

# Water Resources Data Ohio Water Year 2000

## Volume 1. Ohio River Basin Excluding Project Data

Water-Data Report OH-00-1



CALENDAR FOR WATER YEAR 2000

2000

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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	5	6	7				1	2	3	4						1	2
8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9
15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16
22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
29	30	31					26	27	28	29	30			24	25	26	27	28	29	30
														31						

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2001

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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	4	5	6					1	2	3					1	2	3
7	8	9	10	11	12	13	4	5	6	7	8	9	10	4	5	6	7	8	9	10
14	15	16	17	18	19	20	11	12	13	14	15	16	17	11	12	13	14	15	16	17
21	22	23	24	25	26	27	18	19	20	21	22	23	24	18	19	20	21	22	23	24
28	29	30	31				25	26	27	28				25	26	27	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	4	5	6	7			1	2	3	4	5						1	2
8	9	10	11	12	13	14	6	7	8	9	10	11	12	3	4	5	6	7	8	9
15	16	17	18	19	20	21	13	14	15	16	17	18	19	10	11	12	13	14	15	16
22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	20	21	22	23
29	30						27	28	29	30	31			24	25	26	27	28	29	30

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	4	5	6	7				1	2	3	4							1
8	9	10	11	12	13	14	5	6	7	8	9	10	11	2	3	4	5	6	7	8
15	16	17	18	19	20	21	12	13	14	15	16	17	18	9	10	11	12	13	14	15
22	23	24	25	26	27	28	19	20	21	22	23	24	25	16	17	18	19	20	21	22
29	30	31					26	27	28	29	30	31		23	24	25	26	27	28	29
														30						

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

# **Water Resources Data Ohio Water Year 2000**

**Volume 1. Ohio River Basin Excluding Project Data**

**By H.L. Shindel, J.P. Mangus, and L.E. Trimble**

**Water-Data Report OH-00-1**

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

**U.S. Department of the Interior**  
Gale A. Norton, Secretary

**U.S. Geological Survey**  
Charles G. Groat, Director

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6480 Doubletree Avenue  
Columbus, OH 43229-1111



## 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 River 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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This report was prepared in cooperation with the State of Ohio and with other agencies under the general supervision of S.M. Hindall, District Chief, Ohio.

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE May 2001		3. REPORT TYPE AND DATES COVERED Annual—Oct. 1, 1999-Sept. 30, 2000
4. TITLE AND SUBTITLE Water Resources Data, Ohio, Water Year 2000 Volume 1 Ohio River Basin Excluding Project Data			5. FUNDING NUMBERS	
6. AUTHOR(S) Report documentation page H.L. Shindel, J.P. Mangus, and L.E. Trimble				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Geological Survey, Water Resources Division Ohio District 6480 Doubletree Avenue Columbus, Ohio 43229-1111			8. PERFORMING ORGANIZATION REPORT NUMBER USGS-WDR-OH-00-1	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Geological Survey, Water Resources Division, Ohio District 6480 Doubletree Avenue Columbus, Ohio 43229-1111			10. SPONSORING / MONITORING AGENCY REPORT NUMBER USGS-WDR-OH-00-1	
11. SUPPLEMENTARY NOTES Prepared in cooperation with Federal, State, and local agencies.				
12a. DISTRIBUTION / AVAILABILITY STATEMENT No restriction on distribution. This report may be purchased from National Technical Information Service, Springfield, Virginia 22161			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) Water-resources data for the 2000 water year for Ohio consist of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; and water levels and water quality of ground-water wells. This report, in two volumes, contains records for water discharge at 122 gaging stations and 65 partial-record sites; water levels at 65 observation wells and 23 crest-stage gages; and water quality at 36 gaging stations, 69 observation wells, and 35 partial-record sites. Also included are data from miscellaneous and synoptic sites. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data represent that part of the National Water Information System collected by the U.S. Geological Survey and cooperating Federal, State, and local agencies in Ohio.				
14. SUBJECT TERMS *Ohio, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rates, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperature, Sampling sites, Water levels, Water analyses, Streamflow, Water wells.			15. NUMBER OF PAGES 328	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified		18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT Unclassified

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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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## GROUND-WATER STATIONS FOR WHICH RECORDS ARE PUBLISHED

[Letters after station names designate type of data: (c) chemical, (l) water level]

	Well Number	Local Number	Page
<b>ASHLAND COUNTY</b>			
Northeast of Ashland (l) .....	405303082170700	As-2	223
Ashland (l).....	405425082173000	As-3	224
<b>ATHENS COUNTY</b>			
Athens (l) .....	392004082071600	At-2a	225
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Fairfield (l) .....	391942084345700	Bu-18	231
Fairfield (l) .....	392017084345200	Bu-7	232
East of Hamilton (l) .....	392048084311400	Bu-8	233
Southwest of Trenton (l) .....	392737084291300	Bu-16	234
Southwest of Trenton (l) .....	392743084295500	Bu-17	235
Middletown (l) .....	392939084231700	Bu-3	236
Middletown (l) .....	393103084240900	Bu-2	237
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North of Carrollton (l) .....	403709081052800	C-1	239
<b>CHAMPAIGN COUNTY</b>			
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Shadeville (1) .....	395055083000600 .....	Fr-19 .....	253
Southwest of Reese (1) .....	395118082573300 .....	Fr-3 .....	254
Columbus (1) .....	400101083021800 .....	Fr-10 .....	255
<b>GALLIA COUNTY</b>			
East of Crown City (1) .....	383638082103300 .....	G-2 .....	256
<b>GREENE COUNTY</b>			
North of Xenia (1) .....	394411083561300 .....	Gr-1 .....	257
North of Xenia (1) .....	394425083551100 .....	Gr-10 .....	258
<b>HAMILTON COUNTY</b>			
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Cincinnati (1) .....	391201084281600 .....	H-10 .....	261
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Southwest of Venice (c) .....	391748084393800 .....	H-19 .....	267
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Alger (1) .....	404218083503700 .....	Hn-1 .....	269
<b>HOCKING COUNTY</b>			
Logan (1) .....	393200082235300 .....	Hk-1 .....	270
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Mt. Vernon (1) .....	402344082300700 .....	K-1 .....	271
Fredericktown (1) .....	402747082374300 .....	K-4 .....	272
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<b>MONTGOMERY COUNTY</b>			
Miamisburg (c) .....	393757084173600 .....	Mt-928 .....	287
West Carrollton (l) .....	394012084151700 .....	Mt-55 .....	288
West Carrollton (l) .....	394025084162800 .....	Mt-49 .....	289
Dayton (l) .....	394425084113200 .....	Mt-3 .....	290
Dayton (l) .....	394533084113800 .....	Mt-6 .....	291
Dayton (l) .....	394811084095000 .....	Mt-74 .....	292
<b>MUSKINGUM COUNTY</b>			
Zanesville (l) .....	395804081593200 .....	Mu-1a .....	293
<b>PICKAWAY COUNTY</b>			
South of Circleville (l) .....	393327082571600 .....	Pk-7 .....	294
South of Circleville (l) .....	393402082572500 .....	Pk-4 .....	295
Northwest of Circleville (l) .....	393638082572300 .....	Pk-6 .....	296
Orient (l) .....	394742083094800 .....	Pk-9 .....	297
<b>PIKE COUNTY</b>			
West of Piketon (l) .....	390359083015100 .....	Pi-2 .....	298
<b>PORTAGE COUNTY</b>			
Windham (l) .....	411401081025000 .....	Po-1 .....	299
<b>PREBLE COUNTY</b>			
East of Eaton (l) .....	394438084335900 .....	Pr-2 .....	300
<b>RICHLAND COUNTY</b>			
Mansfield (l) .....	404625082305100 .....	R-4 .....	301
Shiloh (l) .....	405753082360800 .....	R-3 .....	302
<b>ROSS COUNTY</b>			
West of Bainbridge (l) .....	391341083172200 .....	Ro-7 .....	303
<b>SHELBY COUNTY</b>			
Sidney (l) .....	401707084103100 .....	Sh-5 .....	304
<b>STARK COUNTY</b>			
Canton (l) .....	404939081203800 .....	St-5a .....	305
North Canton (l) .....	405211081253500 .....	St-27 .....	306
<b>TUSCARAWAS COUNTY</b>			
Dover (l) .....	403207081293800 .....	Tu-3 .....	307
Strasburg (l) .....	403557081313600 .....	Tu-4 .....	308
North of Strasburg (l) .....	403653081321800 .....	Tu-1 .....	309
Strasburg (l) .....	403823081324200 .....	Tu-5 .....	310
<b>UNION COUNTY</b>			
Southeast of Raymond (l) .....	401826083255200 .....	U-4 .....	311
East of East Liberty (l) .....	402010083321900 .....	U-5 .....	312
<b>VINTON COUNTY</b>			
McArthur (l) .....	391452082282900 .....	V-1 .....	313
<b>WARREN COUNTY</b>			
Kings Mill (l) .....	392119084142000 .....	W-6 .....	314
East of Monroe (l) .....	392712084191700 .....	W-5 .....	315
<b>WASHINGTON COUNTY</b>			
North of Marietta (l) .....	392553081281600 .....	Wa-2 .....	316

	<b>Well Number</b>	<b>Local Number</b>	<b>Page</b>
WAYNE COUNTY			
Wooster (1) .....	404655081553200 .....	Wn-3.....	317
Wooster (1) .....	404802081583100 .....	Wn-2a.....	318
Sterling (1) .....	405745081510200 .....	Wn-7.....	319
Rittman (1) .....	405805081462300 .....	Wn-6.....	320

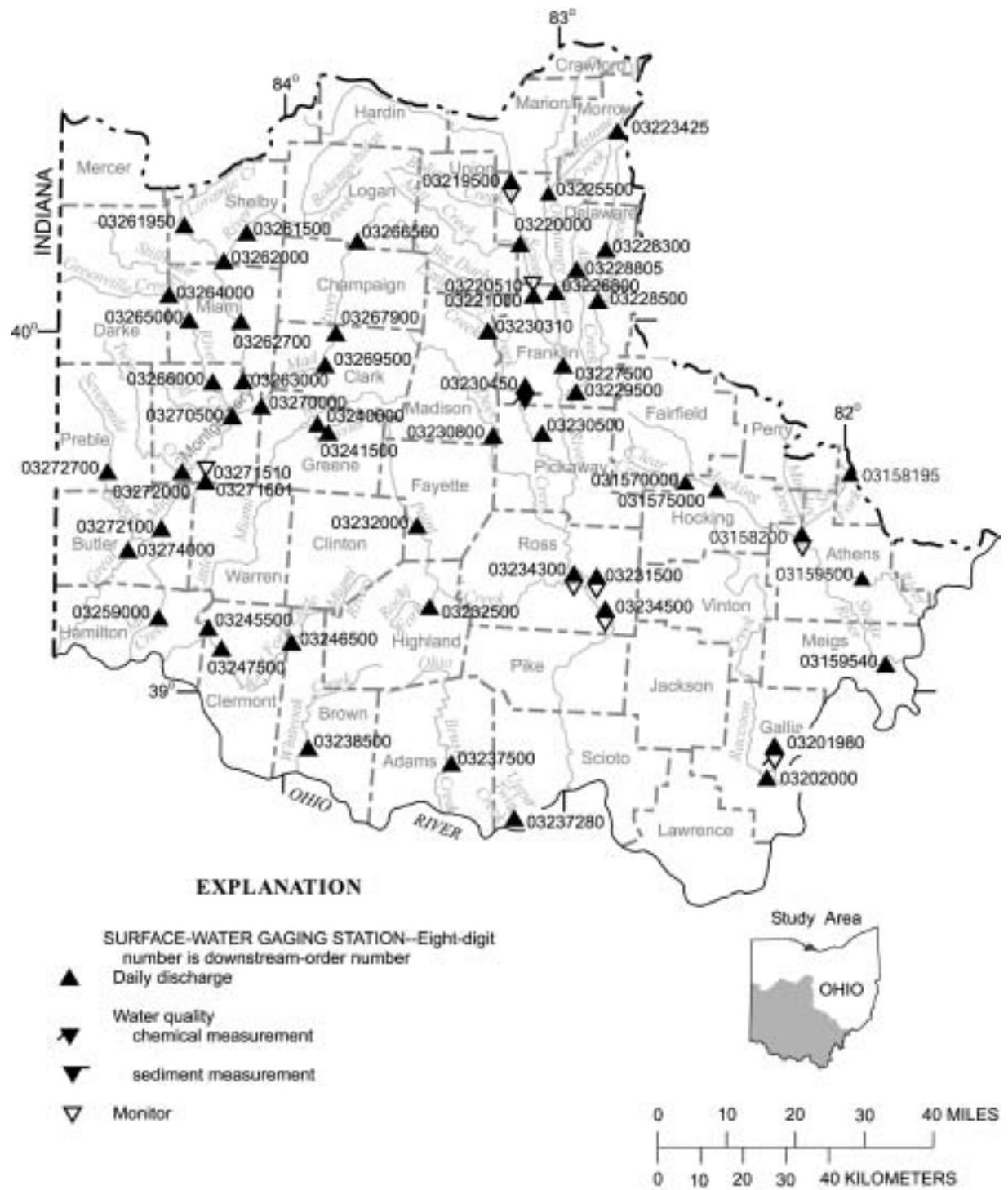


Figure 1a. Location of data-collection stations.

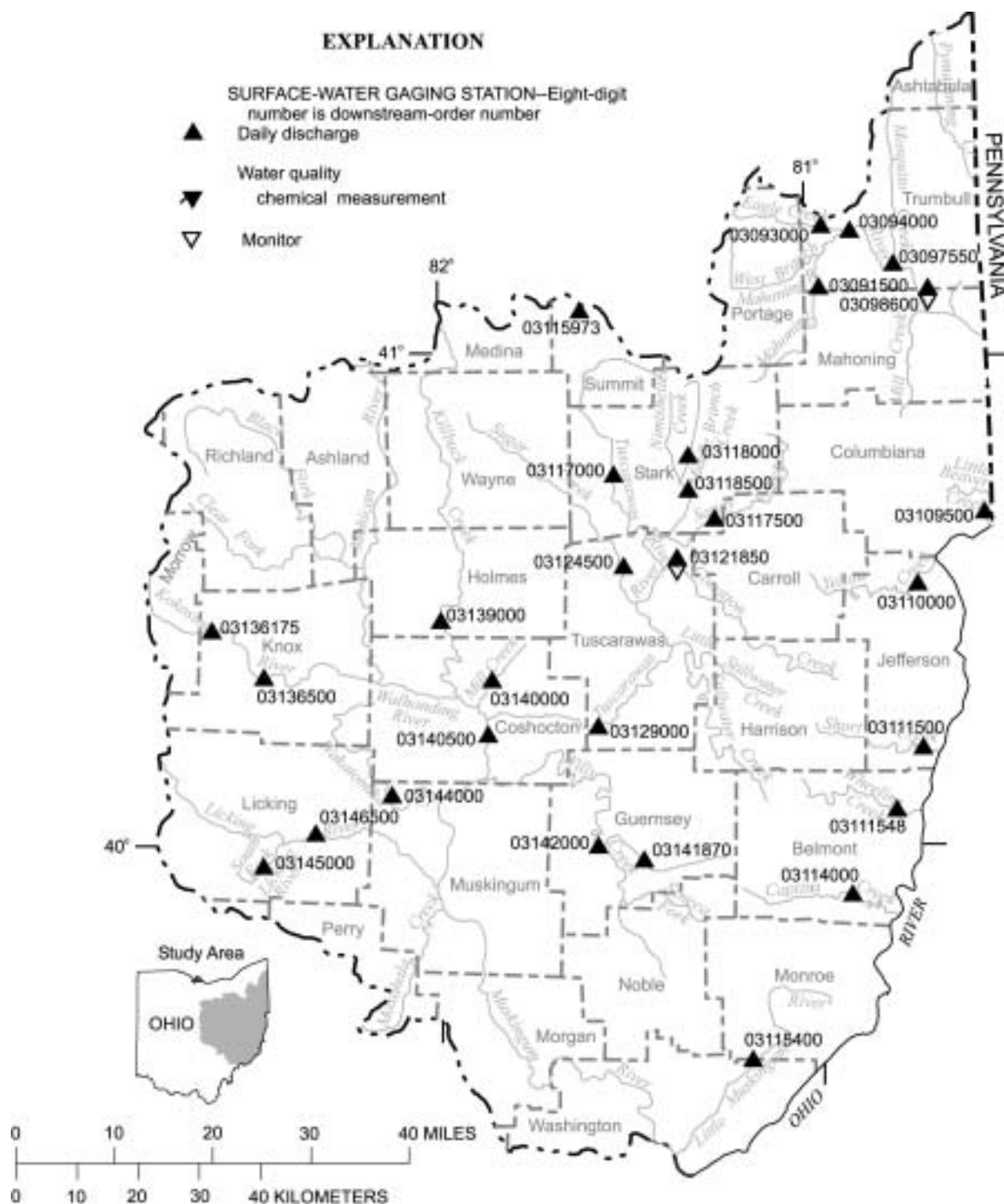


Figure 1b. Location of data-collection stations.

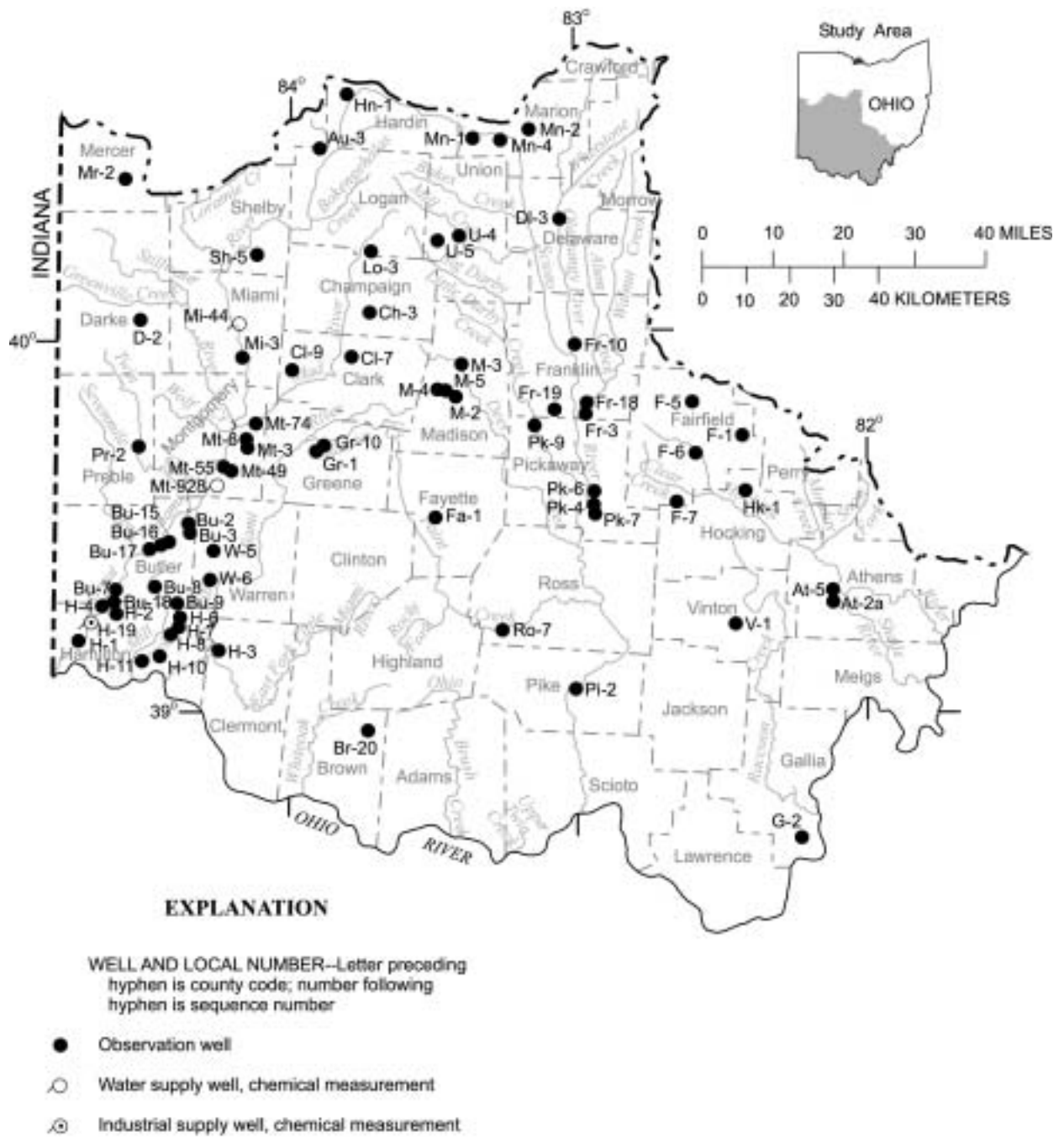


Figure 1c. Location of data-collection wells.

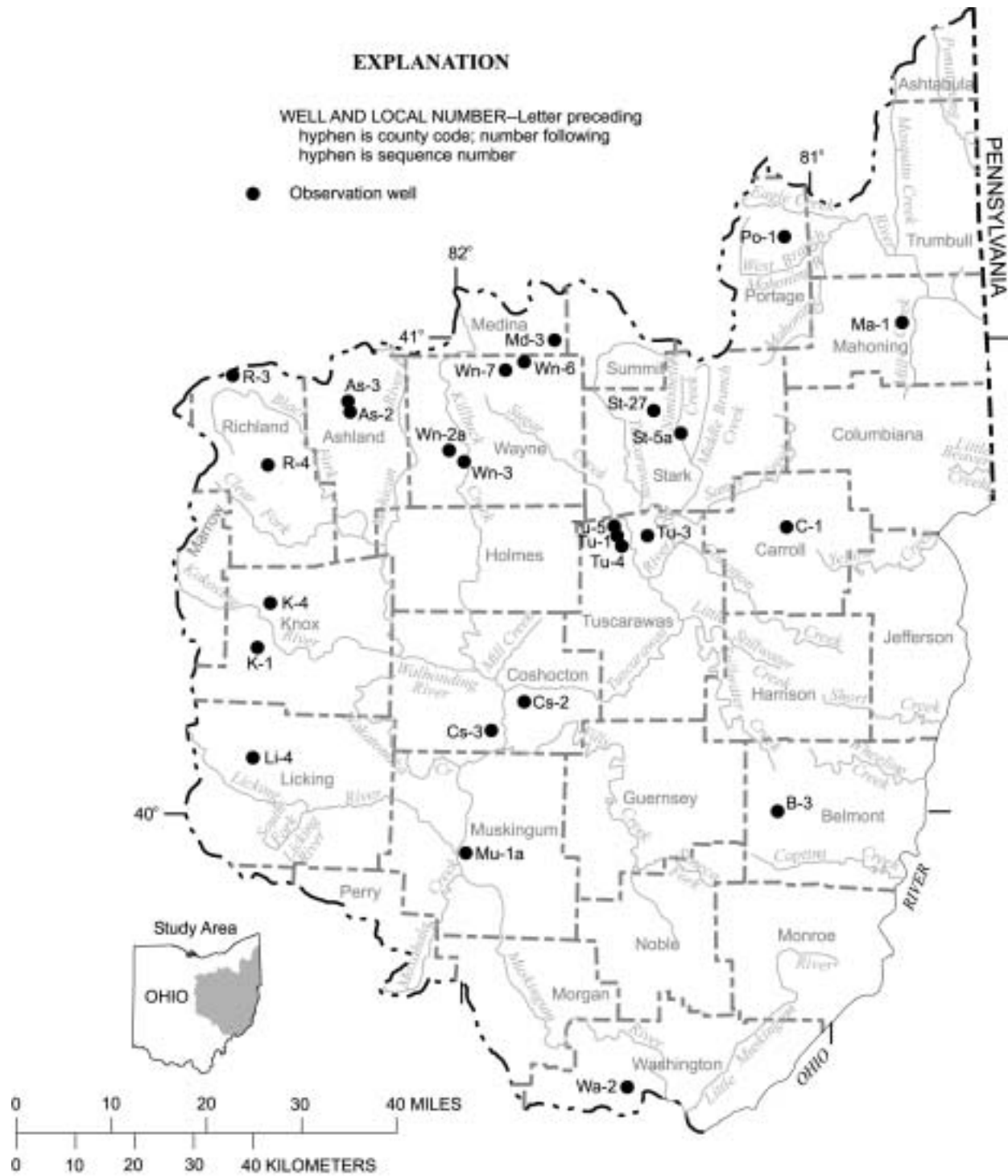


Figure 1d. Location of data-collection wells.

### 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 District Office at the address given on the back side of the title page of this report.

[mi<sup>2</sup>, square miles]

Station name	Station number	Drainage area (mi <sup>2</sup> )	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	1931-92
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	1969-92
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 1943-92
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
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
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
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	1939-90 1992
Indian Fork below Atwood Dam near New Cumberland	03121500	70	1961-75
Tuscarawas River below Dover Dam near Dover	03122500*	1,045	1924-92
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



### Discontinued Surface-Water-Discharge Stations—Continued

[mi<sup>2</sup>, square miles]

Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record
Stillwater Creek at Piedmont	03126000*	122	1939-93
Stillwater Creek at Tippecanoe	03127000*	282	1939-93
Stillwater Creek at Urichsville	03127500*	367	1922-93
Clear Fork Tributary near Hanover	03127970	.68	1978-81
Little Stillwater Creek below Tappan Dam at Tappan	03128500*	71.1	1939-93
Black Fork below Charles Mills Dam near Mifflin	03130000*	217	1939-93
Touby Run at Mansfield	03130500	5.44	1947-78
Rocky Fork near Mansfield	03131000	39	1925-32
Black Fork at Loudonville	03131500*	349	1931-93
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	1939-86 1988-93
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	1922-92
Killbuck Creek at Layland	03139500	503	1924-30
Seneca Fork below Senecaville Dam near Senecaville	03141500*	118	1938-93
Salt Fork near Cambridge	03142200	55.6	1956-68
Salt Fork below Salt Fork Dam near Cambridge	03142295	159	1971-82
Wills Creek at Birds Run	03142500	730	1928-39
Wills Creek below Wills Creek Dam at Wills Creek	03143500*	842	1939-92
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
Licking River below Dillon Dam near Dillon Falls	03147500*	742	1940-92
Salt Creek near Chandlersville	03149500	75.7	1936-47
Muskingum River at McConnelsville	03150000	7,422	1922-93
Meigs Creek near Beverly	03150250	136	1972-75
Hunters Run at Lancaster	03156000	10.0	1956-80
Muskingum River at Beverly	03150300	7,627	1993-99
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
Sunday Creek at Glouster	03159000	104	1952-81

### Discontinued Surface-Water-Discharge Stations—Continued

[mi<sup>2</sup>, square miles]

Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record
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
Symmes 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 Kilbourne	03228750	64.9	1974-83
Alum Creek at Columbus	03229000	189	1923-35 1938-98
Scioto River near Circleville	03230000	2,638	1939-56
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

### Discontinued Surface-Water-Discharge Stations—Continued

[mi<sup>2</sup>, square miles]

Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record
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 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 Woodlaw	03257500	32.2	1953-86
West Fork Mill Creek at Lockland	03258000	35.6	1939-57
Mill Creek at Mitchell Avenue at Cincinnati	03259500	135	1941-48 1990
Stony Creek near DeGraff	03260800	59.1	1958-76
Bokengehalas Creek near DeGraff	03260700	36.3	1957-92
Bokengehalas Creek at DeGraff	03260706*	40.4	1992-96
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 near Urbana	03267000*	162	1926-31

### Discontinued Surface-Water-Discharge Stations—Continued

[mi<sup>2</sup>, square miles]

Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record
Mad River at Tremont City	03267500	264	1939-98 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
Wolf Creek at Dayton	03271000*	68.7	1939-50 1987-97
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 District Office at the address given on the back side of the title page of this report.

[mi<sup>2</sup>, square miles; letters designate type of record: do, dissolved oxygen; pH, pH; s, sediment; sc, specific conductance; t, temperature]

Station name	Station number	Drainage area (mi <sup>2</sup> )	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		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
Linworth Road Creek at Columbus	03226870	2.03	s	1978-81
Bethel Road Creek at Columbus	03226875	.22	s	1978-81

### Discontinued Surface-Water-Quality Stations—Continued

[mi<sup>2</sup>, square miles; letters designate type of record: do, dissolved oxygen; pH, pH; s, sediment; sc, specific conductance; t, temperature]

Station name	Station number	Drainage area (mi <sup>2</sup> )	Type of record	Period of record
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.	1965-80
			pH	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
Paint Creek near Greenfield	03232000	249	t	1974-78
Rattlesnake Creek at Centerfield	03232300	209	t	1974-78
Salt Creek near Londonderry	03235995	268	t	1973-74
Scioto River at Lucasville	03237100	6,178	t	1956-74
			sc	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	1975-84
			s	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	1966
			do, sc, t	1968-82
			pH	1975-82
Great Miami River at Elizabethtown	03276600	5,356	t	1956-74
			sc	1964-74

## INTRODUCTION

The Water Resources Division 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 through 1d. 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 to 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-00-1." 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 ordering specific reports, including current prices, may be obtained by writing the District Chief at 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:

**WATER RESOURCES DATA—OHIO, 2000**  
**Volume 1: Ohio River Basin Excluding Project Data**

Cities of Akron, Canton, Cincinnati, Columbus (Water Division and Sewerage & Drainage Division), Cuyahoga Falls, Fremont, Warren, and Westerville  
Counties of Clermont, Cuyahoga (Board of Health and Sanitary Engineering Division), Geauga, Knox Madison, Ross, and Summit  
Cuyahoga River Community Planning Organization  
Eastgate Development and Transportation Agency  
Federal Emergency Management Agency, Region V  
Miami Conservancy District  
Northeast Ohio Regional Sewer District  
Ohio Departments of Environmental Protection, Natural Resources (Minerals Management and Water Divisions), and Transportation  
Ohio Mine Lands Partnership  
Ottawa River Coalition  
State of Ohio Adjutant General's Department  
Village of South Russell  
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, and Industrial Operations)  
U.S. Environmental Protection Agency (NERL-MICROBIAL and Chemical Exposure Assessment Research Division, and Superfund Division, Region V)  
Universities of Toledo and West Virginia

## **SUMMARY OF HYDROLOGIC CONDITIONS**

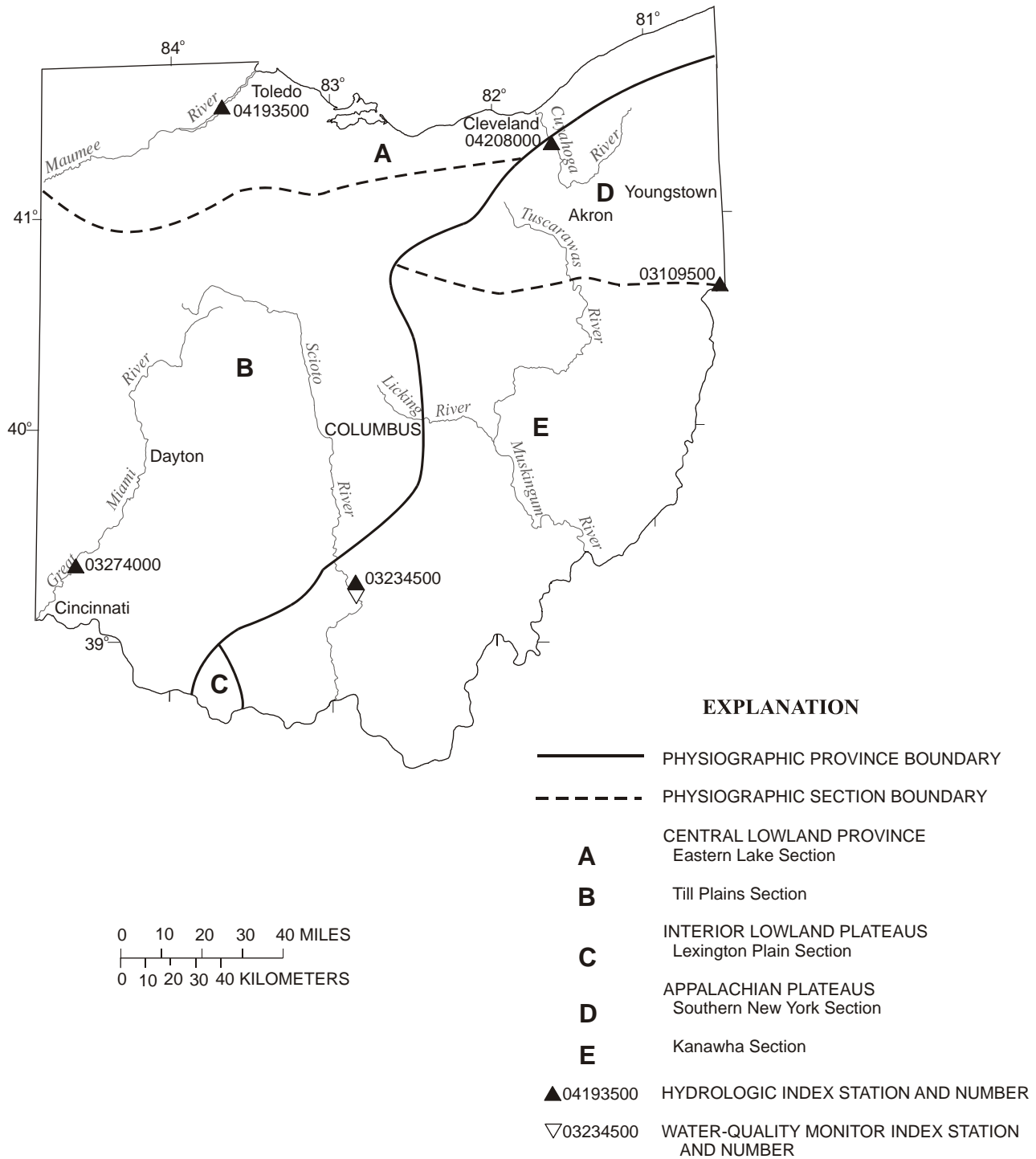
Ohio is part of three physiographic provinces. Each province has its own distinctive hydrologic characteristics. The topography of the Till Plains Section of the Central Lowlands Physiographic Province (fig. 2) consists of gently rolling ground moraine, bands of terminal moraine, and outwash-filled valleys. 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.





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

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 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 4 to 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 2000.** At the beginning of water year 2000, streamflow was in the below normal\* range for much of the State. Deficient flows prevailed in response to below-normal precipitation for the period October to December except for northeast Ohio, where streamflow was in the normal range. By January, flows were generally deficient in western Ohio and normal in eastern Ohio.

Above-normal precipitation in February caused flow to rise into the normal range except in south-central Ohio, where flow was excessive. Flooding occurred on small streams in southern Ohio in mid-February. The flooding caused some loss of life and property damage.

In March, streamflow fell into the normal range in south-central Ohio in response to below-normal precipitation. Streamflow fell into the deficient range for the rest of the State.

Near-normal precipitation prevailed in April and May, and streamflow was generally in the normal range for most of the State.

Excessive flows in northwest Ohio and normal flows elsewhere occurred for the remainder of the water year in response to normal to above-normal precipitation.

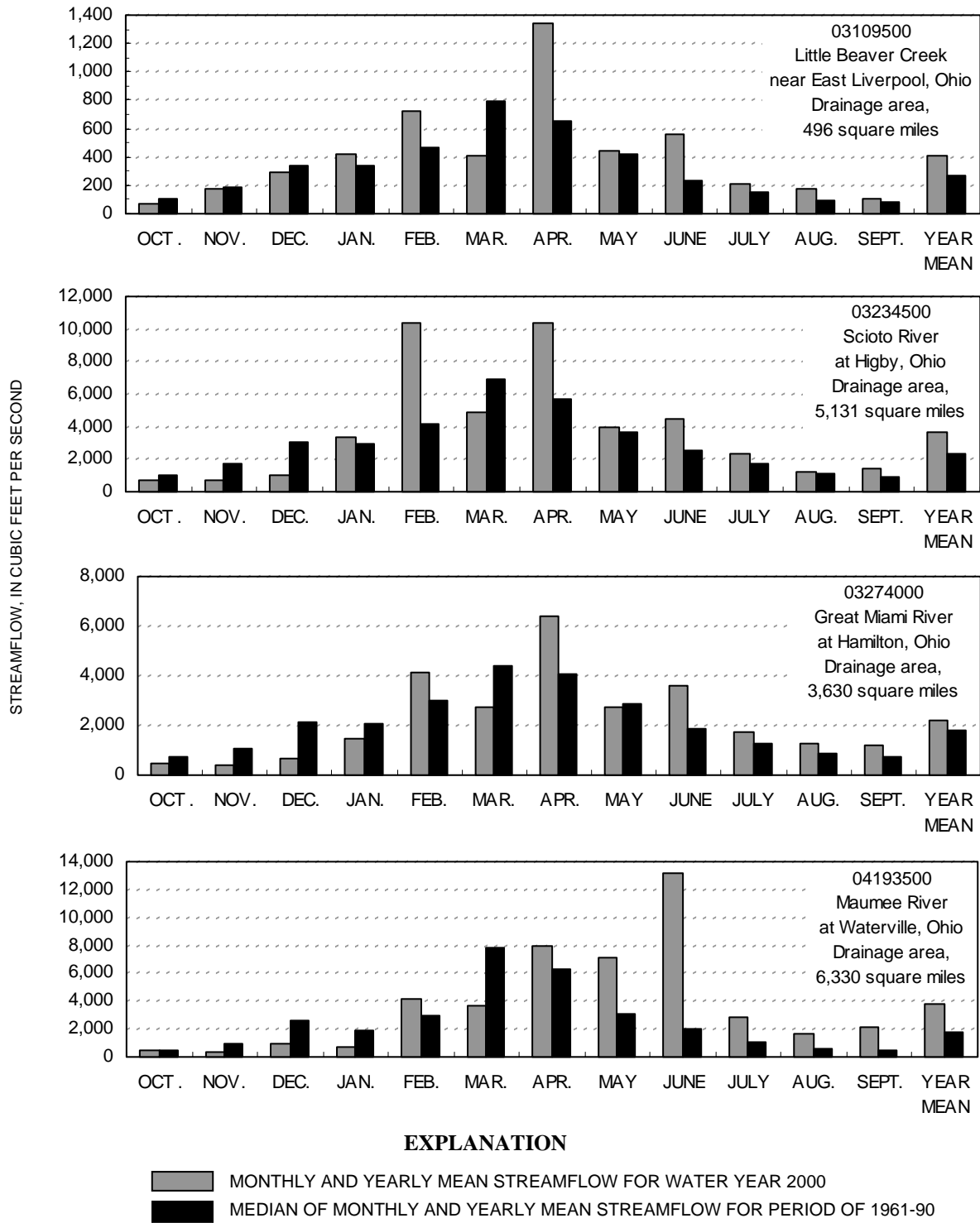
A comparison of streamflows for 2000 with long-term median flows at four representative stations is shown in figure 3.

### Water Quality

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. The National Stream Quality Accounting Network (NASQAN) and the Hydrologic Benchmark Network (BENCHMARK) are other long-term national water-quality programs; however, work in Ohio on NASQAN and BENCHMARK were discontinued in 1996 and 1998, respectively. Sampling in NAWQA began in 1991 in the Nation and in 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) NAWQA study unit. During water year 2000, the LERI NAWQA was in its low-intensity data-collection phase; therefore, water-quality data were collected at only one fixed station, the Maumee River at Waterville. During water year 2000, the MIAM NAWQA was in its high-intensity data-collection phase and collected water-quality data at eight fixed sites, one of which was the Mad River at St. Paris Pike near

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\* For streamflow, "normal" is defined as being between the 25th and 75th percentiles as measured during the base period, water years 1961-90.



**Figure 3.** Streamflow during water year 2000 compared with median streamflow for period 1961-90 for four representative gaging stations.

Eagle City, Ohio. Whereas water-quality sampling in the NASQAN program was done quarterly, sampling in the NAWQA program is done much more frequently. For example, during water year 2000, 14 samples were collected at the Maumee River at Waterville and 21 samples were collected at the Mad River at St. Paris Pike. Samples for NAWQA were collected over a range of streamflows and were analyzed for major anions and cations, nutrients, pesticides, suspended sediment, selected physical properties, and *Escherichia coli*.

None of the samples collected during water year 2000 for nitrate plus nitrite concentrations at the Maumee River at Waterville or the Mad River at St. Paris Pike exceeded the U.S. Environmental Protection Agency maximum contaminant level for finished drinking water (10 milligrams per liter, as N). In Ohio, fertilizers are a major source of nitrate. Land use in the Maumee River Basin is mixed and consists of row-crop agriculture upstream and urban and industrial areas downstream. Concentrations of nitrate plus nitrite in the Maumee River in water year 2000 ranged from 0.31 to 10 milligrams per liter (mg/L) with a median concentration of 6.6 mg/L. At the Mad River site, which is in a predominantly agricultural area, concentrations of nitrate plus nitrite ranged from 1.4 to 6.5 mg/L, with a median concentration of 3.9 mg/L.

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 water year 2000, median concentrations of total phosphorus were 0.143 mg/L for the Maumee River and 0.068 mg/L for the Mad River. Only one sample had an extreme total phosphorus concentration of greater than 1 mg/L; this sample was collected from the Mad River during a January runoff event.

The Maumee and Mad Rivers are in areas of heavy herbicide use. Not surprisingly, herbicides were frequently detected in water samples collected during water year 2000. For example, atrazine and metolachlor were detected in 100 percent of the water samples collected from the Maumee River and 95 percent of those from the Mad River. Simazine was detected in 100 percent and 65 percent of samples from the Maumee and Mad Rivers, respectively. Acetochlor was detected less frequently—in 79 percent of the samples from the Maumee River and only 25 percent of the samples from the Mad River. Atrazine and simazine concentrations in two samples collected from the Maumee River exceeded the U.S. Environmental Protection Agency's Maximum Contaminant Levels (MCLs) (0.003 mg/L and 0.004 mg/L, respectively); MCLs have not been developed for acetochlor and metolachlor. No MCL exceedances were found in Mad River samples. The highest concentration found among these four herbicides during water year 2000 was 0.0082 mg/L in the Maumee River.

*Escherichia coli* (*E. coli*) is a bacterial indicator of fecal contamination of water and is the preferred and most useful indicator of the quality of recreational freshwater for body contact. *Escherichia coli* concentrations in the Maumee River ranged from 500 to 1,100 colonies per 100 milliliters (col/100 mL) and for the Mad River ranged from 20 to 10,600 col/100 mL. The single-sample standard for primary-contact recreation (suitable for full-body contact, such as swimming and canoeing) in Ohio is 298 col/100 mL. Fifty percent of the samples collected from the Maumee River and 41 percent from the Mad River met the primary-contact standard. Fecal contamination of waters can come from a variety of point and nonpoint sources including sewage-treatment plants; septic tanks; overflows from sanitary, combined, and storm sewers; feedlots; animal-production facilities; agricultural lands receiving manure applications; and pasture lands.

### 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

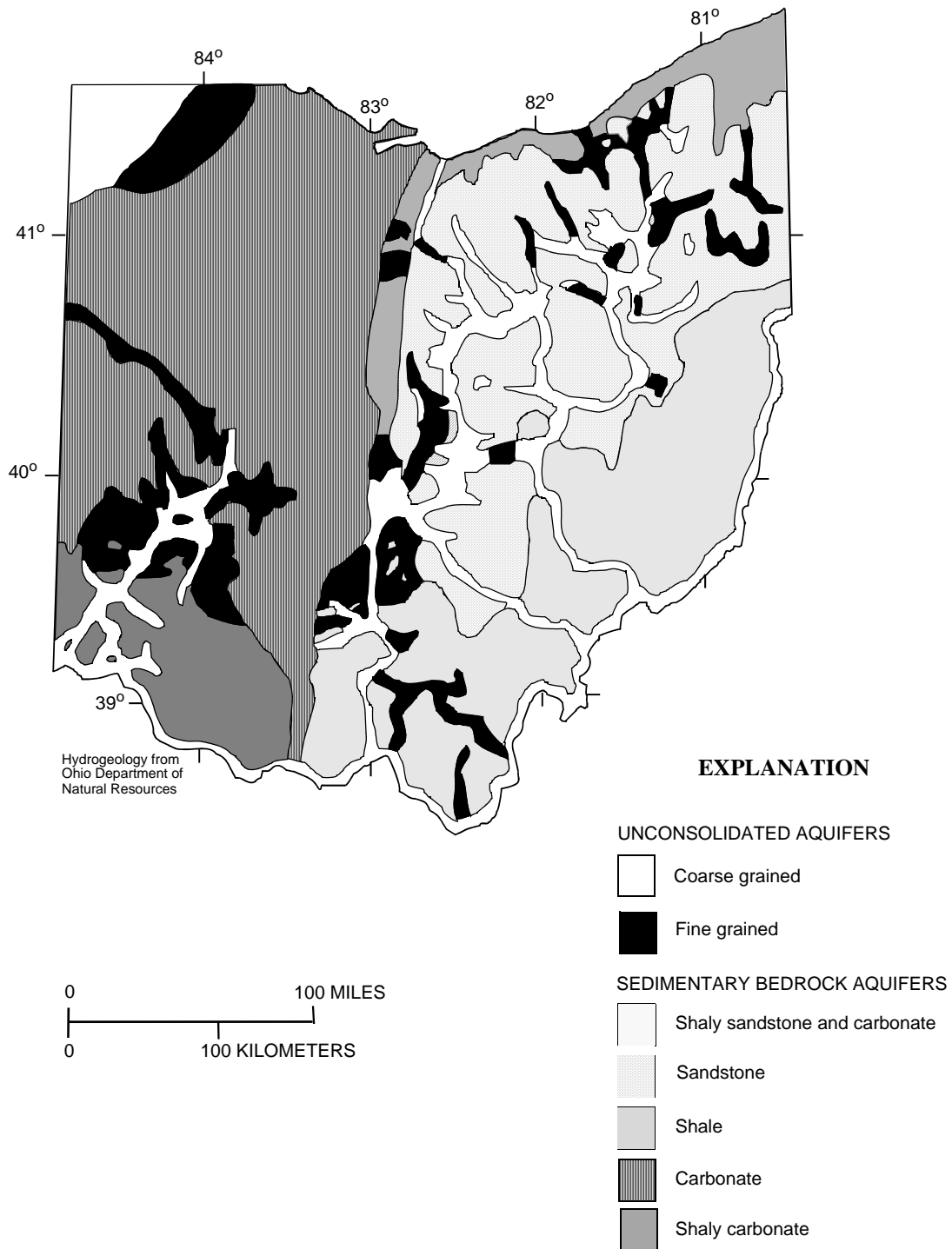


Figure 4. Geographic distribution of principal aquifers in Ohio.

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. 4) 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. 4) that yields only small amounts of water to wells. Silurian-age limestone and dolomite and Devonian limestone comprise the carbonate aquifer system (fig. 4) 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 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.

### 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 5. 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 6. 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.

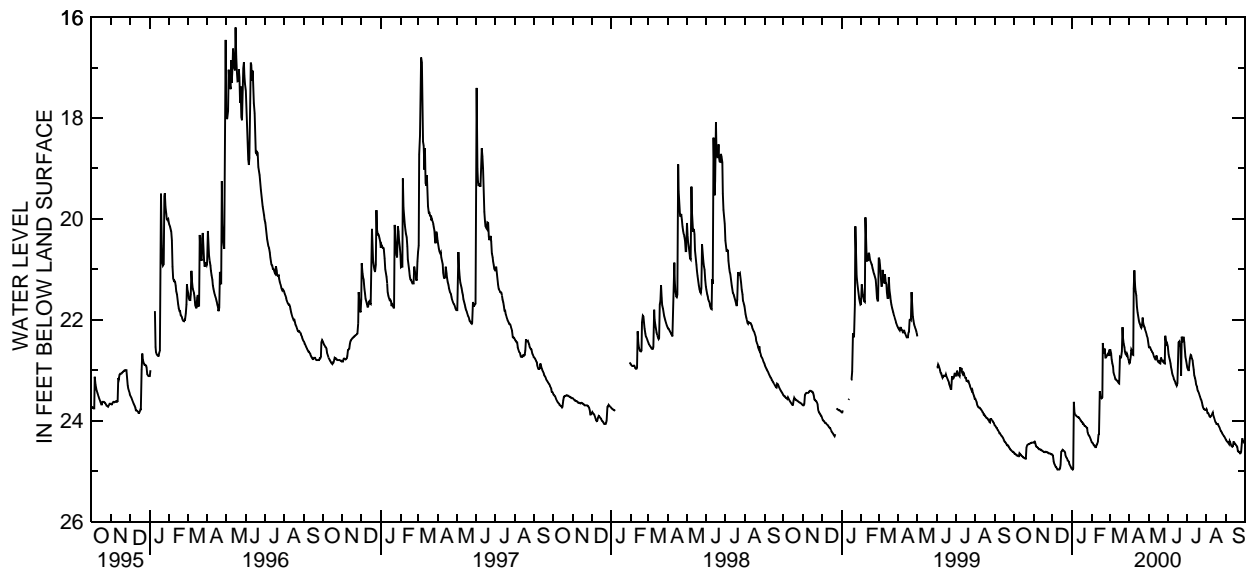
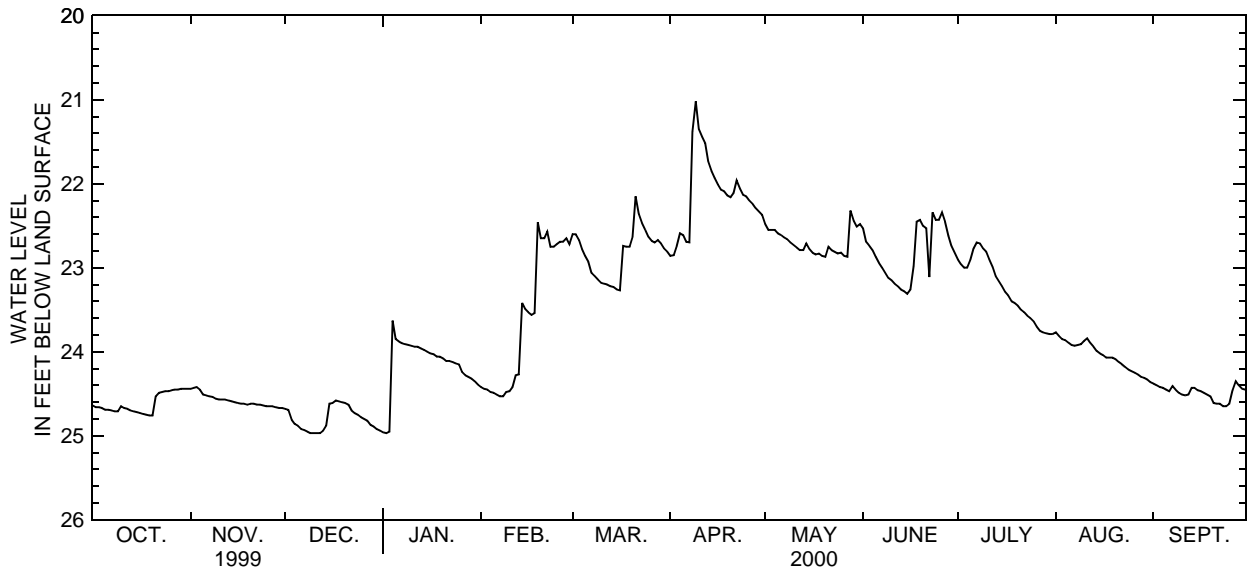
At the beginning of water year 2000, ground-water levels were below normal\* for most of the State. Levels declined in October and November and remained below normal, with monthly record lows established at some wells.

In December and January, ground-water levels stabilized in response to near-normal precipitation but remained below normal throughout the State. Ground-water levels rose during February through April but levels continued to be below normal statewide.

The remainder of the water year was characterized by seasonal ground-water-level declines. Levels were generally below normal statewide from May through September.

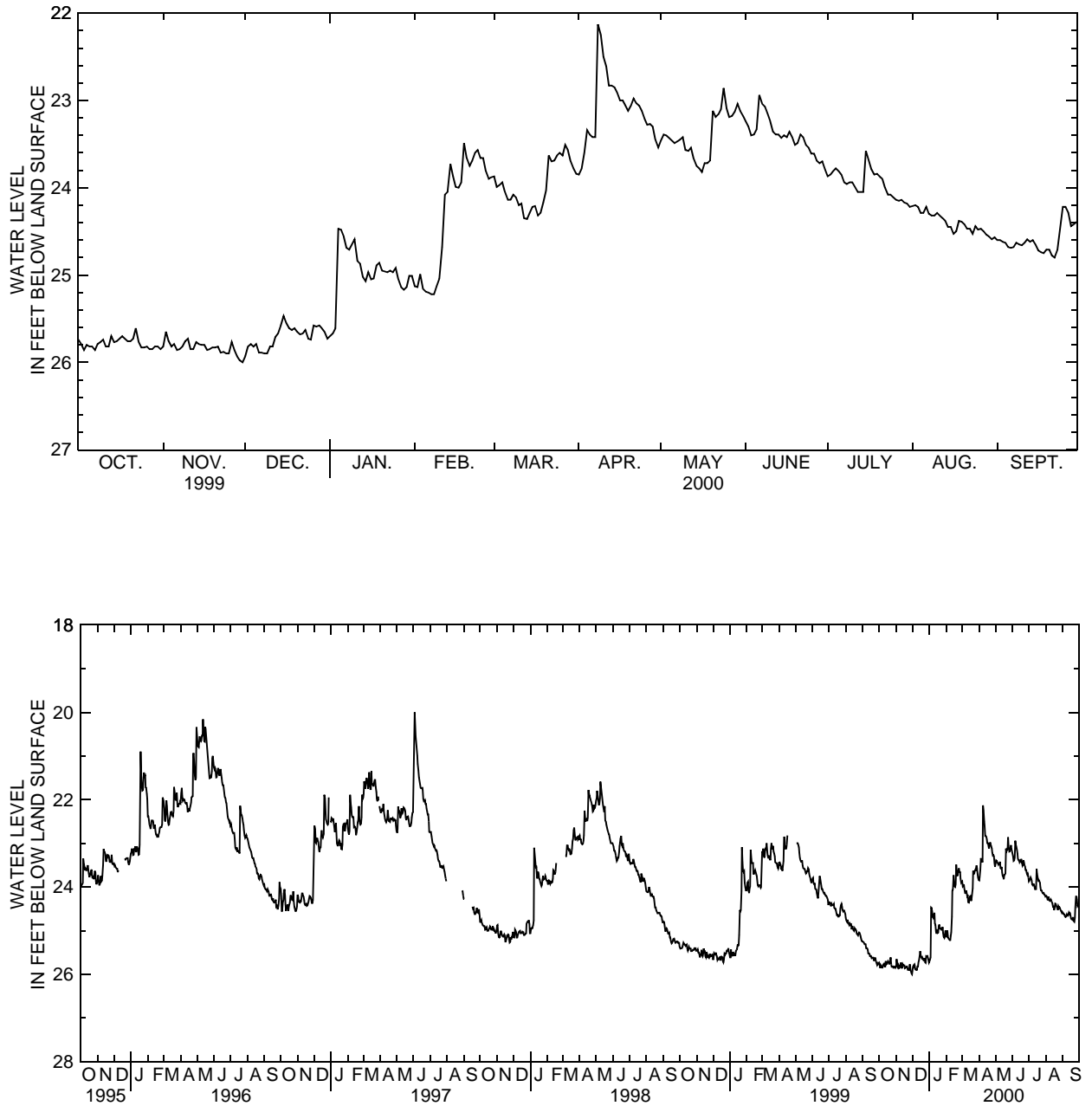
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\* For ground-water, “normal” is defined as being between the 25th and 75th percentiles of the range values recorded during the reference period.



**Figure 5.** Sample of 1-year and 5-year hydrographs of well H-1 (391214084470100), completed in a unconfined unconsolidated aquifer.

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**Figure 6.** Sample of 1-year and 5-year hydrographs of well U-4 (401826083255200), completed in a confined carbonate-rock aquifer.



## SPECIAL NETWORKS AND PROGRAM

Hydrologic Benchmark Network is a network of 50 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by human activities.

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within four of the Nation's largest river basins—the Mississippi, Columbia, Colorado, and Rio Grande. 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 Program (NAWQA), (3) to characterize processes unique to large-river systems, such as storage and remobilization 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.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead Federal agency, the USGS works together with over 100 organizations to provide scientific investigators world-wide with a long-term, high-quality database of atmospheric deposition for research support in the areas of air quality, water quality, agricultural effects, forest productivity, materials effects, ecosystem studies, watershed studies and human health.

Data from the network, as well as information about individual sites, are available through the World Wide Web at <http://nadp.sws.uiuc.edu>.

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey 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; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in selected 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 are being measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

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

Additional information about the NAWQA Program is available through the World Wide Web at [http://water.usgs.gov/nawqa/nawqa\\_home.html](http://water.usgs.gov/nawqa/nawqa_home.html).

## **EXPLANATION OF THE RECORDS**

The records in this report are for the 2000 water year that began October 1, 1999, and ended September 30, 2000. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for surface and ground water, and ground-water-level data. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

### **Station Identification Numbers**

Each data station, whether onstream or at a well, is assigned a unique identification number. The number is generally assigned when a station is first established and is retained for that station indefinitely. The systems used by the USGS to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic locations. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells and, in Ohio, for surface-water stations where only infrequent measurements are made.

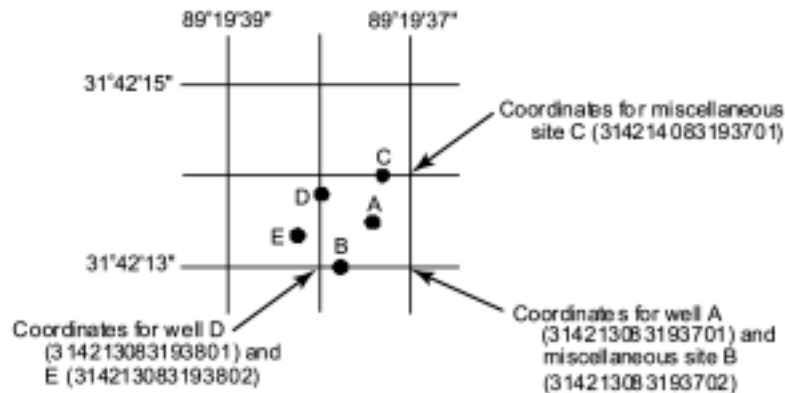
### **Downstream Order System**

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

The station-identification number is assigned according to the above-mentioned downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station such as 04041000, which appears just to the left of the station name, includes the two-digit part number "04" plus the six-digit downstream order number "041000." The part number designates the major river basin; for example, part "03" is the Ohio River Basin, and part "04" is the St. Lawrence River Basin.

### **Latitude-Longitude System**

The identification numbers for wells and miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure 7.)



**Figure 7.** System for numbering wells and miscellaneous sites (latitude and longitude).

### Records of Stage and Water Discharge

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

By contrast, partial records are obtained through discrete measurements often without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of a partial record is indicated by table titles such as CREST-STAGE PARTIAL RECORDS or LOW-FLOW PARTIAL RECORDS. Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report. Location of all complete-record and crest-stage stations for which data are given in this volume are shown in figures 1a through 1d.

### Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relations between stage and discharge. These data, together with supplemental information such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of stage and of notations regarding factors that may affect the relations between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Continuous records of stage are obtained with digital recorders that store stage data on solid-state storage media at selected time intervals. Measurements of discharge are made with current meters using methods adapted by the USGS as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in USGS Techniques of Water-Resources Investigations, Book 3, Chapter A6.

In computing discharge records, results of individual measurements are plotted against the corresponding

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

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

At some stream-gaging stations the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of 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 set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

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

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated from operator's logs, previous or following record, inflow-outflow studies, and other information.

At some gaging stations, acoustic velocity meter (AVM) systems are used to compute discharge. The AVM system measures the stream's velocity at one or more paths in the cross section. Coefficients are developed to relate this path velocity to the mean velocity in the cross section. Because the AVM sensors are fixed in position, the adjustment coefficients generally vary with stage. Cross-sectional area curves are developed to relate stage, recorded as noted above, to cross-section area. Discharge is computed by multiplying path velocity by the appropriate stage-related coefficient and area.

### **Data Presentation**

The records published for each gaging station consist of two parts—the manuscript or station description and the data table for the current water year.

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

**LOCATION.**—Information on locations is obtained from the most accurate maps available. The location of the gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileage, given for only a few stations, was 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 types of maps available vary from one drainage basin to another, the accuracy of the drainage areas likewise varies. Drainage areas are updated as better maps become available.

**PERIOD OF RECORD.**—This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not, and whose location was such that records from it can reasonably be considered equivalent with records from the present station.

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

**GAGE.**—The type of gage in current use, the datum of the current gage referred to sea level (National Geodetic Vertical Datum of 1929) unless otherwise noted, 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 record will either be identified by date in this paragraph of the station description for water-discharge stations or be flagged in the daily discharge table. (See the section, "Identifying Estimated Daily Discharge.") If a "remarks" statement is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, and to conditions that affect natural flow at the station, in addition, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

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

**EXTREMES FOR PERIOD OF RECORD.**—In some headings "Extremes for Period of Record" is presented as a paragraph separate from summary statistics. Extremes may include maximum and minimum stages and maximum and minimum discharges or contents. Unless otherwise qualified, the maximum discharge or content is the instantaneous maximum corresponding to the highest stage that occurred. The highest stage may have been obtained from a graphic or digital recorder, from a crest-stage gage, or by direct observation of a nonrecording gage. If the maximum stage did not occur on the same day as the maximum discharge or content, it is given separately. Similarly, the minimum is the instantaneous minimum discharge, unless otherwise qualified, and was determined and is reported in the same manner as the maximum.

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

**PEAK DISCHARGES ABOVE BASE FOR CURRENT YEAR**—Presented as a separate table. For stations meeting certain criteria, all peak discharges and stages occurring during the water year and greater than a selected base discharge are presented under this heading. All peaks greater than the base discharge are listed with the maximum for the year footnoted by an asterisk (\*). Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial regulation or at locations where the instantaneous peak discharge does not exceed the mean daily discharge by 10 percent. 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.

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

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscript published to document the revision in a REVISED RECORDS entry, users of data for these stations who obtained the data from previously published data reports may wish to contact the District office to determine if the published records were ever revised after the station was discontinued. Of course, if the data were obtained by computer retrieval, the data would be current and there would be no need to check because any published retrieval of data is always accompanied by revisions of the corresponding data in computer storage.

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

**Data Table of Daily Mean Values.** The daily table for stream-gaging stations gives mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed TOTAL gives the sum of the daily figures. The line headed MEAN gives the average flow in cubic feet per second during the month. The lines headed MAX and MIN give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month is often expressed in cubic feet per square mile (line headed CFM), or in inches (line headed IN.), or in acre-feet (line headed AC-FT). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. In the yearly summary below the monthly summary, the figures shown are the appropriate discharges for the calendar and water years. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversions or reservoir contents are given. These figures are identified by symbol and corresponding footnote.

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

**Summary Statistics.** A table titled SUMMARY STATISTICS follows the statistics of monthly mean data tabulation. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, WATER YEARS \_\_\_\_ - \_\_\_\_, will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (See line headings below), except for the ANNUAL SEVEN-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 the footnotes. When the maximum or minimum statistic occurred outside the designated period, that statistic is listed in the EXTREMES FOR PERIOD OF RECORD paragraph in the manuscript. Selected streamflow-duration-curve statistics and runoff data are also given. Runoff data may be omitted if there is extensive regulation or diversion of flow in the drainage basin.

The following summary statistics data, as appropriate, are provided with each continuous record of discharge. Comments to follow clarify information presented under the various line headings of the summary statistics table.

**ANNUAL TOTAL.**—The sum of the daily mean values of discharge for the year. At some stations the annual total discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

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

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

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

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

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

**ANNUAL SEVEN-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.)

**INSTANTANEOUS PEAK FLOW.**—The maximum instantaneous stage occurring for the water year or for the designated period. Note that secondary instantaneous peak discharges above a selected base discharge are given in the table "Peak Discharges and Stages at Continuous-Record Surface Discharge Stations."

**INSTANTANEOUS PEAK STAGE.**—The maximum instantaneous stage occurring for the water year or for the designated period. If the dates of occurrence for the instantaneous peak flow and instantaneous peak stage differ, the "Remarks" paragraph in the manuscript or a footnote may be used to provide further information.

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

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

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

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area for the area. Inches (INCHES) indicates the depth to which the drainage area would be covered if all 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 usually presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second, when collected, is a table of 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 generally made in time of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

### Identifying Estimated Daily Discharge

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

### Accuracy of the Records

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

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

Daily mean discharges in this report are given to the nearest hundredths of a cubic foot per second for values less than 1 ft<sup>3</sup>/s; to the nearest tenth between 1.0 and 10 ft<sup>3</sup>/s; to whole numbers between 10 and 1,000 ft<sup>3</sup>/s; and to three significant figures for more than 1,000 ft<sup>3</sup>/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

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

### Other Records Available

Information used in preparing the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables are on file in the Ohio District office. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on availability of the unpublished information or on results of statistical analyses of the published records may be obtained from the District office.



### Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequency.

#### Classification of Records

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

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

#### 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 a 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."

#### Onsite Measurement and Sample Collection

In obtaining water-quality data, a major concern is that the data obtained represent the in quality of the water. To ensure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made on site when the samples are taken. To ensure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the sample to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in water-quality-related chapters in the series "Techniques of Water-Resources Investigations" (TWRI), which are listed in this report, and in other documents listed on the World Wide Web page for the USGS, Water Resources Division, Office of Water Quality (<http://water.usgs.gov/owq>). Additional information on collecting, treating, and shipping samples can be found in USGS Water-Resources Investigations Report 98-4057 "Quality-Assurance/Quality-Control Manual for Collection and Analysis of Water-Quality Data in the Ohio District, U.S. Geological Survey."

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

obtained for the National Stream-Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals depends on flow conditions and other factors that must be evaluated by the collector.

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

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly readings beginning at 0100 hours and ending at 2400 hours for each day of record. More detailed records (hourly values) may be obtained from the USGS District Office, whose address is given on the back of the title page of this report.

### **Water Temperatures**

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are frequently 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 daily 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.

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

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of 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 the quantities of suspended sediment, records of periodic measurements of the particle-size distribution of the suspended sediment and bed material are included for some stations.

## Laboratory Measurements

Sediment samples, samples for microbiological analyses, and samples for specific conductance, pH, and dissolved oxygen are analyzed locally. All other samples are analyzed in the USGS laboratories in Arvada, Colo., or by a USGS-approved outside laboratory. Methods used in analyzing sediment samples and computing sediment records are given in the series "Techniques of Water-Resources Investigations" (TWRI), which are listed in this report, and in other documents listed on the World Wide Web page for USGS, Water Resources Division, Office of Water Quality (<http://water.usgs.gov/owq>).

## 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, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.—See Data Presentation under "Records of Stage and Water Discharge"; same comments apply.

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

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

INSTRUMENTATION.—Information on instrumentation is given only if a water-quality monitor, temperature 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 record.

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

EXTREMES.—Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently because the true maximums and minimums may not have been sampled. Extremes, when given, are for both the period of record and for the current water year.

REVISIONS.—If errors in published water-quality records are discovered after publication, appropriate updates are made in the USGS computerized data system, the National Water Information System (NWIS). Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of USGS water-quality data are encouraged to obtain all required data from the appropriate computer file to ensure the most recent updates.

### Remark Codes

The following remarks codes may appear with the water-quality data in this report.

E, e	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K, k	Results based on colony count outside the acceptable range (non-ideal colony count)
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted)
D	Biological organism count equal to or greater than 15 percent (dominant)
&	Biological organism estimated as dominant
V	Analyte was detected in both the environmental sample and the associated blanks

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. The chance of 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 <LRL for samples in which the analyte was either not detected or did not pass identification. Analytes that are detected at concentrations between the LT-MDL and 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.

### Dissolved Trace-Element Concentrations

NOTE.—To confidently produce dissolved trace-element data with insignificant contamination, the USGS began using a new trace-element protocol at some stations in water year 1994 to collect trace-element data at the microgram per liter ( $\mu\text{g/L}$ ) level (refer to USGS Open-File Report 94-539 "U.S. Geological Survey Protocol for the Collection and Processing of Surface-Water Samples for the Subsequent Determination of Inorganic Constituents in Filtered Water"). This protocol was used in the current water year at all stations. Therefore, the trace-element data for samples collected before and after implementation of new protocols are not directly comparable.

### Change in National Trends Network Procedures

NOTE.—Sample handling procedures at all National Trends Network stations were changed substantially on January 11, 1994, in order to reduce contamination from the sample shipping container. The data for samples before and after that date are different and not directly comparable. A tabular summary of the differences based on a special intercomparison study, is available from the NADP/NTN Program Office (Telephone: 217-333-7873).

### Records of Ground-Water Levels

Water-level data from a network of observation wells (in addition to project wells) are given in this report. The network well data are intended to provide a sampling and historical record of water-level changes in the Nation's most important aquifers. Locations of the observation wells in this network in Ohio are shown in figures 1a and 1b. Water-level data for specific projects are reported under those projects.

### Data Collection and Computation

Measurements of water levels are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability.

Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is a 15-digit number that is based on latitude and longitude. The secondary identification number is the local well number, which is provided for local needs. Water-level measurements in this report are given in feet with reference to land-surface datum. Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum above sea level is given in each well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description.

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 to water of several hundred feet, the error of 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 to a tenth of a foot or larger units.

### Data Presentation

Each well record consists of two parts, the station description and the data table of water levels observed during the water year. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments to follow clarify information presented under the various headings.

**LOCATION.**—This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds), a landline location designation, the hydrologic-unit number, the distance and direction from a geographic point of reference, and the owner's name.

**AQUIFER.**—This entry describes the aquifer by age and composition.

**WELL CHARACTERISTICS.**--This entry describes the well in terms of depth, diameter, casing depth and (or) screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other changes since construction.

**DATUM.**—This entry describes both the measuring point and the land-surface altitude at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base, and so on) and in relation to land surface (such as 1.3 ft above land-surface datum). The altitude of the land-surface datum is described in feet above (or below) sea level; 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. It should identify wells that are also water-quality observation wells, and may be used to acknowledge the assistance of local (non-USGS) observers.

**PERIOD OF PUBLISHED RECORD.**—This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water level records by the USGS or cooperating agency, and the words "to current year" if the records are to be continued

to the following year. Periods for which water-level records are available, but not published by the USGS, may be noted.

**EXTREMES FOR PERIOD OF PUBLISHED RECORD.**—This entry contains the highest and lowest water levels of the period of published record, with respect to land-surface datum, and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in feet below (or above) land-surface datum. All periodic measurements of water levels for wells are listed. For wells equipped with recorders, daily water-level lows are published. The highest and lowest daily lows of the water year are shown on a line below the table. Because only daily lows are published for wells with recorders, the extreme instantaneous high may be a value that is not listed in the table. Missing records are indicated by dashes in place of the water level.

### **Records of Ground-Water Quality**

Records of ground-water quality in this report differ from other types of records in that, for most sampling sites, they consist of only one set of measurements. The quality of ground water ordinarily changes slowly, so that frequent measuring of the same parameter is not necessary unless one is concerned with a particular problem such as monitoring for trends of a particular constituent.

### **Data Collection and Computation**

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

Most methods for collecting and analyzing water samples are described in the TWRI manuals listed in this report and on the World Wide Web page for the Office of Water Quality (<http://water.usgs.gov/owq>). The data presented in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. All samples were obtained by trained personnel. The wells sampled were pumped long enough to 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 the material comprising the casings.

### **Data Presentation**

The records of ground-water quality are published intermixed with the ground-water-level data for network wells and with the specific project for project wells.

## **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. These data may be accessed at <http://water.usgs.gov>

Some water-quality and ground-water data also are available through the web. In addition, data can be provided in various machine-readable formats. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division District Offices.

## DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined below. See also the table for converting inch-pound units to International System of units (SI) 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 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.

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

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

Algal growth potential (AGP) is the maximum 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.

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

Annual runoff is the total quantity of water in runoff for a drainage area. Runoff data may be reported as inches (depth to which the drainage area would be covered with water if all the runoff were distributed uniformly in time and area) or as acre-feet or cubic feet per second per square mile (both units defined elsewhere in this list).

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield reasonable quantities of water to wells and springs.

Artesian means confined, and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, but 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.

*Clostridium perfringens* (*C. perfringens*) is a spore-forming bacterium that is common in the feces of humans and other warm-blooded animals. Clostridial spores are being used experimentally as an indicator of past fecal contamination and presence of microorganisms that are resistant to disinfection and environmental stresses. *C. perfringens* is a rod-shaped, anaerobic, gram-positive bacterium that produces acid phosphatase and also toxins that cause gas gangrene and gastroenteritis. After inoculation on mCP agar and anaerobic incubation at 42°C for 24 hours, *C. perfringens* forms colonies that turn pink to magenta upon exposure to ammonium hydroxide fumes.

Enterococcus bacteria are commonly found in the feces of humans and other warm-blooded 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 and subsequent transfer to EIA medium. Enterococci include *Streptococcus faecalis*, *Streptococcus faecium*, *Streptococcus avium*, and their variants.

*Escherichia coli* (*E. coli*) are bacteria present in the intestine and feces of warm-blooded animals.

*E. coli* are a member species of the fecal coliform group of indicator bacteria. In the laboratory they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5°C on mTEC medium.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory, they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that produce red or pink colonies within 48 hours at 35°C ± 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.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. 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 the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Benthic organisms (invertebrates) are the group of animals inhabiting the bottom of an aquatic environment. They include microinvertebrates (such as bacteria and fungi) and macroinvertebrates (such as 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 the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m<sup>3</sup>) and periphyton and benthic organisms in grams per square meter (g/m<sup>2</sup>).

Dry mass refers to the mass of residue present after drying in an oven at 105°C for zooplankton and periphyton, 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.

Organic mass or volatile mass of the living substance is the difference between the dry mass and the ash mass and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism, which are 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, usually milliliters (mL) or liters (L).

Cfs-day 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, approximately 1.9835 acre-feet, about 646,000 gallons, or 2,447 cubic meters.



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 carbonaceous organic pollution from sewage or industrial wastes.

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

Coliphages are viruses that infect and replicate in *Escherichia coli* bacteria. They are indicative of sewage contamination of waters and of the survival and transport of viruses in the environment.

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

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.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, 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.

Cubic foot per second (cfs, ft<sup>3</sup>/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

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

Datum, as used in this report, is an elevation above sea level to which gage-height readings are referenced.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

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

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

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

Dissolved: That material in a representative water sample that passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved oxygen (DO) content of water in equilibrium with air is a function of atmospheric pressure, temperature, and dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved solids, with small temperature changes having the more significant offset. Photosynthesis and respiration may cause diurnal variations in dissolved-oxygen concentration in water from some streams.

Dissolved solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totalling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed

basins, or noncontribution areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface stream and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

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

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate ( $\text{CaCO}_3$ ).

Hydrologic benchmark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a benchmark station may be used to separate effects of natural from human-induced changes in other basins that have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped benchmark basin.

Hydrologic index stations in this report, refers to four continuous record gaging stations that have been selected as representative of streamflow patterns for their respective regions of Ohio. Station locations are shown in figure 2.

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

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

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

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.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per kilogram (UG/KG,  $\mu\text{g}/\text{kg}$ ) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (kilogram) of bottom material.

Micrograms per gram (UG/G,  $\mu\text{g}/\text{g}$ ) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (gram) of sediment.

Micrograms per liter (UG/L,  $\mu\text{g}/\text{L}$ ) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L,  $\text{mg}/\text{L}$ ) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute 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.

Miscellaneous site, or miscellaneous station, is a site where streamflow, sediment, and/or water-quality data are collected once, or more often on a random or discontinuous basis.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a geodetic datum derived from a general adjustment of the first order level nets of the United States and Canada. It was formerly called "Sea

Level Datum of 1929” or “mean sea level” in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, 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>

North American Vertical Datum of 1988 (NAVD of 1988) is the vertical control datum established in 1991 by the minimum-constraint adjustment of the Canadian-Mexican-U.S. leveling observations. It held fixed the height of the primary tidal bench mark, referenced to the new International Great Lakes Datum of 1985 local mean sea level height value, at Father Point/Rimouski, Quebec, Canada.

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

Organism is any living entity.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per unit area of habitat, usually square meters (m<sup>2</sup>), acres, or hectares. 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 milliliters (mL) or liters (L). Numbers of planktonic organisms can be expressed in these terms.

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

Parameter code is a 5-digit number used in the U.S. Geological Survey’s data system, the National Water Information System (NWIS), to uniquely identify a specific constituent. The codes used in NWIS are the same as those used in the U.S. Environmental Protection Agency’s data system, STORET.

Partial-record station is a particular site where limited streamflow and (or) water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods 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 used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology.

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

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material 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.

Percent composition 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, number, mass, or volume.

Periphyton is the assemblage of microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7 are termed “acidic,” and solutions with a pH greater than 7 are termed “basic.” Solutions with a pH of 7

are neutral. The presence and concentration of many dissolved chemical constituents found in water are, in part, influenced by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms are also influenced, in part, by the hydrogen-ion activity of water.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Picocurie (PCI, pCi) is one trillionth ( $1 \times 10^{-12}$ ) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields  $3.7 \times 10^{10}$  radioactive disintegrations per second. A picocurie yields 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.

Phytoplankton is the plant part of the plankton. They are usually 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 are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants.

Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliters (cells/mL) of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movement within the water column and are often 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.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic 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 by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [ $\text{mg C}/(\text{m}^2 \text{ or } \text{m}^3/\text{time})$ ] for periphyton, macrophytes, and phytoplankton are units for expressing primary productivity. They define 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 it is preferred for use in unenriched waters. Unit time may be the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [ $\text{mg O}_2/(\text{m}^2 \text{ or } \text{m}^3/\text{time})$ ] for periphyton, macrophytes, and phytoplankton are units for expressing primary productivity. They define 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.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment; thus, the determination represents

less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Recurrence interval is the average time interval between occurrences of a hydrological event of a given or greater magnitude, usually expressed in years. May also be called return period.

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

Sea level refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land use, and quantity and intensity of precipitation.

Bed load is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed and very close to it. In this report, bed load is considered to consist of particles in transit within 0.25 ft of the streambed.

Bed-load discharge (tons per day) is the quantity of bed load measured by dry weight that moves past a section as bed load in a given time.

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

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (ton/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that passes a section in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Suspended-sediment load is the quantity of suspended sediment passing a section in a specified period.

Total sediment discharge (ton/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

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

Seven-day, 10-year low flow ( $7Q_{10}$ ) is the discharge at the 10-year recurrence interval taken from a frequency curve of annual values of the lowest mean discharge for 7 consecutive days (the 7-day low flow).

Sodium-adsorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water.

Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 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.

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

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," because 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.

Natural substrate refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lives.

Artificial substrate is a device that is purposely 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 taken. Examples of artificial substrate are basket samplers (made of wire cages filled with clean streamsize rocks) and multiplate samplers (made of hardboard) for benthic organism collection and plexiglas strips for periphyton.

Surface area of a lake is that area outlined on the latest USGS topographic map as the boundary of the lake and measured by a planimeter or a digitizer, in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered or digitized. All areas shown are those for the stage when the planimetered map was made.

Surficial bed material is the part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of the total concentration in a water-sediment mixture. The water-sediment mixture is associated with (or sorbed on) 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 membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

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

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchial scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in

common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata*, is the following:

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

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY) is the quantity of substance in solution or suspension that passes a stream section during a 24-hour day.

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

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

Total discharge is the total quantity of any individual constituent, as measured by dry mass or volume, that passes through a stream cross section per unit of time. This term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the concentration of the constituent (in milligrams per liter), times the factor 0.0027, times the number of days.

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

Turbidity is a measurement of the collective optical properties of a water sample that cause light to be scattered and absorbed rather than transmitted in straight lines; the higher the intensity of scattered light, the higher the turbidity. Turbidity is expressed in nephelometric turbidity units (NTU) or

Formazin turbidity units (FTU) depending on the method and equipment used.

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, 1980, is called water year 1980.

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to state annual basic-data reports published after 1975.

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

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

WRD is used as an abbreviation for "Water-Resources Data" in the REVISED RECORDS paragraph to refer to state annual basic-data reports published before 1975.

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

## **PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS**

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

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- 1-D1. *Water temperature—influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS—TWRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS—TWRI Book 1, Chapter D2. 1976. 24 pages.
- 2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS—TWRI Book 2, Chapter D1. 1974. 116 pages.
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- 3-A13. *Computation of continuous records of streamflow*, by E. J. Kennedy: USGS—TWRI Book 3, Chapter A13. 1983. 53 pages.
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- 3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS—TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J. E. Reed: USGS—TWRI Book 3, Chapter B3. 1980. 106 pages.
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**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 mi<sup>2</sup>.

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 above sea level. Prior to Aug. 14, 1929, nonrecording gage at same site and datum.

REMARKS.—Records good. 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 ft<sup>3</sup>/s Jan. 25, 1937, gage height, 15.01 ft, from rating curve extended above 4,200 ft<sup>3</sup>/s on basis of velocity-area studies.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	151	94	74	70	108	94	68	141	1300	398	199	179
2	151	96	74	70	108	94	68	146	1300	395	199	179
3	151	97	74	70	108	94	70	148	1300	295	199	179
4	151	96	74	328	108	94	76	149	1300	228	199	179
5	151	96	73	802	108	94	72	152	873	363	199	179
6	148	95	72	963	108	94	121	153	589	453	200	179
7	147	93	72	964	107	94	155	153	589	453	199	179
8	147	92	72	964	96	94	164	153	589	453	199	179
9	147	92	72	964	90	94	389	153	547	455	199	179
10	147	92	71	968	90	94	1150	155	520	457	199	179
11	147	92	70	568	90	96	1860	154	517	377	199	179
12	144	92	70	230	90	96	2100	153	520	329	199	170
13	141	92	70	230	90	96	2090	153	520	327	199	164
14	124	92	73	230	92	96	1590	151	521	296	199	163
15	112	92	72	230	92	96	1140	151	527	276	199	162
16	112	83	71	230	92	96	1140	149	380	389	199	162
17	112	78	70	162	92	96	958	165	271	468	199	162
18	110	78	70	112	92	96	599	176	429	386	197	162
19	110	78	70	112	92	96	404	185	621	333	197	162
20	110	78	70	111	92	96	354	421	678	333	197	162
21	110	76	70	110	92	96	269	584	680	333	188	171
22	110	76	70	110	92	96	269	340	681	333	181	177
23	110	76	70	110	92	79	267	179	513	332	181	178
24	110	76	70	110	92	70	210	179	378	330	181	179
25	101	76	70	110	92	70	172	179	377	330	181	265
26	96	76	70	108	92	70	177	179	374	297	181	324
27	96	76	70	108	94	70	154	179	372	274	181	324
28	96	74	70	108	94	70	138	183	402	274	181	324
29	96	74	70	108	94	70	138	182	417	276	181	310
30	96	74	70	108	---	69	139	655	406	277	180	299
31	95	---	70	108	---	68	---	1300	---	230	179	---
TOTAL	3829	2552	2204	9576	2779	2728	16501	7500	18491	10750	5970	5989
MEAN	124	85.1	71.1	309	95.8	88.0	550	242	616	347	193	200
MAX	151	97	74	968	108	96	2100	1300	1300	468	200	324
MIN	95	74	70	70	90	68	68	141	271	228	179	162

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2000, BY WATER YEAR (WY)

	1991	1986	1997	1991	1959	1956	1994	1996	1947	1990	1958	1975
MEAN	228	233	271	283	325	362	291	279	282	238	248	262
MAX	855	891	987	1059	1211	1098	867	1324	983	582	904	1134
(WY)	1991	1986	1997	1991	1959	1956	1994	1996	1947	1990	1958	1975
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 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1942 - 2000
ANNUAL TOTAL	86501	88869	
ANNUAL MEAN	237	243	275
HIGHEST ANNUAL MEAN			490
LOWEST ANNUAL MEAN			131
HIGHEST DAILY MEAN	1780	2100	3370
LOWEST DAILY MEAN	47	68	.40
ANNUAL SEVEN-DAY MINIMUM	47	69	.94
INSTANTANEOUS PEAK FLOW		2110	4120
INSTANTANEOUS PEAK STAGE		7.07	10.62
INSTANTANEOUS LOW FLOW		68	.40
10 PERCENT EXCEEDS	392	520	668
50 PERCENT EXCEEDS	151	151	175
90 PERCENT EXCEEDS	70	72	61

**SURFACE-WATER RECORDS**  
**Beaver River Basin**

**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 mi<sup>2</sup>.

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, to Sept. 30, 1977, at same site and datum 0.28 ft higher.

REMARKS.—Records good 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 1999 TO SEPTEMBER 2000**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	23	28	e27	e20	87	43	44	158	36	25	20
2	15	45	26	33	e19	90	47	117	101	29	24	20
3	11	421	26	74	e19	75	119	105	67	34	25	19
4	10	380	29	594	e18	66	491	69	52	81	31	19
5	12	136	30	1000	e18	59	701	89	51	45	24	18
6	12	75	65	237	e18	53	254	92	213	33	91	18
7	11	52	74	137	e17	49	147	66	310	28	356	17
8	10	41	47	101	e20	47	772	54	115	25	211	17
9	13	34	36	80	e24	45	1480	55	74	23	70	17
10	23	31	47	76	e30	43	403	75	55	25	120	17
11	18	29	155	98	e100	41	203	125	46	27	82	24
12	15	27	78	94	e250	59	155	75	67	24	45	24
13	13	25	56	73	e150	82	125	59	217	22	34	21
14	41	24	177	59	e350	93	103	49	121	44	29	20
15	43	23	656	54	488	89	92	41	79	278	26	19
16	22	22	309	48	278	77	84	37	67	103	25	27
17	17	21	154	41	172	201	87	35	74	49	23	26
18	15	20	99	38	143	138	104	33	174	35	23	21
19	15	19	74	33	122	93	89	525	410	29	24	19
20	16	20	63	e30	104	79	82	1270	129	27	22	19
21	15	23	61	e28	87	118	359	228	72	26	21	62
22	15	23	48	e27	109	146	336	126	60	27	20	50
23	16	21	39	e26	425	102	158	94	48	27	21	35
24	37	20	33	e25	759	80	115	95	40	24	27	230
25	61	20	30	e24	620	72	89	80	40	22	24	113
26	33	25	27	e23	446	67	73	61	45	21	21	50
27	24	74	e25	e23	191	59	62	53	40	20	20	35
28	21	57	e24	e22	138	68	57	73	40	33	41	28
29	20	37	e23	e22	101	63	52	451	33	54	30	25
30	22	31	e22	e21	---	54	47	214	37	35	23	23
31	21	---	e24	e20	---	48	---	95	---	27	21	---
TOTAL	650	1799	2585	3188	5236	2443	6929	4585	3035	1313	1579	1053
MEAN	21.0	60.0	83.4	103	181	78.8	231	148	101	42.4	50.9	35.1
MAX	61	421	656	1000	759	201	1480	1270	410	278	356	230
MIN	10	19	22	20	17	41	43	33	33	20	20	17
CFSM	.21	.61	.85	1.05	1.85	.81	2.37	1.52	1.04	.43	.52	.36
IN.	.25	.69	.99	1.22	2.00	.93	2.64	1.75	1.16	.50	.60	.40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 2000, BY WATER YEAR (WY)

	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	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
MEAN	45.6	85.5	137	164	199	235	197	120	71.1	48.5	31.0	39.8																																																															
MAX	338	458	511	547	469	436	550	359	330	232	172	409																																																															
(WY)	1927	1986	1991	1952	1981	1963	1957	1984	1989	1958	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 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1926 - 2000	
	TOTAL	MEAN	TOTAL	MEAN	TOTAL	MEAN
ANNUAL TOTAL	27076.3		34395			
ANNUAL MEAN	74.2		94.0		114	
HIGHEST ANNUAL MEAN					170	1984
LOWEST ANNUAL MEAN					34.3	1934
HIGHEST DAILY MEAN	1770	Jan 24	1480	Apr 9	5500	Jan 22 1959
LOWEST DAILY MEAN	7.6	Sep 20	10	Oct 4	.90	Aug 4 1939
ANNUAL SEVEN-DAY MINIMUM	8.0	Sep 14	11	Oct 3	4.1	Jul 24 1934
INSTANTANEOUS PEAK FLOW			1960	Apr 9a	8150	Sep 15 1979
INSTANTANEOUS PEAK STAGE			11.20	Apr 9	13.71	Sep 15 1979
INSTANTANEOUS LOW FLOW			10	Oct 8	.90	Aug 4 1939
ANNUAL RUNOFF (CFSM)	.76		.96		1.17	
ANNUAL RUNOFF (INCHES)	10.32		13.11		15.84	
10 PERCENT EXCEEDS	169		205		260	
50 PERCENT EXCEEDS	25		45		44	
90 PERCENT EXCEEDS	10		20		13	

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

## SURFACE-WATER RECORDS

## Beaver River Basin

## 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 mi<sup>2</sup>.

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 above sea level. Prior to July 2, 1941, nonrecording gage, and July 2, 1941, to July 22, 1952, water-stage recorder, at site 50 ft downstream at same datum.

REMARKS.—Records good. 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 ft<sup>3</sup>/s Jan. 22, 1959, gage height, 19.37 ft; minimum daily, 60 ft<sup>3</sup>/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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	270	173	149	165	191	302	190	253	1930	495	304	250
2	221	246	144	173	190	294	199	326	1830	486	313	249
3	212	552	143	215	190	276	356	394	1730	529	316	272
4	215	616	144	1260	192	254	1780	314	1690	471	318	278
5	221	377	149	2350	192	240	2040	317	1590	419	316	280
6	225	247	175	1680	190	230	957	355	1040	556	431	281
7	225	205	219	1300	191	219	628	317	1210	551	671	281
8	226	182	190	1220	184	213	2540	284	965	544	631	281
9	240	170	170	1180	173	207	3810	281	846	550	418	281
10	240	162	202	1190	183	200	2080	309	681	548	388	284
11	235	157	314	1190	362	199	2250	403	646	515	420	291
12	228	153	282	551	591	231	2720	335	682	407	353	287
13	228	149	215	438	481	280	2820	292	845	396	337	263
14	232	145	425	398	521	298	2610	274	779	510	327	256
15	231	141	1010	363	779	296	1640	257	661	892	321	261
16	208	136	749	369	683	286	1410	255	623	639	315	276
17	193	126	414	330	466	536	1370	254	648	622	313	271
18	190	121	301	225	411	488	1110	279	759	560	313	261
19	186	120	252	209	364	342	691	1310	1290	429	313	257
20	184	123	228	205	345	292	633	2170	1040	413	311	258
21	181	122	217	190	311	337	714	1430	880	410	306	298
22	180	126	204	195	375	464	935	949	851	407	287	329
23	181	131	188	202	1040	365	675	620	749	405	294	328
24	189	128	167	197	1500	282	560	755	485	401	296	539
25	217	126	169	188	1370	251	423	638	461	396	295	518
26	209	152	166	191	1080	234	380	541	462	385	288	503
27	190	190	165	187	615	220	357	507	607	335	288	479
28	183	215	157	186	428	221	313	526	715	346	299	457
29	179	174	164	183	340	227	299	1820	523	364	304	446
30	173	157	166	186	---	223	266	1250	497	358	268	420
31	173	---	165	188	---	203	---	1690	---	332	253	---
TOTAL	6465	5822	7803	17104	13938	8710	36756	19705	27715	14671	10607	9735
MEAN	209	194	252	552	481	281	1225	636	924	473	342	324
MAX	270	616	1010	2350	1500	536	3810	2170	1930	892	671	539
MIN	173	120	143	165	173	199	190	253	461	332	253	249

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2000, BY WATER YEAR (WY)

MEAN	441	599	826	778	814	936	852	671	563	410	372	476
MAX	1575	2077	2010	2105	2262	1909	2089	2267	2116	1047	1022	1705
(WY)	1991	1986	1978	1993	1990	1993	1994	1996	1989	1990	1992	1975
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	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1967 - 2000
ANNUAL TOTAL	173919	179031	
ANNUAL MEAN	476	489	644
HIGHEST ANNUAL MEAN			981
LOWEST ANNUAL MEAN			367
HIGHEST DAILY MEAN			8480
LOWEST DAILY MEAN	3750	Jan 24	106
ANNUAL SEVEN-DAY MINIMUM	120	Nov 19	116
INSTANTANEOUS PEAK FLOW	124	Nov 17	9300
INSTANTANEOUS PEAK STAGE		Apr 9	15.91
INSTANTANEOUS LOW FLOW		Apr 9	106
10 PERCENT EXCEEDS	1020	Nov 18	1510
50 PERCENT EXCEEDS	280		358
90 PERCENT EXCEEDS	174		212

**SURFACE-WATER RECORDS**  
**Beaver River Basin**

**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 mi<sup>2</sup>.

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. 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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	449	205	e280	259	258	423	273	339	2250	581	429	355
2	291	e250	e270	265	251	399	316	435	2100	566	428	351
3	248	e1400	e270	403	259	378	619	498	1920	902	431	370
4	249	e1100	e280	2040	267	347	2670	394	1860	812	431	393
5	245	e660	e310	2880	267	325	3210	410	1840	598	429	396
6	255	e400	e330	2260	262	309	1850	427	1360	617	760	396
7	254	e320	e390	1590	264	295	1190	390	1510	634	1040	387
8	256	e280	e340	1430	258	284	5100	352	1380	617	970	386
9	362	e260	e300	1350	250	273	6200	332	1140	616	646	370
10	313	e240	e350	1370	277	267	3550	409	859	677	518	370
11	287	e230	e540	1500	673	268	2830	495	733	678	560	397
12	267	e220	e450	968	922	351	3180	444	900	532	492	362
13	301	e210	e400	609	820	421	3420	359	1080	449	451	343
14	428	e210	e500	541	905	445	3330	326	989	749	437	308
15	321	e200	e1600	488	1180	430	2610	302	967	1510	427	327
16	269	e200	e1000	471	1090	450	2050	287	1120	1060	419	377
17	246	e190	e640	434	798	839	1960	286	1220	818	431	345
18	251	e190	e500	355	671	844	1720	305	1350	723	435	318
19	229	e185	e430	299	620	551	1260	1840	1820	568	425	309
20	221	e220	e370	276	568	451	1100	3000	1630	501	419	299
21	214	e230	e330	255	518	530	1160	2290	1480	532	416	414
22	209	e230	e300	255	619	714	1330	1520	1380	514	401	389
23	217	e230	e270	273	1440	622	1150	1200	1170	488	464	454
24	262	e240	e250	259	2020	466	1050	1550	842	475	465	962
25	271	e230	e230	250	1950	387	876	1280	717	469	414	781
26	279	e320	e230	246	1570	348	757	912	692	466	399	608
27	244	e540	e240	242	997	341	684	804	1200	427	420	601
28	224	e380	e230	243	638	341	544	802	1300	545	431	523
29	211	e330	e240	246	493	335	423	2130	743	508	431	487
30	206	e300	e250	256	---	322	354	2080	623	504	396	461
31	204	---	e250	258	---	294	---	1690	---	481	362	---
TOTAL	8283	10200	12370	22571	21105	13050	56766	27888	38175	19617	15177	12839
MEAN	267	340	399	728	728	421	1892	900	1272	633	490	428
MAX	449	1400	1600	2880	2020	844	6200	3000	2250	1510	1040	962
MIN	204	185	230	242	250	267	273	286	623	427	362	299
MED	254	235	310	355	620	378	1300	444	1210	568	431	386
CFSM	.31	.40	.47	.85	.85	.49	2.22	1.05	1.49	.74	.57	.50
IN.	.36	.44	.54	.98	.92	.57	2.47	1.21	1.66	.85	.66	.56

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2000, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	591	755	913	1271	1206	1192	1166	933	975	647	552	579	
MAX	2074	1935	2736	3088	2853	2881	2946	3113	3117	1403	1147	1652	
(WY)	1991	1993	1997	1993	1990	1993	1994	1996	1989	1990	1992	1990	
MIN	247	212	272	268	333	421	540	293	293	370	407	326	
(WY)	1989	1992	1992	1992	1992	2000	1988	1992	1992	1988	1988	1994	

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1988 - 2000
ANNUAL TOTAL	245925	258041	
ANNUAL MEAN	674	705	896
HIGHEST ANNUAL MEAN			1262
LOWEST ANNUAL MEAN			546
HIGHEST DAILY MEAN	4570	6200	9120
LOWEST DAILY MEAN	185	185	183
ANNUAL SEVEN-DAY MINIMUM	198	198	196
INSTANTANEOUS PEAK FLOW		7100	9760
INSTANTANEOUS PEAK STAGE		10.34	13.35
INSTANTANEOUS LOW FLOW		185	183
ANNUAL RUNOFF (CFSM)	.79	.83	1.05
ANNUAL RUNOFF (INCHES)	10.71	11.24	14.26
10 PERCENT EXCEEDS	1640	1530	2180
50 PERCENT EXCEEDS	400	430	489
90 PERCENT EXCEEDS	250	246	284

e Estimated.

## SURFACE-WATER RECORDS

## Beaver River Basin

## 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 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

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. 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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	492	213	289	289	318	541	366	443	2390	643	514	379
2	323	979	275	296	313	516	480	618	2260	625	512	374
3	271	1640	284	638	316	486	1310	602	2110	1200	514	388
4	269	1260	317	3320	325	447	4270	509	2130	1020	517	404
5	261	793	328	3480	326	416	4260	577	2030	705	511	396
6	264	465	409	2630	317	393	2360	564	1710	677	1160	396
7	260	346	413	1750	319	375	1720	509	1710	690	1390	394
8	262	298	365	1510	310	366	7860	461	1570	666	1160	395
9	400	280	309	1400	306	360	8090	436	1250	669	796	382
10	333	273	490	1410	342	345	4400	491	964	779	633	386
11	296	258	598	1550	879	348	3130	566	809	771	663	441
12	273	246	537	1040	1040	484	3390	536	1020	617	607	388
13	326	240	415	653	911	524	3650	452	1230	519	558	399
14	491	238	1260	581	1200	530	3520	415	1100	975	544	339
15	345	230	1950	531	1410	512	2780	373	1040	1830	537	393
16	288	227	1550	520	1250	535	2180	352	1250	1240	453	450
17	255	221	843	486	895	948	2100	355	1420	967	437	389
18	273	213	552	419	741	943	1880	421	1510	836	442	346
19	240	214	444	364	726	622	1410	2560	1930	644	440	336
20	229	238	396	350	655	527	1190	3250	1740	559	434	345
21	221	242	365	322	603	669	1270	2480	1640	606	424	547
22	219	241	336	314	746	832	1470	1660	1550	593	416	420
23	226	240	308	335	1780	723	1250	1520	1250	551	492	531
24	293	247	272	328	2400	561	1120	2080	910	534	590	1080
25	283	237	252	315	2250	485	957	1650	778	531	450	856
26	284	555	243	316	1810	439	822	1090	753	525	423	640
27	248	586	256	305	1170	428	745	927	2060	489	435	633
28	228	451	239	301	771	435	623	1020	1490	586	470	569
29	218	351	247	298	610	431	521	2410	835	567	444	527
30	211	315	279	310	---	412	453	2420	683	573	421	506
31	209	---	290	317	---	396	---	1850	---	555	385	---
TOTAL	8791	12337	15111	26678	25039	16029	69577	33597	43122	22742	17772	14029
MEAN	284	411	487	861	863	517	2319	1084	1437	734	573	468
MAX	492	1640	1950	3480	2400	948	8090	3250	2390	1830	1390	1080
MIN	209	213	239	289	306	345	366	352	683	489	385	336

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2000, BY WATER YEAR (WY)

MEAN	662	841	1083	1501	1386	1413	1428	1095	1139	769	613	664
MAX	2303	2117	3184	3608	3323	3456	3502	3639	3693	1932	1316	1881
(WY)	1991	1993	1997	1993	1990	1993	1994	1996	1989	1990	1992	1990
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 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1988 - 2000

ANNUAL TOTAL	290469	304824										
ANNUAL MEAN	796	833								1047		
HIGHEST ANNUAL MEAN										1445		1997
LOWEST ANNUAL MEAN										643		1988
HIGHEST DAILY MEAN				5600	Jan 24		8090	Apr 9		11400	Apr 13	1994
LOWEST DAILY MEAN				209	Oct 31		209	Oct 31		181	Oct 17	1988
ANNUAL SEVEN-DAY MINIMUM				226	Nov 14		226	Nov 14		202	Nov 24	1991
INSTANTANEOUS PEAK FLOW							10000	Apr 8		11900	Apr 13	1994
INSTANTANEOUS PEAK STAGE							13.03	Apr 8		15.44	Apr 13	1994
INSTANTANEOUS LOW FLOW							203	Oct 31		181	Oct 17	1988
10 PERCENT EXCEEDS				2210			1790			2470		
50 PERCENT EXCEEDS				438			518			556		
90 PERCENT EXCEEDS				267			268			334		



**SURFACE-WATER RECORDS**  
**Beaver River Basin**

**03098600 MAHONING RIVER BELOW WEST AVENUE AT YOUNGSTOWN, OHIO—Continued**

WATER-QUALITY RECORDS

PERIOD OF RECORD.—June 1992 to current year.

PERIOD OF DAILY RECORD—

SPECIFIC CONDUCTANCE: July 1992 to current year.

pH: July 1992 to current year.

WATER TEMPERATURES: June 1992 to current year.

DISSOLVED OXYGEN: July 1992 to current year.

INSTRUMENTATION.—Data Collection Platform. Set for 1-hour interval.

REMARKS.—Interruptions in the water-quality were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF RECORD.—

SPECIFIC CONDUCTANCE: Maximum, 1,070 microsiemens, Feb. 11, 2000; minimum, 189 microsiemens, Aug. 1, 1992.

pH: Maximum, 8.8 units, May 14, 23, 31, 1994; minimum, 6.6 units, Feb. 2, 1999.

WATER TEMPERATURES: Maximum, 32.5°C, July 10, 1993, July 15, 1995, and July 27, 1999; minimum, 1.0°C, on several days during winter.

DISSOLVED OXYGEN: Maximum, 14.5 mg/L Apr. 18, 1996; minimum, 3.7 mg/L July 21 and 22, 1999.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum, 1,070 microsiemens, Feb. 11; minimum, 255 microsiemens, May 21.

pH: Maximum, 8.1 units, Dec. 20, 21, and 23; minimum, 6.9 units, Feb. 24, 25, and May 21.

WATER TEMPERATURES: Maximum, 31.0°C, Sept. 2; minimum, 2.0°C, Feb. 17.

DISSOLVED OXYGEN: Maximum, 13.1 mg/L, Feb. 17; minimum, 4.1 mg/L, Aug. 23.

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	412	376	404	656	637	644	637	615	631	761	735	753
2	495	410	452	656	465	585	664	633	650	740	727	733
3	543	495	514	526	438	468	733	656	700	727	655	718
4	584	543	567	475	449	462	726	702	716	662	502	551
5	594	584	590	473	436	457	702	673	686	505	391	447
6	593	581	585	451	436	439	675	651	662	447	375	394
7	608	585	598	498	451	477	662	645	652	523	447	492
8	599	588	594	---	---	---	649	628	634	539	522	532
9	610	570	588	---	---	---	647	628	636	555	539	546
10	600	567	577	---	---	---	696	647	668	570	547	553
11	602	527	553	---	---	---	685	652	665	592	563	573
12	561	536	551	---	---	---	667	592	610	589	564	573
13	582	552	569	---	---	---	629	594	610	607	589	599
14	581	548	566	---	---	---	636	473	571	608	592	599
15	574	527	563	---	---	---	509	444	475	641	608	622
16	565	526	546	---	---	---	446	403	433	642	627	633
17	599	565	580	---	---	---	427	401	410	639	630	632
18	615	599	607	634	625	630	470	427	449	661	639	654
19	633	615	622	648	630	637	510	470	490	664	646	656
20	661	623	647	647	639	643	561	509	534	738	664	694
21	632	616	626	658	638	649	580	554	564	725	696	705
22	656	626	640	661	645	652	622	580	591	762	719	737
23	661	647	653	656	636	649	636	618	626	774	760	764
24	660	636	644	636	616	622	654	626	639	774	757	766
25	650	629	639	633	614	625	674	648	663	760	745	753
26	638	590	619	638	556	609	681	646	664	763	745	752
27	605	591	597	603	564	587	696	677	686	799	763	785
28	611	596	604	564	524	536	698	680	692	793	761	777
29	633	604	616	558	522	532	697	689	693	782	761	769
30	648	630	637	635	558	597	733	690	707	817	782	799
31	648	644	647	---	---	---	759	731	749	798	783	789
MONTH	661	376	587	661	436	575	759	401	618	817	375	656



**SURFACE-WATER RECORDS**  
**Beaver River Basin**

**03098600 MAHONING RIVER BELOW WEST AVENUE AT YOUNGSTOWN, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.6	7.5	7.6	7.6	7.5	7.6	7.4	7.1	7.2	7.8	7.7	7.8
2	7.7	7.5	7.6	7.7	7.5	7.6	7.3	7.1	7.2	7.8	7.7	7.7
3	7.7	7.6	7.6	7.7	7.5	7.5	7.4	7.3	7.3	7.9	7.7	7.8
4	7.7	7.6	7.6	7.5	7.5	7.5	7.5	7.4	7.5	7.9	7.4	7.6
5	7.7	7.6	7.6	7.5	7.5	7.5	7.7	7.5	7.6	7.4	7.2	7.4
6	7.7	7.6	7.6	7.5	7.5	7.5	7.7	7.6	7.6	7.3	7.2	7.2
7	7.6	7.6	7.6	7.5	7.5	7.5	7.6	7.5	7.6	7.3	7.3	7.3
8	7.7	7.6	7.6	---	---	---	7.6	7.5	7.6	7.4	7.3	7.4
9	7.7	7.6	7.7	---	---	---	7.6	7.6	7.6	7.4	7.4	7.4
10	7.7	7.5	7.6	---	---	---	7.7	7.5	7.6	7.5	7.4	7.4
11	7.6	7.5	7.5	---	---	---	7.7	7.7	7.7	7.5	7.4	7.5
12	7.5	7.5	7.5	---	---	---	7.7	7.6	7.6	7.4	7.4	7.4
13	7.6	7.5	7.5	---	---	---	7.7	7.6	7.6	7.5	7.4	7.5
14	7.7	7.6	7.6	---	---	---	7.8	7.6	7.7	7.5	7.4	7.5
15	7.6	7.5	7.5	---	---	---	7.7	7.6	7.6	7.4	7.4	7.4
16	7.5	7.5	7.5	---	---	---	7.7	7.6	7.7	7.4	7.3	7.4
17	7.6	7.5	7.5	---	---	---	7.7	7.7	7.7	7.4	7.3	7.3
18	7.5	7.5	7.5	7.4	7.3	7.4	7.7	7.7	7.7	7.4	7.3	7.4
19	7.7	7.5	7.5	7.4	7.3	7.3	7.9	7.7	7.8	7.5	7.0	7.2
20	7.6	7.5	7.6	7.4	7.3	7.4	8.1	7.9	8.0	7.3	7.1	7.1
21	7.6	7.5	7.6	7.5	7.4	7.4	8.1	8.0	8.1	7.1	7.1	7.1
22	7.6	7.5	7.6	7.6	7.4	7.5	8.0	8.0	8.0	7.3	7.1	7.2
23	7.6	7.5	7.6	7.6	7.5	7.6	8.1	7.9	8.0	7.3	7.3	7.3
24	7.6	7.5	7.5	7.6	7.5	7.5	7.9	7.9	7.9	7.3	7.3	7.3
25	7.5	7.5	7.5	7.6	7.5	7.5	7.9	7.9	7.9	7.3	7.3	7.3
26	7.5	7.5	7.5	7.6	7.4	7.5	7.9	7.8	7.9	7.4	7.3	7.3
27	7.5	7.5	7.5	7.4	7.3	7.3	7.9	7.9	7.9	7.3	7.2	7.3
28	7.5	7.5	7.5	7.3	7.2	7.2	7.9	7.7	7.8	7.4	7.2	7.3
29	7.6	7.5	7.5	7.3	7.2	7.2	7.7	7.7	7.7	7.5	7.4	7.4
30	7.6	7.5	7.5	7.2	7.2	7.2	7.8	7.7	7.7	7.5	7.4	7.4
31	7.6	7.5	7.5	---	---	---	7.7	7.7	7.7	7.4	7.3	7.4
MONTH	7.7	7.5	7.6	7.7	7.2	7.4	8.1	7.1	7.7	7.9	7.0	7.4

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.4	7.3	7.3	7.4	7.3	7.4	---	---	---	7.8	7.5	7.6
2	7.4	7.3	7.3	7.4	7.4	7.4	---	---	---	7.8	7.6	7.7
3	7.5	7.3	7.4	7.5	7.4	7.4	---	---	---	7.6	7.3	7.5
4	7.7	7.4	7.5	7.5	7.4	7.4	---	---	---	7.5	7.2	7.4
5	7.5	7.4	7.5	7.5	7.3	7.4	---	---	---	7.7	7.3	7.4
6	7.5	7.4	7.5	7.6	7.4	7.5	7.9	7.8	7.8	7.5	7.3	7.4
7	7.5	7.4	7.5	7.6	7.4	7.5	7.9	7.7	7.8	7.5	7.3	7.4
8	7.5	7.4	7.4	---	---	---	7.9	7.8	7.8	7.5	7.3	7.4
9	7.5	7.4	7.5	---	---	---	7.8	7.5	7.6	7.4	7.3	7.3
10	7.6	7.4	7.5	---	---	---	7.6	7.5	7.5	7.3	7.3	7.3
11	7.6	7.4	7.5	---	---	---	7.7	7.6	7.7	7.4	7.3	7.3
12	7.4	7.1	7.3	---	---	---	7.7	7.7	7.7	7.4	7.3	7.3
13	7.3	7.1	7.2	---	---	---	7.7	7.6	7.7	7.4	7.3	7.3
14	7.3	7.2	7.2	---	---	---	7.7	7.6	7.6	7.4	7.3	7.3
15	7.2	7.1	7.1	---	---	---	7.7	7.6	7.7	7.4	7.3	7.3
16	7.1	7.0	7.1	---	---	---	7.7	7.6	7.6	7.3	7.2	7.3
17	7.1	7.0	7.0	---	---	---	7.7	7.6	7.6	7.4	7.2	7.3
18	7.1	7.0	7.1	---	---	---	7.6	7.5	7.5	7.4	7.3	7.4
19	7.1	7.1	7.1	---	---	---	7.5	7.3	7.4	7.4	7.2	7.3
20	7.2	7.0	7.1	---	---	---	7.4	7.3	7.3	7.2	7.0	7.1
21	7.1	7.0	7.1	---	---	---	7.4	7.3	7.3	7.0	6.9	7.0
22	7.2	7.1	7.1	---	---	---	7.3	7.3	7.3	7.2	7.0	7.1
23	7.2	7.0	7.1	---	---	---	7.3	7.3	7.3	7.3	7.2	7.2
24	7.2	6.9	7.0	---	---	---	7.4	7.3	7.4	7.3	7.2	7.3
25	7.1	6.9	7.0	---	---	---	7.5	7.4	7.4	7.3	7.3	7.3
26	7.3	7.0	7.1	---	---	---	7.6	7.4	7.5	7.3	7.3	7.3
27	7.2	7.1	7.2	---	---	---	7.6	7.4	7.5	7.3	7.3	7.3
28	7.3	7.2	7.3	---	---	---	7.6	7.4	7.5	7.3	7.2	7.3
29	7.4	7.3	7.3	---	---	---	7.7	7.5	7.6	7.3	7.3	7.3
30	---	---	---	---	---	---	7.8	7.5	7.6	7.3	7.2	7.2
31	---	---	---	---	---	---	---	---	---	7.3	7.2	7.2
MONTH	7.7	6.9	7.3	7.6	7.3	7.4	7.9	7.3	7.5	7.8	6.9	7.3



**SURFACE-WATER RECORDS**  
**Beaver River Basin**

**03098600 MAHONING RIVER BELOW WEST AVENUE AT YOUNGSTOWN, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	22.0	20.5	21.0	21.5	20.0	20.5	9.5	8.5	9.0	10.5	8.5	10.0			
2	22.0	20.0	21.0	21.5	17.5	19.5	11.5	9.5	11.0	12.5	10.5	11.5			
3	21.5	20.5	21.0	18.0	12.5	14.0	13.0	11.5	12.5	13.0	10.5	12.5			
4	20.5	19.5	20.5	12.5	11.5	12.0	15.0	13.0	14.0	12.0	7.0	9.5			
5	20.5	19.5	20.0	12.0	11.0	11.5	16.0	15.0	16.0	7.0	5.5	6.5			
6	20.0	19.0	19.5	13.0	11.5	12.5	16.0	15.0	15.5	5.5	4.5	5.0			
7	19.0	18.0	18.5	12.5	11.5	12.0	15.0	14.0	14.5	4.5	4.0	4.0			
8	18.5	17.5	18.0	---	---	---	14.0	12.5	13.0	4.0	4.0	4.0			
9	19.0	18.5	19.0	---	---	---	13.0	12.5	13.0	4.5	4.0	4.0			
10	19.0	17.0	17.5	---	---	---	13.5	12.0	13.0	6.0	4.5	5.0			
11	17.5	16.5	17.0	---	---	---	13.0	12.0	12.5	6.5	5.5	6.0			
12	17.0	16.0	16.5	---	---	---	12.0	9.0	10.5	6.5	5.5	6.0			
13	17.5	16.0	16.5	---	---	---	9.0	9.0	9.0	7.0	6.5	7.0			
14	19.0	17.5	18.0	---	---	---	10.0	8.5	9.0	7.0	4.5	6.5			
15	18.0	16.0	17.0	---	---	---	8.5	7.0	8.0	4.5	4.0	4.5			
16	18.5	17.0	17.5	---	---	---	7.5	7.0	7.5	5.0	4.5	5.0			
17	18.5	17.5	18.0	---	---	---	8.5	7.5	8.0	4.5	3.5	4.0			
18	18.5	17.5	17.5	12.5	12.0	12.5	9.0	8.5	8.5	6.0	3.5	4.5			
19	18.5	17.0	17.5	13.0	12.0	12.5	9.5	8.5	9.0	4.5	4.0	4.0			
20	20.5	18.5	19.5	14.0	13.0	13.5	10.5	9.5	10.0	5.0	4.0	4.5			
21	20.5	19.0	19.5	14.5	13.5	14.0	10.0	9.5	9.5	4.5	4.0	4.0			
22	20.0	19.0	19.5	18.0	14.0	16.0	10.0	9.0	9.5	6.5	4.5	6.0			
23	19.5	18.5	18.5	19.5	18.0	18.5	9.5	9.0	9.5	8.5	6.5	7.5			
24	18.5	17.5	18.0	19.5	18.5	19.0	9.0	8.5	8.5	8.5	7.5	8.0			
25	18.5	17.0	18.0	18.5	18.0	18.5	9.0	8.0	8.5	8.0	7.5	7.5			
26	18.0	17.0	17.5	18.0	13.5	15.5	9.0	8.0	8.5	8.0	7.5	8.0			
27	17.0	16.0	16.5	13.5	12.5	13.0	9.5	9.0	9.0	7.5	6.5	7.5			
28	17.5	16.0	16.5	12.5	11.0	11.5	9.5	7.0	9.0	8.0	6.5	7.5			
29	19.5	17.0	18.0	11.0	10.0	11.0	7.0	5.5	6.0	8.5	7.0	8.0			
30	20.5	18.5	19.5	10.0	9.0	9.5	7.5	5.5	6.5	8.5	6.5	8.0			
31	20.5	19.5	20.0	---	---	---	9.5	7.5	8.5	6.5	6.0	6.0			
MONTH	22.0	16.0	18.5	21.5	9.0	14.5	16.0	5.5	10.0	13.0	3.5	6.5			

DAY	MAX	MIN	MEAN	FEBRUARY			MARCH			APRIL			MAY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.0	5.5	5.5	13.0	11.5	12.0	15.0	13.0	14.0	21.5	20.0	21.0			
2	6.0	5.0	5.5	12.5	11.5	12.0	15.0	14.0	14.5	21.0	19.0	20.0			
3	7.0	5.5	5.5	12.5	10.5	11.5	14.5	13.5	14.0	22.0	19.0	20.5			
4	9.0	7.0	8.5	12.0	10.5	11.5	14.5	11.0	12.0	21.5	19.5	21.0			
5	7.0	5.5	6.5	11.0	9.5	10.5	11.0	9.0	10.0	23.5	21.0	22.0			
6	6.5	5.5	6.0	12.0	10.0	11.0	11.0	10.0	10.5	25.0	21.5	23.5			
7	6.5	6.0	6.5	13.0	11.0	12.0	11.5	10.0	11.0	26.0	24.0	25.0			
8	6.5	5.5	6.0	15.0	13.0	14.0	10.5	8.5	9.5	27.0	24.5	26.0			
9	7.0	5.5	6.5	15.5	14.0	15.0	8.5	7.0	7.5	28.0	26.5	27.0			
10	10.5	6.5	8.5	15.0	14.0	14.5	8.0	6.5	7.0	27.5	24.0	26.5			
11	10.5	7.0	9.5	14.0	12.0	13.0	9.0	8.0	8.5	24.0	22.5	23.5			
12	7.0	3.0	5.0	12.0	11.0	11.5	9.0	8.5	9.0	23.0	21.5	22.5			
13	3.0	2.5	2.5	11.0	9.5	10.0	9.5	8.5	9.0	23.5	22.5	23.0			
14	3.5	3.0	3.5	10.0	8.0	8.5	11.5	9.5	10.0	23.0	21.5	22.0			
15	3.5	2.5	3.0	9.5	8.5	9.0	13.5	11.0	12.0	22.0	20.5	21.5			
16	3.0	2.5	3.0	9.5	8.5	9.0	14.5	13.5	14.0	22.0	20.0	21.0			
17	3.0	2.0	2.5	8.5	7.5	8.5	14.5	13.5	14.0	22.5	20.5	21.5			
18	3.5	3.0	3.0	8.5	6.5	7.5	13.5	12.0	13.0	22.5	21.0	22.0			
19	5.0	3.5	4.0	8.5	7.5	8.0	12.5	12.0	12.0	21.5	18.5	20.0			
20	4.0	3.5	4.0	9.0	8.5	9.0	13.0	12.0	12.5	18.5	16.5	17.5			
21	5.0	4.0	4.5	10.0	8.5	9.5	13.5	13.0	13.0	16.5	15.0	15.5			
22	6.5	5.0	5.5	10.5	9.5	10.0	13.0	12.5	13.0	17.5	16.0	16.5			
23	8.0	5.5	7.0	11.5	10.0	10.5	14.0	12.5	13.5	18.0	17.5	18.0			
24	5.5	5.0	5.0	13.5	11.0	12.0	16.0	13.5	14.5	19.0	17.5	18.5			
25	6.5	5.5	6.0	15.5	13.0	14.5	17.5	15.5	16.5	20.0	19.0	19.0			
26	9.0	6.5	8.0	16.0	14.5	15.0	18.0	16.5	17.0	20.5	19.0	19.5			
27	11.0	9.0	10.0	15.5	14.5	15.0	18.0	16.5	17.0	20.5	20.0	20.0			
28	12.0	10.5	11.5	14.5	14.0	14.5	19.0	17.0	18.0	20.0	18.5	19.0			
29	12.5	11.0	11.5	14.0	13.0	13.5	20.5	18.0	19.0	19.5	17.5	18.5			
30	---	---	---	14.0	12.5	13.0	21.5	19.0	20.0	17.5	16.5	17.0			
31	---	---	---	14.5	12.5	13.5	---	---	---	20.0	17.5	19.0			
MONTH	12.5	2.0	6.0	16.0	6.5	11.5	21.5	6.5	13.0	28.0	15.0	21.0			



**SURFACE-WATER RECORDS**  
**Beaver River Basin**

**03098600 MAHONING RIVER BELOW WEST AVENUE AT YOUNGSTOWN, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

OXYGEN, DISSOLVED, MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.4	5.6	5.9	6.9	5.9	6.4	10.8	9.6	10.2	9.8	9.0	9.4			
2	6.5	5.9	6.1	9.5	5.2	7.1	10.0	9.3	9.7	9.1	8.4	8.8			
3	6.8	6.0	6.3	10.7	9.3	10.3	9.8	9.1	9.4	8.7	7.9	8.3			
4	7.1	6.0	6.6	10.7	8.7	10.0	9.5	8.6	9.2	8.7	8.1	8.4			
5	7.1	6.7	6.9	8.7	5.3	7.0	9.3	8.3	8.8	---	---	---			
6	7.3	6.8	7.0	---	---	---	8.8	8.4	8.6	---	---	---			
7	7.8	7.1	7.4	---	---	---	9.5	8.7	9.1	---	---	---			
8	8.0	7.4	7.6	---	---	---	10.4	9.1	9.7	---	---	---			
9	7.6	7.2	7.4	---	---	---	10.3	9.5	9.9	---	---	---			
10	8.1	7.2	7.7	---	---	---	10.2	8.6	9.6	---	---	---			
11	8.2	7.5	7.9	---	---	---	10.6	9.8	10.1	---	---	---			
12	8.4	7.8	8.1	---	---	---	11.3	10.0	10.7	---	---	---			
13	8.5	7.7	8.1	---	---	---	11.5	11.2	11.3	---	---	---			
14	8.1	7.5	7.8	---	---	---	11.3	10.3	11.0	---	---	---			
15	8.2	7.4	7.9	---	---	---	12.1	11.3	11.8	---	---	---			
16	8.1	7.2	7.6	---	---	---	12.1	11.8	12.0	---	---	---			
17	7.4	7.0	7.2	---	---	---	11.8	11.3	11.7	---	---	---			
18	7.8	7.2	7.4	8.1	6.9	7.6	11.4	11.0	11.2	---	---	---			
19	7.9	7.1	7.5	8.6	7.7	8.0	11.0	10.2	10.8	---	---	---			
20	7.1	6.6	6.9	8.5	7.6	8.0	11.6	10.0	10.9	10.7	10.1	10.5			
21	7.3	6.6	6.9	8.3	7.5	7.8	11.6	11.2	11.4	10.8	9.8	10.3			
22	7.1	6.5	6.8	8.1	6.5	7.5	11.6	11.1	11.4	9.9	9.2	9.6			
23	7.0	6.4	6.7	7.2	6.2	6.7	11.6	11.0	11.3	9.9	8.9	9.3			
24	7.2	6.6	7.0	7.2	6.2	6.6	11.5	11.2	11.3	10.1	8.9	9.4			
25	7.5	7.0	7.1	7.3	6.3	6.7	11.5	10.9	11.3	10.1	9.0	9.4			
26	7.8	7.2	7.4	8.7	6.5	7.7	11.0	10.4	10.8	10.4	9.0	9.6			
27	8.2	7.5	7.9	9.1	8.6	8.8	10.6	10.2	10.4	10.6	9.1	9.8			
28	8.2	7.5	7.9	9.4	8.8	9.1	10.9	10.0	10.3	10.6	9.3	9.8			
29	7.8	6.8	7.5	9.8	9.1	9.4	11.6	10.9	11.3	10.9	9.3	9.9			
30	7.5	6.6	7.0	10.1	9.3	9.7	11.1	10.4	10.9	10.3	9.2	9.7			
31	6.9	6.3	6.6	---	---	---	10.5	9.8	10.1	11.7	10.0	10.6			
MONTH	8.5	5.6	7.2	10.7	5.2	8.0	12.1	8.3	10.5	11.7	7.9	9.6			

DAY	MAX	MIN	MEAN	FEBRUARY			MARCH			APRIL			MAY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.5	10.0	10.6	9.8	9.2	9.5	10.7	8.6	9.4	---	---	---			
2	12.1	10.2	11.0	9.5	8.9	9.1	9.3	8.6	9.0	---	---	---			
3	11.4	9.6	10.6	10.1	9.1	9.5	9.4	9.0	9.2	---	---	---			
4	10.1	9.0	9.6	10.4	9.1	9.5	9.9	9.1	9.7	---	---	---			
5	11.9	9.8	10.7	10.9	9.2	9.9	9.9	8.5	9.4	7.2	5.4	6.2			
6	12.3	10.2	11.0	10.8	8.9	9.7	9.4	9.2	9.4	7.0	5.5	6.2			
7	11.7	10.2	10.8	10.6	8.6	9.5	9.8	9.3	9.4	7.0	5.4	6.2			
8	12.5	10.2	11.1	10.1	8.3	9.0	9.9	9.4	9.7	6.8	5.3	5.8			
9	12.8	10.4	11.3	9.5	7.9	8.6	10.0	9.6	9.8	6.1	4.7	5.2			
10	11.1	8.9	10.3	8.5	7.8	8.1	10.7	10.0	10.5	5.6	4.3	4.9			
11	11.0	8.9	9.9	8.9	7.8	8.3	10.7	10.4	10.6	6.5	5.4	5.9			
12	12.4	10.8	11.7	10.0	7.8	9.1	10.8	10.6	10.7	7.1	5.9	6.4			
13	12.7	12.4	12.6	10.6	9.4	9.9	11.0	10.6	10.8	6.6	5.9	6.2			
14	12.5	12.2	12.3	11.4	10.0	10.8	10.7	10.2	10.5	6.9	6.0	6.3			
15	12.8	12.3	12.6	11.6	10.3	10.9	10.2	9.4	9.9	7.2	5.9	6.4			
16	12.8	12.6	12.7	10.6	10.0	10.3	9.5	9.0	9.3	7.0	5.9	6.4			
17	13.1	12.7	12.9	10.9	10.0	10.4	9.2	8.8	9.0	6.7	4.9	6.1			
18	12.7	12.3	12.6	11.6	10.6	11.1	9.5	9.0	9.2	6.6	4.9	5.9			
19	12.5	12.1	12.3	11.2	10.6	10.9	9.8	8.5	9.5	7.3	5.7	6.8			
20	12.6	12.3	12.4	11.0	10.2	10.6	9.5	9.0	9.3	7.7	7.3	7.5			
21	12.9	12.2	12.5	10.9	10.4	10.6	9.1	8.7	8.9	8.3	7.6	8.0			
22	12.7	11.5	12.2	10.9	10.1	10.4	8.9	8.6	8.7	8.4	8.2	8.3			
23	12.6	11.0	11.8	11.0	10.0	10.4	8.7	8.3	8.6	8.2	7.7	7.9			
24	12.7	12.4	12.6	10.9	9.6	10.2	8.4	7.6	8.2	7.8	7.6	7.7			
25	12.7	12.1	12.4	10.0	8.7	9.3	7.7	7.1	7.5	7.7	7.4	7.6			
26	12.1	11.1	11.7	10.2	8.3	9.0	7.5	6.8	7.2	7.4	7.1	7.3			
27	11.1	10.2	10.6	8.9	8.0	8.3	7.6	6.7	7.1	7.2	6.9	7.1			
28	10.2	9.8	10.1	9.3	8.0	8.5	7.3	6.5	6.8	7.6	7.0	7.3			
29	10.4	9.7	9.9	9.6	8.2	8.7	---	---	---	8.6	7.3	8.0			
30	---	---	---	10.3	8.6	9.2	---	---	---	8.7	7.2	8.1			
31	---	---	---	10.8	8.8	9.5	---	---	---	8.3	8.0	8.2			
MONTH	13.1	8.9	11.5	11.6	7.8	9.6	11.0	6.5	9.2	8.7	4.3	6.8			





**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 mi<sup>2</sup>.

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 above sea level. Prior to Sept. 22, 1926, nonrecording gage at same site and datum.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	149	61	156	e135	e140	518	290	290	723	173	147	79
2	79	255	147	e130	e140	531	326	505	744	150	125	74
3	59	914	147	e180	e135	468	1730	446	1570	166	123	71
4	53	464	145	2470	e135	416	6010	361	1100	410	127	69
5	49	248	143	2340	e135	384	4110	346	636	275	112	67
6	43	177	187	1070	e135	349	1980	366	1140	190	217	64
7	41	143	191	679	e135	323	1390	328	1130	154	747	62
8	41	126	172	526	e130	309	3950	302	678	134	534	59
9	44	113	155	445	e130	297	4670	297	508	120	291	59
10	75	107	180	414	e170	283	2530	303	407	123	223	60
11	88	100	310	406	537	269	1610	334	350	171	181	92
12	72	95	265	362	1170	337	1280	290	406	143	152	119
13	64	87	213	326	1190	340	1020	259	1510	117	134	217
14	99	82	830	286	2350	302	865	253	683	114	120	170
15	112	80	1460	246	1670	274	757	230	486	389	109	118
16	92	78	719	278	1020	276	687	203	419	596	101	114
17	76	95	482	198	787	477	739	191	533	435	92	112
18	67	96	371	213	750	449	709	197	522	314	114	98
19	62	96	310	262	977	367	650	267	434	214	122	84
20	60	102	287	e220	775	353	582	511	344	181	105	75
21	57	109	277	e200	652	704	610	330	308	159	90	80
22	57	107	236	e185	757	783	612	256	316	195	81	85
23	57	106	203	e170	1510	614	557	241	271	161	99	94
24	59	113	e190	e160	1500	535	500	896	223	133	223	199
25	66	110	e180	e155	1170	488	447	589	197	116	244	191
26	73	213	e175	e150	923	440	405	357	188	106	141	193
27	73	425	e170	e150	753	411	372	307	249	99	109	171
28	67	298	e160	e145	667	428	351	708	276	154	105	137
29	64	206	e150	e145	556	403	328	2130	219	270	129	111
30	62	175	e150	e140	---	350	304	1070	214	207	98	99
31	61	---	e140	e140	---	316	---	651	---	175	86	---
TOTAL	2121	5381	8901	12926	21099	12794	40371	13814	16784	6344	5281	3223
MEAN	68.4	179	287	417	728	413	1346	446	559	205	170	107
MAX	149	914	1460	2470	2350	783	6010	2130	1570	596	747	217
MIN	41	61	140	130	130	269	290	191	188	99	81	59
MED	64	110	187	213	750	384	698	328	426	166	123	93
CFSM	.14	.36	.58	.84	1.47	.83	2.71	.90	1.13	.41	.34	.22
IN.	.16	.40	.67	.97	1.58	.96	3.03	1.04	1.26	.48	.40	.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2000, BY WATER YEAR (WY)

	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	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
MEAN	177	323	538	721	858	1117	920	652	393	253	173	143	1380	2102	2012	3993	1957	2493	2187	1876	1784	1554	1567	1452	1955	1986	1991	1937	1956	1945	1940	1929	1989	1990	1980	1926	25.7	38.2	50.7	63.9	50.8	241	202	79.9	40.8	29.6	22.0	17.4	1964	1931	1931	1931	1934	1969	1946	1934	1934	1930	1930	1930	1932																								

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1916 - 2000

ANNUAL TOTAL	144460	149039				
ANNUAL MEAN	396	407	521			
HIGHEST ANNUAL MEAN			899			
LOWEST ANNUAL MEAN			207			
HIGHEST DAILY MEAN	6740	Jan 24	6010	Apr 4	18900	Jan 25 1937
LOWEST DAILY MEAN	31	Sep 18	41	Oct 7	12	Aug 22 1918
ANNUAL SEVEN-DAY MINIMUM	33	Sep 14	47	Oct 3	12	Sep 13 1932
INSTANTANEOUS PEAK FLOW			6700	Apr 4a	25000	Jul 19 1941
INSTANTANEOUS PEAK STAGE			9.82	Apr 4	17.40	Jul 19 1941
INSTANTANEOUS LOW FLOW			40	Oct 8	12	Sep 15 1918
ANNUAL RUNOFF (CFSM)	.80	.82				1.05
ANNUAL RUNOFF (INCHES)	10.83	11.18				14.26
10 PERCENT EXCEEDS	915	800			1220	
50 PERCENT EXCEEDS	177	214			250	
90 PERCENT EXCEEDS	44	77			51	

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 mi<sup>2</sup>.

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 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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	8.4	33	e34	e31	124	105	106	185	49	106	24
2	11	49	31	e33	e31	126	101	133	144	40	82	24
3	6.3	303	27	e40	e30	108	184	147	159	64	73	22
4	4.9	110	26	807	e29	100	1290	125	119	145	65	22
5	4.4	60	26	597	e28	94	1200	117	100	77	53	22
6	4.2	39	41	300	e28	85	649	110	110	55	405	21
7	3.9	30	58	203	e27	76	440	102	94	44	918	18
8	3.6	25	46	153	e27	72	582	95	76	38	526	16
9	4.2	21	38	130	e27	71	890	95	64	34	301	16
10	5.5	19	43	122	e60	67	609	97	54	31	216	16
11	10	17	83	110	115	62	452	100	50	43	158	55
12	13	16	72	94	214	83	380	85	102	39	124	41
13	8.7	15	61	84	209	84	303	84	202	30	102	87
14	13	14	253	72	1160	76	265	83	125	45	86	51
15	32	49	472	71	718	72	235	67	82	403	74	34
16	16	49	240	64	421	74	213	60	90	220	66	29
17	12	45	160	e60	293	171	216	57	481	161	61	25
18	9.4	40	120	e57	260	164	213	55	333	119	61	22
19	9.2	35	97	e55	422	150	211	103	225	89	66	19
20	8.5	29	85	e52	380	143	191	133	155	75	53	17
21	7.8	20	82	e49	293	396	205	97	126	64	44	20
22	7.1	17	67	e47	263	447	219	80	152	77	39	31
23	6.8	15	53	e44	261	332	211	76	102	58	38	26
24	7.3	14	e50	e42	270	263	191	191	81	46	49	185
25	7.6	13	e46	e40	240	221	176	130	69	41	50	91
26	7.8	37	e44	e39	204	185	160	94	63	36	37	119
27	8.7	136	e42	e37	176	161	145	79	61	33	33	120
28	8.7	78	e40	e36	159	159	132	428	60	87	32	74
29	8.7	53	e38	e35	132	159	124	1110	50	466	30	57
30	8.3	42	e37	e33	---	135	116	414	56	218	27	48
31	8.3	---	e35	e32	---	119	---	256	---	143	24	---
TOTAL	288.9	1398.4	2546	3572	6508	4579	10408	4909	3770	3070	3999	1352
MEAN	9.32	46.6	82.1	115	224	148	347	158	126	99.0	129	45.1
MAX	32	303	472	807	1160	447	1290	1110	481	466	918	185
MIN	3.6	8.4	26	32	27	62	101	55	50	30	24	16
CFSM	.06	.32	.56	.78	1.53	1.00	2.36	1.08	.85	.67	.88	.31
IN.	.07	.35	.64	.90	1.65	1.16	2.63	1.24	.95	.78	1.01	.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2000, BY WATER YEAR (WY)

MEAN	46.4	93.8	169	222	274	346	299	211	117	65.9	49.3	36.7
MAX	242	611	879	745	649	848	627	538	588	266	492	232
(WY)	1991	1986	1991	1952	1956	1945	1948	1956	1989	1958	1980	1975
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 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1941 - 2000	
ANNUAL TOTAL	44324.9		46400.3			
ANNUAL MEAN	121		127		161	
HIGHEST ANNUAL MEAN					266	
LOWEST ANNUAL MEAN					73.9	
HIGHEST DAILY MEAN	2180		1290		6440	
LOWEST DAILY MEAN	1.8		3.6		.80	
ANNUAL SEVEN-DAY MINIMUM	1.9		4.4		.80	
INSTANTANEOUS PEAK FLOW			1870		9580	
INSTANTANEOUS PEAK STAGE			5.83		12.17	
INSTANTANEOUS LOW FLOW			3.2		.80	
ANNUAL RUNOFF (CFSM)	.83		.86		1.09	
ANNUAL RUNOFF (INCHES)	11.22		11.74		14.88	
10 PERCENT EXCEEDS	284		277		384	
50 PERCENT EXCEEDS	43		71		75	
90 PERCENT EXCEEDS	4.7		16		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 mi<sup>2</sup>

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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	18	35	e30	e47	101	108	130	135	39	28	21
2	22	137	37	e37	e46	95	109	227	116	37	26	21
3	19	237	35	59	e46	88	151	163	123	53	24	26
4	25	89	36	733	e46	85	633	144	98	80	23	22
5	21	58	34	303	e45	82	378	138	96	50	22	20
6	19	44	61	168	e45	78	259	130	106	44	234	19
7	17	37	56	128	e45	74	212	123	90	38	254	17
8	17	33	44	102	e45	71	413	119	79	35	100	17
9	18	30	39	93	e44	70	384	121	72	33	65	18
10	34	28	73	89	e48	66	289	124	66	33	55	19
11	36	27	99	83	144	74	243	114	65	40	44	28
12	24	25	65	71	130	109	215	107	78	35	37	25
13	22	24	57	68	123	88	186	106	72	31	34	23
14	43	24	343	56	1050	82	171	103	64	32	31	21
15	33	23	283	65	357	77	159	91	64	67	29	20
16	25	22	143	60	233	86	153	86	67	61	27	19
17	22	22	104	41	174	195	273	84	161	43	26	18
18	22	21	84	70	283	137	375	88	100	36	31	18
19	21	21	72	62	569	118	258	276	80	35	32	17
20	20	23	68	e58	296	144	222	171	75	37	27	17
21	20	26	63	e54	221	495	237	124	75	33	24	25
22	20	23	53	e52	187	279	227	104	75	31	23	25
23	18	23	48	e51	171	209	202	102	60	29	25	22
24	20	22	41	e50	156	179	184	124	55	27	35	34
25	21	26	e38	e49	143	160	170	135	52	26	33	33
26	20	198	e36	e48	129	144	157	98	54	25	27	51
27	19	160	e35	e47	124	139	148	91	49	24	25	46
28	19	78	e34	e47	117	137	142	445	48	24	25	30
29	19	57	e33	e47	103	152	137	501	45	36	24	26
30	19	45	e32	e47	---	127	130	219	42	34	22	23
31	19	---	e31	e47	---	115	---	159	---	31	21	---
TOTAL	707	1601	2212	2915	5167	4056	6925	4747	2362	1179	1433	721
MEAN	22.8	53.4	71.4	94.0	178	131	231	153	78.7	38.0	46.2	24.0
MAX	43	237	343	733	1050	495	633	501	161	80	254	51
MIN	17	18	31	30	44	66	108	84	42	24	21	17
CFSM	.19	.43	.58	.76	1.45	1.06	1.88	1.24	.64	.31	.38	.20
IN.	.21	.48	.67	.88	1.56	1.23	2.09	1.44	.71	.36	.43	.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2000, BY WATER YEAR (WY)

	MEAN	52.5	75.4	115	159	203	246	223	172	115	77.7	62.0	50.5
MAX	195	515	414	469	459	725	488	391	422	331	610	305	
(WY)	1955	1986	1991	1950	1975	1945	1961	1967	1989	1990	1980	1974	
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 FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1942 - 2000

ANNUAL TOTAL	36384	34025	
ANNUAL MEAN	99.7	93.0	
HIGHEST ANNUAL MEAN			225 1980
LOWEST ANNUAL MEAN			46.1 1954
HIGHEST DAILY MEAN	1010	Jan 22	1050 Feb 14 3620 Mar 6 1945
LOWEST DAILY MEAN	12	Sep 19	17 Oct 7 2.8 Sep 21 1947
ANNUAL SEVEN-DAY MINIMUM	13	Sep 13	19 Sep 14 4.9 Dec 14 1943
INSTANTANEOUS PEAK FLOW			1750 Feb 14a 8200 Jun 15 1990
INSTANTANEOUS PEAK STAGE			6.38 Feb 14 12.27 Jun 15 1990
INSTANTANEOUS LOW FLOW			16 Oct 8 2.8 Sep 21 1947
ANNUAL RUNOFF (CFSM)	.81	.76	1.05
ANNUAL RUNOFF (INCHES)	11.00	10.29	14.24
10 PERCENT EXCEEDS	225	210	268
50 PERCENT EXCEEDS	48	54	78
90 PERCENT EXCEEDS	18	21	22

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 mi<sup>2</sup>.

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 good 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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	20	32	e31	e34	104	106	130	86	43	27	17
2	19	103	36	e30	e33	100	109	294	82	42	24	16
3	16	158	29	e45	e32	95	225	180	87	63	23	17
4	23	60	30	837	e32	89	761	159	71	72	26	16
5	22	41	29	255	e31	85	373	152	73	51	22	15
6	18	34	43	145	e30	80	245	146	81	43	114	14
7	17	30	39	113	e30	78	201	138	69	42	80	13
8	17	28	33	95	e29	76	431	133	61	37	65	13
9	19	27	29	87	e29	76	340	126	57	35	43	14
10	34	26	63	84	e70	70	240	123	54	43	37	14
11	33	27	70	78	e250	84	207	112	54	71	32	17
12	23	25	47	70	163	126	203	109	74	44	28	18
13	24	24	42	71	200	94	180	110	58	36	27	19
14	46	23	369	61	1090	84	165	105	54	35	25	15
15	31	24	223	62	319	78	153	95	59	42	24	15
16	33	23	109	61	214	102	145	91	94	41	23	14
17	23	22	86	52	169	221	365	90	263	38	22	13
18	20	23	72	59	376	132	429	94	152	34	33	13
19	20	22	64	65	711	113	256	344	121	32	31	13
20	20	25	63	e55	289	152	216	179	84	36	24	13
21	19	27	59	e48	219	406	233	117	74	33	21	17
22	19	26	53	e45	188	213	217	101	106	31	20	14
23	20	24	e47	e43	169	168	189	103	75	29	22	15
24	23	24	e43	e40	155	145	173	110	63	28	30	31
25	22	32	e41	e39	140	135	160	102	63	26	30	23
26	20	243	e38	e38	130	118	148	82	63	25	21	35
27	20	128	e36	e37	126	117	140	77	58	24	20	30
28	20	60	e34	e37	123	127	137	180	54	25	20	20
29	20	42	e33	e36	108	202	133	202	50	35	19	17
30	20	36	e32	e35	---	139	129	116	46	31	18	16
31	19	---	e31	e35	---	122	---	97	---	29	18	---
TOTAL	706	1407	1955	2789	5489	3931	7009	4197	2386	1196	969	517
MEAN	22.8	46.9	63.1	90.0	189	127	234	135	79.5	38.6	31.3	17.2
MAX	46	243	369	837	1090	406	761	344	263	72	114	35
MIN	16	20	29	30	29	70	106	77	46	24	18	13
CFSM	.23	.48	.65	.92	1.94	1.30	2.39	1.39	.81	.39	.32	.18
IN.	.27	.54	.74	1.06	2.09	1.50	2.67	1.60	.91	.46	.37	.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2000, BY WATER YEAR (WY)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	44.8	91.3	109	147	160	182	167	147	113	74.2	47.5	41.1					
MAX	138	402	395	294	262	330	279	344	345	230	127	95.2					
(WY)	1991	1986	1991	1991	1986	1993	1994	1996	1998	1990	1997	1990					
MIN	17.9	23.7	44.4	51.5	67.9	72.7	73.9	52.8	34.7	31.3	16.6	9.53					
(WY)	1989	1992	1989	1992	1992	1987	1986	1986	1992	1999	1986	1985					

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1984 - 2000
ANNUAL TOTAL	32206	32551	
ANNUAL MEAN	88.2	88.9	110
HIGHEST ANNUAL MEAN			148
LOWEST ANNUAL MEAN			70.6
HIGHEST DAILY MEAN	1590	Jan 18	3900
LOWEST DAILY MEAN	12	Sep 12	7.0
ANNUAL SEVEN-DAY MINIMUM	12	Sep 12	7.4
INSTANTANEOUS PEAK FLOW			1800
INSTANTANEOUS PEAK STAGE			5.29
INSTANTANEOUS LOW FLOW			11
ANNUAL RUNOFF (CFSM)	.90	.91	1.12
ANNUAL RUNOFF (INCHES)	12.26	12.39	15.27
10 PERCENT EXCEEDS	191	201	215
50 PERCENT EXCEEDS	42	48	70
90 PERCENT EXCEEDS	17	19	24

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

**SURFACE-WATER RECORDS**  
**Captina Creek Basin**

**03114000 CAPTINA CREEK AT ARMSTRONGS MILLS, OHIO**

LOCATION.—Latitude 39°54'31", longitude 80°55'27", in NE 1/4 sec. 10, T.5 N., R.4 W., Belmont County, Hydrologic Unit 05030106, on left bank at downstream side of bridge on State Highway 148, 0.5 mi east of Armstrongs Mills, Ohio, and 0.7 mi downstream from Anderson Run.

DRAINAGE AREA.—134 mi<sup>2</sup>.

PERIOD OF RECORD.—August 1926 to September 1935, October 1958 to current year.

REVISED RECORDS.—WSP 1907: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 739.53 ft above sea level. Aug. 20, 1926, to Sept. 30, 1935, nonrecording gage at same site, at datum 1.0 ft higher.

REMARKS.—Records good 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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	14	47	e36	e25	116	196	83	63	44	16	11
2	12	23	43	e35	e25	109	171	477	55	35	14	9.8
3	6.4	298	44	e54	e24	95	229	292	110	53	13	11
4	7.3	110	38	937	e24	86	1680	186	71	170	58	12
5	9.0	65	36	734	e23	82	902	156	51	72	49	8.0
6	12	45	49	320	e23	72	490	144	59	46	72	7.2
7	8.4	32	73	215	e23	67	338	118	50	32	135	6.0
8	6.0	28	55	159	e22	64	504	104	40	24	54	5.5
9	3.5	24	49	134	e22	62	725	93	32	20	37	5.1
10	8.3	21	125	124	e39	60	441	85	27	18	30	5.4
11	42	19	260	112	640	58	330	78	22	124	23	5.6
12	29	18	133	91	506	165	421	67	21	52	20	5.4
13	18	16	102	81	264	134	319	64	50	31	17	19
14	32	15	672	68	3190	108	260	61	49	22	16	19
15	46	14	732	64	994	99	221	53	32	83	12	10
16	29	11	323	71	502	109	192	46	51	66	11	8.7
17	22	10	215	52	328	1030	247	43	559	45	9.5	7.2
18	17	12	160	63	746	435	1720	40	245	35	15	6.3
19	12	12	126	56	3180	291	537	129	242	29	20	5.6
20	9.2	12	111	e50	811	256	363	157	121	143	15	4.9
21	9.9	17	105	e46	459	675	333	79	77	62	10	6.4
22	9.2	16	85	e42	324	501	336	60	75	39	9.6	17
23	8.0	14	73	e39	254	349	269	57	55	30	11	12
24	7.5	14	69	e36	209	271	219	150	41	25	151	31
25	10	16	e58	e33	179	220	185	102	43	21	88	44
26	10	706	e52	e31	153	185	151	64	548	18	35	58
27	10	483	e48	e29	139	162	130	50	152	16	22	83
28	6.0	170	e44	e27	160	169	116	78	160	14	28	38
29	7.8	96	e42	e26	127	530	104	297	92	16	22	26
30	8.7	67	e40	e26	---	355	93	129	61	23	15	19
31	12	---	e38	e25	---	247	---	85	---	21	13	---
TOTAL	449.2	2398	4047	3816	13415	7162	12222	3627	3254	1429	1041.1	507.1
MEAN	14.5	79.9	131	123	463	231	407	117	108	46.1	33.6	16.9
MAX	46	706	732	937	3190	1030	1720	477	559	170	151	83
MIN	3.5	10	36	25	22	58	93	40	21	14	9.5	4.9
CFSM	.11	.60	.97	.92	3.45	1.72	3.04	.87	.81	.34	.25	.13
IN.	.12	.67	1.12	1.06	3.72	1.99	3.39	1.01	.90	.40	.29	.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2000, BY WATER YEAR (WY)

	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	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
MEAN	46.4	107	198	238	290	337	271	192	111	72.0	63.0	49.2																																																														
MAX	294	885	681	579	594	805	679	568	676	409	675	628																																																														
(WY)	1976	1986	1991	1979	1975	1963	1961	1967	1981	1969	1980	1975																																																														
MIN	.090	1.55	6.64	14.6	20.8	59.1	55.5	19.5	4.89	.22	.32	.25																																																														
(WY)	1931	1964	1964	1931	1934	1969	1971	1934	1934	1930	1930	1966																																																														

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1927 - 2000	
ANNUAL TOTAL	46888.23		53367.4			
ANNUAL MEAN	128		146		164	
HIGHEST ANNUAL MEAN					275	
LOWEST ANNUAL MEAN					75.2	
HIGHEST DAILY MEAN	1700		3190		8080	
LOWEST DAILY MEAN	.37		3.5		.00	
ANNUAL SEVEN-DAY MINIMUM	1.0		5.7		.00	
INSTANTANEOUS PEAK FLOW			6400		21900	
INSTANTANEOUS PEAK STAGE			10.00		17.48	
INSTANTANEOUS LOW FLOW			2.7		.00	
ANNUAL RUNOFF (CFSM)	.96		1.09		1.22	
ANNUAL RUNOFF (INCHES)	13.02		14.82		16.62	
10 PERCENT EXCEEDS	341		337		378	
50 PERCENT EXCEEDS	41		52		67	
90 PERCENT EXCEEDS	4.8		10		4.8	

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 Muskingum River Basin**

**03115400 LITTLE MUSKINGUM RIVER AT BLOOMFIELD, OHIO**

LOCATION.—Latitude 39°33'47", longitude 81°12'14", in sec. 22, T.3 N., R.6 W., Washington County, Hydrologic Unit 05030201, on left bank 400 ft upstream from bridge on State Highway 260 at Bloomfield, Ohio, 2.2 mi downstream from Wilson Run.

DRAINAGE AREA.—210 mi<sup>2</sup>.

PERIOD OF RECORD.—October 1958 to September 1981, October 1995 to current year.

REVISED RECORDS.—WSP 1705: 1959.

GAGE.—Water-stage recorder. Datum of gage is 645.99 ft above sea level.

REMARKS.—Records good 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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	1.7	42	e28	e13	204	234	99	122	27	6.1	3.8
2	.28	2.3	32	e27	e13	193	215	403	89	20	5.4	6.8
3	.26	54	26	e34	e13	165	246	397	70	18	9.5	10
4	.30	104	22	848	e12	149	3560	255	58	52	26	28
5	.32	50	21	1540	e12	137	1600	195	49	43	16	22
6	.31	30	22	464	e12	122	775	157	54	28	11	14
7	.30	20	35	271	e11	109	485	131	54	19	12	9.6
8	.32	14	45	193	e11	101	752	109	44	14	11	7.5
9	.34	11	41	149	e25	96	1160	92	35	10	11	6.2
10	1.2	7.7	95	130	77	92	667	78	28	9.5	33	4.9
11	1.8	7.3	468	115	1900	87	470	66	23	9.2	28	3.6
12	2.1	6.5	201	94	1120	217	457	56	20	8.0	17	2.7
13	1.5	5.3	122	74	906	237	384	53	18	7.4	11	3.6
14	2.0	5.0	749	65	8910	195	334	56	16	6.4	8.2	10
15	2.7	5.1	1630	52	2370	171	291	47	27	8.0	6.5	16
16	3.6	4.5	499	48	677	420	258	39	32	8.5	5.1	11
17	4.7	4.3	260	48	397	2270	875	34	534	9.0	4.1	8.2
18	10	4.1	172	41	2190	820	2750	30	268	9.6	11	6.6
19	6.6	4.3	126	e37	9820	497	832	40	232	14	34	5.7
20	6.5	4.8	98	e34	1330	533	500	103	127	59	17	4.4
21	5.5	4.1	92	e31	586	1100	416	69	83	62	11	5.4
22	4.7	3.6	79	e28	410	805	458	47	131	31	7.5	5.6
23	3.8	3.4	65	e25	328	521	419	123	84	19	5.9	8.1
24	3.0	3.6	55	e23	276	402	337	2380	51	12	7.8	174
25	2.6	4.2	44	e20	237	338	282	654	39	9.1	11	92
26	2.9	398	e40	e19	204	282	230	290	30	7.4	13	304
27	3.1	763	e37	e17	186	247	189	174	182	6.0	9.1	183
28	2.4	221	e35	e16	237	258	162	312	198	5.2	7.6	87
29	2.3	100	e33	e15	220	314	139	591	62	8.4	6.4	51
30	2.1	58	e31	e14	---	331	119	283	38	6.7	5.4	37
31	1.7	---	e29	e14	---	274	---	177	---	5.7	4.7	---
TOTAL	79.54	1904.8	5246	4514	32503	11687	19596	7540	2798	552.1	372.3	1131.7
MEAN	2.57	63.5	169	146	1121	377	653	243	93.3	17.8	12.0	37.7
MAX	10	763	1630	1540	9820	2270	3560	2380	534	62	34	304
MIN	.26	1.7	21	14	11	87	119	30	16	5.2	4.1	2.7
CFSM	.01	.30	.81	.69	5.34	1.80	3.11	1.16	.44	.08	.06	.18
IN.	.01	.34	.93	.80	5.76	2.07	3.47	1.34	.50	.10	.07	.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2000, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
MEAN	69.6	149	306	397	504
MAX	476	518	918	1008	1121
(WY)	1980	1971	1979	1979	2000
MIN	.43	2.28	16.3	28.0	59.0
(WY)	1967	1964	1964	1977	1964

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1958 - 2000
ANNUAL TOTAL	60261.17	87924.44	
ANNUAL MEAN	165	240	270
HIGHEST ANNUAL MEAN			461
LOWEST ANNUAL MEAN			151
HIGHEST DAILY MEAN	2490	Jan 19	21600
LOWEST DAILY MEAN	.02	Sep 28	.00
ANNUAL SEVEN-DAY MINIMUM	.05	Sep 23	.05
INSTANTANEOUS PEAK FLOW			12700
INSTANTANEOUS PEAK STAGE			25.68
INSTANTANEOUS LOW FLOW			.25
ANNUAL RUNOFF (CFSM)	.79		1.14
ANNUAL RUNOFF (INCHES)	10.67		15.58
10 PERCENT EXCEEDS	482		498
50 PERCENT EXCEEDS	31		38
90 PERCENT EXCEEDS	.76		4.1

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 mi<sup>2</sup>.

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 periods of estimated record, and discharges less than 2.0 ft<sup>3</sup>/s, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.6	1.3	1.2	1.2	1.5	2.5	1.3	2.7	3.6	3.0	3.0	1.4
2	e1.0	36	1.3	1.3	1.4	2.8	7.8	14	2.6	2.3	2.5	1.3
3	e.80	44	1.2	5.4	1.5	2.3	12	4.0	2.7	11	2.1	2.0
4	e1.1	11	1.2	46	1.6	2.1	31	2.3	2.5	8.4	1.5	1.4
5	e.90	4.7	2.2	10	1.6	2.0	10	4.3	4.6	3.7	1.3	1.9
6	e.90	2.8	8.4	4.9	1.5	1.7	5.4	2.6	13	2.7	20	2.0
7	e.90	2.2	3.3	3.0	1.3	1.6	4.7	2.1	5.8	2.4	15	2.3
8	e1.6	2.0	2.0	2.4	1.3	1.6	48	2.5	3.4	1.9	4.7	2.1
9	e1.9	.92	1.4	2.1	1.3	1.5	16	2.4	2.6	1.6	2.8	2.4
10	e2.0	1.0	15	2.6	2.8	1.5	7.5	6.0	2.2	3.4	8.5	3.6
11	e1.6	.98	8.3	2.9	19	1.8	5.2	4.0	2.2	7.5	3.6	4.3
12	e1.4	.96	3.2	2.2	6.6	5.7	4.4	2.3	11	3.1	2.2	2.3
13	e7.9	1.1	3.8	2.0	3.9	5.0	3.5	2.3	15	2.1	1.9	2.3
14	e3.9	1.1	13	2.0	20	3.6	3.1	2.2	5.7	11	1.4	1.5
15	e2.2	1.0	8.8	1.6	8.8	2.6	2.9	1.5	5.6	38	1.2	1.8
16	e1.7	1.1	5.4	1.6	5.5	3.8	2.7	1.3	3.7	7.5	1.3	4.2
17	e2.0	1.0	3.5	1.7	4.8	8.7	2.5	1.3	6.4	3.5	1.4	2.5
18	e2.9	1.1	2.5	1.7	4.2	4.0	2.4	1.8	21	2.7	2.3	1.5
19	e2.5	1.1	2.2	1.5	5.7	2.7	2.3	39	11	2.6	1.7	1.4
20	e.60	1.9	1.7	1.7	4.1	4.8	3.6	11	4.5	2.5	1.4	1.5
21	.85	2.2	1.9	1.7	3.2	8.6	8.6	3.8	4.0	2.0	1.1	5.2
22	.69	1.7	1.5	1.5	5.9	4.4	5.0	2.6	3.1	1.6	1.0	2.6
23	2.1	1.7	1.4	1.4	13	3.2	3.2	5.1	2.6	1.4	1.1	7.4
24	19	1.8	1.3	1.4	9.8	2.8	2.5	7.4	2.3	1.3	1.0	15
25	7.4	2.0	1.2	1.5	17	2.4	2.2	3.4	4.3	1.1	.94	3.3
26	2.9	8.6	1.2	1.4	7.5	2.3	1.9	2.2	4.6	1.0	.77	1.2
27	2.2	7.4	1.2	1.3	5.3	3.2	1.9	4.1	5.1	1.6	1.2	.70
28	1.8	2.2	1.2	1.2	4.6	3.5	1.9	34	2.9	8.5	1.2	.63
29	1.5	1.0	1.2	1.2	3.2	2.4	1.8	44	2.7	4.1	.72	.60
30	1.3	1.2	1.2	1.3	---	1.9	1.7	8.9	6.3	2.4	1.6	.51
31	1.3	---	1.2	1.5	---	1.6	---	4.9	---	2.7	1.4	---
TOTAL	80.44	147.06	104.1	113.2	167.9	98.6	207.0	230.0	167.0	148.6	91.83	80.84
MEAN	2.59	4.90	3.36	3.65	5.79	3.18	6.90	7.42	5.57	4.79	2.96	2.69
MAX	19	44	15	46	20	8.7	48	44	21	38	20	15
MIN	.60	.92	1.2	1.2	1.3	1.5	1.3	1.3	2.2	1.0	.72	.51
CFSM	.71	1.34	.92	1.00	1.59	.87	1.89	2.03	1.53	1.31	.81	.74
IN.	.82	1.50	1.06	1.15	1.71	1.00	2.11	2.34	1.70	1.51	.94	.82

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2000, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	2.47	4.63	4.20	6.80	4.57	6.13	8.09	5.20	5.05
MAX	5.32	9.51	9.83	10.9	6.80	11.0	12.2	10.0	9.73
(WY)	1997	1993	1997	1993	1997	1993	1994	1996	1997
MIN	.28	1.90	1.81	3.33	1.99	3.18	4.33	2.52	1.86
(WY)	1995	1999	1996	1992	1995	2000	1995	1992	1999

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1992 - 2000
ANNUAL TOTAL	1464.16	1636.57	
ANNUAL MEAN	4.01	4.47	4.88
HIGHEST ANNUAL MEAN			6.10
LOWEST ANNUAL MEAN			3.27
HIGHEST DAILY MEAN	50	Jan 23	48
LOWEST DAILY MEAN	.31	Aug 5	.51
ANNUAL SEVEN-DAY MINIMUM	.59	Aug 27	.99
INSTANTANEOUS PEAK FLOW			86
INSTANTANEOUS PEAK STAGE			12.23
INSTANTANEOUS LOW FLOW			.46
ANNUAL RUNOFF (CFSM)	1.10	1.23	1.34
ANNUAL RUNOFF (INCHES)	14.92	16.68	18.17
10 PERCENT EXCEEDS	8.3	8.8	10
50 PERCENT EXCEEDS	1.9	2.3	2.4
90 PERCENT EXCEEDS	.90	1.2	.70

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**

**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 mi<sup>2</sup>.

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 above sea level. Prior to Aug. 19, 1944, nonrecording gage at same site and datum.

REMARKS.—Records excellent except for periods of estimated record, which are fair. 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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	564	95	155	e110	e140	483	251	210	864	215	306	149
2	251	410	139	156	e140	436	321	490	575	184	287	128
3	156	1580	132	303	e140	404	1010	497	480	594	272	132
4	106	1430	137	2290	e145	346	2850	333	359	1570	231	130
5	127	761	142	2380	e150	314	2790	379	345	946	201	130
6	128	452	187	1810	e155	292	1760	358	1040	558	561	128
7	108	344	245	845	169	272	1150	272	1100	335	1720	117
8	80	291	214	570	162	263	3350	235	637	278	1390	112
9	133	258	178	440	157	306	3610	212	448	255	728	108
10	278	232	250	390	263	244	2820	258	337	234	480	110
11	211	211	632	425	703	235	1710	282	274	808	355	188
12	139	194	407	396	925	299	1030	257	413	517	294	207
13	276	167	309	354	669	351	733	230	964	346	258	180
14	528	147	370	318	1110	348	612	200	734	614	231	151
15	491	147	739	262	1440	332	531	159	471	2220	206	139
16	374	141	614	252	997	307	473	152	580	2200	190	148
17	213	127	423	234	769	530	473	160	1030	1550	175	149
18	157	120	327	218	671	510	451	160	810	795	199	134
19	140	114	282	e190	789	393	398	737	1010	493	177	123
20	124	117	264	e180	645	434	366	1350	659	404	170	147
21	120	116	270	e170	506	982	534	793	517	353	154	384
22	129	117	224	e160	640	764	573	462	423	273	147	332
23	132	116	176	e180	1480	550	470	432	332	217	213	279
24	160	117	157	194	1840	432	419	1290	268	200	483	766
25	243	122	142	e160	1710	378	353	948	261	197	310	541
26	206	174	138	e150	1440	344	308	512	300	190	216	362
27	156	329	e125	e140	973	328	282	376	304	192	240	261
28	124	273	123	e140	700	370	254	752	262	923	283	211
29	115	208	e120	144	587	357	226	2470	237	650	236	190
30	104	177	e115	e135	---	313	202	2590	233	399	178	162
31	92	---	e115	e135	---	278	---	1680	---	325	164	---
TOTAL	6165	9087	7851	13831	20215	12195	30310	19236	16267	19035	11055	6298
MEAN	199	303	253	446	697	393	1010	621	542	614	357	210
MAX	564	1580	739	2380	1840	982	3610	2590	1100	2220	1720	766
MIN	80	95	115	110	140	235	202	152	233	184	147	108

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2000, BY WATER YEAR (WY)

MEAN	207	305	440	556	715	879	737	514	397	308	234	211
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 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1938 - 2000

ANNUAL TOTAL	143674	171545	
ANNUAL MEAN	394	469	457
HIGHEST ANNUAL MEAN			661
LOWEST ANNUAL MEAN			245
HIGHEST DAILY MEAN	5310	3610	9360
LOWEST DAILY MEAN	51	80	49
ANNUAL SEVEN-DAY MINIMUM	57	117	53
INSTANTANEOUS PEAK FLOW		3840	10700
INSTANTANEOUS PEAK STAGE		9.37	16.43
INSTANTANEOUS LOW FLOW		80	45
10 PERCENT EXCEEDS	813	1000	1060
50 PERCENT EXCEEDS	190	282	233
90 PERCENT EXCEEDS	77	130	102

e Estimated.



**SURFACE-WATER RECORDS**  
**Muskingum River Basin**

**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 mi<sup>2</sup>.

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 above sea level.

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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	62	68	e74	e92	286	180	218	595	138	125	80
2	31	92	65	e82	e90	284	246	343	429	128	114	77
3	26	255	64	130	e87	253	1120	312	566	188	109	76
4	27	171	64	1800	e85	232	2530	250	436	360	106	75
5	25	113	63	1540	e84	219	2230	243	345	201	102	76
6	25	90	67	967	e82	206	1480	234	436	160	129	75
7	25	78	69	671	e80	194	990	219	450	143	316	73
8	27	69	67	451	e78	188	2410	214	343	123	280	72
9	33	66	63	325	e76	182	3100	220	288	116	189	71
10	47	67	82	299	e100	172	1900	225	253	115	151	72
11	49	64	138	296	400	168	1230	236	231	247	133	93
12	44	63	112	263	427	192	917	219	420	154	119	99
13	46	61	96	237	377	194	676	208	2370	126	111	128
14	79	61	173	214	912	178	546	202	1380	204	105	108
15	78	58	447	190	917	169	479	188	841	977	99	97
16	65	57	339	e175	817	168	425	179	606	560	95	91
17	59	56	240	e165	658	240	536	174	813	487	91	82
18	60	55	189	e150	519	225	513	172	701	310	100	78
19	65	55	164	e145	648	195	490	205	567	235	102	73
20	65	56	152	e140	587	195	427	225	419	198	94	72
21	64	56	149	e130	482	324	444	193	341	175	87	83
22	63	58	135	e125	533	376	420	174	327	163	83	82
23	62	54	123	e120	756	313	376	193	264	149	102	81
24	65	53	116	e115	741	277	341	568	217	136	146	164
25	70	52	e110	e110	649	257	308	432	193	128	116	207
26	73	62	e100	e105	533	238	273	274	183	122	99	163
27	70	112	e95	e105	437	225	256	224	175	118	99	146
28	66	106	e90	e100	374	234	246	486	174	163	122	122
29	63	82	e84	e98	314	235	236	1550	157	190	97	109
30	63	75	e80	e96	---	213	224	975	147	157	89	99
31	62	---	e76	e94	---	193	---	741	---	136	85	---
TOTAL	1644	2359	3880	9512	11935	7025	25549	10296	14667	6807	3795	2924
MEAN	53.0	78.6	125	307	412	227	852	332	489	220	122	97.5
MAX	79	255	447	1800	917	376	3100	1550	2370	977	316	207
MIN	25	52	63	74	76	168	180	172	147	115	83	71
CFSM	.21	.31	.49	1.21	1.63	.90	3.37	1.31	1.93	.87	.48	.39
IN.	.24	.35	.57	1.40	1.75	1.03	3.76	1.51	2.16	1.00	.56	.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2000, BY WATER YEAR (WY)

	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975		
MEAN	96.5	169	280	355	466	559	473	336	219	139	94.9	80.5																											
MAX	476	1008	1104	1111	987	1179	867	961	750	651	871	513																											
(WY)	1991	1986	1991	1952	1956	1945	1957	1996	1989	1990	1980	1975																											
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 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1939 - 2000
ANNUAL TOTAL	75607	100393	
ANNUAL MEAN	207	274	272
HIGHEST ANNUAL MEAN			429
LOWEST ANNUAL MEAN			140
HIGHEST DAILY MEAN	3680	3100	11000
LOWEST DAILY MEAN	15	25	12
ANNUAL SEVEN-DAY MINIMUM	18	27	12
INSTANTANEOUS PEAK FLOW		3620	15000
INSTANTANEOUS PEAK STAGE		7.10	10.05
INSTANTANEOUS LOW FLOW		23	6.9
ANNUAL RUNOFF (CFSM)	.82	1.08	1.07
ANNUAL RUNOFF (INCHES)	11.12	14.76	14.58
10 PERCENT EXCEEDS	473	567	632
50 PERCENT EXCEEDS	95	158	139
90 PERCENT EXCEEDS	34	63	35

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**

**03118000 MIDDLE BRANCH NIMISHILLEN CREEK AT CANTON, OHIO**

LOCATION.—Latitude 40°50'29", longitude 81°21'14", in NE 1/4 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 mi<sup>2</sup>.

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 above sea level.

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 1999, 12.1 ft<sup>3</sup>/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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	1.3	5.0	e4.9	e9.7	37	15	22	67	24	42	19
2	2.1	22	4.8	e5.6	e9.5	35	22	40	50	20	34	18
3	1.8	55	4.3	23	e9.2	31	87	33	38	139	31	16
4	1.7	51	4.2	270	e9.0	28	356	28	27	272	27	14
5	1.7	33	4.5	242	e8.6	26	277	31	23	142	24	14
6	1.8	23	5.6	120	e8.4	23	144	27	93	71	47	12
7	1.6	18	5.2	69	e8.0	22	114	21	97	46	166	11
8	1.5	12	4.9	e52	e7.8	20	461	17	51	34	118	10
9	2.3	8.8	4.6	e41	e7.5	19	463	15	32	28	65	10
10	2.1	7.4	11	e35	8.9	19	244	22	23	54	46	9.8
11	1.8	6.3	18	e31	54	19	152	19	17	107	36	24
12	1.7	5.1	22	e28	79	26	109	13	90	50	29	17
13	2.7	4.4	17	e26	55	25	87	9.8	128	35	24	16
14	4.4	3.9	27	e24	112	24	72	7.0	71	113	21	13
15	1.8	3.2	56	e22	119	22	62	5.2	48	524	18	14
16	1.6	3.1	48	e21	68	25	55	3.9	64	384	17	15
17	1.8	3.0	35	e19	57	35	62	3.4	326	212	15	12
18	2.0	2.9	27	e18	51	34	65	3.0	266	125	17	10
19	1.6	2.8	20	e17	52	29	58	36	153	86	11	9.4
20	1.5	3.2	17	e16	46	30	51	53	86	66	15	16
21	1.4	2.9	14	e15	39	41	66	28	67	59	15	56
22	1.4	2.6	11	e15	51	45	70	15	63	53	16	32
23	1.5	2.5	9.9	e14	148	38	56	32	46	46	23	30
24	1.9	2.7	8.6	e14	147	32	44	179	35	40	40	71
25	1.5	2.6	7.9	e13	110	28	37	91	32	37	32	59
26	1.4	5.9	6.9	e13	81	24	31	35	29	34	24	40
27	1.4	6.8	e6.3	e12	61	23	27	15	36	35	23	29
28	1.4	6.9	e6.0	e12	50	23	25	125	44	86	26	24
29	1.3	6.2	e5.6	e11	41	21	23	515	34	68	27	18
30	1.3	5.5	e5.4	e11	---	18	21	301	27	53	24	15
31	1.4	---	e5.1	e10	---	16	---	127	---	52	21	---
TOTAL	55.7	314.0	427.8	1224.5	1507.6	838	3356	1872.3	2163	3095	1074	654.2
MEAN	1.80	10.5	13.8	39.5	52.0	27.0	112	60.4	72.1	99.8	34.6	21.8
MAX	4.4	55	56	270	148	45	463	515	326	524	166	71
MIN	1.3	1.3	4.2	4.9	7.5	16	15	3.0	17	20	11	9.4

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2000, BY WATER YEAR (WY)

	1991	1986	1991	1952	1971	1951	1994	1996	1989	1972	1958	1990
MEAN	13.7	23.6	38.0	48.6	59.3	71.8	61.4	45.9	35.1	25.2	18.4	15.5
MAX	84.7	103	140	170	153	142	227	138	150	102	108	97.2
(WY)	1991	1986	1991	1952	1971	1951	1994	1996	1989	1972	1958	1990
MIN	.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 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1942 - 2000	
ANNUAL TOTAL	10167.7		16582.1			
ANNUAL MEAN	27.9		45.3		37.9	
HIGHEST ANNUAL MEAN					67.3	
LOWEST ANNUAL MEAN					16.0	
HIGHEST DAILY MEAN	560		524		1620	
LOWEST DAILY MEAN	1.3		1.3		.30	
ANNUAL SEVEN-DAY MINIMUM	1.4		1.4		.30	
INSTANTANEOUS PEAK FLOW			604		2470	
INSTANTANEOUS PEAK STAGE			5.28		6.62	
INSTANTANEOUS LOW FLOW			1.2		.20	
10 PERCENT EXCEEDS	69		108		84	
50 PERCENT EXCEEDS	9.7		24		19	
90 PERCENT EXCEEDS	2.4		2.9		4.2	

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

### 03118500 NIMISHILLEN CREEK AT NORTH INDUSTRY, OHIO

LOCATION.—Latitude 40°44'03", longitude 81°21'08", in sec. 35, T.10 N., R.8 W., Stark County, Hydrologic Unit 05040001, on left bank upstream abutment of Baun Road bridge, 400 ft northeast of Ridge Street in North Industry, Ohio, and 2.1 mi downstream from Sherrick Run.

DRAINAGE AREA.—175 mi<sup>2</sup>.

PERIOD OF RECORD.—October 1921 to current year.

REVISED RECORDS.—WSP 1113: 1924-30, 1932-37, 1938(M), 1939-40, 1943(M), 1945(P). WSP 1555: 1929, 1935, 1937(M), 1940(M), 1950(M).

GAGE.—Water-stage recorder. Datum of gage is 976.72 ft above sea level. Prior to Dec. 13, 1923, nonrecording gage at present site at different datum. Prior to Dec. 11, 1990, at site 0.9 mi downstream at datum 5.95 ft lower.

REMARKS.—Records good except for periods of estimated record, which are poor. Low flow slightly regulated by plants at Canton. Records include diversion from Sugar Creek well field. Mean pumpage for the 1999 water year, 12.1 ft<sup>3</sup>/s. See REMARKS for station 03124500. 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 1999 TO SEPTEMBER 2000 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	92	127	e92	e120	186	127	222	273	138	166	118
2	70	94	103	e96	e120	176	319	301	346	131	155	110
3	62	93	100	309	e115	162	1370	188	251	939	146	106
4	65	94	99	188	e110	152	1910	181	197	603	139	109
5	60	95	95	147	e110	147	683	208	239	315	131	110
6	62	94	95	132	e105	193	392	167	497	225	357	106
7	65	90	99	127	e100	137	541	156	307	188	559	103
8	230	88	99	119	e98	136	2660	171	228	164	263	102
9	197	90	96	124	103	132	1120	158	193	149	201	99
10	145	188	95	117	150	129	570	256	168	456	176	139
11	126	174	94	114	535	154	413	172	160	447	159	257
12	118	113	92	140	281	201	346	160	1400	214	145	183
13	115	106	90	558	275	155	299	150	1080	177	136	161
14	110	100	92	375	680	143	275	138	339	1190	134	119
15	107	95	91	258	367	136	252	133	286	1940	131	134
16	103	97	93	225	277	194	232	131	415	765	129	136
17	97	97	105	e210	239	235	318	132	836	431	129	107
18	168	95	98	e200	293	169	284	128	482	306	189	104
19	162	94	94	e190	300	152	250	471	339	258	120	101
20	114	134	100	e180	224	238	235	231	262	233	110	206
21	115	107	308	e170	213	281	344	175	358	222	113	345
22	125	95	979	e170	290	218	272	155	275	202	113	148
23	108	97	285	e160	464	188	238	374	217	181	297	250
24	102	94	188	e155	381	172	215	492	189	171	297	338
25	97	102	143	e150	341	160	198	268	187	166	154	201
26	99	236	126	e145	264	148	184	193	176	159	130	178
27	99	122	117	e140	229	168	177	199	183	201	245	143
28	98	109	e110	e135	203	179	172	1070	174	286	174	132
29	96	102	e100	e130	182	167	163	1320	163	221	140	121
30	99	104	e98	e130	---	143	155	526	152	192	128	115
31	96	---	e96	e125	---	135	---	345	---	193	123	---
TOTAL	3392	3291	4507	5511	7169	5286	14714	8971	10372	11463	5589	4581
MEAN	109	110	145	178	247	171	490	289	346	370	180	153
MAX	230	236	979	558	680	281	2660	1320	1400	1940	559	345
MIN	60	88	90	92	98	129	127	128	152	131	110	99

#### STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2000, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1922	103	438	1991	27.4	1931
1923	140	649	1986	30.1	1931
1924	192	733	1991	35.5	1931
1925	236	843	1937	46.7	1945
1926	271	586	1981	33.5	1934
1927	326	569	1963	75.5	1931
1928	284	584	1994	71.1	1935
1929	220	615	1996	37.3	1934
1930	181	689	1989	44.9	1932
1931	152	483	1958	31.4	1930
1932	127	445	1935	28.0	1932
1933	111	452	1979	30.0	1932

#### SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1922 - 2000	
ANNUAL TOTAL	70724		84846			
ANNUAL MEAN	194		232		195	
HIGHEST ANNUAL MEAN					308	1975
LOWEST ANNUAL MEAN					72.4	1931
HIGHEST DAILY MEAN	2420	Jan 23	2660	Apr 8	5390	Jan 22 1959
LOWEST DAILY MEAN	60	Oct 5	60	Oct 5	14	Aug 20 1923
ANNUAL SEVEN-DAY MINIMUM	67	Oct 1	67	Oct 1	20	Sep 10 1932
INSTANTANEOUS PEAK FLOW			3820	Jun 12a	8600	Jan 21 1959
INSTANTANEOUS PEAK STAGE			8.96	Jun 12	11.29	Jan 21 1959
INSTANTANEOUS LOW FLOW			45	Oct 6	3.6	Sep 2 1934
10 PERCENT EXCEEDS	368		374		377	
50 PERCENT EXCEEDS	115		160		124	
90 PERCENT EXCEEDS	76		96		54	

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**

**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 mi<sup>2</sup>.

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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	2.3	3.0	e2.3	e3.3	12	9.7	11	14	5.3	5.3	3.6
2	2.2	13	3.0	e3.0	e3.2	11	18	18	18	5.0	4.9	3.6
3	2.1	13	3.1	17	e3.1	9.6	67	12	19	7.1	6.0	3.5
4	2.3	6.2	3.3	128	e3.1	9.1	130	10	12	7.4	8.9	3.7
5	2.2	4.8	3.3	52	e3.0	8.4	75	11	13	5.6	5.3	3.6
6	2.2	4.1	3.9	27	e2.9	7.6	45	9.6	19	4.9	60	3.3
7	2.0	3.7	3.6	16	e2.9	7.1	45	8.9	14	4.7	52	3.2
8	2.0	3.5	3.3	12	e2.8	7.0	240	12	12	4.4	25	3.3
9	2.8	3.4	3.1	11	e2.8	6.7	115	10	9.3	4.1	17	3.2
10	4.1	3.3	6.3	11	e4.5	6.4	61	12	8.1	4.4	15	4.8
11	2.9	3.1	6.2	10	30	6.9	42	9.6	7.3	5.0	11	7.2
12	2.5	3.0	4.9	8.1	18	9.4	33	8.5	13	4.3	8.7	13
13	4.8	3.1	4.8	7.8	19	6.9	26	8.6	9.0	3.9	7.6	14
14	6.0	2.9	12	6.4	77	6.6	23	7.7	7.3	40	6.8	5.5
15	3.6	3.8	12	6.0	39	6.2	21	6.7	6.6	273	6.3	4.7
16	2.9	2.8	7.6	e5.4	29	7.6	18	6.4	10	89	5.7	4.5
17	2.7	2.8	6.1	e5.0	22	11	27	6.3	37	41	5.5	4.0
18	2.7	2.7	5.5	e4.8	30	7.8	28	6.7	18	27	7.6	3.9
19	2.6	2.8	5.0	e4.5	39	7.6	25	12	14	20	5.9	3.6
20	2.5	3.1	5.0	e4.4	27	12	23	7.5	10	15	5.0	3.6
21	2.4	3.0	4.6	e4.3	23	20	25	6.7	9.8	13	4.6	5.0
22	2.5	2.9	4.0	e4.1	26	15	21	6.1	8.6	11	4.4	4.1
23	2.4	2.8	3.8	e4.0	31	14	19	7.8	7.7	9.1	4.8	8.9
24	2.7	2.9	3.5	e3.9	28	13	17	19	6.4	7.7	7.0	38
25	2.5	2.8	3.0	e3.8	24	12	15	9.1	6.2	7.2	5.2	12
26	2.4	5.2	e2.8	e3.7	20	11	14	6.7	6.1	6.4	4.9	14
27	2.3	5.4	e2.7	e3.6	17	11	13	6.6	13	6.1	5.6	9.5
28	2.3	4.3	e2.6	e3.5	15	14	12	45	6.8	6.1	4.8	7.9
29	2.3	3.7	e2.5	e3.5	13	17	11	63	6.2	6.3	4.2	6.8
30	2.3	3.4	e2.4	e3.4	---	12	10	27	6.2	6.1	3.9	6.1
31	2.3	---	e2.4	e3.3	---	11	---	18	---	5.5	3.7	---
TOTAL	84.3	123.8	139.3	382.8	558.6	316.9	1228.7	409.5	347.6	655.6	322.6	212.1
MEAN	2.72	4.13	4.49	12.3	19.3	10.2	41.0	13.2	11.6	21.1	10.4	7.07
MAX	6.0	13	12	128	77	20	240	63	37	273	60	38
MIN	2.0	2.3	2.4	2.3	2.8	6.2	9.7	6.1	6.1	3.9	3.7	3.2
CFSM	.22	.34	.37	1.00	1.57	.83	3.33	1.07	.94	1.72	.85	.57
IN.	.25	.37	.42	1.16	1.69	.96	3.72	1.24	1.05	1.98	.98	.64

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2000, BY WATER YEAR (WY)

	1998	1999	2000	1998	1999	2000	1998	1999	2000	1998	1999	2000
MEAN	3.35	3.87	6.03	26.3	17.6	17.6	31.1	15.9	8.48	10.8	7.53	4.25
MAX	4.70	4.13	7.91	40.6	20.2	23.4	41.0	23.5	11.6	21.1	10.4	7.07
(WY)	1999	2000	1999	1999	1999	1999	2000	1998	2000	2000	2000	2000
MIN	2.62	3.47	4.49	12.3	13.4	10.2	19.9	11.1	4.53	4.69	4.68	2.21
(WY)	1998	1999	2000	1998	1998	2000	1999	1999	1999	1999	1999	1999

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1998 - 2000
ANNUAL TOTAL	4329.1	4781.8	
ANNUAL MEAN	11.9	13.1	12.7
HIGHEST ANNUAL MEAN			13.1
LOWEST ANNUAL MEAN			12.3
HIGHEST DAILY MEAN	198	Jan 22	273
LOWEST DAILY MEAN	1.7	Sep 27	2.0
ANNUAL SEVEN-DAY MINIMUM	1.8	Sep 22	2.1
INSTANTANEOUS PEAK FLOW			1090
INSTANTANEOUS PEAK STAGE			5.16
INSTANTANEOUS LOW FLOW			1.9
ANNUAL RUNOFF (CFSM)	.96	1.06	1.6
ANNUAL RUNOFF (INCHES)	13.09	14.46	14.05
10 PERCENT EXCEEDS	25	26	26
50 PERCENT EXCEEDS	5.0	6.5	6.2
90 PERCENT EXCEEDS	2.3	2.8	2.7

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**

**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 TEMPERATURES: October 1997 to current year.

DISSOLVED OXYGEN: October 1997 to current year.

INSTRUMENTATION: Data Collection Platform. Set for 1-hour interval.

EXTREMES FOR PERIOD OF RECORD.—

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

pH: Maximum, 7.7 units, Jan. 16, 1999; minimum, 3.9 units, Aug. 24, 1998.

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

DISSOLVED OXYGEN: Maximum, 15 mg/L, Mar. 11-13, 1999; minimum, 3.4 mg/L, Sept. 11 and 12, 2000.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum, 1,850 microsiemens, Oct. 1; minimum, 296 microsiemens, May 29.

pH: Maximum, 7.3 units, Feb. 11, 13, and May 24; minimum, 5.0 units, Oct. 1.

WATER TEMPERATURES: Maximum, 23°C, June 14; minimum, 0.0°C, on many days during winter.

DISSOLVED OXYGEN: Maximum, 13.7 mg/L, Nov. 3; minimum, 3.4 mg/L, Sept. 11 and 12.

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	1850	1800	1830	1710	1670	1690	1410	1360	1390	1460	1440	1450
2	1810	1700	1740	1710	1140	1480	1490	1410	1450	1450	1400	1430
3	1790	1720	1770	1170	951	1050	1470	1440	1460	1400	769	1280
4	1750	1660	1690	1130	1030	1080	1490	1460	1480	793	362	470
5	1700	1620	1680	1220	1130	1190	1500	1420	1480	927	606	783
6	1720	1680	1710	1290	1220	1260	1480	1420	1460	1260	917	1070
7	1720	1680	1700	1360	1290	1330	1520	1470	1490	1370	1250	1310
8	1700	1670	1690	1420	1360	1390	1520	1460	1490	1370	1240	1320
9	1700	1480	1630	1440	1410	1430	1500	1440	1470	1240	840	1120
10	1650	1540	1620	1460	1440	1450	1460	1160	1380	906	843	863
11	1620	1570	1590	1490	1460	1470	1400	1300	1350	924	862	886
12	1580	1550	1560	1530	1490	1500	1300	1170	1200	995	890	922
13	1600	1230	1520	1530	1490	1510	1250	1180	1210	1040	968	990
14	1460	1050	1360	1530	1480	1500	1260	1020	1190	1040	1010	1020
15	1420	1330	1380	1590	1490	1530	1020	811	851	1090	1030	1080
16	1420	1380	1400	1600	1480	1540	999	891	958	1110	1080	1100
17	1390	1360	1380	1510	1470	1490	1070	999	1040	1140	1100	1120
18	1440	1370	1420	1520	1470	1500	1140	1070	1110	1170	1130	1150
19	1500	1440	1480	1540	1480	1510	1200	1140	1170	1220	1170	1190
20	1550	1490	1530	1540	1520	1530	1240	1200	1210	1200	1150	1170
21	1610	1540	1580	1570	1520	1540	1290	1240	1270	1190	1160	1180
22	1620	1590	1600	1550	1530	1540	1310	1280	1300	1320	1190	1230
23	1620	1600	1610	1560	1520	1540	1360	1310	1330	1320	1250	1270
24	1650	1600	1630	1560	1510	1530	1440	1360	1400	1270	1240	1250
25	1670	1650	1660	1560	1520	1530	1500	1440	1470	1300	1240	1280
26	1700	1650	1670	1520	1400	1470	1510	1470	1490	1320	1290	1310
27	1700	1670	1690	1510	1420	1470	1530	1500	1510	1400	1300	1330
28	1700	1670	1690	1430	1300	1380	1560	1500	1530	1360	1320	1340
29	1700	1660	1680	1300	1270	1280	1510	1470	1490	1390	1350	1370
30	1690	1650	1680	1360	1270	1310	1490	1460	1470	1370	1340	1360
31	1700	1660	1680	---	---	---	1470	1440	1450	1350	1320	1340
MONTH	1850	1050	1610	1710	951	1430	1560	811	1340	1460	362	1160



**SURFACE-WATER RECORDS**  
**Muskingum River Basin**

**03121850 HUFF RUN AT MINERAL CITY, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	5.6	5.0	5.3	6.2	6.1	6.1	6.5	6.3	6.5	6.3	6.3	6.3			
2	5.9	5.6	5.8	6.5	6.1	6.3	6.5	6.3	6.4	7.0	6.3	6.4			
3	6.0	5.7	5.8	6.8	6.5	6.5	6.4	6.3	6.4	7.0	6.4	6.9			
4	6.2	5.9	6.0	6.5	6.4	6.4	6.5	6.3	6.4	7.0	6.4	6.6			
5	5.9	5.8	5.8	6.5	6.4	6.4	6.7	6.4	6.4	6.8	6.6	6.7			
6	5.8	5.7	5.7	6.4	6.4	6.4	6.7	6.4	6.4	7.0	6.7	6.8			
7	5.8	5.7	5.8	6.4	6.4	6.4	6.4	6.4	6.4	6.9	6.9	6.9			
8	5.8	5.7	5.7	6.6	6.4	6.4	6.5	6.4	6.4	6.9	6.8	6.9			
9	6.2	5.7	5.9	6.4	6.4	6.4	6.4	6.4	6.4	6.8	6.5	6.7			
10	6.3	6.1	6.2	6.5	6.4	6.4	6.8	6.3	6.5	7.0	6.6	6.6			
11	6.2	5.7	5.8	6.5	6.4	6.4	6.4	6.3	6.3	6.6	6.5	6.6			
12	6.0	5.7	5.8	6.5	6.4	6.4	6.4	6.3	6.3	6.6	6.5	6.5			
13	6.3	5.8	5.9	6.5	6.5	6.5	6.4	6.3	6.4	6.6	6.5	6.5			
14	6.2	6.0	6.1	6.5	6.4	6.5	7.0	6.4	6.7	6.5	6.5	6.5			
15	6.3	6.2	6.2	6.6	6.5	6.5	6.6	6.4	6.5	6.5	6.5	6.5			
16	6.5	6.2	6.4	6.6	6.6	6.6	6.5	6.4	6.4	6.5	6.5	6.5			
17	6.2	6.1	6.2	6.6	6.6	6.6	6.4	6.3	6.4	6.5	6.5	6.5			
18	6.1	6.0	6.1	6.7	6.6	6.6	6.4	6.3	6.3	6.5	6.5	6.5			
19	6.0	5.9	6.0	6.7	6.6	6.6	6.3	6.3	6.3	6.5	6.5	6.5			
20	6.0	5.9	5.9	7.0	6.6	6.7	6.4	6.3	6.4	6.5	6.5	6.5			
21	5.9	5.9	5.9	6.6	6.6	6.6	6.3	6.3	6.3	6.5	6.5	6.5			
22	5.9	5.9	5.9	6.6	6.3	6.4	6.3	6.2	6.3	6.5	6.5	6.5			
23	6.3	5.9	6.0	6.3	6.3	6.3	6.3	6.2	6.3	6.5	6.5	6.5			
24	6.2	6.0	6.1	6.6	6.3	6.3	6.2	6.2	6.2	6.5	6.5	6.5			
25	6.0	6.0	6.0	6.4	6.3	6.3	6.2	6.2	6.2	6.5	6.2	6.4			
26	6.0	6.0	6.0	6.7	6.4	6.6	6.2	6.2	6.2	6.2	6.1	6.2			
27	6.0	6.0	6.0	6.4	6.4	6.4	6.3	6.2	6.3	6.2	6.1	6.2			
28	6.1	6.0	6.0	6.5	6.4	6.5	6.3	6.2	6.3	6.2	6.1	6.2			
29	6.2	6.0	6.0	6.5	6.5	6.5	6.3	6.3	6.3	6.2	6.1	6.2			
30	6.2	6.0	6.1	6.5	6.4	6.5	6.7	6.3	6.3	6.6	6.0	6.1			
31	6.2	6.0	6.1	---	---	---	6.3	6.3	6.3	6.2	6.1	6.2			
MONTH	6.5	5.0	6.0	7.0	6.1	6.4	7.0	6.2	6.4	7.0	6.0	6.5			

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





**SURFACE-WATER RECORDS**  
**Muskingum River Basin**

**03121850 HUFF RUN AT MINERAL CITY, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	15.0	11.5	13.0	13.5	9.5	11.0	2.5	.5	1.0	2.5	.5	1.0			
2	15.0	10.5	12.5	11.5	9.0	10.5	3.5	.5	2.0	---	---	---			
3	14.5	12.5	13.5	9.0	7.0	8.0	5.5	2.0	3.5	---	---	---			
4	14.0	12.5	13.0	7.5	5.0	6.5	8.0	4.5	6.0	---	---	---			
5	13.5	10.5	12.0	9.0	5.0	7.0	10.0	7.0	8.5	---	---	---			
6	12.5	9.0	10.5	10.5	7.5	9.0	9.0	6.0	7.5	---	---	---			
7	11.5	8.0	10.0	8.5	6.0	7.0	6.5	4.0	5.5	---	---	---			
8	12.5	7.5	10.0	8.0	4.5	6.0	5.0	2.5	3.5	---	---	---			
9	13.5	12.0	12.5	10.0	5.5	7.5	5.5	3.0	4.0	---	---	---			
10	14.0	13.0	13.5	11.5	8.0	9.5	6.0	4.5	5.5	---	---	---			
11	15.0	13.0	14.0	10.5	8.0	10.0	4.5	3.0	4.0	---	---	---			
12	13.5	9.5	11.5	9.5	6.5	8.0	4.0	2.5	3.0	---	---	---			
13	15.0	10.5	12.5	9.5	6.5	8.0	5.0	4.0	4.5	3.5	2.0	3.0			
14	13.0	11.0	12.0	10.0	7.5	8.5	6.0	5.0	5.5	2.0	.0	1.0			
15	12.5	8.5	10.5	8.0	6.5	7.5	6.5	6.0	6.0	1.5	.0	.5			
16	14.0	9.5	11.5	7.0	5.0	6.5	6.0	4.0	5.0	2.0	.5	1.5			
17	12.5	11.5	12.0	6.0	3.0	4.5	4.0	2.5	3.5	.5	.0	.5			
18	12.5	10.0	11.0	5.5	2.0	3.5	4.0	3.0	3.5	1.0	.5	.5			
19	12.0	9.0	10.5	7.0	2.5	4.5	3.5	1.5	2.5	1.5	.5	.5			
20	12.0	8.5	10.0	8.5	6.0	7.0	5.0	3.5	4.0	1.0	.0	.5			
21	11.0	7.0	9.0	10.0	6.5	8.0	3.5	2.0	2.5	.5	.0	.5			
22	11.0	8.0	9.5	11.0	7.0	9.0	2.0	.5	1.0	.5	.0	.5			
23	9.5	8.0	8.5	11.0	7.0	9.0	1.5	.5	1.0	.5	.5	.5			
24	8.5	7.5	8.0	10.0	8.0	9.5	1.0	.5	.5	.5	.0	.5			
25	9.5	5.0	7.0	9.0	7.0	8.0	1.0	.5	.5	.5	.0	.5			
26	10.0	6.5	8.0	8.5	8.0	8.0	1.0	.5	.5	.5	.5	.5			
27	9.5	5.5	7.5	8.0	6.5	7.5	1.0	.5	1.0	.5	.0	.5			
28	10.5	5.0	7.5	6.5	4.5	5.5	.5	.5	.5	.5	.0	.5			
29	11.5	6.5	8.5	4.5	3.0	4.0	1.0	.5	1.0	.5	.0	.5			
30	12.0	7.5	9.5	3.5	1.5	3.0	2.0	.5	1.5	.5	.5	.5			
31	12.0	8.0	10.0	---	---	---	2.5	1.0	1.5	.5	.5	.5			
MONTH	15.0	5.0	10.5	13.5	1.5	7.5	10.0	.5	3.0	3.5	.0	.5			

DAY	MAX	MIN	MEAN	FEBRUARY			MARCH			APRIL			MAY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	.5	.5	.5	---	---	---	10.5	6.0	8.5	15.0	11.5	13.5			
2	1.0	.0	.5	---	---	---	10.0	9.5	10.0	17.0	11.5	14.0			
3	.5	.5	.5	---	---	---	15.0	9.5	12.0	17.5	11.5	14.5			
4	1.0	.5	.5	6.5	2.0	4.5	15.0	10.5	13.0	17.0	13.5	15.0			
5	1.0	.0	.5	8.0	3.5	5.5	13.5	6.5	11.5	19.5	15.0	17.0			
6	1.5	.5	.5	9.0	4.5	6.0	12.5	8.5	11.5	20.5	16.0	18.5			
7	2.0	.5	1.0	10.5	5.5	7.5	11.0	8.0	9.0	21.0	17.0	19.0			
8	1.0	.0	.5	13.0	8.0	10.0	9.5	7.0	8.5	21.0	17.5	19.5			
9	2.0	.0	1.0	13.5	10.5	11.5	7.0	5.5	6.5	21.0	19.0	20.0			
10	2.5	.5	1.0	11.0	7.5	9.5	9.0	5.5	7.0	20.0	16.0	18.0			
11	.5	.0	.5	7.5	5.0	6.0	9.0	7.0	8.0	16.0	13.5	15.0			
12	1.0	.0	.5	5.5	3.5	4.5	9.0	6.5	7.5	19.5	15.5	17.0			
13	1.0	.0	.5	5.5	2.0	4.0	11.0	5.5	8.0	19.5	17.5	19.0			
14	---	---	---	9.0	4.5	6.0	13.5	7.5	10.5	17.5	14.5	16.0			
15	3.5	2.0	2.5	11.5	6.0	8.5	16.0	11.0	13.5	15.0	12.5	14.0			
16	3.5	3.0	3.5	9.5	7.0	8.5	16.5	12.5	14.5	14.5	11.5	13.0			
17	3.0	1.0	2.0	7.0	5.0	6.0	15.5	13.0	14.0	17.0	13.0	14.5			
18	2.5	1.5	2.0	6.5	2.5	4.5	14.0	11.5	12.5	18.0	16.0	17.0			
19	3.0	2.0	2.5	6.0	5.0	5.5	12.5	11.0	11.5	19.0	16.5	17.5			
20	3.0	2.5	3.0	6.5	6.0	6.0	14.0	10.5	12.0	18.5	14.5	16.0			
21	4.5	2.0	3.5	7.5	6.0	6.5	14.0	11.5	13.0	15.5	13.5	14.5			
22	6.0	3.0	4.5	8.5	6.5	7.5	11.5	10.0	10.5	16.5	14.0	15.0			
23	8.0	6.0	6.5	11.0	7.0	9.0	13.0	8.5	10.5	16.0	15.5	15.5			
24	---	---	---	12.5	7.5	10.0	15.0	9.5	12.0	18.0	15.0	16.5			
25	---	---	---	14.5	10.5	12.5	15.5	11.0	13.0	18.0	15.5	17.0			
26	---	---	---	13.0	9.5	11.5	14.5	9.5	12.0	17.5	14.5	16.0			
27	---	---	---	10.5	8.5	9.0	13.0	8.5	11.0	17.0	15.5	16.0			
28	---	---	---	8.5	6.5	7.5	15.0	9.5	12.0	16.0	14.0	15.0			
29	---	---	---	9.5	6.5	8.0	15.0	11.0	13.0	16.0	13.0	14.5			
30	---	---	---	10.0	5.5	8.0	16.5	10.5	13.5	16.5	12.5	14.5			
31	---	---	---	10.5	5.5	8.0	---	---	---	19.0	14.5	16.5			
MONTH	8.0	.0	1.5	14.5	2.0	7.5	16.5	5.5	11.0	21.0	11.5	16.0			



**SURFACE-WATER RECORDS**  
**Muskingum River Basin**

**03121850 HUFF RUN AT MINERAL CITY, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

OXYGEN, DISSOLVED, MICROGRAMS PER LITER, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.4	6.6	7.5	9.6	8.8	9.2	10.4	9.9	10.1	---	---	---			
2	8.3	6.5	7.3	13.5	8.8	10.4	10.3	9.7	10.0	---	---	---			
3	8.4	6.6	7.3	13.7	13.2	13.4	9.9	9.2	9.6	---	---	---			
4	8.7	6.8	7.8	13.5	12.8	13.2	9.5	8.5	8.9	---	---	---			
5	8.1	6.8	7.4	13.3	12.0	12.7	8.6	7.9	8.2	---	---	---			
6	8.2	6.9	7.5	12.0	10.8	11.4	8.6	8.0	8.4	---	---	---			
7	8.5	7.2	7.8	11.5	10.8	11.2	9.4	8.6	9.1	---	---	---			
8	8.8	7.1	7.9	11.3	7.7	9.5	10.1	9.4	9.8	---	---	---			
9	9.3	6.9	8.0	---	---	---	10.2	9.4	9.9	---	---	---			
10	9.9	7.4	8.8	---	---	---	11.2	9.2	9.8	---	---	---			
11	8.6	7.1	7.6	---	---	---	9.8	9.3	9.5	---	---	---			
12	9.8	7.2	8.2	---	---	---	9.9	9.3	9.7	---	---	---			
13	9.0	7.7	8.3	---	---	---	9.3	8.8	9.1	12.1	11.2	11.6			
14	8.7	8.1	8.3	---	---	---	10.6	8.8	9.5	13.1	12.1	12.7			
15	8.8	8.0	8.3	---	---	---	10.3	9.8	10.0	13.1	12.4	12.8			
16	8.7	7.6	8.2	---	---	---	11.0	10.2	10.6	12.5	12.1	12.3			
17	7.8	7.5	7.7	---	---	---	11.6	11.0	11.3	12.9	12.4	12.7			
18	8.5	7.4	8.0	---	---	---	11.5	11.3	11.4	12.7	12.3	12.5			
19	8.7	7.8	8.2	---	---	---	11.9	11.3	11.6	12.7	12.1	12.4			
20	8.6	7.8	8.2	---	---	---	11.4	10.7	11.1	12.6	12.2	12.4			
21	11.8	7.9	11.1	---	---	---	11.5	11.0	11.3	12.6	12.3	12.5			
22	11.4	10.5	10.9	---	---	---	11.8	11.2	11.5	12.6	11.9	12.3			
23	12.4	10.4	10.9	7.7	6.9	7.3	11.7	11.3	11.5	12.0	11.8	11.9			
24	12.4	10.4	11.1	8.7	7.1	7.6	11.7	11.2	11.5	12.4	11.8	12.1			
25	10.5	9.1	9.8	8.2	7.6	7.9	11.5	11.1	11.3	12.4	10.3	11.5			
26	9.5	8.4	8.9	10.3	8.1	9.4	11.2	10.7	10.9	10.5	10.1	10.3			
27	9.6	8.5	9.1	8.5	8.0	8.3	10.9	10.6	10.8	10.9	10.5	10.7			
28	10.3	9.1	9.7	9.0	8.4	8.8	11.1	10.5	10.8	11.2	10.7	10.9			
29	10.0	8.9	9.5	9.5	8.9	9.3	---	---	---	11.3	10.4	10.9			
30	9.9	8.8	9.4	10.0	9.5	9.7	---	---	---	11.1	10.5	10.9			
31	9.9	8.7	9.4	---	---	---	---	---	---	11.2	11.0	11.1			
MONTH	12.4	6.5	8.6	13.7	6.9	10.0	11.9	7.9	10.3	13.1	10.1	11.8			

DAY	MAX	MIN	MEAN	FEBRUARY			MARCH			APRIL			MAY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.3	11.0	11.1	---	---	---	10.4	9.5	10.1	---	---	---			
2	11.5	11.1	11.3	---	---	---	11.2	9.5	10.5	---	---	---			
3	11.5	11.1	11.3	---	---	---	13.2	9.5	10.7	6.9	4.9	6.0			
4	11.5	10.8	11.2	---	---	---	12.7	7.5	9.7	7.5	5.7	6.5			
5	11.1	10.4	10.8	---	---	---	12.4	8.0	9.1	9.6	7.1	7.9			
6	11.0	10.5	10.8	---	---	---	9.5	8.3	8.9	7.7	7.1	7.3			
7	11.5	10.9	11.1	8.9	8.0	8.4	12.1	8.4	9.8	7.8	7.1	7.4			
8	12.1	11.2	11.6	9.0	8.3	8.6	---	---	---	9.0	7.1	7.7			
9	12.1	11.4	11.8	8.8	8.3	8.5	---	---	---	8.0	7.3	7.7			
10	12.1	11.6	11.9	9.0	8.4	8.8	---	---	---	8.9	7.5	8.0			
11	12.1	11.4	11.8	12.3	9.0	10.1	9.4	8.9	9.3	8.8	7.3	7.9			
12	12.1	11.9	12.0	11.1	9.7	10.0	9.8	8.7	9.5	9.4	7.3	8.1			
13	12.0	11.6	11.9	10.4	9.8	10.0	10.2	9.1	9.7	9.1	7.0	8.1			
14	---	---	---	10.1	9.5	9.9	9.8	8.6	9.3	9.7	8.4	9.1			
15	---	---	---	9.9	9.1	9.6	9.1	8.2	8.7	9.3	7.1	8.8			
16	---	---	---	11.5	9.1	10.0	8.8	8.2	8.5	10.5	9.1	9.7			
17	---	---	---	10.5	9.3	9.9	9.4	8.4	8.8	10.0	9.2	9.6			
18	---	---	---	10.7	10.1	10.4	9.9	8.4	9.1	9.8	8.7	9.2			
19	---	---	---	10.4	10.1	10.3	9.5	9.2	9.4	10.2	8.7	9.4			
20	---	---	---	11.6	10.0	10.4	9.4	8.5	9.1	10.3	9.2	9.8			
21	---	---	---	11.8	10.0	10.4	9.0	8.7	8.8	10.7	9.8	10.3			
22	---	---	---	10.3	9.9	10.2	9.2	8.8	9.0	10.6	9.8	10.1			
23	---	---	---	10.3	9.3	9.9	9.4	8.5	9.0	11.1	9.7	10.2			
24	---	---	---	9.9	8.9	9.5	8.9	7.9	8.5	---	---	---			
25	---	---	---	9.5	8.6	9.0	8.5	7.7	8.1	---	---	---			
26	---	---	---	9.4	8.6	9.0	8.6	7.8	8.2	---	---	---			
27	---	---	---	10.9	8.9	9.5	---	---	---	---	---	---			
28	---	---	---	11.3	9.3	10.1	---	---	---	---	---	---			
29	---	---	---	10.8	9.6	9.9	---	---	---	---	---	---			
30	---	---	---	10.4	9.6	10.0	---	---	---	---	---	---			
31	---	---	---	10.6	9.8	10.2	---	---	---	---	---	---			
MONTH	12.1	10.4	11.4	12.3	8.0	9.7	13.2	7.5	9.2	11.1	4.9	8.5			



**SURFACE-WATER RECORDS  
Muskingum River Basin**

**03124500 SUGAR CREEK AT STRASBURG, OHIO**

LOCATION.—Latitude 40°35'15", longitude 81°31'24", in NW 1/4 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 mi<sup>2</sup>.

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 above sea level. July 29, 1931, to Mar. 31, 1933, and Dec. 10, 1934, to July 31, 1939, nonrecording gage, and Oct. 1, 1961, to May 26, 1964, water-stage recorder at datum 2.00 ft higher.

REMARKS.—Records good except for periods of estimated record, which are poor. Flood flow regulated by Beach City Lake 5.0 mi upstream, since August 1937. Part of municipal water supply for city of Canton, starting May 1962, is pumped from well field 4.3 mi upstream; pumpage is returned to Nimishillen Creek. Mean pumpage for water year 2000, 15.5 ft<sup>3</sup>/s. Water-quality data formerly collected at this site.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	21	36	e28	e22	240	143	131	237	63	57	26
2	54	51	33	e40	e22	229	169	179	181	56	47	24
3	29	461	33	74	e22	199	693	218	184	62	37	23
4	22	348	34	948	e22	176	1850	166	158	132	32	23
5	21	159	34	1800	e22	162	1950	158	123	116	29	27
6	24	88	35	1090	e21	146	1920	171	192	74	80	34
7	23	62	44	537	e21	135	1850	148	306	58	278	25
8	19	48	44	273	e21	126	1580	129	187	51	227	22
9	21	42	39	195	e21	121	1990	145	130	45	117	20
10	26	38	43	166	e32	110	1960	138	103	43	75	22
11	47	35	131	171	192	103	1940	159	86	61	57	28
12	41	34	120	152	542	138	1910	127	91	80	45	47
13	33	32	78	124	394	164	1890	108	115	54	39	131
14	42	30	82	104	697	142	1110	97	146	64	34	116
15	89	29	211	71	1360	128	458	83	122	101	32	57
16	59	28	191	e62	1060	118	363	75	104	116	30	39
17	39	29	134	e56	527	187	355	73	293	127	30	32
18	31	28	101	e50	475	225	355	77	561	90	35	27
19	30	27	83	e45	785	174	324	115	327	66	64	23
20	33	28	74	e40	721	183	286	258	213	56	46	23
21	29	29	69	e37	468	823	308	163	160	51	34	59
22	25	30	61	e34	486	871	345	113	173	47	29	111
23	23	29	51	e31	692	508	298	98	129	44	29	62
24	24	30	47	e29	886	373	258	159	99	39	58	252
25	25	28	41	e27	765	307	226	201	85	35	97	359
26	27	36	37	e25	616	257	199	126	86	33	59	196
27	27	70	e34	e24	438	224	177	90	89	31	43	159
28	25	80	e32	e23	343	228	163	128	105	31	78	103
29	24	54	e31	e22	278	216	152	764	77	43	57	75
30	24	42	e30	e22	---	188	139	759	69	55	40	61
31	23	---	e29	e22	---	161	---	368	---	57	30	---
TOTAL	1063	2046	2042	6322	11951	7362	25361	5724	4931	1981	1945	2206
MEAN	34.3	68.2	65.9	204	412	237	845	185	164	63.9	62.7	73.5
MAX	104	461	211	1800	1360	871	1990	764	561	132	278	359
MIN	19	21	29	22	21	103	139	73	69	31	29	20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2000, BY WATER YEAR (WY)

MEAN	91.1	181	312	407	488	636	502	311	233	189	152	98.0
MAX	583	929	1001	2025	1174	1297	953	1089	1008	2128	1219	1048
(WY)	1991	1986	1978	1937	1981	1963	1980	1996	1981	1969	1935	1979
MIN	.000	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 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1932 - 2000	
ANNUAL TOTAL	84626		72934			
ANNUAL MEAN	232		199		300	
HIGHEST ANNUAL MEAN					520	
LOWEST ANNUAL MEAN					160	
HIGHEST DAILY MEAN					10200	
LOWEST DAILY MEAN			2000	Apr 11		Aug 7 1935
ANNUAL SEVEN-DAY MINIMUM			12	Sep 14		Sep 29 1963
INSTANTANEOUS PEAK FLOW			12	Sep 14		Sep 29 1963
INSTANTANEOUS PEAK STAGE					2040	Apr 9
INSTANTANEOUS LOW FLOW					5.74	Apr 9
10 PERCENT EXCEEDS			620		18	Oct 8
50 PERCENT EXCEEDS			73		463	
90 PERCENT EXCEEDS			20		78	
					130	
					26	

e Estimated.

**SURFACE-WATER RECORDS**  
**Muskingum River Basin**

**03129000 TUSCARAWAS RIVER AT NEWCOMERSTOWN, OHIO**

LOCATION.—Latitude 40°15'41", longitude 81°36'33", in T.5 N., R.3 W., Tuscarawas County, Hydrologic Unit 05040001, on right bank 150 ft upstream from highway bridge, 0.2 mi south of Newcomerstown, Ohio, 2 mi upstream from Buckhorn Creek, and 4 mi downstream from Dunlap Creek.

DRAINAGE AREA.—2,443 mi<sup>2</sup>.

PERIOD OF RECORD.—September 1921 to current year.

REVISED RECORDS.—WSP 728: 1929(M). WSP 873: 1935. WSP 1907: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 780.00 ft above sea level. Gage located 1.5 mi upstream from 1921 to Oct. 1, 1934. From 1921 to Sept. 28, 1925, non-recording gage at 785.03 ft above sea level. From Sept. 28, 1925 to Oct. 1, 1934, recording gage at 785.03 ft above sea level. Gage moved to current location Oct. 1, 1934. From Oct. 1, 1934 to July 17, 1935, recording gage at 780.03 ft above sea level. From July 18, 1935 to Feb. 13, 1939, non-recording gage at 780.03 ft above sea level. From Feb. 13, 1939 to present, recording gage at 780.00 ft above sea level.

REMARKS.—Records excellent except for periods of estimated record, which are fair. Diversion from basin at Portage Lakes (see REMARKS for station 03117000). Flow regulated by eight flood-control reservoirs at points 40 mi to 64 mi upstream. Water-quality data formerly collected at this site. U.S. Army of Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood in March 1913 reached a stage of about 21.5 ft, at site and datum used prior to Oct. 1, 1934, discharge, 83,000 ft<sup>3</sup>/s computed by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1010	391	1460	e670	e600	2570	1900	1810	6430	1190	1280	702
2	973	487	1390	e660	e580	2300	1760	2010	5000	1100	1150	668
3	657	1850	1280	e740	e570	2120	2970	2770	3280	1160	1050	638
4	507	3340	1200	4610	e560	1890	9130	2640	2990	2110	971	609
5	431	2530	1180	8230	e550	1710	10800	2160	2410	3580	893	651
6	384	1610	1210	8370	e540	1580	10500	2110	2430	2410	987	599
7	396	1110	1240	7220	e540	1470	9800	1980	3390	1690	2520	584
8	384	906	1210	5080	e530	1380	10900	1860	3300	1300	4140	556
9	373	805	1180	4180	e520	1310	11400	1780	2430	1090	3460	534
10	418	790	1200	2960	e640	1210	10300	1700	1990	1020	2390	537
11	590	899	1550	2810	1140	1110	9970	1780	1700	1120	1830	725
12	573	999	2060	2620	2860	1150	9720	1740	1670	2070	1470	833
13	506	1000	1770	1970	3190	1360	9250	1590	2330	1520	1250	1230
14	633	972	1670	1600	5130	1440	8750	1480	4080	1170	1120	1130
15	974	938	2530	1380	7280	1350	7390	1360	4120	2640	1030	909
16	923	935	3560	1190	7860	1290	6640	1250	3610	5150	953	735
17	784	933	3200	1150	5590	1480	6930	1180	3970	5520	885	706
18	623	911	2460	1030	3930	2150	6960	1180	4820	5220	881	654
19	548	925	1890	1010	4650	2090	6960	1430	4620	3650	953	605
20	490	994	1710	1010	5290	1960	6980	2720	4010	2280	891	572
21	463	1020	1550	936	4280	3520	6580	3360	3020	1900	802	616
22	435	1020	1260	811	3410	4790	5600	2450	2600	1630	740	1150
23	426	1010	1140	725	3800	4020	4540	1920	2310	1420	739	964
24	429	1060	954	1070	5510	3040	3420	2140	1930	1230	1020	1290
25	445	1100	844	977	5850	2490	3030	3250	1660	1120	1430	2220
26	507	1180	e800	873	5330	2170	2770	3390	1520	1040	1140	1940
27	532	1460	e760	e790	4410	1970	2440	2120	1600	981	921	1580
28	492	1780	e730	e720	3550	1930	2250	2160	1530	949	929	1310
29	445	1620	e700	e680	3020	2140	2100	6060	1410	1790	1080	1080
30	420	1460	e690	e640	---	2370	1940	7690	1280	1760	881	939
31	403	---	e680	e620	---	2210	---	7050	---	1490	762	---
TOTAL	17174	36035	45058	67332	91710	63570	193680	78120	87440	62300	40548	27266
MEAN	554	1201	1453	2172	3162	2051	6456	2520	2915	2010	1308	909
MAX	1010	3340	3560	8370	7860	4790	11400	7690	6430	5520	4140	2220
MIN	373	391	680	620	520	1110	1760	1180	1280	949	739	534

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2000, BY WATER YEAR (WY)

	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	
MEAN	947	1693	2583	3390	3912	4906	4350	3096	2144	1518	1148	951													
MAX	4257	7201	8471	16130	9762	11090	7909	9194	8339	7663	8648	4882													
(WY)	1991	1986	1928	1937	1959	1945	1948	1996	1981	1969	1935	1926													
MIN	227	253	255	354	422	969	1155	541	430	291	233	245													
(WY)	1931	1931	1931	1931	1934	1931	1925	1934	1988	1930	1930	1930													

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1922 - 2000	
ANNUAL TOTAL	825506		810233			
ANNUAL MEAN	2262		2214		2546	
HIGHEST ANNUAL MEAN					4227	
LOWEST ANNUAL MEAN					967	
HIGHEST DAILY MEAN	12900	Jan 23	11400	Apr 9	45000	Jan 26 1937
LOWEST DAILY MEAN	318	Sep 27	373	Oct 9	170	Aug 6 1930
ANNUAL SEVEN-DAY MINIMUM	330	Sep 16	413	Oct 4	197	Dec 18 1930
INSTANTANEOUS PEAK FLOW			12100		46800	
INSTANTANEOUS PEAK STAGE			8.77		20.65	
INSTANTANEOUS LOW FLOW			370		216	
10 PERCENT EXCEEDS	6370		5140		6610	
50 PERCENT EXCEEDS	1180		1430		1470	
90 PERCENT EXCEEDS	419		583		420	

e Estimated.

**SURFACE-WATER RECORDS  
Muskingum River Basin**

**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, 13.7 mi west of Fredricktown, Ohio, and 4.2 mi east of Chesterville, Ohio.

DRAINAGE AREA.—59.5 mi<sup>2</sup>.

PERIOD OF RECORD.—January to September 2000.

GAGE.—Water-stage recorder. Datum of gage is 1065 ft above sea level.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	e5.2	e9.2	39	40	33	e130	e18	8.0	4.0
2	---	---	---	e7.2	e9.0	35	122	68	e80	e16	6.9	3.6
3	---	---	---	e100	e8.8	32	369	54	e58	e18	5.9	3.8
4	---	---	---	e1000	e8.6	30	760	e41	e46	e22	7.2	3.7
5	---	---	---	e500	e8.6	28	221	e38	e60	e27	6.6	3.2
6	---	---	---	102	e8.6	26	101	e36	e100	e21	6.9	2.9
7	---	---	---	69	e8.4	24	308	e34	e82	16	8.5	3.0
8	---	---	---	50	e8.4	23	1250	e31	e54	13	8.4	3.1
9	---	---	---	42	e8.2	23	679	e30	e40	12	8.1	3.2
10	---	---	---	39	e9.0	21	196	e29	e36	10	7.4	3.3
11	---	---	---	37	358	20	127	e28	e33	10	6.5	4.6
12	---	---	---	31	238	23	101	e27	e31	9.8	5.8	5.9
13	---	---	---	29	106	23	84	e26	e29	7.9	5.3	4.3
14	---	---	---	24	475	24	73	e25	e33	12	5.1	3.1
15	---	---	---	22	186	24	65	e24	e42	54	4.7	2.8
16	---	---	---	22	122	25	59	e23	e52	36	4.3	2.5
17	---	---	---	18	97	60	85	e22	e140	24	4.3	2.3
18	---	---	---	e17	189	42	160	e28	e130	18	11	2.1
19	---	---	---	e16	320	42	91	e54	e80	15	9.7	2.0
20	---	---	---	e15	105	410	72	e84	e52	15	7.6	2.4
21	---	---	---	e14	71	361	110	e74	e50	13	6.0	5.0
22	---	---	---	e13	86	115	151	e58	e45	12	5.5	4.1
23	---	---	---	e13	147	77	100	e42	e42	11	6.2	6.0
24	---	---	---	e12	109	60	75	e41	e35	11	7.3	16
25	---	---	---	e11	88	49	60	e43	e29	10	6.8	15
26	---	---	---	e11	70	41	50	e38	e26	9.6	6.7	11
27	---	---	---	e11	57	43	44	e34	e23	9.9	9.4	8.9
28	---	---	---	e10	48	51	41	e80	e22	9.5	9.8	6.3
29	---	---	---	e9.8	41	99	37	e400	e21	9.1	6.0	4.3
30	---	---	---	e9.6	---	67	33	e250	e19	9.3	4.9	3.5
31	---	---	---	e9.4	---	49	---	e190	---	9.5	4.4	---
TOTAL	---	---	---	2269.2	2999.8	1986	5664	1985	1620	488.6	211.2	145.9
MEAN	---	---	---	73.2	103	64.1	189	64.0	54.0	15.8	6.81	4.86
MAX	---	---	---	1000	475	410	1250	400	140	54	11	16
MIN	---	---	---	5.2	8.2	20	33	22	19	7.9	4.3	2.0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2000, BY WATER YEAR (WY)

	1999	2000	1999	2000	1999	2000	1999	2000	1999	2000	1999	2000
MEAN	---	---	73.2	103	64.1	189	64.0	54.0	15.8	6.81	4.86	4.86
MAX	---	---	73.2	103	64.1	189	64.0	54.0	15.8	6.81	4.86	4.86
(WY)	---	---	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
MIN	---	---	73.2	103	64.1	189	64.0	54.0	15.8	6.81	4.86	4.86
(WY)	---	---	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000

SUMMARY STATISTICS

	WATER YEARS 1999 - 2000
HIGHEST DAILY MEAN	1250 Apr 8 2000
LOWEST DAILY MEAN	2.0 Sep 19 2000
ANNUAL SEVEN-DAY MINIMUM	2.5 Sep 14 2000
INSTANTANEOUS PEAK FLOW	1340 Apr 8 2000
INSTANTANEOUS PEAK STAGE	8.08 Apr 8 2000
INSTANTANEOUS LOW FLOW	2.0 Sep 19 2000
10 PERCENT EXCEEDS	124
50 PERCENT EXCEEDS	26
90 PERCENT EXCEEDS	4.9

e Estimated.

**SURFACE-WATER RECORDS**  
**Muskingum River Basin**

**03136500 KOKOSING RIVER AT MOUNT VERNON, OHIO**

LOCATION.—Latitude 40°24'20", longitude 82°30'00", in sec. 2, T.6 N., R.13 W., Knox County, Hydrologic Unit 05040003, on right bank 300 ft downstream from Tilden Avenue Bridge at Mount Vernon, Ohio, 0.8 mi downstream from North Branch, and 2.7 mi upstream from Dry Creek.  
DRAINAGE AREA.—202 mi<sup>2</sup>.

PERIOD OF RECORD.—February 1953 to current year.

REVISED RECORDS.—WSP 2107: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 981.16 ft above sea level. (Levels by U.S. Army Corps of Engineers.) Prior to May 21, 1991, gage at same site and at datum 3.00 ft higher.

REMARKS.—Records fair except for periods of estimated record, which are poor. Some regulation by Knox Lake, capacity, 3,750 acre-ft, 8.2 mi upstream on East Branch of North Branch Kokosing River beginning in 1954 and North Branch Kokosing River Lake, 14,886 acre-ft, 10.0 mi upstream on North Branch Kokosing River, beginning in June 1972. 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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	25	31	e42	e52	173	159	149	352	99	59	33
2	24	41	33	e45	e50	161	226	204	269	95	57	32
3	22	67	31	124	e49	147	759	198	220	99	53	32
4	24	61	32	1780	e56	139	1380	170	186	160	50	30
5	22	51	33	1040	e50	133	790	160	243	156	47	28
6	19	45	37	411	e48	126	419	147	493	124	47	27
7	19	41	37	264	e48	118	514	137	310	107	52	26
8	21	38	35	203	e48	114	3040	127	232	95	51	26
9	25	36	34	171	e50	110	1770	120	188	87	51	28
10	29	34	47	157	e56	104	922	121	160	86	49	30
11	25	32	56	148	e400	102	624	118	139	86	47	32
12	21	31	59	134	448	107	403	113	129	82	44	35
13	29	30	57	123	298	105	317	114	147	78	42	37
14	41	30	124	108	782	104	279	108	137	77	41	36
15	32	30	238	101	573	102	252	102	272	118	39	35
16	25	29	169	e90	377	105	231	97	318	107	38	34
17	24	27	135	e82	315	159	365	97	912	91	39	34
18	22	27	101	e78	387	154	625	109	535	80	51	33
19	20	27	88	e74	708	147	418	235	313	74	52	33
20	20	28	e74	e70	394	394	318	364	233	70	46	59
21	24	28	e66	e68	271	857	332	244	236	68	41	73
22	21	28	e60	e66	270	422	426	188	227	65	39	53
23	18	29	e54	e62	419	289	341	168	182	62	40	48
24	20	29	e50	e60	416	233	286	180	156	60	46	75
25	22	29	e47	e58	341	204	247	177	146	57	43	61
26	23	37	e44	e56	300	180	212	153	138	55	39	57
27	22	39	e41	e54	244	172	191	139	128	54	41	48
28	23	37	e40	e52	211	181	179	780	118	57	42	43
29	28	34	e40	e50	186	221	165	1950	110	58	39	43
30	27	33	e45	e52	---	209	152	991	105	58	36	44
31	24	---	e42	e54	---	176	---	550	---	59	34	---
TOTAL	749	1053	1980	5877	7847	6121	16342	8510	7334	2624	1395	1205
MEAN	24.2	35.1	63.9	190	271	197	545	275	244	84.6	45.0	40.2
MAX	41	67	238	1780	782	857	3040	1950	912	160	59	75
MIN	18	25	31	42	48	102	152	97	105	54	34	26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2000, BY WATER YEAR (WY)

MEAN	62.9	140	236	279	345	417	383	269	201	150	80.5	64.8
MAX	275	635	979	1020	805	1068	845	820	909	636	438	587
(WY)	1991	1973	1991	1959	1975	1963	1964	1996	1998	1990	1980	1979
MIN	15.1	20.4	23.0	36.0	31.4	129	122	53.0	29.1	25.0	18.0	16.7
(WY)	1964	1972	1964	1964	1964	1983	1971	1955	1955	1965	1988	1954

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1953 - 2000
ANNUAL TOTAL	55573	61037	
ANNUAL MEAN	152	167	220
HIGHEST ANNUAL MEAN			325
LOWEST ANNUAL MEAN			78.7
HIGHEST DAILY MEAN	2700	3040	14600
LOWEST DAILY MEAN	14	18	8.6
ANNUAL SEVEN-DAY MINIMUM	18	21	11
INSTANTANEOUS PEAK FLOW		3530	38000
INSTANTANEOUS PEAK STAGE		9.69	18.19
INSTANTANEOUS LOW FLOW		18	8.6
10 PERCENT EXCEEDS	376	369	478
50 PERCENT EXCEEDS	50	74	102
90 PERCENT EXCEEDS	21	28	30

e Estimated.



**SURFACE-WATER RECORDS**  
**Muskingum River Basin**

**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 mi<sup>2</sup>.

PERIOD OF RECORD.—October 1930 to current year.

REVISED RECORDS.—WSP 873: 1935. WSP 1555: 1935. WSP 1907: Drainage area. WRD-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 and Oct. 1, 1949 to Oct. 5, 1976, water-stage recorder and nonrecording gage, at site 0.9 mi upstream at same datum.

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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	173	81	88	e90	e115	606	330	269	647	162	94	89
2	106	128	83	e86	e115	542	406	341	563	149	84	83
3	74	410	81	e120	e110	474	1210	330	499	160	76	78
4	65	381	86	1730	e110	424	2440	307	412	285	72	81
5	60	316	85	1660	e110	383	2260	337	383	319	74	87
6	59	244	115	1230	e105	354	1830	315	480	271	158	80
7	57	193	130	990	e105	332	1550	282	493	219	305	72
8	59	162	127	756	e105	312	2120	267	480	181	286	68
9	71	143	120	611	e100	293	2450	247	432	151	218	71
10	108	129	150	532	e120	272	2300	241	377	150	159	69
11	97	118	253	483	691	260	2180	236	327	160	127	97
12	80	109	239	414	607	314	1930	222	296	143	103	111
13	74	101	190	375	563	297	1570	206	340	129	88	101
14	140	99	263	326	1240	282	1260	189	333	142	78	91
15	147	95	385	282	1240	273	1020	172	326	187	74	83
16	109	89	364	268	1050	271	790	164	371	222	71	74
17	93	86	314	232	857	373	697	159	1150	190	66	68
18	97	82	256	212	842	354	627	160	855	155	87	66
19	108	80	210	e190	1070	346	566	287	568	132	93	61
20	92	91	186	e180	893	702	519	405	481	119	79	65
21	83	85	169	e170	736	1410	543	390	527	115	68	187
22	79	80	149	e160	722	1190	517	340	436	117	62	133
23	80	79	133	e155	861	984	482	304	349	101	72	122
24	79	79	e120	e150	922	773	445	363	295	89	475	720
25	85	77	e115	e140	963	649	410	422	272	87	254	298
26	83	84	e110	e135	975	553	375	394	259	83	152	232
27	78	130	e105	e130	946	497	350	347	239	78	162	180
28	76	121	e100	e130	845	464	330	511	209	78	181	153
29	76	105	e98	e125	703	443	311	1070	191	106	134	139
30	77	96	e94	e120	---	394	285	874	180	108	107	129
31	75	---	e92	e120	---	358	---	750	---	92	95	---
TOTAL	2740	4073	5010	12302	17821	15179	32103	10901	12770	4680	4154	3888
MEAN	88.4	136	162	397	615	490	1070	352	426	151	134	130
MAX	173	410	385	1730	1240	1410	2450	1070	1150	319	475	720
MIN	57	77	81	86	100	260	285	159	180	78	62	61
CFSM	.19	.29	.35	.86	1.32	1.06	2.31	.76	.92	.33	.29	.28
IN.	.22	.33	.40	.99	1.43	1.22	2.57	.87	1.02	.38	.33	.31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2000, BY WATER YEAR (WY)

MEAN	135	225	378	554	667	862	748	515	400	284	198	143
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 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1931 - 2000

ANNUAL TOTAL	125137					125621						
ANNUAL MEAN	343					343				424		
HIGHEST ANNUAL MEAN										695		1969
LOWEST ANNUAL MEAN										128		1931
HIGHEST DAILY MEAN			2350		Jan 24		2450	Apr 9		37200	Jul 6	1969
LOWEST DAILY MEAN			37		Sep 6		57	Oct 7		23	Sep 10	1954
ANNUAL SEVEN-DAY MINIMUM			41		Sep 1		64	Oct 3		23	Sep 8	1954
INSTANTANEOUS PEAK FLOW							2540	Apr 4a		47500	Jul 5	1969
INSTANTANEOUS PEAK STAGE							16.19	Apr 4		26.40	Jul 5	1969
INSTANTANEOUS LOW FLOW							56	Oct 7		23	Sep 10	1954
ANNUAL RUNOFF (CFSM)			.74				.74			.91		
ANNUAL RUNOFF (INCHES)			10.03				10.07			12.43		
10 PERCENT EXCEEDS			921				843			1080		
50 PERCENT EXCEEDS			149				184			206		
90 PERCENT EXCEEDS			54				79			57		

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**

**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 mi<sup>2</sup>.

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 above sea level.

REMARKS.—Records fair 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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	.44	2.6	e2.2	e3.3	24	27	21	27	4.6	4.9	2.9
2	.75	56	2.5	e2.2	e3.2	21	62	43	22	4.2	3.3	2.7
3	.44	30	2.7	e20	e3.1	19	118	25	19	16	3.0	2.6
4	.46	10	2.8	422	e3.1	18	242	22	16	12	2.5	2.5
5	.43	6.2	2.8	79	e3.0	16	112	24	15	6.5	2.1	2.7
6	.53	4.7	e3.5	47	e2.9	15	77	20	19	5.2	3.3	2.2
7	.51	3.8	e6.0	34	e2.9	13	73	18	13	4.4	5.7	2.0
8	.44	3.3	e4.4	26	e2.8	13	e160	35	11	3.7	3.8	1.9
9	.57	3.0	e3.8	23	e2.8	12	e180	26	8.9	3.4	3.1	1.9
10	1.1	2.7	e6.0	30	e7.0	11	e120	28	7.6	6.4	2.9	3.1
11	1.5	2.6	e12	30	87	12	e100	23	6.7	15	2.4	4.1
12	.89	2.3	e9.0	22	40	19	66	20	15	5.3	2.0	13
13	.80	2.2	7.4	21	63	15	57	17	33	4.0	1.9	19
14	6.9	2.2	31	15	318	13	51	15	13	7.5	1.8	5.2
15	1.6	2.1	24	e13	95	12	46	13	11	24	1.8	3.9
16	.70	2.0	16	e12	67	15	42	12	11	17	1.7	3.2
17	.45	1.9	12	e11	51	26	71	12	54	11	1.7	2.7
18	.44	1.9	9.8	e9.6	96	19	53	12	23	6.8	8.0	2.4
19	.44	1.9	8.2	e8.8	102	19	47	43	17	5.9	3.8	2.3
20	.51	2.0	e6.5	e8.0	62	147	43	22	13	6.0	2.2	3.0
21	.44	2.2	e5.4	e7.1	52	123	54	17	12	4.9	1.8	21
22	.43	2.0	e4.6	e6.7	50	73	46	15	10	4.3	1.7	5.3
23	.43	1.9	e4.0	e5.8	54	58	41	17	8.0	3.6	e14	7.3
24	.47	2.0	e3.3	e5.4	49	50	36	23	7.0	3.1	e80	42
25	.48	2.0	e3.0	e5.0	42	44	32	25	6.9	3.0	12	15
26	.46	6.5	e2.9	e4.6	36	37	28	15	7.3	2.6	6.5	22
27	.43	9.3	e2.7	e4.3	32	37	26	13	15	3.0	9.2	14
28	.43	4.8	e2.6	e4.0	28	38	24	e80	7.9	4.4	6.1	10
29	.41	3.6	e2.5	e3.8	24	45	22	e120	6.3	7.2	4.5	8.2
30	.39	3.0	e2.4	e3.6	---	34	19	52	5.4	13	3.7	6.9
31	.42	---	e2.3	e3.4	---	30	---	36	---	5.9	3.2	---
TOTAL	25.65	178.54	208.7	889.5	1382.1	1028	2075	864	441.0	223.9	204.6	235.0
MEAN	.83	5.95	6.73	28.7	47.7	33.2	69.2	27.9	14.7	7.22	6.60	7.83
MAX	6.9	56	31	422	318	147	242	120	54	24	80	42
MIN	.39	.44	2.3	2.2	2.8	11	19	12	5.4	2.6	1.7	1.9
CFSM	.03	.22	.25	1.05	1.75	1.22	2.54	1.02	.54	.27	.24	.29
IN.	.04	.24	.29	1.22	1.89	1.41	2.84	1.18	.60	.31	.28	.32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2000, BY WATER YEAR (WY)

	MEAN	6.63	14.7	28.8	42.0	49.1	57.7	53.4	32.4	23.1	14.8	7.45	6.32
MAX	56.4	92.1	138	206	106	174	134	79.5	102	161	73.9	96.1	
(WY)	1978	1986	1991	1937	1951	1963	1979	1996	1957	1969	1980	1979	
MIN	.10	.42	.60	1.49	2.69	15.2	7.87	5.59	1.28	.57	.28	.14	
(WY)	1964	1954	1964	1977	1954	1969	1971	1986	1988	1944	1962	1963	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1937 - 2000

ANNUAL TOTAL	6427.70	7755.99		
ANNUAL MEAN	17.6	21.2	27.6	
HIGHEST ANNUAL MEAN			54.5	1979
LOWEST ANNUAL MEAN			7.66	1954
HIGHEST DAILY MEAN	366	Jan 22	422	Jan 4
LOWEST DAILY MEAN	.19	Sep 25	.39	Oct 30
ANNUAL SEVEN-DAY MINIMUM	.26	Sep 10	.43	Oct 26
INSTANTANEOUS PEAK FLOW			910	Jan 4a
INSTANTANEOUS PEAK STAGE			9.38	Jan 4
INSTANTANEOUS LOW FLOW			.38	Oct 29
ANNUAL RUNOFF (CFSM)	.65	.78		1.02
ANNUAL RUNOFF (INCHES)	8.79	10.61		13.80
10 PERCENT EXCEEDS	47	52		63
50 PERCENT EXCEEDS	4.8	8.0		10
90 PERCENT EXCEEDS	.42	1.8		1.0

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**

**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 mi<sup>2</sup>.

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 above sea level. Prior to Sept. 19, 1936, nonrecording gage and Sept. 20, 1936 to Sept. 30, 1977, water-stage recorder at same site at datum 5.00 ft higher.

REMARKS.—Records good 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 March 1913 reached a stage of about 28.8 ft, discharge, 202,000 ft<sup>3</sup>/s, computed by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	701	674	1930	e1100	e1200	6140	4020	3600	12500	2430	1970	1580
2	873	839	1830	e1100	e1150	5450	3870	4050	9550	2230	1840	1430
3	926	1460	1760	e1400	e1150	4930	7070	4770	6960	2240	1710	1270
4	927	3450	1710	9710	e1100	4400	18900	4720	5920	2960	1570	1170
5	884	3810	1650	16000	e1100	3970	22500	4250	5050	5000	1470	1150
6	840	3320	1670	17100	e1050	3630	23000	4100	5510	4180	1420	1140
7	797	2460	1720	15400	e1050	3300	21500	3850	7090	3130	2610	1080
8	760	2050	1820	10000	e1000	2980	25500	3790	6900	2550	5140	1040
9	749	1770	1800	7910	e1000	2890	24100	3610	5390	2180	4670	1000
10	834	1550	1840	6430	e1200	2680	24400	3400	4510	1990	3530	1010
11	835	1390	1970	5500	1880	2490	23000	3320	3850	2070	2870	1160
12	844	1350	2350	4960	5380	2520	21800	3260	3560	2600	2390	1450
13	842	1360	2630	4210	6430	2630	20900	3020	3900	2500	2060	1870
14	853	1350	2870	3610	11200	2760	19500	2810	5410	2060	1840	1800
15	905	1320	3780	3170	14400	2710	17700	2590	6190	2690	1670	1560
16	997	1300	4850	2750	14100	2550	15900	2390	6850	5490	1540	1320
17	1040	1330	5080	2510	11300	2760	15100	2250	8720	6300	1440	1200
18	1040	1270	4520	2300	8770	3620	12000	2180	10700	6050	1450	1130
19	1000	1210	3650	2170	10000	3870	11200	2650	9240	4940	1530	1070
20	961	1200	3130	2140	11200	5050	10500	4830	7990	3340	1570	1020
21	919	1220	2770	1970	9340	11800	10100	5660	6460	2740	1380	1120
22	876	1240	2470	1580	7690	12500	9340	4600	5910	2440	1260	1590
23	837	1270	2190	1350	8010	10200	8260	3850	5080	2210	1220	1680
24	802	1340	1900	1550	10900	7870	6760	3870	4280	1980	2330	2490
25	774	1360	1600	1680	11700	6570	5910	5510	3720	1820	4110	3730
26	755	1500	1450	1570	11100	5670	5500	5270	3450	1690	2970	3290
27	745	1590	e1350	e1400	9850	5040	5000	4070	3630	1600	2480	2790
28	736	1770	e1300	e1350	8610	4830	4530	4050	3320	1560	2500	2320
29	724	1960	e1250	e1300	7160	5020	4170	13000	2890	1970	2490	1970
30	708	1950	e1200	e1250	---	4980	3830	16600	2610	2480	2090	1740
31	691	---	e1150	e1200	---	4550	---	15100	---	2280	1790	---
TOTAL	26175	49663	71190	135670	190020	150360	405860	151020	177140	89700	68910	48170
MEAN	844	1655	2296	4376	6552	4850	13530	4872	5905	2894	2223	1606
MAX	1040	3810	5080	17100	14400	12500	25500	16600	12500	6300	5140	3730
MIN	691	674	1150	1100	1000	2490	3830	2180	2610	1560	1220	1000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2000, BY WATER YEAR (WY)

	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	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
MEAN	1705	2997	4725	6441	7890	9749	8898	6206	4637	3214	2137	1693																																																					
MAX	7981	12310	14860	30880	20990	21070	16400	19350	17480	16640	12430	9765																																																					
(WY)	1991	1986	1991	1937	1959	1945	1957	1996	1947	1969	1980	1979																																																					
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

	FOR 1999 CALENDAR YEAR				FOR 2000 WATER YEAR				WATER YEARS 1936 - 2000			
ANNUAL TOTAL	1494250				1563878							
ANNUAL MEAN	4094				4273							
HIGHEST ANNUAL MEAN									5009			
LOWEST ANNUAL MEAN									7545			
HIGHEST DAILY MEAN									1980			
LOWEST DAILY MEAN									2082			
ANNUAL SEVEN-DAY MINIMUM	26400				Jan 23				25500			
INSTANTANEOUS PEAK FLOW	475				Sep 28				674			
INSTANTANEOUS PEAK STAGE	486				Sep 22				719			
INSTANTANEOUS LOW FLOW									16.50			
10 PERCENT EXCEEDS	11200				10100				12900			
50 PERCENT EXCEEDS	1830				2540				2930			
90 PERCENT EXCEEDS	742				1030				863			

e Estimated.

**SURFACE-WATER RECORDS**  
**Muskingum River Basin**

**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 mi<sup>2</sup>.

PERIOD OF RECORD.—February to September 2000.

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

GAGE.—Water-stage recorder. Datum of gage is 790 ft above sea level (from topographic map).

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

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 1,190 ft<sup>3</sup>/s, Feb. 14, gage height 11.89 ft; minimum discharge, 0.49 ft<sup>3</sup>/s, Sept. 20, gage height 2.23 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	e8.2	48	83	44	24	7.4	3.4	4.4
2	---	---	---	---	e8.0	45	82	368	19	7.1	2.6	4.8
3	---	---	---	---	e7.7	38	284	147	27	19	2.9	13
4	---	---	---	---	e7.4	35	962	89	19	46	14	7.5
5	---	---	---	---	e7.2	33	533	73	16	15	9.0	5.5
6	---	---	---	---	e7.1	30	209	63	25	9.9	17	5.5
7	---	---	---	---	e7.0	28	137	53	18	10	23	3.9
8	---	---	---	---	e6.8	27	344	45	15	7.3	11	2.7
9	---	---	---	---	e6.8	25	376	39	12	5.9	7.7	2.8
10	---	---	---	---	e15	23	190	39	9.9	5.9	7.0	3.6
11	---	---	---	---	352	27	140	33	8.9	10	7.1	5.1
12	---	---	---	---	231	84	152	27	22	9.2	6.3	5.9
13	---	---	---	---	154	64	113	25	19	6.6	4.0	6.8
14	---	---	---	---	993	48	97	24	11	5.9	3.0	6.9
15	---	---	---	---	545	40	87	19	9.1	13	5.5	4.7
16	---	---	---	---	195	72	91	17	30	23	2.9	3.6
17	---	---	---	---	121	394	163	16	493	23	1.7	2.8
18	---	---	---	---	317	153	374	16	205	9.3	3.1	2.6
19	---	---	---	---	957	110	205	219	118	7.5	3.5	1.8
20	---	---	---	---	357	325	138	102	54	20	4.2	1.0
21	---	---	---	---	160	529	202	46	35	11	2.7	2.3
22	---	---	---	---	116	254	216	32	37	8.0	1.7	6.3
23	---	---	---	---	96	160	145	33	20	6.5	3.0	5.9
24	---	---	---	---	83	122	110	45	15	5.6	129	18
25	---	---	---	---	73	105	92	30	13	4.6	34	14
26	---	---	---	---	63	87	75	21	13	4.1	15	61
27	---	---	---	---	58	83	65	19	11	3.5	11	36
28	---	---	---	---	65	93	59	109	11	3.3	13	14
29	---	---	---	---	50	273	53	164	9.8	4.1	8.2	9.6
30	---	---	---	---	---	141	47	62	8.4	4.2	6.3	7.4
31	---	---	---	---	---	100	---	35	---	4.1	5.1	---
TOTAL	---	---	---	---	5067.2	3596	5824	2054	1328.1	320.0	367.9	269.4
MEAN	---	---	---	---	175	116	194	66.3	44.3	10.3	11.9	8.98
MAX	---	---	---	---	993	529	962	368	493	46	129	61
MIN	---	---	---	---	6.8	23	47	16	8.4	3.3	1.7	1.0
CFM	---	---	---	---	2.51	1.67	2.79	.95	.64	.15	.17	.13
IN.	---	---	---	---	2.71	1.92	3.12	1.10	.71	.17	.20	.14
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2000, BY WATER YEAR (WY)												
MEAN	---	---	---	---	175	116	194	66.3	44.3	10.3	11.9	8.98
MAX	---	---	---	---	175	116	194	66.3	44.3	10.3	11.9	8.98
(WY)	---	---	---	---	2000	2000	2000	2000	2000	2000	2000	2000
MIN	---	---	---	---	175	116	194	66.3	44.3	10.3	11.9	8.98
(WY)	---	---	---	---	2000	2000	2000	2000	2000	2000	2000	2000

e Estimated.



**SURFACE-WATER RECORDS**  
**Muskingum River Basin**

**03144000 WAKATOMIKA CREEK NEAR FRAZEYSBURG, OHIO**

LOCATION.—Latitude 40°07'57", longitude 82°08'53", in NW 1/4 sec. 13, T.3 N., R.9 W., Muskingum County, Hydrologic Unit 05040004, on right bank 2.0 mi northwest of Frazeytsburg, Ohio, 2.0 mi downstream from Fivemile Run, and 2.5 mi upstream from Black Run.

DRAINAGE AREA.—140 mi<sup>2</sup>.

PERIOD OF RECORD.—September 1936 to current year.

REVISED RECORDS.—WSP 1113: 1937(M). WSP 1555: 1952(M).

GAGE.—Water-stage recorder. Datum of gage is 748.12 ft above sea level. Prior to Oct. 31, 1936, nonrecording gage at same site and datum.

REMARKS.—Records fair except for periods of estimated record and discharge in the 300-600 ft<sup>3</sup>/s range 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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	19	12	e13	e25	99	106	77	117	17	18	10
2	12	31	11	14	e25	93	120	300	95	16	13	9.9
3	11	82	11	23	e24	81	426	211	151	17	11	11
4	10	43	11	1610	e24	76	1250	169	93	28	9.3	14
5	9.8	23	12	483	e23	71	669	148	77	30	8.2	11
6	10	16	14	196	e23	64	402	135	105	29	8.7	9.3
7	9.8	13	15	139	e23	59	308	118	89	26	27	8.5
8	9.9	11	15	103	e23	56	2180	181	71	22	34	7.5
9	11	11	14	86	e23	55	1070	167	60	19	19	7.5
10	15	11	27	82	e25	52	555	135	52	17	16	7.9
11	18	12	45	83	e80	50	379	113	46	16	13	9.1
12	18	11	32	69	e170	72	299	98	43	16	10	11
13	18	11	25	61	e160	70	233	87	51	15	8.9	32
14	44	11	93	e50	1720	63	204	75	56	14	7.9	32
15	34	10	138	e46	754	58	182	64	48	13	7.5	16
16	23	11	65	e44	386	65	164	59	53	14	7.1	12
17	17	9.8	45	e42	258	163	174	56	53	15	6.5	10
18	15	9.7	36	e40	388	137	169	54	73	15	13	9.1
19	15	9.5	29	e38	745	137	147	145	55	13	21	8.5
20	14	9.7	e23	e36	386	895	136	142	44	17	14	8.5
21	14	10	e20	e35	253	1330	150	94	38	17	11	12
22	15	11	e18	e34	220	548	157	78	35	15	8.4	19
23	16	10	e16	e33	225	344	141	70	31	13	8.8	20
24	16	11	e15	e32	211	261	128	75	26	11	80	198
25	17	11	e14	e31	181	216	117	71	24	10	46	82
26	17	13	e13	e30	156	181	104	56	24	9.5	23	63
27	18	19	e13	e29	141	167	95	49	24	8.8	20	57
28	18	20	e13	e28	126	161	92	84	25	9.2	25	40
29	20	16	e13	e28	105	158	88	486	22	16	19	30
30	17	13	e13	e27	---	136	81	203	19	25	14	23
31	18	---	e13	e26	---	119	---	147	---	23	12	---
TOTAL	516.5	498.7	834	3591	6903	6037	10326	3947	1700	526.5	540.3	788.8
MEAN	16.7	16.6	26.9	116	238	195	344	127	56.7	17.0	17.4	26.3
MAX	44	82	138	1610	1720	1330	2180	486	151	30	80	198
MIN	9.8	9.5	11	13	23	50	81	49	19	8.8	6.5	7.5
MED	16	11	15	38	156	99	166	98	52	16	13	12
CFSM	.12	.12	.19	.83	1.70	1.39	2.46	.91	.40	.12	.12	.19
IN.	.14	.13	.22	.95	1.83	1.60	2.74	1.05	.45	.14	.14	.21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2000, BY WATER YEAR (WY)

	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	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
MEAN	36.6	84.1	153	221	255	308	299	194	124	79.8	57.2	36.8																																																				
MAX	155	396	786	1219	560	883	654	601	745	432	720	617																																																				
(WY)	1987	1986	1991	1937	1990	1963	1940	1968	1998	1990	1980	1979																																																				
MIN	4.78	7.39	10.1	14.3	15.0	73.8	47.9	21.7	12.6	9.48	5.05	3.45																																																				
(WY)	1964	1954	1964	1964	1964	1983	1941	1941	1988	1944	1962	1953																																																				

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1937 - 2000

ANNUAL TOTAL	38353.7	36208.8	
ANNUAL MEAN	105	98.9	153
HIGHEST ANNUAL MEAN			270
LOWEST ANNUAL MEAN			51.9
HIGHEST DAILY MEAN	1900	Jan 22	2180
LOWEST DAILY MEAN	5.4	Aug 7	6.5
ANNUAL SEVEN-DAY MINIMUM	6.3	Sep 15	8.7
INSTANTANEOUS PEAK FLOW			3000
INSTANTANEOUS PEAK STAGE			6.57
INSTANTANEOUS LOW FLOW			6.5
ANNUAL RUNOFF (CFSM)	.75	.71	1.10
ANNUAL RUNOFF (INCHES)	10.19	9.62	14.89
10 PERCENT EXCEEDS	283	197	344
50 PERCENT EXCEEDS	23	29	63
90 PERCENT EXCEEDS	7.7	10	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**  
**Muskingum River Basin**

**81**

**03145000 SOUTH FORK LICKING RIVER NEAR HEBRON, OHIO**

LOCATION.—Latitude 39°59'19", longitude 82°28'30", in NW 1/4 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 mi<sup>2</sup>.

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 except for periods of estimated record, which are poor. 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 ft<sup>3</sup>/s, by slope-area measurement.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	3.8	43	e7.0	e11	145	45	42	132	15	9.8	6.6
2	4.0	26	43	e7.2	e11	137	52	227	94	13	9.3	6.8
3	6.0	47	43	e15	e10	130	163	152	77	31	8.5	6.9
4	11	17	43	e800	e10	129	1070	120	67	37	7.5	8.1
5	5.3	7.8	42	e500	e10	128	635	137	67	27	6.4	7.9
6	4.9	3.6	42	322	e10	90	372	127	77	16	7.0	6.9
7	2.9	2.7	41	251	e10	34	259	108	58	12	8.5	7.0
8	3.4	2.1	40	218	e10	32	929	102	43	11	15	6.9
9	4.8	2.1	39	202	e11	31	686	111	36	10	19	e7.0
10	8.3	3.9	50	194	e13	27	308	85	30	15	20	e7.8
11	6.1	4.4	11	175	e45	30	233	66	26	12	14	e9.0
12	3.6	6.0	7.3	157	e200	50	209	32	23	10	9.9	e12
13	6.3	7.7	5.5	111	e190	46	186	28	68	9.8	8.7	e20
14	7.6	8.0	113	65	e1300	41	172	22	55	9.0	9.3	e13
15	5.0	25	107	e54	e800	35	160	25	40	11	8.9	9.7
16	3.4	55	40	e46	e380	53	149	26	36	15	7.2	8.6
17	2.9	54	22	e38	e310	202	154	24	386	10	7.4	9.5
18	2.9	54	15	e32	e350	103	225	22	248	8.3	21	8.3
19	2.8	53	12	e27	e800	203	117	37	157	12	22	11
20	3.0	52	10	e23	e230	1140	95	26	108	13	11	11
21	3.9	52	8.9	e20	e170	1120	131	22	94	12	8.6	15
22	4.8	51	e8.6	e17	241	330	261	26	85	8.9	8.4	12
23	4.3	50	e8.2	e16	342	203	167	66	75	8.5	8.5	33
24	4.0	49	e7.8	e15	321	174	133	264	35	8.4	8.7	345
25	4.4	47	e7.6	e14	276	148	106	104	31	8.3	7.8	85
26	4.3	49	e7.4	e14	190	122	79	53	26	7.7	7.2	67
27	4.2	47	e7.2	e13	180	116	64	39	28	7.5	10	43
28	3.9	45	e7.2	e13	167	114	49	278	21	9.8	8.6	28
29	3.9	44	e7.0	e12	149	94	42	1150	19	14	8.1	19
30	3.9	43	e6.8	e12	---	59	39	343	15	22	7.4	16
31	3.7	---	e6.8	e11	---	51	---	196	---	12	6.5	---
TOTAL	145.8	912.1	852.3	3401.2	6747	5317	7290	4060	2257	416.2	320.2	847.0
MEAN	4.70	30.4	27.5	110	233	172	243	131	75.2	13.4	10.3	28.2
MAX	11	55	113	800	1300	1140	1070	1150	386	37	22	345
MIN	2.8	2.1	5.5	7.0	10	27	39	22	15	7.5	6.4	6.6

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2000, BY WATER YEAR (WY)

MEAN	40.7	178	203	195	252	255	241	172	136	98.4	69.2	46.5
MAX	177	858	666	460	536	860	616	768	554	572	503	607
(WY)	1976	1986	1991	1991	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 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1940 - 2000

ANNUAL TOTAL	34645.9			32565.8			157	1979
ANNUAL MEAN	94.9			89.0			273	1941
HIGHEST ANNUAL MEAN							56.9	1997
LOWEST ANNUAL MEAN							4560	1942
HIGHEST DAILY MEAN	1530	Jan 18		1300	Feb 14			1942
LOWEST DAILY MEAN	2.1	Nov 8		2.1	Nov 8			1942
ANNUAL SEVEN-DAY MINIMUM	3.4	Oct 16		3.4	Oct 16			1942
INSTANTANEOUS PEAK FLOW				1640	Feb 14	5200	Mar 6	1945
INSTANTANEOUS PEAK STAGE				9.30	Feb 14	12.27	Jul 28	1997
INSTANTANEOUS LOW FLOW				2.1	Nov 8	.00	Aug 22	1942
10 PERCENT EXCEEDS	294			220		419		
50 PERCENT EXCEEDS	19			26		47		
90 PERCENT EXCEEDS	4.4			6.3		7.8		

e Estimated.

**SURFACE-WATER RECORDS**  
**Muskingum River Basin**

**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, 1.0 mi downstream from Shawnee Run, 1.5 mi upstream from Equality Run, and 3.5 mi east of Newark, Ohio.

DRAINAGE AREA.—537 mi<sup>2</sup>.

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 good 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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	52	99	e78	e78	420	325	306	608	113	83	70
2	66	120	100	e78	e76	392	529	965	479	110	81	69
3	56	147	99	e150	e76	357	2270	753	417	165	75	70
4	62	120	100	e6000	e76	340	8510	547	353	158	74	74
5	60	104	101	2460	e74	327	2730	516	346	135	72	70
6	52	90	106	1080	e74	296	1470	548	508	120	77	70
7	53	80	97	754	e74	220	1120	459	428	107	98	68
8	51	73	97	600	e78	206	7170	505	314	101	93	69
9	60	71	97	512	e86	197	3210	511	255	97	137	68
10	73	67	148	467	e100	188	1540	400	219	99	134	84
11	61	67	100	440	e600	202	1150	339	195	99	102	71
12	56	65	100	396	e900	240	977	270	184	92	88	105
13	73	66	98	339	e800	237	825	241	273	91	81	95
14	80	65	345	262	6630	231	730	219	285	148	78	82
15	66	64	679	e220	2770	217	664	201	261	112	75	e74
16	63	e110	323	e210	1550	261	606	194	228	107	74	e72
17	64	107	214	e190	1170	745	623	185	670	104	76	e70
18	59	107	166	e180	1730	512	741	177	550	95	161	e66
19	55	107	142	e170	3050	620	582	483	394	108	175	e64
20	55	109	130	e150	1220	4940	521	589	302	105	121	e62
21	55	105	121	e140	827	4220	637	360	259	98	94	e62
22	56	103	113	e130	847	1440	1030	282	239	90	83	e76
23	54	101	e110	e120	1070	951	794	306	219	87	83	e150
24	56	104	e100	e110	934	760	641	658	174	82	86	e400
25	54	101	e90	e110	771	642	546	389	154	81	86	e660
26	54	115	e86	e100	615	539	460	265	144	80	78	e500
27	54	107	e82	e94	561	498	406	223	143	86	96	e350
28	53	102	e80	e90	511	495	354	1390	145	100	92	e300
29	54	102	e80	e84	448	485	324	4610	132	105	85	e250
30	52	98	e78	e82	---	432	291	1460	121	102	79	e200
31	53	---	e78	e80	---	364	---	845	---	90	74	---
TOTAL	1827	2829	4359	15876	27796	21974	41776	19196	8999	3267	2891	4421
MEAN	58.9	94.3	141	512	958	709	1393	619	300	105	93.3	147
MAX	80	147	679	6000	6630	4940	8510	4610	670	165	175	660
MIN	51	52	78	78	74	188	291	177	121	80	72	62

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2000, BY WATER YEAR (WY)

MEAN	165	423	671	856	1031	1163	1051	706	553	375	258	170
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 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1940 - 2000	
ANNUAL TOTAL	154529		155211			
ANNUAL MEAN	423		424		616	
HIGHEST ANNUAL MEAN					1138	
LOWEST ANNUAL MEAN					156	
HIGHEST DAILY MEAN	5270		8510		25600	
LOWEST DAILY MEAN	47		51		28	
ANNUAL SEVEN-DAY MINIMUM	49		53		31	
INSTANTANEOUS PEAK FLOW			10400		45000	
INSTANTANEOUS PEAK STAGE			11.56		20.30	
INSTANTANEOUS LOW FLOW			46		28	
10 PERCENT EXCEEDS	1080		808		1440	
50 PERCENT EXCEEDS	117		131		256	
90 PERCENT EXCEEDS	55		67		68	

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



**SURFACE-WATER RECORDS**  
**Hocking River Basin**

**03157000 CLEAR CREEK NEAR ROCKBRIDGE, OHIO**

LOCATION.—Latitude 39°35'18", longitude 82°34'43", in NE 1/4 sec. 20, T.13 N., R.18 W., Hocking County, Hydrologic Unit 05030204, on left bank at upstream side of county road bridge, 400 ft downstream from unnamed right bank tributary, 2.0 mi upstream from mouth, and 3 mi west of Rockbridge, Ohio.

DRAINAGE AREA.—89.0 mi<sup>2</sup>.

PERIOD OF RECORD.—October 1939 to current year.

REVISED RECORDS.—WSP 1305: 1940(M), 1943(M), 1945(M). WSP 1907: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 760.13 ft above sea level. Prior to May 2, 1940, 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e9.4	13	15	20	e23	65	57	e50	57	37	34	21
2	e8.0	45	17	21	e23	61	70	e80	48	36	23	19
3	e7.7	51	16	39	e23	58	324	e72	39	37	18	28
4	e15	29	17	1040	e22	51	1040	e64	35	62	17	28
5	e14	22	17	238	e22	52	391	e57	37	45	18	28
6	e12	19	19	140	e22	48	232	e52	141	39	20	22
7	e11	18	17	93	e22	43	173	e48	65	34	29	19
8	e15	17	16	69	e22	44	406	e44	47	32	26	20
9	e18	16	17	60	23	43	255	e41	38	31	30	16
10	e21	16	35	56	30	40	180	e38	35	31	121	15
11	e15	16	31	48	205	46	150	e35	34	31	40	22
12	e13	15	25	41	126	65	125	e32	29	29	31	19
13	e20	17	24	39	195	55	104	e30	31	29	26	20
14	e28	17	128	33	1200	47	95	e29	29	28	25	17
15	e21	15	83	32	323	44	86	e27	30	35	22	16
16	e19	15	51	33	200	82	75	24	40	32	20	19
17	e17	14	40	29	144	156	83	27	316	29	17	18
18	e16	14	35	e28	1070	89	106	24	284	23	19	18
19	e15	14	30	e27	1320	138	83	31	215	31	18	18
20	e14	16	29	e27	339	686	67	27	122	40	16	20
21	e13	16	25	e26	215	404	e86	25	87	30	16	45
22	e12	15	23	e26	176	225	e120	23	73	26	15	24
23	12	15	e22	e25	145	168	e100	43	58	24	16	24
24	12	16	e22	e25	126	145	e90	54	51	23	23	34
25	12	15	e21	e25	107	120	e82	37	46	24	43	32
26	12	18	e21	e24	90	101	e72	28	43	22	22	60
27	12	18	e21	e24	94	97	e66	30	82	23	28	35
28	13	16	e21	e23	87	89	e60	73	63	27	28	28
29	13	15	e20	e23	66	83	e57	251	53	52	22	23
30	13	15	e20	e23	---	70	e53	132	44	38	21	20
31	14	---	e20	e23	---	64	---	78	---	33	21	---
TOTAL	447.1	558	898	2380	6460	3479	4888	1606	2272	1013	825	728
MEAN	14.4	18.6	29.0	76.8	223	112	163	51.8	75.7	32.7	26.6	24.3
MAX	28	51	128	1040	1320	686	1040	251	316	62	121	60
MIN	7.7	13	15	20	22	40	53	23	29	22	15	15
CFSM	.16	.21	.33	.86	2.50	1.26	1.83	.58	.85	.37	.30	.27
IN.	.19	.23	.38	.99	2.70	1.45	2.04	.67	.95	.42	.34	.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2000, BY WATER YEAR (WY)

	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	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
MEAN	28.8	52.5	86.6	118	146	171	155	122	73.5	53.4	43.8	29.2																																																	
MAX	126	327	351	324	321	585	365	554	287	280	292	213																																																	
(WY)	1976	1986	1991	1949	1979	1945	1940	1968	1941	1948	1979	1979																																																	
MIN	11.5	13.1	12.8	20.5	18.8	39.1	41.3	31.1	14.9	13.3	11.5	9.37																																																	
(WY)	1964	1965	1964	1977	1954	1941	1941	1988	1988	1999	1999	1999																																																	

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1940 - 2000
ANNUAL TOTAL	21838.0	25554.1	
ANNUAL MEAN	59.8	69.8	89.7
HIGHEST ANNUAL MEAN			164
LOWEST ANNUAL MEAN			28.8
HIGHEST DAILY MEAN	851	1320	4690
LOWEST DAILY MEAN	7.6	7.7	3.5
ANNUAL SEVEN-DAY MINIMUM	7.9	11	6.3
INSTANTANEOUS PEAK FLOW		3270	16000
INSTANTANEOUS PEAK STAGE		9.40	17.68
INSTANTANEOUS LOW FLOW		11	3.0
ANNUAL RUNOFF (CFSM)	.67	.78	1.01
ANNUAL RUNOFF (INCHES)	9.13	10.68	13.70
10 PERCENT EXCEEDS	146	134	183
50 PERCENT EXCEEDS	22	30	44
90 PERCENT EXCEEDS	9.0	15	16

e Estimated.

**SURFACE-WATER RECORDS**  
**Hocking River Basin**

**03157500 HOCKING RIVER AT ENTERPRISE, OHIO**

LOCATION.—Latitude 39°33'54", longitude 82°28'29", in NW 1/4 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 mi<sup>2</sup>.

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

REVISED RECORDS.—WSP 873: 1938. WRD-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 March 1907 reached a stage of 22.0 ft from flood mark; discharge, 36,000 ft<sup>3</sup>/s from reports of U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	42	56	e78	e90	345	372	309	353	139	87	57
2	56	159	60	e82	e88	322	393	549	297	125	78	56
3	47	361	61	157	e88	297	1680	482	280	123	71	73
4	60	178	62	3690	e88	281	6000	391	237	173	65	83
5	54	105	64	1980	e88	267	4460	351	225	152	61	98
6	46	85	80	943	e86	251	2000	321	424	130	59	68
7	42	75	72	608	e86	237	1360	301	301	111	67	59
8	39	70	68	454	e86	229	2310	296	238	97	65	55
9	44	63	64	381	e90	222	2210	288	204	90	68	57
10	78	62	134	331	e100	209	1410	271	176	91	196	56
11	71	61	169	292	e300	214	1060	248	154	138	96	72
12	59	59	116	251	763	326	875	210	139	107	74	68
13	51	59	101	229	658	294	720	224	137	91	64	69
14	110	61	483	201	4660	266	636	205	136	84	59	63
15	68	59	511	172	2350	250	574	183	141	116	57	60
16	58	57	286	e140	1290	347	520	172	180	99	55	54
17	48	57	209	e130	832	929	582	170	993	88	52	51
18	44	61	168	e120	2450	640	662	163	854	80	94	49
19	43	67	142	e120	7090	758	569	194	909	117	92	49
20	40	72	128	e110	2950	3220	506	197	506	216	71	53
21	39	75	e100	e110	1480	4100	626	170	373	130	60	126
22	38	74	e94	e100	1040	1950	760	159	302	95	56	95
23	38	72	e86	e100	817	1290	672	240	247	82	54	76
24	38	66	e80	e100	647	971	580	1700	210	74	113	539
25	38	63	e80	e98	555	764	518	775	185	71	166	392
26	38	70	e78	e96	487	617	456	451	174	68	79	382
27	40	81	e76	e94	449	563	413	346	274	65	108	288
28	43	76	e76	e92	407	540	386	397	251	74	100	192
29	43	66	e76	e92	366	519	357	1090	196	123	77	142
30	43	61	e76	e90	---	450	327	653	163	99	66	113
31	42	---	e76	e90	---	403	---	454	---	80	63	---
TOTAL	1581	2517	3932	11531	30481	22071	33994	11960	9259	3328	2473	3595
MEAN	51.0	83.9	127	372	1051	712	1133	386	309	107	79.8	120
MAX	110	361	511	3690	7090	4100	6000	1700	993	216	196	539
MIN	38	42	56	78	86	209	327	159	136	65	52	49
CFSM	.11	.18	.28	.81	2.29	1.55	2.47	.84	.67	.23	.17	.26
IN.	.13	.20	.32	.93	2.47	1.79	2.76	.97	.75	.27	.20	.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2000, BY WATER YEAR (WY)

	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	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
MEAN	124	247	419	648	786	946	854	615	368	274	225	152																																																									
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 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1932 - 2000
ANNUAL TOTAL	122760	136722	
ANNUAL MEAN	336	374	470
HIGHEST ANNUAL MEAN			860
LOWEST ANNUAL MEAN			110
HIGHEST DAILY MEAN	4940	7090	21600
LOWEST DAILY MEAN	33	38	23
ANNUAL SEVEN-DAY MINIMUM	36	38	27
INSTANTANEOUS PEAK FLOW		8040	26000
INSTANTANEOUS PEAK STAGE		14.23	21.31
INSTANTANEOUS LOW FLOW		38	23
ANNUAL RUNOFF (CFSM)	.73	.81	1.02
ANNUAL RUNOFF (INCHES)	9.95	11.08	13.91
10 PERCENT EXCEEDS	850	763	1060
50 PERCENT EXCEEDS	94	127	210
90 PERCENT EXCEEDS	39	56	58

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

**SURFACE-WATER RECORDS**  
**Hocking River Basin**

**03158195 SNOW FORK MONDAY CREEK AT BUCHEL, OHIO**

LOCATION.—Latitude 39°27'51", longitude 82°10'16". Athens County, Hydrologic Unit 05030204, on left bank at the upstream abutment of bridge on State Route 685, at the Corporation limits of the Village of Buchtel, Ohio, and 0.3 mi east of State Route 78.

DRAINAGE AREA.—24.4 mi<sup>2</sup>.

PERIOD OF RECORD.—April 1981 to September 1981. May 1997 to current year.

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

REMARKS.—Record fair except for period of estimated record which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	2.9	4.9	5.7	e6.0	48	26	21	15	7.4	8.9	3.7
2	3.9	99	4.8	6.0	e6.0	45	29	34	14	7.1	5.3	3.6
3	3.9	40	4.7	9.8	e5.8	43	49	26	14	8.6	4.8	3.7
4	5.6	13	4.8	191	e5.8	42	234	23	13	10	4.5	5.5
5	4.7	9.1	4.7	45	e5.8	40	94	21	13	7.7	4.3	3.8
6	4.1	7.5	5.1	23	5.8	39	65	20	14	7.2	4.4	3.3
7	3.9	6.5	4.6	17	5.9	37	49	19	11	6.8	4.3	3.1
8	3.9	6.0	4.3	14	5.9	35	108	18	10	6.3	4.1	3.2
9	4.5	5.6	4.3	13	6.2	34	83	17	9.6	6.0	5.0	3.3
10	7.2	5.8	37	13	8.3	32	61	17	9.9	9.7	6.0	3.3
11	4.6	5.2	17	11	136	38	49	16	8.8	7.7	4.2	3.3
12	3.9	5.6	11	10	45	66	44	15	8.9	6.5	3.9	3.8
13	5.4	4.7	9.3	10	103	51	38	17	10	6.1	3.7	3.7
14	6.2	4.7	157	9.3	540	46	34	15	9.3	6.0	3.6	3.1
15	3.4	4.5	43	9.1	99	42	32	14	9.0	6.3	3.5	3.0
16	3.0	4.4	20	9.1	55	128	30	14	9.3	8.1	3.5	2.8
17	2.9	4.3	14	8.4	34	153	48	13	134	6.4	4.2	2.8
18	2.8	4.2	12	e8.0	426	75	64	13	30	5.8	6.1	2.8
19	2.8	4.2	10	e7.6	442	79	48	19	21	9.4	4.2	2.7
20	2.8	4.5	9.8	e7.4	134	421	41	16	15	10	3.6	2.8
21	2.7	4.3	8.7	e7.2	92	182	49	14	12	6.9	3.4	5.2
22	2.9	4.1	e7.6	e7.0	76	85	51	13	11	6.0	3.3	2.9
23	3.0	4.1	e7.0	e7.0	68	64	43	21	9.6	5.7	3.8	3.2
24	3.1	4.1	e6.6	e6.8	63	51	37	40	9.1	5.3	6.9	7.5
25	2.9	4.3	e6.4	e6.6	60	43	32	17	8.8	5.1	5.6	5.6
26	3.0	10	e6.2	e6.6	56	37	28	14	8.5	4.9	3.9	8.4
27	3.0	11	e6.0	e6.4	55	37	26	15	9.3	4.7	6.9	5.1
28	3.7	7.2	e5.8	e6.4	52	36	24	48	8.6	5.4	5.2	4.1
29	3.1	5.9	e5.8	e6.2	48	34	23	46	8.2	7.2	4.1	3.7
30	2.8	5.3	e5.8	e6.0	---	30	22	23	7.7	5.3	3.8	3.5
31	2.8	---	e5.8	e6.0	---	27	---	18	---	4.9	3.5	---
TOTAL	116.5	302.0	454.0	499.6	2645.5	2120	1561	637	471.6	210.5	142.5	116.5
MEAN	3.76	10.1	14.6	16.1	91.2	68.4	52.0	20.5	15.7	6.79	4.60	3.88
MAX	7.2	99	157	191	540	421	234	48	134	10	8.9	8.4
MIN	2.7	2.9	4.3	5.7	5.8	27	22	13	7.7	4.7	3.3	2.7
MED	3.4	5.2	6.4	8.0	55	43	44	17	9.9	6.4	4.2	3.4
AC-FT	231	599	901	991	5250	4210	3100	1260	935	418	283	231
CFSM	.15	.41	.60	.66	3.74	2.80	2.13	.84	.64	.28	.19	.16
IN.	.18	.46	.69	.76	4.03	3.23	2.38	.97	.72	.32	.22	.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2000, BY WATER YEAR (WY)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	
MEAN	4.60	7.50	11.0	43.7	57.8	53.1	59.4	43.5	34.8	10.4	14.3	5.34									
MAX	5.16	10.1	14.6	64.5	91.2	68.4	82.2	71.4	87.6	14.1	48.4	10.2									
(WY)	1999	2000	2000	1999	2000	2000	1998	1981	1998	1998	1997	1997									
MIN	3.76	4.13	6.07	16.1	39.0	36.5	37.7	17.4	6.92	4.31	4.60	3.88									
(WY)	2000	1999	1999	2000	1999	1998	1999	1999	1999	1999	2000	2000									

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1981 - 2000

ANNUAL TOTAL	8018.6	9276.7	
ANNUAL MEAN	22.0	25.3	25.4
HIGHEST ANNUAL MEAN			29.9
LOWEST ANNUAL MEAN			20.9
HIGHEST DAILY MEAN	378	Jan 18	620
LOWEST DAILY MEAN	2.3	Aug 23	2.3
ANNUAL SEVEN-DAY MINIMUM	2.8	Aug 17	2.8
INSTANTANEOUS PEAK FLOW			904
INSTANTANEOUS PEAK STAGE			9.69
INSTANTANEOUS LOW FLOW			2.7
ANNUAL RUNOFF (AC-FT)	15900	18400	18380
ANNUAL RUNOFF (CFSM)	.90	1.04	1.04
ANNUAL RUNOFF (INCHES)	12.23	14.14	14.13
10 PERCENT EXCEEDS	55	51	57
50 PERCENT EXCEEDS	7.2	7.8	10
90 PERCENT EXCEEDS	3.3	3.5	3.7

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

**SURFACE-WATER RECORDS**  
**Hocking River Basin**

**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 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

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

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

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

REVISIONS.—The peak discharges and annual maximum (\*) reported for water year 1999 have been revised as shown in the following table. They supersede figures published in the report for 1999.

PEAK DISCHARGES EQUAL TO OR GREATER THAN BASE DISCHARGES,  
WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

[ft<sup>3</sup>/s, cubic feet per second; --, no data; c, no longer above peak  
discharge of 600 ft<sup>3</sup>/s]

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (feet)
Jan.			
19	--	*1450	*13.75
22	1645	696	9.29
Feb.			
7	2115	672	9.12
Apr.			
21	2215	598c	8.59

**SURFACE-WATER RECORDS**  
**Hocking River Basin**

**03158200 MONDAY CREEK AT DOANVILLE, OHIO—Continued**

WATER-DISCHARGE RECORDS—CONTINUED

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	5.5	16	19	e22	89	90	70	56	16	21	13
2	7.8	150	15	20	e22	83	126	117	52	14	20	12
3	8.8	232	15	30	e21	77	543	110	63	15	14	26
4	11	76	15	618	e21	73	1100	84	52	25	12	51
5	9.9	41	14	595	e21	69	1400	76	48	22	10	24
6	7.7	30	15	157	e21	66	e1000	70	82	16	10	20
7	7.0	24	14	98	e21	62	e500	63	70	14	9.6	14
8	7.0	20	14	74	e21	60	e350	57	48	12	9.1	12
9	7.8	18	14	63	e21	58	e450	54	38	11	11	12
10	13	16	63	60	e25	55	e560	50	33	16	19	11
11	9.7	15	106	53	e260	59	e400	45	28	34	22	11
12	11	15	52	45	e250	135	e300	41	25	24	14	15
13	10	15	40	43	196	118	e250	44	29	16	11	14
14	16	14	297	38	e1100	98	e200	43	27	13	9.9	12
15	22	13	275	33	e500	86	e180	35	24	13	9.2	11
16	12	13	106	36	e300	160	147	32	23	32	8.6	9.6
17	7.7	12	69	32	170	334	253	30	587	26	8.0	8.6
18	6.0	12	54	e30	277	246	380	29	308	17	12	8.2
19	5.7	12	43	e29	e500	203	254	45	156	20	24	7.9
20	5.2	13	39	e27	e1200	e600	186	70	79	78	15	7.7
21	5.1	13	35	e27	e350	e1000	194	39	52	35	11	17
22	5.3	12	31	e26	248	e400	234	32	41	21	10	32
23	5.3	12	28	e26	188	287	198	40	32	16	10	16
24	5.5	12	e23	e25	158	204	160	174	26	13	18	27
25	5.3	12	e21	e24	e140	166	136	81	23	12	85	27
26	5.3	26	e20	e24	e130	140	114	45	20	11	28	62
27	5.3	32	e19	e23	e120	130	100	40	21	10	25	61
28	5.3	26	e19	e23	e110	133	91	127	32	11	32	30
29	6.2	21	e19	e23	94	129	82	290	24	18	24	22
30	5.3	18	e19	e22	---	110	74	133	18	15	17	18
31	5.2	---	e19	e22	---	98	---	79	---	13	14	---
TOTAL	252.7	930.5	1529	2365	6507	5528	10052	2245	2117	609	543.4	612.0
MEAN	8.15	31.0	49.3	76.3	224	178	335	72.4	70.6	19.6	17.5	20.4
MAX	22	232	297	618	1200	1000	1400	290	587	78	85	62
MIN	5.1	5.5	14	19	21	55	74	29	18	10	8.0	7.7
MED	7.0	15	21	30	140	118	217	54	36	16	14	14
CFSM	.07	.27	.43	.67	1.97	1.56	2.94	.64	.62	.17	.15	.18
IN.	.08	.30	.50	.77	2.12	1.80	3.28	.73	.69	.20	.18	.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2000, BY WATER YEAR (WY)

	1997	1998	1999	2000	1997	1998	1999	2000	1997	1998	1999	2000
MEAN	13.6	29.1	48.7	240	208	189	260	135	84.2	28.6	99.0	18.0
MAX	16.3	42.2	67.3	342	224	198	335	279	126	47.3	347	37.6
(WY)	1998	1998	1998	1998	2000	1999	2000	1998	1997	1997	1997	1997
MIN	8.15	14.1	29.4	76.3	178	178	145	52.3	15.8	9.03	13.0	5.43
(WY)	2000	1999	1999	2000	1999	2000	1999	1999	1999	1999	1998	1998

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR				FOR 2000 WATER YEAR				WATER YEARS 1997 - 2000			
ANNUAL TOTAL	30741.9				33290.6							
ANNUAL MEAN	84.2				91.0				103			
HIGHEST ANNUAL MEAN									136			
LOWEST ANNUAL MEAN									81.8			
HIGHEST DAILY MEAN	1700				1400				4200			
LOWEST DAILY MEAN	3.4				5.1				3.4			
ANNUAL SEVEN-DAY MINIMUM	3.7				5.3				3.7			
INSTANTANEOUS PEAK FLOW					1610				5300			
INSTANTANEOUS PEAK STAGE					14.32				19.60			
INSTANTANEOUS LOW FLOW					5.1				3.3			
ANNUAL RUNOFF (CFSM)	.74				.80				.90			
ANNUAL RUNOFF (INCHES)	10.03				10.86				12.28			
10 PERCENT EXCEEDS	232				247				247			
50 PERCENT EXCEEDS	20				27				36			
90 PERCENT EXCEEDS	7.0				10				8.2			

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

**SURFACE-WATER RECORDS**  
**Hocking River Basin**

**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 TEMPERATURES: June 1997 to current year.

DISSOLVED OXYGEN: June 1997 to current year.

INSTRUMENTATION.—Water-quality monitor. Electronic data logger. Set for 1-hour interval.

REMARKS.—Interruptions in the water-quality record were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: Maximum, 1,110 microsiemens, Sept. 20, 1998; minimum, 172 microsiemens, June 8, 1998.

pH: Maximum, 7.2 units Aug. 16, 1997; minimum, 3.0 units May 30, 1998.

WATER TEMPERATURES: Maximum, 28.0°C, July 5, 6, 23, 24, and 31, 1999; minimum, 0.0°C, on several days during winter.

DISSOLVED OXYGEN: Maximum, 15.3 mg/L, Dec. 25, 1999; minimum, 4.7 mg/L, June 18, 2000.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum, 980 microsiemens, Oct. 2; minimum, 228 microsiemens, Apr. 4.

pH: Maximum, 6.9 units, Sept. 29; minimum, 3.7 units, Oct. 4.

WATER TEMPERATURES: Maximum, 24.0°C, June 14 and 26; minimum, 0.5°C, on several days.

DISSOLVED OXYGEN: Maximum, 14.6 mg/L, Jan. 18; minimum, 4.7 mg/L, June 18.

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	976	942	955	957	949	953	853	842	847	822	814	818
2	980	952	971	953	407	726	883	853	870	819	804	814
3	979	953	969	676	434	573	884	880	882	804	768	787
4	953	887	905	620	578	610	884	876	881	768	327	512
5	887	863	872	639	617	630	888	878	884	430	332	379
6	886	874	882	664	639	652	885	872	879	504	430	469
7	893	885	890	687	664	676	888	882	885	548	504	527
8	903	892	897	709	687	700	907	888	897	583	548	567
9	920	876	907	725	708	718	915	907	913	604	583	594
10	892	800	861	736	725	731	915	601	790	617	604	609
11	838	799	821	747	736	743	778	662	724	634	617	624
12	839	786	817	754	744	748	869	759	799	647	634	640
13	787	729	777	768	754	764	860	712	761	658	647	652
14	790	682	758	767	759	763	712	336	547	674	658	667
15	784	708	734	785	767	777	588	473	502	692	674	682
16	792	723	760	795	785	791	565	496	531	699	688	692
17	811	792	804	805	794	800	623	565	603	719	699	708
18	826	811	817	811	803	808	645	614	630	727	719	724
19	839	823	829	819	811	816	670	645	658	742	726	734
20	878	840	858	819	810	815	683	670	676	749	739	743
21	906	878	894	823	812	818	711	683	694	785	749	763
22	921	906	914	832	823	827	727	711	719	802	785	793
23	922	917	920	841	832	836	752	727	738	803	789	798
24	926	920	923	850	841	846	768	752	757	802	789	794
25	933	926	929	857	842	851	804	768	784	823	802	813
26	938	930	934	848	728	798	811	799	806	825	811	818
27	940	926	936	762	726	747	805	799	802	838	812	823
28	944	936	941	793	754	775	814	801	810	863	838	852
29	949	942	945	806	793	797	818	813	816	880	863	871
30	963	944	957	842	806	828	822	814	818	868	844	856
31	961	955	958	---	---	---	819	811	815	844	834	840
MONTH	980	682	882	957	407	764	915	336	765	880	327	708



**SURFACE-WATER RECORDS**  
**Hocking River Basin**

**03158200 MONDAY CREEK AT DOANVILLE, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	3.9	3.8	3.9	3.9	3.9	3.9	5.2	5.2	5.2	5.3	5.2	5.3			
2	3.9	3.8	3.8	5.6	3.9	4.3	5.2	5.1	5.2	5.3	5.1	5.2			
3	3.8	3.7	3.8	6.2	5.5	5.8	5.1	5.0	5.1	5.2	5.1	5.2			
4	4.1	3.8	4.0	6.3	6.1	6.2	5.1	5.1	5.1	6.1	5.2	5.7			
5	4.1	4.0	4.0	6.2	5.8	6.1	5.1	5.0	5.1	6.1	5.9	6.0			
6	4.1	4.0	4.0	5.9	5.5	5.7	5.2	5.0	5.1	6.4	5.8	6.0			
7	4.1	4.0	4.0	5.6	5.2	5.4	5.2	5.2	5.2	6.7	6.4	6.6			
8	4.1	4.0	4.0	5.2	5.0	5.1	5.4	5.2	5.3	6.6	6.2	6.5			
9	4.0	3.9	3.9	5.0	4.9	5.0	5.4	5.2	5.3	6.5	6.0	6.3			
10	4.0	3.8	3.9	4.9	4.8	4.9	5.9	5.3	5.4	6.3	5.9	6.1			
11	4.0	3.9	4.0	4.8	4.8	4.8	6.0	5.8	5.9	6.4	6.0	6.3			
12	4.1	3.9	4.0	4.8	4.8	4.8	6.1	5.9	6.0	6.4	6.1	6.3			
13	4.8	4.1	4.2	4.8	4.7	4.8	6.0	5.8	5.9	6.3	5.8	6.1			
14	4.4	4.2	4.3	4.8	4.8	4.8	6.5	6.0	6.2	6.3	6.2	6.2			
15	4.9	4.2	4.6	4.8	4.8	4.8	6.7	6.2	6.4	6.2	5.8	6.1			
16	4.9	4.7	4.8	4.8	4.8	4.8	6.3	6.1	6.2	5.9	5.8	5.9			
17	4.7	4.5	4.6	4.8	4.8	4.8	6.1	6.0	6.1	6.1	5.9	6.1			
18	4.5	4.3	4.4	4.9	4.8	4.8	6.1	6.0	6.0	6.1	5.9	6.0			
19	4.3	4.2	4.3	4.9	4.9	4.9	6.0	5.9	6.0	6.0	5.7	5.9			
20	4.2	4.1	4.2	4.9	4.8	4.9	6.0	5.8	5.9	6.0	5.9	6.0			
21	4.1	4.1	4.1	4.8	4.8	4.8	6.1	5.9	6.0	6.0	5.5	5.7			
22	4.1	4.0	4.0	4.8	4.8	4.8	6.1	5.7	6.0	5.9	5.5	5.7			
23	4.1	4.0	4.0	4.8	4.8	4.8	6.1	5.4	5.7	5.9	5.7	5.8			
24	4.0	4.0	4.0	4.8	4.8	4.8	5.5	5.3	5.4	5.9	5.7	5.8			
25	4.0	4.0	4.0	4.9	4.8	4.8	5.6	5.3	5.5	5.9	5.5	5.8			
26	4.0	4.0	4.0	5.0	4.8	4.9	5.3	5.2	5.3	5.7	5.7	5.7			
27	4.0	3.9	4.0	5.3	5.0	5.1	5.3	5.2	5.3	5.8	5.5	5.7			
28	4.0	3.9	3.9	5.3	5.2	5.3	5.4	5.3	5.4	5.7	5.6	5.7			
29	3.9	3.9	3.9	5.2	5.2	5.2	5.3	5.2	5.3	5.7	5.5	5.6			
30	3.9	3.9	3.9	5.2	5.2	5.2	5.3	5.2	5.3	5.5	5.5	5.5			
31	3.9	3.9	3.9	---	---	---	5.3	5.2	5.2	5.7	5.3	5.5			
MONTH	4.9	3.7	4.1	6.3	3.9	5.0	6.7	5.0	5.6	6.7	5.1	5.9			

DAY	MAX	MIN	MEAN	FEBRUARY			MARCH			APRIL			MAY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	5.4	5.2	5.3	4.5	4.4	4.4	4.9	4.7	4.8	4.9	4.8	4.8			
2	5.3	5.1	5.2	4.4	4.4	4.4	4.7	4.7	4.7	5.2	4.8	4.9			
3	---	---	---	4.4	4.3	4.3	5.5	4.7	4.9	5.5	5.2	5.4			
4	---	---	---	4.4	4.3	4.3	6.5	5.5	6.1	5.3	4.9	5.1			
5	---	---	---	4.5	4.3	4.4	6.5	6.2	6.4	4.9	4.9	4.9			
6	---	---	---	4.5	4.4	4.4	6.3	5.9	6.1	5.0	4.9	5.0			
7	---	---	---	5.1	3.8	4.3	5.9	5.5	5.7	5.0	4.8	4.9			
8	---	---	---	3.9	3.8	3.8	6.4	5.6	5.8	4.8	4.8	4.8			
9	---	---	---	3.9	3.8	3.9	6.5	6.2	6.4	4.8	4.7	4.8			
10	---	---	---	3.9	3.8	3.8	6.2	5.7	5.9	4.7	4.7	4.7			
11	---	---	---	3.9	3.8	3.8	5.7	5.3	5.5	4.8	4.7	4.8			
12	6.5	6.4	6.5	4.9	3.8	4.4	5.3	5.3	5.3	4.7	4.6	4.7			
13	6.5	6.1	6.4	5.1	4.9	5.0	5.3	5.1	5.2	4.8	4.6	4.7			
14	6.5	5.9	6.2	5.0	4.8	4.9	5.1	4.9	5.0	4.9	4.8	4.8			
15	6.5	6.2	6.4	4.8	4.7	4.8	5.1	4.9	5.0	4.8	4.7	4.8			
16	6.2	6.0	6.2	5.1	4.6	4.7	4.9	4.8	4.9	4.7	4.6	4.7			
17	6.2	6.0	6.1	6.1	5.1	5.8	5.7	4.8	5.2	4.6	4.6	4.6			
18	---	---	---	6.1	5.8	6.0	6.3	5.7	6.1	4.6	4.5	4.5			
19	---	---	---	5.8	5.4	5.6	6.2	5.8	6.1	4.6	4.4	4.5			
20	---	---	---	6.2	5.5	5.9	5.9	5.4	5.7	5.4	4.6	5.2			
21	---	---	---	6.4	6.2	6.4	5.8	5.4	5.5	5.3	5.0	5.1			
22	---	---	---	6.4	5.8	6.0	6.3	5.8	6.1	5.0	4.8	4.9			
23	---	---	---	5.8	5.3	5.5	6.2	5.7	6.0	4.8	4.8	4.8			
24	---	---	---	5.3	5.0	5.2	5.8	5.4	5.6	6.1	4.8	5.6			
25	---	---	---	5.0	4.9	5.0	5.4	5.1	5.3	6.3	5.9	6.2			
26	4.7	4.6	4.7	4.9	4.8	4.9	5.2	5.0	5.1	5.9	5.2	5.6			
27	4.6	4.6	4.6	4.9	4.8	4.8	5.1	4.9	5.0	5.2	5.0	5.1			
28	4.7	4.6	4.6	4.9	4.8	4.9	5.0	4.9	4.9	5.7	5.0	5.2			
29	4.6	4.5	4.5	4.9	4.9	4.9	5.0	4.9	5.0	6.5	5.7	6.2			
30	---	---	---	4.9	4.8	4.9	5.0	4.8	4.9	6.4	6.2	6.3			
31	---	---	---	4.8	4.7	4.8	---	---	---	6.3	6.0	6.2			
MONTH	6.5	4.5	5.6	6.4	3.8	4.8	6.5	4.7	5.5	6.5	4.4	5.1			





**SURFACE-WATER RECORDS**  
**Hocking River Basin**

**03158200 MONDAY CREEK AT DOANVILLE, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	16.5	13.5	15.0	13.5	10.5	12.0	2.5	1.0	1.5	1.5	.5	1.0			
2	16.5	13.0	15.0	13.0	10.5	12.0	2.5	.5	1.5	5.0	1.5	3.0			
3	16.5	14.0	15.0	10.5	8.5	9.5	4.0	2.0	3.0	7.0	5.0	6.0			
4	16.0	15.0	15.5	8.5	6.5	7.5	6.5	4.0	5.5	8.5	7.0	7.5			
5	15.0	14.0	14.5	8.0	6.0	7.0	8.0	6.0	7.0	7.0	4.5	5.5			
6	15.0	12.0	13.5	10.0	8.0	9.0	7.5	6.0	7.0	4.5	3.0	3.5			
7	14.0	11.5	13.0	9.5	7.5	8.5	6.0	4.0	5.0	3.5	3.0	3.0			
8	14.0	11.0	12.5	8.5	6.5	7.5	4.0	2.5	3.5	3.0	1.5	2.0			
9	14.0	13.0	13.5	10.0	7.0	8.5	3.5	2.0	3.0	3.5	2.5	2.5			
10	15.5	14.0	14.5	11.5	9.5	10.5	5.5	3.0	4.0	5.0	3.5	4.0			
11	17.0	15.5	16.0	12.0	11.0	11.5	5.0	3.0	3.5	5.0	4.5	4.5			
12	15.5	13.5	14.5	11.5	10.0	11.0	3.5	2.5	3.0	4.5	3.0	3.5			
13	15.5	13.5	14.5	11.0	9.5	10.0	5.0	3.5	4.5	4.5	3.0	4.0			
14	14.5	13.0	14.0	11.0	9.0	10.0	7.0	5.0	6.0	3.0	1.0	2.0			
15	13.5	11.5	12.5	9.5	7.0	8.0	6.5	6.5	6.5	2.0	.5	1.0			
16	14.0	12.0	13.0	7.0	5.0	6.0	6.5	5.0	6.0	3.5	2.0	3.0			
17	15.0	12.5	13.5	5.0	3.5	4.0	5.0	4.0	4.5	3.0	.5	1.5			
18	14.0	12.0	13.0	4.5	2.5	3.5	4.5	3.5	4.0	1.0	.5	.5			
19	13.0	11.0	12.0	6.0	3.0	4.5	4.5	3.0	4.0	1.5	.5	1.0			
20	13.0	10.5	11.5	7.5	5.5	7.0	5.5	4.5	5.0	1.5	.5	.5			
21	12.0	9.0	10.5	10.0	7.5	9.0	5.0	3.0	3.5	.5	.5	.5			
22	12.0	9.5	10.5	11.0	8.5	9.5	3.0	1.5	2.0	.5	.5	.5			
23	10.5	9.0	9.5	11.5	8.5	10.0	1.5	1.0	1.5	.5	.5	.5			
24	9.5	8.0	9.0	11.0	10.0	10.5	1.0	.5	.5	.5	.5	.5			
25	9.0	6.5	8.0	10.0	9.0	9.5	.5	.5	.5	.5	.5	.5			
26	9.5	6.5	8.0	9.0	8.5	9.0	.5	.5	.5	.5	.5	.5			
27	9.5	6.5	8.0	8.5	7.0	8.0	.5	.5	.5	.5	.5	.5			
28	10.0	6.5	8.5	7.5	6.0	6.5	.5	.5	.5	.5	.5	.5			
29	11.0	7.5	9.0	6.0	4.0	5.0	.5	.5	.5	.5	.5	.5			
30	12.0	9.0	10.5	4.0	2.5	3.0	1.0	.5	.5	.5	.5	.5			
31	13.0	9.5	11.0	---	---	---	1.5	.5	1.0	.5	.5	.5			
MONTH	17.0	6.5	12.0	13.5	2.5	8.0	8.0	.5	3.0	8.5	.5	2.0			

DAY	MAX	MIN	MEAN	FEBRUARY			MARCH			APRIL			MAY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	.5	.5	.5	9.3	7.8	8.6	11.0	8.5	10.0	15.5	14.0	15.0			
2	.5	.5	.5	9.0	7.2	8.2	11.5	11.0	11.0	17.0	14.5	15.5			
3	---	---	---	7.2	5.5	6.5	12.5	11.5	12.0	17.5	14.5	16.0			
4	---	---	---	7.2	4.8	6.1	12.0	10.0	11.5	18.0	16.5	17.0			
5	---	---	---	8.3	5.5	6.9	10.0	8.5	9.5	19.0	17.0	18.0			
6	---	---	---	9.5	6.6	8.0	11.5	9.0	10.0	20.0	18.0	19.0			
7	---	---	---	10.7	7.7	9.2	12.0	11.0	11.5	21.0	19.0	20.0			
8	---	---	---	12.5	9.4	10.9	12.0	9.5	11.0	21.0	19.5	20.5			
9	---	---	---	13.5	11.4	12.5	9.5	7.5	8.0	21.0	20.0	20.5			
10	---	---	---	13.0	11.0	12.0	9.5	7.0	8.0	20.5	19.0	20.0			
11	1.5	.5	1.0	11.5	8.0	9.5	10.0	9.5	9.5	19.0	17.0	18.0			
12	1.5	.5	1.0	8.0	6.5	7.0	10.0	9.0	9.5	20.0	17.5	18.5			
13	3.5	1.0	1.5	6.5	5.0	5.5	10.5	8.5	9.5	20.0	19.5	20.0			
14	4.0	3.5	3.5	8.0	5.0	6.5	13.0	9.0	11.0	19.5	17.0	18.0			
15	4.0	3.0	3.5	10.0	7.0	8.5	15.5	12.5	14.0	17.0	15.0	16.0			
16	4.4	3.9	4.2	10.0	9.5	10.0	16.5	14.0	15.5	16.0	14.0	15.0			
17	4.4	3.3	3.8	9.5	7.0	8.0	16.5	15.0	15.5	17.0	14.5	16.0			
18	5.1	3.6	4.0	7.0	5.5	6.5	15.0	13.0	13.5	18.0	16.0	17.0			
19	5.2	4.1	4.7	7.0	6.5	6.5	13.0	12.0	12.5	19.0	18.0	18.0			
20	4.1	3.6	3.8	7.5	7.0	7.5	14.5	12.0	13.0	19.0	17.5	18.5			
21	4.6	3.2	3.9	8.0	7.5	8.0	14.5	13.0	14.0	17.5	17.0	17.5			
22	5.8	4.2	4.8	8.5	8.0	8.5	13.0	11.0	12.0	18.0	16.5	17.0			
23	7.5	5.8	6.6	10.0	8.0	9.0	12.5	10.0	11.0	18.0	17.0	17.5			
24	8.8	7.2	7.9	12.0	9.0	10.5	12.5	11.5	12.0	19.0	17.0	18.0			
25	10.5	8.0	9.1	14.0	11.5	12.5	14.5	12.0	13.5	19.0	18.0	18.5			
26	11.8	9.4	10.5	13.5	12.0	13.0	14.5	12.0	13.5	18.5	16.5	18.0			
27	11.5	10.8	11.2	12.5	11.0	11.5	15.0	11.5	13.0	18.0	17.5	17.5			
28	10.8	8.8	9.7	11.0	9.0	10.0	15.0	12.5	13.5	17.5	17.0	17.0			
29	9.2	7.2	8.3	10.5	8.0	9.0	15.0	13.0	14.0	17.5	16.5	16.5			
30	---	---	---	11.0	8.5	9.5	15.5	13.0	14.5	17.0	15.5	16.0			
31	---	---	---	11.5	8.5	10.0	---	---	---	19.0	16.5	17.5			
MONTH	11.8	.5	5.0	14.0	4.8	9.0	16.5	7.0	12.0	21.0	14.0	17.5			



**SURFACE-WATER RECORDS**  
**Hocking River Basin**

**03158200 MONDAY CREEK AT DOANVILLE, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

OXYGEN, DISSOLVED, MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.9	7.4	7.7	8.7	7.2	8.0	13.1	12.6	12.9	13.8	13.5	13.6			
2	8.4	7.6	8.0	9.3	7.1	8.1	13.3	12.7	13.0	13.5	12.4	13.1			
3	8.4	7.7	8.1	9.8	9.1	9.5	12.8	12.2	12.5	12.4	11.5	12.0			
4	8.1	7.6	7.8	10.6	9.8	10.3	12.2	11.2	11.6	11.5	9.9	10.8			
5	8.0	7.5	7.7	10.9	10.3	10.6	11.2	10.5	10.8	11.9	10.3	11.1			
6	8.6	7.9	8.3	10.3	9.8	10.1	10.8	10.2	10.4	12.9	11.9	12.5			
7	9.3	8.3	8.8	10.4	9.8	10.1	11.5	10.8	11.1	13.2	12.9	13.1			
8	9.5	8.4	9.0	10.5	10.2	10.3	12.2	11.5	11.9	13.7	13.2	13.6			
9	8.7	8.2	8.4	10.4	9.8	10.1	12.5	12.2	12.4	13.5	12.9	13.2			
10	8.3	7.6	8.0	9.8	9.1	9.5	12.5	11.3	12.0	12.9	12.2	12.5			
11	7.8	7.4	7.5	9.1	8.9	9.0	12.3	11.6	12.1	12.5	12.2	12.3			
12	8.3	7.5	8.0	9.3	9.0	9.1	12.6	12.3	12.4	13.0	12.5	12.8			
13	8.5	7.8	8.2	9.4	9.0	9.3	12.3	11.8	12.0	13.0	12.5	12.7			
14	8.2	7.6	7.9	9.4	9.0	9.2	11.8	10.5	11.2	14.2	13.0	13.7			
15	8.8	7.9	8.3	9.9	9.3	9.6	10.9	10.4	10.6	14.5	13.9	14.3			
16	8.7	8.3	8.5	10.5	9.9	10.3	11.5	10.9	11.2	13.9	13.3	13.6			
17	8.4	7.9	8.2	11.2	10.5	11.0	12.0	11.5	11.9	14.4	13.5	14.1			
18	8.2	7.6	7.9	11.7	11.0	11.4	12.4	12.0	12.2	14.6	14.2	14.4			
19	8.3	7.7	8.0	11.5	10.8	11.2	12.5	12.2	12.4	14.4	13.9	14.2			
20	8.5	7.2	7.8	10.8	10.1	10.4	12.2	11.8	12.0	14.3	13.9	14.1			
21	8.3	7.3	7.9	10.1	9.5	9.8	12.8	11.9	12.3	14.4	14.0	14.2			
22	9.5	5.8	8.0	9.7	9.3	9.5	13.5	12.8	13.2	14.1	13.6	13.9			
23	---	---	---	9.7	9.2	9.5	13.7	13.4	13.5	13.6	13.0	13.3			
24	---	---	---	9.4	9.3	9.4	14.0	13.6	13.8	13.3	13.1	13.2			
25	---	---	---	9.7	9.3	9.6	14.1	13.6	13.8	13.5	12.9	13.2			
26	---	---	---	9.8	9.5	9.7	13.6	13.2	13.4	13.1	13.0	13.0			
27	---	---	---	10.5	9.7	10.1	13.4	13.2	13.4	13.2	12.9	13.0			
28	10.3	9.1	9.8	10.9	10.4	10.7	13.5	13.3	13.4	13.2	12.8	13.0			
29	10.0	8.8	9.4	11.7	10.9	11.3	13.3	13.2	13.3	12.9	12.2	12.6			
30	9.6	8.4	9.0	12.6	11.7	12.1	13.4	13.3	13.3	12.4	12.1	12.2			
31	9.1	7.9	8.6	---	---	---	13.5	13.3	13.4	12.5	12.2	12.3			
MONTH	10.3	5.8	8.3	12.6	7.1	10.0	14.1	10.2	12.4	14.6	9.9	13.1			

DAY	MAX	MIN	MEAN	FEBRUARY			MARCH			APRIL			MAY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	12.5	12.2	12.4	11.8	11.4	11.6	11.1	10.4	10.8	10.1	9.8	9.9			
2	12.8	12.5	12.7	12.1	11.4	11.7	10.5	10.2	10.4	9.9	9.5	9.7			
3	---	---	---	12.6	12.1	12.4	10.2	10.0	10.2	10.0	9.4	9.7			
4	---	---	---	12.8	12.3	12.5	10.1	9.7	9.9	9.6	9.2	9.4			
5	---	---	---	12.5	11.8	12.2	10.5	9.7	10.2	9.3	8.9	9.2			
6	---	---	---	12.2	11.4	11.8	10.8	10.3	10.5	9.1	8.7	9.0			
7	---	---	---	11.7	11.0	11.4	10.5	10.2	10.4	8.8	8.5	8.7			
8	---	---	---	11.3	10.3	10.8	10.9	10.2	10.5	8.5	8.4	8.5			
9	---	---	---	10.4	9.8	10.1	11.7	10.9	11.5	8.7	8.4	8.5			
10	---	---	---	10.3	9.8	10.1	11.9	11.2	11.7	8.9	8.5	8.7			
11	14.5	13.2	13.4	11.1	10.2	10.7	11.2	11.0	11.2	9.4	8.9	9.2			
12	13.8	13.3	13.6	12.2	11.1	11.7	11.5	11.0	11.3	9.2	8.8	9.0			
13	13.9	12.5	13.6	12.7	12.1	12.5	11.7	11.1	11.4	8.8	8.5	8.6			
14	12.5	12.0	12.2	12.5	11.6	12.3	11.3	10.4	11.0	9.4	8.7	9.1			
15	12.4	12.2	12.3	11.6	10.6	11.2	10.4	9.5	10.1	9.9	9.4	9.7			
16	12.5	12.1	12.3	10.6	10.3	10.5	9.8	9.3	9.6	10.1	9.7	9.9			
17	13.1	12.4	12.8	11.5	10.6	11.1	9.6	9.3	9.4	9.9	9.6	9.8			
18	---	---	---	12.2	11.5	11.9	10.2	9.6	9.9	9.6	9.3	9.4			
19	---	---	---	11.8	11.5	11.7	10.5	10.2	10.4	9.3	8.3	8.8			
20	---	---	---	11.5	11.0	11.4	10.5	9.8	10.3	9.0	8.3	8.6			
21	---	---	---	11.0	10.2	10.6	10.2	9.7	9.9	9.4	8.9	9.1			
22	---	---	---	11.1	10.0	10.5	11.0	10.2	10.6	9.4	9.0	9.2			
23	---	---	---	11.0	10.4	10.8	11.4	10.8	11.1	9.2	8.7	8.9			
24	---	---	---	10.6	9.9	10.4	10.9	10.5	10.8	9.0	8.4	8.7			
25	---	---	---	9.9	9.4	9.7	10.6	10.1	10.4	9.0	8.5	8.7			
26	11.2	10.5	10.9	9.8	9.5	9.6	10.7	10.2	10.4	9.2	8.7	9.0			
27	10.7	10.5	10.5	10.0	9.6	9.8	10.8	10.2	10.5	9.0	8.8	8.9			
28	11.3	10.7	11.1	10.7	9.9	10.4	10.6	10.0	10.3	8.9	8.7	8.8			
29	11.9	11.3	11.7	11.2	10.7	10.9	10.5	10.0	10.2	9.0	8.7	8.9			
30	---	---	---	11.1	10.5	10.8	10.4	9.8	10.1	9.3	9.0	9.2			
31	---	---	---	11.1	10.5	10.8	---	---	---	9.1	8.6	9.0			
MONTH	14.5	10.5	12.3	12.8	9.4	11.1	11.9	9.3	10.5	10.1	8.3	9.1			





**SURFACE-WATER RECORDS**  
**Shade River Basin**

**03159540 SHADE RIVER NEAR CHESTER, OHIO**

LOCATION.—Latitude 39°03'49", longitude 81°52'55", in NE 1/4 sec. 10, T.3N., R.12 W., Meigs County, Hydrologic Unit 05030202, on right bank at downstream side of bridge on Oak Hill Road, 200 ft upstream from Sugar Run, 2.8 mi southeast of Chester, Ohio, and 8.5 mi northeast of Pomeroy, Ohio.

DRAINAGE AREA.—156 mi<sup>2</sup>, includes that of Sugar Run.

PERIOD OF RECORD.—Water years 1956, 1962-64 (occasional low-flow measurements), June 1965 to current year.

GAGE.—Water-stage recorder. Datum of gage is 576.91 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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	4.0	50	46	e30	e100	119	72	34	8.8	18	6.0
2	3.0	155	41	51	e29	e90	112	85	26	6.6	8.8	6.4
3	2.9	465	37	68	e29	e82	143	85	20	6.0	5.8	11
4	4.3	197	35	1280	e29	e78	652	66	17	8.4	4.4	11
5	7.8	80	34	984	e28	e74	493	60	15	9.7	4.1	28
6	5.4	51	65	307	e28	e70	376	59	13	12	3.1	15
7	4.4	38	107	208	e28	e66	278	49	12	8.5	2.6	7.5
8	3.4	29	66	152	e28	e64	385	44	12	6.0	2.3	5.8
9	3.1	24	50	126	e30	62	524	39	11	4.7	6.8	5.2
10	62	20	389	118	e35	59	333	36	8.2	4.5	61	5.3
11	57	18	616	108	e45	65	266	30	6.6	5.5	29	5.1
12	27	15	242	90	e100	177	339	27	5.1	9.2	15	5.5
13	16	13	285	88	e180	158	269	25	5.5	8.5	8.4	23
14	34	12	1290	84	e1000	104	222	25	5.0	5.9	5.5	22
15	22	11	1040	71	e600	89	192	22	12	5.0	4.1	12
16	12	11	336	e62	e500	152	168	18	18	11	3.3	7.7
17	8.2	9.9	204	e58	e400	563	373	15	18	19	2.7	5.4
18	5.7	9.2	141	e54	e1200	388	556	21	15	11	2.8	4.5
19	5.5	8.8	106	e50	e700	285	365	30	22	9.2	2.5	4.1
20	5.8	9.8	89	e47	e500	469	263	80	25	20	2.1	4.1
21	5.0	9.9	79	e44	e370	529	349	85	165	21	2.0	7.9
22	4.5	11	67	e41	e280	450	586	49	137	13	1.8	7.6
23	4.4	10	57	e38	e220	306	392	40	26	8.1	2.4	8.2
24	4.1	9.8	52	e37	e180	224	279	42	17	5.8	46	118
25	4.2	14	41	e35	e160	209	216	39	12	4.5	35	228
26	4.0	464	44	e34	e150	179	164	29	10	3.7	22	376
27	4.0	418	44	e32	e140	160	127	28	26	3.0	13	151
28	3.8	202	43	e32	e120	178	106	54	46	2.8	16	53
29	4.2	101	44	e31	e110	229	92	89	20	3.2	11	32
30	4.1	66	42	e30	---	176	81	81	12	3.3	6.7	22
31	3.9	---	47	e30	---	140	---	48	---	11	6.9	---
TOTAL	339.1	2486.4	5783	4436	7249	5975	8820	1472	771.4	258.9	355.1	1198.3
MEAN	10.9	82.9	187	143	250	193	294	47.5	25.7	8.35	11.5	39.9
MAX	62	465	1290	1280	1200	563	652	89	165	21	61	376
MIN	2.9	4.0	34	30	28	59	81	15	5.0	2.8	1.8	4.1
CFSM	.07	.53	1.20	.92	1.60	1.24	1.88	.30	.16	.05	.07	.26
IN.	.08	.59	1.38	1.06	1.73	1.42	2.10	.35	.18	.06	.08	.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2000, BY WATER YEAR (WY)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	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			
MEAN	52.1	105	202	245	310	353	274	235	93.9	65.4	62.0	35.7																											
MAX	259	386	765	755	884	1088	634	912	488	384	406	262																											
(WY)	1976	1974	1991	1994	1994	1997	1972	1968	1998	1980	1980	1979																											
MIN	.42	.99	20.2	24.0	40.7	53.4	48.6	33.2	2.37	2.40	.72	.38																											
(WY)	1988	1988	1988	1977	1978	1969	1995	1986	1988	1987	1988	1987																											

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR				FOR 2000 WATER YEAR				WATER YEARS 1965 - 2000			
ANNUAL TOTAL	40495.0				39144.2							
ANNUAL MEAN	111				107				170			
HIGHEST ANNUAL MEAN									272			
LOWEST ANNUAL MEAN									45.4			
HIGHEST DAILY MEAN	1290				Dec 14				10300			
LOWEST DAILY MEAN	1.2				Jul 6				.18			
ANNUAL SEVEN-DAY MINIMUM	1.4				Jul 4				.21			
INSTANTANEOUS PEAK FLOW									1920			
INSTANTANEOUS PEAK STAGE									Jan 4a			
INSTANTANEOUS LOW FLOW									15600			
ANNUAL RUNOFF (CFSM)	.71				.69				31.44			
ANNUAL RUNOFF (INCHES)	9.66				9.33				.17			
10 PERCENT EXCEEDS	346				334				376			
50 PERCENT EXCEEDS	41				34				56			
90 PERCENT EXCEEDS	2.5				4.4				3.8			

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

**SURFACE-WATER RECORDS**  
**Raccoon Creek Basin**

**03201980 LITTLE RACCOON CREEK NEAR EWINGTON, OHIO**

LOCATION.—Latitude 39°00'38", longitude 82°27'08", in SW 1/4 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 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—July 1984 to June 1985 and November 1998 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 630 ft above sea level (from topographic map).

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.7	6.4	12	e17	e17	76	92	46	53	15	9.5	4.0
2	9.9	118	12	19	e17	70	86	66	41	15	8.5	13
3	8.4	237	12	45	e18	61	95	63	34	14	7.7	9.8
4	7.6	70	12	364	e18	58	283	50	29	19	7.6	7.5
5	8.0	29	12	470	e18	55	396	48	25	20	7.3	9.2
6	8.4	18	14	292	e19	50	330	44	25	17	6.0	9.1
7	8.1	13	15	129	e21	47	194	38	27	16	5.9	6.5
8	7.4	10	14	91	e25	45	208	35	21	14	6.0	5.3
9	7.7	9.5	13	72	e30	44	322	33	18	14	7.0	5.2
10	37	8.9	55	65	e40	40	228	30	16	35	12	5.0
11	34	9.1	154	58	e50	43	166	27	15	115	12	4.4
12	15	8.8	63	49	e70	97	156	26	13	43	9.2	4.4
13	7.7	8.8	48	48	e100	94	132	24	37	21	8.2	10
14	13	8.6	266	46	1000	76	113	24	34	19	6.6	9.4
15	15	8.9	326	38	1460	68	98	22	24	44	5.8	6.3
16	9.4	8.3	114	e35	862	98	87	20	21	23	5.2	4.6
17	6.0	7.8	65	e31	328	421	128	19	21	17	5.4	3.8
18	3.8	7.7	48	e29	645	347	210	18	29	13	6.6	3.2
19	3.5	8.2	38	e27	7460	192	141	21	33	15	7.5	2.7
20	3.4	10	34	e25	3020	320	112	50	27	31	6.7	2.2
21	3.4	10	29	e24	761	723	117	32	24	e17	6.4	2.8
22	3.9	8.9	25	e23	274	783	147	23	24	e8.0	5.4	7.7
23	4.4	8.2	23	e21	169	461	134	22	23	e6.0	4.8	6.6
24	5.3	7.7	21	e20	137	201	112	63	18	e5.4	6.4	7.2
25	4.6	9.4	19	e19	120	150	98	47	16	e5.6	7.0	22
26	5.4	34	18	e18	102	121	82	28	16	e6.0	6.6	135
27	5.1	53	e17	e18	92	107	70	27	19	8.3	6.2	64
28	4.9	34	e17	e17	88	121	63	55	25	8.5	7.0	22
29	6.1	20	e16	e17	79	171	57	184	20	9.4	6.2	14
30	6.3	15	e16	e17	---	132	50	126	17	10	5.0	10
31	6.2	---	e16	e17	---	107	---	75	---	10	4.7	---
TOTAL	277.6	806.2	1544	2161	17040	5379	4507	1386	745	614.2	216.4	416.9
MEAN	8.95	26.9	49.8	69.7	588	174	150	44.7	24.8	19.8	6.98	13.9
MAX	37	237	326	470	7460	783	396	184	53	115	12	135
MIN	3.4	6.4	12	17	17	40	50	18	13	5.4	4.7	2.2
CFSM	.09	.27	.50	.70	5.89	1.74	1.51	.45	.25	.20	.07	.14
IN.	.10	.30	.58	.81	6.36	2.01	1.68	.52	.28	.23	.08	.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2000, BY WATER YEAR (WY)

	1999	2000	1999	2000	1999	2000	1999	2000	1999	2000	1999	2000
MEAN	8.95	26.9	35.1	161	373	211	112	37.1	17.7	13.3	9.75	9.71
MAX	8.95	26.9	49.8	252	588	248	150	44.7	24.8	19.8	12.5	13.9
(WY)	2000	2000	2000	1999	2000	1999	2000	2000	2000	1999	1999	2000
MIN	8.95	26.9	20.4	69.7	150	174	73.8	29.5	10.5	6.82	6.98	5.52
(WY)	2000	2000	1999	2000	1999	2000	1999	1999	1999	1999	2000	1999

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1999 - 2000	
ANNUAL TOTAL	26537.7		35093.3			
ANNUAL MEAN	72.7		95.9			
HIGHEST ANNUAL MEAN					95.9	
LOWEST ANNUAL MEAN					95.9	
HIGHEST DAILY MEAN	903	Jan 19	7460	Feb 19	7460	Feb 19 2000
LOWEST DAILY MEAN	2.1	Sep 29	2.2	Sep 20	2.1	Sep 29 1999
ANNUAL SEVEN-DAY MINIMUM	3.1	Aug 2	3.7	Sep 15	3.1	Aug 2 1999
INSTANTANEOUS PEAK FLOW			8450	Feb 19a	8450	Feb 19 2000
INSTANTANEOUS PEAK STAGE			15.83	Feb 19	15.83	Feb 19 2000
INSTANTANEOUS LOW FLOW			2.2	Sep 20	2.1	Sep 29 1999
ANNUAL RUNOFF (CFSM)	.73		.96		.96	
ANNUAL RUNOFF (INCHES)	9.90		13.09		13.07	
10 PERCENT EXCEEDS	219		155		201	
50 PERCENT EXCEEDS	15		21		20	
90 PERCENT EXCEEDS	4.4		6.0		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**  
**Raccoon Creek Basin**

**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.—

SUSPENDED SEDIMENT DISCHARGE: August 1984 to June 1985 (discontinued).

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.

INSTRUMENTATION.—Water-quality monitor interfaced to electronic data logger with 1-hour recording interval. Satellite telemeter at station.

REMARKS.—Interruptions in the water-quality record were due to malfunctions of the instrument.

EXTREMES FOR PERIOD OF RECORD.—

SPECIFIC CONDUCTANCE: Maximum, 1,310 microsiemens, Sept. 19, 1999; minimum, 164 microsiemens, Feb. 20, 2000.

pH: Maximum, 8.0 units, Sept. 10 and 11, 1999; minimum, 4.8 units, Nov. 2, 1999.

WATER TEMPERATURE: Maximum, 29.0°C, July 31, 1999; minimum 0.0°C, on many days during winter.

DISSOLVED OXYGEN: Maximum, 14.9 mg/L, Jan. 1, 1999; minimum, 5.7 mg/L, July 5-7, 1999.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum, 1,240 microsiemens, Oct. 11 and 12; minimum, 164 microsiemens, Feb. 20.

pH: Maximum, 7.7 units, May 21-25 and June 21; minimum, 4.8 units, Nov. 2.

WATER TEMPERATURE: Maximum, 25.0°C, June 14, 15, 26, and Aug. 3; minimum 0.5°C, Dec. 24-31, Jan. 1, 18-31, and Feb. 1-12.

DISSOLVED OXYGEN: Maximum, 14.7°C, Dec. 25; minimum 5.8°C, Aug. 25.

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	893	839	882	959	945	953	799	787	792	731	719	726
2	839	749	773	959	594	842	818	799	812	726	711	731
3	889	769	849	939	620	727	814	788	801	723	663	683
4	902	880	892	793	701	755	788	769	780	781	496	629
5	918	902	912	742	734	737	792	769	777	496	371	415
6	924	917	921	747	740	743	821	791	799	405	370	391
7	927	917	922	754	747	751	891	821	864	400	387	395
8	979	926	943	761	754	759	937	891	915	413	398	405
9	1020	979	1010	762	757	759	938	922	929	428	413	420
10	1060	683	932	764	761	762	923	769	869	457	428	447
11	1240	851	989	772	762	767	961	730	798	466	448	455
12	1240	886	1020	791	772	780	796	660	711	491	466	483
13	886	829	857	810	791	801	660	615	641	493	487	490
14	862	793	843	823	810	816	624	390	523	519	493	504
15	831	777	808	836	822	829	598	468	512	540	518	528
16	796	770	782	852	836	843	492	468	477	539	515	528
17	776	749	762	868	852	860	519	492	510	553	517	540
18	752	746	748	878	868	873	549	519	537	576	552	562
19	754	745	751	899	878	888	578	548	558	583	575	580
20	748	740	743	910	899	904	614	578	599	577	568	573
21	776	748	763	947	910	924	632	614	626	627	574	609
22	811	776	793	951	932	941	649	631	642	678	625	661
23	869	811	837	947	932	936	663	643	652	670	648	662
24	999	869	938	957	947	951	670	659	662	668	648	653
25	1060	999	1040	957	932	949	703	670	690	729	668	704
26	1070	1050	1060	1040	875	929	718	701	710	741	729	737
27	1050	999	1020	1050	959	1010	718	703	712	744	734	742
28	999	980	990	1060	938	994	724	701	713	749	731	737
29	981	955	969	938	845	882	725	704	714	755	749	752
30	955	940	946	845	795	819	---	---	---	749	726	743
31	945	940	942	---	---	---	---	---	---	726	715	719
MONTH	1240	683	892	1060	594	849	961	390	701	781	370	587



**SURFACE-WATER RECORDS**  
**Raccoon Creek Basin**

**03201980 LITTLE RACCOON CREEK NEAR EWINGTON, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.2	6.5	6.8	5.3	5.1	5.3	6.9	6.8	6.9	6.7	6.7	6.7
2	6.8	6.7	6.8	5.7	4.8	5.2	6.8	6.6	6.7	6.7	6.5	6.6
3	6.8	6.6	6.7	6.8	5.3	6.3	6.6	6.5	6.6	6.5	6.3	6.5
4	6.7	6.6	6.6	6.9	6.7	6.8	6.5	6.5	6.5	6.9	6.1	6.5
5	6.8	6.7	6.7	6.8	6.8	6.8	6.5	6.5	6.5	6.7	6.5	6.7
6	6.8	6.8	6.8	6.8	6.7	6.8	6.5	6.4	6.5	6.7	6.5	6.6
7	6.8	6.7	6.8	6.8	6.7	6.8	6.5	6.3	6.4	6.7	6.6	6.6
8	6.7	6.5	6.6	6.7	6.7	6.7	6.5	6.0	6.3	6.7	6.6	6.7
9	6.5	5.9	6.2	6.7	6.6	6.6	6.2	6.0	6.1	6.7	6.7	6.7
10	5.9	5.1	5.6	6.6	6.5	6.6	6.6	6.1	6.4	6.8	6.7	6.7
11	6.5	4.9	5.7	6.5	6.4	6.5	7.1	5.8	6.7	6.7	6.6	6.6
12	7.0	6.1	6.6	6.4	6.2	6.3	7.0	6.8	6.9	6.8	6.7	6.7
13	7.1	7.0	7.1	6.2	6.0	6.1	6.8	6.6	6.8	6.8	6.7	6.8
14	7.1	7.0	7.1	6.0	5.8	5.8	6.7	5.6	6.2	6.7	6.7	6.7
15	7.1	6.9	7.0	5.8	5.7	5.7	6.7	6.5	6.7	6.8	6.7	6.7
16	7.0	6.7	6.9	5.7	5.6	5.6	6.6	6.5	6.6	6.8	6.8	6.8
17	6.8	6.6	6.7	5.6	5.6	5.6	6.6	6.5	6.6	6.8	6.7	6.8
18	6.7	6.4	6.6	5.6	5.5	5.5	6.6	6.6	6.6	6.8	6.8	6.8
19	6.6	6.1	6.4	5.5	5.5	5.5	6.6	6.6	6.6	6.9	6.8	6.8
20	6.8	6.6	6.7	5.5	5.4	5.5	6.6	6.5	6.5	6.9	6.8	6.8
21	6.8	6.8	6.8	5.5	5.4	5.5	6.6	6.5	6.6	6.8	6.7	6.8
22	6.8	6.7	6.8	5.7	5.4	5.5	6.6	6.5	6.5	6.7	6.7	6.7
23	6.7	6.6	6.7	5.7	5.5	5.6	6.6	6.6	6.6	6.8	6.6	6.7
24	6.6	6.4	6.5	5.5	5.4	5.5	6.7	6.6	6.7	6.8	6.7	6.8
25	6.4	6.3	6.4	5.5	5.4	5.4	6.7	6.6	6.6	6.7	6.7	6.7
26	6.3	6.1	6.2	5.5	5.2	5.4	6.6	6.5	6.5	6.7	6.7	6.7
27	6.1	6.0	6.0	6.5	5.3	6.0	6.6	6.5	6.5	6.7	6.6	6.7
28	6.0	5.8	5.9	6.9	6.5	6.7	6.7	6.6	6.7	6.6	6.6	6.6
29	5.8	5.5	5.7	7.0	6.9	7.0	6.6	6.6	6.6	6.6	6.6	6.6
30	5.5	5.4	5.5	7.0	6.9	7.0	---	---	---	6.7	6.6	6.6
31	5.4	5.3	5.4	---	---	---	---	---	---	6.7	6.6	6.6
MONTH	7.2	4.9	6.5	7.0	4.8	6.1	7.1	5.6	6.6	6.9	6.1	6.7

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.6	6.6	6.6	6.7	6.6	6.6	6.9	6.9	6.9	7.2	7.1	7.1
2	6.7	6.6	6.6	6.7	6.5	6.7	6.9	6.9	6.9	7.1	7.0	7.1
3	6.7	6.7	6.7	6.8	6.7	6.7	6.9	6.9	6.9	7.1	6.6	6.9
4	6.7	6.7	6.7	6.8	6.7	6.8	6.9	6.3	6.8	7.1	7.0	7.0
5	6.7	6.7	6.7	6.8	6.7	6.8	7.0	6.9	6.9	7.1	7.0	7.1
6	6.8	6.7	6.7	6.9	6.8	6.8	6.9	6.8	6.9	7.1	7.1	7.1
7	6.8	6.8	6.8	6.9	6.8	6.9	6.9	6.8	6.8	7.1	7.1	7.1
8	6.8	6.8	6.8	6.9	6.8	6.9	6.9	6.3	6.7	7.2	7.1	7.2
9	6.8	6.7	6.7	6.9	6.8	6.9	7.0	6.5	6.9	7.3	7.2	7.3
10	6.8	6.7	6.7	7.0	6.9	7.0	6.9	6.8	6.8	7.3	7.3	7.3
11	6.8	6.6	6.8	7.0	7.0	7.0	6.8	6.8	6.8	7.4	7.3	7.4
12	7.0	6.7	6.9	7.0	5.9	6.7	6.8	6.6	6.7	7.4	7.4	7.4
13	7.0	6.7	6.9	7.1	6.9	7.0	6.9	6.6	6.8	7.4	7.4	7.4
14	6.7	6.2	6.4	7.0	6.9	7.0	6.9	6.8	6.9	7.5	7.4	7.5
15	6.8	6.4	6.6	7.0	6.9	6.9	6.9	6.9	6.9	7.5	7.5	7.5
16	6.9	6.8	6.9	6.9	6.7	6.8	6.9	6.9	6.9	7.6	7.5	7.5
17	6.9	6.6	6.7	6.9	5.8	6.6	6.9	6.7	6.9	7.6	7.5	7.6
18	6.7	6.2	6.5	6.9	6.7	6.8	7.0	6.2	6.8	7.6	7.5	7.5
19	7.0	6.2	6.7	6.7	6.7	6.7	6.9	6.8	6.8	7.5	7.4	7.5
20	7.0	6.8	6.9	6.7	6.4	6.6	6.9	6.9	6.9	7.6	7.1	7.3
21	6.8	6.7	6.8	6.8	6.5	6.8	6.9	6.7	6.9	7.7	7.6	7.7
22	6.7	6.4	6.5	7.0	6.8	6.8	7.0	6.8	6.9	7.7	7.7	7.7
23	6.5	6.4	6.4	6.8	6.7	6.8	7.0	7.0	7.0	7.7	7.4	7.6
24	6.5	6.5	6.5	6.7	6.6	6.7	7.0	6.9	6.9	7.7	7.4	7.5
25	6.6	6.4	6.5	6.7	6.7	6.7	6.9	6.8	6.9	7.7	7.5	7.6
26	6.6	6.5	6.6	6.8	6.7	6.8	7.0	6.9	7.0	7.5	7.5	7.5
27	6.7	6.6	6.6	6.8	6.8	6.8	7.0	7.0	7.0	7.5	7.4	7.5
28	6.6	6.4	6.5	6.8	6.7	6.7	7.0	7.0	7.0	7.5	7.2	7.4
29	6.6	6.5	6.6	6.8	6.2	6.6	7.1	7.0	7.0	7.6	7.2	7.4
30	---	---	---	7.0	6.8	6.9	7.1	7.1	7.1	7.2	7.1	7.2
31	---	---	---	6.9	6.9	6.9	---	---	---	7.3	7.2	7.3
MONTH	7.0	6.2	6.7	7.1	5.8	6.8	7.1	6.2	6.9	7.7	6.6	7.4



**SURFACE-WATER RECORDS**  
**Raccoon Creek Basin**

**03201980 LITTLE RACCOON CREEK NEAR EWINGTON, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	17.5	14.0	15.5	13.0	11.0	12.0	3.0	1.5	2.5	1.0	.5	.5			
2	16.0	13.0	14.5	13.0	11.0	12.0	2.5	1.5	1.5	6.0	1.0	2.0			
3	16.0	13.5	14.5	11.5	9.0	10.0	3.5	1.5	2.5	6.5	5.0	5.0			
4	16.0	15.0	15.5	9.0	7.5	8.0	6.0	3.5	5.0	8.0	6.5	7.0			
5	15.0	14.0	14.5	8.5	6.5	7.5	7.0	5.5	6.0	7.5	5.5	6.5			
6	15.0	12.5	14.0	9.5	8.5	9.0	7.0	6.0	6.5	5.5	4.0	4.5			
7	14.5	12.0	13.0	9.5	7.5	9.0	6.0	4.5	5.0	4.0	3.5	3.5			
8	14.0	12.0	13.0	9.0	7.5	8.0	4.5	3.5	4.0	3.5	2.5	3.0			
9	14.0	13.5	13.5	10.5	7.5	8.5	3.5	3.0	3.5	3.5	3.0	3.0			
10	15.5	14.0	14.5	11.5	9.0	10.0	5.0	3.5	4.5	5.0	3.5	4.0			
11	16.0	15.5	15.5	11.5	10.5	11.0	5.0	4.0	4.5	5.0	4.5	4.5			
12	16.0	14.0	15.0	12.0	10.5	11.0	5.0	4.0	4.5	4.5	3.5	4.0			
13	16.0	14.5	15.0	11.5	9.5	10.0	5.5	5.0	5.0	4.5	3.5	4.0			
14	15.5	13.5	14.5	11.0	9.0	10.0	7.5	5.5	6.5	3.5	2.0	2.5			
15	13.5	12.0	13.0	10.0	8.0	9.0	7.5	6.5	7.0	2.0	.5	1.5			
16	15.0	12.5	13.5	8.0	6.0	7.0	7.0	5.0	6.0	4.0	2.0	3.0			
17	15.5	13.0	14.0	6.0	4.5	5.0	5.0	4.5	5.0	3.5	1.5	2.0			
18	14.5	13.0	14.0	5.5	3.5	4.5	5.0	3.5	4.0	1.5	.5	1.0			
19	14.0	12.0	13.0	6.0	3.5	4.5	5.0	3.5	4.0	1.5	.5	1.0			
20	13.0	11.0	12.0	7.0	5.5	6.0	5.5	4.5	5.0	1.5	.5	1.0			
21	12.5	10.0	11.0	9.0	7.0	8.0	5.5	4.0	4.5	.5	.5	.5			
22	11.5	10.0	11.0	10.0	7.5	8.5	4.0	2.0	3.0	.5	.5	.5			
23	11.5	9.5	10.0	10.5	8.0	9.0	2.0	1.5	2.0	.5	.5	.5			
24	9.5	9.0	9.5	10.0	9.5	9.5	1.5	.5	1.0	.5	.5	.5			
25	9.5	7.5	8.5	10.0	9.5	9.5	.5	.5	.5	.5	.5	.5			
26	9.5	7.5	8.5	9.5	9.0	9.0	.5	.5	.5	.5	.5	.5			
27	9.0	7.0	8.0	9.0	7.5	8.0	1.0	.5	.5	.5	.5	.5			
28	9.5	7.0	8.5	7.5	6.0	6.5	.5	.5	.5	.5	.5	.5			
29	10.0	8.0	9.0	6.5	5.0	5.5	.5	.5	.5	.5	.5	.5			
30	11.0	8.5	9.5	5.0	3.0	4.0	1.0	.5	.5	.5	.5	.5			
31	12.5	10.0	11.0	---	---	---	1.0	.5	.5	.5	.5	.5			
MONTH	17.5	7.0	12.5	13.0	3.0	8.3	7.5	.5	3.4	8.0	.5	2.2			

DAY	MAX	MIN	MEAN	FEBRUARY			MARCH			APRIL			MAY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	.5	.5	.5	10.0	7.5	8.5	11.5	9.5	10.5	16.0	13.5	15.0			
2	.5	.5	.5	9.0	8.0	8.5	12.0	11.0	11.5	17.5	15.0	16.0			
3	.5	.5	.5	8.0	6.0	7.0	13.5	11.5	12.5	18.5	15.0	16.5			
4	.5	.5	.5	7.5	5.0	6.5	13.0	11.5	12.5	19.5	17.0	18.0			
5	.5	.5	.5	8.5	5.5	7.0	11.5	9.5	10.5	20.5	18.0	19.5			
6	.5	.5	.5	10.0	6.5	8.0	12.5	10.5	11.5	22.0	18.5	20.0			
7	.5	.5	.5	10.5	7.5	9.0	13.5	12.0	12.5	22.5	19.5	21.0			
8	.5	.5	.5	12.5	9.0	10.5	13.5	11.5	13.0	22.5	20.0	21.5			
9	.5	.5	.5	14.0	11.0	12.5	11.5	9.5	10.0	22.5	20.5	21.5			
10	.5	.5	.5	13.5	11.0	12.5	11.5	9.5	10.0	22.5	20.5	21.5			
11	.5	.5	.5	12.5	9.0	10.5	11.5	11.0	11.5	20.5	18.0	19.0			
12	1.5	.5	.5	9.0	7.5	8.0	11.5	10.5	11.0	20.5	18.5	19.5			
13	3.0	1.5	2.0	7.5	6.0	6.5	11.0	9.5	10.0	21.0	20.0	20.5			
14	5.0	3.0	4.5	8.0	5.5	6.5	13.5	10.0	11.5	20.0	17.5	19.0			
15	4.5	4.0	4.5	10.5	7.0	8.5	16.0	13.0	14.0	19.0	16.0	17.0			
16	5.5	4.5	5.0	10.5	9.5	10.0	18.0	15.5	16.5	17.5	15.0	16.0			
17	5.5	4.5	5.0	10.0	8.5	9.0	17.5	16.5	17.0	17.5	16.0	16.5			
18	6.5	4.5	5.0	8.5	6.5	7.5	16.5	14.0	15.0	19.0	17.0	18.0			
19	7.0	5.5	6.5	8.0	7.5	7.5	15.0	13.5	14.0	19.5	19.0	19.0			
20	5.5	4.0	5.0	8.5	8.0	8.0	16.0	14.0	14.5	20.0	18.5	19.0			
21	4.5	3.0	4.0	9.0	8.5	9.0	15.5	13.5	15.0	18.5	18.0	18.0			
22	5.5	4.5	5.0	14.5	8.5	9.5	13.5	12.0	12.5	18.5	16.5	17.5			
23	7.0	5.5	6.5	10.5	8.5	9.5	13.0	10.5	11.5	19.0	17.5	18.5			
24	8.5	7.0	7.5	12.0	9.5	11.0	13.5	12.5	13.0	20.0	18.0	19.0			
25	9.5	8.0	8.5	14.0	12.0	13.0	14.0	13.0	13.5	20.5	18.5	19.5			
26	11.0	9.0	10.0	14.5	12.5	13.5	15.0	12.5	13.5	20.0	17.5	18.5			
27	11.5	10.5	11.0	13.5	12.0	12.5	15.0	12.0	13.5	19.5	18.5	19.0			
28	10.5	9.0	9.5	12.0	10.0	10.5	15.5	12.5	14.0	19.5	18.5	19.0			
29	9.5	7.5	8.5	10.5	8.5	9.5	16.0	13.0	14.0	19.0	17.5	18.5			
30	---	---	---	11.5	9.0	10.0	16.5	13.0	14.5	18.5	17.0	17.5			
31	---	---	---	11.5	9.5	10.5	---	---	---	20.5	17.5	18.5			
MONTH	11.5	.5	3.9	14.5	5.0	9.4	18.0	9.5	12.8	22.5	13.5	18.6			



**SURFACE-WATER RECORDS**  
**Raccoon Creek Basin**

**03201980 LITTLE RACCOON CREEK NEAR EWINGTON, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

OXYGEN, DISSOLVED, MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY	
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN
1	8.4	6.5	7.1	7.3	6.6	7.1	13.4	12.6	12.9	14.6	14.4	14.5		
2	8.2	6.8	7.5	9.0	6.5	7.8	13.5	13.1	13.3	14.5	13.0	14.0		
3	8.4	7.9	8.1	8.4	6.8	7.9	13.3	12.7	13.0	13.0	11.8	12.7		
4	8.5	7.7	7.9	10.0	8.3	9.5	12.7	11.7	12.1	11.8	10.2	11.0		
5	8.1	7.5	7.8	10.8	10.0	10.4	11.7	11.2	11.4	10.4	10.0	10.2		
6	8.1	7.7	7.9	10.2	9.9	10.1	11.3	10.9	11.0	11.1	10.4	10.7		
7	8.4	7.8	8.0	10.2	9.7	9.9	11.9	11.2	11.6	12.1	11.1	11.7		
8	8.5	8.1	8.2	10.3	9.8	10.1	12.6	11.9	12.1	12.7	12.0	12.4		
9	8.7	8.1	8.3	10.4	9.3	9.8	12.8	12.5	12.7	12.5	12.3	12.4		
10	9.0	8.4	8.8	9.6	8.5	9.1	12.8	12.0	12.4	12.3	11.5	11.9		
11	8.9	8.5	8.8	8.7	7.9	8.4	12.1	11.5	11.7	11.8	11.5	11.6		
12	8.9	8.5	8.8	8.2	7.9	8.0	12.3	12.0	12.2	12.0	11.5	11.9		
13	8.7	8.2	8.4	8.6	8.0	8.3	12.1	11.7	11.9	12.1	11.8	11.9		
14	8.2	7.3	7.8	8.6	8.2	8.4	11.7	10.4	11.1	13.2	12.1	12.8		
15	8.1	7.5	7.8	8.8	8.4	8.6	10.4	9.8	10.1	13.8	13.2	13.5		
16	7.8	7.3	7.6	9.9	8.7	9.4	11.4	9.8	10.7	13.2	12.3	12.7		
17	7.4	6.7	7.2	10.7	9.9	10.5	12.0	11.4	11.8	13.2	12.3	12.9		
18	6.8	6.5	6.6	11.4	10.7	11.1	12.5	11.9	12.3	13.6	13.1	13.4		
19	6.5	5.9	6.2	12.2	11.3	11.6	12.6	12.2	12.5	13.5	13.1	13.4		
20	6.6	5.9	6.3	11.8	11.1	11.6	12.3	12.0	12.2	13.3	13.1	13.2		
21	7.4	6.4	7.0	11.1	10.3	10.8	12.6	12.0	12.4	14.2	13.3	13.8		
22	7.9	7.3	7.5	10.6	9.9	10.4	13.8	12.6	13.2	13.9	13.2	13.6		
23	8.1	7.4	7.8	10.3	9.4	9.9	14.1	13.8	14.0	13.2	12.8	13.0		
24	8.3	7.9	8.1	9.6	9.4	9.5	14.6	14.0	14.4	12.9	12.8	12.9		
25	8.8	8.3	8.6	9.5	9.3	9.4	14.7	14.3	14.6	13.2	12.7	13.0		
26	9.0	8.6	8.8	9.9	9.4	9.8	14.3	13.9	14.1	12.7	12.6	12.7		
27	9.4	8.9	9.3	10.7	9.9	10.4	14.0	13.9	14.0	12.7	12.4	12.6		
28	9.4	8.7	9.1	11.3	10.7	11.1	14.3	14.0	14.2	12.5	12.3	12.4		
29	9.2	8.7	8.9	11.9	11.2	11.6	14.1	13.9	14.0	12.3	11.9	12.1		
30	8.9	8.2	8.6	12.7	11.8	12.1	---	---	---	11.9	11.5	11.7		
31	8.3	7.3	8.0	---	---	---	---	---	---	11.7	11.5	11.6		
MONTH	9.4	5.9	8.0	12.7	6.5	9.8	14.7	9.8	12.5	14.6	10.0	12.5		

DAY	MAX	MIN	MEAN	FEBRUARY			MARCH			APRIL			MAY	
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN
1	12.0	11.6	11.8	10.5	10.2	10.4	10.7	10.0	10.4	9.7	9.0	9.4		
2	12.0	11.8	11.8	10.4	10.3	10.4	10.2	9.7	9.9	9.3	8.8	9.1		
3	12.0	11.8	11.9	10.6	10.4	10.5	9.8	9.1	9.4	9.5	8.7	9.1		
4	12.2	11.9	12.0	10.5	10.4	10.5	9.8	9.1	9.4	8.9	8.2	8.7		
5	12.4	12.2	12.4	10.5	10.3	10.4	10.3	9.8	10.1	8.6	8.2	8.4		
6	12.8	12.4	12.6	10.4	10.1	10.3	9.9	9.3	9.6	8.5	7.9	8.3		
7	12.8	12.6	12.7	10.2	9.9	10.1	9.7	9.1	9.4	8.3	7.8	8.1		
8	13.1	12.8	13.0	11.2	9.9	10.4	10.1	9.0	9.4	8.2	7.7	8.0		
9	13.2	12.9	13.1	10.6	10.1	10.4	10.9	10.1	10.7	8.4	7.6	8.0		
10	13.3	13.0	13.1	10.5	10.1	10.3	11.0	10.3	10.7	8.5	7.8	8.1		
11	13.4	13.1	13.1	10.5	10.2	10.3	10.3	10.2	10.3	9.0	8.3	8.7		
12	13.6	13.1	13.3	10.7	10.3	10.5	10.9	10.3	10.6	8.8	8.3	8.6		
13	13.2	12.7	13.0	10.7	10.5	10.6	11.4	10.9	11.1	8.6	8.0	8.3		
14	12.7	10.5	11.5	10.6	10.5	10.6	11.1	10.1	10.7	9.3	8.1	8.7		
15	11.6	10.8	11.3	10.5	10.3	10.4	10.1	9.3	9.8	9.8	8.7	9.3		
16	11.6	11.3	11.4	10.3	10.1	10.2	9.4	8.7	9.0	10.2	9.1	9.6		
17	11.5	11.2	11.3	10.3	10.0	10.1	9.1	8.8	8.9	9.8	9.1	9.4		
18	12.0	10.7	11.6	10.1	9.7	9.8	9.7	9.0	9.3	9.4	8.7	9.1		
19	11.1	10.5	10.9	9.9	9.7	9.8	9.9	9.7	9.8	8.9	8.1	8.4		
20	11.6	10.9	11.3	10.0	9.7	9.9	9.9	9.3	9.7	8.2	7.2	7.8		
21	11.9	11.5	11.7	10.1	9.5	9.7	9.9	9.3	9.6	8.7	7.9	8.3		
22	11.5	11.0	11.2	11.0	9.4	9.9	10.5	9.9	10.2	8.9	8.3	8.7		
23	11.1	10.6	10.9	10.4	9.6	10.1	10.9	10.3	10.6	8.3	7.7	8.0		
24	10.7	10.3	10.5	10.0	9.4	9.7	10.3	9.9	10.2	7.8	7.1	7.5		
25	10.7	10.4	10.6	9.5	8.9	9.2	9.9	9.6	9.8	7.8	7.3	7.6		
26	10.4	10.1	10.3	9.4	9.0	9.2	9.9	9.4	9.7	8.3	7.3	7.9		
27	10.2	9.9	10.0	9.6	9.2	9.4	10.0	9.3	9.6	8.0	7.6	7.8		
28	10.4	10.1	10.2	10.4	9.6	10.0	9.7	9.0	9.4	7.9	7.6	7.8		
29	10.5	10.3	10.4	11.1	10.4	10.7	9.9	9.1	9.5	7.9	7.3	7.6		
30	---	---	---	10.8	10.2	10.6	9.9	9.1	9.5	8.2	7.5	7.9		
31	---	---	---	10.8	10.2	10.5	---	---	---	8.5	8.1	8.3		
MONTH	13.6	9.9	11.7	11.2	8.9	10.2	11.4	8.7	9.9	10.2	7.1	8.4		





**SURFACE-WATER RECORDS**  
**Raccoon Creek Basin**

**03201980 LITTLE RACCOON CREEK NEAR EWINGTON, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

The following table lists the results of chemical analysis of surface-water samples collected from Little Raccoon Creek near Ewington. Samples were collected bi-monthly beginning in February 1999 to characterize water quality before reclamation projects to reduce acid-mine drainage were conducted.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[ft<sup>3</sup>/s, cubic feet per second; (00061), USGS National Water Information System parameter code; mg/L, milligrams per liter; μS/cm, microsiemens per centimeter; deg C, degrees Celsius; --, no data; e, estimated; μg/L, micrograms per liter]

Date	Time	Discharge, instantaneous (ft <sup>3</sup> /s) (00061)	Dissolved oxygen (mg/L) (00300)	pH, whole water, field (standard units) (00400)	Specific conductance, field (μS/cm) (00095)	Water temperature (deg C) (00010)	Air temperature (deg C) (00020)	Acidity, total, heated (mg/L as CaCo <sup>3</sup> ) (70508)	Alkalinity, water, dissolved, field (mg/L as CaCO <sub>3</sub> ) (39086)	
Oct.	28	0930	4.9	8.9	5.8	1080	7.0	7.5	21	1
Dec.	22	1030	25	12.0	6.6	652	2.5	-3.0	--	10
Feb.	23	1000	170	11.0	6.5	305	6.0	13.5	--	7
Apr.	28	1030	66	9.5	6.8	414	13.0	14.5	--	21
June	9	0945	19	8.0	7.5	512	18.5	24.0	--	50
Aug.	9	1015	6.1	6.5	7.6	764	23.0	28.0	--	74

Date	Bicarbonate water, dissolved field (mg/L as HCO <sub>3</sub> ) (00453)	Sulfate, dissolved (mg/L as SO <sub>4</sub> ) (00945)	Aluminum, dissolved (μg/L as Al) (01106)	Aluminum, total recoverable (μg/L as Al) (01105)	Iron, dissolved (μg/L as Fe) (01046)	Iron, total recoverable (μg/L as Fe) (01045)	Manganese, dissolved (μg/L as Mn) (01056)	Manganese, total recoverable (μg/L as Mn) (01055)	
Oct.	28	1	543	473	679	400	510	3910	3930
Dec.	22	13	274	72	496	2320	2590	3250	2900
Feb.	23	9	116	30	1290	1000	2840	976	984
Apr.	28	26	154	e11	727	100	1730	1390	1220
June	9	61	171	23	152	20	380	1090	1120
Aug.	9	91	271	19	98	<10	500	577	585

**SURFACE-WATER RECORDS**  
**Raccoon Creek Basin**

**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 mi<sup>2</sup>.

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 to 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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	60	118	105	e98	452	509	269	285	56	72	69
2	45	463	102	106	e100	404	440	296	189	52	54	43
3	43	1020	95	153	e100	358	479	302	143	54	50	45
4	49	873	91	1360	e100	325	1800	282	115	71	51	46
5	49	534	87	2300	108	296	2490	268	99	67	46	43
6	49	266	93	2180	106	271	2750	235	90	61	42	38
7	47	157	93	1430	109	244	2340	195	88	55	41	36
8	46	122	91	729	114	226	1600	167	86	52	40	38
9	48	107	89	493	122	210	1790	147	79	51	42	37
10	73	97	342	394	155	195	1990	130	76	178	105	33
11	80	88	657	337	244	188	1550	115	71	786	57	31
12	66	81	856	286	376	284	1210	105	66	254	48	31
13	60	79	733	257	689	438	960	97	63	98	59	43
14	54	77	2060	229	4060	561	790	90	88	121	74	37
15	33	73	2210	201	4510	479	661	85	85	273	57	36
16	34	71	1690	184	4760	518	569	84	73	130	49	30
17	31	69	1020	170	4830	1750	716	80	66	81	44	27
18	22	68	546	157	4940	2330	1450	76	81	80	44	25
19	22	68	365	152	8860	2080	1240	73	81	397	41	23
20	28	68	289	e140	9270	2250	1050	90	86	225	39	22
21	23	68	240	e140	9040	3690	888	130	156	99	37	25
22	21	70	198	e130	8070	3960	948	110	156	79	35	24
23	19	70	170	e120	6790	4110	1040	100	91	61	33	22
24	17	69	152	e120	4080	3510	891	110	75	52	85	26
25	17	71	130	e110	987	2000	729	161	66	48	61	134
26	18	270	126	e100	754	952	595	109	64	46	41	363
27	26	258	121	e100	631	743	486	110	61	45	45	247
28	30	234	111	e96	559	736	406	130	67	56	47	170
29	40	206	110	e94	497	867	348	250	70	64	40	127
30	49	147	106	e94	---	799	304	632	62	110	37	92
31	49	---	108	e96	---	627	---	470	---	140	34	---
MEAN	39.7	197	426	405	2588	1157	1101	177	95.9	127	50.0	65.4
MAX	80	1020	2210	2300	9270	4110	2750	632	285	786	105	363
MIN	17	60	87	94	98	188	304	73	61	45	33	22
CFSM	.07	.34	.73	.69	4.42	1.98	1.88	.30	.16	.22	.09	.11
IN.	.08	.38	.84	.80	4.77	2.28	2.10	.35	.18	.25	.10	.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2000, BY WATER YEAR (WY)

MEAN	121	307	651	952	1202	1484	1190	878	416	239	200	127
MAX	986	1812	2562	2739	2989	4165	3231	4200	2244	1752	1548	1252
(WY)	1976	1920	1979	1950	1939	1963	1939	1968	1941	1958	1926	1979
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 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1916 - 2000
ANNUAL MEAN	394	526	648
HIGHEST ANNUAL MEAN			1095
LOWEST ANNUAL MEAN			186
HIGHEST DAILY MEAN	3800	Jan 22	19600
LOWEST DAILY MEAN	15	Sep 13	1.1
ANNUAL SEVEN-DAY MINIMUM	18	Sep 11	1.3
INSTANTANEOUS PEAK FLOW		9290	19600
INSTANTANEOUS PEAK STAGE		21.64	29.11
INSTANTANEOUS LOW FLOW		17	1.1
ANNUAL RUNOFF (CFSM)	.67	.90	1.11
ANNUAL RUNOFF (INCHES)	9.15	12.25	15.04
10 PERCENT EXCEEDS	1190	1280	1710
50 PERCENT EXCEEDS	84	108	240
90 PERCENT EXCEEDS	24	38	25

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, 2.0 mi south of Prospect, Ohio, and 2.5 mi downstream from Patton Run.  
DRAINAGE AREA.—567 mi<sup>2</sup>.

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 above sea level (levels by U.S. Army Corps of Engineers). July 24, 1925, to Oct. 31, 1932, nonrecording gage at site 2.5 mi upstream at datum 4.8 ft higher. Oct. 16 to 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. Water-quality data formerly collected at this site

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of March 25, 1913, reached a stage of 21.1 ft, discharge; 27,000 ft<sup>3</sup>/s, computed by Franklin County Conservancy District, at site and datum used 1925-32.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	12	13	22	e39	583	318	223	643	162	47	33
2	15	15	13	20	e38	477	323	266	422	136	89	28
3	15	46	13	58	e37	378	498	323	295	138	101	26
4	14	46	13	1390	e37	306	1060	392	229	538	77	23
5	15	50	13	1660	e36	265	1170	312	252	653	54	18
6	14	38	18	1620	e36	234	866	280	654	431	44	18
7	13	26	19	1000	e36	204	688	265	1070	266	42	18
8	13	19	18	558	e36	182	3090	224	798	189	42	18
9	16	16	19	361	e36	169	3370	197	492	141	59	18
10	30	15	29	277	e70	158	4210	185	328	114	61	18
11	25	14	54	242	e500	146	3700	175	244	98	49	23
12	18	12	46	202	e1000	135	2360	158	195	87	38	25
13	19	12	53	173	e1500	129	1200	142	312	79	33	43
14	27	12	141	138	e1800	131	779	131	492	72	30	61
15	23	12	321	107	1660	134	634	117	1060	91	27	57
16	16	12	349	e90	1380	142	540	104	1020	227	25	45
17	14	12	264	e84	1310	174	461	96	1540	230	22	33
18	14	12	170	e78	1410	183	590	94	1340	141	36	27
19	14	12	112	e70	1900	191	690	230	1480	96	39	23
20	14	12	81	e66	2130	447	628	632	1780	74	40	20
21	13	12	63	e62	2100	1020	581	746	1920	61	59	30
22	13	13	44	e60	1490	1160	1150	486	1460	53	50	30
23	13	13	36	e56	1500	834	1540	327	1340	49	40	25
24	13	12	46	e50	1670	599	1390	261	926	42	41	43
25	13	12	45	e48	1540	481	858	220	553	39	35	61
26	12	13	31	e45	1190	382	599	187	447	36	27	194
27	11	16	25	e43	903	341	460	155	474	34	28	169
28	11	16	26	e42	740	347	361	199	341	34	38	124
29	11	13	26	e41	703	439	302	894	249	44	37	93
30	12	13	24	e40	---	526	255	1380	199	39	37	69
31	12	---	24	e40	---	421	---	1130	---	39	38	---
TOTAL	482	538	2149	8743	26827	11318	34671	10531	22555	4433	1385	1413
MEAN	15.5	17.9	69.3	282	925	365	1156	340	752	143	44.7	47.1
MAX	30	50	349	1660	2130	1160	4210	1380	1920	653	101	194
MIN	11	12	13	20	36	129	255	94	195	34	22	18
CFSM	.03	.03	.12	.50	1.63	.64	2.04	.60	1.33	.25	.08	.08
IN.	.03	.04	.14	.57	1.76	.74	2.27	.69	1.48	.29	.09	.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 2000, BY WATER YEAR (WY)

MEAN	114	255	478	712	781	1008	880	487	410	267	122	93.9
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 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1926 - 2000
ANNUAL TOTAL	123184.6	125045	
ANNUAL MEAN	337	342	466
HIGHEST ANNUAL MEAN			833
LOWEST ANNUAL MEAN			127
HIGHEST DAILY MEAN	5440	4210	10000
LOWEST DAILY MEAN	9.5	11	4.5
ANNUAL SEVEN-DAY MINIMUM	9.9	12	5.9
INSTANTANEOUS PEAK FLOW		4310	10100
INSTANTANEOUS PEAK STAGE		9.80	15.00
INSTANTANEOUS LOW FLOW		11	3.5
ANNUAL RUNOFF (CFSM)	.60	.60	.82
ANNUAL RUNOFF (INCHES)	8.08	8.20	11.16
10 PERCENT EXCEEDS	1150	1140	1290
50 PERCENT EXCEEDS	46	86	128
90 PERCENT EXCEEDS	12	14	19

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—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 TEMPERATURES: June 1998 to current year.

DISSOLVED OXYGEN: June 1998 to current year.

INSTRUMENTATION.—Water-quality monitor. Electronic data logger. Set for 1-hour interval.

REMARKS.—Interruptions in the water-quality were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: Maximum, 1,830 microsiemens, Jan. 16, 1999; minimum, 289 microsiemens, Apr. 9, 2000.

pH: Maximum, 9.4 units, Nov. 28, 1999; minimum, 6.9 units, JApr. 10, 29, May 3 and 16.

WATER TEMPERATURES: Maximum, 32.5°C, July 31, 1999; minimum, 0.0°C, on several days during winter.

DISSOLVED OXYGEN: Maximum, 18.7 mg/L, Nov. 28, 1999; minimum, 0.9 mg/L, July 23, 1999.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum, 1,340 microsiemens, Feb. 6; minimum, 289 microsiemens, Apr. 9.

pH: Maximum, 9.4 units, Nov. 28; minimum, 6.9 units, Apr. 10, 29, May 3 and 16.

WATER TEMPERATURES: Maximum, 28.0°C, Sept. 2; minimum, 0.0°C, on multiple days in Dec., Jan., and Feb.

DISSOLVED OXYGEN: Maximum, 20.0 mg/L, Nov. 25; minimum, 3.0 mg/L, Nov. 3, 6, and 7.

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1240	1200	1220	1100	1090	1100	1160	1110	1130	1070	1020	1050
2	1260	1230	1250	1090	949	1020	1130	1090	1120	1050	1020	1040
3	1260	1230	1250	1050	972	1020	1110	1080	1100	1020	631	922
4	1240	1230	1230	1110	1050	1080	1090	1060	1070	650	368	490
5	1230	1210	1220	1120	950	1060	1080	997	1040	432	373	391
6	1210	1190	1190	950	684	813	1010	928	975	480	397	466
7	---	---	---	731	667	684	964	926	933	521	468	490
8	---	---	---	825	731	779	1030	964	996	595	521	561
9	---	---	---	859	825	843	1070	1030	1060	649	595	622
10	---	---	---	862	851	858	1100	1020	1060	681	649	666
11	---	---	---	875	855	863	1080	977	1040	716	681	702
12	---	---	---	894	872	880	998	973	984	743	716	737
13	1180	1160	1180	914	894	901	986	930	952	764	736	750
14	---	---	---	938	914	925	930	721	818	787	764	775
15	---	---	---	964	938	952	854	632	738	801	787	795
16	879	815	836	983	963	973	635	596	613	824	800	810
17	845	819	825	1030	981	1010	668	596	638	847	824	837
18	926	845	885	1050	1030	1040	707	668	696	839	827	833
19	959	926	949	1070	1040	1050	746	694	712	854	837	844
20	961	932	947	1070	1050	1060	801	746	772	885	853	864
21	955	934	941	1080	1060	1070	879	801	834	935	885	904
22	981	955	974	1080	1060	1070	945	879	915	963	935	947
23	991	980	986	1110	1080	1100	983	945	962	969	958	965
24	998	969	985	1120	1100	1120	1020	977	989	1020	967	993
25	988	972	980	1150	1110	1130	1040	1000	1020	1060	1020	1050
26	1000	974	992	1130	1080	1100	1050	1020	1040	1060	1030	1040
27	---	---	---	1110	1070	1090	1060	1040	1050	1120	1060	1090
28	---	---	---	1100	1070	1080	1080	1060	1070	1160	1120	1150
29	1100	1090	1100	1130	1090	1110	1060	1030	1050	1190	1160	1180
30	1130	1100	1120	1160	1130	1140	1050	1020	1040	1190	1180	1190
31	1120	1090	1110	---	---	---	1040	1010	1030	1200	1180	1190
MONTH	1260	815	1060	1160	667	997	1160	596	950	1200	368	850



**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**03219500 SCIOTO RIVER NEAR PROSPECT, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.1	7.6	7.8	8.0	7.3	7.7	9.0	8.6	8.8	8.1	7.9	8.0			
2	8.0	7.6	7.8	8.0	7.4	7.7	8.9	8.4	8.7	8.1	7.9	8.0			
3	8.0	7.5	7.8	7.8	7.7	7.7	8.7	8.2	8.5	8.1	7.8	7.9			
4	7.8	7.5	7.6	7.8	7.6	7.7	8.7	8.1	8.4	7.8	7.5	7.6			
5	7.8	7.6	7.7	7.7	7.5	7.6	8.4	8.0	8.2	7.7	7.6	7.6			
6	7.8	7.5	7.7	7.5	7.4	7.5	8.6	7.9	8.2	7.7	7.7	7.7			
7	---	---	---	7.7	7.4	7.5	8.9	8.1	8.4	7.7	7.7	7.7			
8	---	---	---	8.0	7.5	7.7	8.8	8.2	8.5	7.8	7.7	7.8			
9	---	---	---	8.2	7.6	7.8	8.8	8.2	8.5	7.8	7.8	7.8			
10	---	---	---	8.2	7.6	7.9	8.8	8.1	8.4	7.9	7.8	7.9			
11	---	---	---	8.4	7.6	7.9	8.6	8.0	8.2	8.0	7.9	7.9			
12	---	---	---	8.5	7.7	8.0	8.3	8.0	8.1	8.0	7.9	8.0			
13	7.9	7.3	7.6	8.6	7.7	8.1	8.1	7.9	8.0	8.0	7.9	8.0			
14	---	---	---	8.6	7.7	8.2	7.9	7.8	7.9	8.0	8.0	8.0			
15	---	---	---	8.6	7.8	8.2	7.9	7.7	7.8	8.1	8.0	8.0			
16	8.0	7.1	7.4	8.7	7.9	8.3	7.8	7.7	7.8	8.1	8.0	8.0			
17	7.4	7.2	7.3	8.8	7.6	8.3	7.9	7.8	7.8	8.1	8.0	8.0			
18	7.9	7.3	7.5	8.9	8.0	8.5	7.8	7.8	7.8	8.1	8.0	8.0			
19	7.8	7.3	7.5	8.9	8.0	8.5	7.9	7.8	7.9	8.1	8.0	8.0			
20	7.8	7.2	7.5	8.8	7.8	8.4	8.0	7.9	7.9	8.0	8.0	8.0			
21	7.8	7.2	7.5	8.6	7.8	8.2	8.1	7.9	8.0	8.0	7.9	8.0			
22	7.8	7.3	7.5	8.7	7.8	8.3	8.1	7.9	8.0	7.9	7.9	7.9			
23	7.6	7.3	7.5	8.7	7.8	8.3	8.2	8.0	8.0	7.9	7.8	7.9			
24	7.9	7.3	7.6	8.8	7.8	8.3	8.1	7.9	8.0	7.9	7.8	7.8			
25	7.9	7.3	7.6	9.1	8.1	8.6	8.1	7.9	7.9	7.9	7.7	7.8			
26	8.0	7.4	7.7	8.9	8.4	8.7	8.0	7.9	7.9	7.9	7.8	7.8			
27	---	---	---	9.2	8.5	8.8	8.0	7.9	7.9	8.0	7.8	7.9			
28	---	---	---	9.4	8.7	9.1	7.9	7.8	7.9	8.1	7.9	8.0			
29	8.0	7.1	7.5	9.3	8.9	9.1	8.0	7.8	7.9	8.0	7.9	7.9			
30	8.2	7.3	7.8	9.2	8.8	9.0	8.0	7.9	7.9	8.0	7.9	7.9			
31	8.0	7.3	7.6	---	---	---	8.1	7.9	8.0	8.0	7.8	7.9			
MONTH	8.2	7.1	7.6	9.4	7.3	8.2	9.0	7.7	8.1	8.1	7.5	7.9			

DAY	MAX	MIN	MEAN	FEBRUARY			MARCH			APRIL			MAY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.9	7.8	7.8	7.7	7.6	7.7	7.7	7.6	7.7	7.8	7.1	7.5			
2	7.9	7.8	7.8	7.7	7.7	7.7	7.7	7.6	7.6	7.7	7.0	7.4			
3	7.9	7.8	7.9	7.8	7.7	7.7	7.6	7.5	7.5	7.6	6.9	7.4			
4	7.9	7.8	7.9	7.8	7.7	7.7	7.5	7.2	7.3	7.7	7.3	7.6			
5	7.9	7.7	7.8	7.8	7.7	7.8	7.3	7.3	7.3	7.6	7.5	7.6			
6	7.9	7.7	7.8	7.8	7.6	7.7	7.4	7.3	7.4	---	---	---			
7	8.1	7.8	7.9	7.7	7.6	7.7	7.4	7.3	7.4	---	---	---			
8	8.0	7.8	7.9	7.7	7.6	7.6	7.3	7.1	7.1	7.5	7.4	7.5			
9	8.1	7.8	7.9	7.8	7.6	7.7	7.1	7.0	7.1	7.5	7.4	7.5			
10	8.2	7.9	8.0	7.8	7.7	7.8	7.1	6.9	7.0	7.7	7.4	7.5			
11	7.9	7.7	7.8	7.8	7.7	7.8	7.1	7.1	7.1	7.7	7.6	7.6			
12	7.7	7.6	7.6	8.0	7.8	7.9	7.2	7.1	7.2	7.7	7.6	7.6			
13	7.6	7.6	7.6	8.1	7.8	7.9	7.2	7.2	7.2	7.7	7.6	7.7			
14	7.6	7.5	7.6	8.1	7.9	8.0	7.4	7.2	7.3	7.8	7.2	7.6			
15	7.6	7.6	7.6	8.3	7.8	8.0	7.4	7.4	7.4	7.8	7.2	7.5			
16	7.6	7.5	7.5	8.1	8.0	8.0	---	---	---	7.8	6.9	7.5			
17	7.6	7.5	7.6	8.2	8.0	8.1	7.5	7.4	7.4	7.9	7.2	7.6			
18	7.6	7.5	7.6	8.1	7.9	8.0	7.6	7.5	7.5	7.8	7.7	7.7			
19	7.5	7.4	7.5	8.0	7.9	8.0	7.6	7.5	7.5	8.2	8.0	8.2			
20	7.4	7.4	7.4	7.9	7.7	7.8	7.6	7.6	7.6	8.1	7.5	7.8			
21	7.4	7.4	7.4	7.7	7.6	7.7	7.6	7.6	7.6	8.0	7.3	7.7			
22	7.4	7.4	7.4	7.7	7.7	7.7	7.6	7.1	7.5	8.0	7.3	7.8			
23	7.4	7.3	7.4	7.7	7.6	7.7	7.5	7.4	7.5	7.9	7.4	7.8			
24	7.3	7.3	7.3	7.6	7.6	7.6	7.5	7.5	7.5	7.8	7.4	7.7			
25	7.4	7.3	7.3	7.7	7.6	7.7	7.6	7.5	7.5	7.8	7.5	7.7			
26	7.4	7.4	7.4	7.8	7.7	7.7	7.6	7.6	7.6	7.9	7.6	7.8			
27	7.5	7.4	7.4	7.8	7.7	7.8	7.6	7.5	7.5	7.9	7.8	7.8			
28	7.5	7.5	7.5	7.8	7.7	7.8	7.6	7.0	7.3	7.9	7.8	7.8			
29	7.6	7.5	7.5	7.8	7.7	7.7	7.8	6.9	7.4	7.8	7.4	7.6			
30	---	---	---	7.7	7.7	7.7	7.8	7.1	7.5	7.6	7.6	7.6			
31	---	---	---	7.7	7.6	7.7	---	---	---	7.6	7.5	7.6			
MONTH	8.2	7.3	7.6	8.3	7.6	7.8	7.8	6.9	7.4	8.2	6.9	7.6			



**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**03219500 SCIOTO RIVER NEAR PROSPECT, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	18.5	14.0	16.0	15.5	12.0	14.0	4.5	1.0	2.5	2.0	.0	1.0			
2	18.5	13.5	16.0	14.5	7.5	11.0	5.0	1.5	3.5	6.0	1.5	3.5			
3	18.0	14.5	16.5	8.5	6.5	7.5	6.5	4.5	5.5	7.0	4.0	5.0			
4	16.5	13.5	15.0	10.5	5.5	7.5	9.0	6.0	7.5	7.5	5.5	7.0			
5	16.5	11.5	14.0	11.5	7.0	9.0	9.0	8.0	8.5	---	---	---			
6	---	---	---	12.5	8.5	10.0	8.5	5.5	6.5	4.0	3.0	3.0			
7	---	---	---	12.0	7.0	9.0	6.5	4.0	5.0	3.0	2.5	2.5			
8	---	---	---	11.5	6.0	9.0	---	---	---	2.5	2.0	2.0			
9	---	---	---	14.0	8.5	11.0	6.0	3.5	5.0	3.0	2.0	2.5			
10	---	---	---	14.5	10.5	12.5	8.0	5.0	6.5	4.5	3.0	3.5			
11	---	---	---	14.0	10.0	12.0	6.0	3.5	4.5	4.0	3.0	3.5			
12	---	---	---	12.0	8.0	10.0	4.5	3.5	4.0	4.5	3.0	3.5			
13	---	---	---	13.0	9.0	11.0	5.5	4.5	5.0	3.5	2.0	3.0			
14	---	---	---	13.5	9.0	11.5	6.0	5.0	5.5	2.5	.5	1.5			
15	---	---	---	10.0	6.5	8.0	6.0	5.5	5.5	2.0	.5	1.0			
16	19.0	13.0	16.0	9.0	5.0	6.5	5.5	4.0	5.0	2.0	.5	1.5			
17	17.0	13.0	15.0	---	---	---	4.0	3.5	3.5	1.0	.0	.5			
18	14.5	10.5	12.5	8.0	3.5	6.0	3.5	2.5	3.0	.5	.0	.5			
19	13.0	10.0	11.5	10.0	5.0	8.0	4.0	2.0	3.0	.5	.0	.5			
20	13.5	9.0	11.0	10.5	8.0	9.5	5.0	2.0	4.0	.5	.0	.5			
21	---	---	---	11.5	7.5	9.0	2.5	1.0	1.5	.5	.0	.0			
22	12.5	10.0	11.0	13.0	9.0	11.0	2.0	.0	1.0	.5	.0	.0			
23	10.5	8.0	9.0	13.0	9.0	11.0	2.0	.0	.5	.5	.0	.0			
24	10.0	7.0	8.0	12.5	9.0	11.0	.5	.0	.5	.5	.0	.0			
25	11.0	6.0	8.5	10.0	7.5	8.5	.5	.0	.5	.5	.0	.0			
26	11.5	7.5	9.5	9.0	7.0	8.5	.5	.0	.5	---	---	---			
27	---	---	---	8.0	6.0	7.0	.5	.0	.5	.5	.0	.0			
28	---	---	---	8.5	4.5	6.0	.0	.0	.0	---	---	---			
29	---	---	---	6.0	3.5	5.0	.5	.0	.5	.5	.0	.0			
30	15.0	11.0	13.0	4.5	2.0	3.5	1.0	.0	.5	.0	.0	.0			
31	14.5	12.0	13.5	---	---	---	1.0	.0	.5	.5	.0	.0			
MONTH	19.0	6.0	12.5	15.5	2.0	9.0	9.0	.0	3.5	7.5	.0	1.5			

DAY	MAX	MIN	MEAN	FEBRUARY			MARCH			APRIL			MAY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	.5	.0	.0	8.5	7.5	8.0	11.0	8.5	10.0	16.5	14.5	15.5			
2	.5	.0	.5	7.5	6.5	7.0	11.0	10.0	10.5	17.0	14.0	15.5			
3	.0	.0	.0	7.0	5.5	6.5	11.5	10.5	11.0	18.0	14.5	16.5			
4	.5	.0	.0	7.5	5.5	6.5	11.0	9.5	10.5	18.0	16.5	17.0			
5	.5	.0	.0	8.5	6.0	7.5	9.5	8.0	9.0	19.5	17.0	18.0			
6	.5	.0	.0	---	---	---	10.5	8.5	9.5	---	---	---			
7	.5	.0	.0	11.0	8.0	9.5	10.5	9.5	10.0	---	---	---			
8	.5	.0	.0	13.0	9.5	11.5	10.5	8.5	10.0	---	---	---			
9	.5	.0	.5	14.0	11.5	12.5	8.5	6.5	7.0	---	---	---			
10	1.0	.0	.5	12.5	10.0	11.0	---	---	---	22.5	20.0	21.0			
11	.5	.0	.5	10.0	6.0	8.0	7.5	6.5	7.0	21.0	19.0	19.5			
12	1.0	.0	.5	8.5	5.0	6.5	7.5	7.0	7.5	22.0	18.5	20.5			
13	.5	.5	.5	7.5	5.0	6.5	9.0	7.0	8.0	21.5	19.0	20.5			
14	1.0	.5	.5	9.0	5.5	7.0	11.5	8.5	10.0	20.5	17.5	18.5			
15	1.5	.5	1.0	---	---	---	13.5	11.0	12.5	19.0	16.5	17.5			
16	1.5	1.0	1.0	9.5	7.0	8.5	---	---	---	17.0	15.5	16.0			
17	1.5	.5	1.0	8.0	6.0	7.0	---	---	---	18.5	14.5	16.5			
18	2.0	1.5	2.0	7.5	4.5	6.0	13.5	11.5	12.5	---	---	---			
19	2.0	1.5	2.0	6.5	5.5	6.0	11.5	11.0	11.0	---	---	---			
20	1.5	1.0	1.0	7.0	6.5	7.0	13.0	11.0	12.0	17.5	15.5	16.0			
21	2.0	.5	1.5	7.5	7.0	7.5	12.5	11.5	12.0	16.0	15.5	15.5			
22	4.0	2.0	3.0	8.5	7.5	8.0	11.5	10.5	11.0	16.5	15.0	16.0			
23	5.5	4.0	5.0	10.0	8.0	9.0	11.0	9.5	10.0	17.0	15.5	16.0			
24	7.5	5.5	6.5	12.0	9.5	10.5	12.5	10.5	11.5	18.5	16.0	17.5			
25	9.0	7.5	8.5	13.5	11.5	12.5	13.5	12.0	12.5	19.0	17.0	18.0			
26	10.5	9.0	10.0	13.5	11.5	12.5	---	---	---	19.5	17.0	18.5			
27	11.0	10.0	10.5	13.5	12.0	12.5	---	---	---	19.0	17.5	18.0			
28	10.0	9.0	9.5	12.0	9.5	11.0	15.0	12.5	13.5	18.0	17.0	17.5			
29	9.0	8.0	8.5	10.5	9.0	9.5	15.5	13.0	14.5	17.0	15.5	16.0			
30	---	---	---	10.0	8.5	9.0	16.5	13.0	15.0	16.5	15.5	16.0			
31	---	---	---	10.5	8.0	9.5	---	---	---	18.0	16.0	17.0			
MONTH	11.0	.0	2.5	14.0	4.5	9.0	16.5	6.5	10.5	22.5	14.0	17.5			





**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**03219500 SCIOTO RIVER NEAR PROSPECT, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

OXYGEN, DISSOLVED, MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.9	4.0	6.4	---	---	---	9.7	6.4	8.1	14.3	10.5	11.9			
2	10.0	4.1	6.9	---	---	---	11.7	7.2	9.5	13.4	10.5	11.8			
3	9.7	4.4	6.8	4.8	3.0	3.7	15.9	8.2	12.0	12.2	10.1	10.8			
4	7.6	4.1	5.8	6.1	3.4	4.3	16.3	8.9	12.4	10.4	8.4	9.1			
5	8.7	4.0	6.4	5.0	3.3	3.9	12.4	7.7	10.4	9.2	7.4	8.2			
6	8.7	3.8	6.4	4.8	3.0	3.6	14.7	7.6	10.5	8.0	7.2	7.7			
7	---	---	---	7.0	3.0	4.5	19.5	9.1	13.3	8.3	7.7	8.0			
8	---	---	---	8.4	3.6	5.5	18.1	10.6	13.4	9.2	7.9	8.5			
9	---	---	---	9.6	4.3	6.4	17.9	10.7	13.2	9.4	8.2	9.0			
10	---	---	---	10.1	4.5	6.8	17.6	10.5	12.7	9.2	8.3	8.9			
11	---	---	---	11.0	4.8	7.2	15.4	9.6	11.6	9.0	8.7	8.9			
12	---	---	---	12.1	5.0	8.3	13.5	9.3	11.1	9.3	8.5	8.9			
13	9.8	4.1	7.1	13.1	5.7	9.1	11.4	8.1	9.4	9.3	8.2	8.8			
14	---	---	---	13.8	6.0	9.6	10.7	8.1	9.6	9.9	8.9	9.3			
15	---	---	---	14.2	6.5	10.2	9.8	8.3	9.0	10.4	9.3	9.9			
16	11.0	5.6	8.0	15.2	7.5	11.1	10.0	8.4	9.5	10.6	9.8	10.2			
17	6.8	4.5	5.7	18.2	8.3	12.9	10.3	9.9	10.1	10.5	9.7	10.0			
18	11.4	4.7	7.7	18.8	7.6	13.1	10.6	10.1	10.3	10.1	9.4	9.8			
19	11.9	6.1	8.8	17.9	6.9	12.4	11.4	10.2	10.6	10.6	9.9	10.2			
20	---	---	---	17.2	5.5	11.9	11.4	10.3	10.8	10.6	10.0	10.2			
21	---	---	---	15.8	5.4	10.4	12.8	10.8	11.5	10.7	10.0	10.4			
22	12.4	6.8	9.7	16.2	5.1	10.9	13.5	11.2	12.0	11.0	10.4	10.6			
23	12.2	8.2	10.4	15.8	4.9	10.6	13.8	11.2	12.2	10.5	10.0	10.3			
24	13.8	8.6	11.0	17.3	4.9	11.2	13.2	11.3	12.2	10.9	10.0	10.5			
25	11.2	6.9	9.1	20.0	6.8	13.4	13.3	11.2	12.0	11.2	10.3	10.7			
26	---	---	---	15.9	8.9	12.3	13.1	10.8	11.7	---	---	---			
27	---	---	---	18.8	9.1	13.2	13.1	10.5	11.6	---	---	---			
28	---	---	---	13.5	8.1	10.6	11.4	10.3	10.8	11.0	10.1	10.7			
29	---	---	---	9.1	6.7	7.8	13.0	9.8	11.1	11.5	8.9	10.5			
30	---	---	---	8.9	6.3	7.5	13.3	9.9	11.3	10.8	9.1	9.8			
31	---	---	---	---	---	---	14.0	10.1	11.8	11.1	8.8	9.9			
MONTH	13.8	3.8	7.7	20.0	3.0	9.0	19.5	6.4	11.2	14.3	7.2	9.8			
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN			
		FEBRUARY			MARCH			APRIL			MAY				
1	11.8	8.3	10.0	---	---	---	11.5	9.9	10.7	10.4	8.8	9.4			
2	13.1	8.2	10.4	---	---	---	10.4	9.8	10.2	10.0	8.5	9.3			
3	11.2	9.1	10.3	---	---	---	10.6	9.5	9.9	8.9	8.1	8.4			
4	12.2	8.9	10.1	---	---	---	10.0	8.9	9.4	8.9	8.1	8.4			
5	13.3	8.5	10.6	---	---	---	10.1	8.9	9.5	8.5	7.5	8.0			
6	13.8	9.4	11.4	11.1	8.8	10.5	10.6	9.7	10.1	---	---	---			
7	16.4	10.0	12.5	9.9	7.8	9.0	10.4	9.4	9.9	---	---	---			
8	16.6	11.1	14.0	9.5	7.6	8.5	9.5	7.9	8.4	7.8	6.4	7.0			
9	18.1	11.8	14.8	8.9	7.2	7.8	8.7	8.0	8.4	7.2	6.1	6.5			
10	18.5	13.1	14.8	8.0	6.5	7.2	10.1	8.3	9.2	7.7	6.0	6.7			
11	14.5	10.3	12.5	7.8	6.3	6.9	10.4	9.3	9.9	7.7	6.3	6.8			
12	12.5	10.6	11.7	9.8	6.7	8.0	11.1	9.8	10.3	7.8	6.1	6.9			
13	12.4	11.3	11.7	10.6	7.6	9.0	11.1	9.8	10.5	8.0	6.2	7.0			
14	11.5	10.7	11.1	10.6	7.8	9.1	12.1	10.3	11.3	8.5	6.7	7.4			
15	11.8	10.6	11.3	13.8	7.8	10.2	11.3	9.8	10.7	8.4	6.6	7.4			
16	11.8	11.1	11.6	11.4	10.1	11.0	---	---	---	8.6	6.7	7.5			
17	11.9	10.9	11.4	13.0	9.8	10.9	8.0	7.0	7.3	9.7	7.2	8.1			
18	11.6	10.7	11.1	12.3	9.7	10.8	8.8	7.6	8.1	10.0	7.2	8.1			
19	10.9	10.0	10.4	11.5	9.4	10.4	10.3	8.8	9.6	---	---	---			
20	10.8	10.2	10.6	11.1	9.9	10.4	10.9	9.5	10.3	9.6	6.0	8.1			
21	10.9	9.5	10.4	11.0	9.4	10.4	10.3	9.9	10.2	9.3	8.4	8.9			
22	10.8	10.3	10.6	11.5	9.6	11.1	10.9	9.3	9.9	9.9	9.1	9.4			
23	11.2	9.9	10.6	12.2	10.4	11.4	11.4	9.8	10.9	10.0	8.7	9.5			
24	10.6	9.2	10.2	12.4	10.9	11.7	11.2	10.2	10.8	8.8	7.8	8.4			
25	10.2	7.9	9.3	12.1	10.9	11.6	11.2	9.6	10.4	7.9	6.7	7.4			
26	---	---	---	11.7	10.5	11.1	10.7	9.9	10.2	6.8	4.2	5.9			
27	---	---	---	11.5	10.3	10.9	---	---	---	4.2	3.9	4.0			
28	---	---	---	11.2	9.9	10.5	10.1	9.4	9.7	4.4	3.9	4.1			
29	---	---	---	11.4	9.9	10.7	10.3	9.3	9.8	4.8	3.9	4.4			
30	---	---	---	11.4	10.1	10.8	10.5	9.0	9.8	5.1	4.8	5.0			
31	---	---	---	11.4	10.1	10.8	---	---	---	5.2	5.0	5.1			
MONTH	18.5	7.9	11.3	13.8	6.3	10.0	12.1	7.0	9.8	10.4	3.9	7.3			



**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**03220000 MILL CREEK NEAR BELLEPOINT, OHIO**

LOCATION.—Latitude 40°14'54", longitude 83°10'26", Delaware County, Hydrologic Unit 05060001, on left bank at upstream 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 mi<sup>2</sup>.

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 above sea level (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 18.0 ft occurred in March 1913.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	6.0	5.3	12	e13	68	54	41	80	17	7.0	5.7
2	9.0	7.4	4.9	10	e13	57	137	147	58	15	10	9.7
3	6.0	42	4.4	220	e13	48	502	250	49	19	23	5.1
4	9.4	23	4.7	2010	e12	45	1030	112	39	39	18	5.9
5	5.2	13	4.9	1210	e12	42	499	77	114	74	14	7.3
6	5.1	13	5.4	269	e12	35	199	57	788	39	9.9	6.1
7	5.9	8.8	5.4	144	e12	35	608	51	292	26	13	15
8	7.3	5.9	5.2	99	e12	33	5070	42	127	19	27	12
9	7.5	4.7	4.3	72	e20	32	2950	36	77	14	20	9.1
10	15	4.1	9.4	62	e40	28	559	40	61	13	34	7.9
11	19	3.9	34	e52	e900	28	273	38	50	12	28	12
12	8.9	3.7	16	e45	e1000	28	180	33	52	10	35	11
13	5.2	3.4	24	e38	623	32	129	34	45	10	17	14
14	5.3	3.0	117	e33	1650	30	105	48	46	46	11	33
15	4.3	3.4	115	e28	883	30	83	38	56	931	10	23
16	6.3	3.1	83	e24	588	40	67	31	98	276	7.1	14
17	6.1	2.8	52	e22	459	126	63	26	345	89	7.7	12
18	6.9	2.9	34	e19	752	87	67	26	421	47	98	8.1
19	5.5	3.0	25	e18	1460	88	99	578	160	33	156	6.1
20	5.3	3.4	20	e16	535	857	73	697	118	24	67	6.0
21	4.6	3.9	18	e15	241	1000	130	188	184	21	33	7.5
22	5.0	5.1	15	e14	232	362	201	102	256	15	18	13
23	4.5	3.4	14	e14	310	190	195	93	98	15	14	38
24	5.8	2.9	12	e14	245	124	119	356	48	12	13	231
25	5.1	3.4	12	e13	162	95	82	202	42	8.0	9.4	381
26	3.6	5.9	10	e13	118	73	64	90	48	10	9.6	156
27	3.6	5.7	8.6	e13	99	73	54	57	38	9.7	7.6	166
28	3.8	8.2	9.6	e13	84	91	46	225	30	7.0	14	79
29	4.5	5.4	8.9	e13	87	103	41	435	26	11	9.6	47
30	6.3	4.6	8.2	e13	---	91	37	298	20	8.2	8.5	31
31	4.7	---	8.2	e13	---	70	---	126	---	8.5	5.9	---
TOTAL	217.7	209.0	698.4	4551	10587	4041	13716	4574	3866	1878.4	755.3	1372.5
MEAN	7.02	6.97	22.5	147	365	130	457	148	129	60.6	24.4	45.8
MAX	23	42	117	2010	1650	1000	5070	697	788	931	156	381
MIN	3.6	2.8	4.3	10	12	28	37	26	20	7.0	5.9	5.1
CFSM	.04	.04	.13	.82	2.05	.73	2.57	.83	.72	.34	.14	.26
IN.	.05	.04	.15	.95	2.21	.84	2.87	.96	.81	.39	.16	.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2000, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
25.7	95.3	168	255	284	328
449	553	1130	1227	768	963
1987	1973	1991	1950	1975	1978
.90	1.99	2.17	3.82	8.09	36.1
1954	1964	1964	1977	1964	1983

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1944 - 2000
ANNUAL TOTAL	34788.8	46466.3	
ANNUAL MEAN	95.3	127	158
HIGHEST ANNUAL MEAN			258
LOWEST ANNUAL MEAN			51.4
HIGHEST DAILY MEAN	2940	Jan 23	5070
LOWEST DAILY MEAN	2.8	Nov 17	2.8
ANNUAL SEVEN-DAY MINIMUM	3.1	Nov 13	3.1
INSTANTANEOUS PEAK FLOW			5710
INSTANTANEOUS PEAK STAGE			9.14
INSTANTANEOUS LOW FLOW			2.4
ANNUAL RUNOFF (CFSM)	.54	.71	.89
ANNUAL RUNOFF (INCHES)	7.27	9.71	12.09
10 PERCENT EXCEEDS	239	270	355
50 PERCENT EXCEEDS	13	28	28
90 PERCENT EXCEEDS	4.4	5.2	4.0

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**

**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 mi<sup>2</sup>.

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 TEMPERATURES: June 1998 to September 1998.

DISSOLVED OXYGEN: June 1998 to current year.

INSTRUMENTATION.—Water-quality monitor. Electronic data logger. Set for 1-hour interval.

REMARKS.—Interruptions in the water-quality record were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: Maximum, 1,400 microsiemens, Dec. 21, 1998; minimum, 229 microsiemens, Apr. 9, 2000.

pH: Maximum, 8.9 units, July 18, Dec. 12, 1998, and Jan. 30, 2000; minimum, 6.7 units, Mar. 24, 2000.

WATER TEMPERATURES: Maximum, 30.5°C, July 30, 1999; minimum, 0.5°C, Feb. 13-17, 2000.

DISSOLVED OXYGEN: Maximum, 17.4 mg/L, May 12, 1999; minimum, 0.2 mg/L, Aug. 13,14, 1999, Aug. 25 and 26, 2000.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum, 1,020 microsiemens, Nov. 10; minimum, 229 microsiemens, Apr. 9.

pH: Maximum, 8.9 units, Dec. 12 and Jan. 30; minimum, 6.7 units, Mar. 24.

WATER TEMPERATURES: Maximum, 28.5°C, Sept. 2; minimum, 0.5°C, Feb. 13-17.

DISSOLVED OXYGEN: Maximum, 17.2 mg/L, Nov. 4; minimum, 0.2 mg/L, Aug. 25 and 26.

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	811	758	784	898	866	881	900	888	896	926	916	921
2	800	760	779	898	829	857	945	897	918	935	924	930
3	790	763	775	853	835	842	956	945	951	940	854	915
4	800	755	771	866	841	848	954	927	944	1000	805	863
5	799	777	785	885	848	864	956	922	938	805	510	551
6	793	775	785	896	862	877	947	925	936	625	414	546
7	806	792	799	888	869	881	990	917	934	414	392	399
8	819	796	808	918	881	894	980	940	958	480	407	436
9	812	773	781	986	895	934	966	955	962	500	466	478
10	816	786	806	1020	953	979	974	939	956	650	500	567
11	814	780	793	995	932	957	945	938	941	569	540	549
12	828	778	799	966	933	942	947	937	942	555	541	548
13	815	805	811	961	933	943	953	939	946	574	543	558
14	879	779	806	1000	944	967	946	839	916	580	571	574
15	789	781	785	990	956	976	954	928	944	631	578	612
16	832	785	799	999	974	983	970	948	957	644	628	636
17	843	802	823	981	931	961	994	970	978	650	639	645
18	835	810	822	940	926	933	984	968	971	652	641	648
19	829	818	823	947	927	937	972	947	961	653	644	648
20	848	824	833	943	913	923	965	943	956	658	645	652
21	855	840	847	953	914	929	964	948	953	666	650	659
22	861	838	848	957	919	936	957	938	948	672	658	665
23	838	827	831	944	909	928	945	924	935	665	658	661
24	835	825	830	935	916	925	939	923	931	673	661	668
25	877	825	859	958	913	939	931	918	925	683	671	678
26	881	862	870	938	900	916	924	916	920	711	676	687
27	887	873	879	913	897	905	928	918	923	717	692	701
28	886	877	882	919	895	903	932	902	920	724	668	700
29	885	874	880	907	891	896	920	898	910	688	665	677
30	890	872	883	907	895	898	923	910	915	677	664	669
31	889	863	877	---	---	---	930	912	918	682	667	673
MONTH	890	755	821	1020	829	918	994	839	939	1000	392	649



**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**03220510 SCIOTO RIVER AT O'SHAUGHNESSY DAM, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.0	7.5	7.7	7.4	7.3	7.3	7.7	7.5	7.6	7.4	7.3	7.4
2	7.8	7.5	7.6	7.8	7.3	7.5	7.6	7.4	7.5	8.2	7.3	7.5
3	7.9	7.6	7.7	7.6	7.4	7.5	7.5	7.4	7.4	8.4	7.4	8.1
4	8.0	7.7	7.8	7.5	7.4	7.4	7.5	7.3	7.4	7.6	7.3	7.4
5	7.9	7.6	7.8	7.4	7.3	7.4	7.5	7.3	7.4	7.5	7.4	7.5
6	8.0	7.6	7.9	7.4	7.3	7.3	7.5	7.3	7.4	7.5	7.3	7.4
7	7.9	7.6	7.8	7.4	7.3	7.3	7.8	7.4	7.5	7.4	7.3	7.3
8	8.0	7.6	7.7	7.4	7.3	7.3	7.7	7.3	7.4	7.4	7.3	7.4
9	8.1	7.9	8.0	7.9	7.2	7.5	7.5	7.3	7.4	8.4	7.4	7.8
10	8.0	7.5	7.7	8.0	7.5	7.6	8.5	7.4	7.8	8.4	7.4	7.8
11	7.7	7.6	7.6	8.0	7.5	7.8	8.3	8.1	8.2	8.2	7.5	7.6
12	7.8	7.5	7.6	8.2	7.8	7.9	8.9	8.1	8.4	8.3	7.5	7.5
13	8.0	7.5	7.6	8.1	7.7	7.8	8.8	8.0	8.3	8.4	7.5	7.7
14	7.8	7.6	7.7	8.0	7.6	7.7	8.8	7.9	8.3	7.6	7.5	7.5
15	8.0	7.6	7.7	8.0	7.7	7.8	8.7	7.8	8.0	7.6	7.5	7.5
16	8.0	7.5	7.7	7.7	7.4	7.6	8.0	7.8	7.9	7.6	7.5	7.6
17	8.2	7.5	7.7	7.7	7.5	7.6	7.9	7.8	7.9	7.6	7.6	7.6
18	7.7	7.5	7.5	7.8	7.6	7.6	7.9	7.8	7.9	7.6	7.6	7.6
19	7.5	7.4	7.5	7.7	7.6	7.6	7.9	7.6	7.8	7.6	7.6	7.6
20	7.5	7.4	7.4	8.0	7.6	7.8	8.7	7.6	8.0	7.6	7.6	7.6
21	7.6	7.4	7.5	7.9	7.6	7.7	7.8	7.7	7.8	7.7	7.6	7.6
22	7.6	7.4	7.4	7.9	7.6	7.7	7.8	7.7	7.8	7.7	7.6	7.6
23	7.9	7.4	7.5	7.9	7.6	7.7	7.8	7.6	7.7	7.6	7.6	7.6
24	7.6	7.4	7.5	7.8	7.5	7.7	7.6	7.6	7.6	7.8	7.6	7.7
25	7.7	7.4	7.4	7.7	7.5	7.6	7.6	7.6	7.6	7.8	7.7	7.7
26	7.4	7.3	7.4	7.8	7.5	7.6	7.6	7.5	7.6	7.8	7.7	7.7
27	7.4	7.3	7.4	7.8	7.5	7.7	7.7	7.5	7.5	7.8	7.7	7.7
28	7.4	7.3	7.4	7.7	7.5	7.6	7.6	7.5	7.6	7.8	7.6	7.8
29	7.4	7.2	7.3	7.8	7.6	7.6	8.3	7.5	7.6	8.6	7.7	7.9
30	7.4	7.2	7.3	7.7	7.5	7.6	7.6	7.5	7.5	8.9	7.7	8.3
31	7.3	7.3	7.3	---	---	---	7.6	7.3	7.4	8.1	7.7	7.7
MONTH	8.2	7.2	7.6	8.2	7.2	7.6	8.9	7.3	7.7	8.9	7.3	7.6

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.8	7.7	7.7	8.0	7.9	7.9	7.8	7.1	7.2	7.9	7.7	7.8
2	7.8	7.7	7.7	7.9	7.8	7.9	7.9	7.1	7.6	8.3	7.7	7.9
3	8.6	7.7	7.8	7.9	7.7	7.8	7.8	7.2	7.6	8.3	8.1	8.2
4	8.5	7.6	7.8	7.8	7.6	7.7	7.6	7.3	7.4	8.1	7.8	7.9
5	7.6	7.5	7.6	7.7	7.6	7.6	7.3	7.1	7.2	8.6	7.9	8.3
6	7.7	7.6	7.6	7.7	7.5	7.6	7.1	6.9	7.0	8.4	7.8	8.2
7	7.6	7.5	7.6	7.6	7.3	7.4	8.0	7.0	7.4	8.1	7.7	7.9
8	7.7	7.5	7.6	7.5	7.2	7.4	8.0	7.8	7.9	8.0	7.7	7.8
9	7.7	7.5	7.6	7.3	7.2	7.2	7.8	7.8	7.8	8.2	7.7	7.9
10	8.2	7.6	7.8	7.6	7.3	7.4	7.8	7.8	7.8	8.4	7.7	8.1
11	8.3	7.6	7.8	8.3	7.2	7.5	7.8	7.8	7.8	8.4	7.9	8.1
12	7.7	7.6	7.6	7.3	7.1	7.2	7.9	7.8	7.9	8.4	7.9	8.1
13	8.7	7.6	7.8	7.8	7.1	7.5	7.9	7.8	7.9	8.2	7.9	8.0
14	8.5	7.6	7.8	7.8	7.5	7.6	7.9	7.8	7.8	8.3	8.0	8.1
15	8.0	7.4	7.5	7.6	7.2	7.4	7.8	7.7	7.8	8.6	8.0	8.2
16	7.5	7.4	7.4	7.8	6.9	7.2	7.7	7.6	7.7	8.2	8.0	8.1
17	7.8	7.4	7.5	7.0	6.8	6.9	7.9	7.7	7.8	8.2	7.7	8.0
18	8.8	7.7	8.4	7.0	6.9	7.0	7.9	7.7	7.8	7.8	7.4	7.5
19	8.8	7.4	7.5	8.1	6.9	7.4	7.8	7.7	7.7	8.0	7.7	7.8
20	7.5	7.5	7.5	8.1	7.0	7.4	7.8	7.7	7.7	8.3	8.0	8.1
21	7.5	7.3	7.4	8.2	7.1	7.2	7.9	7.7	7.7	8.3	7.7	8.1
22	7.4	7.3	7.3	7.1	6.8	7.0	8.1	7.9	8.0	8.1	7.7	7.9
23	7.8	7.3	7.4	7.1	6.8	6.9	8.1	8.0	8.1	7.8	7.3	7.6
24	7.8	7.4	7.5	7.2	6.7	6.9	8.1	8.0	8.1	7.7	7.4	7.6
25	7.7	7.4	7.5	6.9	6.8	6.8	8.1	8.0	8.1	8.1	7.5	7.8
26	7.7	7.4	7.5	7.0	6.9	6.9	8.0	7.8	7.9	8.2	7.8	8.0
27	8.6	7.6	7.9	7.8	7.0	7.2	7.8	7.7	7.8	8.1	7.4	7.7
28	8.2	7.8	7.9	7.6	7.1	7.2	7.8	7.8	7.8	8.0	7.4	7.7
29	8.2	7.9	8.1	7.3	7.0	7.1	7.9	7.8	7.8	8.0	7.7	7.9
30	---	---	---	7.1	7.1	7.1	8.1	7.8	7.9	8.0	7.5	7.8
31	---	---	---	7.2	7.1	7.1	---	---	---	7.9	7.6	7.7
MONTH	8.8	7.3	7.7	8.3	6.7	7.3	8.1	6.9	7.7	8.6	7.3	7.9





**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**03220510 SCIOTO RIVER AT O'SHAUGHNESSY DAM, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	21.5	18.0	19.0	13.0	12.0	12.5	8.0	7.0	7.5	5.0	3.5	4.0
2	20.5	17.5	19.0	12.5	11.0	11.5	8.0	6.5	7.0	6.0	4.5	5.0
3	20.0	17.5	18.5	11.5	10.0	11.0	7.5	7.0	7.5	6.5	5.0	5.5
4	18.0	17.0	17.5	12.5	9.5	11.0	8.0	7.5	7.5	7.0	4.5	4.5
5	18.0	16.5	17.0	13.0	10.0	11.0	8.0	7.0	7.5	6.0	4.5	6.0
6	17.5	17.0	17.0	12.5	10.5	11.0	7.5	6.5	7.0	5.5	5.0	5.5
7	17.5	16.5	17.0	12.0	10.0	11.0	7.0	6.0	6.5	5.0	4.0	4.5
8	17.0	16.5	16.5	12.5	10.0	11.0	7.5	5.0	6.5	4.5	4.0	4.5
9	17.0	16.5	17.0	12.5	10.0	11.0	7.0	6.0	6.5	4.5	4.0	4.0
10	17.5	16.5	17.0	12.5	10.0	11.0	7.5	6.0	7.0	4.5	4.0	4.5
11	18.0	16.0	17.0	12.0	10.5	11.0	7.0	5.5	6.0	4.0	3.5	4.0
12	17.5	15.5	16.5	12.5	10.0	11.0	6.5	5.5	6.0	4.0	3.5	4.0
13	17.0	16.0	16.5	12.5	10.0	11.0	7.0	6.5	6.5	4.0	3.0	3.5
14	17.0	15.0	16.0	12.0	10.0	11.0	7.0	6.0	6.5	3.0	2.5	2.5
15	18.5	14.5	16.0	11.0	9.5	10.0	6.5	5.5	6.0	3.5	3.0	3.0
16	19.5	15.5	17.0	10.5	9.5	10.0	6.0	5.0	5.5	3.5	2.5	3.0
17	16.5	15.0	16.0	10.0	9.0	9.5	6.5	5.0	5.5	3.0	2.0	2.5
18	16.0	14.0	15.0	10.0	9.0	9.5	5.5	5.0	5.5	3.0	2.5	2.5
19	15.5	15.0	15.0	10.5	9.0	9.5	6.5	4.5	5.5	2.5	2.0	2.5
20	15.5	14.5	15.0	11.0	9.0	10.0	6.0	4.5	5.5	2.5	2.0	2.0
21	15.5	13.5	14.5	11.0	9.0	10.0	4.5	3.5	4.0	2.5	1.5	2.0
22	15.5	13.5	14.0	11.5	9.0	10.0	5.0	3.0	4.0	2.0	1.5	2.0
23	13.5	12.5	13.0	12.0	9.0	10.0	4.0	3.0	3.5	2.5	2.0	2.0
24	13.0	12.0	12.5	10.5	9.0	10.0	3.5	2.5	3.0	3.0	1.5	2.0
25	13.5	11.0	12.0	10.0	9.0	9.5	3.5	2.5	3.0	2.5	1.5	2.0
26	12.5	12.0	12.0	9.5	9.0	9.5	4.0	3.0	3.5	2.5	2.0	2.0
27	12.5	11.5	12.0	10.0	9.0	9.0	4.0	3.5	3.5	3.0	1.5	2.0
28	12.5	11.5	12.0	10.0	8.5	9.0	3.5	2.5	3.0	3.0	1.5	2.0
29	12.5	11.5	12.0	9.5	8.0	8.5	4.0	3.0	3.5	3.0	1.5	2.0
30	13.0	11.5	12.0	8.5	7.5	8.0	4.5	3.0	4.0	2.5	2.0	2.5
31	13.0	11.5	12.5	---	---	---	4.5	3.5	4.0	3.0	2.0	2.5
MONTH	21.5	11.0	15.5	13.0	7.5	10.5	8.0	2.5	5.5	7.0	1.5	3.0

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	3.0	2.0	2.5	9.5	8.5	9.0	12.0	10.5	11.0	16.0	13.5	14.5
2	3.5	2.0	2.5	9.0	8.5	9.0	11.5	10.5	11.0	17.0	13.5	15.0
3	2.5	2.0	2.0	9.5	8.5	9.0	11.5	11.5	11.5	16.5	15.5	16.0
4	2.5	2.0	2.5	9.5	8.0	9.0	11.5	11.0	11.5	15.5	15.0	15.0
5	3.5	2.0	2.5	10.5	8.5	9.5	11.0	10.0	11.0	19.5	15.5	17.5
6	3.0	2.0	2.5	12.5	9.0	10.0	11.0	10.0	10.5	19.0	17.0	18.5
7	3.5	2.0	2.5	9.5	8.0	9.0	10.5	10.0	10.5	19.0	15.5	17.5
8	3.5	2.0	2.5	10.0	8.0	9.0	10.5	10.0	10.0	18.5	15.0	17.5
9	4.0	2.0	3.0	9.5	8.0	8.5	10.0	7.5	9.0	20.0	16.5	18.5
10	3.5	2.5	3.0	10.0	9.5	9.5	7.5	7.0	7.5	20.0	18.5	19.5
11	2.5	2.0	2.5	9.5	8.5	9.0	7.5	7.0	7.0	20.0	18.0	19.0
12	2.5	1.5	2.0	9.5	8.0	8.5	7.5	7.0	7.5	20.0	18.5	19.5
13	1.5	.5	1.0	9.0	8.0	8.5	7.5	7.5	7.5	21.0	19.5	20.0
14	.5	.5	.5	10.0	8.0	8.5	8.0	7.5	7.5	20.5	19.0	20.0
15	.5	.5	.5	9.5	8.5	9.0	11.0	8.0	9.0	21.0	18.5	19.5
16	.5	.5	.5	9.0	8.0	8.5	15.5	11.0	12.5	19.5	18.5	19.0
17	1.0	.5	1.0	8.0	7.5	8.0	16.0	13.5	15.0	19.5	18.0	18.5
18	1.5	1.0	1.5	8.0	7.5	7.5	13.5	12.0	12.5	19.0	18.0	18.5
19	1.5	1.0	1.5	8.0	7.5	8.0	12.0	10.5	11.0	20.0	18.5	19.5
20	1.5	1.5	1.5	8.0	8.0	8.0	11.0	10.0	10.5	20.0	19.0	19.5
21	1.5	1.5	1.5	8.5	8.0	8.0	11.0	11.0	11.0	19.5	19.0	19.0
22	2.0	1.5	1.5	8.5	8.0	8.5	11.5	11.0	11.5	19.5	17.5	18.5
23	2.5	1.5	2.0	9.5	8.5	9.0	14.0	11.5	12.5	17.5	16.0	17.0
24	4.0	2.5	3.0	9.5	8.0	9.0	13.5	12.0	12.5	19.5	17.5	18.5
25	5.0	4.0	4.5	10.5	8.0	9.5	13.0	12.0	12.5	20.5	19.0	19.5
26	6.5	5.0	5.5	12.0	10.5	11.0	12.5	11.5	12.0	21.5	19.0	20.0
27	8.5	6.5	7.5	11.5	10.5	11.0	14.5	12.0	13.0	20.5	18.5	19.5
28	9.5	8.5	9.0	11.0	10.5	11.0	14.5	13.0	13.5	18.5	18.0	18.0
29	9.5	8.5	9.0	11.5	10.5	11.0	15.0	13.5	14.0	18.5	18.0	18.5
30	---	---	---	12.0	10.5	11.0	16.5	13.5	15.0	18.5	17.0	17.5
31	---	---	---	13.5	10.5	12.0	---	---	---	18.5	17.5	18.0
MONTH	9.5	.5	3.0	13.5	7.5	9.0	16.5	7.0	11.0	21.5	13.5	18.5



**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**03220510 SCIOTO RIVER AT O'SHAUGHNESSY DAM, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

OXYGEN, DISSOLVED, MILLIGRAMS PER LITER), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.9	2.5	4.8	9.5	5.1	7.5	11.8	8.6	10.0	10.1	8.4	9.1			
2	6.0	1.9	3.2	9.1	5.5	7.5	10.3	8.1	8.9	9.9	8.1	9.0			
3	6.0	2.0	3.2	12.5	7.2	9.3	9.7	8.0	8.7	10.8	8.1	9.6			
4	5.9	2.2	3.5	17.2	8.1	10.2	10.0	7.6	8.5	12.9	9.6	12.5			
5	5.3	3.6	4.3	12.5	6.7	8.8	10.0	7.0	8.3	12.9	12.1	12.3			
6	5.4	3.5	4.4	12.6	6.2	8.7	10.1	6.6	8.2	12.4	12.2	12.3			
7	4.9	3.8	4.3	13.3	8.1	10.1	10.7	7.9	9.5	12.9	12.4	12.6			
8	4.3	3.2	3.6	14.5	6.5	9.5	---	---	---	12.7	12.3	12.5			
9	4.0	1.8	2.9	11.9	5.9	8.0	9.4	7.7	8.3	13.7	12.3	12.8			
10	3.5	1.2	2.0	9.8	5.6	6.9	10.3	7.6	8.7	13.7	11.8	12.4			
11	6.2	1.9	3.7	10.5	5.5	8.0	11.1	8.3	9.2	12.8	11.6	12.1			
12	8.2	3.1	4.0	11.7	7.9	9.3	10.3	8.1	9.0	13.1	12.1	12.3			
13	5.1	2.6	3.4	11.1	7.4	8.7	9.5	7.8	8.7	13.5	12.1	12.4			
14	9.7	4.0	5.7	10.5	6.9	8.4	9.6	8.0	8.8	13.0	12.6	12.8			
15	11.1	2.6	5.1	10.2	8.4	9.0	10.6	7.8	8.7	12.7	12.1	12.4			
16	10.8	1.7	4.4	9.8	8.0	8.9	10.2	7.8	9.0	12.6	12.1	12.4			
17	6.2	1.1	3.6	11.6	8.5	9.9	12.3	9.3	10.5	12.8	12.6	12.7			
18	7.2	4.6	5.6	13.8	11.2	12.0	11.2	9.4	10.1	12.6	12.3	12.4			
19	5.3	4.0	4.5	13.1	10.7	11.6	12.9	9.6	10.5	12.8	12.4	12.6			
20	4.9	3.8	4.3	15.0	10.3	11.7	11.5	9.8	10.8	12.6	12.2	12.4			
21	8.2	2.3	4.4	14.0	9.7	11.0	12.7	10.5	11.4	12.9	12.6	12.8			
22	8.2	1.6	3.9	14.2	9.3	10.8	13.2	10.5	11.5	12.9	12.5	12.7			
23	8.3	3.4	5.7	14.6	9.1	10.7	12.5	9.6	10.9	12.6	12.4	12.5			
24	9.4	5.2	6.4	13.2	8.0	10.0	10.6	9.2	9.8	12.8	12.4	12.6			
25	6.7	5.1	5.8	12.0	9.1	10.2	10.7	9.5	9.9	12.8	12.3	12.6			
26	7.0	1.8	5.9	11.4	9.0	10.0	10.4	9.2	9.6	12.8	12.3	12.5			
27	7.7	5.8	6.6	12.0	8.2	10.0	10.5	9.1	9.6	13.0	12.4	12.6			
28	7.1	5.6	6.2	12.3	8.1	9.7	11.3	9.1	9.9	13.2	11.9	12.5			
29	7.6	5.4	6.4	13.8	9.3	10.6	12.0	9.5	10.5	13.2	12.5	12.7			
30	8.5	5.6	6.8	12.3	9.1	10.3	12.2	9.4	10.6	14.1	12.4	13.1			
31	9.3	6.4	7.5	---	---	---	10.6	9.1	9.9	13.3	12.3	12.7			
MONTH	11.1	1.1	4.7	17.2	5.1	9.6	13.2	6.6	9.6	14.1	8.1	12.2			

DAY	MAX	MIN	MEAN	FEBRUARY			MARCH			APRIL			MAY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	13.2	12.4	12.8	9.3	8.8	9.0	10.5	8.6	9.6	12.9	10.5	11.5			
2	13.6	12.6	13.0	9.6	8.9	9.2	10.7	9.2	9.7	11.8	10.3	11.2			
3	13.8	12.4	12.8	9.6	8.9	9.2	10.0	9.2	9.5	11.5	10.3	10.9			
4	13.8	12.3	12.8	9.6	9.0	9.3	9.8	9.4	9.6	11.9	10.5	11.1			
5	13.3	12.2	12.7	9.8	8.9	9.3	9.8	9.6	9.7	11.2	9.2	10.4			
6	13.9	12.3	12.9	9.9	8.9	9.3	9.8	9.2	9.6	11.1	9.0	10.0			
7	13.6	12.3	12.8	10.7	9.0	9.8	9.5	5.5	8.8	10.9	9.0	10.0			
8	14.2	12.3	13.1	11.1	9.6	10.1	5.5	4.3	4.6	11.0	8.6	10.0			
9	13.8	12.1	12.7	10.9	9.4	10.1	5.1	4.4	4.7	10.8	8.3	9.5			
10	14.0	12.0	12.6	12.2	9.3	10.2	5.5	5.0	5.4	11.0	8.0	9.1			
11	14.3	12.7	13.5	12.1	9.4	10.1	6.0	5.4	5.7	11.3	8.0	9.4			
12	14.5	13.8	14.1	12.6	9.7	10.7	6.2	5.9	6.1	10.9	7.5	9.2			
13	15.5	14.1	14.6	12.9	9.9	11.0	6.6	6.2	6.4	9.6	6.6	8.0			
14	15.6	14.9	15.3	13.0	10.0	11.1	6.9	6.5	6.7	10.6	6.6	8.2			
15	15.7	15.0	15.4	11.5	8.8	10.1	6.8	6.5	6.7	10.5	6.3	8.2			
16	15.4	14.9	15.1	10.3	8.8	9.4	7.0	6.5	6.7	8.1	5.1	6.7			
17	15.5	14.9	15.1	10.2	8.9	9.7	7.3	6.3	6.8	7.6	5.0	6.0			
18	16.3	14.5	15.4	11.2	9.8	10.4	7.5	6.5	7.1	7.4	4.4	5.7			
19	16.3	15.2	15.4	12.0	9.7	10.5	8.3	7.3	7.9	6.8	5.1	6.2			
20	15.5	15.2	15.4	11.8	10.0	10.9	9.3	8.2	8.5	6.7	6.1	6.5			
21	15.5	15.3	15.4	11.9	10.7	10.9	8.9	8.1	8.5	7.0	5.7	6.2			
22	15.4	15.1	15.3	11.0	10.5	10.8	10.1	8.9	9.6	6.7	5.8	6.3			
23	15.3	14.8	15.0	10.8	9.9	10.4	10.5	9.8	10.2	7.1	5.6	6.6			
24	14.8	13.8	14.4	10.6	9.9	10.3	11.2	10.3	10.8	7.2	6.4	6.7			
25	13.9	13.7	13.8	10.4	9.1	9.9	13.0	11.2	12.6	7.4	5.9	6.5			
26	---	---	---	9.5	8.8	9.1	13.1	12.2	12.8	7.6	5.2	6.4			
27	---	---	---	9.8	8.7	9.2	12.7	11.3	12.1	7.2	5.4	6.3			
28	---	---	---	9.4	8.5	9.0	12.2	11.3	11.7	7.9	5.3	6.7			
29	9.5	8.9	9.1	9.9	9.0	9.4	12.5	11.2	11.8	8.6	7.8	8.2			
30	---	---	---	10.1	8.9	9.4	12.6	10.5	11.6	8.9	7.3	8.3			
31	---	---	---	10.1	8.4	9.2	---	---	---	8.8	7.5	8.5			
MONTH	16.3	8.9	13.9	13.0	8.4	9.9	13.1	4.3	8.7	12.9	4.4	8.2			



**SURFACE-WATER RECORDS**  
**Scioto River Basin**

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**03221000 SCIOTO RIVER BELOW O'SHAUGHNESSY DAM NEAR DUBLIN, OHIO**

LOCATION.—Latitude 40°08'36", longitude 83°07'14", Delaware County, Hydrologic Unit 05060001, on left bank, 0.2 mi north of county line, 0.8 mi downstream from O'Shaughnessy Dam, and 3.0 mi north of Dublin, Ohio.

DRAINAGE AREA.—980 mi<sup>2</sup>.

PERIOD OF RECORD.—April 1921 to current year.

REVISED RECORDS.—WSP 803: 1924-35. WSP 1725: 1924. WSP 1908: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 775.00 ft above sea level. Prior to Aug. 26, 1921, nonrecording gage at site 0.8 mi upstream at same datum. Aug. 26, 1921, to Oct. 13, 1924, nonrecording gage at site 100 ft downstream at same datum.

REMARKS.—Records fair except for periods of estimated records, which are poor. Flow regulated since 1924 by O'Shaughnessy Reservoir 0.8 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 of March 25, 1913 reached a stage of 24.6 ft, discharge; 74,500 ft<sup>3</sup>/s at Griggs Dam, 9 mi downstream from gage, computed by C.E. Sherman, The Ohio State University.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	38	7.9	62	e70	749	539	411	905	264	64	146
2	15	22	30	62	77	641	588	619	635	223	66	48
3	17	10	60	63	87	550	1120	749	477	253	121	39
4	29	9.1	45	3940	85	483	2650	701	385	373	144	43
5	98	10	13	4050	81	435	2250	615	501	690	107	39
6	174	9.8	7.1	2270	e74	389	1420	508	1560	595	92	43
7	137	9.9	7.1	1490	e70	355	1560	473	1640	424	111	99
8	97	10	30	836	e66	332	12000	433	1140	312	90	61
9	20	9.6	41	609	e76	318	9570	391	730	236	107	37
10	13	9.4	20	492	e90	287	6220	386	542	192	130	37
11	13	9.5	7.7	e390	1070	301	4790	341	443	158	124	38
12	52	9.6	7.7	e290	2850	242	3370	325	390	127	103	39
13	137	9.4	8.1	e210	2810	228	1840	336	383	114	79	38
14	21	17	18	e170	4920	240	1110	287	473	176	62	90
15	12	34	9.6	e150	3620	235	871	241	956	853	57	128
16	12	50	10	e130	2620	343	739	197	1070	746	61	156
17	34	51	17	e120	2290	440	693	176	2110	501	53	136
18	61	51	14	e110	2710	415	671	167	2480	358	104	79
19	133	51	15	e100	4630	458	816	736	1780	254	286	34
20	116	16	17	e96	3590	1580	803	1440	1820	167	184	34
21	53	8.6	16	e90	2810	2590	805	1120	2190	131	132	34
22	10	8.3	16	e84	2140	1970	1280	759	2110	106	111	33
23	10	8.3	35	e80	2070	1330	1870	639	1570	88	99	45
24	10	8.4	88	e76	2130	904	1760	745	1160	84	85	46
25	43	34	85	e70	2000	731	1190	602	737	68	71	438
26	103	24	82	e68	1520	621	784	413	570	64	61	411
27	104	8.3	60	e68	1180	586	642	340	557	62	73	462
28	101	8.2	35	e66	916	594	546	662	491	61	61	367
29	101	8.2	13	e60	840	629	481	1450	400	64	59	237
30	82	8.1	13	e66	---	687	416	1770	328	65	58	174
31	57	---	40	e68	---	644	---	1500	---	65	57	---
TOTAL	1879	560.7	868.2	16436	47492	20307	63394	19532	30533	7874	3012	3611
MEAN	60.6	18.7	28.0	530	1638	655	2113	630	1018	254	97.2	120
MAX	174	51	88	4050	4920	2590	12000	1770	2480	853	286	462
MIN	10	8.1	7.1	60	66	228	416	167	328	61	53	33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2000, BY WATER YEAR (WY)

MEAN	177	423	812	1293	1416	1784	1526	879	707	436	240	150
MAX	2626	3426	4794	6397	4072	5231	4706	3865	3407	3599	1584	2285
(WY)	1927	1973	1991	1937	1975	1963	1957	1996	1947	1992	1995	1926
MIN	28.2	15.1	13.0	29.3	30.9	249	152	46.4	57.8	37.2	29.4	25.6
(WY)	1922	1954	1953	1992	1964	1941	1946	1925	1955	1921	1921	1965

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1921 - 2000

ANNUAL TOTAL	214769.9	215498.9										
ANNUAL MEAN	588	589								818		
HIGHEST ANNUAL MEAN										1458		1973
LOWEST ANNUAL MEAN										190		1934
HIGHEST DAILY MEAN	9200	Jan 23				12000	Apr 8			42900	Jan 22	1959
LOWEST DAILY MEAN	7.1	Dec 6				7.1	Dec 6			.40	Nov 8	1924
ANNUAL SEVEN-DAY MINIMUM	9.6	Nov 7				9.6	Nov 7			1.1	Nov 14	1953
INSTANTANEOUS PEAK FLOW						14000	Apr 8			42900	Jan 22	1959
INSTANTANEOUS PEAK STAGE						11.87	Apr 8			22.04	Jan 22	1959
INSTANTANEOUS LOW FLOW						7.1	Dec 6			7.1	Dec 6	1999
10 PERCENT EXCEEDS	1930					1680				2250		
50 PERCENT EXCEEDS	113					140				202		
90 PERCENT EXCEEDS	13					13				41		

e Estimated.

**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**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 mi<sup>2</sup>.

PERIOD OF RECORD.—October 1996 to current year.

GAGE.—Water-stage recorder. 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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.95	1.7	2.1	6.8	e6.2	30	24	15	30	7.5	3.1	1.7
2	.55	22	2.1	8.9	e6.1	26	90	37	19	6.2	2.8	1.8
3	.55	19	2.2	144	e6.0	20	186	27	13	65	2.6	1.7
4	.59	8.6	2.3	911	e6.0	17	326	19	9.5	116	2.4	1.9
5	.58	6.5	3.1	172	e6.0	15	138	18	25	47	2.2	2.0
6	.55	5.1	4.1	84	e6.0	12	74	16	63	24	2.6	1.6
7	.62	3.8	3.7	57	e6.0	11	162	13	32	14	4.4	1.4
8	.59	3.0	3.3	41	e6.0	10	1420	12	17	9.1	3.6	1.5
9	3.0	2.8	3.0	34	e6.0	9.9	231	11	11	7.3	3.4	1.7
10	3.4	2.5	19	32	20	8.5	122	12	8.2	6.8	3.2	2.9
11	2.1	2.3	16	28	314	8.5	87	9.8	6.6	8.2	2.8	3.7
12	.72	1.9	8.1	21	176	10	67	8.4	6.1	6.1	2.4	2.8
13	2.8	1.9	9.2	20	106	10	54	8.1	7.6	4.9	2.1	2.4
14	3.3	2.0	173	15	241	12	45	6.8	38	16	2.0	2.1
15	2.1	1.8	140	13	139	13	38	5.7	161	36	2.0	2.2
16	.83	1.8	83	13	112	16	32	5.4	131	15	1.9	1.7
17	1.0	1.7	48	11	90	43	89	5.4	320	8.9	2.0	1.5
18	.88	1.7	32	e9.2	165	27	104	5.3	99	6.3	4.4	1.3
19	.65	1.8	24	e8.3	208	27	62	135	55	5.3	3.5	1.1
20	.65	2.2	21	e8.2	96	185	49	84	34	4.9	2.8	1.3
21	.64	2.1	18	e8.1	60	176	112	40	50	4.4	2.3	1.6
22	.65	2.0	e13	e7.9	98	84	135	24	38	3.9	1.9	1.5
23	.65	2.1	e10	e7.5	216	52	84	20	21	3.5	2.4	2.4
24	.67	2.2	e8.6	e6.8	143	38	54	37	19	3.2	2.6	4.5
25	.69	2.1	e7.5	e6.4	149	29	39	25	65	3.0	2.4	2.2
26	.70	3.1	e7.1	e6.6	96	21	29	14	41	2.9	2.0	1.9
27	.74	3.3	e6.9	e6.5	63	32	22	12	22	2.7	3.5	1.3
28	.81	2.8	e6.6	e6.4	47	43	19	121	14	2.6	2.8	1.0
29	1.0	2.5	e6.4	e6.5	35	69	15	269	11	2.7	2.2	.93
30	1.0	2.3	e6.2	e6.4	---	51	14	85	9.6	2.9	2.0	.90
31	1.1	---	e6.2	e6.4	---	33	---	45	---	3.1	1.9	---
TOTAL	35.06	118.6	695.7	1712.9	2628.3	1138.9	3923	1145.9	1376.6	449.4	82.2	56.53
MEAN	1.13	3.95	22.4	55.3	90.6	36.7	131	37.0	45.9	14.5	2.65	1.88
MAX	3.4	22	173	911	314	185	1420	269	320	116	4.4	4.5
MIN	.55	1.7	2.1	6.4	6.0	8.5	14	5.3	6.1	2.6	1.9	.90

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2000, BY WATER YEAR (WY)

	1997	1997	1997	1999	2000	1997	1997	1997	1998	1998	1998	1998
MEAN	3.53	12.8	47.1	61.0	66.4	63.3	77.8	44.8	82.1	8.35	3.86	1.12
MAX	7.04	28.1	133	89.2	90.6	96.6	131	72.2	214	14.5	9.53	2.05
(WY)	1997	1997	1997	1999	2000	1997	2000	1998	1998	2000	1997	1997
MIN	1.13	3.95	14.4	42.6	47.9	36.7	20.4	10.5	3.43	2.92	1.18	.13
(WY)	2000	2000	1999	1997	1999	2000	1997	1999	1999	1999	1999	1998

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1997 - 2000
ANNUAL TOTAL	10378.94	13363.09	
ANNUAL MEAN	28.4	36.5	39.1
HIGHEST ANNUAL MEAN			46.0
LOWEST ANNUAL MEAN			28.6
HIGHEST DAILY MEAN	814	Jan 22	1420
LOWEST DAILY MEAN	.10	Sep 12	.55
ANNUAL SEVEN-DAY MINIMUM	.11	Sep 10	.58
INSTANTANEOUS PEAK FLOW			2310
INSTANTANEOUS PEAK STAGE			9.53
INSTANTANEOUS LOW FLOW			.55
10 PERCENT EXCEEDS	84	98	89
50 PERCENT EXCEEDS	3.7	8.0	9.8
90 PERCENT EXCEEDS	.63	1.6	1.4

e Estimated.

**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**03225500 OLENTANGY RIVER NEAR DELAWARE, OHIO**

LOCATION.—Latitude 40°21'18", longitude 83°04'02", in NE 1/4 T.5 N., R.19 W., Delaware County, Hydrologic Unit 05060001, on left bank 500 ft upstream from highway bridge, 1,000 ft downstream from Delaware Dam, 1300 ft upstream from Norfolk and Western Railway bridge, and 4.0 mi north of Delaware, Ohio.

DRAINAGE AREA.—393 mi<sup>2</sup>

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. 1, 1950, water-stage recorder at this site 500 ft downstream at datum 1.72 ft lower. Oct. 1, 1950 to 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 ft<sup>3</sup>/s Mar. 21, 1927, gage height, 16.9 ft, site and datum then in use; minimum daily, 0.1 ft<sup>3</sup>/s Sept. 14-29, 1934.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	6.2	10	40	36	128	28	94	377	61	27	30
2	15	3.9	10	40	36	177	43	444	20	61	31	30
3	14	3.6	11	65	36	240	168	408	86	62	34	23
4	14	3.3	11	1100	36	240	1540	211	143	1040	34	17
5	16	3.2	11	2630	36	238	2190	148	33	1190	34	17
6	19	3.1	11	3170	36	185	1190	147	619	415	34	17
7	18	3.1	11	2050	55	126	652	147	796	227	34	17
8	19	25	11	570	65	101	481	146	427	124	34	17
9	19	37	11	240	65	101	2210	146	229	88	49	17
10	18	37	83	528	69	101	4000	100	229	67	244	17
11	19	37	114	507	644	101	4160	28	229	72	110	17
12	20	37	114	212	1440	101	3950	9.5	145	72	49	17
13	20	37	192	128	1960	101	2810	11	59	61	39	17
14	20	37	328	127	1990	101	1120	524	389	35	35	17
15	20	37	1120	125	1940	104	393	16	855	19	35	17
16	20	37	1390	127	1360	115	390	16	916	345	35	17
17	20	37	478	125	1290	198	394	44	853	387	35	17
18	20	37	249	71	1080	225	911	110	1730	151	57	17
19	21	23	249	28	785	233	1120	378	1850	91	35	16
20	23	12	162	44	26	404	686	1020	964	61	34	16
21	22	12	122	63	1020	1580	514	789	465	40	31	14
22	17	12	90	63	2280	1600	446	293	380	40	27	15
23	12	13	54	63	2220	744	1110	205	332	40	27	16
24	10	13	54	63	1980	386	1140	83	254	35	28	14
25	10	13	54	62	1360	268	557	73	241	29	28	14
26	10	13	54	62	1070	265	456	72	225	27	30	14
27	9.5	11	54	62	1050	268	196	211	213	27	30	14
28	8.4	11	54	44	436	268	91	251	109	27	30	14
29	9.4	9.7	54	35	126	268	91	1180	62	27	30	14
30	9.7	10	47	35	---	345	91	1450	61	27	30	14
31	9.4	---	40	36	---	142	---	952	---	27	30	---
TOTAL	497.4	574.1	5253	12515	24527	9454	33128	9706.5	13291	4975	1340	513
MEAN	16.0	19.1	169	404	846	305	1104	313	443	160	43.2	17.1
MAX	23	37	1390	3170	2280	1600	4160	1450	1850	1190	244	30
MIN	8.4	3.1	10	28	26	101	28	9.5	20	19	27	14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2000, BY WATER YEAR (WY)

	75.6	275	434	490	652	755	560	399	304	250	116	65.3
MEAN	75.6	275	434	490	652	755	560	399	304	250	116	65.3
MAX	560	1442	1683	1790	2073	2087	1537	1618	1247	1723	1259	538
(WY)	1987	1973	1991	1952	1959	1963	1964	1996	1981	1987	1995	1979
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 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1951 - 2000	
ANNUAL TOTAL	96072.8		115774.0			
ANNUAL MEAN	263		316		363	
HIGHEST ANNUAL MEAN					609	
LOWEST ANNUAL MEAN					137	
HIGHEST DAILY MEAN	4180	Jan 25	4160	Apr 11	5940	Feb 1 1959
LOWEST DAILY MEAN	3.1	Nov 6	3.1	Nov 6	1.0	Apr 15 1986
ANNUAL SEVEN-DAY MINIMUM	3.8	Nov 1	3.8	Nov 1	3.4	Apr 15 1986
INSTANTANEOUS PEAK FLOW			4290		6000	
INSTANTANEOUS PEAK STAGE			8.61		88.13	
INSTANTANEOUS LOW FLOW			3.1		1.0	
10 PERCENT EXCEEDS	904		1070		1030	
50 PERCENT EXCEEDS	33		62		90	
90 PERCENT EXCEEDS	12		13		19	

**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**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 mi<sup>2</sup>.

**PERIOD OF RECORD.**—October 1955 to September 1984, October 1996 to current year.

**REVISED RECORDS.**—WSP 1625: 1952(M). WSP 1908. Drainage area. WRD Ohio 1972: 1971(M). WRD-OH-80-1: 1976(M), 1978(M).

**GAGE.**—Water-stage recorder. Datum of gage is 743.20 ft above sea level.

**REMARKS.**—Records fair except for periods of estimated record, which are poor. 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 ft<sup>3</sup>/s, from information by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	18	29	44	e56	188	96	165	787	74	33	31
2	28	222	24	46	e54	181	170	565	135	72	42	31
3	22	220	27	628	e54	260	968	643	80	107	35	35
4	33	89	28	2790	e54	266	2140	325	183	506	36	40
5	27	50	37	2730	e56	264	2650	245	332	1550	33	27
6	23	31	70	3370	e58	249	1780	210	641	559	37	19
7	24	22	54	2640	62	191	1430	199	992	280	81	22
8	27	18	39	962	87	142	3410	196	622	163	47	21
9	47	16	34	302	97	138	2020	190	269	139	81	21
10	103	41	187	442	143	139	4110	202	254	85	141	22
11	51	65	264	612	1090	146	4370	111	254	83	225	34
12	33	62	223	353	1630	168	4130	72	260	82	67	53
13	60	60	321	175	2480	161	3470	69	115	80	51	36
14	108	63	1120	164	3240	157	1730	404	188	113	41	28
15	52	63	1110	159	2420	154	490	207	734	134	35	25
16	38	62	1810	161	2020	230	469	51	1090	91	36	23
17	49	61	859	155	1530	380	506	43	872	468	46	21
18	57	62	278	154	2050	321	725	69	1500	232	245	25
19	42	63	259	78	1640	435	1520	560	2210	149	108	25
20	35	60	240	75	447	1440	769	997	1160	110	56	26
21	36	36	138	72	508	1740	795	1130	629	64	45	56
22	38	26	129	75	2500	2200	774	385	410	46	39	39
23	37	26	80	105	2440	975	985	394	392	44	40	181
24	32	28	63	98	2310	625	1720	278	278	43	45	246
25	25	28	53	95	1740	351	559	126	264	38	39	78
26	24	63	64	98	1200	330	610	112	241	35	32	101
27	21	82	64	101	1170	368	377	156	224	29	85	57
28	18	50	53	92	847	355	162	815	204	29	53	38
29	19	38	71	e64	191	341	143	1350	84	37	39	30
30	18	34	61	e60	---	352	136	1930	76	41	35	26
31	16	---	52	e58	---	363	---	1080	---	39	32	---
TOTAL	1190	1759	7841	16958	32174	13610	43214	13279	15480	5522	1960	1417
MEAN	38.4	58.6	253	547	1109	439	1440	428	516	178	63.2	47.2
MAX	108	222	1810	3370	3240	2200	4370	1930	2210	1550	245	246
MIN	16	16	24	44	54	138	96	43	76	29	32	19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2000, BY WATER YEAR (WY)

	MEAN	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	82.8	311	546	629	766	995	757	509	382	262	147	92.7
MAX (WY)	576	1797	1772	2352	2368	2517	2033	1219	1297	1672	801	809
MIN (WY)	1973	1973	1978	1992	1959	1963	1964	1967	1981	1992	1980	1979
MIN (WY)	11.9	25.7	12.1	17.7	27.2	139	40.0	62.7	15.6	30.7	36.6	17.6
MIN (WY)	1965	1964	1964	1977	1964	1983	1971	1962	1962	1962	1983	1964

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	FOR WATER YEARS 1956 - 2000
ANNUAL TOTAL	120716	154404	
ANNUAL MEAN	331	422	453
HIGHEST ANNUAL MEAN			778 1973
LOWEST ANNUAL MEAN			269 1977
HIGHEST DAILY MEAN	4270	4370	10800 Jan 21 1959
LOWEST DAILY MEAN	12	16	6.5 Dec 28 1991
ANNUAL SEVEN-DAY MINIMUM	16	19	8.0 Jan 7 1992
INSTANTANEOUS PEAK FLOW		5980	11300 Sep 17 0000
INSTANTANEOUS PEAK STAGE		8.66	15.68 Jan 21 1959
INSTANTANEOUS LOW FLOW		16	8.5 Sep 26 1967
10 PERCENT EXCEEDS	1160	1430	1310
50 PERCENT EXCEEDS	63	108	134
90 PERCENT EXCEEDS	21	28	25

e Estimated.



**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**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 mi<sup>2</sup>.

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 good except for periods of estimated record, which are poor. Flow regulated by Griggs Reservoir 10.4 mi upstream (see station 03221500), O'Shaughnessy Reservoir 20.4 mi upstream (see station 03220500), and Delaware Lake 35 mi upstream from station. Records include sewage return flow from Jackson Pike Wastewater Treatment Plant. Shadeville Treatment Plant flow enters downstream. Water supply for City of Columbus is obtained from Scioto River downstream from Griggs Dam and Big Walnut Creek downstream from Central College. 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 ft<sup>3</sup>/s, estimated by Franklin County Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	185	101	115	160	e150	1090	803	596	2240	358	140	179
2	125	571	112	162	e150	938	1040	1450	1050	314	136	291
3	111	644	109	963	e160	844	3120	1470	732	505	142	349
4	112	231	112	7680	196	814	5860	1200	534	556	165	220
5	114	160	130	7100	195	744	5980	998	876	2070	178	189
6	112	139	150	6300	e180	685	3990	775	1950	1430	170	137
7	109	122	130	5050	e170	589	2910	663	2860	831	385	130
8	108	117	127	2350	e190	509	15300	738	2180	573	264	130
9	145	118	119	1120	e210	457	12100	621	1310	394	366	134
10	200	114	343	913	297	432	10800	620	896	323	492	137
11	168	127	314	1130	1540	458	9360	500	729	272	393	138
12	131	131	262	919	4040	583	8030	379	759	242	287	234
13	181	135	370	623	5670	452	6420	417	601	223	187	239
14	260	131	1910	492	9180	416	3300	421	580	422	158	141
15	157	128	1210	e360	6980	407	1730	771	1470	1030	148	132
16	134	125	1830	e300	5180	770	1370	312	2310	1120	155	124
17	132	126	1290	e280	3930	1180	1440	273	2880	965	389	126
18	139	128	468	e260	5230	845	1360	260	3790	765	1540	136
19	127	125	390	e250	6780	1050	2240	936	4240	763	527	137
20	121	131	394	e230	4880	3540	1770	2280	3130	538	390	242
21	114	125	307	e210	3290	4630	1840	2530	3060	287	250	377
22	109	117	e210	e200	4740	4860	1960	1490	2730	212	216	153
23	111	110	e180	e190	4580	2900	2530	1320	2230	178	211	914
24	113	116	e160	e180	4610	1950	3600	1490	1760	150	386	1860
25	111	107	e140	e170	3900	1300	2230	958	1330	151	319	481
26	106	171	e150	e170	2950	1100	1640	643	934	143	163	793
27	101	173	e160	e170	2570	1110	1170	531	810	135	336	555
28	104	132	e150	e160	2130	1080	832	2050	776	270	328	490
29	104	126	e140	e160	1200	1040	674	3300	577	350	168	364
30	101	123	e170	e150	---	1050	576	3790	418	159	148	270
31	111	---	e150	e150	---	1150	---	2960	---	188	146	---
TOTAL	4056	4904	11802	38552	85278	38973	115975	36742	49742	15917	9283	9802
MEAN	131	163	381	1244	2941	1257	3866	1185	1658	513	299	327
MAX	260	644	1910	7680	9180	4860	15300	3790	4240	2070	1540	1860
MIN	101	101	109	150	150	407	576	260	418	135	136	124

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2000, BY WATER YEAR (WY)

	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	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
MEAN	366	827	1471	2177	2374	2964	2500	1559	1278	826	477	335																																																																				
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 1999 CALENDAR YEAR				FOR 2000 WATER YEAR				WATER YEARS 1921 - 2000			
ANNUAL TOTAL	363591				421026							
ANNUAL MEAN	996				1150				1422			
HIGHEST ANNUAL MEAN									2514			
LOWEST ANNUAL MEAN									305			
HIGHEST DAILY MEAN	11100				Jan 25				15300			
LOWEST DAILY MEAN	97				Sep 17				101			
ANNUAL SEVEN-DAY MINIMUM	102				Sep 13				104			
INSTANTANEOUS PEAK FLOW									18900			
INSTANTANEOUS PEAK STAGE									19.48			
INSTANTANEOUS LOW FLOW									101			
10 PERCENT EXCEEDS	2850				3180				3930			
50 PERCENT EXCEEDS	239				390				461			
90 PERCENT EXCEEDS	109				125				118			

e Estimated.

**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**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 mi<sup>2</sup>.

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, flows below 0.5 ft<sup>3</sup>/s, and discharge above 500 ft<sup>3</sup>/s, which are poor. Water-quality data collected at this site.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.04	2.7	9.8	e8.0	53	e66	e38	67	5.3	2.1	1.0
2	.00	1.8	3.0	12	e7.9	45	e180	e130	43	.58	2.3	.90
3	.00	21	3.0	218	e7.9	38	e560	e110	31	1.3	1.2	1.1
4	.00	14	3.0	2820	e8.0	35	e1020	e90	22	6.3	1.9	.84
5	.00	9.2	3.3	528	e8.0	33	e450	e76	120	20	1.0	.61
6	.00	4.9	4.1	204	e8.2	29	e170	66	331	19	.01	.36
7	.00	2.7	4.1	127	e8.6	26	e480	43	99	12	.17	.22
8	.00	2.1	4.1	82	e9.6	25	e2000	33	51	6.3	.00	.14
9	.22	1.7	3.9	62	e11	25	e1000	27	31	.10	.42	.13
10	.21	1.4	22	55	24	22	e260	23	18	.02	5.0	.12
11	.06	1.1	46	59	665	21	e200	20	12	2.8	.06	.17
12	.00	.98	35	43	474	26	e160	16	10	2.7	.00	.47
13	.25	.90	35	36	300	32	e140	18	10	1.4	.00	.67
14	.19	.79	428	27	1630	e34	e120	20	15	2.0	.00	1.1
15	.06	.64	341	e24	603	e36	e110	16	e100	23	.00	1.8
16	.02	.51	151	e22	379	e44	e100	10	e90	33	.00	1.4
17	.30	.48	88	e19	255	e96	e140	7.7	340	17	.02	1.1
18	.26	.40	57	e17	473	e70	e240	7.0	146	13	112	.86
19	.11	.40	42	e15	671	e80	e140	226	58	5.6	59	.65
20	.05	.40	36	e14	230	e660	e120	179	34	5.2	15	1.8
21	.04	.40	32	e13	137	e580	e190	75	29	4.9	7.0	1.6
22	.02	.40	28	e12	180	e180	e240	44	36	2.6	4.7	.85
23	.01	.40	23	e12	288	e130	e140	33	22	2.1	3.9	12
24	.01	.40	17	e11	205	e90	e60	32	13	1.8	3.4	150
25	.00	.40	14	e10	144	e76	e40	e23	8.1	1.8	3.7	59
26	.00	1.2	13	e9.8	113	e68	e33	16	8.3	1.5	3.5	29
27	.00	1.6	12	e9.4	90	e74	e32	12	12	.81	4.0	24
28	.01	1.5	11	e9.0	71	e88	e30	540	5.8	.49	5.4	10
29	.03	1.6	12	e8.6	59	e160	e30	1370	.53	1.5	2.9	6.2
30	.04	1.6	11	e8.4	---	e110	e31	267	8.6	2.0	1.8	5.2
31	.04	---	10	e8.0	---	e80	---	122	---	2.1	1.3	---
TOTAL	1.95	74.94	1495.2	4505.0	7068.2	3066	8482	3689.7	1771.33	198.20	241.78	313.29
MEAN	.063	2.50	48.2	145	244	98.9	283	119	59.0	6.39	7.80	10.4
MAX	.30	.21	428	2820	1630	660	2000	1370	340	.33	112	150
MIN	.00	.04	2.7	8.0	7.9	21	30	7.0	.53	.02	.00	.12
CFSM	.00	.02	.48	1.44	2.41	.98	2.80	1.18	.58	.06	.08	.10
IN.	.00	.03	.55	1.66	2.60	1.13	3.12	1.36	.65	.07	.09	.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2000, BY WATER YEAR (WY)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	12.9	66.3	126	197	172	172	197	150	150	94.1	28.0	8.28
MAX	81.2	256	585	426	424	354	334	398	338	348	167	56.4
(WY)	1991	1993	1991	1996	1990	1993	1996	1996	1989	1992	1995	1992
MIN	.002	.051	.72	16.4	46.0	46.0	36.7	17.0	1.29	.15	.007	.006
(WY)	1992	1992	1992	1992	1992	1990	1997	1999	1999	1991	1991	1991

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR
ANNUAL TOTAL	24729.78	30907.59				
ANNUAL MEAN	67.8	84.4				
HIGHEST ANNUAL MEAN			114			
LOWEST ANNUAL MEAN			159			
HIGHEST DAILY MEAN			67.4			
LOWEST DAILY MEAN	1500	2820	4790			
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00			
INSTANTANEOUS PEAK FLOW	.00	.00	.00			
INSTANTANEOUS PEAK STAGE						
INSTANTANEOUS LOW FLOW						
ANNUAL RUNOFF (CFSM)	.67	.84	1.13			
ANNUAL RUNOFF (INCHES)	9.11	11.38	15.36			
10 PERCENT EXCEEDS	180	193	261			
50 PERCENT EXCEEDS	5.2	12	28			
90 PERCENT EXCEEDS	.00	.11	.27			

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**

**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 TEMPERATURES: April 2000 to current year.

DISSOLVED OXYGEN: April 2000 to current year.

INSTRUMENTATION.—Water-quality monitor. Electronic data logger. Set for 1-hour interval.

REMARKS.—Interruptions in the water-quality were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF RECORD.—

SPECIFIC CONDUCTANCE: Maximum, 777 microsiemens, July 16, 2000; minimum, 231 microsiemens, June 15 and 16, 2000.

pH: Maximum, 8.6 units, Apr. 30, May 1, July 7-9, 18, 20, 21, and 23, 2000; minimum, 7.0 units, May 17, 2000.

WATER TEMPERATURES: Maximum, 28°C, Aug. 16, 2000; minimum, 9.5°C, Sept. 17, 2000.

DISSOLVED OXYGEN: Maximum, 13.0 mg/L, Sept. 1 and 29, 2000; minimum, 0.6 mg/L, June 8, 2000.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum, 777 microsiemens, July 16; minimum, 231 microsiemens, June 15 and 16.

pH: Maximum, 8.6 units, Apr. 30, May 1, July 7-9, 18, 20, 21, and 23; minimum, 7.0 units, May 17.

WATER TEMPERATURES: Maximum, 28°C, Aug. 16; minimum, 9.5°C, Sept. 17.

DISSOLVED OXYGEN: Maximum, 13.0 mg/L, Sept. 1 and 29; minimum, 0.6 mg/L, June 8.

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	---	---	---	531	485	517
2	---	---	---	---	---	---	---	---	---	485	310	370
3	---	---	---	---	---	---	---	---	---	434	351	393
4	---	---	---	---	---	---	---	---	---	468	434	452
5	---	---	---	---	---	---	---	---	---	477	429	454
6	---	---	---	---	---	---	---	---	---	470	445	458
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	583	556	567
18	---	---	---	---	---	---	---	---	---	594	572	586
19	---	---	---	---	---	---	---	---	---	594	397	493
20	---	---	---	---	---	---	---	---	---	467	421	446
21	---	---	---	---	---	---	---	---	---	492	461	473
22	---	---	---	---	---	---	---	---	---	525	492	509
23	---	---	---	---	---	---	---	---	---	537	525	531
24	---	---	---	---	---	---	---	---	---	563	537	549
25	---	---	---	---	---	---	---	---	---	570	559	566
26	---	---	---	---	---	---	---	---	---	576	557	568
27	---	---	---	---	---	---	---	---	---	575	564	571
28	---	---	---	---	---	---	512	482	501	576	269	479
29	---	---	---	---	---	---	518	490	507	389	268	327
30	---	---	---	---	---	---	524	496	513	438	389	416
31	---	---	---	---	---	---	---	---	---	477	438	458
MONTH	---	---	---	---	---	---	524	482	507	594	268	485









**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**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 mi<sup>2</sup>.

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 good except those for estimated record which are fair. Flow completely regulated by Hoover Reservoir since Sept. 1954. (See station 03228400). Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	149	e160	142	120	135	178	152	116	263	145	156	145
2	144	e140	137	126	122	164	215	197	236	146	150	149
3	151	e150	141	145	122	135	3130	216	186	148	150	154
4	e150	e140	138	143	122	145	3620	169	153	168	150	e160
5	e150	e140	138	136	132	144	1270	176	199	150	149	e160
6	e150	e160	151	120	124	143	732	153	326	147	156	143
7	e140	e160	135	116	141	157	1380	143	231	147	151	148
8	e150	e170	148	113	134	161	4610	148	198	146	152	150
9	e160	e160	130	131	123	145	1620	137	e170	148	149	157
10	e130	e160	143	144	121	140	819	119	e120	136	154	154
11	e140	e160	144	127	122	139	435	110	e150	148	146	148
12	e160	e150	135	122	122	138	284	118	e180	148	160	147
13	e130	e150	136	122	136	138	218	122	e150	135	159	152
14	e160	e150	146	126	144	137	170	114	e140	132	146	150
15	e130	154	e140	119	135	143	147	120	e140	162	145	158
16	e140	143	e130	129	122	157	138	121	e150	167	144	159
17	e130	146	e130	130	119	132	160	120	159	146	141	159
18	e130	148	e170	126	139	124	134	136	180	147	152	156
19	e140	139	130	115	144	139	106	128	152	143	163	139
20	e140	135	128	124	159	898	108	114	151	160	161	147
21	e150	141	124	126	170	1350	190	113	145	147	161	147
22	e140	155	110	117	184	674	407	128	147	160	139	153
23	e130	150	96	126	153	384	338	122	148	157	145	160
24	e150	132	102	137	185	275	255	157	145	139	153	175
25	150	129	109	128	247	229	221	120	155	139	152	157
26	149	117	103	127	194	211	191	131	148	140	149	151
27	138	129	125	125	182	180	123	110	136	140	150	168
28	143	152	130	121	183	177	113	440	144	146	149	179
29	132	142	112	123	174	177	106	1570	149	151	e150	161
30	150	149	111	130	---	178	103	814	143	167	e170	163
31	e150	---	133	138	---	155	---	392	---	161	e150	---
TOTAL	4456	4411	4047	3932	4290	7647	21495	6874	5094	4616	4702	4649
MEAN	144	147	131	127	148	247	716	222	170	149	152	155
MAX	160	170	170	145	247	1350	4610	1570	326	168	170	179
MIN	130	117	96	113	119	124	103	110	120	132	139	139

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2000, BY WATER YEAR (WY)

MEAN	109	122	155	194	242	342	332	262	220	163	144	119
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	.15	1.69	.77	1.02	6.24	89.1	46.2	21.5	.30	.55	4.86	3.43
(WY)	1956	1956	1956	1956	1956	1972	1955	1955	1955	1955	1955	1955

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1955 - 2000

ANNUAL TOTAL	69310	76213										
ANNUAL MEAN	190	208							200			
HIGHEST ANNUAL MEAN									337			1973
LOWEST ANNUAL MEAN									111			1966
HIGHEST DAILY MEAN			1330	Mar 7	4610	Apr 8	10600	Jan 22	1959			
LOWEST DAILY MEAN			96	Dec 23	96	Dec 23	.00	May 20	1955			
ANNUAL SEVEN-DAY MINIMUM			110	Dec 21	110	Dec 21	.00	May 31	1955			
INSTANTANEOUS PEAK FLOW					6170	Apr 8	23800	Jan 21	1959			
INSTANTANEOUS PEAK STAGE					12.19	Apr 8	19.75	Jan 21	1959			
INSTANTANEOUS LOW FLOW					96	Dec 23	.00	May 20	1955			
10 PERCENT EXCEEDS			225		195		303					
50 PERCENT EXCEEDS			158		147		120					
90 PERCENT EXCEEDS			126		122		64					

e Estimated.



**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**03228805 ALUM CREEK AT AFRICA, OHIO**

LOCATION.—Latitude 40°10'56", longitude 82°57'42". in SE 1/4 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 mi<sup>2</sup>.

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, to Sept. 30, 1985, at datum 22.00 ft lower. Oct. 17, 1973, to 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. Flow regulated by Alum Creek Lake since August 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 ft<sup>3</sup>/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 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	18	16	8.6	11	10	14	25	335	17	19	18
2	19	19	16	8.6	11	11	15	16	135	17	19	18
3	19	18	11	14	11	11	28	16	34	27	19	18
4	19	18	7.0	15	11	11	21	16	11	37	19	17
5	18	18	7.0	12	11	11	17	26	35	17	19	17
6	18	18	7.0	11	11	12	16	31	140	14	19	17
7	18	18	7.1	11	11	12	23	32	183	19	18	17
8	18	18	7.1	12	11	12	26	57	183	19	18	17
9	17	18	7.3	12	11	13	18	76	136	19	19	17
10	18	18	8.0	12	12	13	17	76	35	19	19	17
11	18	18	7.8	11	13	13	120	74	9.9	19	18	17
12	18	18	7.8	12	11	13	182	75	10	19	18	17
13	18	18	8.1	12	14	12	181	75	10	19	18	17
14	17	18	10	12	16	12	133	64	11	19	18	17
15	17	18	8.1	12	12	12	81	43	95	18	18	18
16	17	18	7.9	12	12	13	81	43	191	18	18	17
17	18	18	8.1	12	12	12	63	42	367	18	19	17
18	18	18	8.1	12	15	11	37	42	476	18	19	17
19	18	17	8.1	12	13	12	37	55	476	18	18	16
20	19	16	8.0	12	13	16	37	71	412	18	18	17
21	19	16	8.1	12	13	13	39	69	262	18	18	16
22	18	16	9.0	12	13	12	39	68	71	18	18	17
23	18	16	9.0	12	13	12	38	69	15	18	18	17
24	18	17	9.0	12	13	12	278	67	15	18	18	17
25	18	16	8.9	12	13	12	430	65	16	18	18	17
26	18	17	8.9	12	13	12	420	65	16	18	19	17
27	18	16	9.0	11	12	13	245	65	16	18	19	17
28	17	16	8.9	11	12	13	67	67	16	19	19	17
29	17	16	8.8	11	11	12	37	308	16	20	19	16
30	17	16	8.9	11	---	13	38	463	16	19	18	16
31	18	---	8.7	11	---	13	---	462	---	19	18	---
TOTAL	557	520	272.7	362.2	355	379	2778	2723	3743.9	592	572	510
MEAN	18.0	17.3	8.80	11.7	12.2	12.2	92.6	87.8	125	19.1	18.5	17.0
MAX	19	19	16	15	16	16	430	463	476	37	19	18
MIN	17	16	7.0	8.6	11	10	14	16	9.9	14	18	16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2000, 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
MEAN	53.0	115	142	126	171	167	101	116	94.6	74.5	40.9	54.2															
MAX	309	375	460	437	464	514	358	651	293	364	570	618															
(WY)	1987	1980	1991	1993	1990	1979	1979	1996	1990	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 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1974 - 2000	
ANNUAL TOTAL	14327.2		13364.8			
ANNUAL MEAN	39.3		36.5			
HIGHEST ANNUAL MEAN					104	
LOWEST ANNUAL MEAN					243	1980
HIGHEST DAILY MEAN	692	Mar 9	476	Jun 18	8.54	1992
LOWEST DAILY MEAN	3.8	Jan 16	7.0	Dec 4	.00	Aug 25 1992
ANNUAL SEVEN-DAY MINIMUM	5.0	Jan 15	7.2	Dec 4	1.5	Jun 11 1976
INSTANTANEOUS PEAK FLOW			482	Jun 18	2310	Sep 19 1979
INSTANTANEOUS PEAK STAGE			3.37	Jun 18	27.74	Sep 19 1979
INSTANTANEOUS LOW FLOW			7.0	Dec 4	.00	Aug 25 1992
10 PERCENT EXCEEDS	50		67		296	
50 PERCENT EXCEEDS	18		17		18	
90 PERCENT EXCEEDS	9.9		11		5.8	

**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**03229500 BIG WALNUT CREEK AT REES, OHIO**

LOCATION.—Latitude 39°51'24", longitude 82°57'26", in NE 1/4 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 mi<sup>2</sup>.

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, to 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.—Record good except for periods of estimated record, which are poor. Flow regulated by Hoover Reservoir 26 mi upstream (see station 03228400) and Alum Creek Lake 30 mi upstream since August 1973. Beginning June 15, 1956, diversion at Morse Road Treatment Plant, 21 mi upstream from station, for municipal water supply for the City of Columbus. 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 ft<sup>3</sup>/s Jan. 22, 1959, gage height, 22.03 ft (from highwater mark in well), from rating curve extended above 13,000 ft<sup>3</sup>/s on basis of contracted-opening measurement of peak flow; minimum, 5 ft<sup>3</sup>/s Sept. 4, 5, 10-12, 1925; minimum daily since 1956, 9.4 ft<sup>3</sup>/s Sept. 13, 1964.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	119	53	53	59	e60	158	149	160	917	78	127	56
2	74	532	51	56	e62	144	418	1010	519	73	83	75
3	57	596	51	569	e64	148	1920	387	407	276	75	87
4	70	178	52	4310	e66	119	7080	294	235	357	64	125
5	68	101	48	672	e68	113	3390	285	291	147	60	153
6	57	74	106	296	e72	110	1270	369	705	111	63	68
7	51	58	73	201	75	110	1070	233	568	82	370	53
8	48	61	56	156	85	109	5440	423	426	75	213	52
9	84	63	47	135	99	103	4240	325	380	72	205	55
10	191	58	396	133	162	99	1460	246	247	74	509	53
11	117	55	217	140	776	106	964	210	154	77	137	56
12	64	51	92	120	460	235	723	189	205	80	79	67
13	119	47	153	104	600	172	560	214	792	72	65	225
14	347	46	1340	104	3060	125	475	223	205	289	59	87
15	115	48	447	85	859	109	327	161	354	686	53	62
16	72	49	184	79	461	338	270	135	324	153	56	55
17	57	50	121	e74	330	656	478	137	1240	97	238	49
18	76	54	88	e70	1280	249	536	129	766	83	1140	47
19	73	52	73	e74	1260	380	321	398	663	282	246	47
20	59	47	74	e78	468	2050	260	259	628	350	109	66
21	57	51	90	e70	311	2200	458	185	629	117	75	598
22	51	53	e64	e66	268	1310	801	175	380	81	65	135
23	50	54	e60	e66	269	700	679	418	169	72	66	1070
24	53	54	e54	e64	237	446	490	966	114	66	134	2340
25	51	59	e52	e60	227	324	717	319	135	63	242	392
26	53	119	e50	e60	251	250	657	213	149	68	81	420
27	62	185	e50	e58	217	272	552	213	139	63	238	218
28	66	83	52	e56	198	257	292	2180	109	138	224	138
29	58	60	55	e56	176	230	186	3430	99	444	85	104
30	52	52	62	e56	---	193	156	2020	84	134	73	88
31	52	---	60	e58	---	180	---	1280	---	157	64	---
TOTAL	2523	3043	4371	8185	12521	11995	36339	17186	12033	4917	5298	7041
MEAN	81.4	101	141	264	432	387	1211	554	401	159	171	235
MAX	347	596	1340	4310	3060	2200	7080	3430	1240	686	1140	2340
MIN	48	46	47	56	60	99	149	129	84	63	53	47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2000, 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									
MEAN	204	384	507	547	697	771	694	546	503	374	279	223	204	384	507	547	697	771	694	546	503	374	279	223	204	384	507	547	697	771	694	546	503	374	279	223
MAX	951	1398	2110	1458	1747	1688	1467	2057	1657	1313	1566	1814	951	1398	2110	1458	1747	1688	1467	2057	1657	1313	1566	1814	951	1398	2110	1458	1747	1688	1467	2057	1657	1313	1566	1814
(WY)	1987	1986	1991	1993	1990	1984	1979	1996	1997	1990	1980	1979	1987	1986	1991	1993	1990	1984	1979	1996	1997	1990	1980	1979	1987	1986	1991	1993	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	57.4	47.8	111	115	110	121	130	63.3	64.0	84.7	52.8	57.3	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	1995	1992	1988	1977	1992	1983	1976	1976	1988	1991	1993	1985	1995	1992	1988	1977	1992	1983	1976	1976	1988	1991	1993	1985

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1974 - 2000
ANNUAL TOTAL	95579	125452	
ANNUAL MEAN	262	343	476
HIGHEST ANNUAL MEAN			740
LOWEST ANNUAL MEAN			221
HIGHEST DAILY MEAN	2940	7080	14000
LOWEST DAILY MEAN	38	46	22
ANNUAL SEVEN-DAY MINIMUM	43	49	25
INSTANTANEOUS PEAK FLOW		7670	21700
INSTANTANEOUS PEAK STAGE		11.88	17.75
INSTANTANEOUS LOW FLOW		46	22
10 PERCENT EXCEEDS	705	702	1190
50 PERCENT EXCEEDS	103	128	185
90 PERCENT EXCEEDS	50	53	58

e Estimated.

**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**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 mi<sup>2</sup>.

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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	1.9	7.0	e7.2	e15	92	81	82	211	35	16	7.2
2	.12	7.1	6.3	e7.2	e14	86	101	128	162	31	14	6.8
3	2.5	26	6.0	e15	e14	75	401	165	210	32	14	6.4
4	1.7	7.1	5.8	337	e13	71	822	132	140	36	17	8.7
5	.91	14	6.2	504	e13	68	666	153	117	43	13	9.3
6	.59	8.3	6.8	209	e12	62	376	152	219	35	12	7.3
7	.41	5.9	6.5	125	e12	57	356	122	175	29	14	6.7
8	1.5	4.1	6.5	89	e12	54	1940	107	126	26	15	6.2
9	4.6	4.2	6.6	71	e11	54	2410	98	102	23	20	6.1
10	2.0	5.3	10	63	e11	53	1250	92	86	22	30	5.9
11	2.8	5.5	10	56	e20	48	680	89	77	23	63	5.9
12	2.5	4.8	9.7	48	e60	52	472	83	75	21	33	6.5
13	3.8	4.6	14	40	e150	50	341	82	74	19	21	7.6
14	2.8	4.6	25	34	e400	48	274	75	69	25	16	7.2
15	1.1	4.8	23	30	e700	56	228	71	64	144	13	6.7
16	.70	6.0	28	34	421	76	194	65	69	99	11	7.3
17	.54	5.5	22	26	335	206	171	63	78	45	11	7.0
18	1.4	5.6	17	25	383	183	163	62	88	30	14	7.3
19	1.8	5.5	14	29	871	159	149	89	75	31	18	7.3
20	3.1	5.7	12	26	589	457	139	418	63	32	18	7.4
21	6.0	5.5	11	e24	321	757	166	241	169	29	14	7.7
22	2.1	6.0	e9.4	e23	252	425	250	164	210	23	11	8.5
23	.67	6.1	e8.4	e22	243	272	208	146	113	19	9.8	15
24	.45	6.2	e7.6	e21	212	213	168	408	79	16	9.1	31
25	.82	6.2	e7.2	e20	177	179	144	311	71	15	9.7	37
26	.98	7.8	e7.0	e20	145	146	123	181	75	14	11	36
27	1.2	7.7	e7.0	e19	128	138	109	138	61	13	12	27
28	1.8	7.9	e6.8	e18	110	137	103	194	50	13	11	26
29	1.9	7.2	e6.6	e17	95	119	94	684	44	15	11	22
30	1.6	7.3	e6.4	e16	---	98	85	458	40	17	9.6	18
31	1.6	---	e6.4	e15	---	89	---	273	---	19	8.1	---
TOTAL	53.99	204.4	326.2	1990.4	5739	4580	12664	5526	3192	974	499.3	369.0
MEAN	1.74	6.81	10.5	64.2	198	148	422	178	106	31.4	16.1	12.3
MAX	6.0	26	28	504	871	757	2410	684	219	144	63	37
MIN	.00	1.9	5.8	7.2	11	48	81	62	40	13	8.1	5.9
CFSM	.01	.04	.06	.40	1.22	.91	2.61	1.10	.66	.19	.10	.08
IN.	.01	.05	.07	.46	1.32	1.05	2.91	1.27	.73	.22	.11	.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2000, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	19.5	91.9	105	260	208	256	289	267
MAX	81.0	312	349	485	273	503	493	845
(WY)	1996	1994	1997	1996	1994	1993	1996	1996
MIN	1.74	6.81	10.5	64.2	91.7	147	70.2	55.5
(WY)	2000	2000	2000	2000	1995	1998	1997	1999

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1993 - 2000

ANNUAL TOTAL	32268.65	36118.29	
ANNUAL MEAN	88.4	98.7	165
HIGHEST ANNUAL MEAN			256
LOWEST ANNUAL MEAN			91.1
HIGHEST DAILY MEAN	1520	Jan 23	2410
LOWEST DAILY MEAN	.00	Sep 6	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 12	.89
INSTANTANEOUS PEAK FLOW			2770
INSTANTANEOUS PEAK STAGE			11.90
INSTANTANEOUS LOW FLOW			.00
ANNUAL RUNOFF (CFSM)	.55		.61
ANNUAL RUNOFF (INCHES)	7.41		8.29
10 PERCENT EXCEEDS	247		232
50 PERCENT EXCEEDS	15		25
90 PERCENT EXCEEDS	.77		4.8

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**

**03230450 HELLBRANCH RUN NEAR HARRISBURG, OHIO**

LOCATION.—Latitude 39°49'50", longitude 83°09'36", Franklin County, Hydrologic Unit 05060001, on right side of abandoned bridge, 500 ft upstream from Lambert Road, 1.0 mi upstream from mouth, and 1.5 mi north-northeast of Harrisburg, Ohio.  
DRAINAGE AREA.—37.0 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.—October 1992 to current year.

GAGE.—Water-stage recorder. Elevation of gage is 785 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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	e1.2	14	14	9.2	42	2.1	1.4	1.8
2	.00	.00	.00	.01	e1.2	12	23	34	29	1.8	1.0	1.7
3	.00	.00	.00	40	e1.1	10	178	25	21	1.9	.75	3.3
4	.00	.00	.00	415	e1.1	9.9	463	19	16	4.3	.69	3.6
5	.00	.15	.00	68	e1.0	9.1	161	15	16	4.2	.67	3.5
6	.00	.00	.00	31	e1.0	8.0	90	13	31	2.8	.74	2.7
7	.00	.00	.00	19	e.97	7.2	68	11	19	2.0	.92	1.7
8	.00	.00	.00	14	e.93	7.2	647	12	14	1.6	.82	1.4
9	.00	.00	.00	11	e.90	7.1	296	11	11	1.3	3.4	1.2
10	.00	.00	.00	10	e1.3	6.5	105	10	9.0	1.3	7.9	1.1
11	.00	.00	.00	8.5	e10	6.4	74	9.1	7.7	1.5	4.8	.84
12	.00	.00	.00	6.6	e30	8.2	55	7.8	6.4	1.5	2.8	1.0
13	.00	.00	.00	5.7	153	8.5	43	7.7	6.6	1.1	1.9	2.1
14	.00	.00	25	4.9	725	7.7	36	7.7	6.1	1.5	1.3	2.6
15	.00	.00	21	4.0	173	7.1	30	6.2	8.0	9.8	.89	2.0
16	.00	.00	5.8	3.7	97	17	25	5.5	8.3	6.4	.68	1.3
17	.00	.00	3.2	3.2	62	60	25	5.2	54	3.6	.71	.93
18	.00	.00	2.0	3.1	298	35	25	5.0	27	2.5	16	.83
19	.00	.00	1.3	2.9	247	42	22	5.0	16	6.3	19	.75
20	.00	.00	1.0	e2.7	96	366	21	5.5	10	7.7	7.5	1.0
21	.00	.00	.62	e2.5	62	216	33	5.6	9.4	4.8	4.2	4.5
22	.00	.00	.37	e2.3	47	97	30	5.4	11	3.0	3.0	3.3
23	.00	.00	.21	e2.1	39	64	25	10	7.3	2.1	2.5	8.2
24	.00	.00	.05	e1.9	33	48	21	31	5.5	1.6	2.6	33
25	.00	.00	.01	e1.8	28	38	18	17	5.2	1.2	5.7	14
26	.00	.00	.00	e1.7	24	29	15	10	5.3	.89	2.6	13
27	.00	.00	.00	e1.6	21	28	13	9.2	4.5	.78	4.0	10
28	.00	.00	.01	e1.5	18	27	12	181	3.5	.90	8.6	6.1
29	.00	.00	.00	e1.4	15	22	11	252	3.0	.85	5.1	4.2
30	.00	.00	.00	e1.4	---	17	9.1	85	2.5	1.3	3.0	3.3
31	.00	---	.00	e1.3	---	15	---	51	---	2.2	2.2	---
TOTAL	0.00	0.15	60.57	672.81	2188.70	1249.9	2588.1	881.1	415.3	84.82	117.37	134.95
MEAN	.000	.005	1.95	21.7	75.5	40.3	86.3	28.4	13.8	2.74	3.79	4.50
MAX	.00	.15	25	415	725	366	647	252	54	9.8	19	33
MIN	.00	.00	.00	.00	.90	6.4	9.1	5.0	2.5	.78	.67	.75
CFSM	.00	.00	.05	.59	2.04	1.09	2.33	.77	.37	.07	.10	.12
IN.	.00	.00	.06	.68	2.20	1.26	2.60	.89	.42	.09	.12	.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2000, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997	1998	1999	2000	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	2.70	15.0	24.2	78.2	51.4	61.1	75.9	51.3	51.5	25.1	13.2	1.39				
MAX	16.0	46.2	82.0	143	75.5	109	157	187	142	82.1	65.4	4.50				
(WY)	1996	1993	1997	1996	2000	1993	1996	1996	1997	1993	1995	2000				
MIN	.000	.005	1.95	21.7	23.6	36.0	12.7	5.40	.36	.30	.000	.000				
(WY)	1995	2000	2000	2000	1995	1998	1997	1999	1999	1999	1999	1999				

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1993 - 2000
ANNUAL TOTAL	8369.88	8393.77	
ANNUAL MEAN	22.9	22.9	37.5
HIGHEST ANNUAL MEAN			66.8
LOWEST ANNUAL MEAN			22.9
HIGHEST DAILY MEAN	811	725	2000
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
INSTANTANEOUS PEAK FLOW		960	3180
INSTANTANEOUS PEAK STAGE		7.60	14.19
INSTANTANEOUS LOW FLOW		.00	.00
ANNUAL RUNOFF (CFSM)	.62	.62	1.01
ANNUAL RUNOFF (INCHES)	8.42	8.44	13.77
10 PERCENT EXCEEDS	51	41	88
50 PERCENT EXCEEDS	.19	3.5	9.8
90 PERCENT EXCEEDS	.00	.00	.00

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**

**03230450 HELLBRANCH RUN NEAR HARRISBURG, OHIO—Continued**

WATER-QUALITY RECORDS

PERIOD OF RECORD.—May 4, 1992, to current year.

PERIOD OF DAILY RECORD.—

SUSPENDED-SEDIMENT DISCHARGE: October 1, 1992, to current year.

INSTRUMENTATION.—Refrigerated water-quality pumping sampler since October 1, 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 by a local observer approximately once per day beginning Dec. 14, 1999, when flow returned to the stream channel. 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, 1 mg/L, Oct. 11, Nov. 3, 4, 1995, Aug. 7, and Oct. 25, 1996, on several days during 1998 and 2000, and Nov. 13, 1998.

SEDIMENT LOADS: Maximum daily, 4,420 tons, June 29, 1998; minimum daily, 0.00 ton, on many days during 1993, 1994, 1995, 1998, 1999, and on several days during 1996, 1997, and 2000.

EXTREMES FOR CURRENT YEAR.—

SEDIMENT CONCENTRATIONS: Maximum daily mean, 291 mg/L, Jan. 4; minimum daily mean, 1 mg/L, on several days during the year.

SEDIMENT LOADS: Maximum daily, 598 tons, Feb. 14; minimum daily, 0.00 ton, on several days during the year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[ft<sup>3</sup>/s, cubic feet per second; (00061), USGS National Water Information System parameter code; μS/cm, microsiemens per centimeter; deg C, degrees Celsius; mg/L, milligrams per liter; --, no data]

Date	Time	Discharge, instantaneous (ft <sup>3</sup> /s) (00061)	Oxygen, dissolved (mg/L) (00300)	pH, whole water, field (standard units) (00400)	Specific conductance, field (μS/cm) (00095)	Air temperature (deg C) (00020)	Water temperature (deg C) (00010)	Chloride, dissolved (mg/L as Cl) (00940)	Silica, dissolved (mg/L as SiO <sub>2</sub> ) (00955)	Sulfate, dissolved (mg/L as SO <sub>4</sub> ) (00945)
Jan.										
	3 2030	30	--	--	--	--	--	46	4.9	45
	3 2100	108	--	--	--	--	--	30	5.6	34
	3 2200	270	--	--	--	--	--	105	4.1	59
	4 0015	459	--	--	--	--	--	53	5.2	29
	4 0315	674	--	--	--	--	--	70	4.9	42
	4 1140	435	9.8	7.8	488	3.0	8.0	54	5.7	45
	4 1500	283	--	--	--	--	--	60	5.9	71
	5 1115	63	--	--	--	--	--	67	6.9	78
Feb.										
	13 1800	124	--	--	--	--	--	117	5.1	65
	13 1845	267	--	--	--	--	--	121	5.2	62
	13 2000	455	--	--	--	--	--	105	5.3	47
	13 2215	665	--	--	--	--	--	74	5.4	32
	14 0100	890	--	--	--	--	--	75	5.5	32
	14 2145	404	--	--	--	--	--	59	6.6	37
	16 0500	110	--	--	--	--	--	62	7.1	47
Apr.										
	5 1235	145	10.6	7.9	535	11.0	9.5	49	7.8	40
May										
	17 1235	5.1	14.1	8.6	837	25.0	17.0	98	1.9	56
June										
	8 1140	14	10.8	8.3	760	25.5	18.0	72	6.4	47
July										
	24 1350	1.5	14.8	8.8	724	26.0	24.5	89	3.1	50
Sept.										
	6 1125	2.8	10.3	8.4	664	18.0	17.5	72	4.7	45

**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**03230450 HELLBRANCH RUN NEAR HARRISBURG, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000—Continued

[mg/L, milligrams per liter; (00625), USGS National Information System parameter code; deg C, degrees Celsius; %, percent; mm, millimeters; <, concentration or value reported is less than that indicated; --, no data; \*, 10—Stream cross-section sample collected by equal-width-increment (EWI) sampling method, 50—Point sample collected from flow tank]

Date	Nitrogen, ammonia plus organic, total (mg/L as N) (00625)	Nitrogen, ammonia, dissolved (mg/L as N) (00608)	Nitrogen, nitrate, dissolved (mg/L as N) (00618)	Nitrogen, nitrite, dissolved (mg/L as N) (00613)	Phosphorus, ortho-phosphate, dissolved (mg/L as P) (00671)	Phosphorus, total (mg/L as P) (00665)	Residue, total at 105 deg C, suspended (mg/L) (00530)	Sediment, suspended (mg/L) (80154)	Sediment, sieve diameter % finer than .062 mm (70331)	Sampling method codes* (82398)
Jan.										
3	.8	.14	.29	<.02	.03	.33	415	544	--	50
3	3.4	<.03	3.3	<.02	.02	1.1	1260	1343	--	50
3	3.5	<.03	2.5	<.02	.04	.90	781	807	--	50
4	3.1	.03	3.5	<.02	.05	.99	827	906	--	50
4	3.4	.25	3.5	<.02	.05	.88	600	650	--	50
4	1.6	.24	7.0	<.02	.06	.38	183	193	96.2	10
4	1.6	<.03	8.6	<.02	.04	.31	130	148	--	50
5	1.3	.26	9.0	<.02	.04	.16	38	42	--	50
Feb.										
13	4.0	.91	8.0	<.02	.01	.52	607	645	--	50
13	4.1	.82	7.3	<.02	.02	.66	632	670	--	50
13	5.1	.67	5.8	<.02	.05	.87	711	742	--	50
13	3.5	.29	4.8	<.02	.08	.87	632	680	--	50
14	3.3	.42	6.3	<.02	.05	.74	534	564	--	50
14	2.2	.46	8.8	<.02	.07	.34	54	130	--	50
16	3.2	.80	11	<.02	.07	.21	45	54	--	50
Apr.										
5	1.6	.43	9.0	.47	.06	.20	44	57	--	10
May										
17	.6	<.03	3.4	<.02	<.01	<.02	3	--	--	10
June										
8	.3	.04	9.7	<.02	.05	.08	2	2	--	10
July										
24	.2	<.03	.56	<.02	.06	.03	3	1	--	10
Sept.										
6	.4	.04	.87	<.02	.07	.09	<2	1	--	10

**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**03230450 HELLBRANCH RUN NEAR HARRISBURG, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

SEDIMENT DISCHARGE, SUSPENDED, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[cfs, cubic feet per second; mg/L, milligrams per liter; --, no data; e, estimated]

Day	Mean discharge (cfs)	Mean concentration (mg/L)	Sediment discharge (tons per day)	Mean discharge (cfs)	Mean concentration (mg/L)	Sediment discharge (tons per day)	Mean discharge (cfs)	Mean concentration (mg/L)	Sediment discharge (tons per day)
<u>OCTOBER</u>									
1	.00	--	.00	.00	--	.00	.00	--	.00
2	.00	--	.00	.00	--	.00	.00	--	.00
3	.00	--	.00	.00	--	.00	.00	--	.00
4	.00	--	.00	.00	--	.00	.00	--	.00
5	.00	--	.00	.15	--	.00	.00	--	.00
6	.00	--	.00	.00	--	.00	.00	--	.00
7	.00	--	.00	.00	--	.00	.00	--	.00
8	.00	--	.00	.00	--	.00	.00	--	.00
9	.00	--	.00	.00	--	.00	.00	--	.00
10	.00	--	.00	.00	--	.00	.00	--	.00
11	.00	--	.00	.00	--	.00	.00	--	.00
12	.00	--	.00	.00	--	.00	.00	--	.00
13	.00	--	.00	.00	--	.00	.00	--	.00
14	.00	--	.00	.00	--	.00	25	46	4.8
15	.00	--	.00	.00	--	.00	21	57	3.6
16	.00	--	.00	.00	--	.00	5.8	40	.62
17	.00	--	.00	.00	--	.00	3.2	41	.35
18	.00	--	.00	.00	--	.00	2.0	45	.23
19	.00	--	.00	.00	--	.00	1.3	50	.17
20	.00	--	.00	.00	--	.00	1.0	64	.17
21	.00	--	.00	.00	--	.00	.62	66	.11
22	.00	--	.00	.00	--	.00	.37	52	.05
23	.00	--	.00	.00	--	.00	.21	41	.02
24	.00	--	.00	.00	--	.00	.05	33	.00
25	.00	--	.00	.00	--	.00	.01	26	.00
26	.00	--	.00	.00	--	.00	.00	20	.00
27	.00	--	.00	.00	--	.00	.00	16	.00
28	.00	--	.00	.00	--	.00	.01	13	.00
29	.00	--	.00	.00	--	.00	.00	10	.00
30	.00	--	.00	.00	--	.00	.00	8	.00
31	.00	--	.00	---	---	---	.00	6	.00
TOTAL	0.00	--	0.00	0.15	--	0.00	60.57	--	10.12
<u>JANUARY</u>									
1	.00	5	.00	e1.2	2	.01	14	3	.13
2	.01	4	.00	e1.2	2	.01	12	3	.10
3	40	156	98	e1.1	2	.01	10	2	.07
4	415	291	424	e1.1	2	.01	9.9	3	.08
5	68	44	8.9	e1.0	2	.01	9.1	2	.04
6	31	16	1.4	e1.0	2	.01	8.0	1	.02
7	19	9	.49	e.97	2	.01	7.2	1	.02
8	14	7	.28	e.93	2	.00	7.2	2	.04
9	11	6	.17	e.90	2	.00	7.1	3	.06
10	10	4	.10	e1.3	2	.01	6.5	2	.04
11	8.5	3	.07	e10	8	.21	6.4	1	.02
12	6.6	2	.04	e30	9	.75	8.2	3	.07
13	5.7	3	.04	153	189	240	8.5	3	.07
14	4.9	3	.04	725	276	598	7.7	1	.03
15	4.0	3	.03	173	94	46	7.1	2	.03
16	3.7	3	.03	97	52	14	17	9	.87
17	3.2	3	.03	62	43	7.2	60	27	4.8
18	3.1	3	.02	298	145	160	35	7	.63
19	2.9	3	.02	247	102	76	42	11	1.9
20	e2.7	3	.02	96	47	12	366	219	241
21	e2.5	3	.02	62	30	5.0	216	116	74
22	e2.3	3	.02	47	18	2.3	97	49	13
23	e2.1	3	.01	39	13	1.3	64	22	3.9
24	e1.9	3	.01	33	9	.83	48	12	1.5
25	e1.8	3	.01	28	7	.50	38	6	.63
26	e1.7	2	.01	24	6	.38	29	4	.29
27	e1.6	2	.01	21	5	.28	28	2	.18
28	e1.5	2	.01	18	4	.19	27	2	.15
29	e1.4	2	.01	15	4	.16	22	2	.12
30	e1.4	2	.01	---	---	---	17	2	.09
31	e1.3	2	.01	---	---	---	15	1	.05
TOTAL	672.81	--	533.81	2188.70	--	1165.18	1249.9	--	343.93
<u>FEBRUARY</u>									
<u>MARCH</u>									

**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**03230450 HELLBRANCH RUN NEAR HARRISBURG, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

SEDIMENT DISCHARGE, SUSPENDED, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000—Continued

[cfs, cubic feet per second; mg/L, milligrams per liter; --, no data; e, estimated]

Day	Mean discharge (cfs)	Mean concentration (mg/L)	Sediment discharge (tons per day)	Mean discharge (cfs)	Mean concentration (mg/L)	Sediment discharge (tons per day)	Mean discharge (cfs)	Mean concentration (mg/L)	Sediment discharge (tons per day)	
		<u>APRIL</u>			<u>MAY</u>			<u>JUNE</u>		
1	14	1	.04	9.2	7	.18	42	10	1.1	
2	23	2	.16	34	32	3.2	29	6	.49	
3	178	167	177	25	19	1.3	21	3	.19	
4	463	177	239	19	16	.79	16	2	.11	
5	161	66	30	15	13	.54	16	3	.17	
6	90	38	9.5	13	11	.37	31	26	2.4	
7	68	.26	5.0	11	9	.27	19	5	.28	
8	647	288	525	12	7	.24	14	3	.10	
9	296	106	90	11	4	.12	11	3	.10	
10	105	58	17	10	4	.10	9.0	2	.05	
11	74	39	7.7	9.1	4	.10	7.7	2	.04	
12	55	32	4.8	7.8	2	.04	6.4	2	.03	
13	43	27	3.2	7.7	2	.03	6.6	2	.03	
14	36	23	2.3	7.7	2	.04	6.1	4	.07	
15	30	20	1.6	6.2	3	.04	8.0	5	.11	
16	25	16	1.1	5.5	3	.05	8.3	7	.21	
17	25	14	.92	5.2	2	.03	54	154	23	
18	25	12	.80	5.0	3	.04	27	18	1.4	
19	22	10	.59	5.0	3	.05	16	7	.31	
20	21	10	.56	5.5	3	.04	10	6	.17	
21	33	24	2.2	5.6	2	.04	9.4	5	.12	
22	30	20	1.6	5.4	3	.04	11	3	.10	
23	25	15	1.0	10	9	.41	7.3	2	.05	
24	21	13	.76	31	19	1.6	5.5	2	.03	
25	18	12	.58	17	4	.20	5.2	3	.05	
26	15	11	.42	10	1	.04	5.3	8	.13	
27	13	10	.33	9.2	2	.04	4.5	11	.13	
28	12	9	.28	181	178	201	3.5	4	.04	
29	11	8	.22	252	133	116	3.0	4	.03	
30	9.1	7	.17	85	34	8.0	2.5	6	.04	
31	---	---	---	51	15	2.1	---	---	---	
TOTAL	2588.1	--	1123.83	881.1	--	337.04	415.3	--	31.08	
		<u>JULY</u>			<u>AUGUST</u>			<u>SEPTEMBER</u>		
1	2.1	5	.03	1.4	9	.04	1.8	3	.01	
2	1.8	10	.05	1.0	7	.02	1.7	2	.01	
3	1.9	15	.08	.75	9	.02	3.3	3	.02	
4	4.3	4	.04	.69	12	.02	3.6	2	.02	
5	4.2	2	.02	.67	17	.03	3.5	1	.01	
6	2.8	1	.01	.74	16	.03	2.7	1	.01	
7	2.0	1	.00	.92	11	.03	1.7	1	.00	
8	1.6	4	.02	.82	9	.02	1.4	2	.01	
9	1.3	8	.03	3.4	12	.16	1.2	4	.01	
10	1.3	10	.04	7.9	16	.34	1.1	6	.02	
11	1.5	10	.04	4.8	10	.13	.84	3	.01	
12	1.5	8	.03	2.8	6	.05	1.0	5	.01	
13	1.1	6	.02	1.9	4	.02	2.1	5	.03	
14	1.5	9	.05	1.3	4	.01	2.6	2	.01	
15	9.8	10	.28	.89	7	.02	2.0	2	.01	
16	6.4	2	.04	.68	9	.02	1.3	3	.01	
17	3.6	1	.01	.71	7	.01	.93	4	.01	
18	2.5	2	.01	16	31	2.9	.83	4	.01	
19	6.3	7	.17	19	37	2.0	.75	5	.01	
20	7.7	5	.12	7.5	15	.33	1.0	9	.04	
21	4.8	2	.03	4.2	6	.06	4.5	11	.14	
22	3.0	1	.01	3.0	3	.03	3.3	4	.04	
23	2.1	2	.01	2.5	3	.02	8.2	65	4.0	
24	1.6	3	.01	2.6	7	.11	33	56	5.4	
25	1.2	12	.04	5.7	38	.68	14	18	.73	
26	.89	16	.04	2.6	9	.07	13	10	.36	
27	.78	12	.03	4.0	23	.36	10	7	.19	
28	.90	11	.03	8.6	20	.45	6.1	4	.06	
29	.85	15	.04	5.1	6	.09	4.2	2	.02	
30	1.3	7	.02	3.0	4	.03	3.3	3	.03	
31	2.2	8	.05	2.2	3	.02	---	---	---	
TOTAL	84.82	--	1.40	117.37	--	8.12	134.95	--	11.24	
YEAR	8393.77	--	3565.75							



**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**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 mi<sup>2</sup>.

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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	31	27	e26	e44	281	239	220	578	117	64	52
2	16	36	30	e30	e41	262	246	306	435	109	59	49
3	12	46	31	86	e40	235	778	452	393	108	56	47
4	10	63	31	1330	e39	215	2800	396	347	118	53	51
5	11	51	30	2350	e39	205	2350	335	303	114	56	50
6	10	62	30	956	e38	193	1390	382	385	135	67	47
7	10	58	29	483	e38	179	908	314	584	121	64	45
8	10	50	28	334	e37	170	3550	283	369	102	64	51
9	14	44	25	261	e36	169	7690	258	296	92	73	58
10	19	40	31	222	e35	168	4730	240	255	88	164	51
11	20	38	42	199	e50	161	1880	225	226	87	100	46
12	21	36	37	186	e200	161	1380	215	208	81	100	43
13	24	33	42	175	e900	160	1000	208	200	73	85	46
14	29	31	69	157	2600	154	792	201	190	74	73	44
15	50	29	81	146	2840	155	653	197	192	134	63	44
16	44	29	99	e120	1590	182	549	190	188	179	56	43
17	38	29	93	e110	1290	433	497	175	490	143	51	46
18	35	31	70	e100	1680	547	479	169	325	126	51	45
19	30	32	60	e94	2830	433	478	167	294	150	83	42
20	28	31	52	e86	2230	1400	424	1150	230	150	135	39
21	26	29	46	e78	1190	2580	462	830	229	106	127	49
22	23	27	41	e76	819	1640	539	452	346	87	90	45
23	23	25	e38	e70	762	969	601	369	300	77	73	50
24	31	27	e35	e64	735	697	482	493	229	69	66	122
25	32	29	e32	e60	595	555	410	701	189	63	66	310
26	31	31	e31	e58	478	447	354	431	175	56	57	319
27	29	29	e30	e54	407	390	304	322	182	56	59	189
28	28	29	e29	e52	354	385	292	636	164	54	65	185
29	27	28	e28	e49	309	384	263	1790	141	56	62	134
30	26	28	e27	e47	---	313	238	1490	127	60	55	105
31	28	---	e26	e45	---	268	---	813	---	64	53	---
TOTAL	749	1082	1300	8104	22246	14491	36758	14410	8570	3049	2290	2447
MEAN	24.2	36.1	41.9	261	767	467	1225	465	286	98.4	73.9	81.6
MAX	50	63	99	2350	2840	2580	7690	1790	584	179	164	319
MIN	10	25	25	26	35	154	238	167	127	54	51	39
CFSM	.05	.07	.08	.49	1.44	.88	2.29	.87	.53	.18	.14	.15
IN.	.05	.08	.09	.56	1.55	1.01	2.56	1.00	.60	.21	.16	.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2000, BY WATER YEAR (WY)

MEAN	105	256	465	712	786	934	835	577	452	254	155	92.8
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 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1922 - 2000
ANNUAL TOTAL	114456.2	115496	
ANNUAL MEAN	314	316	467
HIGHEST ANNUAL MEAN			840
LOWEST ANNUAL MEAN			79.1
HIGHEST DAILY MEAN	4790	7690	38400
LOWEST DAILY MEAN	3.9	10	1.4
ANNUAL SEVEN-DAY MINIMUM	4.2	11	2.0
INSTANTANEOUS PEAK FLOW		8930	49000
INSTANTANEOUS PEAK STAGE		11.50	17.94
INSTANTANEOUS LOW FLOW		10	1.4
ANNUAL RUNOFF (CFSM)	.59	.59	.87
ANNUAL RUNOFF (INCHES)	7.97	8.05	11.88
10 PERCENT EXCEEDS	859	711	1120
50 PERCENT EXCEEDS	75	96	155
90 PERCENT EXCEEDS	18	29	25

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**

**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 mi<sup>2</sup>.

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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	7.4	8.5	e12	e22	137	105	115	314	55	41	17
2	6.3	14	7.4	e30	e22	123	118	185	207	50	41	16
3	4.7	21	7.0	144	e22	100	470	199	195	61	38	17
4	3.4	16	7.5	1340	e21	96	2040	168	215	184	36	32
5	2.9	9.9	7.5	500	e21	91	1040	164	164	102	35	32
6	2.5	7.9	9.2	236	e21	85	561	144	212	72	37	37
7	2.7	8.3	9.0	160	e21	79	377	131	164	58	45	29
8	2.8	10	7.7	127	e20	78	2150	134	129	50	49	25
9	5.3	11	e10	112	e25	78	2490	130	109	44	58	22
10	6.7	11	e14	104	e30	73	780	119	93	43	96	14
11	7.2	12	e25	e90	e50	71	519	106	81	44	85	19
12	8.4	13	e50	e80	e100	78	392	98	74	45	52	21
13	8.0	13	e80	e70	e230	73	300	95	73	41	44	27
14	6.7	12	e70	e64	2430	73	257	92	73	41	40	23
15	10	13	e80	e60	1070	75	224	82	88	68	42	15
16	9.8	11	e120	e54	659	89	195	80	85	84	46	16
17	7.7	11	e50	e50	456	293	185	80	1330	77	40	17
18	7.2	11	e40	e45	1140	206	198	80	696	58	35	17
19	6.9	11	e28	e42	1930	199	185	81	410	98	29	17
20	7.2	11	e23	e40	777	995	175	82	241	191	22	22
21	7.6	11	e19	e37	490	1050	313	77	223	91	16	29
22	7.2	12	e17	e35	369	560	355	76	339	63	11	23
23	6.4	12	e15	e33	304	363	278	92	210	51	11	28
24	6.3	12	e14	e32	253	267	221	107	135	44	14	51
25	6.2	12	e13	e30	217	216	188	100	111	40	22	47
26	5.8	13	e12	e29	188	179	160	89	99	38	17	54
27	5.6	13	e12	e28	175	165	146	85	106	37	20	45
28	6.2	13	e11	e26	154	162	139	204	83	38	21	36
29	6.4	9.5	e11	e25	139	147	128	905	71	39	22	25
30	6.5	8.5	e10	e24	---	127	116	520	62	40	20	19
31	7.4	---	e10	e23	---	113	---	298	---	43	17	---
TOTAL	194.9	350.5	797.8	3682	11356	6441	14805	4918	6392	1990	1102	792
MEAN	6.29	11.7	25.7	119	392	208	494	159	213	64.2	35.5	26.4
MAX	10	21	120	1340	2430	1050	2490	905	1330	191	96	54
MIN	2.5	7.4	7.0	12	20	71	105	76	62	37	11	14
CFSM	.03	.05	.11	.52	1.72	.91	2.16	.70	.93	.28	.16	.12
IN.	.03	.06	.13	.60	1.85	1.05	2.42	.80	1.04	.32	.18	.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2000, BY WATER YEAR (WY)

	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
MEAN	52.6	152	266	315	367	433	389	331	277	114	104	69.1			
MAX	180	743	641	910	910	1239	786	1210	764	480	531	779			
(WY)	1980	1973	1978	1996	1975	1978	1996	1997	1973	1979	1979	1979			
MIN	6.29	9.67	15.7	10.0	111	113	58.5	29.2	17.0	12.9	13.7	3.73			
(WY)	2000	1999	1977	1977	1978	1969	1976	1976	1999	1977	1999	1998			

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1967 - 2000
ANNUAL TOTAL	48625.81	52821.2	
ANNUAL MEAN	133	144	238
HIGHEST ANNUAL MEAN			394
LOWEST ANNUAL MEAN			82.7
HIGHEST DAILY MEAN	2420	Jan 22	9400
LOWEST DAILY MEAN	.91	Sep 19	.91
ANNUAL SEVEN-DAY MINIMUM	1.2	Sep 14	1.2
INSTANTANEOUS PEAK FLOW			3530
INSTANTANEOUS PEAK STAGE			9.09
INSTANTANEOUS LOW FLOW			2.5
ANNUAL RUNOFF (CFSM)	.58	.63	1.05
ANNUAL RUNOFF (INCHES)	7.93	8.62	14.20
10 PERCENT EXCEEDS	335	299	545
50 PERCENT EXCEEDS	18	50	93
90 PERCENT EXCEEDS	6.3	8.4	16

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**

**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 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

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, to Aug. 6, 1930, nonrecording gage, at site 1,400 ft upstream at present datum. Aug. 7, 1930, to Sept. 30, 1969, water-stage recorder 900 ft upstream at same datum.

REMARKS.—Records good except for periods of estimated record, which are fair. Flow regulated by 6 reservoirs 36 mi to 91 mi upstream from station. Water-quality data 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 ft<sup>3</sup>/s (estimated by Franklin County Conservancy District).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1610	599	640	717	e640	2780	2420	2010	6370	e1500	e800	675
2	906	707	603	713	e640	2560	2050	2450	4970	e1400	771	646
3	630	1410	569	743	e620	2300	3050	4010	3360	1380	650	772
4	574	2130	562	7810	e620	2130	12100	3710	2770	2260	615	1160
5	535	1220	544	16600	e600	2050	17900	3160	2260	2620	586	1030
6	538	930	580	13500	e600	1920	15600	2900	3120	3510	610	924
7	510	791	677	8540	e620	1770	9050	2660	4730	2750	642	705
8	487	747	698	6340	e640	1590	10000	2250	5000	1980	1030	632
9	490	716	637	3990	e660	1460	20300	2450	4030	1590	1060	608
10	580	696	643	2680	e700	1390	26400	2190	3090	1350	1580	595
11	770	689	1060	2250	1340	1370	23600	2080	2420	1330	1880	596
12	760	660	1250	2230	3930	1420	16400	2030	2040	1220	1310	597
13	644	671	957	1940	6340	1700	13100	1990	2080	1180	1120	624
14	649	660	1340	1580	13800	1530	9420	1840	2430	1130	911	931
15	1260	643	4280	1360	19600	1350	6240	1810	1880	1080	e700	689
16	1010	641	2730	1210	17100	1370	4450	1880	2880	e2400	e640	578
17	833	634	2790	1140	9950	2730	3900	1430	5250	e2100	677	533
18	775	621	2210	1110	9860	3680	4150	1320	8390	1910	1100	543
19	769	626	1380	1050	20600	2720	4090	1310	8280	1650	3040	587
20	797	635	1140	1060	16800	4820	4400	2120	7020	e1800	1510	728
21	720	631	1110	942	9940	e7000	4120	4550	e5000	e1900	1160	847
22	691	625	1040	877	7060	13800	4800	4050	e4000	e1600	960	1530
23	678	613	916	e800	9880	10100	5380	3050	e3400	e1300	833	826
24	658	609	854	e740	9870	6700	5400	3810	e3000	e1100	774	4160
25	652	606	763	e700	8480	5000	5610	4480	e2600	e940	1000	6030
26	639	615	719	e680	6500	3850	4470	3310	e2400	e840	1260	2700
27	610	654	697	e680	5320	3390	3800	2280	e2200	e800	849	2600
28	598	880	712	e660	4720	3080	3220	2100	e2000	e760	1080	1830
29	587	738	707	e660	3770	2890	2580	10000	e1700	e900	1320	1480
30	602	658	709	e640	---	2710	2200	11700	e1600	e1000	840	1190
31	599	---	718	e640	---	2520	---	8520	---	e820	711	---
TOTAL	22161	23055	34235	84582	191200	103680	250200	103450	110270	48100	32019	37346
MEAN	715	768	1104	2728	6593	3345	8340	3337	3676	1552	1033	1245
MAX	1610	2130	4280	16600	20600	13800	26400	11700	8390	3510	3040	6030
MIN	487	599	544	640	600	1350	2050	1310	1600	760	586	533

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2000, BY WATER YEAR (WY)

	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955			
MEAN	962	2017	3495	5278	5808	7126	6071	4155	3258	2148	1433	979																										
MAX (WY)	8068	12130	14120	30110	13700	19450	14640	18590	11050	9507	8263	10180																										
MIN (WY)	1927	1973	1991	1937	1951	1963	1957	1996	1997	1992	1980	1979																										
	192	210	222	312	386	1041	1136	440	378	303	214	207																										
	1954	1935	1935	1931	1934	1931	1941	1934	1925	1930	1930	1953																										

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1921 - 2000	
ANNUAL TOTAL	936576		1040298			
ANNUAL MEAN	2566		2842		3549	
HIGHEST ANNUAL MEAN					6217	
LOWEST ANNUAL MEAN					883	
HIGHEST DAILY MEAN	21000		26400		127000	
LOWEST DAILY MEAN	438		487		166	
ANNUAL SEVEN-DAY MINIMUM	454		531		174	
INSTANTANEOUS PEAK FLOW			27500		144000	
INSTANTANEOUS PEAK STAGE			12.69		32.50	
INSTANTANEOUS LOW FLOW			487		166	
10 PERCENT EXCEEDS	7110		6790		9210	
50 PERCENT EXCEEDS	1010		1360		1480	
90 PERCENT EXCEEDS	536		620		377	

e Estimated.

**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**03231500 SCIOTO RIVER AT CHILLICOTHE, OHIO—Continued**

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1950-51, 1965-1981, November 1985 to current year.

PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: May 1965 to October 1981, November 1985 to current year.

pH: June 1971 to October 1981, November 1985 to current year.

WATER TEMPERATURES: October 1950 to September 1951, October 1953 to October 1981, November 1985 to current year.

DISSOLVED OXYGEN: May 1965 to October 1981, November 1985 to current year.

INSTRUMENTATION.—Water-quality monitor. Electronic data logger replaced digital recorder since July 12, 1991. Set for 1-hour interval.

REMARKS.—Interruptions in the water-quality record were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: Maximum, 1,430 microsiemens, Feb. 12, 2000; minimum, 150 microsiemens, June 29, 1972.

pH: Maximum, 9.3 units, Aug. 24-26, 1981, May 1, 1988, and Oct. 1, 2, 1995; minimum, 6.3 units, Mar. 6, 1979.

WATER TEMPERATURES: Maximum, 32.5°C, July 17, Aug. 18, 1988; minimum, 0.0°C, on many days during winters.

DISSOLVED OXYGEN: Maximum, >20.0 mg/L, on several days during 1978 thru 1995; minimum, 0.0 mg/L, April 27, Aug. 12, Sept. 22, 1966.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum, 1,430 microsiemens, Feb. 12; minimum, 345 microsiemens, Feb. 19.

pH: Maximum, 8.9 units, July 13; minimum, 7.0 units, Sept. 24-26.

WATER TEMPERATURES: Maximum, 28.5°C, Aug. 3; minimum, 0.0°C, Jan. 27-29.

DISSOLVED OXYGEN: Maximum, 19.0 mg/L, Apr. 2; minimum, 3.4 mg/L, May 16.

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	919	903	912	796	760	778	864	817	838	925	916	921
2	911	736	836	760	713	727	827	793	806	919	910	915
3	736	645	671	808	725	735	801	790	795	930	893	914
4	674	639	656	846	644	779	848	801	824	896	508	688
5	691	674	682	644	577	595	875	848	863	548	459	491
6	733	691	706	596	576	581	954	853	905	705	546	630
7	792	733	762	635	596	616	924	866	887	705	608	652
8	832	792	812	668	635	651	893	884	887	608	557	569
9	849	771	832	694	668	682	912	893	903	619	559	585
10	832	821	827	725	694	712	913	860	893	650	619	638
11	846	826	834	744	725	734	903	841	880	672	647	655
12	868	846	861	765	744	756	883	846	870	695	672	684
13	874	819	863	770	765	768	875	721	803	694	670	680
14	850	806	831	778	768	774	721	650	678	701	689	693
15	806	750	769	781	777	779	758	511	657	716	701	712
16	784	749	764	794	781	787	545	502	515	733	713	723
17	781	663	720	807	793	798	601	545	575	770	733	752
18	663	634	643	821	807	814	636	562	588	795	769	784
19	664	633	650	822	816	818	673	636	657	794	790	792
20	696	664	680	817	805	809	736	673	709	805	788	793
21	739	696	715	805	796	799	760	719	743	822	793	805
22	760	739	753	799	795	798	790	760	779	855	822	843
23	762	754	759	801	798	800	798	790	794	891	855	875
24	757	750	754	809	798	803	805	798	800	911	890	897
25	763	751	758	819	806	809	821	804	809	980	911	944
26	771	762	766	821	808	815	849	821	836	992	969	985
27	799	771	782	813	804	809	895	849	874	970	966	968
28	807	777	801	823	804	810	907	895	901	1020	970	990
29	817	777	803	835	823	830	934	903	916	1040	1020	1030
30	814	809	812	836	833	835	927	919	924	1030	1000	1020
31	809	796	802	---	---	---	924	911	919	1000	993	997
MONTH	919	633	768	846	576	760	954	502	801	1040	459	794



**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**03231500 SCIOTO RIVER AT CHILLICOTHE, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.3	8.2	8.2	8.1	7.8	7.9	---	---	---	7.9	7.7	7.8
2	8.2	8.0	8.1	8.1	7.8	8.0	---	---	---	---	---	---
3	8.1	7.9	8.0	7.9	7.7	7.8	7.7	7.5	7.6	---	---	---
4	8.2	7.9	8.2	7.7	7.5	7.6	8.0	7.7	7.9	8.2	8.0	8.1
5	8.6	8.0	8.3	7.6	7.4	7.5	8.1	7.9	8.0	8.1	7.8	8.0
6	8.7	8.4	8.5	7.6	7.4	7.5	8.1	7.5	7.8	8.1	7.8	7.9
7	8.7	8.4	8.5	7.6	7.5	7.6	8.0	7.4	7.7	8.1	7.8	7.9
8	8.6	8.4	8.5	7.7	7.5	7.6	8.0	7.7	7.8	8.1	7.9	7.9
9	8.5	8.2	8.3	7.7	7.5	7.6	8.0	7.6	7.8	8.0	7.8	7.9
10	8.6	8.4	8.5	7.6	7.5	7.6	---	---	---	8.3	8.0	8.2
11	8.6	8.4	8.5	7.7	7.5	7.6	7.7	7.6	7.6	8.7	8.2	8.3
12	8.5	8.2	8.3	7.8	7.6	7.7	8.1	7.6	7.7	8.2	8.1	8.2
13	8.4	8.2	8.3	7.9	7.6	7.7	8.1	7.5	8.0	8.2	8.1	8.2
14	8.2	8.1	8.2	7.7	7.5	7.6	8.0	7.5	7.8	8.2	8.1	8.1
15	8.2	8.1	8.1	7.8	7.6	7.7	7.8	7.3	7.5	8.1	8.0	8.1
16	8.2	8.0	8.1	7.9	7.7	7.8	7.8	7.4	7.4	8.1	8.0	8.0
17	8.2	7.7	8.0	8.0	7.8	7.9	7.5	7.4	7.4	8.1	8.1	8.1
18	7.9	7.8	7.9	7.8	7.5	7.7	7.5	7.4	7.4	8.3	8.1	8.2
19	8.1	7.8	7.9	7.7	7.4	7.6	7.6	7.5	7.5	8.3	8.2	8.2
20	7.9	7.6	7.8	8.1	7.5	7.9	---	---	---	8.3	8.2	8.3
21	8.0	7.6	7.8	8.0	7.6	7.8	7.9	7.7	7.8	8.2	8.1	8.2
22	8.0	7.9	7.9	7.8	7.6	7.7	7.9	7.8	7.8	8.2	8.1	8.1
23	8.1	7.9	8.0	8.0	7.4	7.8	7.9	7.8	7.9	8.2	8.1	8.1
24	8.2	8.0	8.0	7.9	7.4	7.6	7.9	7.8	7.8	8.1	8.0	8.1
25	8.1	8.0	8.0	8.0	7.6	7.8	7.9	7.8	7.9	8.1	8.0	8.1
26	8.1	7.9	8.0	8.0	7.7	7.8	7.9	7.8	7.8	8.0	7.9	8.0
27	8.1	8.0	8.0	7.8	7.7	7.8	7.9	7.8	7.9	8.1	8.0	8.0
28	8.1	7.8	8.0	7.9	7.6	7.8	---	---	---	8.2	8.0	8.1
29	8.0	7.8	7.9	7.8	7.6	7.7	---	---	---	8.6	8.0	8.1
30	8.0	7.8	7.9	7.8	7.7	7.8	7.7	7.5	7.6	8.5	7.9	8.1
31	8.1	7.8	7.9	---	---	---	7.8	7.6	7.8	8.0	8.0	8.0
MONTH	8.7	7.6	8.1	8.1	7.4	7.7	8.1	7.3	7.7	8.7	7.7	8.1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.3	8.0	8.1	8.0	7.4	7.7	8.4	8.3	8.3	---	---	---
2	8.1	8.0	8.1	7.8	7.3	7.7	8.5	8.3	8.4	8.3	8.2	8.2
3	8.3	8.0	8.1	8.3	7.4	7.8	8.5	8.4	8.5	8.2	8.0	8.1
4	8.2	8.1	8.1	7.9	7.6	7.8	8.5	8.3	8.4	8.4	8.0	8.1
5	8.1	7.4	7.6	8.0	7.4	7.8	8.3	8.3	8.3	8.2	8.1	8.1
6	8.1	7.4	7.6	8.2	7.9	8.0	8.4	8.3	8.4	8.4	8.2	8.3
7	7.6	7.6	7.6	8.0	7.9	7.9	8.6	8.4	8.5	8.5	8.2	8.3
8	8.3	7.6	7.8	8.2	7.9	8.0	8.6	8.5	8.5	8.5	8.0	8.2
9	8.2	7.6	7.7	8.4	7.9	8.0	8.5	8.4	8.4	8.5	8.0	8.3
10	8.5	7.7	7.8	8.3	7.9	8.1	8.4	8.4	8.4	8.5	7.9	8.2
11	8.5	7.8	8.1	8.2	8.0	8.1	8.5	8.4	8.4	8.8	7.9	8.4
12	7.8	7.7	7.7	8.2	8.1	8.1	8.5	8.4	8.5	8.3	8.0	8.2
13	8.5	7.7	8.2	8.3	8.0	8.1	8.4	8.3	8.4	8.5	8.0	8.2
14	8.5	7.8	8.4	8.0	7.9	8.0	8.3	8.2	8.3	8.3	8.0	8.1
15	8.4	7.7	7.8	8.4	7.9	8.0	8.4	8.2	8.3	8.2	7.6	8.1
16	8.4	7.8	7.8	---	---	---	8.4	8.3	8.4	7.7	7.4	7.6
17	8.3	7.8	8.0	---	---	---	8.5	8.3	8.4	7.8	7.4	7.6
18	8.2	7.8	8.0	---	---	---	8.8	8.5	8.7	7.8	7.6	7.7
19	8.0	7.7	7.8	---	---	---	---	---	---	8.1	7.7	7.9
20	7.8	7.7	7.7	---	---	---	---	---	---	8.1	7.8	7.9
21	8.0	7.7	7.9	---	---	---	8.8	8.6	8.7	7.9	7.6	7.8
22	8.0	7.8	7.9	8.3	7.9	8.1	8.8	8.7	8.7	7.6	7.5	7.6
23	7.9	7.8	7.9	8.3	7.8	8.1	8.8	8.6	8.7	7.8	7.5	7.5
24	8.0	7.7	7.8	8.7	8.2	8.5	8.7	8.4	8.6	8.0	7.8	7.9
25	7.9	7.7	7.8	8.5	8.3	8.4	8.6	8.3	8.4	7.9	7.8	7.8
26	7.9	7.6	7.7	8.3	8.2	8.2	8.5	8.3	8.4	7.9	7.8	7.8
27	7.7	7.6	7.7	8.2	8.1	8.2	8.7	8.5	8.6	8.1	7.8	8.0
28	7.7	7.4	7.6	8.2	8.1	8.2	8.6	8.3	8.5	8.1	8.0	8.0
29	7.7	7.6	7.6	8.2	8.2	8.2	8.6	8.4	8.5	8.1	7.6	7.8
30	---	---	---	8.3	8.2	8.2	8.5	8.3	8.4	7.7	7.6	7.7
31	---	---	---	8.3	8.3	8.3	---	---	---	7.8	7.7	7.8
MONTH	8.5	7.4	7.9	8.7	7.3	8.1	8.8	8.2	8.5	8.8	7.4	8.0



**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**03231500 SCIOTO RIVER AT CHILLICOTHE, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	19.5	18.0	19.0	15.5	14.0	14.5	6.0	5.0	5.5	4.5	3.0	3.5			
2	19.5	17.5	18.5	15.5	12.5	14.5	5.5	4.0	5.0	7.5	4.5	6.0			
3	20.0	18.0	19.0	12.5	11.0	11.5	6.5	5.0	5.5	9.5	7.5	8.5			
4	19.5	17.5	18.5	12.0	11.0	11.5	8.0	6.5	7.5	10.5	9.0	10.0			
5	18.0	16.5	17.0	11.5	9.5	10.5	9.5	8.0	8.5	9.0	6.0	7.5			
6	17.5	15.5	16.5	12.5	11.5	12.0	9.0	7.5	8.0	6.0	4.5	5.0			
7	17.5	15.5	16.5	12.0	11.0	11.5	8.0	7.0	7.5	4.5	4.0	4.5			
8	17.0	15.5	16.5	12.0	10.5	11.0	7.5	6.0	6.5	4.5	4.0	4.5			
9	17.5	17.0	17.0	13.0	11.0	12.0	7.0	6.0	6.5	5.0	4.0	4.5			
10	18.5	17.0	17.5	14.0	12.5	13.0	8.0	6.5	7.0	6.0	5.0	5.5			
11	18.5	17.5	18.0	14.0	13.0	13.5	7.0	5.5	6.0	6.0	5.5	6.0			
12	18.0	16.5	17.5	13.5	12.0	12.5	7.0	6.0	6.5	6.0	5.0	5.5			
13	18.5	17.0	17.5	13.5	12.0	12.5	7.5	7.0	7.5	6.0	5.0	5.5			
14	17.0	16.0	16.5	13.5	12.0	13.0	7.5	7.5	7.5	5.0	3.5	4.0			
15	16.5	15.0	16.0	12.0	10.5	11.5	8.5	7.0	7.5	4.0	3.5	4.0			
16	17.5	15.5	16.5	10.5	9.0	10.0	7.0	6.0	6.5	5.0	4.0	4.5			
17	17.0	16.0	16.5	9.0	7.5	8.0	6.5	5.5	6.0	4.5	3.5	4.0			
18	16.0	14.5	15.0	8.0	6.5	7.5	6.0	5.5	5.5	3.5	3.0	3.5			
19	15.0	13.5	14.0	9.0	7.0	8.0	5.5	5.0	5.5	3.5	2.5	3.0			
20	13.5	12.5	13.0	10.5	9.0	9.5	6.5	5.5	6.0	3.0	2.0	2.5			
21	13.5	12.5	13.0	12.0	10.0	11.0	5.5	4.5	5.0	2.0	1.0	1.5			
22	13.0	12.5	13.0	13.0	11.5	12.0	4.5	3.5	4.0	1.0	.5	.5			
23	13.0	11.0	12.0	13.5	12.0	12.5	4.0	3.0	3.5	.5	.5	.5			
24	11.0	10.0	10.5	13.5	12.5	13.0	3.0	2.0	2.5	1.0	.5	.5			
25	11.0	9.0	10.0	12.5	11.5	12.0	2.0	1.0	1.5	.5	.5	.5			
26	11.5	10.0	10.5	11.5	10.5	11.0	1.5	1.0	1.0	.5	.5	.5			
27	11.5	10.0	11.0	10.5	9.0	10.0	1.5	1.0	1.0	.5	.0	.5			
28	12.5	10.0	11.0	9.5	9.0	9.5	1.0	.5	1.0	.5	.0	.5			
29	13.5	11.0	12.0	9.0	7.5	8.5	1.5	.5	1.0	.5	.0	.5			
30	14.5	12.5	13.0	7.5	6.0	6.5	2.5	1.0	2.0	.5	.5	.5			
31	15.0	13.0	14.0	---	---	---	3.5	2.5	3.0	.5	.5	.5			
MONTH	20.0	9.0	15.0	15.5	6.0	11.0	9.5	.5	5.0	10.5	.0	3.5			

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





**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**03231500 SCIOTO RIVER AT CHILLICOTHE, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

OXYGEN, DISSOLVED, MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.6	6.3	7.0	12.4	10.0	11.0	---	---	---	---	---	---	---		
2	7.4	6.1	6.7	10.2	7.3	8.1	---	---	---	---	---	---	---		
3	7.5	6.1	6.6	11.0	6.8	9.6	---	---	---	---	---	---	---		
4	6.5	5.7	6.1	12.1	10.0	10.8	---	---	---	---	---	---	---		
5	9.4	5.4	6.8	11.0	8.3	9.7	---	---	---	---	---	---	---		
6	8.5	6.5	7.4	8.9	7.8	8.2	13.0	10.4	12.3	---	---	---	---		
7	15.6	8.4	11.2	9.4	8.2	8.8	11.8	9.1	10.3	---	---	---	---		
8	15.0	10.6	13.0	10.4	8.8	9.5	11.0	8.9	9.6	---	---	---	---		
9	13.2	9.7	11.9	9.7	6.8	8.5	10.5	8.3	9.2	---	---	---	---		
10	11.0	8.5	10.1	8.2	6.4	7.2	15.2	8.0	11.5	---	---	---	---		
11	9.3	8.2	8.8	8.5	6.7	7.5	14.0	11.5	12.6	---	---	---	---		
12	8.2	6.5	6.9	9.4	7.0	8.0	12.6	10.9	11.6	---	---	---	---		
13	9.7	6.2	6.9	10.9	7.1	8.9	11.4	10.5	10.7	---	---	---	---		
14	8.6	6.3	7.0	10.3	7.9	9.1	10.9	10.4	10.6	---	---	---	---		
15	12.3	8.3	10.1	11.7	8.5	9.9	10.4	9.4	9.9	---	---	---	---		
16	12.6	10.4	11.7	12.9	8.3	10.6	10.0	9.4	9.8	---	---	---	---		
17	---	---	---	12.8	9.0	10.8	10.1	9.5	9.8	---	---	---	---		
18	---	---	---	14.4	9.6	12.0	10.6	9.8	10.2	---	---	---	---		
19	---	---	---	15.2	13.1	14.4	11.1	10.2	10.6	---	---	---	---		
20	---	---	---	14.0	9.2	12.5	---	---	---	---	---	---	---		
21	11.4	9.0	10.0	13.9	8.7	12.2	8.3	6.5	7.8	---	---	---	---		
22	11.7	10.9	11.3	12.6	10.9	12.0	6.5	5.1	5.6	---	---	---	---		
23	11.5	8.8	10.8	12.4	8.2	10.3	---	---	---	---	---	---	---		
24	11.8	10.4	10.8	11.0	8.7	10.0	---	---	---	---	---	---	---		
25	11.5	10.3	10.9	11.8	10.1	10.9	---	---	---	---	---	---	---		
26	11.7	10.6	10.9	11.9	7.9	10.4	---	---	---	---	---	---	---		
27	11.5	10.8	11.1	11.8	11.1	11.4	---	---	---	---	---	---	---		
28	11.6	10.1	11.0	11.9	11.3	11.6	11.3	9.2	10.2	---	---	---	---		
29	11.5	9.9	10.5	12.4	11.4	12.0	13.1	7.6	9.4	---	---	---	---		
30	11.1	9.7	10.3	12.1	11.9	12.0	10.1	6.8	8.5	---	---	---	---		
31	11.9	9.5	10.4	---	---	---	9.6	6.4	8.2	---	---	---	---		
MONTH	15.6	5.4	9.5	15.2	6.4	10.3	15.2	5.1	9.9	---	---	---	---		

DAY	MAX	MIN	MEAN	FEBRUARY			MARCH			APRIL			MAY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	16.0	14.2	14.8	13.4	13.0	13.2	18.8	14.2	17.8	10.9	4.2	6.9	---	---	
2	15.8	14.6	15.2	13.1	12.9	13.0	19.0	15.1	16.7	11.2	7.6	9.4	---	---	
3	15.7	14.0	14.9	13.4	13.0	13.2	---	---	---	8.0	6.4	7.3	---	---	
4	16.0	14.8	15.2	13.4	13.3	13.3	---	---	---	8.6	5.5	6.5	---	---	
5	15.9	15.1	15.5	13.3	12.9	13.1	14.0	12.0	13.2	12.4	6.3	8.8	---	---	
6	16.5	15.2	15.7	12.9	12.1	12.4	12.8	11.5	12.2	13.0	10.7	11.4	---	---	
7	16.3	15.1	15.5	12.2	11.2	11.7	12.2	9.4	11.6	12.7	10.0	11.1	---	---	
8	16.5	15.0	15.6	12.2	11.3	11.8	13.2	9.2	11.5	12.4	6.6	9.3	---	---	
9	16.1	14.3	15.2	11.5	10.5	11.0	13.7	12.3	13.1	12.5	6.4	9.5	---	---	
10	15.5	13.6	14.5	10.9	9.6	10.3	13.7	11.7	12.6	10.3	7.9	8.7	---	---	
11	13.6	13.2	13.4	10.4	9.4	9.9	13.8	9.4	11.3	15.3	8.5	11.5	---	---	
12	13.4	12.7	13.0	10.2	9.4	9.8	13.8	12.0	12.9	12.8	8.1	10.2	---	---	
13	14.4	13.2	13.7	10.2	9.1	9.7	12.7	10.0	11.7	13.3	8.4	10.4	---	---	
14	13.9	13.1	13.4	9.9	9.2	9.6	10.4	7.6	9.4	14.5	9.4	11.6	---	---	
15	13.5	13.2	13.3	10.5	9.4	10.0	9.7	7.6	8.8	14.4	5.1	11.4	---	---	
16	13.5	12.9	13.1	---	---	---	9.7	8.2	9.1	7.8	3.4	5.1	---	---	
17	14.8	12.9	13.4	---	---	---	11.1	8.4	9.4	7.6	4.1	6.2	---	---	
18	14.5	13.7	14.0	---	---	---	11.4	8.3	9.8	7.3	6.3	6.7	---	---	
19	14.0	13.7	13.8	---	---	---	---	---	---	12.2	6.0	8.9	---	---	
20	14.0	13.8	13.9	---	---	---	---	---	---	11.6	8.7	9.8	---	---	
21	13.8	13.1	13.6	---	---	---	13.7	8.8	10.2	8.9	8.1	8.6	---	---	
22	13.6	12.5	13.1	16.2	12.8	14.7	13.3	9.5	11.2	8.5	6.4	7.4	---	---	
23	13.1	12.7	12.9	16.6	12.3	14.7	11.1	8.1	9.6	---	---	---	---	---	
24	13.2	12.1	12.7	13.8	12.3	13.1	9.6	5.8	8.4	10.5	7.4	8.8	---	---	
25	13.3	12.9	13.2	13.3	11.6	12.4	8.6	4.9	6.3	9.7	8.0	8.8	---	---	
26	13.1	12.8	13.0	11.6	9.4	10.4	8.2	5.7	7.0	10.4	8.6	9.1	---	---	
27	13.5	12.7	12.9	14.7	9.6	12.6	9.4	6.5	8.3	10.9	7.3	8.4	---	---	
28	13.2	12.8	13.0	15.2	11.6	14.2	7.9	4.5	6.5	9.5	7.0	8.8	---	---	
29	13.3	13.1	13.2	15.2	13.8	14.6	7.8	4.8	6.8	9.4	5.2	8.0	---	---	
30	---	---	---	16.4	14.7	15.7	7.3	4.1	5.6	9.1	7.6	8.3	---	---	
31	---	---	---	17.2	14.2	16.4	---	---	---	8.9	7.8	8.4	---	---	
MONTH	16.5	12.1	14.0	17.2	9.1	12.4	19.0	4.1	10.4	15.3	3.4	8.8	---	---	



**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**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 mi<sup>2</sup>.

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, to June 3, 1955, water-stage recorder, June 4, 1955, to 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 poor. Sediment data formerly collected at this site.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	3.5	3.1	2.8	e24	177	118	111	273	74	60	5.7
2	2.6	3.4	3.3	2.8	e30	154	127	168	265	60	48	9.0
3	1.9	20	4.0	114	e28	132	281	238	240	62	40	5.8
4	2.1	15	3.0	1590	e26	120	1670	201	184	303	33	21
5	2.6	5.5	3.1	1100	e24	111	1420	170	164	318	26	42
6	4.5	3.0	3.7	491	e23	99	864	159	220	205	21	18
7	3.0	2.3	3.4	284	e22	89	562	138	267	141	21	18
8	2.0	2.4	3.7	197	e20	85	1370	127	184	103	28	13
9	2.2	2.3	3.7	152	e21	84	1410	130	147	74	38	9.1
10	5.7	2.2	6.1	126	e25	82	1000	131	123	85	63	7.7
11	13	2.3	18	106	e35	76	581	104	106	226	40	7.8
12	4.8	2.7	9.0	85	e100	88	418	90	94	151	32	7.9
13	3.3	2.6	6.5	64	e200	82	325	87	87	95	25	15
14	2.5	2.8	25	54	e1100	81	280	84	80	72	21	7.8
15	7.1	2.8	39	44	2500	77	244	70	90	1750	19	6.3
16	3.3	2.7	13	40	1310	104	215	58	105	1110	14	4.8
17	2.4	2.8	7.2	39	785	239	198	56	992	402	12	3.8
18	2.4	2.8	4.4	36	2560	268	217	58	1680	251	15	4.0
19	2.9	3.0	3.5	34	3730	275	255	66	1380	343	17	4.0
20	2.2	3.0	3.7	e33	2420	800	229	66	738	827	14	4.2
21	3.2	3.1	3.0	e31	1100	1030	331	59	460	490	11	23
22	2.3	3.3	3.0	e30	688	714	479	57	363	292	9.4	16
23	2.1	3.2	2.9	e28	549	475	402	69	278	198	8.9	19
24	1.9	3.6	2.9	e27	443	361	308	318	211	144	9.4	32
25	2.0	3.7	3.0	e25	361	295	255	226	171	104	8.6	98
26	2.2	4.6	3.1	e25	298	244	211	146	146	83	7.6	183
27	2.4	5.0	3.3	e24	261	224	180	120	152	71	8.5	151
28	3.3	6.2	4.4	e23	222	206	156	333	147	59	8.5	106
29	3.5	5.6	5.2	e22	189	175	139	827	114	61	8.4	68
30	2.5	3.8	4.5	e21	---	146	120	593	89	57	7.4	46
31	2.7	---	2.8	e20	---	130	---	386	---	55	6.0	---
TOTAL	106.2	129.2	204.5	4870.6	19094	7223	14365	5446	9550	8266	680.7	956.9
MEAN	3.43	4.31	6.60	157	658	233	479	176	318	267	22.0	31.9
MAX	13	20	39	1590	3730	1030	1670	827	1680	1750	63	183
MIN	1.9	2.2	2.8	2.8	20	76	118	56	80	55	6.0	3.8
MED	2.6	3.0	3.7	36	222	146	280	127	178	141	17	14
CFSM	.01	.02	.03	.63	2.64	.94	1.92	.71	1.28	1.07	.09	.13
IN.	.02	.02	.03	.73	2.85	1.08	2.15	.81	1.43	1.23	.10	.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2000, BY WATER YEAR (WY)

	1927	1931	1935	1939	1943	1947	1951	1955	1959	1963	1967	1971	1975	1979	1983	1987	1991	1995	2000
MEAN	45.5	106	238	376	427	489	398	320	222	103	72.3	55.8							
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	.59	1.11	2.08	2.97	8.06	28.9	57.3	20.6	2.48	.82	.47	.16							
(WY)	1931	1954	1995	1995	1954	1931	1941	1941	1993	1930	1930	1953							

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR
ANNUAL TOTAL	47606.40	70892.1				
ANNUAL MEAN	130	194				
HIGHEST ANNUAL MEAN			239			
LOWEST ANNUAL MEAN			442			1996
HIGHEST DAILY MEAN	1790	Jan 23	3730	Feb 19	14400	May 24 1968
LOWEST DAILY MEAN	.37	Aug 13	1.9	Oct 3	.00	Sep 10 1953
ANNUAL SEVEN-DAY MINIMUM	.44	Aug 8	2.3	Oct 20	.04	Sep 26 1953
INSTANTANEOUS PEAK FLOW			4710	Feb 18a	21700	May 24 1969
INSTANTANEOUS PEAK STAGE			9.17	Feb 18	14.28	May 24 1969
INSTANTANEOUS LOW FLOW			1.5	Oct 3	.00	Sep 10 1953
ANNUAL RUNOFF (CFSM)	.52		.78		.96	
ANNUAL RUNOFF (INCHES)	7.11		10.59		13.06	
10 PERCENT EXCEEDS	349		464		570	
50 PERCENT EXCEEDS	12		58		70	
90 PERCENT EXCEEDS	1.2		3.0		2.8	

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**

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**03232500 ROCKY FORK NEAR BARRETT'S 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 mi<sup>2</sup>.

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.—The maximum discharge for the water year 1995 has been revised to 3,700 ft<sup>3</sup>/s, May 18, 1995, gage height 9.01 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	8.5	7.9	5.6	e13	95	80	37	72	15	15	7.0
2	7.6	13	8.1	6.4	e13	80	e108	56	58	11	13	6.8
3	7.5	12	8.6	11	e13	67	554	52	89	13	11	6.9
4	10	9.3	9.9	250	e13	61	1580	50	67	54	9.9	7.0
5	8.9	8.2	10	265	e13	53	995	49	51	149	9.3	6.8
6	7.9	7.9	11	190	e13	48	691	46	42	199	8.3	6.5
7	7.3	7.5	9.4	146	e13	44	540	43	27	143	8.2	6.1
8	7.1	7.3	9.2	114	e15	40	412	41	21	102	8.3	5.9
9	9.4	7.3	9.8	92	e18	42	389	35	16	72	11	5.8
10	11	7.4	14	85	e23	32	312	31	13	69	28	6.0
11	8.3	7.2	9.9	71	31	37	248	20	11	155	21	6.1
12	8.5	7.2	8.8	49	40	62	201	17	11	102	16	6.2
13	13	7.3	9.7	54	206	56	164	23	11	73	12	6.2
14	13	7.2	17	41	1880	53	142	22	9.6	55	10	6.0
15	8.6	6.9	10	36	746	48	124	15	11	51	9.0	6.0
16	7.5	6.9	8.8	35	246	104	111	12	12	41	8.5	5.9
17	6.9	7.1	8.0	27	491	200	111	10	114	29	8.2	5.9
18	6.2	7.2	7.5	e23	2550	164	155	12	168	21	9.1	5.9
19	5.6	7.2	7.3	e22	3480	175	147	13	221	70	11	5.6
20	5.9	7.5	7.4	e20	1050	470	142	15	160	61	9.4	6.1
21	5.8	8.4	e7.0	e19	321	509	226	13	123	43	8.2	8.2
22	6.7	6.9	e6.8	e18	258	296	220	13	84	30	7.8	7.3
23	7.8	7.0	e6.6	e17	209	235	191	36	52	20	7.5	8.1
24	7.9	7.0	e6.4	e16	179	189	163	35	37	15	7.4	134
25	7.6	6.8	e6.2	e15	162	160	141	27	28	13	7.2	329
26	8.4	7.5	e6.1	e15	144	132	118	19	55	11	6.7	866
27	8.3	7.1	e6.0	e14	135	121	100	43	68	11	6.7	129
28	8.2	6.6	e5.8	e14	120	125	87	111	45	9.8	7.6	100
29	8.7	6.6	e5.7	e14	103	128	120	162	34	9.8	8.2	70
30	8.7	6.9	e5.7	e14	---	112	106	131	22	12	7.7	52
31	9.0	---	e5.6	e14	---	94	---	101	---	13	7.3	---
TOTAL	255.8	230.9	260.2	1713.0	12498	4032	8678	1290	1732.6	1672.6	318.5	1828.3
MEAN	8.25	7.70	8.39	55.3	431	130	289	41.6	57.8	54.0	10.3	60.9
MAX	13	13	17	265	3480	509	1580	162	221	199	28	866
MIN	5.6	6.6	5.6	5.6	13	32	80	10	9.6	9.8	6.7	5.6

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2000, BY WATER YEAR (WY)

	1991	1973	1991	1952	1956	1963	1970	1968	1957	1954	1958	1964
MEAN	53.2	99.1	164	184	249	292	261	205	108	75.3	55.7	59.4
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 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1952 - 2000	
ANNUAL TOTAL	29776.9		34509.9			
ANNUAL MEAN	81.6		94.3		150	
HIGHEST ANNUAL MEAN					259	
LOWEST ANNUAL MEAN					56.5	
HIGHEST DAILY MEAN	1300		Feb 28		9520	
LOWEST DAILY MEAN	4.1		Aug 2		.50	
ANNUAL SEVEN-DAY MINIMUM	4.6		Jul 28		.69	
INSTANTANEOUS PEAK FLOW			5590		Feb 18	
INSTANTANEOUS PEAK STAGE			11.10		Feb 18	
INSTANTANEOUS LOW FLOW			5.4		Sep 19	
10 PERCENT EXCEEDS	228		189		345	
50 PERCENT EXCEEDS	9.0		15		59	
90 PERCENT EXCEEDS	5.0		6.8		8.2	

e Estimated.

**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**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 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

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 collected at this site.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	39	41	e56	e150	1360	778	897	2870	523	211	69
2	53	60	41	e58	e140	1280	717	769	1020	416	187	67
3	41	70	42	e64	e120	1160	2290	1020	776	372	169	67
4	45	65	45	4620	e110	1060	7290	884	735	670	181	135
5	42	55	46	5780	e100	1030	6110	838	702	1640	217	175
6	41	41	51	4710	e90	988	5050	825	709	1280	215	114
7	39	42	50	1980	e88	831	3320	705	752	1390	215	92
8	38	39	48	1240	e84	781	4120	562	683	923	212	83
9	44	41	46	1120	e90	756	4420	533	649	638	197	79
10	104	43	66	1040	e120	731	1770	515	538	491	199	75
11	115	42	75	505	633	721	3460	626	444	1390	202	71
12	97	45	79	341	760	797	3250	629	420	2660	189	71
13	101	56	74	281	1050	797	2490	527	412	1260	174	70
14	127	54	437	237	10100	769	2390	465	355	949	152	68
15	94	45	343	208	5890	745	1360	439	377	2110	126	67
16	64	42	189	184	7370	970	1240	421	387	1550	116	62
17	53	41	131	164	7170	1830	1230	414	1170	1400	112	62
18	48	40	105	156	11700	1610	1390	366	2680	1340	117	62
19	46	41	91	e150	18700	1550	1190	296	5470	1600	114	60
20	45	43	84	e140	4780	3140	1200	285	4600	1920	109	63
21	44	44	78	e140	2040	3920	1590	280	2060	1550	104	77
22	42	44	71	e130	1890	4110	1720	269	1330	1380	99	74
23	39	44	67	e130	7220	3880	1480	332	1180	958	95	80
24	39	45	65	e120	7300	2770	1410	1370	1090	695	105	105
25	40	42	e62	e120	7330	1780	1610	674	765	641	89	227
26	39	45	e60	e120	7090	1630	961	767	728	498	77	1440
27	39	45	e58	e120	5530	1540	764	689	637	453	99	852
28	40	44	e56	e130	5220	1290	945	1030	571	391	96	657
29	39	43	e56	e150	1670	1260	658	1910	521	334	80	512
30	39	41	e56	e180	---	1200	926	1890	582	261	75	333
31	38	---	e54	e170	---	1150	---	1710	---	207	72	---
TOTAL	1742	1381	2767	24544	114535	47436	67129	22937	35213	31890	4405	5969
MEAN	56.2	46.0	89.3	792	3949	1530	2238	740	1174	1029	142	199
MAX	127	70	437	5780	18700	4110	7290	1910	5470	2660	217	1440
MIN	38	39	41	56	84	721	658	269	355	207	72	60

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2000, BY WATER YEAR (WY)

	1991	1986	1991	1986	2000	1997	1994	1996	1996	1990	1990	1990
MEAN	320	697	1224	1775	2346	2373	2158	2138	1367	645	326	142
MAX	2106	3368	5202	3533	3949	5148	4375	6366	4266	1687	1156	463
(WY)	1991	1986	1991	1986	2000	1997	1994	1996	1996	1990	1990	1990
MIN	48.2	46.0	62.8	298	310	458	376	239	94.4	66.1	61.5	62.1
(WY)	1988	2000	1988	1988	1987	1987	1986	1988	1988	1999	1986	1999

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR
ANNUAL TOTAL	298809	359948				
ANNUAL MEAN	819	983				
HIGHEST ANNUAL MEAN			1287			
LOWEST ANNUAL MEAN			2178			1996
HIGHEST DAILY MEAN			483			1988
LOWEST DAILY MEAN	7780	Jan 22	18700	Feb 19	25300	May 29 1990
ANNUAL SEVEN-DAY MINIMUM	33	Aug 5	38	Oct 8	33	Aug 5 1999
INSTANTANEOUS PEAK FLOW	39	Oct 26	39	Oct 26	38	Sep 30 1998
INSTANTANEOUS PEAK STAGE			26400	Feb 19	30100	May 29 1990
INSTANTANEOUS LOW FLOW			23.38	Feb 19	24.67	May 29 1990
10 PERCENT EXCEEDS	2300		38	Oct 8	33	Aug 5 1999
50 PERCENT EXCEEDS	97		2320		3710	
90 PERCENT EXCEEDS	44		290		538	
			44		70	

e Estimated.

**SURFACE-WATER RECORDS  
Scioto River Basin**

**03234300 PAINT CREEK AT CHILLICOTHE, OHIO—Continued**

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years October 1985 to current year.

PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: October 1985 to current year.

pH: October 1985 to current year.

WATER TEMPERATURES: October 1985 to current year.

DISSOLVED OXYGEN: October 1985 to current year.

INSTRUMENTATION.—Water-quality monitor since Oct. 1985. Electronic data logger. Set for 1-hour intervals.

REMARKS.—Interruptions in the water-quality record were due to malfunction of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: Maximum, 980 microsiemens, Dec. 9, 11, 1989; minimum, 110 microsiemens, Oct. 17, 1989.

pH: Maximum, 9.0 units, May 24, 1986; minimum, 7.1 units, July 26, 1992.

WATER TEMPERATURES: Maximum, 34.0°C, July 30, 1999; minimum, 0.0°C, on many days during winters.

DISSOLVED OXYGEN: Maximum, 19.2 mg/L, Feb. 11, 13, 1987; minimum, 3.8 mg/L, Aug. 16, 1986 and Aug. 14, 2000.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum, 716 microsiemens, Jan. 30; minimum, 169 microsiemens, Feb. 19.

pH: Maximum, 8.7 units, May 3; minimum, 7.3 units, Sept. 5 and 17.

WATER TEMPERATURE: Maximum, 28.5°C, Aug. 31; minimum, 0.0°C, on many days during winter.

DISSOLVED OXYGEN: Maximum, 18.2 mg/L, Apr. 24; minimum, 3.8 mg/L, Aug. 14.

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	508	496	503	---	---	---	---	---	---	585	521	557
2	508	492	501	---	---	---	---	---	---	546	423	506
3	510	466	497	---	---	---	---	---	---	567	485	549
4	503	437	481	564	539	557	---	---	---	---	---	---
5	525	496	504	563	555	559	---	---	---	486	401	465
6	---	---	---	556	538	549	---	---	---	401	367	377
7	---	---	---	555	544	549	574	567	571	407	390	396
8	---	---	---	577	537	544	578	560	570	428	407	421
9	---	---	---	---	---	---	574	557	567	433	428	432
10	---	---	---	---	---	---	564	471	514	470	432	444
11	---	---	---	---	---	---	557	528	545	547	470	515
12	---	---	---	---	---	---	571	557	565	573	547	563
13	---	---	---	---	---	---	564	526	549	590	573	581
14	---	---	---	---	---	---	546	421	482	603	590	597
15	---	---	---	---	---	---	542	470	505	608	603	605
16	---	---	---	---	---	---	531	493	514	611	604	607
17	---	---	---	---	---	---	547	531	539	619	611	615
18	---	---	---	---	---	---	555	544	550	621	611	615
19	---	---	---	---	---	---	570	547	559	624	571	603
20	---	---	---	---	---	---	585	561	573	674	534	567
21	---	---	---	---	---	---	595	567	583	548	530	539
22	---	---	---	---	---	---	615	565	590	618	548	587
23	---	---	---	---	---	---	602	579	591	648	610	623
24	---	---	---	---	---	---	610	576	591	618	611	614
25	---	---	---	---	---	---	636	590	611	636	618	629
26	---	---	---	---	---	---	618	581	603	632	616	624
27	---	---	---	---	---	---	610	587	599	653	632	643
28	---	---	---	---	---	---	614	591	603	678	645	657
29	---	---	---	---	---	---	608	557	592	656	648	654
30	---	---	---	---	---	---	593	542	574	716	654	678
31	---	---	---	---	---	---	591	528	569	669	666	668
MONTH	525	437	497	577	537	552	636	421	564	716	367	564





**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**03234300 PAINT CREEK AT CHILLICOTHE, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.3	7.9	8.1	---	---	---	---	---	---	8.4	8.2	8.3			
2	8.4	8.0	8.1	---	---	---	---	---	---	8.4	8.2	8.3			
3	8.5	8.0	8.2	---	---	---	---	---	---	8.3	8.1	8.2			
4	8.2	8.0	8.1	8.2	8.0	8.1	---	---	---	---	---	---			
5	8.1	8.0	8.1	8.2	8.0	8.1	---	---	---	8.0	7.9	8.0			
6	---	---	---	8.2	8.1	8.1	---	---	---	7.9	7.9	7.9			
7	---	---	---	8.1	7.9	8.0	8.3	7.9	8.1	7.9	7.9	7.9			
8	---	---	---	8.1	7.9	8.0	8.0	7.9	8.0	8.0	7.9	8.0			
9	---	---	---	---	---	---	8.1	7.9	8.0	8.0	8.0	8.0			
10	---	---	---	---	---	---	8.1	7.9	8.0	8.0	7.9	8.0			
11	---	---	---	---	---	---	8.2	8.1	8.1	8.0	8.0	8.0			
12	---	---	---	---	---	---	8.2	8.1	8.1	8.0	8.0	8.0			
13	---	---	---	---	---	---	8.1	8.0	8.1	8.1	8.0	8.1			
14	---	---	---	---	---	---	8.0	7.6	7.8	8.2	8.1	8.2			
15	---	---	---	---	---	---	7.8	7.7	7.8	8.2	8.2	8.2			
16	---	---	---	---	---	---	8.0	7.8	7.9	8.2	8.2	8.2			
17	---	---	---	---	---	---	8.2	7.9	8.1	8.3	8.2	8.3			
18	---	---	---	---	---	---	8.3	8.1	8.2	8.3	8.3	8.3			
19	---	---	---	---	---	---	8.3	8.2	8.2	8.3	8.2	8.3			
20	---	---	---	---	---	---	8.2	8.1	8.2	8.3	8.3	8.3			
21	---	---	---	---	---	---	8.4	8.2	8.3	8.3	8.2	8.3			
22	---	---	---	---	---	---	8.3	8.2	8.3	8.2	8.2	8.2			
23	---	---	---	---	---	---	8.3	8.2	8.3	8.2	8.1	8.1			
24	---	---	---	---	---	---	8.3	8.2	8.3	8.2	8.1	8.1			
25	---	---	---	---	---	---	8.3	8.2	8.3	8.2	8.1	8.2			
26	---	---	---	---	---	---	8.3	8.2	8.3	8.1	8.1	8.1			
27	---	---	---	---	---	---	8.3	8.3	8.3	8.2	8.1	8.1			
28	---	---	---	---	---	---	8.4	8.2	8.3	8.2	8.1	8.1			
29	---	---	---	---	---	---	8.4	8.2	8.3	8.1	8.1	8.1			
30	---	---	---	---	---	---	8.4	8.2	8.3	8.1	8.1	8.1			
31	---	---	---	---	---	---	8.4	8.2	8.3	8.1	8.1	8.1			
MONTH	8.5	7.9	8.1	8.2	7.9	8.1	8.4	7.6	8.2	8.4	7.9	8.1			

DAY	MAX	MIN	MEAN	FEBRUARY			MARCH			APRIL			MAY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.2	8.1	8.1	8.1	8.1	8.1	---	---	---	8.6	8.4	8.5			
2	8.2	8.2	8.2	8.2	8.1	8.1	---	---	---	8.6	8.2	8.4			
3	8.2	8.2	8.2	8.2	8.2	8.2	8.3	8.0	8.2	8.7	8.4	8.5			
4	8.3	8.2	8.2	8.2	8.1	8.2	8.1	8.0	8.0	---	---	---			
5	8.4	8.3	8.3	8.2	8.1	8.2	---	---	---	8.6	8.4	8.4			
6	8.4	8.3	8.4	8.2	8.0	8.2	8.3	8.3	8.3	8.6	8.4	8.5			
7	8.4	8.3	8.4	8.2	8.1	8.2	8.3	8.2	8.2	8.5	8.3	8.4			
8	8.5	8.3	8.4	8.2	8.1	8.2	8.2	8.1	8.2	8.5	8.2	8.3			
9	8.6	8.3	8.4	8.2	8.1	8.2	8.2	8.1	8.1	8.5	8.1	8.3			
10	8.4	8.3	8.3	8.3	8.2	8.2	8.2	8.1	8.1	8.4	7.9	8.0			
11	8.3	8.2	8.2	8.3	8.2	8.3	8.3	8.2	8.2	---	---	---			
12	8.3	8.2	8.2	8.4	8.2	8.3	8.2	8.2	8.2	---	---	---			
13	8.3	7.9	8.2	8.4	8.2	8.3	8.2	8.1	8.2	8.4	8.2	8.3			
14	8.1	8.0	8.1	8.4	8.2	8.3	8.2	8.1	8.2	8.4	8.2	8.3			
15	8.1	8.0	8.1	8.5	8.2	8.3	8.1	8.1	8.1	8.4	8.2	8.3			
16	8.1	8.0	8.0	8.4	8.2	8.3	8.2	8.1	8.1	8.4	8.2	8.3			
17	8.0	7.9	8.0	8.3	8.1	8.2	8.2	8.1	8.1	8.4	8.2	8.3			
18	8.1	7.8	8.0	8.4	8.2	8.3	---	---	---	8.4	8.2	8.3			
19	8.2	7.8	8.0	8.4	8.3	8.3	8.3	8.1	8.1	8.4	8.1	8.3			
20	7.9	7.8	7.9	8.4	8.2	8.3	8.3	8.2	8.2	8.3	8.1	8.2			
21	7.9	7.7	7.8	8.2	8.0	8.2	8.3	8.2	8.2	8.5	8.2	8.3			
22	7.7	7.6	7.7	8.3	8.0	8.2	8.3	8.2	8.3	8.4	8.2	8.3			
23	7.8	7.6	7.8	8.3	8.2	8.2	8.4	8.3	8.3	8.5	8.2	8.3			
24	8.0	7.8	7.9	8.2	8.2	8.2	8.4	8.3	8.4	8.4	7.8	8.0			
25	8.0	7.9	8.0	8.2	8.2	8.2	8.4	8.3	8.4	8.2	7.9	8.0			
26	7.9	7.9	7.9	8.3	8.2	8.2	8.5	8.3	8.4	8.4	8.2	8.3			
27	8.0	7.9	8.0	8.3	8.2	8.2	8.5	8.2	8.4	8.4	8.2	8.3			
28	8.1	8.0	8.0	---	---	---	8.6	8.3	8.4	8.3	8.1	8.2			
29	8.1	8.1	8.1	---	---	---	8.6	8.3	8.5	8.1	7.9	8.0			
30	---	---	---	---	---	---	8.6	8.4	8.5	8.1	7.9	8.0			
31	---	---	---	---	---	---	---	---	---	8.1	8.0	8.0			
MONTH	8.6	7.6	8.1	8.5	8.0	8.2	8.6	8.0	8.2	8.7	7.8	8.3			



**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**03234300 PAINT CREEK AT CHILLICOTHE, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	20.0	15.0	17.5	---	---	---	---	---	---	8.0	1.0	3.5			
2	22.5	15.0	18.5	---	---	---	---	---	---	9.5	3.0	5.5			
3	27.0	18.0	21.0	---	---	---	---	---	---	10.0	8.0	9.0			
4	23.5	17.5	19.0	12.0	5.5	8.0	---	---	---	---	---	---			
5	---	---	---	12.0	6.5	9.0	---	---	---	6.5	5.0	5.5			
6	---	---	---	23.5	11.0	15.5	---	---	---	6.5	6.0	6.5			
7	---	---	---	19.5	9.0	13.0	11.0	4.5	6.5	6.0	4.5	5.0			
8	---	---	---	17.5	8.0	12.5	13.0	3.0	6.5	4.5	3.5	4.0			
9	---	---	---	---	---	---	9.0	4.0	6.0	4.5	4.0	4.0			
10	---	---	---	---	---	---	9.0	4.5	7.5	6.0	4.5	5.5			
11	---	---	---	---	---	---	8.0	2.5	4.5	6.0	5.0	5.5			
12	---	---	---	---	---	---	6.0	3.0	4.5	5.0	3.5	4.5			
13	---	---	---	---	---	---	7.0	5.5	6.5	5.0	4.0	5.0			
14	---	---	---	---	---	---	7.5	6.0	7.0	4.0	2.0	3.0			
15	---	---	---	---	---	---	7.0	6.0	6.5	3.0	1.5	2.5			
16	---	---	---	---	---	---	7.5	4.5	5.5	5.0	3.0	4.0			
17	---	---	---	---	---	---	5.5	3.5	4.5	4.0	2.0	3.0			
18	---	---	---	---	---	---	6.0	2.5	4.0	2.0	1.5	2.0			
19	---	---	---	---	---	---	7.0	2.0	4.0	2.5	1.5	2.0			
20	---	---	---	---	---	---	7.0	3.0	5.5	2.0	1.0	1.5			
21	---	---	---	---	---	---	5.0	2.0	3.0	1.0	.0	.5			
22	---	---	---	---	---	---	5.5	1.0	2.0	.5	.0	.0			
23	---	---	---	---	---	---	2.5	1.0	1.5	.5	.0	.0			
24	---	---	---	---	---	---	2.5	.5	1.0	.5	.0	.0			
25	---	---	---	---	---	---	2.0	.0	.5	.5	.0	.5			
26	---	---	---	---	---	---	1.5	.5	1.0	.5	.0	.0			
27	---	---	---	---	---	---	2.5	.5	1.0	1.0	.0	.5			
28	---	---	---	---	---	---	1.0	.5	.5	.5	.0	.5			
29	---	---	---	---	---	---	3.5	1.0	1.5	.5	.0	.5			
30	---	---	---	---	---	---	5.0	1.5	2.5	.5	.0	.0			
31	---	---	---	---	---	---	8.0	1.5	3.0	.5	.0	.0			
MONTH	27.0	15.0	19.0	23.5	5.5	11.5	13.0	.0	4.0	10.0	.0	3.0			

DAY	MAX	MIN	MEAN	FEBRUARY			MARCH			APRIL			MAY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	.5	.0	.0	10.0	8.5	9.0	---	---	---	17.5	14.5	16.0			
2	.5	.0	.5	9.5	8.0	8.5	---	---	---	18.5	15.0	16.0			
3	.5	.0	.0	8.5	7.0	7.5	13.0	12.5	13.0	19.0	15.5	17.0			
4	.5	.0	.5	8.5	6.5	7.5	13.0	11.0	12.0	20.5	18.0	20.0			
5	1.0	.5	.5	10.0	7.5	8.5	---	---	---	20.5	18.0	19.0			
6	1.0	.5	.5	11.5	8.5	9.5	12.5	11.0	11.5	21.0	18.5	19.5			
7	1.5	.5	1.0	12.0	9.5	10.5	12.5	11.5	12.0	22.5	19.0	20.5			
8	2.0	.5	1.0	14.0	10.5	12.0	12.0	10.0	11.5	23.0	20.5	21.5			
9	3.0	.5	1.0	15.5	13.0	14.0	10.0	8.5	9.5	23.0	21.0	22.0			
10	2.5	1.0	1.5	15.0	12.0	13.0	11.5	9.0	10.0	---	---	---			
11	3.0	2.0	2.5	13.0	9.0	10.5	12.0	10.5	11.0	---	---	---			
12	2.5	1.5	2.0	9.0	7.0	8.0	10.5	9.5	10.0	22.5	19.5	20.5			
13	4.0	2.0	2.5	8.5	6.5	7.0	11.0	9.0	10.0	22.5	20.5	21.5			
14	4.5	4.0	4.5	10.0	6.5	8.0	12.5	10.0	11.0	22.0	18.0	19.5			
15	4.0	3.0	3.5	12.5	9.0	10.0	15.5	12.0	13.0	20.5	16.5	18.5			
16	4.0	3.0	3.5	12.5	11.0	11.5	15.5	13.5	15.0	20.0	16.0	18.0			
17	3.5	3.0	3.5	11.0	8.0	9.0	15.5	14.0	14.5	19.5	16.5	18.0			
18	5.0	3.0	3.5	8.5	6.5	7.5	---	---	---	20.5	17.5	18.5			
19	5.0	3.5	4.5	8.5	7.5	8.0	13.5	12.0	13.0	22.0	19.5	20.5			
20	3.5	3.5	3.5	8.5	8.0	8.5	14.5	13.0	13.5	22.0	19.0	20.0			
21	5.0	3.0	4.0	9.0	8.5	8.5	14.5	13.0	14.0	21.5	17.5	18.5			
22	6.0	4.5	5.5	9.5	8.5	9.0	13.0	11.5	12.0	20.5	17.5	19.0			
23	6.0	4.5	5.0	10.5	8.5	9.5	14.0	10.5	12.0	21.5	19.0	20.0			
24	6.0	5.0	5.5	11.5	9.5	10.5	14.5	13.5	14.0	22.0	17.0	19.0			
25	6.5	5.5	6.0	14.5	11.5	12.5	15.0	12.5	14.0	22.5	20.0	21.0			
26	7.0	5.5	6.0	14.0	11.5	13.0	15.5	12.5	14.0	22.5	20.0	21.0			
27	7.5	6.5	7.0	13.5	12.0	12.5	16.0	13.0	14.5	21.5	20.0	20.5			
28	8.5	7.0	7.5	---	---	---	16.0	14.0	15.0	20.5	19.5	20.0			
29	9.0	7.0	8.0	---	---	---	17.0	14.0	15.0	20.0	18.0	18.5			
30	---	---	---	---	---	---	18.0	14.5	16.0	20.5	18.5	19.0			
31	---	---	---	---	---	---	---	---	---	22.5	20.0	21.0			
MONTH	9.0	.0	3.5	15.5	6.5	10.0	18.0	8.5	12.5	23.0	14.5	19.5			



**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**03234300 PAINT CREEK AT CHILLICOTHE, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

OXYGEN, DISSOLVED, MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.1	8.9	9.4	---	---	---	---	---	---	---	---	15.5	11.4	13.6	
2	10.9	8.4	9.8	---	---	---	---	---	---	---	---	14.5	11.1	12.9	
3	10.1	8.2	8.9	---	---	---	---	---	---	---	---	12.3	11.6	11.9	
4	9.6	7.9	8.7	14.8	12.2	13.5	---	---	---	---	---	---	---	---	
5	9.9	8.2	8.9	14.3	10.6	12.1	---	---	---	---	---	8.8	6.0	7.0	
6	10.3	8.3	9.3	12.9	8.1	10.3	---	---	---	---	---	8.1	7.3	7.7	
7	9.7	8.5	9.4	9.1	6.9	8.1	15.8	11.7	13.6	8.7	7.7	8.1	7.7	8.1	
8	---	---	---	8.1	6.4	7.3	15.5	11.8	13.1	8.2	6.7	7.2	7.2	7.2	
9	---	---	---	---	---	---	13.3	12.6	12.9	7.7	7.1	7.4	7.4	7.4	
10	---	---	---	---	---	---	13.6	12.1	12.6	7.8	6.8	7.4	7.4	7.4	
11	---	---	---	---	---	---	14.3	12.7	13.6	6.8	6.4	6.6	6.6	6.6	
12	---	---	---	---	---	---	14.9	13.2	14.0	6.4	6.0	6.3	6.3	6.3	
13	---	---	---	---	---	---	14.9	13.6	14.3	---	---	---	---	---	
14	---	---	---	---	---	---	14.2	13.4	13.7	---	---	---	---	---	
15	---	---	---	---	---	---	14.0	13.3	13.6	---	---	---	---	---	
16	---	---	---	---	---	---	14.6	13.6	13.9	---	---	---	---	---	
17	---	---	---	---	---	---	15.1	14.1	14.5	---	---	---	---	---	
18	---	---	---	---	---	---	15.1	14.1	14.6	---	---	---	---	---	
19	---	---	---	---	---	---	15.1	13.2	14.1	---	---	---	---	---	
20	---	---	---	---	---	---	14.9	11.1	13.4	---	---	---	---	---	
21	---	---	---	---	---	---	15.9	13.4	14.4	---	---	---	---	---	
22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
23	---	---	---	---	---	---	17.8	16.7	17.3	---	---	---	---	---	
24	---	---	---	---	---	---	17.0	16.2	16.6	---	---	---	---	---	
25	---	---	---	---	---	---	16.4	14.1	15.4	---	---	---	---	---	
26	---	---	---	---	---	---	16.5	14.8	15.6	---	---	---	---	---	
27	---	---	---	---	---	---	16.5	15.3	16.0	---	---	---	---	---	
28	---	---	---	---	---	---	15.8	14.0	14.6	---	---	---	---	---	
29	---	---	---	---	---	---	15.2	13.8	14.4	---	---	---	---	---	
30	---	---	---	---	---	---	15.5	13.9	14.8	---	---	---	---	---	
31	---	---	---	---	---	---	15.8	12.3	14.7	---	---	---	---	---	
MONTH	10.9	7.9	9.2	14.8	6.4	10.3	17.8	11.1	14.4	15.5	6.0	8.7	8.7	8.7	

DAY	MAX	MIN	MEAN	FEBRUARY			MARCH			APRIL			MAY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	12.8	11.2	11.6	13.8	12.2	12.8	16.2	14.2	15.0	13.6	11.2	12.1	12.1	12.1	
2	13.5	12.8	13.2	13.3	12.5	12.8	---	---	---	12.4	9.2	10.6	10.6	10.6	
3	13.5	13.0	13.2	13.5	12.9	13.2	13.9	13.0	13.8	12.0	7.9	9.9	9.9	9.9	
4	13.8	13.2	13.4	13.9	12.8	13.3	14.9	12.3	13.2	10.5	5.6	7.5	7.5	7.5	
5	14.6	13.6	14.0	13.8	12.3	13.3	17.6	14.9	15.9	10.0	5.2	7.8	7.8	7.8	
6	15.2	14.0	14.6	13.4	11.4	12.5	15.6	14.0	14.8	9.2	6.5	7.7	7.7	7.7	
7	16.0	14.3	15.1	13.0	11.5	12.5	14.0	13.3	13.5	8.9	5.6	6.9	6.9	6.9	
8	16.2	14.8	15.5	12.4	11.2	11.9	13.5	12.1	12.9	8.5	7.0	7.1	7.1	7.1	
9	16.2	15.1	15.6	11.7	11.2	11.5	12.7	6.8	10.3	---	---	---	---	---	
10	16.6	15.0	15.6	12.1	10.8	11.4	---	---	---	---	---	---	---	---	
11	15.1	14.5	14.8	12.0	8.0	10.7	---	---	---	7.8	5.2	7.3	7.3	7.3	
12	16.0	14.8	15.6	11.3	8.9	10.4	---	---	---	---	---	---	---	---	
13	15.9	14.4	15.6	10.8	7.8	9.5	---	---	---	---	---	---	---	---	
14	14.4	12.9	13.7	10.2	8.5	9.3	---	---	---	---	---	---	---	---	
15	14.8	13.5	14.1	9.8	8.4	9.1	11.8	7.1	9.6	---	---	---	---	---	
16	15.0	14.1	14.6	8.4	7.6	7.7	12.4	8.7	10.2	---	---	---	---	---	
17	15.2	14.1	14.6	8.1	6.4	6.9	10.8	7.3	8.7	---	---	---	---	---	
18	14.3	12.6	13.8	---	---	---	15.8	9.5	13.3	11.1	8.2	9.3	9.3	9.3	
19	13.1	11.4	12.2	---	---	---	15.1	12.9	13.6	10.4	7.1	8.6	8.6	8.6	
20	---	---	---	---	---	---	14.1	9.8	11.6	10.1	6.9	8.4	8.4	8.4	
21	---	---	---	---	---	---	16.3	12.4	13.8	12.0	8.5	9.7	9.7	9.7	
22	---	---	---	12.9	10.3	11.0	17.4	13.8	15.9	12.6	8.3	10.5	10.5	10.5	
23	12.6	9.9	11.2	12.4	11.1	11.9	17.6	14.9	16.1	11.9	8.0	10.0	10.0	10.0	
24	14.9	10.7	13.4	13.8	11.7	12.2	18.2	14.3	15.8	11.5	7.0	8.0	8.0	8.0	
25	14.1	13.1	13.6	15.8	13.8	14.3	17.9	13.6	16.2	9.8	7.2	8.0	8.0	8.0	
26	14.5	13.3	14.0	15.4	14.2	14.9	13.8	11.0	12.7	10.8	8.6	9.7	9.7	9.7	
27	14.8	13.6	14.1	15.2	12.9	14.3	16.0	10.7	12.7	10.3	7.2	9.0	9.0	9.0	
28	14.1	13.1	13.6	14.5	12.2	13.2	16.1	10.6	13.4	11.5	7.5	8.9	8.9	8.9	
29	13.3	12.3	12.8	16.7	13.9	15.6	15.6	10.5	13.6	7.6	5.3	6.4	6.4	6.4	
30	---	---	---	15.9	13.7	15.1	14.1	10.6	12.5	8.5	5.6	7.1	7.1	7.1	
31	---	---	---	16.2	14.0	15.2	---	---	---	8.4	5.6	6.8	6.8	6.8	
MONTH	16.6	9.9	14.0	16.7	6.4	12.1	18.2	6.8	13.3	13.6	5.2	8.6	8.6	8.6	



**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**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 downstream 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 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

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

EXTREMES OUTSIDE PERIOD OF RECORD.—A stage of 31.6 ft occurred Mar. 26, 1913.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1300	550	601	659	e820	4240	3170	3080	8490	1860	1200	878
2	986	664	582	655	e800	3840	2780	3010	5840	1600	1160	844
3	710	924	548	689	e800	3430	4850	5040	3980	1530	1030	889
4	647	1980	535	9630	e800	3140	19200	4640	3210	2180	972	1290
5	587	1170	530	20300	e780	2970	22800	4090	2730	3490	966	1260
6	591	883	526	17700	e780	2810	20400	3710	3160	3930	970	1140
7	571	731	554	10100	e760	2530	11900	3390	4850	3560	999	953
8	549	692	603	7280	e800	2280	12100	2900	5210	2560	1150	861
9	551	654	564	4810	e900	2140	22500	2970	4330	1950	1430	827
10	630	631	636	3430	1010	2040	26700	2780	3330	1630	1520	808
11	739	621	741	2600	1820	2030	27000	2630	2600	2010	2080	808
12	791	599	1130	2460	4100	2130	20100	2530	2220	3150	1470	812
13	707	605	870	2170	6910	2390	15700	2290	2140	2200	1290	795
14	694	608	1630	1820	24000	2240	12000	2160	2550	2780	1120	1030
15	1020	590	3860	1590	25700	2050	8020	2190	2010	2810	1010	940
16	992	585	2740	1430	24200	2590	6040	2350	2750	3560	938	806
17	811	581	2440	1360	16900	4600	5430	1980	5050	3150	903	763
18	749	573	2080	1340	19700	5220	5660	1810	9290	2810	899	747
19	726	572	1350	1290	42500	4350	5490	1730	12000	2920	2800	743
20	750	585	1060	1370	25100	7240	5730	2170	10400	3300	1740	748
21	703	581	997	1230	12200	16100	5720	4580	6920	3350	1320	809
22	667	580	962	1120	8160	16900	6510	4410	6030	2550	1170	1400
23	644	566	850	e1000	14800	13100	6840	3470	5370	2000	1040	1090
24	631	568	797	e960	15600	8790	6720	4690	4600	1560	1010	2610
25	623	562	725	e940	14600	6440	7140	4740	3660	1410	1030	6480
26	611	583	672	e920	12400	5370	5700	3760	3080	1280	1390	3680
27	588	582	649	e900	9860	4820	4780	3010	2680	1180	1110	3340
28	574	752	659	e880	9320	4310	4370	3060	2520	1130	1040	2390
29	561	706	657	e860	5690	4060	3420	9930	2250	1100	1500	1960
30	556	626	655	e840	---	3760	3240	13100	2080	1520	1070	1600
31	560	---	656	e820	---	3510	---	9710	---	1230	926	---
TOTAL	21819	20904	31859	103153	301810	151420	312010	121910	135330	71290	38253	43301
MEAN	704	697	1028	3328	10410	4885	10400	3933	4511	2300	1234	1443
MAX	1300	1980	3860	20300	42500	16900	27000	13100	12000	3930	2800	6480
MIN	549	550	526	655	760	2030	2780	1730	2010	1100	899	743
MED	647	602	672	1340	8160	3760	6620	3060	3500	2180	1110	914
AC-FT	43280	41460	63190	204600	598600	300300	618900	241800	268400	141400	75870	85890
CFSM	.14	.14	.20	.65	2.03	.95	2.03	.77	.88	.45	.24	.28
IN.	.16	.15	.23	.75	2.19	1.10	2.26	.88	.98	.52	.28	.31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2000, BY WATER YEAR (WY)

	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	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
MEAN	1188	2382	4259	6742	7823	9636	8384	5952	4233	2863	1965	1334																																																										
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 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1931 - 2000

ANNUAL TOTAL	1164677	1353059	
ANNUAL MEAN	3191	3697	4714
HIGHEST ANNUAL MEAN			8178
LOWEST ANNUAL MEAN			1364
HIGHEST DAILY MEAN	26000	Jan 24	42500
LOWEST DAILY MEAN	526	Dec 6	526
ANNUAL SEVEN-DAY MINIMUM	551	Dec 3	551
INSTANTANEOUS PEAK FLOW			45100
INSTANTANEOUS PEAK STAGE			18.96
INSTANTANEOUS LOW FLOW			526
ANNUAL RUNOFF (AC-FT)	2310000	2684000	3415000
ANNUAL RUNOFF (CFSM)	.62	.72	.92
ANNUAL RUNOFF (INCHES)	8.44	9.81	12.48
10 PERCENT EXCEEDS	9000	9410	12200
50 PERCENT EXCEEDS	1130	1820	2080
90 PERCENT EXCEEDS	582	610	539

e Estimated.

**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**03234500 SCIOTO RIVER AT HIGBY, OHIO—Continued**

WATER-QUALITY RECORDS

PERIOD OF RECORD.—Water years 1954 to 1993, 1996 to current year.

PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: March 1967 to September 1993, October 1995 to September 1996.

pH: March 1967 to September 1993, October 1995 to September 1996.

WATER TEMPERATURES: March 1967 to September 1993, October 1995 to September 1996.

DISSOLVED OXYGEN: March 1967 to September 1993, October 1995 to September 1996.

INSTRUMENTATION.—Water-quality monitor since March 1967. Digital recorder set for 1-hour interval punch since May 1972. Electronic data logger since April 30, 1991, set for 1-hour interval.

REMARKS.—Samples were collected quarterly as part of the National Stream Quality Accounting Network. Interruptions in the water-quality record were due to malfunction of the instrument. Daily sediment data collected 1954-1974, 1979-1982.

EXTREMES FOR PERIOD OF DAILY RECORD.—

SPECIFIC CONDUCTANCE: Maximum, 1,200 microsiemens, Feb. 10 and 11, 2000; minimum, 113 microsiemens, Sept. 16, 1975.

pH: Maximum, 9.3 units, July 21, 1982, July 19, Aug. 21, 1984; minimum, 5.9 units, Mar. 8, 1980.

WATER TEMPERATURES: Maximum, 35.0°C, June 13, 1999; minimum, 0.0°C, on many days during winter.

DISSOLVED OXYGEN: Maximum, >20.0 mg/, on several days from 1982 to 1989; minimum, 0.0 mg/L, on many days during 1968, Sept. 13, 1969.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum, 1,200 microsiemens, Feb. 10 and 11; minimum, 227 microsiemens, Apr. 4.

pH: Maximum, 9.0 units, Apr. 18, May 15, 16, Sept. 2, and 3; minimum, 7.0 units, Sept. 25-27.

WATER TEMPERATURE: Maximum, 33°C, Aug. 31; minimum, 0.0°C Jan. 25.

DISSOLVED OXYGEN: Maximum, 16.7 mg/L, July 2; minimum, 4.0 mg/L, Oct. 1 and Aug. 12.

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	850	818	835	836	799	821	948	914	930	1050	1030	1040
2	861	850	855	823	772	787	947	918	939	1040	986	1020
3	858	779	825	809	725	763	918	897	903	1030	962	1010
4	779	708	733	894	773	840	898	891	895	1000	454	646
5	760	690	729	884	702	780	913	897	905	607	573	597
6	775	758	769	702	682	688	947	913	934	593	566	574
7	804	762	789	717	683	698	959	947	953	611	588	602
8	829	802	820	756	717	734	960	946	951	592	568	580
9	848	824	840	807	756	783	969	960	966	578	568	572
10	896	848	876	827	805	811	972	875	926	634	578	606
11	895	846	875	835	826	830	943	869	892	683	634	661
12	865	846	854	850	827	841	943	895	911	714	683	700
13	887	865	878	863	850	859	938	905	925	725	701	716
14	895	878	887	861	855	858	926	499	696	721	701	715
15	878	802	851	855	847	850	772	638	705	727	670	707
16	802	775	783	854	851	853	664	582	597	670	617	644
17	800	774	790	859	851	854	668	599	629	718	669	695
18	798	716	758	882	859	870	682	660	671	694	630	670
19	757	697	733	886	874	880	763	678	727	631	615	624
20	756	745	752	878	870	872	808	763	782	623	602	611
21	780	756	770	874	866	871	838	808	826	651	614	629
22	818	780	799	866	858	861	882	838	859	720	587	641
23	835	818	828	868	859	863	912	882	899	602	589	595
24	845	834	841	872	868	870	921	912	916	643	590	621
25	844	836	842	877	868	871	935	919	927	637	604	621
26	843	836	840	889	876	880	974	919	944	---	---	---
27	845	842	843	900	887	893	979	947	966	---	---	---
28	864	845	853	889	862	879	994	979	989	---	---	---
29	880	846	871	881	861	868	1030	988	1010	---	---	---
30	876	732	822	915	881	897	1020	1000	1020	---	---	---
31	866	768	832	---	---	---	1040	1000	1030	---	---	---
MONTH	896	690	818	915	682	834	1040	499	878	1050	454	684





**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**03234500 SCIOTO RIVER AT HIGBY, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.1	7.9	8.0	8.4	8.1	8.2	8.1	7.8	8.0	8.0	7.9	7.9			
2	8.1	7.9	8.0	8.1	7.9	8.0	7.9	7.8	7.8	8.1	7.9	8.0			
3	8.1	7.8	7.9	7.9	7.7	7.8	7.9	7.7	7.8	8.3	8.0	8.1			
4	7.9	7.8	7.8	7.8	7.6	7.7	7.9	7.7	7.8	8.1	7.9	8.0			
5	8.0	7.8	7.9	7.7	7.5	7.6	8.0	7.8	7.9	8.1	7.9	8.0			
6	8.2	8.0	8.1	7.7	7.5	7.7	8.0	7.8	8.0	8.0	7.8	7.9			
7	8.3	8.0	8.2	7.7	7.6	7.6	8.0	7.7	7.8	8.0	7.8	7.9			
8	8.4	8.2	8.3	7.7	7.1	7.4	8.0	7.7	7.9	8.0	7.9	7.9			
9	8.3	8.1	8.2	7.9	7.4	7.7	7.9	7.7	7.8	8.1	7.9	8.0			
10	8.1	8.0	8.1	8.1	7.9	8.0	7.9	7.7	7.8	8.2	7.7	8.0			
11	8.2	8.0	8.1	8.2	7.9	8.1	7.9	7.6	7.8	8.2	7.9	8.0			
12	8.1	8.0	8.1	8.2	7.8	8.0	7.9	7.7	7.8	8.2	7.9	8.0			
13	8.0	7.9	7.9	8.3	7.6	8.0	7.8	7.7	7.7	8.1	8.0	8.1			
14	8.0	7.9	8.0	8.4	8.2	8.3	7.9	7.6	7.7	8.1	8.0	8.1			
15	8.1	8.0	8.0	8.3	8.0	8.1	7.9	7.6	7.8	8.1	8.0	8.1			
16	8.1	8.0	8.0	8.2	7.9	8.1	7.8	7.6	7.8	8.3	8.0	8.2			
17	8.0	8.0	8.0	8.1	7.4	7.9	7.9	7.6	7.8	8.3	8.2	8.2			
18	8.0	7.9	8.0	8.2	7.8	8.0	7.9	7.7	7.8	8.3	8.1	8.2			
19	8.0	7.6	7.9	8.2	8.0	8.2	7.9	7.7	7.8	8.3	8.2	8.2			
20	8.1	7.7	7.9	8.3	8.0	8.1	8.0	7.6	7.9	8.5	8.2	8.3			
21	8.0	7.7	7.9	8.5	8.0	8.3	7.9	7.7	7.8	8.5	8.3	8.4			
22	8.0	7.9	8.0	8.6	8.3	8.5	7.8	7.6	7.7	8.4	8.2	8.3			
23	8.0	7.5	7.8	8.6	8.2	8.4	7.9	7.6	7.8	8.5	8.3	8.4			
24	7.9	7.8	7.9	8.6	8.3	8.5	7.9	7.7	7.8	8.6	8.3	8.5			
25	8.0	7.5	7.9	8.4	8.1	8.3	7.9	7.7	7.8	8.5	8.2	8.4			
26	8.0	7.7	7.8	8.2	8.0	8.1	7.9	7.6	7.8	8.6	8.3	8.4			
27	8.3	7.6	8.1	8.2	7.9	8.1	7.8	7.7	7.8	---	---	---			
28	8.3	8.1	8.2	8.3	8.0	8.2	7.8	7.8	7.8	---	---	---			
29	8.3	8.1	8.2	8.3	8.0	8.2	8.0	7.8	7.8	8.8	8.5	8.7			
30	8.3	8.1	8.2	8.2	8.0	8.1	7.9	7.8	7.9	8.7	8.1	8.4			
31	8.3	8.2	8.3	---	---	---	8.1	7.8	7.9	---	---	---			
MONTH	8.4	7.5	8.0	8.6	7.1	8.0	8.1	7.6	7.8	8.8	7.7	8.2			

DAY	MAX	MIN	MEAN	FEBRUARY			MARCH			APRIL			MAY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	8.3	8.1	8.2	8.6	8.0	8.2			
2	---	---	---	---	---	---	8.3	8.1	8.2	8.6	8.1	8.3			
3	---	---	---	---	---	---	8.2	7.8	8.1	8.6	8.0	8.3			
4	---	---	---	---	---	---	8.1	7.8	7.9	8.2	7.9	8.0			
5	---	---	---	---	---	---	8.6	7.9	8.2	8.4	8.0	8.2			
6	---	---	---	8.0	7.3	7.6	8.3	8.0	8.1	8.5	8.1	8.3			
7	---	---	---	8.2	7.6	8.0	8.2	8.0	8.1	8.5	8.1	8.4			
8	---	---	---	8.4	7.9	8.2	8.1	7.9	8.0	8.6	8.2	8.4			
9	8.7	8.3	8.4	8.6	8.2	8.4	8.8	7.9	8.1	8.5	8.2	8.3			
10	8.8	8.2	8.5	8.4	8.1	8.3	8.3	7.9	8.0	8.5	8.0	8.3			
11	8.7	8.3	8.6	8.2	7.7	7.9	8.8	8.0	8.2	8.6	8.3	8.4			
12	8.8	8.3	8.6	8.0	7.7	7.8	8.4	7.9	8.2	8.6	8.1	8.4			
13	---	---	---	8.0	7.7	7.8	8.5	7.9	8.2	8.9	8.3	8.6			
14	---	---	---	8.7	7.6	8.1	8.6	8.0	8.2	8.9	8.7	8.8			
15	---	---	---	8.7	7.8	8.2	8.4	8.1	8.3	9.0	8.6	8.8			
16	---	---	---	8.4	7.7	8.0	8.5	8.3	8.4	9.0	8.6	8.8			
17	8.4	7.6	8.0	8.2	7.3	7.8	8.9	8.5	8.6	8.8	8.4	8.6			
18	8.5	8.0	8.3	8.3	7.5	8.0	9.0	8.5	8.7	8.6	8.2	8.3			
19	8.5	7.8	8.2	8.4	7.8	8.0	8.7	8.4	8.5	8.6	8.2	8.4			
20	8.4	8.2	8.3	8.3	8.0	8.1	9.0	8.3	8.5	8.6	8.4	8.5			
21	8.6	7.9	8.3	8.4	7.9	8.2	8.8	8.3	8.5	8.5	8.2	8.3			
22	8.6	8.5	8.6	8.4	8.0	8.2	8.5	7.8	8.1	8.3	7.8	8.1			
23	8.5	7.8	8.1	8.2	8.0	8.1	8.6	7.6	8.1	8.2	7.9	8.1			
24	8.2	7.5	7.9	8.3	7.9	8.1	8.0	7.7	7.9	8.2	7.5	7.8			
25	8.3	7.2	7.8	8.3	8.2	8.2	8.0	7.7	7.8	8.0	7.7	7.9			
26	8.5	7.5	8.0	8.4	8.2	8.3	8.1	7.7	7.9	8.0	7.7	7.9			
27	8.3	8.0	8.2	8.4	8.1	8.3	8.1	7.7	8.0	8.1	7.9	8.0			
28	8.4	7.5	7.9	8.3	8.1	8.2	8.1	7.8	7.9	8.1	7.9	8.0			
29	8.2	7.6	7.8	8.2	8.1	8.2	8.3	7.9	8.0	8.2	7.6	8.0			
30	---	---	---	8.3	8.1	8.2	8.5	7.9	8.2	8.1	7.6	7.8			
31	---	---	---	8.3	8.1	8.2	---	---	---	8.2	7.7	8.0			
MONTH	8.8	7.2	8.2	8.7	7.3	8.1	9.0	7.6	8.2	9.0	7.5	8.3			



**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**03234500 SCIOTO RIVER AT HIGBY, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	20.0	18.0	19.0	16.5	14.0	15.5	7.0	5.5	6.0	5.0	3.5	4.5			
2	20.5	18.0	19.0	16.0	13.0	14.5	6.5	5.0	6.0	8.0	5.0	6.5			
3	21.0	18.5	19.5	13.0	10.5	11.5	7.5	6.0	6.5	10.0	8.0	9.0			
4	20.0	18.0	19.0	11.5	9.5	11.0	9.5	7.5	8.5	10.5	9.5	10.0			
5	19.0	17.0	18.0	12.0	10.5	11.5	10.0	9.0	9.5	9.5	7.0	7.5			
6	19.0	16.5	17.5	13.5	11.5	12.5	10.0	8.0	9.0	7.5	6.5	7.0			
7	18.5	16.0	17.0	13.5	11.5	12.5	8.5	7.0	8.0	7.5	5.5	6.5			
8	17.5	16.0	17.0	13.0	10.5	12.0	8.0	6.5	7.0	6.5	5.0	5.5			
9	18.0	17.5	17.5	13.5	11.5	12.5	7.5	6.5	7.0	6.5	6.0	6.5			
10	19.0	17.5	18.0	14.0	12.5	13.5	8.0	7.0	7.5	6.0	5.5	6.0			
11	20.5	18.5	19.0	14.0	13.5	13.5	7.5	6.0	7.0	6.5	6.0	6.0			
12	19.5	17.0	18.5	14.0	12.0	13.0	6.5	6.0	6.5	6.5	5.5	6.0			
13	19.0	17.5	18.0	14.0	12.0	13.0	8.0	6.5	7.0	6.5	5.0	6.0			
14	18.5	16.0	17.0	14.5	12.5	13.5	8.0	8.0	8.0	5.0	4.0	4.5			
15	17.5	15.5	16.5	13.0	11.0	12.0	8.0	7.0	7.5	5.5	4.0	4.5			
16	18.5	16.0	17.0	11.0	9.0	10.0	7.5	6.0	7.0	7.0	5.5	6.0			
17	17.5	16.5	17.0	9.0	8.0	8.5	6.0	5.5	6.0	6.0	4.5	5.0			
18	17.0	15.0	16.0	9.0	7.0	8.0	6.0	5.5	6.0	5.0	4.0	4.5			
19	15.0	14.0	14.5	10.0	7.5	8.5	6.0	5.0	5.5	5.5	4.5	5.0			
20	15.0	13.5	14.0	10.5	9.5	10.0	6.5	6.0	6.5	5.5	4.0	4.5			
21	15.0	13.0	13.5	12.5	10.5	11.5	6.0	5.0	5.5	4.0	2.0	3.0			
22	15.0	13.0	13.5	13.5	11.5	12.5	5.0	4.0	4.5	2.5	1.5	2.0			
23	13.5	11.5	12.5	14.0	12.0	13.0	4.0	3.5	4.0	4.5	2.5	3.5			
24	11.5	10.5	11.0	14.0	13.0	13.5	4.0	2.5	3.0	4.5	2.5	3.0			
25	12.5	9.5	10.5	13.0	12.0	12.5	2.5	1.5	2.0	4.5	.0	2.5			
26	13.0	10.0	11.5	12.0	11.0	12.0	2.5	1.5	2.0	---	---	---			
27	13.5	10.5	12.0	11.5	10.0	10.5	2.5	2.0	2.0	---	---	---			
28	13.5	11.0	12.0	10.5	9.5	10.0	2.0	1.0	1.5	---	---	---			
29	14.5	12.0	13.0	9.5	8.0	9.0	3.0	1.0	2.0	---	---	---			
30	15.5	13.0	14.0	8.0	6.5	7.5	4.0	2.0	3.0	---	---	---			
31	15.5	13.5	14.5	---	---	---	5.0	3.5	4.0	---	---	---			
MONTH	21.0	9.5	15.5	16.5	6.5	11.5	10.0	1.0	5.5	10.5	.0	5.5			

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



**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**03234500 SCIOTO RIVER AT HIGBY, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

OXYGEN, DISSOLVED, MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.7	4.0	5.4	9.8	7.8	8.8	13.7	11.4	12.5	14.1	13.4	13.7			
2	8.9	4.1	5.2	9.0	8.0	8.4	14.4	12.9	13.5	13.4	12.3	13.0			
3	8.5	4.3	6.1	8.6	7.1	8.0	14.6	13.3	13.8	12.3	10.9	11.4			
4	7.2	5.7	6.4	10.0	8.3	9.3	14.0	12.8	13.2	10.9	7.6	9.0			
5	12.9	6.9	9.8	---	---	---	13.6	11.9	12.6	10.0	7.5	8.9			
6	13.3	10.4	11.6	---	---	---	12.2	11.3	11.7	9.4	8.3	8.7			
7	13.8	9.9	11.4	---	---	---	14.2	11.6	12.8	---	---	---			
8	13.1	10.5	11.8	10.4	9.1	9.7	15.4	13.4	14.1	---	---	---			
9	12.2	10.1	10.8	---	---	---	14.6	13.2	13.9	---	---	---			
10	10.3	9.1	9.7	---	---	---	13.2	12.2	12.7	12.2	11.4	11.9			
11	11.9	9.1	10.2	---	---	---	14.4	12.2	13.3	11.4	11.0	11.1			
12	11.9	9.9	10.7	---	---	---	14.8	13.2	13.8	11.2	11.0	11.1			
13	10.8	9.4	9.9	---	---	---	13.2	11.9	12.3	11.3	10.8	11.0			
14	9.4	7.9	8.5	---	---	---	11.9	11.2	11.6	11.8	11.3	11.6			
15	7.9	6.6	7.1	---	---	---	11.9	11.1	11.5	11.9	11.4	11.7			
16	6.6	4.6	5.4	13.2	9.9	11.7	12.1	11.2	11.6	11.4	10.9	11.1			
17	---	---	---	11.4	7.8	9.6	12.6	12.1	12.5	11.5	11.0	11.3			
18	---	---	---	12.0	7.9	10.5	12.8	12.5	12.7	11.6	11.3	11.5			
19	---	---	---	12.4	10.5	11.4	13.0	12.7	12.9	11.3	10.6	11.1			
20	---	---	---	10.9	9.5	10.1	12.9	12.5	12.6	11.2	10.6	10.9			
21	11.6	8.9	10.6	11.5	8.5	9.9	13.6	12.4	13.0	11.6	11.1	11.3			
22	10.5	8.6	9.2	11.9	8.8	10.2	14.4	13.4	13.8	11.4	11.1	11.3			
23	16.2	8.7	13.7	11.7	8.0	9.8	14.4	13.5	14.0	11.3	10.7	11.0			
24	16.3	10.1	12.9	10.8	7.4	9.0	14.7	13.9	14.3	10.9	10.4	10.7			
25	15.5	9.1	11.8	9.1	7.3	8.2	15.0	14.5	14.8	10.6	8.1	9.5			
26	---	---	---	7.3	6.2	6.7	14.9	14.3	14.7	9.8	7.6	8.8			
27	---	---	---	9.0	6.2	7.5	14.8	14.1	14.5	7.6	5.5	6.2			
28	8.1	5.0	6.2	10.5	8.3	9.3	14.8	14.3	14.6	7.9	6.1	7.2			
29	8.9	6.2	7.5	10.9	9.0	10.0	14.7	14.0	14.4	8.8	7.7	8.2			
30	9.9	7.1	8.1	12.5	9.8	11.0	14.4	13.9	14.2	8.5	7.1	7.8			
31	9.6	7.6	8.5	---	---	---	14.0	13.6	13.8	---	---	---			
MONTH	16.3	4.0	9.1	13.2	6.2	9.5	15.4	11.1	13.3	14.1	5.5	10.4			

DAY	MAX	MIN	MEAN	FEBRUARY			MARCH			APRIL			MAY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	11.6	8.4	10.3	11.7	10.3	11.0	10.8	9.3	10.1			
2	---	---	---	9.1	7.6	8.1	11.0	9.8	10.2	11.9	8.6	10.2			
3	---	---	---	---	---	---	9.9	9.0	9.5	10.8	8.8	9.8			
4	---	---	---	---	---	---	---	---	---	10.2	8.0	9.0			
5	---	---	---	---	---	---	10.1	7.3	8.8	10.2	8.2	9.1			
6	---	---	---	---	---	---	10.6	7.5	9.9	12.0	8.4	9.9			
7	---	---	---	---	---	---	10.3	7.1	9.3	12.1	8.2	9.9			
8	---	---	---	11.0	10.1	10.6	10.2	8.1	9.6	12.3	8.2	10.0			
9	12.9	12.2	12.5	10.9	10.0	10.4	10.3	7.7	9.4	12.4	8.3	10.2			
10	12.6	11.8	12.2	11.5	9.9	10.7	10.5	7.7	9.6	14.0	8.2	10.7			
11	12.0	11.2	11.5	11.1	10.4	10.8	11.0	9.0	10.2	15.7	8.9	11.7			
12	11.2	9.9	10.8	13.2	11.1	12.1	11.4	8.6	10.8	15.8	9.3	11.8			
13	10.1	7.8	8.4	14.0	12.4	13.2	11.6	10.8	11.3	14.6	8.5	11.2			
14	8.1	7.7	7.9	14.4	12.8	13.6	11.4	10.1	11.0	16.2	8.8	12.1			
15	---	---	---	14.3	12.2	13.3	10.6	9.1	9.9	16.6	9.1	12.7			
16	---	---	---	13.4	10.5	12.1	9.5	8.9	9.3	15.0	8.9	11.8			
17	13.7	12.6	13.2	12.9	8.5	11.3	9.0	8.6	8.9	12.5	8.2	10.2			
18	13.6	12.0	12.6	12.4	8.2	11.2	9.5	8.8	9.2	11.3	7.8	9.4			
19	14.6	12.6	13.8	12.8	7.1	11.7	9.6	9.2	9.4	11.3	8.8	9.8			
20	14.9	13.8	14.2	12.7	11.3	12.3	9.4	8.9	9.2	10.0	7.8	8.9			
21	15.6	12.5	14.3	---	---	---	9.6	8.6	9.2	8.6	6.8	7.4			
22	14.7	12.5	13.5	12.2	9.8	11.6	10.2	9.5	9.9	7.6	6.8	7.2			
23	13.0	10.7	11.9	12.3	8.8	11.3	10.5	10.1	10.2	7.8	6.8	7.3			
24	13.9	9.2	11.2	12.0	10.0	11.4	10.2	9.8	10.0	7.3	5.4	6.3			
25	---	---	---	11.2	10.6	11.0	10.2	9.6	9.9	7.2	5.8	6.4			
26	---	---	---	11.0	9.9	10.6	10.0	9.6	9.8	7.0	5.4	6.3			
27	---	---	---	10.8	9.9	10.3	10.0	9.3	9.7	7.4	6.4	6.8			
28	---	---	---	10.6	9.8	10.3	10.4	9.2	9.7	7.0	6.4	6.7			
29	13.6	10.6	12.4	11.2	10.3	10.7	10.8	9.0	9.9	6.5	4.2	5.5			
30	---	---	---	11.5	10.4	11.0	11.3	9.3	10.2	7.3	4.4	6.4			
31	---	---	---	11.6	10.4	11.0	---	---	---	7.3	6.6	6.8			
MONTH	15.6	7.7	12.0	14.4	7.1	11.2	11.7	7.1	9.8	16.6	4.2	9.1			



**SURFACE-WATER RECORDS**  
**Scioto River Basin**

**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 mi<sup>2</sup>.

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, 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 05060001, 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 mi<sup>2</sup>.

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, 6,122 acre-ft Apr. 8, elevation 760.22 ft; minimum, 4,351 acre-ft Dec. 2, elevation 755.32.

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 05060001, 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 mi<sup>2</sup>.

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: 79,539 acre-ft Apr. 8, elevation, 896.21 ft; minimum, 31,776 acre-ft Dec. 9, elevation, 877.61 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

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	841.23	11790		755.42	4380		880.08	36320	
Oct. 31	839.15	10470	-1320	756.20	4650	+270	879.25	34750	-1570
Nov. 30	841.18	11760	+1290	755.54	4425	-225	877.97	32467	-2283
Dec. 31	847.50	16600	+4840	755.84	4527	+102	879.86	35897	+3430
CALENDAR YEAR 1999			+1640			-63			-8413
Jan. 31	848.54	17600	+1000	756.41	4722	+195	886.95	52056	+16159
Feb. 29	848.76	17820	+220	756.84	4877	+155	894.34	73042	+20986
Mar. 31	848.85	17910	+90	756.73	4837	-40	894.38	73178	+136
Apr. 30	848.81	17870	-40	756.58	4783	-54	894.22	72634	-544
May 31	849.35	18420	+550	757.12	4977	+194	894.70	74267	+1633
June 30	848.91	17970	-450	756.50	4754	-223	892.89	68327	-5940
July 31	848.74	17800	-170	756.31	4687	-67	889.44	58623	-9704
Aug. 31	848.55	17610	-190	756.10	4616	-71	886.12	49924	-8699
Sept. 30	848.71	17770	+160	756.40	4720	+104	885.04	47199	-2725
WATER YEAR 2000			+5980			+340			+10879



**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 right bank, 0.3 mi downstream from Brown Run, 0.3 mi upstream from Tucker Run, 0.7 mi upstream from bridge on U.S. Highway 52 at McGaw, Ohio, 2.7 mi northeast of Buena Vista, Ohio, and 3.2 mi upstream from mouth.

DRAINAGE AREA.—12.2 mi<sup>2</sup>.

PERIOD OF RECORD.—June 1963 to current year.

GAGE.—Water-stage recorder. Datum of gage is 538.41 ft above sea level (revised). Ohio Department of Highways benchmark. Prior to July 21, 1972 at site 0.7 mi downstream at datum 18.41 ft lower. July 21, 1972, to September 30, 1984, at same site at datum 5.00 ft higher.

REMARKS.—Records poor. Periods of no flow occur most years. Water-quality data formerly collected at this site.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of July 3, 1960, reached a stage of 11.62 ft; discharge, 7,230 ft<sup>3</sup>/s, on basis of contracted-opening and flow-over-road measurement of peak flow.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	e.11	e.20	e.42	e6.0	e6.0	e1.5	e6.0	3.3	e.15	e.10
2	.00	.54	e9.0	e.30	e.45	e5.0	e4.0	e1.4	e3.5	2.3	e.20	e.50
3	.00	.00	e.20	e.50	e.48	e4.0	e3.0	e1.3	e1.5	1.5	e.35	e8.0
4	.00	.00	e.08	e1.0	e.50	e2.8	e10	e1.4	e1.0	1.3	e.12	e3.0
5	.00	.00	e.05	e10	e.50	e2.3	e50	e1.4	e.70	1.7	e.07	e1.5
6	.00	.00	e.20	e50	e.50	e2.2	e45	e1.6	.47	5.7	e.05	e1.0
7	.00	.00	e.26	e10	e.50	e2.0	e25	e1.8	.74	4.6	e.05	e.80
8	.00	.00	e.15	e4.0	e.56	e1.7	e13	e1.5	.59	2.7	e.10	e.70
9	.00	.00	e.05	e2.0	e.60	e1.5	e25	e1.4	e.35	1.8	e2.0	e.64
10	.00	.00	e.02	e1.5	e.66	e1.4	e45	e1.3	e.25	1.6	e50	e.90
11	.00	.00	e1.0	e1.4	e.80	e1.3	e25	e1.1	e.20	17	e15	e1.5
12	.00	.00	e.90	e1.2	e1.0	e1.3	e15	e.90	e.15	15	e5.0	e1.2
13	.00	.00	e1.2	e1.0	e3.0	e2.0	e8.0	e.80	e.13	10	e3.0	e.90
14	.00	.00	e1.5	e.94	e5.0	e2.5	e6.0	e.90	e.10	6.6	e1.5	e.50
15	.00	.00	e2.5	e.90	e10	e3.7	e5.0	e.80	e.09	10	e.80	e.35
16	.00	.00	e3.5	e1.0	e50	e2.5	e4.0	e.74	1.1	7.9	e.40	e.23
17	.00	.00	e2.0	e.80	e30	e2.1	e3.5	e.70	3.3	5.4	e.14	e.16
18	.00	.00	e1.3	e.70	e15	e10	e2.8	e.66	16	3.7	e.08	e.12
19	.00	.00	e.80	e.66	e10	e50	e4.0	e.66	14	22	e.05	e.10
20	.00	.00	e.60	e.60	e50	e14	e8.0	e.64	12	24	e.02	e.11
21	.00	.00	e.50	e.56	e40	e20	e7.0	e.64	10	17	e.01	e.15
22	.00	.00	e.40	e.54	e25	e45	e5.0	e.60	12	13	e.00	e.25
23	.00	.00	e.30	e.52	e17	e50	e16	e.56	9.1	8.5	e.00	e1.0
24	.00	.00	e.24	e.50	e13	e20	e20	e.60	5.9	6.0	e.00	e5.0
25	.00	.00	e.22	e.47	e8.4	e13	e13	e1.0	4.1	e2.0	e.00	e100
26	.00	.00	e.20	e.45	e7.8	e8.0	e6.0	e4.0	3.0	e1.0	e.00	e500
27	.00	.00	e.17	e.43	e12	e5.0	e4.0	e1.6	3.0	e.60	e.00	e200
28	.00	.00	e.16	e.42	e9.0	e4.0	e3.0	e1.2	6.8	e.45	e.00	e80
29	.00	.00	e.16	e.41	e7.0	e3.5	e2.1	e4.0	6.7	e.30	e.00	e50
30	.00	.89	e.17	e.40	---	e5.0	e1.8	e13	4.9	e.25	e.00	e40
31	.00	---	e.18	e.41	---	e16	---	e20	---	e.19	e.02	---
TOTAL	0.00	1.43	28.12	93.81	319.17	307.8	385.2	69.70	127.67	197.39	79.11	998.71
MEAN	.000	.048	.91	3.03	11.0	9.93	12.8	2.25	4.26	6.37	2.55	33.3
MAX	.00	.89	9.0	50	50	50	50	20	16	24	50	500
MIN	.00	.00	.02	.20	.42	1.3	1.8	.56	.09	.19	.00	.10
CFSM	.00	.00	.07	.25	.90	.81	1.05	.18	.35	.52	.21	2.73
IN.	.00	.00	.09	.29	.97	.94	1.17	.21	.39	.60	.24	3.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2000, BY WATER YEAR (WY)

	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	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						
MEAN	2.27	5.95	15.8	18.0	23.5	30.1	28.1	20.2	7.40	3.82	3.04	3.69																																
MAX	16.8	29.0	81.6	46.3	60.9	90.7	66.7	93.1	35.3	30.8	38.0	33.3																																
(WY)	1990	1986	1979	1996	1975	1964	1965	1996	1979	1986	1979	2000																																
MIN	.000	.000	.000	.44	4.42	4.39	4.41	1.63	.043	.031	.000	.000																																
(WY)	1964	1964	1964	1981	1978	1969	1971	1991	1988	1999	1999	1999																																

SUMMARY STATISTICS		FOR 1999 CALENDAR YEAR			FOR 2000 WATER YEAR			WATER YEARS 1963 - 2000				
ANNUAL TOTAL		2610.91			2608.11							
ANNUAL MEAN		7.15			7.13			13.5				
HIGHEST ANNUAL MEAN								31.9				
LOWEST ANNUAL MEAN								5.15				
HIGHEST DAILY MEAN		226			500			850				
LOWEST DAILY MEAN		.00			.00			.00				
ANNUAL SEVEN-DAY MINIMUM		.00			.00			.00				
INSTANTANEOUS PEAK FLOW					1000			4430				
INSTANTANEOUS PEAK STAGE					6.40			10.20				
INSTANTANEOUS LOW FLOW					.00			.00				
ANNUAL RUNOFF (CFSM)		.59			.58			1.10				
ANNUAL RUNOFF (INCHES)		7.96			7.95			14.98				
10 PERCENT EXCEEDS		23			15			31				
50 PERCENT EXCEEDS		.32			.90			3.0				
90 PERCENT EXCEEDS		.00			.00			.06				

a Peaks above base shown in table of peak discharges and stages at continuous-record surface-water-discharge stations.  
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, 7.0 mi east of West Union, Ohio, and 7.1 mi upstream from Beasley Fork.

DRAINAGE AREA.—387 mi<sup>2</sup>.

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 above sea level. Prior to Nov. 22, 1940, nonrecording gage at same site and datum.

REMARKS.—Records poor. Water-quality and sediment data formerly collected at this site.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.89	e10	e7.2	2.8	e62	258	244	e52	e100	19	40	45
2	.90	29	e6.8	3.0	e66	229	211	e50	48	13	47	37
3	.90	37	e6.6	104	e70	198	1690	e54	38	60	41	87
4	.98	26	e6.6	269	e75	172	6870	e50	30	753	32	90
5	1.1	14	e6.4	e1000	e74	154	1800	e60	24	888	24	67
6	1.2	9.7	e6.4	e2000	e74	134	999	e68	25	564	19	42
7	1.3	8.2	e6.6	e800	e74	120	703	e54	20	252	20	32
8	1.3	7.1	e12	e500	e80	111	2050	e50	25	118	21	26
9	1.6	e6.6	e20	e300	e84	105	1250	e47	20	70	36	23
10	4.0	e6.0	e30	e210	e100	99	785	e40	15	74	2590	46
11	6.6	e5.6	215	e190	e150	96	578	e35	11	1670	405	46
12	12	e5.4	127	e170	e200	185	479	e30	8.7	584	187	49
13	14	e5.2	78	e150	585	248	381	e32	7.7	254	102	195
14	15	e5.2	373	e140	10900	191	319	e30	6.9	151	68	106
15	22	e5.0	442	e120	3510	156	275	e28	7.5	408	50	60
16	31	e4.9	225	e110	2060	759	236	e25	7.5	191	39	41
17	e35	e4.9	121	e100	1450	1900	343	e24	150	107	31	30
18	e30	e4.8	72	e90	13100	743	883	e24	332	70	45	22
19	e10	e4.8	46	e80	26500	695	605	e24	376	280	81	18
20	e8.0	e4.9	28	e76	1610	2000	395	e23	184	714	71	15
21	e5.0	e4.9	22	e72	807	1490	457	e22	126	296	44	16
22	e4.0	e5.0	17	e70	588	871	555	e20	75	149	33	23
23	e3.5	e6.0	14	e68	529	616	436	e25	48	89	25	23
24	e3.2	e30	10	e64	459	474	336	e50	35	61	804	150
25	e2.9	e25	8.2	e62	435	383	e240	e100	25	46	729	982
26	e2.7	e20	6.2	e60	388	315	e150	e60	19	36	248	5000
27	e2.6	e15	4.7	e60	350	268	e100	e45	17	29	190	987
28	e2.5	e12	4.0	e58	350	304	e80	e150	16	25	338	494
29	e2.7	e10	3.3	e58	298	576	e68	e500	28	27	152	325
30	e3.0	e8.0	3.0	e58	---	375	e58	e1000	27	39	88	229
31	e3.4	---	2.8	e60	---	294	---	e200	---	49	60	---
TOTAL	233.27	340.2	1930.8	7104.8	65028	14519	23576	2972	1852.3	8086	6660	9306
MEAN	7.52	11.3	62.3	229	2242	468	786	95.9	61.7	261	215	310
MAX	35	37	442	2000	26500	2000	6870	1000	376	1670	2590	5000
MIN	.89	4.8	2.8	2.8	62	96	58	20	6.9	13	19	15
CFSM	.02	.03	.16	.59	5.79	1.21	2.03	.25	.16	.67	.56	.80
IN.	.02	.03	.19	.68	6.25	1.40	2.27	.29	.18	.78	.64	.89

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2000

	MEAN	88.4	253	526	754	849	1018	748	542	266	183	147	130
MAX	651	1447	2252	2637	2242	3909	2030	2230	1424	1222	1000	2053	
MIN	.13	.28	2.28	12.1	24.9	96.5	106	27.5	3.18	1.46	1.04	.43	

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1927 - 2000	
ANNUAL TOTAL	120760.05		141608.37			
ANNUAL MEAN	331		387		457	
HIGHEST ANNUAL MEAN					951	
LOWEST ANNUAL MEAN					158	
HIGHEST DAILY MEAN	5000		26500		49400	
LOWEST DAILY MEAN	.21		.89		.00	
ANNUAL SEVEN-DAY MINIMUM	.28		1.0		.00	
INSTANTANEOUS PEAK FLOW			55700		77700	
INSTANTANEOUS PEAK STAGE			25.97		31.15	
INSTANTANEOUS LOW FLOW			.89		.00	
ANNUAL RUNOFF (CFSM)	.85		1.00		1.18	
ANNUAL RUNOFF (INCHES)	11.61		13.61		16.04	
10 PERCENT EXCEEDS	1210		706		1000	
50 PERCENT EXCEEDS	17		60		107	
90 PERCENT EXCEEDS	2.6		5.1		5.1	

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

**SURFACE-WATER RECORDS**  
**Whiteoak Creek Basin**

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**03238500 WHITEOAK 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 mi<sup>2</sup>.

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. Datum of gage is 604.20 ft above sea level. Prior to Oct. 12, 1972, nonrecording gage at a site 1.0 mi downstream at datum 35.24 ft lower. See WSP 2108 for history of changes prior to Dec. 8, 1940.

REMARKS.—Records good except those below 30 ft<sup>3</sup>/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 1999 TO SEPTEMBER 2000  
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	3.4	8.6	66	57	25	40	12	2.9	14
2	.00	.00	.00	4.9	9.4	53	362	29	28	7.4	3.0	185
3	.00	.00	.00	17	9.5	45	2860	27	231	137	7.2	96
4	.00	.00	.00	2710	9.5	38	6780	31	116	882	5.2	78
5	.00	.00	1.4	361	9.5	36	1080	37	40	1320	1.5	31
6	.00	.00	4.3	111	9.5	33	352	28	26	658	.00	20
7	.00	.00	4.8	52	9.6	30	225	28	20	141	.00	14
8	.00	.00	2.5	35	9.9	28	3130	26	16	49	.00	13
9	.00	.00	.75	28	11	27	748	23	12	27	11	12
10	7.3	.00	22	24	15	25	274	20	9.3	18	2590	12
11	6.5	.00	15	22	32	27	174	17	6.9	482	236	20
12	3.6	.00	20	19	84	47	132	16	5.4	289	73	26
13	.09	.00	22	17	308	78	107	17	3.7	93	36	23
14	9.0	.00	40	18	7580	52	87	15	2.0	49	24	20
15	4.1	.00	66	18	784	40	71	14	.00	45	19	16
16	.99	.00	50	16	241	230	58	13	.60	111	15	12
17	.00	.00	30	14	135	1070	54	13	440	34	13	9.9
18	.00	.00	20	13	6170	261	147	13	301	20	74	6.4
19	.00	.00	13	12	11700	472	179	13	733	630	60	2.8
20	.00	.00	11	12	658	2490	99	12	134	683	38	.00
21	.00	.00	9.5	9.2	272	1190	358	11	50	127	24	.00
22	.00	.00	7.0	10	189	370	413	11	28	47	17	.31
23	.00	.00	6.0	11	174	206	227	15	19	27	13	.62
24	.00	.00	5.2	9.4	150	138	126	77	13	18	14	2140
25	.00	.00	4.0	9.3	241	106	86	39	9.5	12	63	1310
26	.00	.00	4.1	9.7	162	81	59	23	6.9	8.7	33	6870
27	.00	.00	3.8	11	119	63	44	96	262	6.7	36	592
28	.00	.00	2.9	8.2	113	92	35	668	101	4.8	29	194
29	.00	.00	3.4	7.4	92	310	31	566	36	5.5	35	108
30	.00	.00	3.1	7.7	---	148	28	164	20	5.1	25	72
31	.00	---	3.6	8.1	---	87	---	72	---	4.7	19	---
TOTAL	31.58	0.00	375.35	3608.3	29305.5	7939	18383	2159	2710.30	5953.9	3516.80	11898.03
MEAN	1.02	.000	12.1	116	1011	256	613	69.6	90.3	192	113	397
MAX	9.0	.00	66	2710	11700	2490	6780	668	733	1320	2590	6870
MIN	.00	.00	.00	3.4	8.6	25	28	11	.00	4.7	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2000, BY WATER YEAR (WY)

MEAN	61.3	158	290	438	497	555	439	288	165	97.4	86.7	84.0
MAX	580	1103	1427	1487	1281	1822	1134	1646	996	598	531	1220
(WY)	1984	1986	1991	1950	1955	1963	1973	1996	1998	1980	1926	1979
MIN	.071	.000	1.64	1.67	12.2	41.5	31.6	10.9	.47	.000	1.28	.17
(WY)	1941	2000	1964	1977	1934	1941	1971	1934	1999	1999	1993	1985

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1925 - 2000

ANNUAL TOTAL	59160.85	85880.76	
ANNUAL MEAN	162	235	
HIGHEST ANNUAL MEAN			583 1979
LOWEST ANNUAL MEAN			82.4 1954
HIGHEST DAILY MEAN	5020 Jan 13	11700 Feb 19	19400 Mar 10 1964
LOWEST DAILY MEAN	.00 Jun 1	.00 Oct 1	.00 Jul 19 1930
ANNUAL SEVEN-DAY MINIMUM	.00 Jun 9	.00 Oct 1	.00 Jul 19 1930
INSTANTANEOUS PEAK FLOW		15700 Feb 19a	22400 Mar 10 1964
INSTANTANEOUS PEAK STAGE		8.88 Feb 19	20.87 May 14 1933
INSTANTANEOUS LOW FLOW		.00 Oct 1	.00 Sep 15 1930
10 PERCENT EXCEEDS	330	323	533
50 PERCENT EXCEEDS	3.6	19	42
90 PERCENT EXCEEDS	.00	.00	2.3

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

### 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 mi<sup>2</sup>.

PERIOD OF RECORD.—July 1952 to current year.

REVISED RECORDS.—WRD-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 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 1999 TO SEPTEMBER 2000 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.7	11	13	14	e15	76	88	e150	e84	58	56	e19
2	8.4	16	13	14	e15	72	105	e230	e82	54	39	e20
3	7.7	21	13	29	e15	66	437	e210	e80	117	35	e25
4	7.6	22	13	221	e15	65	1000	e180	e72	172	33	e38
5	9.2	18	14	153	e16	62	589	e160	e64	105	31	e30
6	7.9	16	15	76	e17	59	355	e140	e90	82	31	e24
7	7.5	15	14	53	e18	56	331	e130	e140	70	35	e21
8	7.4	17	13	42	e20	55	2200	e120	e100	61	33	e21
9	8.9	16	13	36	e23	54	1110	e110	e80	57	33	e21
10	10	15	18	33	e27	53	448	e120	e68	56	35	e22
11	9.1	15	18	31	46	54	323	e100	e58	55	32	e23
12	9.1	14	19	28	89	57	254	e90	e54	51	29	e23
13	8.3	13	24	27	120	53	210	e90	e50	47	28	e22
14	8.5	11	27	24	623	52	184	e82	51	91	27	e21
15	8.4	17	27	e22	344	53	166	e72	55	114	26	e19
16	8.6	14	25	e21	222	82	152	e68	68	71	26	e18
17	9.3	13	21	e20	172	256	e180	e62	341	55	25	e17
18	9.6	13	18	e19	297	170	e270	e58	219	48	27	e16
19	8.2	13	17	e19	645	149	e210	e54	147	93	26	e16
20	8.5	14	17	e18	336	359	e300	e52	115	116	25	e18
21	9.4	13	17	e18	209	397	e480	e49	236	75	e24	e23
22	10	13	15	e17	166	255	e400	e45	225	57	e24	e21
23	11	14	15	e17	148	194	e300	e54	143	49	e25	e30
24	11	13	15	e16	130	162	e250	e70	114	44	e24	e38
25	11	12	17	e16	116	142	e210	e110	109	41	e22	e40
26	11	16	15	e15	101	125	e190	e74	95	39	e26	e44
27	11	16	14	e15	96	128	e170	e60	83	38	e25	e37
28	11	14	14	e15	86	129	e150	e70	75	36	e22	e32
29	11	14	15	e15	78	115	e130	e90	71	36	e21	e29
30	12	13	14	e15	---	101	e130	e140	65	38	e20	e27
31	12	---	14	e15	---	94	---	e100	---	38	e19	---
TOTAL	291.3	442	517	1074	4205	3745	11322	3140	3234	2064	884	755
MEAN	9.40	14.7	16.7	34.6	145	121	377	101	108	66.6	28.5	25.2
MAX	12	22	27	221	645	397	2200	230	341	172	56	44
MIN	7.4	11	13	14	15	52	88	45	50	36	19	16
CFSM	.07	.11	.13	.27	1.12	.94	2.93	.79	.84	.52	.22	.20
IN.	.08	.13	.15	.31	1.21	1.08	3.26	.91	.93	.60	.25	.22

#### STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2000, BY WATER YEAR (WY)

	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	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
MEAN	34.4	68.5	107	140	180	211	203	171	132	86.6	61.9	36.8																																					
MAX	163	315	513	497	485	655	446	637	469	406	413	378																																					
(WY)	1991	1986	1991	1959	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 1999 CALENDAR YEAR			FOR 2000 WATER YEAR			WATER YEARS 1952 - 2000		
ANNUAL TOTAL	26016.7			31673.3					
ANNUAL MEAN	71.3			86.5			119		
HIGHEST ANNUAL MEAN							228		
LOWEST ANNUAL MEAN							28.6		
HIGHEST DAILY MEAN	716			2200			6140		
LOWEST DAILY MEAN	5.3			7.4			3.5		
ANNUAL SEVEN-DAY MINIMUM	5.5			8.0			5.5		
INSTANTANEOUS PEAK FLOW				2720			14800		
INSTANTANEOUS PEAK STAGE				7.91			12.20		
INSTANTANEOUS LOW FLOW				7.4			2.8		
ANNUAL RUNOFF (CFSM)	.55			.67			.92		
ANNUAL RUNOFF (INCHES)	7.50			9.13			12.55		
10 PERCENT EXCEEDS	171			209			253		
50 PERCENT EXCEEDS	25			36			61		
90 PERCENT EXCEEDS	8.4			13			17		

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**

**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 mi<sup>2</sup>.

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. Datum of gage is 865.15 ft above sea level. Aug. 4, 1972, to 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 1999 TO SEPTEMBER 2000  
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	5.9	2.9	3.4	e4.2	40	37	66	61	26	20	6.1
2	1.9	12	3.0	3.8	e4.2	34	52	112	60	23	15	6.5
3	2.1	7.5	3.0	39	e4.3	29	195	104	52	50	14	6.7
4	2.4	5.8	3.1	120	e4.4	28	391	89	46	96	13	13
5	2.4	4.3	3.6	62	e4.5	26	277	81	55	62	12	9.8
6	2.4	3.4	3.5	33	e4.8	23	181	75	107	45	12	8.3
7	2.2	3.0	3.2	21	e5.0	21	152	70	75	35	15	7.2
8	2.9	2.9	3.2	16	e5.2	20	735	65	57	28	12	7.1
9	4.4	2.9	3.3	13	5.7	20	413	61	48	25	12	7.1
10	5.4	3.1	7.4	12	7.0	19	224	65	43	26	12	7.2
11	3.8	3.0	5.6	11	15	19	169	52	39	28	11	7.3
12	3.1	2.6	5.5	9.2	28	20	133	49	36	22	10	7.6
13	3.9	2.6	9.7	8.9	85	17	110	51	34	18	10	7.3
14	4.4	3.3	11	7.7	373	17	95	45	33	89	9.3	6.8
15	3.8	3.8	7.3	7.5	237	18	82	41	31	173	8.4	6.6
16	3.2	3.3	5.8	7.7	160	48	72	39	66	77	8.2	6.1
17	3.3	2.8	4.6	6.3	119	137	106	38	361	43	8.3	5.8
18	3.2	2.7	4.4	e5.8	294	93	135	37	342	29	10	5.5
19	3.2	2.6	4.0	e5.2	424	91	105	36	188	332	9.1	5.4
20	3.0	3.0	4.4	e5.0	236	220	107	34	129	218	8.3	5.2
21	3.0	2.8	3.9	e4.9	146	204	237	33	212	108	7.9	7.7
22	3.8	2.8	3.4	e4.8	119	138	222	33	149	63	7.7	6.9
23	4.6	3.0	e3.1	e4.6	103	108	161	52	96	45	8.4	9.4
24	4.7	3.1	e2.9	e4.5	86	90	129	81	71	34	8.3	13
25	4.5	2.8	e2.8	e4.5	72	77	108	60	61	28	7.7	12
26	4.4	4.0	e2.8	e4.4	61	63	90	46	50	24	7.2	15
27	4.3	3.6	e2.8	e4.4	55	65	81	46	44	21	8.8	13
28	4.0	3.1	2.8	e4.3	46	62	74	79	39	19	7.6	12
29	4.3	2.8	3.0	e4.3	41	51	67	109	34	19	6.9	10
30	4.9	2.6	3.2	e4.3	---	44	62	81	29	18	6.7	9.3
31	5.0	---	3.4	e4.2	---	40	---	63	---	19	6.3	---
TOTAL	110.9	111.1	132.6	446.7	2749.3	1882	5002	1893	2648	1843	313.1	250.9
MEAN	3.58	3.70	4.28	14.4	94.8	60.7	167	61.1	88.3	59.5	10.1	8.36
MAX	5.4	12	11	120	424	220	735	112	361	332	20	15
MIN	1.9	2.6	2.8	3.4	4.2	17	37	33	29	18	6.3	5.2
CFSM	.06	.06	.07	.23	1.50	.96	2.64	.97	1.40	.94	.16	.13
IN.	.07	.07	.08	.26	1.62	1.11	2.94	1.11	1.56	1.08	.18	.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2000, BY WATER YEAR (WY)

MEAN	15.0	40.1	62.9	78.5	102	119	110	92.4	64.7	40.5	27.4	14.4
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 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1952 - 2000	
ANNUAL TOTAL	14424.8		17382.6			
ANNUAL MEAN	39.5		47.5		63.7	
HIGHEST ANNUAL MEAN					113	
LOWEST ANNUAL MEAN					8.68	
HIGHEST DAILY MEAN	487		735		3620	
LOWEST DAILY MEAN	1.4		1.9		.30	
ANNUAL SEVEN-DAY MINIMUM	1.6		2.3		.33	
INSTANTANEOUS PEAK FLOW			1170		7300	
INSTANTANEOUS PEAK STAGE			6.96		11.25	
INSTANTANEOUS LOW FLOW			1.9		.30	
ANNUAL RUNOFF (CFSM)	.63		.75		1.01	
ANNUAL RUNOFF (INCHES)	8.49		10.23		13.69	
10 PERCENT EXCEEDS	103		119		146	
50 PERCENT EXCEEDS	7.7		14		28	
90 PERCENT EXCEEDS	2.0		3.1		4.6	

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**

**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 mi<sup>2</sup>.

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. Datum of gage is 494.35 ft above sea level. June 22, 1915, to May 14, 1920, nonrecording gage at site 4 mi upstream at different datum. Mar. 11, 1925, to Aug. 16, 1928, nonrecording gage at bridge 500 ft upstream at datum 5.72 ft higher. Aug. 17, 1928, to 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. Water-quality data collected at this site and published in volume 2, project data. Results from Selected Sites in the Great Miami and Little Miami River Basin.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood in March 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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	85	106	108	196	959	533	e1100	718	321	226	161
2	101	201	105	111	197	682	1470	e1600	633	285	247	154
3	86	193	105	4080	175	602	4400	e1400	884	267	229	149
4	117	188	111	14200	173	557	10100	e1200	635	4450	214	156
5	81	133	112	2260	166	532	5830	e1000	556	5160	204	181
6	75	109	133	995	163	509	4630	e820	531	3860	193	217
7	73	101	115	620	167	460	2710	e740	598	1880	273	174
8	73	97	121	464	169	410	11100	e640	431	763	349	154
9	359	95	109	432	179	385	7320	e600	356	517	520	154
10	442	93	252	430	250	363	6020	e520	324	404	641	179
11	171	152	179	430	780	414	4310	499	e300	474	263	227
12	124	167	251	364	866	527	2600	515	e280	715	214	264
13	99	167	555	293	3160	499	1840	722	e270	839	191	258
14	103	166	827	250	14900	420	1560	695	e260	860	180	243
15	107	168	434	237	5780	342	1230	497	e330	499	174	198
16	107	167	278	231	4430	e450	1080	374	e4500	609	168	157
17	90	170	200	222	4070	e700	1030	353	e4000	495	199	143
18	86	170	165	219	14300	e1100	1360	384	e3000	484	301	139
19	86	165	147	215	12900	e1800	1380	361	e1300	492	234	136
20	84	122	155	223	4130	e1200	1330	373	3040	1970	204	144
21	84	107	151	198	2320	e1500	3320	335	2710	1370	174	183
22	83	109	144	190	1680	e2500	4100	400	2280	952	168	187
23	82	107	133	195	2520	2880	e3000	1430	1510	684	164	271
24	82	105	124	214	2400	2200	e2000	700	946	419	158	3240
25	83	102	114	208	2900	1370	e1700	534	676	312	157	2010
26	82	119	112	202	3060	960	e1400	495	614	264	159	3510
27	84	119	116	207	1890	960	e1200	648	542	251	350	1330
28	84	124	112	198	2740	1430	e1100	677	504	232	334	817
29	84	119	111	198	1720	1160	e1000	1520	415	269	237	631
30	85	109	114	208	---	755	e900	1580	352	246	185	431
31	87	---	110	201	---	608	---	1210	---	240	168	---
TOTAL	3516	4029	5801	28603	88381	29234	91553	23922	33495	30583	7478	16198
MEAN	113	134	187	923	3048	943	3052	772	1116	987	241	540
MAX	442	201	827	14200	14900	2880	11100	1600	4500	5160	641	3510
MIN	73	85	105	108	163	342	533	335	260	232	157	136
CFSM	.09	.11	.16	.77	2.53	.78	2.54	.64	.93	.82	.20	.45
IN.	.11	.12	.18	.88	2.73	.90	2.83	.74	1.04	.95	.23	.50

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2000, BY WATER YEAR (WY)

	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	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
MEAN	340	782	1276	1873	2102	2403	2141	1643	1040	696	468	357																																																																									
MAX	2775	4189	4836	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 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1916 - 2000
ANNUAL TOTAL	240040	362793	
ANNUAL MEAN	658	991	1255
HIGHEST ANNUAL MEAN			2364
LOWEST ANNUAL MEAN			301
HIGHEST DAILY MEAN	6660	Mar 6	72400
LOWEST DAILY MEAN	73	Oct 7	27
ANNUAL SEVEN-DAY MINIMUM	80	Sep 15	37
INSTANTANEOUS PEAK FLOW			28800
INSTANTANEOUS PEAK STAGE		17.80	Feb 18a
INSTANTANEOUS LOW FLOW		73	Oct 7
ANNUAL RUNOFF (CFSM)	.55	.82	1.04
ANNUAL RUNOFF (INCHES)	7.42	11.22	14.18
10 PERCENT EXCEEDS	1850	2630	2980
50 PERCENT EXCEEDS	218	332	490
90 PERCENT EXCEEDS	86	107	112

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**

**03246500 EAST FORK LITTLE MIAMI RIVER AT WILLIAMSBURG, OHIO**

LOCATION.—Latitude 39°03'09", longitude 84°03'02", Clermont County, Hydrologic Unit 05090202, on right bank at downstream side of Main Street bridge in Williamsburg, Ohio, 1.1 mi upstream from Todd Run, and 2.4 mi downstream from Crane Run.

DRAINAGE AREA.—237 mi<sup>2</sup>.

PERIOD OF RECORD.—March 1949 to September 1953, July 1960 to September 1974, January 1999 to current year (station discontinued).

REVISIONS.—WSP 1908: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 784.09 ft above sea level.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.32	2.0	.65	e2.0	e2.6	95	84	53	84	26	27	16
2	.24	3.0	.85	2.2	e2.7	84	216	52	58	22	17	16
3	.25	2.4	1.1	61	e2.8	75	2120	50	50	49	14	12
4	.37	2.1	1.4	4870	e2.8	66	5870	53	51	1110	13	11
5	.31	2.3	1.5	414	e2.9	60	1020	47	56	973	12	11
6	.26	1.7	1.2	83	e3.0	57	399	39	36	820	11	11
7	.22	2.6	1.5	31	e3.1	52	335	36	27	231	13	10
8	.34	4.4	1.7	17	e3.3	46	2630	33	31	114	14	9.9
9	2.2	3.6	1.6	12	3.4	43	822	34	26	67	407	11
10	2.4	3.2	2.1	11	4.2	40	322	31	19	46	1380	12
11	1.2	3.3	1.7	11	10	43	210	27	16	181	160	12
12	.97	3.0	2.5	10	108	57	161	24	13	171	68	12
13	.87	2.7	5.2	10	935	61	131	25	12	82	38	11
14	1.0	2.5	12	9.5	8500	64	107	23	13	50	23	11
15	3.8	2.2	14	e6.2	1040	55	96	23	13	46	16	11
16	4.0	1.5	12	e5.6	358	218	87	21	22	71	12	11
17	3.9	1.3	9.9	e5.0	216	746	92	20	610	54	12	11
18	3.9	1.2	5.4	e4.5	6210	285	199	20	1970	30	27	11
19	3.2	1.6	4.3	e4.0	10200	345	243	19	1750	180	40	11
20	3.0	1.6	3.7	e3.7	759	1760	148	17	307	360	19	11
21	2.9	1.5	3.2	e3.5	335	1100	570	17	155	e140	14	14
22	1.9	1.4	2.6	e3.0	231	416	579	17	99	e90	14	12
23	1.5	1.3	2.4	e2.8	204	238	293	82	72	e70	12	77
24	1.3	1.3	2.3	e2.7	210	168	182	105	52	e50	14	3610
25	1.1	1.2	2.1	e2.6	230	131	137	61	44	e38	13	1550
26	1.1	1.3	2.1	e2.5	177	106	106	37	103	e30	11	4440
27	1.2	1.0	2.5	e2.5	144	92	84	87	601	e23	14	666
28	1.4	.84	2.3	e2.5	133	180	72	946	150	34	13	264
29	1.5	.77	2.1	e2.5	113	361	64	1000	75	16	11	146
30	2.2	.70	e2.0	e2.5	---	170	57	266	40	72	11	100
31	2.1	---	e2.0	e2.6	---	108	---	134	---	60	12	---
TOTAL	50.95	59.51	109.90	5602.4	30143.8	7322	17436	3399	6555	5306	2462	11110.9
MEAN	1.64	1.98	3.55	181	1039	236	581	110	218	171	79.4	370
MAX	4.0	4.4	14	4870	10200	1760	5870	1000	1970	1110	1380	4440
MIN	.22	.70	.65	2.0	2.6	40	57	17	12	16	11	9.9
MED	1.3	1.7	2.1	4.5	144	95	190	36	52	67	14	12
AC-FT	101	118	218	11110	59790	14520	34580	6740	13000	10520	4880	22040
CFSM	.01	.01	.01	.76	4.39	1.00	2.45	.46	.92	.72	.34	1.56
IN.	.01	.01	.02	.88	4.73	1.15	2.74	.53	1.03	.83	.39	1.74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2000, BY WATER YEAR (WY)

	MEAN	42.4	173	292	491	503	618	467	266	119	73.6	68.8	115
MAX	213	1187	837	1412	1172	1897	1154	1530	441	494	290	672	
(WY)	1966	1973	1973	1950	1971	1964	1970	1968	1972	1973	1974	1950	
MIN	.048	.34	2.02	50.3	30.1	135	28.8	15.6	8.14	3.76	.79	.000	
(WY)	1965	1965	1964	1967	1964	1969	1971	1949	1966	1964	1953	1953	

SUMMARY STATISTICS

FOR 2000 WATER YEAR

WATER YEARS 1949 - 2000

ANNUAL TOTAL	89557.46	
ANNUAL MEAN	245	276
HIGHEST ANNUAL MEAN		465
LOWEST ANNUAL MEAN		156
HIGHEST DAILY MEAN	10200	18200
LOWEST DAILY MEAN	.22	.00
ANNUAL SEVEN-DAY MINIMUM	.28	.00
INSTANTANEOUS PEAK FLOW	13900	19800
INSTANTANEOUS PEAK STAGE	12.71	15.23
INSTANTANEOUS LOW FLOW	.22	.00
ANNUAL RUNOFF (AC-FT)	177600	199700
ANNUAL RUNOFF (CFSM)	1.03	1.16
ANNUAL RUNOFF (INCHES)	14.06	15.80
10 PERCENT EXCEEDS	360	575
50 PERCENT EXCEEDS	19	43
90 PERCENT EXCEEDS	1.5	1.5

e Estimated.

**SURFACE-WATER RECORDS**  
**Little Miami River Basin**

**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 mi<sup>2</sup>.

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. Datum of gage is 507.03 ft above sea level. Prior to Feb. 6, 1940, nonrecording gage at same site and datum.

REMARKS.—Records fair 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 ft<sup>3</sup>/s Mar. 10, 1964, gage height, 23.84 ft; minimum daily, 0.4 ft<sup>3</sup>/s July 24, 1930, Sept. 11, 12, 23, 1939; minimum gage height, -0.18 ft Oct. 3-7, 1917. Maximum discharge since start of construction of East Fork Dam, 23,200 ft<sup>3</sup>/s Aug. 30, 1974, gage height, 19.52 ft, result of failure of cofferdam.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	41	40	43	e39	4250	107	74	510	158	56	39
2	41	115	40	43	e39	4160	568	81	510	150	48	47
3	41	115	40	714	e39	3570	2490	64	512	191	47	44
4	50	56	42	3630	e39	1690	3820	80	285	480	44	43
5	48	48	42	306	e39	272	3670	e70	268	1750	44	46
6	45	46	43	122	e38	260	3750	e56	96	2010	43	45
7	44	44	42	82	e38	231	2730	e56	64	2110	76	42
8	43	44	41	65	e38	140	2730	e56	59	1450	85	42
9	154	44	42	62	e45	98	3510	e56	49	625	408	44
10	249	43	123	57	66	91	3570	55	45	174	1290	44
11	64	43	81	53	133	100	1970	51	44	508	474	48
12	48	43	71	48	117	139	1110	50	44	268	746	67
13	45	43	258	55	1390	114	539	90	43	366	338	67
14	63	43	327	52	4180	104	306	66	44	478	329	45
15	50	42	138	47	2470	99	269	52	44	319	324	42
16	45	41	77	46	4270	500	174	49	43	180	315	39
17	44	42	58	45	3150	839	174	51	794	164	315	38
18	43	42	51	44	6650	1190	176	62	1810	159	236	37
19	41	43	49	44	2860	2310	171	53	1060	746	156	36
20	42	43	50	e42	533	2750	226	51	1430	324	134	37
21	42	43	49	e42	306	2640	630	50	1670	216	89	70
22	42	42	45	e41	272	2050	720	50	1300	348	77	59
23	42	41	44	e41	521	1100	659	115	749	338	50	806
24	42	42	43	e41	1090	547	588	95	230	306	49	1880
25	41	42	41	e40	3560	197	558	62	239	173	50	2190
26	40	43	41	e40	3680	177	448	53	427	306	47	4570
27	41	43	41	e40	3010	184	211	343	489	168	96	4080
28	41	42	42	e40	3680	341	194	688	207	97	64	1690
29	41	41	41	e40	2570	331	142	314	171	96	51	1630
30	40	40	42	e40	---	164	131	283	163	93	49	1240
31	40	---	43	e40	---	124	---	523	---	88	41	---
TOTAL	1695	1440	2127	6045	44862	30762	36341	3799	13399	14839	6171	19107
MEAN	54.7	48.0	68.6	195	1547	992	1211	123	447	479	199	637
MAX	249	115	327	3630	6650	4250	3820	688	1810	2110	1290	4570
MIN	40	40	40	40	38	91	107	49	43	88	41	36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2000, BY WATER YEAR (WY)

MEAN	237	377	671	794	1034	1103	928	902	534	252	180	218
MAX	980	1446	2108	1637	2162	2432	1789	3657	2165	947	1220	1869
(WY)	1984	1986	1991	1991	1990	1997	1998	1996	1997	1980	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
(WY)	1983	2000	1977	1977	1987	1983	1986	1988	1988	1984	1987	1983

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1977 - 2000

ANNUAL TOTAL	133285	180587										
ANNUAL MEAN	365	493										
HIGHEST ANNUAL MEAN									600			1996
LOWEST ANNUAL MEAN									1058			1977
HIGHEST DAILY MEAN				3690	Jan 13		6650	Feb 18				Sep 14 1979
LOWEST DAILY MEAN				32	Sep 24		36	Sep 19		14		Jan 21 1977
ANNUAL SEVEN-DAY MINIMUM				35	Sep 19		39	Feb 2		14		Jan 28 1977
INSTANTANEOUS PEAK FLOW							15500	Feb 18		29000		Sep 14 1979
INSTANTANEOUS PEAK STAGE							16.13	Feb 18		21.00		Sep 14 1979
INSTANTANEOUS LOW FLOW							36	Sep 19		14		Jan 21 1977
10 PERCENT EXCEEDS				1380			1710			2040		
50 PERCENT EXCEEDS				48			70			148		
90 PERCENT EXCEEDS				37			41			38		

e Estimated.



**SURFACE-WATER RECORDS**  
**Mill Creek Basin**

**03259000 MILL CREEK AT CARTHAGE, OHIO**

LOCATION.—Latitude 39°12'07", longitude 84°28'16", in SW 1/4 sec. 1, R.1, T.3, Hamilton County, Hydrologic Unit 05090203, on right bank at Anthony Wayne Avenue Bridge in Carthage, Ohio, 1.0 mi downstream from West Fork Mill Creek, and 11.0 mi upstream from mouth.

DRAINAGE AREA.—115 mi<sup>2</sup>.

PERIOD OF RECORD.—November 1946 to current year.

REVISED RECORDS.—WDR-OH-95-1: 1993 (M). WSP 1908: Drainage area.

GAGE.—Water-stage recorder. Datum of gage is 507.00 ft above Ohio River datum. Prior to Oct. 1, 1954, at same site at datum 512.00 ft above Ohio River Datum. Oct. 1, 1954, to Sept. 30, 1977, at site 100 ft downstream at datum 512.00 ft above Ohio River Datum. Oct. 1, 1977, to Oct. 16, 1984, at site 100 ft upstream at present datum.

REMARKS.—Records fair except for periods of estimated record, which are poor. Some interbasin transfers of water between Mill Creek and Great Miami River basins by industrial and municipal operations. Flow regulated by West Fork Mill Creek Reservoir, 6.9 mi upstream, beginning 1953. Water-quality data formerly collected at this site. Because of interbasin transfers and regulation, statistics are not published.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 9,030 ft<sup>3</sup>/s Sept. 14, 1979, gage height, 21.82 ft present datum, from rating curve extended above 4,000 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow; no flow many days in 1947-48.

EXTREMES FOR CURRENT YEAR.—Maximum discharge, 6,600 ft<sup>3</sup>/s Jan. 3, gage height, 18.01 ft; minimum daily, 16.0 ft<sup>3</sup>/s Oct. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	18	16	18	e22	52	53	45	37	28	56	30
2	19	240	17	32	e23	38	541	58	36	21	37	28
3	21	76	18	1980	32	37	897	38	34	68	46	50
4	64	29	26	2240	42	34	881	94	29	55	33	70
5	23	24	48	1020	38	33	357	53	54	326	28	54
6	20	22	56	452	34	37	282	49	46	138	26	36
7	17	22	29	120	30	34	183	44	32	57	178	30
8	19	22	21	102	39	32	e1600	48	29	40	112	26
9	478	23	30	79	41	33	e400	41	28	32	353	27
10	283	23	255	57	68	30	e250	161	26	30	258	27
11	134	22	69	56	139	139	e200	77	25	103	121	29
12	65	21	213	52	92	125	e150	57	61	50	82	58
13	67	20	352	49	1170	90	e110	253	38	35	58	36
14	35	19	699	37	1670	59	e90	91	72	329	37	24
15	30	20	212	34	741	38	e70	75	74	166	37	e24
16	19	20	116	e32	251	408	e54	62	100	61	34	e23
17	16	20	56	e30	128	381	e130	57	479	45	131	e23
18	16	20	28	e28	2340	147	e57	59	367	42	216	e22
19	18	20	26	e26	1200	329	50	48	161	153	100	e22
20	21	44	57	e25	719	722	208	37	85	60	39	e22
21	23	22	38	e24	347	789	357	32	127	44	36	e52
22	22	16	25	e23	293	419	182	156	81	36	33	e28
23	18	16	23	e22	176	338	117	315	49	33	38	e80
24	19	19	22	e21	139	158	78	113	42	34	37	e400
25	32	17	20	e21	104	105	61	89	186	33	35	e410
26	20	68	19	e20	65	55	57	45	100	66	30	e600
27	17	37	e18	e20	130	159	57	294	91	34	263	e120
28	17	20	e18	e19	94	285	53	197	53	35	66	e80
29	17	19	e18	e19	68	149	49	103	38	49	46	41
30	17	16	e18	e19	---	113	40	70	33	73	35	34
31	16	---	e18	e20	---	84	---	41	---	88	35	---
TOTAL	1605	975	2581	6697	10235	5452	7614	2902	2613	2364	2636	2506
MEAN	51.8	32.5	83.3	216	353	176	254	93.6	87.1	76.3	85.0	83.5
MAX	478	240	699	2240	2340	789	1600	315	479	329	353	600
MIN	16	16	16	18	22	30	40	32	25	21	26	22
CAL YR 1999	TOTAL 37414	MEAN 103	MAX 1380	MIN 13								
WTR YR 2000	TOTAL 48180	MEAN 132	MAX 2340	MIN 16								

e Estimated.

**SURFACE-WATER RECORDS**  
**Great Miami River Basin**

**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 mi<sup>2</sup>.

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 above sea level. Prior to Sept. 18, 1919, nonrecording gage at site 50 ft downstream at datum 1.76 ft higher. September 18, 1919 to August, 1925, nonrecording gage at site 50 ft downstream at present datum.

REMARKS.—Records good except for periods of estimated record, which are poor. Water supply for city of Sidney is pumped from the Great Miami River 1,200 ft upstream and from wells adjacent to Great Miami River upstream from station. The pumpage averaged 3.88 ft<sup>3</sup>/s in 2000 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.—Gage-height record and 8 discharge measurements 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 ft<sup>3</sup>/s, computed by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	39	48	e54	e66	372	194	233	266	161	626	82
2	37	50	48	64	e66	356	199	891	228	178	1400	74
3	34	92	48	111	e68	319	269	831	235	397	744	70
4	30	99	47	1500	e68	240	483	526	202	893	419	85
5	32	78	57	1280	e70	222	532	484	239	540	231	97
6	33	64	72	631	70	200	350	325	796	321	180	98
7	32	56	82	356	69	180	624	324	598	243	483	80
8	36	51	75	251	68	173	4420	277	312	207	351	67
9	65	48	65	198	69	166	3700	241	228	171	729	64
10	79	47	89	176	108	188	2490	235	190	146	1070	83
11	73	43	181	168	e800	181	1730	266	170	132	486	153
12	58	46	143	152	e1000	243	1220	207	168	124	264	163
13	54	47	119	e130	e1400	199	843	212	216	114	185	132
14	47	43	147	e110	1800	151	580	254	340	103	145	110
15	46	43	270	e100	1310	170	469	224	673	76	118	92
16	46	42	215	e96	1190	174	412	177	1020	104	99	93
17	46	42	167	e90	1120	302	429	160	1690	104	109	93
18	42	43	128	e84	1340	278	566	149	2130	90	331	75
19	44	44	108	e80	2330	203	432	1070	2040	81	479	65
20	43	51	e96	e76	1700	419	376	1160	1580	81	240	67
21	40	48	e86	e74	1170	854	569	584	2080	74	155	134
22	42	47	e80	e74	959	741	1120	392	1920	69	121	153
23	41	50	e72	e72	989	541	955	354	1370	69	110	421
24	41	50	e56	e70	845	436	674	479	879	66	104	3660
25	40	49	e62	e70	669	357	554	355	744	62	94	1900
26	39	55	e60	e66	564	327	452	270	797	59	88	1340
27	39	59	e58	e66	489	291	322	222	507	57	143	840
28	38	59	e54	e64	576	334	283	231	373	59	205	511
29	39	55	e54	e64	478	324	257	567	280	60	146	371
30	39	51	e52	e64	---	283	227	574	239	71	110	273
31	39	---	e52	e64	---	234	---	348	---	174	93	---
TOTAL	1360	1591	2891	6455	21451	9458	25731	12622	22510	5086	10058	11446
MEAN	43.9	53.0	93.3	208	740	305	858	407	750	164	324	382
MAX	79	99	270	1500	2330	854	4420	1160	2130	893	1400	3660
MIN	30	39	47	54	66	151	194	149	168	57	88	64

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 2000, BY WATER YEAR (WY)

MEAN	150	311	496	735	771	956	875	537	441	307	178	132
MAX	1717	1876	2373	3846	2186	2507	2500	2010	2073	2181	1173	2365
(WY)	1927	1973	1991	1930	1950	1927	1957	1996	1958	1992	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 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1926 - 2000

ANNUAL TOTAL	122054	130659										
ANNUAL MEAN	334	357								489		
HIGHEST ANNUAL MEAN										963		1927
LOWEST ANNUAL MEAN										141		1931
HIGHEST DAILY MEAN				4570	Jan 24		4420	Apr 8		17400	Mar 21	1927
LOWEST DAILY MEAN				24	Sep 27		30	Oct 4		8.0	Sep 23	1935
ANNUAL SEVEN-DAY MINIMUM				26	Sep 22		33	Oct 2		15	Sep 19	1935
INSTANTANEOUS PEAK FLOW							4800	Apr 8a		20700	Mar 20	1927
INSTANTANEOUS PEAK STAGE							8.42	Apr 8		15.91	Jan 21	1959
INSTANTANEOUS LOW FLOW							30	Oct 4		1.5	Aug 13	1963
10 PERCENT EXCEEDS				987			912			1260		
50 PERCENT EXCEEDS				90			166			180		
90 PERCENT EXCEEDS				39			47			45		

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

**SURFACE-WATER RECORDS  
Great Miami River Basin**

**03261950 LORAMIE CREEK NEAR NEWPORT, OHIO**

LOCATION.—Latitude 40°18'25", longitude 84°23'02", in SE 1/4 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 mi<sup>2</sup>

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, to September 30, 1980, water-stage recorder at same site at datum 0.43 ft higher.

REMARKS.—Records fair except for estimated record, which is poor. Some regulation by Lake Loramie 5 mi upstream, capacity, 13,000 acre-ft. Sediment data formerly collected at this site.

COOPERATION.—Gage-height record and 8 discharge measurements 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 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	2.5	2.2	1.8	e3.4	55	36	33	18	29	29	4.3
2	1.7	1.8	1.9	1.7	3.7	49	38	305	15	21	62	3.5
3	3.7	2.2	1.7	7.9	3.9	37	50	228	13	38	106	3.1
4	5.3	2.6	2.0	93	4.3	31	58	134	11	135	77	7.6
5	11	2.3	3.9	41	4.6	26	48	99	31	91	42	7.8
6	6.8	2.4	15	20	4.3	23	41	73	107	55	25	4.7
7	4.4	1.7	13	14	4.0	19	79	60	72	38	21	3.0
8	4.3	1.3	9.6	11	4.3	17	1420	49	47	22	16	2.7
9	19	1.1	7.3	9.8	4.6	15	1330	41	34	14	48	2.5
10	17	1.2	20	8.4	11	15	561	39	25	10	192	9.3
11	5.8	1.4	19	6.5	421	17	269	30	19	10	114	30
12	3.6	.99	14	5.8	414	19	166	26	20	9.2	55	36
13	2.5	.96	13	8.1	215	16	113	37	19	6.6	28	23
14	9.4	.99	27	6.6	243	23	89	34	22	5.3	15	13
15	5.1	.90	31	e5.0	178	32	75	21	282	7.4	8.8	10
16	2.9	.86	17	e4.0	212	34	63	16	323	4.4	5.5	6.8
17	2.8	.88	9.7	e3.5	210	42	103	16	333	3.8	5.8	4.1
18	3.2	.90	6.4	e3.4	353	28	216	20	788	4.1	25	2.9
19	2.6	.94	4.5	e3.3	752	27	118	164	943	4.1	45	2.4
20	2.0	3.0	4.0	e3.2	359	96	98	143	432	3.7	32	2.3
21	1.6	2.5	3.4	e3.1	188	135	386	80	1090	3.4	17	6.7
22	1.6	1.7	2.7	e3.0	183	113	436	58	1040	3.0	9.0	3.7
23	2.1	1.3	2.2	e2.9	198	85	289	70	446	2.9	12	4.4
24	2.4	1.4	1.8	e2.9	140	67	180	72	203	2.7	17	92
25	1.8	1.3	1.4	e2.8	105	56	121	50	266	3.0	11	138
26	1.8	4.1	1.1	e2.8	76	45	71	33	236	3.3	6.8	100
27	2.8	6.1	.99	e2.8	79	59	45	35	144	3.2	13	72
28	2.3	4.2	1.1	e2.7	90	85	45	43	72	4.0	18	49
29	2.2	3.1	1.5	e2.7	68	68	38	38	52	8.4	15	29
30	2.1	2.6	2.0	e3.0	---	55	31	26	40	12	8.4	16
31	2.2	---	2.0	e3.2	---	44	---	20	---	13	5.6	---
TOTAL	139.0	59.22	242.39	289.9	4532.1	1433	6613	2093	7143	570.5	1084.9	689.8
MEAN	4.48	1.97	7.82	9.35	156	46.2	220	67.5	238	18.4	35.0	23.0
MAX	19	6.1	31	93	752	135	1420	305	1090	135	192	138
MIN	1.6	.86	.99	1.7	3.4	15	31	16	11	2.7	5.5	2.3

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2000, BY WATER YEAR (WY)

	33.4	106	177	173	216	271	237	128	122	108	45.7	23.1
MEAN	33.4	106	177	173	216	271	237	128	122	108	45.7	23.1
MAX	360	656	802	560	613	826	700	437	561	830	322	186
(WY)	1987	1973	1991	1996	1975	1978	1972	1996	1981	1992	1995	1972
MIN	.75	1.32	1.63	.63	14.1	38.9	23.1	7.14	1.47	.51	.22	.53
(WY)	1965	1981	1977	1977	1978	1981	1971	1988	1988	1965	1965	1966

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1965 - 2000
ANNUAL TOTAL	34021.71	24889.81	
ANNUAL MEAN	93.2	68.0	136
HIGHEST ANNUAL MEAN			249
LOWEST ANNUAL MEAN			39.6
HIGHEST DAILY MEAN	3050	Jan 23	5100
LOWEST DAILY MEAN	.86	Nov 16	.10
ANNUAL SEVEN-DAY MINIMUM	.92	Nov 13	.13
INSTANTANEOUS PEAK FLOW			1730
INSTANTANEOUS PEAK STAGE			10.37
INSTANTANEOUS LOW FLOW			.86
10 PERCENT EXCEEDS	220	179	350
50 PERCENT EXCEEDS	8.8	16	22
90 PERCENT EXCEEDS	1.8	2.0	1.7

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

**SURFACE-WATER RECORDS**  
**Great Miami River Basin**

**03262000 LORAMIE CREEK AT LOCKINGTON, OHIO**

LOCATION.—Latitude 40°12'35", longitude 84°14'32", in NE 1/4 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 mi<sup>2</sup>.

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 above sea level. Prior to July 3, 1924, nonrecording gage at same site at datum 75.96 ft higher. July 3, 1924, to Aug. 17, 1926, nonrecording gage, and Aug. 18 to Sept. 30, 1926, water-stage recorder, at same site at datum 74.96 ft higher.

REMARKS.—Records good 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.—Gage-height record and 8 discharge measurements furnished by Miami Conservancy District.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 10,400 ft<sup>3</sup>/s May 7, 1916, gage height, 86.4 ft, present datum, from rating curve extended above 5,400 ft<sup>3</sup>/s.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of March 25, 1913, reached a stage of 91.6 ft, present datum; discharge, 25,600 ft<sup>3</sup>/s, at site upstream from Turtle Creek, drainage area, 211 mi<sup>2</sup>, computed by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	1.3	12	12	e6.8	97	56	52	46	64	418	16
2	9.5	2.6	12	12	e7.4	81	53	425	39	47	565	16
3	6.2	6.0	8.5	18	e8.0	67	61	328	34	101	201	15
4	5.5	2.8	3.4	299	e8.6	59	96	200	31	369	146	15
5	5.7	3.1	4.7	119	e9.2	53	87	163	46	176	83	24
6	5.4	3.6	17	45	e9.4	47	70	125	156	106	54	19
7	5.1	3.3	18	29	e8.8	41	149	101	119	73	192	16
8	5.8	4.5	16	28	e8.4	36	2550	84	80	54	77	14
9	13	7.7	11	25	e10	34	1740	72	59	39	276	13
10	27	11	17	23	e13	32	811	67	49	35	714	17
11	21	15	18	20	e300	32	394	59	48	34	229	31
12	13	13	14	18	e600	38	252	51	45	29	113	47
13	9.3	13	17	16	e370	37	178	55	52	25	65	43
14	6.7	15	26	9.9	636	35	144	63	40	25	43	29
15	9.1	11	42	e9.2	323	49	120	47	233	24	31	23
16	13	10	29	e9.0	375	52	103	37	438	22	25	19
17	12	10	18	e8.4	335	71	148	35	667	16	20	17
18	9.3	10	19	e8.0	702	62	342	36	1590	18	28	14
19	6.5	10	17	e7.6	1190	53	204	345	1200	22	55	13
20	6.3	10	15	e7.2	555	182	157	285	563	17	53	12
21	5.5	10	11	e7.0	287	285	461	150	1990	16	37	14
22	4.8	8.9	8.8	e6.8	270	200	602	106	1350	15	26	14
23	6.4	12	11	e6.6	303	146	404	131	616	15	21	32
24	6.1	12	4.7	e6.4	219	116	258	124	289	14	25	279
25	5.7	11	3.9	e6.2	168	96	187	93	434	14	27	213
26	6.2	8.2	4.1	e6.2	129	77	137	65	333	13	22	182
27	5.3	6.1	7.6	e6.0	131	75	86	57	216	13	25	122
28	2.8	13	12	e6.0	154	110	76	94	141	13	35	75
29	4.9	5.5	12	e5.8	121	103	69	147	95	13	31	54
30	1.8	7.2	12	e6.0	---	79	57	78	77	19	24	35
31	1.4	---	12	e6.4	---	68	---	57	---	30	19	---
TOTAL	256.3	256.8	433.7	792.7	7257.6	2513	10052	3732	11076	1471	3680	1433
MEAN	8.27	8.56	14.0	25.6	250	81.1	335	120	369	47.5	119	47.8
MAX	27	15	42	299	1190	285	2550	425	1990	369	714	279
MIN	1.4	1.3	3.4	5.8	6.8	32	53	35	31	13	19	12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2000, BY WATER YEAR (WY)

MEAN	47.7	124	224	334	347	450	387	207	187	127	66.0	47.4
MAX	540	1025	1203	1728	1119	1235	1301	1017	1754	1088	682	1092
(WY)	1987	1973	1991	1937	1950	1978	1922	1933	1958	1992	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

	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1921 - 2000	
ANNUAL TOTAL	48652.68		42954.1			
ANNUAL MEAN	133		117		212	
HIGHEST ANNUAL MEAN					413	
LOWEST ANNUAL MEAN					53.0	
HIGHEST DAILY MEAN	3400	Jan 23	2550	Apr 8	6400	Jun 11 1958
LOWEST DAILY MEAN	.51	Sep 23	1.3	Nov 1	.51	Sep 23 1999
ANNUAL SEVEN-DAY MINIMUM	2.7	Sep 19	2.7	Oct 30	1.6	Sep 14 1983
INSTANTANEOUS PEAK FLOW			2890		6590	
INSTANTANEOUS PEAK STAGE			81.67		85.00	
INSTANTANEOUS LOW FLOW			1.3		.51	
10 PERCENT EXCEEDS	330		299		535	
50 PERCENT EXCEEDS	18		32		42	
90 PERCENT EXCEEDS	5.5		6.2		7.2	

e Estimated.

**SURFACE-WATER RECORDS**  
**Great Miami River Basin**

**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 mi<sup>2</sup>.

PERIOD OF RECORD.—Occasional low-flow measurements, water years 1961, 1962 (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 Loramic 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 is pumped from wells adjacent to the Great Miami River upstream from the station. The pumpage averaged 8.0 ft<sup>3</sup>/s in 2000 and is returned as sewage 1 mi downstream from the station. Water-quality and sediment data formerly collected at this site.

COOPERATION.—Gage-height record and 8 discharge measurements 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 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	66	73	88	e82	522	485	411	389	440	687	137
2	77	98	75	88	e84	451	459	1060	345	361	2100	138
3	66	103	75	164	e84	434	445	1330	276	450	1110	124
4	72	136	72	1490	e86	361	660	831	329	1370	744	166
5	128	141	74	1570	e86	314	704	758	292	926	430	144
6	75	121	102	781	e88	302	555	581	717	631	295	153
7	55	112	104	465	e88	276	886	518	872	491	684	148
8	50	99	114	357	e90	247	7450	464	556	430	677	126
9	92	82	110	290	92	234	6870	410	405	379	465	115
10	138	72	146	254	108	228	4080	393	349	276	1980	118
11	119	79	160	e210	1120	267	2420	379	309	262	861	166
12	145	76	204	e190	e2000	265	1650	357	284	252	439	244
13	91	84	173	e170	e1800	309	1180	344	310	240	326	213
14	84	92	218	e160	2840	235	842	349	348	232	246	178
15	77	90	241	e140	1910	240	669	330	682	216	204	149
16	78	80	275	e130	1610	296	603	285	1500	179	191	124
17	83	82	221	e120	1570	358	686	259	2680	153	161	129
18	73	82	188	e120	1890	434	986	243	3900	175	231	122
19	69	83	204	e110	4320	357	776	1580	4000	192	528	108
20	65	95	194	e100	2570	546	621	2010	2490	195	409	106
21	78	95	163	e100	1590	1100	872	978	3760	185	268	183
22	75	91	173	e96	1190	982	1550	659	3900	150	208	194
23	82	48	112	e94	1230	722	1440	675	2280	120	196	196
24	103	27	98	e92	1080	611	988	661	1360	114	162	2310
25	94	79	65	e90	836	518	755	609	1250	107	165	2920
26	72	94	69	e86	700	453	657	471	1210	109	154	1570
27	71	90	94	e84	615	457	503	416	857	91	223	1120
28	65	80	83	e80	700	629	452	418	656	91	274	645
29	58	86	85	e80	618	674	424	620	574	130	255	453
30	60	79	91	e82	---	613	396	854	446	132	206	358
31	61	---	90	e82	---	549	---	545	---	235	160	---
TOTAL	2521	2642	4146	7963	31077	13984	41064	19798	37326	9314	15039	12857
MEAN	81.3	88.1	134	257	1072	451	1369	639	1244	300	485	429
MAX	145	141	275	1570	4320	1100	7450	2010	4000	1370	2100	2920
MIN	50	27	65	80	82	228	396	243	276	91	154	106

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2000

MEAN	237	620	988	943	1229	1623	1521	947	795	630	346	179
MAX	2268	3824	3949	3069	3403	4005	4032	3294	2858	3458	2246	671
MIN	24.9	49.4	49.2	34.6	58.7	308	270	140	65.9	65.2	41.0	24.1

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	FOR WATER YEARS 1963 - 2000
ANNUAL TOTAL	191212	197731	
ANNUAL MEAN	524	540	836
HIGHEST ANNUAL MEAN			1662
LOWEST ANNUAL MEAN			300
HIGHEST DAILY MEAN	9000	7450	18900
LOWEST DAILY MEAN	27	27	4.3
ANNUAL SEVEN-DAY MINIMUM	34	65	19
INSTANTANEOUS PEAK FLOW		9320	21700
INSTANTANEOUS PEAK STAGE		10.29	16.02
INSTANTANEOUS LOW FLOW		27	4.3
10 PERCENT EXCEEDS	1510	1340	2170
50 PERCENT EXCEEDS	157	244	302
90 PERCENT EXCEEDS	60	80	72

e Estimated.

**SURFACE-WATER RECORDS**  
**Great Miami River Basin**

**03263000 GREAT MIAMI RIVER AT TAYLORSVILLE, OHIO**

LOCATION.—Latitude 39°52'27", longitude 84°09'45", in SW 1/4 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 mi<sup>2</sup>

PERIOD OF RECORD.—January 1914 to September 1917 (published as Miami River at Tadmor), October 1921 to current year (published as Miami River at Taylorsville 1921-62). 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 above sea level, levels by Miami Conservancy District. Prior to October 1921, nonrecording gage at site 1.7 mi upstream at different datum. Jan. 1, 1922, to Nov. 11, 1925, nonrecording gage at site 50 ft downstream at outlet works of Taylorsville Dam at datum 60.03 ft lower, October 1921 to September 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 March 1913 reached a stage of 25.4 ft at site at Tadmor; discharge, 127,000 ft<sup>3</sup>/s computed by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	76	92	124	e140	786	463	e560	539	456	617	199
2	77	117	94	125	e140	658	480	e1500	466	349	2040	183
3	76	135	96	276	e140	610	561	e1700	404	483	1520	178
4	e86	118	99	1830	e140	536	883	e1300	392	1380	972	215
5	e150	151	98	2160	e140	455	1070	e1100	395	1220	584	186
6	e100	133	122	1230	e140	406	894	e900	664	810	383	183
7	e80	115	129	724	e140	378	1360	e800	1040	580	620	184
8	64	102	141	510	e150	353	9810	e700	685	459	920	169
9	71	97	138	404	154	342	9930	e540	476	392	521	152
10	145	93	194	348	162	317	5560	e490	393	331	2030	164
11	137	83	175	309	876	346	3420	428	330	306	1280	210
12	155	87	217	279	2790	366	2340	434	322	274	710	261
13	122	87	230	263	2450	427	1760	441	325	249	457	280
14	98	99	263	234	3610	369	1330	432	380	240	335	232
15	94	104	251	217	2670	357	1080	433	689	252	271	207
16	87	97	363	e200	2060	453	911	387	1430	197	233	183
17	95	91	285	e190	2020	561	1080	343	2570	198	204	167
18	98	92	229	e180	2190	656	1500	328	3300	198	263	175
19	94	90	201	e170	5150	592	1260	1860	4430	201	525	163
20	85	101	185	e170	3440	922	999	2860	2920	188	541	144
21	86	105	170	e170	2150	1710	1170	1570	3360	174	362	226
22	85	104	156	e160	1720	1630	1900	1020	4350	169	238	214
23	83	98	148	e160	1750	1210	1950	1070	2780	160	250	298
24	84	58	145	e160	1590	956	1450	1020	1720	157	216	2190
25	90	59	128	e150	1260	821	1130	888	1450	150	207	3410
26	86	104	143	e150	1050	702	e900	669	1460	141	204	1860
27	80	112	138	e150	942	702	e740	607	1160	130	263	1470
28	76	98	142	e140	948	695	e640	550	824	129	278	897
29	75	102	130	e140	936	686	e600	620	656	158	312	620
30	74	104	129	e140	---	622	e580	939	528	179	239	473
31	74	---	125	e140	---	536	---	711	---	189	210	---
TOTAL	2881	3012	5156	11603	41048	20160	57751	27200	40438	10499	17805	15493
MEAN	92.9	100	166	374	1415	650	1925	877	1348	339	574	516
MAX	155	151	363	2160	5150	1710	9930	2860	4430	1380	2040	3410
MIN	64	58	92	124	140	317	463	328	322	129	204	144
CFSM	.08	.09	.14	.33	1.23	.57	1.68	.76	1.17	.29	.50	.45
IN.	.09	.10	.17	.38	1.33	.65	1.88	.88	1.31	.34	.58	.50

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2000, BY WATER YEAR (WY)

	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	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
MEAN	294	604	1010	1523	1581	1955	1829	1145	985	644	379	257																																																																			
MAX	3089	4228	4587	8024	4473	5158	5525	4603	5567	4591	2786	3608																																																																			
(WY)	1927	1973	1991	1937	1950	1963	1922	1996	1958	1993	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 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1922 - 2000
ANNUAL TOTAL	273206	253046	
ANNUAL MEAN	749	691	1014
HIGHEST ANNUAL MEAN			2005
LOWEST ANNUAL MEAN			292
HIGHEST DAILY MEAN	14800	Jan 23	30200
LOWEST DAILY MEAN	34	Sep 25	25
ANNUAL SEVEN-DAY MINIMUM	49	Sep 21	31
INSTANTANEOUS PEAK FLOW		12600	31400
INSTANTANEOUS PEAK STAGE		16.79	75.44
INSTANTANEOUS LOW FLOW		58	25
ANNUAL RUNOFF (CFSM)	.65	.60	.88
ANNUAL RUNOFF (INCHES)	8.85	8.19	11.99
10 PERCENT EXCEEDS	1950	1720	2450
50 PERCENT EXCEEDS	191	314	392
90 PERCENT EXCEEDS	76	97	94

e Estimated.

**SURFACE-WATER RECORDS**  
**Great Miami River Basin**

**03264000 GREENVILLE CREEK NEAR BRADFORD, OHIO**

LOCATION.—Latitude 40°06'08", longitude 84°25'48", in NW 1/4 sec. 34, T.9 N., R.4 E., 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 mi<sup>2</sup>.

PERIOD OF RECORD.—October 1930 to September 2000 (station discontinued). Prior to April 1931, monthly discharge only, published in WSP 1305.

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 is 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.—Gage-height record and 9 discharge measurements furnished by Miami Conservancy District.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood in March 1913 reached a stage of 12.1 ft; discharge, 18,200 ft<sup>3</sup>/s, at site with drainage area of 213 mi<sup>2</sup>, computed by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	20	24	20	e30	117	68	127	176	131	48	23
2	16	25	26	20	e32	99	70	247	153	116	44	23
3	15	32	29	30	e32	86	86	243	128	174	44	23
4	15	31	28	249	e30	82	99	189	114	712	46	28
5	14	29	32	150	e28	76	96	177	128	398	44	51
6	13	27	39	83	e27	69	90	145	137	341	41	39
7	13	27	36	63	e27	64	341	122	112	230	62	32
8	14	26	34	51	e29	62	2140	113	99	172	72	26
9	22	25	31	43	e35	62	1790	102	91	142	54	25
10	31	27	45	43	53	61	719	97	85	121	52	28
11	27	25	42	42	127	57	430	86	82	111	48	76
12	24	28	35	34	196	61	310	82	81	106	44	85
13	20	36	35	31	145	59	242	86	78	97	40	60
14	22	39	66	26	401	62	205	76	79	86	37	46
15	21	34	85	e25	287	72	179	68	318	78	35	40
16	21	29	59	e24	233	74	158	65	465	73	33	35
17	21	25	43	e23	213	83	181	66	898	69	32	30
18	19	22	33	e23	324	76	192	70	1040	63	38	29
19	18	22	30	e22	631	81	165	945	1110	62	39	28
20	23	25	29	e21	322	205	155	1010	478	61	33	26
21	21	28	27	e21	207	286	270	417	897	58	29	29
22	21	26	31	e20	216	203	256	267	982	53	26	33
23	18	25	e23	e20	259	158	216	814	456	50	30	34
24	19	25	e22	e20	202	132	178	615	304	47	36	53
25	19	24	e21	e19	162	117	155	327	514	46	34	82
26	20	24	e20	e19	133	100	139	220	401	46	30	72
27	30	32	e20	e19	135	101	130	223	265	45	34	70
28	28	29	e19	e19	158	104	129	389	206	45	36	56
29	29	28	e19	e20	135	92	125	420	174	43	33	42
30	27	25	19	e22	---	77	121	265	150	50	29	37
31	23	---	19	e25	---	71	---	199	---	60	25	---
TOTAL	642	820	1021	1247	4809	3049	9435	8272	10201	3886	1228	1261
MEAN	20.7	27.3	32.9	40.2	166	98.4	314	267	340	125	39.6	42.0
MAX	31	39	85	249	631	286	2140	1010	1110	712	72	85
MIN	13	20	19	19	27	57	68	65	78	43	25	23
CFSM	.11	.14	.17	.21	.86	.51	1.63	1.38	1.76	.65	.21	.22
IN.	.12	.16	.20	.24	.93	.59	1.82	1.59	1.97	.75	.24	.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2000, BY WATER YEAR (WY)

	55.0	109	173	249	274	326	319	217	189	110	69.1	47.7
MEAN	55.0	109	173	249	274	326	319	217	189	110	69.1	47.7
MAX	496	724	772	1430	844	826	783	935	1142	502	723	425
(WY)	1987	1994	1991	1937	1950	1963	1964	1933	1958	1987	1979	1989
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

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1931 - 2000

ANNUAL TOTAL	47109.2	45871	177
ANNUAL MEAN	129	125	302
HIGHEST ANNUAL MEAN			52.8
LOWEST ANNUAL MEAN			1950
HIGHEST DAILY MEAN	3240	2140	7920
LOWEST DAILY MEAN	7.4	13	5.3
ANNUAL SEVEN-DAY MINIMUM	7.9	14	6.4
INSTANTANEOUS PEAK FLOW		2300	9320
INSTANTANEOUS PEAK STAGE		6.16	10.31
INSTANTANEOUS LOW FLOW		13	4.8
ANNUAL RUNOFF (CFSM)	.67	.65	.92
ANNUAL RUNOFF (INCHES)	9.08	8.84	12.49
10 PERCENT EXCEEDS	268	268	393
50 PERCENT EXCEEDS	42	52	74
90 PERCENT EXCEEDS	15	21	21

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

**SURFACE-WATER RECORDS**  
**Great Miami River Basin**

**03265000 STILLWATER RIVER AT PLEASANT HILL, OHIO**

LOCATION.—Latitude 40°03'28", longitude 84°21'22", in SW 1/4 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 mi<sup>2</sup>.

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 above sea level. Prior to Dec. 23, 1934, nonrecording gage at same site and datum.

REMARKS.—Records fair except for periods of estimated record, which are poor. Sediment data formerly collected at this site.

COOPERATION.—Gage-height record and 10 discharge measurements furnished by Miami Conservancy District.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of March 25, 1913, reached a stage of 17.5 ft. Discharge at site about 3 mi upstream, 51,400 ft<sup>3</sup>/s, computed by Miami Conservancy District. This stage is not comparable with present gage heights because of failure of levee in 1913.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	11	57	46	e40	275	138	212	347	218	106	46
2	38	16	55	56	e45	222	152	508	307	199	82	41
3	30	19	61	90	e49	185	181	545	251	309	82	38
4	27	65	63	639	e46	175	215	391	216	1390	75	129
5	21	111	73	436	e43	167	196	359	225	816	68	106
6	18	95	73	199	e41	151	197	308	274	543	69	78
7	16	86	72	132	e42	139	838	277	231	371	141	55
8	17	77	67	102	e43	139	6510	261	203	269	145	46
9	28	56	63	89	e45	140	4150	240	185	223	100	40
10	38	56	88	90	e56	119	1790	225	168	201	118	47
11	37	55	107	80	e400	109	1040	202	154	180	116	149
12	24	51	94	68	e740	112	732	190	145	166	83	231
13	17	62	90	63	e500	109	550	192	141	153	67	149
14	20	73	127	52	e1300	117	463	172	137	139	59	88
15	19	74	186	50	821	160	400	154	581	124	54	64
16	16	70	163	54	710	169	350	139	1110	114	54	51
17	17	62	109	45	649	183	533	140	2320	104	46	42
18	14	54	81	e40	1050	168	922	155	2920	96	56	38
19	11	53	69	e37	2370	170	525	2160	2770	88	55	38
20	12	57	67	e35	967	512	436	2150	1120	86	50	44
21	13	60	58	e31	557	754	847	920	2310	84	44	49
22	13	64	48	e31	577	518	759	600	2270	73	41	52
23	21	63	56	e30	802	376	546	1200	1000	66	61	70
24	24	62	45	e30	574	326	427	1150	639	63	67	220
25	25	56	37	e30	443	294	353	637	985	61	68	191
26	19	68	52	e30	342	243	294	434	853	62	55	173
27	9.0	66	46	e29	319	240	265	396	538	59	78	166
28	14	71	39	e29	363	243	251	709	391	60	96	127
29	14	66	47	e29	309	210	225	830	326	62	82	94
30	15	63	47	e33	---	165	207	527	270	65	64	72
31	13	---	46	e36	---	143	---	399	---	88	52	---
TOTAL	646.0	1842	2286	2741	14243	7033	24492	16782	23387	6532	2334	2734
MEAN	20.8	61.4	73.7	88.4	491	227	816	541	780	211	75.3	91.1
MAX	46	111	186	639	2370	754	6510	2160	2920	1390	145	231
MIN	9.0	11	37	29	40	109	138	139	59	41	38	---
CFSM	.04	.12	.15	.18	.98	.45	1.62	1.08	1.55	.42	.15	.18
IN.	.05	.14	.17	.20	1.05	.52	1.81	1.24	1.73	.48	.17	.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 2000, BY WATER YEAR (WY)

	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	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
MEAN	129	286	441	621	717	915	837	477	472	271	147	116	129	1909	2437	3961	2177	2433	2513	1700	3334	1295	1823	2127	1927	1994	1991	1937	1950	1963	1922	1996	1958	1993	1979	1926	11.7	19.3	16.0	21.5	44.0	79.8	131	44.6	33.7	22.2	14.1	14.9	1964	1964	1964	1977	1964	1941	1971	1941	1988	1977	1988	1954																								

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1917 - 2000	
ANNUAL TOTAL	120277.2		105052.0			
ANNUAL MEAN	330		287		451	
HIGHEST ANNUAL MEAN					775	
LOWEST ANNUAL MEAN					99.3	
HIGHEST DAILY MEAN	8860		6510		17400	
LOWEST DAILY MEAN	9.0		9.0		4.0	
ANNUAL SEVEN-DAY MINIMUM	11		13		8.1	
INSTANTANEOUS PEAK FLOW			7210		26400	
INSTANTANEOUS PEAK STAGE			10.65		18.46	
INSTANTANEOUS LOW FLOW			9.0		4.0	
ANNUAL RUNOFF (CFSM)	.66		.57		.90	
ANNUAL RUNOFF (INCHES)	8.90		7.77		12.18	
10 PERCENT EXCEEDS	692		709		1020	
50 PERCENT EXCEEDS	89		103		144	
90 PERCENT EXCEEDS	18		30		33	

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



**SURFACE-WATER RECORDS**  
Great Miami River Basin

**03266000 STILLWATER RIVER AT ENGLEWOOD, OHIO**

LOCATION.—Latitude 39°52'10", longitude 84°16'57", in NW 1/4 sec. 23, T.5 N., R.5 E., Montgomery County, Hydrologic Unit 05080001, on right bank 1,000 ft downstream from Englewood Dam, 1 mi southeast of Englewood, Ohio, and at mile 8.9.

DRAINAGE AREA.—650 mi<sup>2</sup>.

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 699.82 ft above sea level.

REMARKS.—Records good except for periods of estimated record, which are poor. Flood flow regulated by Englewood retarding basin.

COOPERATION.—Gage-height tapes and 8 discharge measurements furnished by Miami Conservancy District.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood in March 1913 reached a discharge of 85,400 ft<sup>3</sup>/s at site 1 mi downstream, computed by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	e15	e72	50	e54	367	226	269	432	300	139	66
2	19	e14	e70	52	e58	321	234	471	374	267	134	58
3	23	e25	e76	72	e60	273	246	840	321	394	121	49
4	26	e70	e80	469	e60	248	310	567	281	2050	116	61
5	26	e130	e92	812	e60	236	342	481	275	1590	103	149
6	26	e120	e92	449	e60	220	311	412	316	806	96	127
7	24	e110	e90	246	e60	203	697	362	312	551	126	97
8	24	e96	e86	174	e60	191	4980	333	272	371	185	74
9	26	e70	e80	143	e60	188	5690	309	239	288	168	64
10	37	e70	e110	125	e64	183	5480	302	218	253	131	67
11	45	e68	e130	119	e80	181	3960	270	205	230	142	72
12	50	e64	e120	111	e800	188	1520	249	194	211	128	219
13	e21	e74	e110	101	e700	184	1000	256	190	197	99	218
14	e25	e90	e160	90	1660	187	786	259	197	184	82	158
15	e24	e92	e230	80	1580	221	653	236	260	171	74	110
16	e20	e88	e170	76	1000	276	553	217	1240	151	68	85
17	e21	e80	160	75	991	377	550	206	2670	141	66	73
18	e18	e70	123	74	1080	327	1360	204	2950	132	75	64
19	e14	e68	96	e70	3160	303	916	1080	4360	139	72	57
20	e15	e70	82	e64	1940	690	653	3010	2140	126	71	55
21	e16	e76	75	e60	939	1390	918	2320	2060	116	65	67
22	e20	e80	68	e54	692	1020	1200	1080	5400	108	61	59
23	e28	e80	61	e54	1020	683	870	1240	1700	98	60	75
24	e30	e78	59	e52	835	528	636	1970	891	89	72	125
25	e32	e70	54	e52	604	452	515	1190	995	84	76	217
26	e25	e86	50	e50	471	374	433	647	1340	81	77	208
27	e12	e84	50	e50	424	354	372	519	757	80	89	187
28	e15	e90	50	e49	443	351	340	704	520	79	96	178
29	e18	e84	50	e48	445	341	313	1100	411	86	105	135
30	e19	e76	49	e50	---	283	284	847	348	101	92	107
31	e17	---	49	e52	---	246	---	547	---	122	74	---
TOTAL	736	2288	2844	4023	19460	11386	36348	22497	31868	9596	3063	3281
MEAN	23.7	76.3	91.7	130	671	367	1212	726	1062	310	98.8	109
MAX	50	130	230	812	3160	1390	5690	3010	5400	2050	185	219
MIN	12	14	49	48	54	181	226	204	190	79	60	49
CFSM	.04	.12	.14	.20	1.03	.57	1.86	1.12	1.63	.48	.15	.17
IN.	.04	.13	.16	.23	1.11	.65	2.08	1.29	1.82	.55	.18	.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 2000, BY WATER YEAR (WY)

	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	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
MEAN	166	344	559	890	937	1140	1078	684	587	364	204	141	1781	2215	2495	5129	2840	3147	3015	2931	4244	1582	2438	1993	1987	1973	1991	1937	1950	1963	1964	1911	180	61.1	52.2	30.0	19.7	17.9	1964	1945	1945	1945	1945	1964	1941	1941	1941	1941	1934	1988	1988	1963																							
MAX (WY)	1987	1973	1991	1937	1950	1963	1964	1933	1958	1993	1979	1926	15.6	27.3	27.9	28.6	63.0	111	180	61.1	52.2	30.0	19.7	17.9	1964	1945	1945	1945	1945	1964	1941	1941	1941	1941	1934	1988	1988	1963																																					

	FOR 1999 CALENDAR YEAR				FOR 2000 WATER YEAR				WATER YEARS 1926 - 2000			
	1999	2000	1926-2000	1926-2000	1999	2000	1926-2000	1926-2000	1999	2000	1926-2000	1926-2000
ANNUAL TOTAL	165397	147390			165397	147390						
ANNUAL MEAN	453	403			453	403						
HIGHEST ANNUAL MEAN												
LOWEST ANNUAL MEAN												
HIGHEST DAILY MEAN	7320	Jan 24	5690	Apr 9	7320	Jan 24	5690	Apr 9	9980	Jun 15	1958	1941
LOWEST DAILY MEAN	12	Oct 27	12	Oct 27	12	Oct 27	12	Oct 27	4.8	Sep 30	1944	1941
ANNUAL SEVEN-DAY MINIMUM	16	Oct 27	16	Oct 27	16	Oct 27	16	Oct 27	9.7	Sep 24	1941	1941
INSTANTANEOUS PEAK FLOW			5740	Apr 9	5740	Apr 9	5740	Apr 9	9980	Jun 15	1958	1941
INSTANTANEOUS PEAK STAGE			78.00	Apr 9	78.00	Apr 9	78.00	Apr 9	80.88	Jun 15	1958	1941
INSTANTANEOUS LOW FLOW			12	Oct 27	12	Oct 27	12	Oct 27	3.7	Sep 30	1944	1941
ANNUAL RUNOFF (CFSM)	.70	.62			.70	.62			.91			
ANNUAL RUNOFF (INCHES)	9.47	8.44			9.47	8.44			12.31			
10 PERCENT EXCEEDS	1100	996			1100	996			1410			
50 PERCENT EXCEEDS	120	132			120	132			198			
90 PERCENT EXCEEDS	23	49			23	49			43			

e Estimated.

**SURFACE-WATER RECORDS**  
**Great Miami River Basin**

**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 mi<sup>2</sup>.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	10	12	12	e14	27	23	31	31	26	23	18
2	13	16	12	13	e14	26	28	59	30	26	28	18
3	13	20	12	37	e14	24	34	36	29	40	23	18
4	14	14	12	164	e14	24	47	34	27	41	21	20
5	13	15	14	41	e14	23	36	32	68	32	20	18
6	13	15	16	29	e14	22	31	33	55	29	20	17
7	13	16	14	26	e14	22	92	31	38	27	25	17
8	13	16	14	23	14	22	500	30	32	26	21	17
9	15	16	13	22	15	22	112	29	29	25	27	20
10	15	15	22	22	18	22	72	31	28	24	26	23
11	12	15	19	21	93	22	59	29	27	24	22	23
12	12	15	16	20	38	22	51	28	26	23	20	30
13	13	15	18	20	29	22	46	32	27	22	20	22
14	13	15	22	e17	57	22	43	29	28	24	19	20
15	13	15	20	e16	34	21	41	28	38	24	19	20
16	12	15	19	e16	32	22	39	27	59	22	18	18
17	12	15	16	e16	29	24	42	27	108	21	22	18
18	12	14	15	e15	60	22	42	27	53	20	44	18
19	12	14	15	e15	63	23	38	79	44	21	26	18
20	12	14	15	e15	37	74	38	45	37	21	22	19
21	12	14	14	e15	31	53	48	37	58	20	21	42
22	12	13	12	e14	39	37	62	35	42	19	20	21
23	13	13	12	e14	55	31	48	69	35	19	20	178
24	12	14	11	e14	43	28	42	58	31	19	19	286
25	12	14	e11	e14	34	26	38	37	35	19	18	72
26	11	15	11	e14	30	25	36	33	32	19	19	68
27	11	14	11	e14	33	28	35	32	30	18	24	45
28	11	13	e11	e14	32	28	34	36	29	18	20	38
29	11	13	11	e14	28	27	34	49	29	19	19	34
30	11	13	13	e14	---	25	32	36	27	18	18	32
31	10	---	12	e14	---	24	---	33	---	22	18	---
TOTAL	384	436	445	715	942	840	1823	1152	1162	728	682	1208
MEAN	12.4	14.5	14.4	23.1	32.5	27.1	60.8	37.2	38.7	23.5	22.0	40.3
MAX	15	20	22	164	93	74	500	79	108	41	44	286
MIN	10	10	11	12	14	21	23	27	26	18	18	17
CFSM	.34	.40	.39	.63	.89	.74	1.66	1.02	1.06	.64	.60	1.10
IN.	.39	.44	.45	.73	.96	.85	1.85	1.17	1.18	.74	.69	1.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2000, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999	2000
MEAN	20.0	22.2	31.8	43.3	42.9	48.8	63.6
MAX	30.4	40.9	81.2	70.8	66.6	86.6	96.5
(WY)	1997	1997	1997	1996	1997	1997	1996
MIN	12.4	14.0	14.4	15.9	17.1	27.1	45.4
(WY)	2000	1995	2000	1995	1995	2000	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1994 - 2000
ANNUAL TOTAL	10234	10517	
ANNUAL MEAN	28.0	28.7	40.0
HIGHEST ANNUAL MEAN			56.6
LOWEST ANNUAL MEAN			28.5
HIGHEST DAILY MEAN	377	Jan 22	704
LOWEST DAILY MEAN	10	Oct 31	7.2
ANNUAL SEVEN-DAY MINIMUM	11	Oct 26	7.7
INSTANTANEOUS PEAK FLOW		940	1200
INSTANTANEOUS PEAK STAGE		7.42	8.43
INSTANTANEOUS LOW FLOW		10	5.0
ANNUAL RUNOFF (CFSM)	.77	.79	1.09
ANNUAL RUNOFF (INCHES)	10.40	10.69	14.84
10 PERCENT EXCEEDS	48	44	70
50 PERCENT EXCEEDS	20	22	29
90 PERCENT EXCEEDS	12	13	14

e Estimated.

**SURFACE-WATER RECORDS**  
**Great Miami River Basin**

197

**003267900 MAD RIVER AT ST. PARIS PIKE AT EAGLE CITY, OHIO**

LOCATION.—Latitude 39°57'51", longitude 83°49'54", in W 1/2 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 mi<sup>2</sup>.

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. Water supply for city of Springfield is pumped from wells, adjacent to Mad River, just upstream from station. Recharge to the well field is largely by induced infiltration from Mad River and Moore Run. Pumpage, averaging 20.2 ft<sup>3</sup>/s in 2000, 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 and published in volume 2, project data, Results from Selected Sites in the Great Miami and Little Miami River Basin.

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 1999 TO SEPTEMBER 2000  
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	113	116	120	e110	215	180	276	248	162	209	118
2	97	152	117	121	e110	203	223	398	239	161	164	126
3	99	137	116	247	e110	193	289	322	226	191	152	119
4	108	127	113	988	e110	189	396	294	219	237	143	127
5	104	121	120	384	e110	182	323	283	244	182	134	123
6	101	119	123	271	e105	177	274	266	291	168	134	119
7	102	120	117	225	e105	172	721	257	232	161	190	116
8	102	120	117	198	e105	171	4100	249	218	157	155	116
9	113	118	115	185	120	170	1280	240	206	153	167	116
10	118	118	144	181	127	165	828	260	198	152	206	116
11	110	117	137	169	364	167	632	234	195	149	158	126
12	108	114	132	159	305	172	513	229	193	143	142	127
13	122	115	144	158	291	164	450	252	190	139	136	138
14	132	114	158	149	886	166	413	257	188	157	133	126
15	135	111	156	147	434	168	384	232	201	151	130	121
16	111	114	146	147	389	186	357	224	203	140	125	117
17	110	117	139	142	332	206	414	221	308	137	125	115
18	111	115	131	e135	628	187	416	217	241	134	153	114
19	111	115	130	e130	804	207	370	1130	216	140	150	112
20	112	118	135	e130	429	445	363	611	198	135	133	111
21	113	116	130	e125	337	434	414	413	228	132	127	130
22	118	115	127	e120	325	310	442	353	222	130	125	132
23	116	113	127	e120	350	265	389	367	192	130	126	132
24	115	115	124	e120	313	238	350	412	183	129	125	1210
25	116	112	131	e120	276	221	324	317	193	125	122	416
26	117	128	123	e115	250	203	304	284	184	124	121	332
27	115	118	122	e115	244	225	292	278	179	123	148	254
28	115	115	120	e115	235	224	286	289	172	132	136	213
29	115	115	120	e115	221	207	274	294	170	151	126	189
30	112	115	123	e110	---	201	264	269	166	130	123	175
31	112	---	123	e110	---	187	---	258	---	164	119	---
TOTAL	3464	3557	3976	5671	8525	6620	16265	9986	6343	4619	4437	5586
MEAN	112	119	128	183	294	214	542	322	211	149	143	186
MAX	135	152	158	988	886	445	4100	1130	308	237	209	1210
MIN	94	111	113	110	105	164	180	217	166	123	119	111

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2000, BY WATER YEAR (WY)

	1970	1970	1968	1969	1971	1967	1970	1968	1969	1969	1969	2000
MEAN	127	156	222	286	379	351	394	393	264	192	170	136
MAX	151	214	378	548	718	655	682	629	368	298	287	186
(WY)	1970	1970	1968	1969	1971	1967	1970	1968	1969	1969	1969	2000
MIN	101	116	114	139	188	183	196	184	155	134	120	99.5
(WY)	1967	1971	1966	1971	1967	1966	1971	1971	1966	1971	1966	1966

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR
ANNUAL TOTAL	91378	79049				
ANNUAL MEAN	250	216				
HIGHEST ANNUAL MEAN					327	1969
LOWEST ANNUAL MEAN					169	1966
HIGHEST DAILY MEAN			4070	Jan 22	4100	Apr 8
LOWEST DAILY MEAN			94	Oct 1	94	Oct 1
ANNUAL SEVEN-DAY MINIMUM			100	Jan 11	101	Oct 1
INSTANTANEOUS PEAK FLOW					6460	Apr 8
INSTANTANEOUS PEAK STAGE					14.34	Apr 8
INSTANTANEOUS LOW FLOW					94	Oct 1
10 PERCENT EXCEEDS	448	359			60	Jan 27
50 PERCENT EXCEEDS	160	152			428	
90 PERCENT EXCEEDS	106	114			176	
					111	

e Estimated.

**SURFACE-WATER RECORDS**  
**Great Miami River Basin**

**03269500 MAD RIVER NEAR SPRINGFIELD, OHIO**

LOCATION.—Latitude 39°55'23", longitude 83°52'13", in NW 1/4 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 mi<sup>2</sup>.

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 above sea level. Jan. 1, 1904, to Mar. 31, 1906, nonrecording gage at site 0.3 mi downstream at different datum. Feb. 1, 1914, to Feb. 29, 1924, nonrecording gage at site 1.8 mi upstream at datum 6.39 ft higher. Mar. 1, 1924, to July 31, 1925, nonrecording gage at site 300 ft upstream at same datum.

REMARKS.—Records good except for periods of estimated record, which is 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.—Gage-height record and 9 discharge measurements furnished by Miami Conservancy District.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 30,500 ft<sup>3</sup>/s Jan. 21, 1959, gage height, 15.76 ft, from rating curve extended above 14,000 ft<sup>3</sup>/s on basis of slope-area and contracted opening measurements of peak flow; minimum daily discharge, 30 ft<sup>3</sup>/s Sept. 15, 1904.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of March 25, 1913, reached a stage of 16.9 ft, present datum; discharge, 55,400 ft<sup>3</sup>/s computed by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	174	171	209	163	e170	292	264	542	430	253	367	190
2	170	265	210	165	179	287	363	750	415	248	274	219
3	170	210	209	534	183	284	503	611	493	390	265	187
4	213	192	209	1220	181	278	739	571	410	433	261	237
5	250	184	228	599	178	269	544	564	411	370	242	191
6	235	181	225	445	175	263	432	530	441	289	224	185
7	202	180	215	387	177	257	1060	511	368	274	359	176
8	203	182	214	355	176	256	5730	503	343	259	292	176
9	221	181	212	338	179	253	1720	482	325	242	323	233
10	222	181	277	340	190	246	1160	549	313	239	372	180
11	208	180	228	311	391	256	991	424	314	233	315	189
12	204	178	211	269	390	267	868	402	310	223	288	199
13	236	179	217	262	460	251	768	435	305	214	252	198
14	216	179	256	221	1200	248	708	401	315	374	211	181
15	210	179	230	204	672	241	653	368	314	326	207	179
16	206	181	216	199	572	371	607	355	549	335	204	190
17	208	186	210	193	551	399	793	351	761	273	213	190
18	206	180	203	195	968	312	816	344	424	212	248	190
19	191	181	199	195	1140	357	735	1090	359	267	242	187
20	192	187	211	209	679	720	660	791	330	229	218	201
21	206	181	200	198	663	685	760	569	772	234	216	237
22	212	180	196	e190	642	467	763	518	533	226	209	240
23	208	180	191	e170	616	384	704	533	430	217	214	369
24	197	183	180	e190	444	344	639	582	415	207	200	1210
25	199	185	169	e180	417	319	581	504	416	203	193	648
26	198	236	166	e170	385	300	555	446	364	203	187	551
27	174	207	166	e160	366	348	490	425	309	200	254	452
28	174	201	165	e150	314	324	515	474	296	207	223	391
29	174	204	165	e160	296	302	498	480	290	241	210	328
30	170	209	166	e160	---	288	482	422	277	227	208	283
31	170	---	168	e170	---	275	---	420	---	290	202	---
TOTAL	6219	5703	6321	8702	12954	10143	26101	15947	12032	8138	7693	8587
MEAN	201	190	204	281	447	327	870	514	401	263	248	286
MAX	250	265	277	1220	1200	720	5730	1090	772	433	372	1210
MIN	170	171	165	150	170	241	264	344	277	200	187	176
CFSM	.41	.39	.42	.57	.91	.67	1.78	1.05	.82	.54	.51	.58
IN.	.47	.43	.48	.66	.98	.77	1.98	1.21	.91	.62	.58	.65

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2000, BY WATER YEAR (WY)

MEAN	348	417	528	584	677	706	720	667	588	487	352	321
MAX	1081	904	1583	1177	1409	1279	1174	2106	1371	1284	947	1279
(WY)	1987	1986	1991	1991	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

	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1974 - 2000
ANNUAL TOTAL	138780	128540	
ANNUAL MEAN	380	351	532
HIGHEST ANNUAL MEAN			792
LOWEST ANNUAL MEAN			279
HIGHEST DAILY MEAN	3900	5730	8200
LOWEST DAILY MEAN	158	150	100
ANNUAL SEVEN-DAY MINIMUM	166	163	103
INSTANTANEOUS PEAK FLOW		7710	12200
INSTANTANEOUS PEAK STAGE		10.20	11.88
INSTANTANEOUS LOW FLOW		150	100
ANNUAL RUNOFF (CFSM)	.78	.72	1.09
ANNUAL RUNOFF (INCHES)	10.54	9.76	14.76
10 PERCENT EXCEEDS	754	612	984
50 PERCENT EXCEEDS	257	252	384
90 PERCENT EXCEEDS	177	179	214

**SURFACE-WATER RECORDS**  
**Great Miami River Basin**

**03270000 MAD RIVER NEAR DAYTON, OHIO**

LOCATION.—Latitude 39°47'50", longitude 84°05'19", in SW 1/4 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 mi<sup>2</sup>.

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 above sea level. Jan. 21, 1959, to 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 records 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.—Gage-height record and 8 discharge measurements furnished by Miami Conservancy District.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 21,200 ft<sup>3</sup>/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 ft<sup>3</sup>/s Aug. 6, 1934, but may have been less during 1921-1924.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of March 25, 1913, reached a stage of 14.0 ft, original site and datum; discharge 75,700 ft<sup>3</sup>/s, computed by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	178	178	179	216	218	392	380	e700	622	332	440	200
2	176	230	179	214	222	384	486	e900	569	319	331	229
3	176	248	179	464	224	376	663	e1000	664	533	296	200
4	181	196	178	1650	225	368	1110	e800	592	632	288	294
5	219	187	182	870	220	355	919	e740	538	486	272	218
6	232	181	198	617	216	345	697	e720	621	381	248	196
7	202	180	180	526	217	337	1160	e700	514	337	359	186
8	195	181	179	482	217	333	6760	e660	471	312	349	180
9	214	181	179	456	218	329	4270	e640	448	285	314	219
10	226	180	233	447	235	323	2020	e700	430	278	410	203
11	208	181	209	431	347	329	1610	581	423	282	367	195
12	202	179	192	379	551	360	1350	549	433	259	319	197
13	204	179	213	362	543	338	1160	607	419	245	297	208
14	234	180	257	321	1650	329	1060	575	437	265	236	197
15	205	180	253	281	1040	318	986	515	488	467	223	182
16	204	180	239	267	785	488	908	491	558	394	214	187
17	202	186	223	258	718	678	1050	484	1360	360	225	185
18	203	189	215	258	1200	496	1130	472	678	252	251	188
19	201	186	208	253	1770	511	1040	925	522	332	262	184
20	193	197	219	266	952	907	959	1220	462	286	236	189
21	191	188	213	258	852	1070	1300	789	789	262	228	219
22	202	188	207	238	780	738	1260	699	705	256	225	226
23	200	189	203	e230	779	589	1120	770	550	250	223	302
24	193	190	197	e240	601	524	974	773	506	236	232	952
25	193	188	207	e230	547	476	860	699	522	229	207	747
26	194	203	220	e220	504	440	773	621	484	225	199	585
27	185	186	220	e210	499	496	695	595	417	220	259	504
28	179	178	219	e210	435	474	e640	652	393	216	241	450
29	179	177	217	e200	406	445	e700	673	379	253	222	390
30	179	178	218	e200	---	417	e660	606	365	248	218	335
31	178	---	220	e210	---	396	---	523	---	282	212	---
TOTAL	6128	5644	6435	11464	17171	14361	38700	21379	16359	9714	8403	8747
MEAN	198	188	208	370	592	463	1290	690	545	313	271	292
MAX	234	248	257	1650	1770	1070	6760	1220	1360	632	440	952
MIN	176	177	178	200	216	318	380	472	365	216	199	180
CFSM	.31	.30	.33	.58	.93	.73	2.03	1.09	.86	.49	.43	.46
IN.	.36	.33	.38	.67	1.01	.84	2.27	1.25	.96	.57	.49	.51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2000, 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
MEAN	417	516	680	759	887	938	956	881	746	606	436	386															
MAX	1425	1175	2027	1559	1839	1637	1561	2885	1745	1525	1235	1528															
(WY)	1987	1986	1991	1991	1975	1978	1996	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

	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1974 - 2000
ANNUAL TOTAL	172618	164505	
ANNUAL MEAN	473	449	683
HIGHEST ANNUAL MEAN			1029
LOWEST ANNUAL MEAN			336
HIGHEST DAILY MEAN	4110	6760	10300
LOWEST DAILY MEAN	167	176	112
ANNUAL SEVEN-DAY MINIMUM	170	178	124
INSTANTANEOUS PEAK FLOW		8210	11400
INSTANTANEOUS PEAK STAGE		15.45	19.01
INSTANTANEOUS LOW FLOW		176	112
ANNUAL RUNOFF (CFSM)	.74	.71	1.08
ANNUAL RUNOFF (INCHES)	10.11	9.64	14.61
10 PERCENT EXCEEDS	1010	854	1280
50 PERCENT EXCEEDS	286	295	487
90 PERCENT EXCEEDS	179	186	246

e Estimated.

**SURFACE-WATER RECORDS**  
**Great Miami River Basin**

**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 80.0.

DRAINAGE AREA.—2,511 mi<sup>2</sup>.

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 700.00 ft above sea level 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, to July 24, 1931, nonrecording gage at Main Street Bridge at datum 21.00 ft higher.

REMARKS.—Records fair 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. Water is diverted 6 mi upstream from station for use in Dayton; 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.—Gage-height record and 9 discharge measurements furnished by Miami Conservancy District.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 60,900 ft<sup>3</sup>/s Jan. 22, 1959, gage height, 36.00 ft Jan. 22, 1959; minimum discharge 109 ft<sup>3</sup>/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 ft<sup>3</sup>/s, computed by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	189	224	215	252	e200	1700	1520	1780	1830	1460	1340	381
2	168	478	212	253	e200	1590	1650	2300	1790	1180	2240	447
3	177	443	222	1410	e210	1510	1800	3280	1700	1730	2090	322
4	175	276	256	6320	e220	1510	2250	2450	1610	3260	1740	937
5	198	291	296	3890	e220	1510	2290	2140	1610	3060	1510	523
6	285	282	335	2190	e220	1420	2050	2010	1750	2030	1130	343
7	264	266	314	1720	e220	1240	3310	1850	1980	1770	1470	325
8	212	245	313	1460	e220	1090	19800	1800	1730	1560	1760	312
9	177	234	318	1300	e230	956	20100	1730	1520	1450	1540	312
10	189	221	757	1040	271	1120	13900	1820	1360	1400	2330	312
11	273	212	636	799	531	1100	9360	1640	887	1350	1960	344
12	289	201	635	609	3680	703	5440	1610	853	976	1620	492
13	340	178	994	552	4170	1120	3950	1640	766	745	1370	803
14	305	177	1270	455	6680	1360	3180	1590	949	671	765	563
15	255	197	938	357	5690	1330	2710	1540	1550	1290	496	e450
16	236	209	1230	353	3920	1740	2340	1450	3030	943	395	e400
17	229	208	1050	327	3780	1910	2560	1340	6150	795	355	e380
18	239	214	760	319	4440	1810	3700	1240	6120	606	446	e360
19	241	210	572	e290	9870	1810	3230	3120	8500	1120	773	e350
20	224	216	525	e300	6800	2370	2710	6920	5490	915	1360	e400
21	218	204	483	e250	4280	3860	3260	4660	5080	486	701	e600
22	232	202	419	e220	3300	3280	4340	2940	8030	430	421	e800
23	228	198	372	e240	3420	2440	4110	2820	5000	361	366	e1000
24	230	187	337	e220	3090	2080	3170	3430	3090	317	456	e2000
25	236	158	293	e200	2490	1950	2580	2690	2650	312	325	e4000
26	258	266	247	e190	2120	1820	2230	2040	2970	312	335	e3000
27	246	256	228	e190	2040	1860	2070	1940	2260	312	320	e2200
28	228	217	235	e180	1810	1810	1960	1970	1900	312	424	1840
29	226	205	280	e180	1820	1800	1900	2160	1720	350	629	1620
30	220	218	266	e180	---	1700	1830	2230	1580	448	495	1460
31	213	---	260	e190	---	1600	---	1970	---	617	387	---
TOTAL	7200	7093	15268	26436	76142	53099	135300	72100	85455	32568	31549	27276
MEAN	232	236	493	853	2626	1713	4510	2326	2848	1051	1018	909
MAX	340	478	1270	6320	9870	3860	20100	6920	8500	3260	2330	4000
MIN	168	158	212	180	200	703	1520	1240	766	312	320	312

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2000, BY WATER YEAR (WY)

MEAN	923	1689	2601	3028	3655	4166	3969	2982	2669	2058	1166	750
MAX	5792	6233	9210	7217	8926	10140	7410	11030	7357	7510	5727	2862
(WY)	1987	1994	1991	1996	1975	1978	1989	1996	1981	1993	1979	1979
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 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1974 - 2000
ANNUAL TOTAL	611225	569486	
ANNUAL MEAN	1675	1556	2465
HIGHEST ANNUAL MEAN			3765
LOWEST ANNUAL MEAN			881
HIGHEST DAILY MEAN	25500	20100	39700
LOWEST DAILY MEAN	133	158	111
ANNUAL SEVEN-DAY MINIMUM	138	187	125
INSTANTANEOUS PEAK FLOW		23800	43800
INSTANTANEOUS PEAK STAGE		30.86	33.15
INSTANTANEOUS LOW FLOW		158	111
10 PERCENT EXCEEDS	4230	3290	5740
50 PERCENT EXCEEDS	572	952	1270
90 PERCENT EXCEEDS	200	216	360

e Estimated.

**SURFACE-WATER RECORDS  
Great Miami River Basin**

**03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OHIO**

WATER-QUALITY RECORDS

LOCATION.—Latitude 39°38'14", longitude 84°17'33", Montgomery County, Hydrologic Unit 05080002, on left bank at Miamisburg, 1.0 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 mi<sup>2</sup>.

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 TEMPERATURES: June 1978 to current year.

DISSOLVED OXYGEN: June 1978 to current year.

INSTRUMENTATION.—Water-quality monitor since June 1978. Electronic data logger replaced digital recorder since June 19, 1991. Set for 1-hour interval.

REMARKS.—Interruptions in the water-quality record were 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).

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, 7.0 units, July 30, Aug. 30, 1979.

WATER TEMPERATURES: Maximum, 33.0°C, July 20, 22, 1978; minimum, 0.0°C, on many days during winters.

DISSOLVED OXYGEN: Maximum, >20.0 mg/L, on several days in water years 1978-1994 and 2000; minimum, 0.4 mg/L, Aug. 27, 1981 and Aug. 2, 1982.

EXTREMES FOR CURRENT YEAR.—

SPECIFIC CONDUCTANCE: Maximum, 1,360 microsiemens, Feb. 5; minimum, 359 microsiemens, Apr. 9.

pH: Maximum, 9.1 units, June 13, July 2, and 7; minimum, 7.4 units, June 19 and Aug. 18.

WATER TEMPERATURES: Maximum, 29.5°C, Aug. 25; minimum, 0.5°C, Jan. 22, 24, 25, 27, and 28.

DISSOLVED OXYGEN: Maximum, 20.0 mg/L, Jan. 26-Feb. 9 and Sept. 21; minimum, 3.9 mg/L, July 18.

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	934	875	918	1010	949	977	1100	1050	1070	1060	1020	1040
2	875	788	828	982	858	913	1100	1080	1090	1050	1020	1030
3	---	---	---	908	796	842	1100	1030	1050	1050	495	910
4	---	---	---	801	764	780	1060	1010	1030	567	478	516
5	---	---	---	---	---	---	1020	954	997	659	547	618
6	---	---	---	---	---	---	966	935	949	666	650	657
7	938	923	927	---	---	---	954	881	923	---	---	---
8	949	915	932	---	---	---	966	884	930	666	587	639
9	953	868	930	---	---	---	970	944	957	674	650	659
10	921	880	900	---	---	---	964	877	920	804	699	772
11	902	816	867	---	---	---	913	783	844	831	798	817
12	863	813	830	---	---	---	844	793	821	877	827	857
13	897	784	864	---	---	---	811	737	785	894	869	882
14	873	833	855	---	---	---	745	615	706	916	885	902
15	901	836	882	---	---	---	764	706	730	947	903	925
16	927	892	906	1090	1050	1070	831	764	807	948	915	931
17	944	921	930	1080	1040	1060	856	811	826	961	915	944
18	997	933	961	1090	1050	1070	897	847	869	1020	949	988
19	989	944	970	---	---	---	937	888	901	1060	992	1010
20	996	974	984	---	---	---	929	882	904	1230	1060	1170
21	1010	986	998	---	---	---	927	902	914	1150	1060	1100
22	1010	983	996	---	---	---	958	920	942	1320	1110	1240
23	1010	980	996	---	---	---	989	955	967	1320	1130	1210
24	1010	979	992	1100	1050	1070	996	959	981	1150	1060	1110
25	---	---	---	1100	1040	1070	993	969	979	1220	1110	1180
26	1030	955	975	1120	1040	1070	1020	980	995	1180	1080	1130
27	998	944	964	1040	996	1030	1020	1000	1010	1130	1060	1100
28	1000	966	987	996	943	969	1030	991	1020	1120	1080	1100
29	1000	955	980	1020	945	978	1030	589	998	1130	1090	1120
30	1000	954	982	1090	1020	1040	1030	1000	1020	1140	1080	1110
31	1020	968	995	---	---	---	1040	1020	1030	1110	1080	1090
MONTH	1030	784	936	1120	764	996	1100	589	934	1320	478	959





**SURFACE-WATER RECORDS**  
**Great Miami River Basin**

**03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.7	8.4	8.6	9.0	8.5	8.6	8.6	8.2	8.3	8.8	8.5	8.7			
2	8.4	8.2	8.3	8.7	8.5	8.6	8.7	8.2	8.4	8.7	8.5	8.6			
3	---	---	---	8.5	8.1	8.3	8.9	8.5	8.7	8.5	8.2	8.4			
4	---	---	---	8.1	7.9	8.0	8.9	8.6	8.8	8.2	7.9	8.0			
5	---	---	---	---	---	---	8.8	8.7	8.8	8.2	8.1	8.2			
6	---	---	---	---	---	---	8.8	8.6	8.7	8.2	8.2	8.2			
7	---	---	---	---	---	---	8.8	8.5	8.6	---	---	---			
8	8.9	8.7	8.8	---	---	---	8.9	8.5	8.7	8.2	8.1	8.2			
9	8.9	8.6	8.8	---	---	---	8.8	8.6	8.8	8.2	8.2	8.2			
10	8.6	8.3	8.5	---	---	---	8.8	8.5	8.7	---	---	---			
11	8.5	8.2	8.4	---	---	---	8.7	8.5	8.6	8.5	8.4	8.4			
12	8.6	8.2	8.4	---	---	---	8.6	8.4	8.5	8.5	8.4	8.4			
13	8.5	8.3	8.4	---	---	---	8.5	8.4	8.5	8.5	8.4	8.4			
14	8.4	8.2	8.3	---	---	---	8.4	8.2	8.3	8.6	8.4	8.5			
15	8.4	8.1	8.3	---	---	---	8.3	8.2	8.3	8.6	8.5	8.5			
16	8.4	8.1	8.2	8.4	8.1	8.3	8.5	8.3	8.4	8.7	8.5	8.6			
17	8.2	8.1	8.1	8.4	8.0	8.2	8.6	8.3	8.4	8.7	8.5	8.6			
18	8.3	8.1	8.2	8.4	8.0	8.2	8.6	8.4	8.5	8.7	8.5	8.6			
19	8.2	8.1	8.2	---	---	---	8.6	8.5	8.5	8.7	8.5	8.6			
20	8.4	8.1	8.2	---	---	---	8.6	8.4	8.5	8.7	8.5	8.6			
21	8.5	8.2	8.3	---	---	---	8.7	8.5	8.6	8.7	8.5	8.6			
22	8.5	8.2	8.3	---	---	---	8.7	8.4	8.5	8.7	8.5	8.6			
23	8.5	8.2	8.3	---	---	---	8.8	8.4	8.6	8.7	8.5	8.6			
24	8.5	8.2	8.3	8.3	7.9	8.0	8.8	8.5	8.7	8.6	8.5	8.5			
25	8.6	8.3	8.4	8.3	8.0	8.1	8.8	8.5	8.7	8.7	8.3	8.5			
26	8.6	8.3	8.4	8.2	7.9	8.0	8.7	8.6	8.7	8.7	8.5	8.6			
27	8.6	8.4	8.5	8.3	8.1	8.2	8.7	8.6	8.6	8.7	8.5	8.6			
28	8.7	8.5	8.5	8.2	8.0	8.1	8.6	8.5	8.6	8.7	8.5	8.6			
29	8.8	8.5	8.6	8.4	8.0	8.2	8.8	8.5	8.6	8.7	8.5	8.6			
30	8.8	8.4	8.6	8.5	8.1	8.3	8.7	8.5	8.6	8.7	8.4	8.6			
31	8.7	8.4	8.5	---	---	---	8.8	8.5	8.6	8.7	8.4	8.6			
MONTH	8.9	8.1	8.4	9.0	7.9	8.2	8.9	8.2	8.6	8.8	7.9	8.5			

DAY	MAX	MIN	MEAN	FEBRUARY			MARCH			APRIL			MAY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.6	8.3	8.5	8.5	8.3	8.4	8.6	8.2	8.4	---	---	---			
2	8.7	8.3	8.5	8.6	8.4	8.5	8.3	7.9	8.1	8.1	7.9	8.0			
3	8.7	8.4	8.5	8.5	8.3	8.4	8.0	7.8	7.9	7.9	7.7	7.8			
4	8.7	8.3	8.5	8.6	8.3	8.4	8.1	8.0	8.0	7.7	7.6	7.7			
5	8.8	8.3	8.5	8.6	8.3	8.5	8.3	8.1	8.2	7.8	7.6	7.7			
6	8.8	8.3	8.6	---	---	---	8.4	8.2	8.3	7.8	7.6	7.7			
7	8.9	8.4	8.7	8.3	8.0	8.1	8.3	7.6	8.2	7.9	7.6	7.8			
8	8.8	8.4	8.6	8.4	8.0	8.2	7.8	7.5	7.5	8.1	7.6	7.9			
9	8.8	8.3	8.6	8.5	8.0	8.3	7.6	7.5	7.6	8.2	7.7	8.0			
10	8.7	8.3	8.5	8.7	8.1	8.4	7.6	7.5	7.5	8.3	7.9	8.1			
11	8.5	8.2	8.4	8.4	8.2	8.3	8.1	7.5	7.8	8.3	8.0	8.2			
12	8.4	8.1	8.3	8.6	8.2	8.4	8.1	8.1	8.1	8.2	7.9	8.0			
13	8.3	7.9	8.2	8.6	8.3	8.4	8.1	8.1	8.1	8.2	7.9	8.0			
14	8.2	7.9	8.1	8.6	8.3	8.4	8.1	8.0	8.1	8.3	7.9	8.1			
15	8.4	8.0	8.2	8.5	8.2	8.3	8.1	7.9	8.0	8.3	8.0	8.1			
16	8.4	8.0	8.3	8.3	7.8	8.1	8.0	7.9	8.0	8.3	8.1	8.2			
17	8.5	8.4	8.5	7.8	7.7	7.8	8.0	7.9	8.0	8.3	7.9	8.0			
18	8.5	8.1	8.4	8.1	7.8	7.9	8.0	8.0	8.0	8.3	7.9	8.0			
19	8.4	8.2	8.3	8.1	7.9	8.0	8.0	7.9	8.0	8.5	7.8	8.1			
20	8.2	8.1	8.2	7.9	7.8	7.9	8.0	7.8	7.9	8.2	7.5	7.7			
21	8.3	8.2	8.2	7.8	7.8	7.8	8.0	7.9	7.9	7.6	7.6	7.6			
22	8.3	8.0	8.2	7.8	7.8	7.8	8.1	8.0	8.1	7.7	7.6	7.7			
23	8.2	7.8	8.0	7.9	7.8	7.9	8.1	8.0	8.0	7.8	7.7	7.7			
24	8.2	8.1	8.2	7.9	7.8	7.9	8.1	7.8	7.9	7.8	7.6	7.7			
25	8.2	8.0	8.1	8.0	7.8	7.9	7.9	7.8	7.8	7.7	7.7	7.7			
26	8.1	8.0	8.1	8.2	7.9	8.1	8.0	7.8	7.9	7.8	7.7	7.8			
27	---	---	---	8.2	8.0	8.1	8.2	7.9	8.0	7.8	7.7	7.8			
28	8.2	7.9	8.0	8.3	8.1	8.2	8.3	7.9	8.1	8.0	7.7	7.8			
29	8.5	7.8	8.2	8.4	8.1	8.2	---	---	---	7.9	7.8	7.9			
30	---	---	---	8.5	8.2	8.3	---	---	---	8.2	7.8	8.0			
31	---	---	---	8.6	8.2	8.4	---	---	---	---	---	---			
MONTH	8.9	7.8	8.3	8.7	7.7	8.2	8.6	7.5	8.0	8.5	7.5	7.9			



**SURFACE-WATER RECORDS**  
**Great Miami River Basin**

**03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	21.0	18.0	19.5	18.0	15.5	16.5	8.0	6.5	7.5	5.5	3.5	4.5
2	22.0	17.5	19.5	17.0	14.0	15.5	8.0	6.5	7.5	9.0	5.5	7.5
3	22.5	16.0	19.0	14.0	11.5	13.0	8.5	7.5	8.0	10.5	9.0	9.5
4	21.0	14.0	17.5	---	---	---	10.0	8.5	9.0	10.5	8.0	9.5
5	19.0	13.5	15.5	---	---	---	11.0	10.0	10.5	8.0	5.0	6.0
6	21.0	12.5	17.0	---	---	---	10.5	9.5	10.0	5.0	4.0	4.5
7	19.5	14.5	17.0	---	---	---	9.5	8.5	9.0	10.0	4.0	6.0
8	17.0	16.5	17.0	---	---	---	9.0	7.5	8.5	4.5	3.5	4.0
9	18.0	17.0	17.5	---	---	---	8.5	7.5	8.0	5.0	4.0	4.5
10	18.5	17.5	18.0	---	---	---	9.5	8.5	9.0	6.5	5.0	5.5
11	19.5	17.5	18.5	---	---	---	9.0	7.5	8.0	6.5	6.0	6.0
12	19.5	17.0	18.0	---	---	---	8.5	7.5	7.5	6.5	5.0	5.5
13	19.5	18.0	18.5	16.5	8.5	12.0	8.0	7.5	7.5	6.5	5.0	5.5
14	18.5	16.5	17.5	16.0	12.5	14.0	8.0	7.5	8.0	5.0	4.0	4.5
15	18.5	16.0	17.0	13.0	6.0	10.0	7.5	7.0	7.5	4.5	3.5	4.0
16	19.5	17.0	18.0	12.0	11.0	11.5	7.0	6.0	6.5	5.0	4.0	4.5
17	18.5	16.5	18.0	11.0	9.5	10.5	6.5	5.5	6.0	4.0	3.0	3.5
18	17.5	15.5	16.0	11.0	9.0	10.0	6.0	5.0	5.5	3.5	3.0	3.5
19	16.0	15.0	15.5	17.0	8.0	12.5	6.5	5.0	5.5	3.5	2.5	3.0
20	16.0	13.5	14.5	15.5	11.0	13.5	6.5	5.5	6.5	4.0	2.5	3.0
21	15.0	13.0	14.0	17.0	11.0	13.5	6.0	5.0	5.0	2.5	1.0	1.5
22	15.5	13.5	14.0	19.0	13.5	16.0	5.0	4.0	4.5	1.5	.5	1.0
23	14.0	12.0	13.0	---	---	---	4.5	3.5	4.0	2.5	1.5	2.0
24	13.5	11.0	12.0	14.5	13.0	14.0	3.5	2.5	3.0	2.0	.5	1.5
25	13.0	10.5	12.0	13.0	11.5	12.5	2.5	1.5	2.0	2.0	.5	1.0
26	13.5	11.0	12.5	12.5	11.5	12.0	3.0	1.5	2.0	2.0	1.0	1.5
27	13.5	11.0	12.5	11.5	10.0	10.5	2.5	2.0	2.0	1.5	.5	1.0
28	14.5	12.5	13.5	10.5	9.0	10.0	2.0	1.5	1.5	1.5	.5	1.0
29	16.0	13.5	14.5	10.0	8.5	9.0	3.5	1.5	2.5	2.0	1.0	1.5
30	16.5	14.5	15.5	9.5	7.0	8.0	4.5	2.5	3.5	2.5	1.5	2.0
31	17.0	15.0	16.0	---	---	---	5.0	3.5	4.0	3.0	1.5	2.0
MONTH	22.5	10.5	16.0	19.0	6.0	12.0	11.0	1.5	6.0	10.5	.5	4.0

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



**SURFACE-WATER RECORDS**  
**Great Miami River Basin**

**03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OHIO—Continued**

WATER-QUALITY RECORDS—CONTINUED

OXYGEN, DISSOLVED, MILLIGRAMS PER LITER, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	13.8	5.5	8.9	11.3	9.8	10.5	18.5	13.8	15.9
2	---	---	---	---	---	---	13.6	10.0	11.4	16.0	12.4	14.0
3	---	---	---	---	---	---	14.7	10.6	12.3	12.8	11.1	11.7
4	---	---	---	---	---	---	14.0	10.3	12.0	12.1	11.0	11.4
5	---	---	---	---	---	---	11.9	9.7	10.7	13.9	12.1	13.1
6	---	---	---	---	---	---	12.1	9.2	10.4	14.4	13.9	14.2
7	15.3	13.2	13.9	---	---	---	13.8	9.6	11.3	14.3	11.0	11.7
8	16.4	10.2	13.1	---	---	---	14.3	10.1	12.1	14.1	12.5	13.5
9	13.4	10.2	11.7	---	---	---	13.9	10.8	12.3	14.4	14.1	14.3
10	11.6	8.7	10.1	---	---	---	13.1	10.0	11.6	---	---	---
11	12.7	8.4	10.5	---	---	---	13.3	10.6	11.6	14.2	13.5	13.8
12	12.4	8.4	10.6	---	---	---	12.2	10.4	11.2	15.0	13.4	14.1
13	11.4	8.5	10.2	17.6	13.9	15.9	12.6	10.9	11.6	14.6	13.5	14.0
14	10.7	8.1	9.4	15.5	14.0	14.8	11.5	10.9	11.2	16.3	14.0	14.9
15	10.5	8.0	9.2	18.7	15.4	17.7	11.7	10.8	11.2	16.8	14.7	15.6
16	9.8	7.8	8.8	17.9	15.0	16.8	13.1	11.3	12.0	16.9	14.4	15.6
17	9.0	7.0	8.1	17.9	16.1	16.8	14.0	11.9	12.8	17.7	14.7	15.9
18	---	---	---	19.6	17.2	18.9	14.3	12.3	13.1	17.7	14.6	16.0
19	---	---	---	19.6	13.7	16.9	14.6	12.3	13.2	18.4	14.9	16.4
20	---	---	---	14.7	13.2	13.9	13.9	11.9	12.8	18.5	14.7	16.4
21	---	---	---	14.3	11.6	13.3	15.6	12.0	13.4	19.5	15.4	17.1
22	---	---	---	11.6	7.8	10.3	16.0	12.1	13.9	18.6	15.9	17.3
23	---	---	---	12.6	7.8	9.6	17.0	12.8	14.7	18.8	15.7	17.1
24	---	---	---	12.5	9.0	10.5	17.0	13.7	15.2	19.6	15.7	17.5
25	---	---	---	12.7	9.4	10.7	17.2	14.1	15.5	19.8	16.0	17.8
26	10.0	4.8	7.2	10.3	8.9	9.5	17.5	14.4	15.7	20.0	15.9	17.9
27	11.0	4.9	7.8	11.0	8.9	9.7	16.4	14.2	15.4	20.0	16.1	18.2
28	11.8	5.1	8.3	11.0	9.0	9.9	15.8	14.0	15.1	20.0	16.4	18.5
29	13.8	5.8	9.5	11.0	9.3	10.1	17.6	14.1	15.6	20.0	16.4	18.4
30	14.6	6.5	10.2	11.2	9.5	10.3	17.3	14.0	15.6	20.0	15.8	17.8
31	13.2	6.6	9.6	---	---	---	18.4	13.8	15.8	20.0	15.4	17.9
MONTH	16.4	4.8	9.9	19.6	5.5	12.9	18.4	9.2	12.9	20.0	11.0	15.6

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	20.0	15.3	18.1	---	---	---	17.6	11.8	14.0	---	---	---
2	20.0	15.3	18.1	---	---	---	12.4	9.6	10.8	13.7	9.9	11.4
3	20.0	15.1	17.7	---	---	---	13.3	8.5	9.6	12.8	10.6	11.6
4	20.0	14.8	17.4	---	---	---	14.6	12.7	13.5	11.7	9.8	10.6
5	20.0	14.8	17.7	---	---	---	16.3	13.6	14.6	11.1	8.7	9.8
6	20.0	15.0	18.2	---	---	---	16.2	13.1	14.4	10.8	8.0	9.2
7	20.0	---	---	13.0	10.7	11.9	13.2	10.8	12.1	9.6	7.3	8.2
8	---	---	---	14.4	9.6	11.3	11.3	7.7	9.4	8.2	6.2	7.1
9	20.0	13.9	17.9	15.6	9.3	11.7	11.0	9.1	10.1	---	---	---
10	19.2	13.4	16.4	16.0	9.4	12.1	10.5	9.6	10.2	---	---	---
11	16.5	12.8	14.4	13.2	10.5	11.7	11.5	9.9	10.9	---	---	---
12	16.4	13.6	15.3	17.5	11.5	13.9	11.2	10.7	10.9	---	---	---
13	16.1	15.3	15.7	16.5	13.1	14.6	10.7	9.8	10.5	---	---	---
14	15.4	14.9	15.2	17.3	13.1	14.8	9.8	9.1	9.5	---	---	---
15	16.1	15.3	15.8	16.8	12.4	14.2	9.1	8.0	8.6	---	---	---
16	16.5	15.1	15.8	13.2	11.3	11.7	8.0	7.0	7.4	---	---	---
17	15.6	13.9	14.9	13.2	11.5	12.4	7.1	5.7	6.4	10.2	7.5	9.2
18	14.9	12.2	13.1	14.8	12.9	13.7	5.9	5.4	5.7	10.0	7.1	8.2
19	12.2	9.5	10.6	13.8	13.1	13.5	---	---	---	11.3	6.8	8.3
20	9.5	8.1	8.8	13.1	12.6	12.9	---	---	---	8.2	7.0	7.5
21	8.1	7.1	7.6	13.1	12.7	12.9	---	---	---	8.6	7.9	8.4
22	---	---	---	13.5	12.7	13.0	---	---	---	8.9	8.3	8.5
23	---	---	---	13.5	11.9	12.8	---	---	---	8.4	7.9	8.2
24	---	---	---	13.3	11.4	12.2	10.8	8.9	10.0	8.4	7.8	8.1
25	---	---	---	13.8	10.7	12.0	10.3	9.1	9.6	8.3	7.7	8.0
26	---	---	---	15.2	10.6	12.3	10.8	9.1	9.8	8.9	7.5	8.2
27	---	---	---	14.0	10.6	11.9	11.8	9.1	10.2	8.7	7.3	7.9
28	---	---	---	14.0	11.0	12.1	13.0	9.1	10.6	9.2	7.4	8.1
29	---	---	---	16.9	11.9	13.9	13.6	9.5	11.2	10.1	6.9	9.1
30	---	---	---	17.5	12.5	14.4	---	---	---	10.4	7.6	9.5
31	---	---	---	17.8	12.2	14.3	---	---	---	11.1	7.6	9.8
MONTH	20.0	7.1	15.2	17.8	9.3	12.9	17.6	5.4	10.4	13.7	6.2	8.9



**SURFACE-WATER RECORDS**  
**Great Miami River Basin**

**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 point 63.4.

DRAINAGE AREA.—2,715 mi<sup>2</sup>.

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, on Stillwater River 26 mi upstream, on Great Miami River 26 mi upstream, and on Loramie Creek 55 mi upstream.

COOPERATION.—Eight discharge measurements furnished by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e420	374	375	407	e440	1880	1270	1620	1760	1290	874	550
2	e375	623	370	406	e450	1660	1550	2740	1710	1160	1900	688
3	e340	614	374	1720	e460	1490	1980	3660	1640	2020	2480	548
4	e310	454	407	5900	e460	1360	2910	3030	1420	4110	1570	869
5	e326	454	453	4740	e470	1240	2880	2460	1440	4810	1180	714
6	e300	453	527	2790	e470	1150	2400	2270	1630	2630	918	565
7	e473	430	467	1740	e480	1080	3700	1880	2060	1860	1240	533
8	e381	418	455	1360	481	1010	22000	1800	1680	1460	1490	494
9	e400	400	462	1160	494	965	22600	1610	1290	1230	1250	485
10	e580	396	717	1050	567	905	14200	1890	1170	1090	2000	523
11	e510	383	678	955	789	913	9850	1530	1030	1120	2250	571
12	e465	364	609	876	3860	1060	6230	1410	960	974	1400	563
13	e600	340	933	748	5240	1050	4600	1640	934	852	1000	774
14	e520	335	1110	690	7790	1080	3810	1480	986	810	791	717
15	e420	350	810	e600	6590	1020	3260	1320	1260	992	632	585
16	e420	362	802	e580	4440	2260	2860	1220	3210	881	655	519
17	e350	364	785	e540	4250	2570	3020	1140	7060	790	510	479
18	e357	371	689	e520	6140	1930	4050	1110	6220	721	653	462
19	384	380	607	e500	10000	2080	3830	2030	8530	1540	662	426
20	378	422	609	e490	7740	3290	3220	7000	6350	990	957	484
21	363	374	536	e480	4920	4640	4040	5210	5410	688	747	580
22	375	371	491	e460	3800	4070	4710	3510	8180	642	612	530
23	364	370	454	e450	3770	3100	4560	3280	5880	594	564	846
24	366	362	476	e450	3600	2490	3680	3740	3800	537	607	2060
25	374	323	429	e440	2960	2120	3010	3160	3100	498	524	5520
26	398	432	397	e440	2440	1830	2590	2310	3420	491	524	3540
27	399	449	435	e430	2350	2010	2260	2160	2730	490	1020	2630
28	384	389	406	e420	2120	1840	1940	2080	2050	505	699	1810
29	385	374	422	e430	2130	1750	1800	2450	1630	462	661	1340
30	374	369	428	e430	---	1570	1670	2590	1410	638	647	1080
31	362	---	420	e440	---	1390	---	2180	---	743	599	---
TOTAL	12453	12100	17133	32642	89701	56803	150480	75510	89950	37618	31616	31485
MEAN	402	403	553	1053	3093	1832	5016	2436	2998	1213	1020	1050
MAX	600	623	1110	5900	10000	4640	22600	7000	8530	4810	2480	5520
MIN	300	323	370	406	440	905	1270	1110	934	462	510	426
CFSM	.15	.15	.20	.39	1.14	.67	1.85	.90	1.10	.45	.38	.39
IN.	.17	.17	.23	.45	1.23	.78	2.06	1.03	1.23	.52	.43	.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2000, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	770	2094	2018	3761	2945	3871	4597	3757	3592
MAX	1814	6603	7690	7884	4820	6894	7343	11920	6770
(WY)	1996	1994	1997	1996	1997	1993	1996	1997	1993
MIN	402	403	553	867	842	1143	2124	1239	978
(WY)	2000	2000	2000	1992	1992	1992	1997	1992	1999

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1992 - 2000
ANNUAL TOTAL	696812	637491	
ANNUAL MEAN	1909	1742	2721
HIGHEST ANNUAL MEAN			4283
LOWEST ANNUAL MEAN			1742
HIGHEST DAILY MEAN	28100	Jan 23	22600
LOWEST DAILY MEAN	250	Sep 27	300
ANNUAL SEVEN-DAY MINIMUM	265	Sep 23	355
INSTANTANEOUS PEAK FLOW			26600
INSTANTANEOUS PEAK STAGE			15.65
INSTANTANEOUS LOW FLOW			122
ANNUAL RUNOFF (CFSM)	.70	.64	1.00
ANNUAL RUNOFF (INCHES)	9.55	8.73	13.62
10 PERCENT EXCEEDS	4670	3840	6230
50 PERCENT EXCEEDS	765	934	1400
90 PERCENT EXCEEDS	346	384	488

e Estimated.

**SURFACE-WATER RECORDS**  
**Great Miami River Basin**

**03272000 TWIN CREEK NEAR GERMANTOWN, OHIO**

LOCATION.—Latitude 39°38'10", longitude 84°23'48", in NW 1/4 sec. 11, T.3 N., R.4 E., Montgomery County, Hydrologic Unit 05080002, on right bank 0.3 mi downstream from Germantown Dam, 1.5 mi northwest of Germantown, Ohio, and 3 mi upstream from Little Twin Creek.

DRAINAGE AREA.—275 mi<sup>2</sup>.

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 700.24 ft above sea level. Prior to Dec. 18, 1926, nonrecording gage at site 1 mi downstream at datum 12.49 ft higher.

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.—Gage-height record and 8 discharge measurements furnished by Miami Conservancy District.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, 9,390 ft<sup>3</sup>/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 ft<sup>3</sup>/s, computed by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	6.3	6.4	3.8	e22	159	115	108	94	58	44	15
2	4.9	8.6	6.1	4.0	e22	141	125	176	83	49	46	14
3	4.8	7.7	6.0	158	e22	123	153	203	75	82	37	13
4	4.7	7.6	5.8	934	e22	115	296	155	66	463	33	15
5	4.8	7.5	6.4	353	e22	108	241	166	62	1140	28	19
6	4.6	7.2	8.1	146	e23	97	193	172	73	450	26	15
7	4.5	6.8	6.9	100	e24	88	587	166	76	213	52	14
8	4.4	6.6	6.0	76	e25	83	5580	154	61	135	50	12
9	5.3	6.6	6.1	65	e29	81	4110	131	52	105	41	12
10	6.2	7.5	7.2	58	e33	77	1190	149	46	85	39	13
11	6.5	6.8	9.4	51	e70	75	742	123	42	80	31	18
12	5.7	6.8	11	45	e150	83	508	107	41	77	25	21
13	6.0	6.7	12	42	e350	82	379	114	41	65	21	18
14	6.5	6.5	29	37	e1000	84	312	130	41	58	19	17
15	5.9	6.3	26	34	742	104	265	108	74	50	18	16
16	5.7	6.1	15	32	469	450	234	94	213	44	17	14
17	5.3	6.1	10	30	344	702	228	90	926	40	17	12
18	5.3	6.1	7.8	29	1180	335	219	89	409	36	22	11
19	5.3	6.3	6.2	e28	1650	374	187	100	350	134	25	11
20	5.2	6.9	5.6	e27	744	1440	185	334	206	146	22	12
21	5.4	7.0	5.2	e26	411	1270	341	174	360	71	18	14
22	5.7	7.1	5.2	e26	315	663	334	128	282	49	16	15
23	5.7	6.8	4.6	e25	295	424	266	201	171	40	17	14
24	5.8	6.9	4.4	e25	248	316	225	303	125	34	17	35
25	5.8	6.7	4.7	e24	224	256	191	188	126	30	17	37
26	6.2	7.5	4.4	e24	192	206	159	129	204	27	16	39
27	6.4	7.5	4.2	e23	198	220	143	118	128	25	19	49
28	6.6	7.2	4.0	e23	219	209	135	146	103	24	24	35
29	6.6	7.8	4.3	e23	180	164	124	148	82	24	23	26
30	6.5	6.6	4.2	e23	---	137	113	127	68	30	18	21
31	6.2	---	4.0	e23	---	124	---	106	---	40	16	---
TOTAL	173.8	208.1	246.2	2517.8	9225	8790	17880	4637	4680	3904	814	577
MEAN	5.61	6.94	7.94	81.2	318	284	596	150	156	126	26.3	19.2
MAX	6.6	8.6	29	934	1650	1440	5580	334	926	1140	52	49
MIN	4.4	6.1	4.0	3.8	22	75	113	89	41	24	16	11
CFSM	.02	.03	.03	.30	1.16	1.03	2.17	.54	.57	.46	.10	.07
IN.	.02	.03	.03	.34	1.25	1.19	2.42	.63	.63	.53	.11	.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2000, BY WATER YEAR (WY)

MEAN	54.6	154	290	447	452	522	482	339	236	130	71.4	40.8
MAX	718	978	1398	2669	1214	1304	1421	1237	882	636	509	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 FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1921 - 2000

ANNUAL TOTAL	64319.3	53652.9	
ANNUAL MEAN	176	147	265
HIGHEST ANNUAL MEAN			493
LOWEST ANNUAL MEAN			43.3
HIGHEST DAILY MEAN	6400	5580	8450
LOWEST DAILY MEAN	2.5	3.8	2.0
ANNUAL SEVEN-DAY MINIMUM	2.8	4.1	2.7
INSTANTANEOUS PEAK FLOW		6210	8790
INSTANTANEOUS PEAK STAGE		26.61	29.19
INSTANTANEOUS LOW FLOW		3.8	1.5
ANNUAL RUNOFF (CFSM)	.64	.53	.97
ANNUAL RUNOFF (INCHES)	8.70	7.26	13.11
10 PERCENT EXCEEDS	379	321	600
50 PERCENT EXCEEDS	24	38	81
90 PERCENT EXCEEDS	4.8	6.0	12

e Estimated.



**SURFACE-WATER RECORDS**  
**Great Miami River Basin**

**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, on northwest side of city of Middletown, Ohio.

DRAINAGE AREA.—3,134 mi<sup>2</sup>.

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.—Gage-height record and 8 discharge measurements furnished by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	439	311	345	410	e450	2110	1500	1790	2020	1420	941	614
2	331	476	348	404	e460	1880	1780	2830	1880	1280	1700	743
3	307	639	352	1190	e470	1680	2450	3750	1940	1590	2480	626
4	260	453	377	8450	e470	1540	3820	3350	1600	5120	1660	817
5	282	403	407	5260	e480	1420	3450	2790	1520	6560	1280	841
6	250	419	526	3240	e490	1330	2840	2590	1790	3570	1040	659
7	349	390	456	2060	e500	1250	3370	2180	2110	2280	1310	592
8	314	378	436	1500	e540	1170	27200	2100	1920	1730	1560	569
9	327	374	438	1290	568	1130	27700	1940	1550	1470	1460	513
10	488	359	635	1210	650	1070	16600	2120	1330	1320	1660	558
11	449	350	721	1090	931	1030	11500	1870	1210	1370	2330	626
12	408	333	587	974	3190	1190	7530	1690	1180	1240	1500	600
13	432	319	957	912	5310	1210	5270	1870	1130	1060	1120	784
14	513	290	1140	852	10600	1250	4300	1770	1150	1010	958	783
15	393	302	898	762	7830	1200	3650	1580	1340	1090	783	668
16	362	318	794	e700	4930	2400	3200	1460	2750	1040	721	538
17	340	327	846	e640	4510	3800	3200	1390	8700	975	604	512
18	331	333	728	e600	8200	2430	4150	1380	6960	911	761	496
19	345	351	636	e560	12600	2450	4170	1540	9060	1440	713	473
20	346	396	652	e540	9290	4950	3410	7300	7120	1440	951	490
21	327	357	613	e540	5630	6150	4660	5710	5750	933	882	604
22	322	341	547	e520	4210	5000	5220	3770	8700	791	739	574
23	322	344	506	e500	3970	3710	5030	3380	6570	736	654	796
24	319	336	470	e480	3900	2960	4080	3990	4100	695	677	1380
25	328	301	440	e470	3220	2520	3320	3560	3260	657	681	4890
26	349	350	399	e460	2670	2180	2850	2540	3560	626	533	3430
27	356	454	424	e450	2540	2320	2530	2310	3070	618	1010	2460
28	343	379	426	e440	2370	2230	2200	2320	2280	599	841	1850
29	339	347	412	e440	2320	2040	2030	2580	1860	546	742	1390
30	336	340	432	e440	---	1830	1900	2730	1590	712	746	1130
31	314	---	421	e440	---	1650	---	2430	---	860	680	---
TOTAL	10921	11070	17369	37824	103299	69080	174910	82610	99000	45689	33717	31006
MEAN	352	369	560	1220	3562	2228	5830	2665	3300	1474	1088	1034
MAX	513	639	1140	8450	12600	6150	27700	7300	9060	6560	2480	4890
MIN	250	290	345	404	450	1030	1500	1380	1130	546	533	473
CFSM	.11	.12	.18	.39	1.14	.71	1.86	.85	1.05	.47	.35	.33
IN.	.13	.13	.21	.45	1.23	.82	2.08	.98	1.18	.54	.40	.37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2000, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999	2000
MEAN	765	1101	2198	4373	3654	4730	5229
MAX	1759	2585	8508	8581	5289	7590	8320
(WY)	1996	1996	1997	1996	1999	1997	1996
MIN	352	369	560	1220	1370	2228	2306
(WY)	2000	2000	2000	2000	1995	2000	1997

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1994 - 2000
ANNUAL TOTAL	827761	716495	
ANNUAL MEAN	2268	1958	3105
HIGHEST ANNUAL MEAN			4724
LOWEST ANNUAL MEAN			1958
HIGHEST DAILY MEAN	32400	Jan 23	27700
LOWEST DAILY MEAN	220	Sep 16	250
ANNUAL SEVEN-DAY MINIMUM	236	Sep 15	298
INSTANTANEOUS PEAK FLOW			31900
INSTANTANEOUS PEAK STAGE			11.41
INSTANTANEOUS LOW FLOW			110
ANNUAL RUNOFF (CFSM)	.72	.62	.99
ANNUAL RUNOFF (INCHES)	9.83	8.50	13.46
10 PERCENT EXCEEDS	6030	4240	7210
50 PERCENT EXCEEDS	801	1050	1500
90 PERCENT EXCEEDS	313	349	480

e Estimated.

**SURFACE-WATER RECORDS**  
**Great Miami River Basin**

**03272700 SEVENMILE CREEK AT CAMDEN, OHIO**

LOCATION.—Latitude 39°37'45", longitude 84°38'40", Preble County, Hydrologic Unit 05080002, on right bank at downstream side of bridge on State Highway 725 in Camden, Ohio, 0.3 mi downstream from Beasley Run, and at mile 16.2.

DRAINAGE AREA.—69.0 mi<sup>2</sup>.

PERIOD OF RECORD.—December 1970 to current year (station discontinued).

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 at 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.—Gage-height record and 8 discharge measurements furnished by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	3.8	2.5	4.1	e9.4	50	34	31	17	17	17	6.4
2	2.2	6.1	2.4	4.3	e9.2	64	41	60	16	15	12	6.6
3	2.0	7.2	2.3	141	e9.2	53	48	42	14	43	15	6.3
4	2.2	4.2	2.4	292	e9.2	35	88	36	13	70	11	8.6
5	2.5	3.7	2.8	72	e9.4	32	79	43	14	207	9.4	8.6
6	2.5	3.6	4.3	43	e9.4	29	99	38	15	138	8.8	6.6
7	3.0	3.5	3.4	25	e9.8	27	429	46	12	62	29	6.3
8	3.0	3.4	4.5	20	e10	27	1650	38	11	40	18	6.1
9	3.2	3.5	1.3	18	e11	26	430	33	10	30	15	7.7
10	4.9	3.7	4.5	18	e14	24	243	36	9.7	23	21	15
11	3.5	3.6	3.3	16	e20	24	157	27	9.5	23	13	21
12	2.4	3.5	2.1	15	59	26	102	28	9.2	20	11	18
13	2.7	3.6	3.9	14	139	25	82	32	9.6	16	9.3	17
14	3.2	3.4	23	14	369	28	71	28	12	13	8.7	13
15	3.0	3.5	11	13	160	30	63	23	37	12	8.3	12
16	3.5	3.6	7.8	13	114	138	56	22	94	11	7.8	12
17	3.6	3.5	6.3	12	81	179	59	23	360	10	7.8	11
18	3.6	3.4	5.6	e12	530	104	52	23	128	9.4	11	11
19	3.6	3.4	5.6	e11	473	133	46	23	73	88	9.5	11
20	3.7	5.0	5.1	e11	176	427	53	21	50	50	7.7	13
21	3.7	4.2	4.8	e11	109	311	99	19	121	24	7.1	22
22	3.6	3.3	4.5	e11	105	170	88	19	76	18	7.5	12
23	3.7	3.1	4.5	e10	101	108	71	23	48	14	9.1	26
24	3.9	3.1	4.1	e10	71	88	60	20	37	12	7.7	25
25	4.0	2.7	3.9	e10	66	70	53	16	55	11	7.6	20
26	3.9	4.0	4.2	e9.8	56	57	44	14	35	10	7.0	43
27	4.1	5.2	4.1	e9.6	66	70	41	26	28	9.6	11	25
28	4.2	3.1	4.0	e9.6	66	57	38	47	24	9.1	9.3	19
29	4.2	2.7	4.3	e9.6	54	44	34	30	22	9.4	7.8	16
30	4.3	2.5	4.4	e9.4	---	64	29	22	19	11	7.1	14
31	3.9	---	4.4	e9.4	---	68	---	20	---	14	6.9	---
TOTAL	104.4	113.1	151.3	877.8	2915.6	2588	4439	909	1379.0	1039.5	338.4	439.2
MEAN	3.37	3.77	4.88	28.3	101	83.5	148	29.3	46.0	33.5	10.9	14.6
MAX	4.9	7.2	23	292	530	427	1650	60	360	207	29	43
MIN	2.0	2.5	1.3	4.1	9.2	24	29	14	9.2	9.1	6.9	6.1
CFSM	.05	.05	.07	.41	1.46	1.21	2.14	.42	.67	.49	.16	.21
IN.	.06	.06	.08	.47	1.57	1.40	2.39	.49	.74	.56	.18	.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2000, BY WATER YEAR (WY)

	1971	1972	1973	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
MEAN	17.6	53.7	83.6	87.1	111	136	129	109	109	60.5	34.0	18.0	9.17																	
MAX	126	266	281	265	276	344	323	421	269	138	91.6	40.9																		
(WY)	1987	1986	1991	1982	1975	1978	1996	1989	1998	1992	1979	1979																		
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

	FOR 1999 CALENDAR YEAR				FOR 2000 WATER YEAR				WATER YEARS 1971 - 2000			
ANNUAL TOTAL	15332.0				15294.3							
ANNUAL MEAN	42.0				41.8				71.1			
HIGHEST ANNUAL MEAN									117			
LOWEST ANNUAL MEAN									28.0			
HIGHEST DAILY MEAN	1060				1650				5520			
LOWEST DAILY MEAN	1.2				1.3				.81			
ANNUAL SEVEN-DAY MINIMUM	1.3				2.4				1.1			
INSTANTANEOUS PEAK FLOW					3140				20200			
INSTANTANEOUS PEAK STAGE					9.66				18.67			
INSTANTANEOUS LOW FLOW					1.3				1.2			
ANNUAL RUNOFF (CFSM)	.61				.61				1.03			
ANNUAL RUNOFF (INCHES)	8.27				8.25				14.00			
10 PERCENT EXCEEDS	92				88				156			
50 PERCENT EXCEEDS	14				14				25			
90 PERCENT EXCEEDS	1.9				3.5				3.8			

e Estimated.

**SURFACE-WATER RECORDS**  
**Great Miami River Basin**

**03274000 GREAT MIAMI RIVER AT HAMILTON, OHIO**

LOCATION.—Latitude 39°23'28", longitude 84°34'20", in NE 1/4 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 mi<sup>2</sup>

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 above sea level. 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. Water-quality data collected and published in volume 2, project data, Results from Selected Sites in the Great Miami and Little Miami River Basin.

COOPERATION.—Gage-height record and 9 discharge measurements furnished by Miami Conservancy District.

EXTREMES OUTSIDE PERIOD OF RECORD.—Maximum discharge, 352,000 ft<sup>3</sup>/s Mar. 26, 1913, gage height 38.5 ft, site and datum then in use, computed by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	644	368	383	501	e560	2430	1800	1950	2140	1630	1170	713
2	387	447	395	502	e560	2160	2220	2850	1920	1460	1630	794
3	382	714	406	2280	e560	1970	3330	3600	2040	1570	2880	829
4	357	551	427	11000	e580	1780	5270	3520	1640	5270	2080	781
5	359	459	466	5590	e580	1620	4230	2900	1580	6930	1600	1080
6	357	459	542	3650	e600	1520	3450	2710	1760	4800	1250	828
7	366	445	537	2360	e600	1400	3590	2340	1970	2850	1440	707
8	430	431	507	1720	e620	1340	31200	2220	1970	2120	1640	682
9	448	430	500	1430	655	1270	28500	2080	1620	1750	1710	651
10	651	415	617	1340	730	1260	17700	2240	1360	1560	1570	631
11	547	393	825	1260	1080	1200	12200	2090	1230	1610	2670	689
12	522	379	696	1130	2670	1370	8160	1810	1190	1490	1720	768
13	486	367	1070	1040	6260	1380	5710	2040	1160	1220	1260	810
14	662	338	1560	985	13200	1390	4700	1990	1110	1260	1060	914
15	492	334	1170	850	8630	1380	4020	1760	1310	1220	873	829
16	481	338	891	e760	5470	2720	3540	1610	2140	1210	786	687
17	460	355	920	e700	4800	5240	3380	1550	10500	1080	805	641
18	439	359	834	e680	11800	3140	4140	1540	8270	1010	899	609
19	445	370	740	e660	14900	3160	4400	1600	9090	1240	835	572
20	442	410	710	e640	10300	7380	3650	5990	7950	1890	944	544
21	422	414	738	e620	6320	7900	5060	5680	7580	1130	1010	663
22	398	382	651	e600	4780	5960	5520	3970	9050	909	859	697
23	399	375	599	e600	4370	4430	5230	3660	7500	830	771	707
24	393	373	570	e580	4290	3490	4380	3880	4800	789	740	2090
25	386	364	551	e580	3620	2970	3590	3640	3860	781	780	4870
26	386	385	488	e560	3040	2570	3080	2720	3860	752	640	4420
27	401	471	456	e560	2880	2740	2750	2490	3660	747	1310	3000
28	404	449	517	e540	2760	2750	2420	2580	2720	756	1140	2310
29	392	404	497	e540	2610	2390	2230	2740	2170	832	871	1720
30	392	388	510	e540	---	2170	2090	2810	1850	909	845	1360
31	379	---	511	e560	---	1990	---	2590	---	1220	761	---
TOTAL	13709	12367	20284	45358	119825	84470	191540	85150	109000	52825	38549	36596
MEAN	442	412	654	1463	4132	2725	6385	2747	3633	1704	1244	1220
MAX	662	714	1560	11000	14900	7900	31200	5990	10500	6930	2880	4870
MIN	357	334	383	501	560	1200	1800	1540	1110	747	640	544
CFSM	.12	.11	.18	.40	1.14	.75	1.76	.76	1.00	.47	.34	.34
IN.	.14	.13	.21	.46	1.23	.87	1.96	.87	1.12	.54	.40	.38

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2000, BY WATER YEAR (WY)

MEAN (WY)	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
MEAN	1017	1924	3219	4972	5190	6075	5867	4215	3218	2189	1394	946	7995	4382
MAX (WY)	6728	10060	13280	29460	14410	15590	13760	17390	14860	7995	7613	4382	1958	1979
MIN (WY)	1987	1973	1991	1937	1950	1963	1964	1996	1958	1958	1979	1979	445	319
MEAN	279	286	323	434	502	826	1219	602	445	335	391	319	1936	1963
MAX (WY)	1964	1935	1935	1977	1964	1941	1941	1934	1934	1936	1936	1963	1936	1963

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1927 - 2000

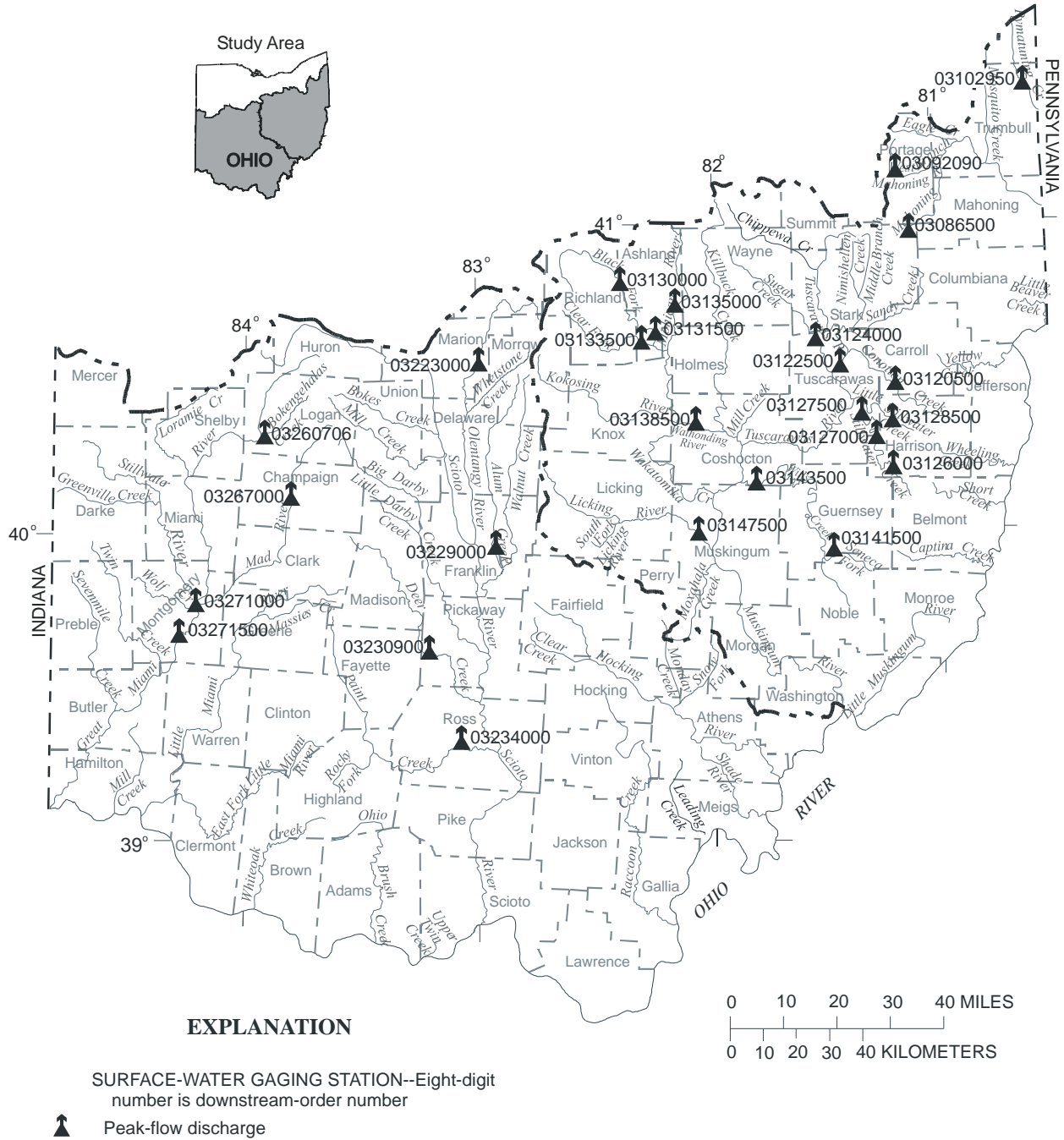
	1999 CALENDAR YEAR	2000 WATER YEAR	1927 - 2000
ANNUAL TOTAL	871535	809673	3339
ANNUAL MEAN	2388	2212	5778
HIGHEST ANNUAL MEAN			931
LOWEST ANNUAL MEAN			73900
HIGHEST DAILY MEAN	33700	31200	Jan 22 1959
LOWEST DAILY MEAN	267	334	Nov 15 1941
ANNUAL SEVEN-DAY MINIMUM	302	352	Nov 13 1941
INSTANTANEOUS PEAK FLOW		36800	Apr 8 1959
INSTANTANEOUS PEAK STAGE		71.03	Apr 8 1959
INSTANTANEOUS LOW FLOW		334	Nov 15 1941
ANNUAL RUNOFF (CFSM)	.66	.61	.92
ANNUAL RUNOFF (INCHES)	8.93	8.30	12.50
10 PERCENT EXCEEDS	6270	4820	7680
50 PERCENT EXCEEDS	896	1220	1600
90 PERCENT EXCEEDS	367	409	504

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.



**DISCHARGE AT PARTIAL-RECORD STATIONS  
AND MISCELLANEOUS SITES**

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

**MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS**

[mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; ≠, operated as a continuous-record gaging station; --, no data; e, estimated]

Location	Drainage area (mi <sup>2</sup> )	Period of record	Water year 2000 maximum			Period of record maximum		
			Date	Gage height (feet)	Discharge (ft <sup>3</sup> /s)	Date	Gage height (feet)	Discharge (ft <sup>3</sup> /s)
<b>OHIO RIVER BASIN</b>								
<b>Beaver River Basin</b>								
<u>03086500 MAHONING RIVER AT ALLIANCE, OHIO</u>								
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≠ 1994-00	04/08/00	5.02	2570	01/21/59	9.11	9740
<u>03092090 WEST BRANCH MAHONING RIVER NR RAVENNA, OHIO</u>								
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≠ 1994-00	05/19/00	4.78	668	09/14/79	8.63	2810
<u>03102950 PYMATUNING CREEK AT KINSMAN, OHIO</u>								
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≠ 1995-00	04/08/00	10.87	1020	11/06/85	12.40	2740
<b>Muskingum River Basin</b>								
<u>03120500 MCGUIRE CREEK BELOW LEESVILLE DAM, NEAR LEESVILLE, OHIO</u>								
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≠ 1992-00	04/12/00	4.50	265	03/04/40	7.88	740
<u>03122500 TUSCARAWAS RIVER BELOW DOVER DAM, NEAR DOVER, OHIO</u>								
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.	1405	1923-91≠ 1992-00	05/30/00	7.16	5640	01/26/37	15.51	26400
<u>03124000 SUGAR CREEK BELOW BEACH CITY DAM, NEAR BEACH CITY, OHIO</u>								
Latitude 40°38'08", longitude 81°33'11", Tuscarawas County, Hydrologic Unit 05040001, on right bank 1,000 ft downstream from Beach City Dam, 0.4 mi downstream from South Fork, and 1.8 mi southeast of Beach City.	300	1938-91≠ 1992-99	04/10/00	7.35	2810	7/6/69	11.26	7,520

**DISCHARGE AT PARTIAL-RECORD STATIONS  
AND MISCELLANEOUS SITES**

MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS—Continued

[mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; ≠, operated as a continuous-record gaging station; --, no data; e, estimated]

Location	Drainage area (mi <sup>2</sup> )	Period of record	Water year 2000 maximum			Period of record maximum		
			Date	Gage height (feet)	Discharge (ft <sup>3</sup> /s)	Date	Gage height (feet)	Discharge (ft <sup>3</sup> /s)
<b>Muskingum River Basin—Continued</b>								
<u>03126000 STILLWATER CREEK AT PIEDMONT, OHIO</u>								
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≠ 1992-00	04/12/00	7.17	720	12/4/50	11.44	1470
<u>03127000 STILLWATER CREEK AT TIPPECANOE, OHIO</u>								
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≠ 1992-00	04/05/00	13.66	1910	03/05/63	17.29	4410
<u>03127500 STILLWATER CREEK AT UHRICHSVILLE, OHIO</u>								
Latitude 40°23'10", longitude 81°20'50", Tuscarawas County, Hydrologic Unit 05040001, on left bank at concrete dam of Dennison Water Supply Co. at Uhrichsville, 2.2 mi upstream from Little Stillwater Creek.	367	1922-91≠ 1992-00	04/05/00	4.62	2880	08/08/35	12.80	7650
<u>03128500 LITTLE STILLWATER CREEK BELOW TAPPAN DAM, AT TAPPAN, OHIO</u>								
Latitude 40°21'25", longitude 81°13'49", Harrison County, Hydrologic Unit 05040001, on right bank 150 ft downstream from outlet of lake at Tappan Dam, 1 mi west of Tappan, and 2 mi upstream from Plum Run.	71.1	1938-91≠ 1992-00	04/12/00	6.68	455	03/13/39	10.00	1050
<u>03130000 BLACK FORK BELOW CHARLES MILL DAM, NEAR MIFFLIN, OHIO</u>								
Latitude 40°44'16", longitude 82°21'48", Ashland County, Hydrologic Unit 05040002, on left bank 700 ft downstream from Charles Mill Dam, 2.5 mi south of Mifflin, and 4 mi upstream from Rocky Fork.	217	1938-91≠ 1992-00	04/11/00	6.59	1940	03/13/64	8.45	2800
<u>03131500 BLACK FORK AT LOUDONVILLE, OHIO</u>								
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≠ 1992-00	04/08/00	9.97	3080	07/05/69	14.11	8460
<u>03133500 CLEAR FORK BELOW PLEASANT HILL DAM, NEAR PERRYVILLE, OHIO</u>								
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≠ 1992-00	04/14/00	4.55	2240	01/23/59	4.89	2340

**DISCHARGE AT PARTIAL-RECORD STATIONS  
AND MISCELLANEOUS SITES**

MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS—Continued

[mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; ≠, operated as a continuous-record gaging station; --, no data; e, estimated]

Location	Drainage area (mi <sup>2</sup> )	Period of record	Water year 2000 maximum			Period of record maximum		
			Date	Gage height (feet)	Discharge (ft <sup>3</sup> /s)	Date	Gage height (feet)	Discharge (ft <sup>3</sup> /s)
<b>Muskingum River Basin—Continued</b>								
<u>03135000 LAKE FORK BELOW MOHICANVILLE DAM, NEAR MOHICANVILLE, OHIO</u>								
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≠ 1994-00	04/08/00	9.34	1120	7/5/69	14.32	5490
<u>03138500 WALHONDING RIVER BELOW MOHAWK DAM, AT NELLIE, OHIO</u>								
Latitude 40°20'29", longitude 82°03'56", Coshocton County, Hydrologic Unit 05040003, on right bank at upstream side of bridge on U.S. Highway 36 at Nellie, 0.5 mi upstream from Mohawk Creek, and 1.7 mi downstream from Mohawk Dam.	1505	1910-13 1921-91≠ 1992-00	04/14/00	11.17	7090	01/25/37	18.80	43800
<u>03141500 SENECA FORK BELOW SENECAVILLE DAM, NEAR SENECAVILLE, OHIO</u>								
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≠ 1992-00	04/08/00	8.34	7.71	08/24/80	9.69	985
<u>03143500 WILLS CREEK BELOW WILLS CREEK DAM AT WILLS CREEK, OHIO</u>								
Latitude 40°09'34", longitude 81°50'51", Coshocton County, Hydrologic Unit 05040005, on left bank 1,200 ft. downstream from Wills Creek Dam, 1.3 mi southeast of town of Wills Creek, 2.7 mi southeast of Conesville, and 6.2 mi upstream from mouth.	842	1938-91≠ 1992-00	04/15/00	15.11	5790	03/07/40	17.40	6930
<u>03147500 LICKING RIVER BELOW DILLON DAM, NEAR DILLON FALLS, OHIO</u>								
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≠ 1992-00	03/21/00	9.88	5090	01/22/59	32.46	47000
<b>Scioto River Basin</b>								
<u>03223000 OLENTANGY RIVER NEAR CLARIDON, OHIO</u>								
Latitude 40°34'58", longitude 82°59'20", Marion County, Hydrologic Unit 05060001, on left bank 900 ft downstream from bridge on State Highway 95, 0.5 mi east of Claridon, 0.8 mi downstream from Otter Creek, and 1.4 mi upstream from Beaver Run.	157	1946-98≠ 1999-00	04/08/00	10.92	2930	01/22/59	16.77	14900
<u>03229000 ALUM CREEK AT COLUMBUS, OHIO</u>								
Latitude 39°56'42", longitude 82°56'28", Franklin County, Hydrologic Unit 05060001, on left bank 0.2 mi downstream from Livingston Avenue bridge in Columbus, and 6 mi upstream from mouth.	189	1963-98≠ 1999-00	01/03/00	7.93	3440	01/22/59	19.59	26400

**DISCHARGE AT PARTIAL-RECORD STATIONS  
AND MISCELLANEOUS SITES**

MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS—Continued

[mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; ≠, operated as a continuous-record gaging station; --, no data; e, estimated]

Location	Drainage area (mi <sup>2</sup> )	Period of record	Water year 2000 maximum			Period of record maximum		
			Date	Gage height (feet)	Discharge (ft <sup>3</sup> /s)	Date	Gage height (feet)	Discharge (ft <sup>3</sup> /s)
<b>Scioto River Basin—Continued</b>								
	03230700	<u>SCIOTO RIVER AT CIRCLEVILLE, OHIO</u>						
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.	3217	1974-79≠ 2000	04/09/00	17.25	22900	02/25/75	21.95	61500
	03230900	<u>DEER CREEK NEAR PANCOASTBURG, OHIO</u>						
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≠ 1998-00	02/22/00	6.54	2710	03/10/64	12.93	19500
	03234000	<u>PAINT CREEK NEAR BOURNEVILLE, OHIO</u>						
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≠ 1999-00	02/18/00	12.60	11500	03/10/64	20.50	56900
<b>Great Miami River Basin</b>								
	03260706	<u>BOKENGAHALAS CREEK AT DEGRAFF, OHIO</u>						
Latitude 40°18'40", longitude 83°54'45", 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.	40.4	1993-96≠ 1998-00	04/08/00	5.05	611	06/02/97	5.68	753
	03267000	<u>MAD RIVER NEAR URBANA, OHIO</u>						
Latitude 40°06'27", longitude 83°47'57", 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.	162	1925-31 1939-98≠ 1999-00	04/08/00	--	e3100	01/22/59	12.05	8000
	03271000	<u>WOLF CREEK AT DAYTON, OHIO</u>						
Latitude 39°46'00", longitude 84°14'10", Montgomery County, Hydrologic Unit 05080002, on right bank, at West Riverview Avenue Bridge, in Dayton, 1.8 mi upstream from mouth.	68.7	1938-50≠ 1986-96≠ 1998-00	04/08/00	9.30	5690	03/19/43	13.50	9950
	03271500	<u>GREAT MIAMI RIVER AT MIAMISBURG, OHIO</u>						
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.	2711	1916-20≠ 1924-35≠ 1952-95≠ 1996-00	04/09/00	13.07	26000	01/21/59	21.30	61800



**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 1999 TO SEPTEMBER 2000

[ft<sup>3</sup>/s, cubic feet per second; \*, maximum peak discharge and gage height; --, no data; b, ice jam; e, estimated]

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (feet)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (feet)
<b>OHIO RIVER BASIN</b>							
<b>Beaver River Basin</b>							
<u>03093000 EAGLE CREEK AT PHALANK STATION, OHIO</u> (Base discharge: 1,300 ft <sup>3</sup> /s)							
Jan. 5	0500	1350	10.17	Mar. 20	0600	1730	10.88
Apr. 9	0400	*1960	*11.20				
<b>Little Beaver Creek Basin</b>							
<u>03109500 LITTLE BEAVER CREEK NEAR EAST LIVERPOOL, OHIO</u> (Base discharge: 5,000 ft <sup>3</sup> /s)							
Apr. 4	1500	*6700	9.82	Apr. 8	2000	5870	9.31
<b>Yellow Creek Basin</b>							
<u>03110000 YELLOW CREEK NEAR HAMMONDSVILLE, OHIO</u> (Base discharge: 2,000 ft <sup>3</sup> /s)							
Apr. 4	2100	*1870	*5.83				
<b>Short Creek Basin</b>							
<u>03111500 SHORT CREEK NEAR DILLONVALE, OHIO</u> (Base discharge: 1,200 ft <sup>3</sup> /s)							
Feb. 14	0430	*1750	*6.38	May 28	1830	1270	5.43
<b>Wheeling Creek Basin</b>							
<u>03111548 WHEELING CREEK BELOW BLAINE, OHIO</u> (Base discharge: 1,500 ft <sup>3</sup> /s)							
Feb. 11	1300	--	*5.29b	Feb. 14	0400	*1800	4.86
<b>Captina Creek Basin</b>							
<u>03114000 CAPTINA CREEK AT ARMSTRONGS MILLS, OHIO</u> (Base discharge: 3,000 ft <sup>3</sup> /s)							
Feb. 14	1030	5920	6.67	Apr. 18	0330	4280	8.42
Feb. 19	0600	*6400	*10.00				
<b>Little Muskingum River Basin</b>							
<u>03115400 LITTLE MUSKINGUM RIVER AT BLOOMFIELD, OHIO</u> (Base discharge: 3,000 ft <sup>3</sup> /s)							
Feb. 11	1700	3530	16.14	Apr. 4	1500	4790	18.27
Feb. 14	1400	11000	24.60	Apr. 18	0430	4540	17.88
Feb. 19	0930	*12700	25.68	May 24	0530	4370	17.62
Mar. 17	0630	3100	15.31				
<b>Muskingum River Basin</b>							
<u>03115973 SCHOCALOG RUN AT COPLEY JUNCTION, OHIO</u> (Base discharge: 90 ft <sup>3</sup> /s)							
May 28	2125	*86	*12.23				
<u>03117500 SANDY CREEK AT WAYNESBURG, OHIO</u> (Base discharge: 1,800 ft <sup>3</sup> /s)							
Jan. 4	1800	2420	5.61	May 29	0900	1870	4.76
Apr. 4	2000	2780	6.11	June 13	0900	3130	6.55
Apr. 8	2300	*3620	*7.10				

**PEAK DISCHARGE AND STAGE  
AT CONTINUOUS-RECORD SURFACE DISCHARGE STATIONS**

PEAK DISCHARGES EQUAL TO OR GREATER THAN BASE DISCHARGES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000—Continued

[ft<sup>3</sup>/s, cubic feet per second; \*, maximum peak discharge and gage height; --, no data; b, ice jam; e, estimated]

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (feet)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (feet)
<b>Muskingum River Basin—Continued</b>							
<u>03118000 MIDDLE BRANCH NIMISHILLEN CREEK AT CANTON, OHIO</u> (Base discharge: 400 ft <sup>3</sup> /s)							
Apr. 4	1300	404	4.42	May 29	1300	564	5.19
Apr. 8	2400	*604	*5.28	July 15	1530	583	5.21
<u>031118500 NIMISHILLEN CREEK AT NORTH INDUSTRY, OHIO</u> (Base discharge: 400 ft <sup>3</sup> /s)							
Apr. 3	1300	2290	6.77	June 12	2000	*3820	*8.96
Apr. 8	1400	3220	8.17	July 14	2000	3300	8.28
May 28	2300	2190	6.61				
<u>03121850 HUFF RUN AT MINERAL CITY, OHIO</u> (Base discharge: 100 ft <sup>3</sup> /s)							
Jan. 4	0900	192	3.31	May 29	0200	138	3.06
Feb. 14	0645	101	2.83	July 15	0215	*1090	*5.16
Apr. 4	1400	160	3.16	Aug. 6	1245	129	3.02
Apr. 8	1800	417	4.11				
<u>03139000 KILLBUCK CREEK AT KILLBUCK, OHIO</u> (Base discharge: 2,000 ft <sup>3</sup> /s)							
Apr. 4	1900	*2540	*16.19	Apr. 9	0900	2500	16.15
<u>03140000 MILL CREEK NEAR COSHOCTON, OHIO</u> (Base discharge: 700 ft <sup>3</sup> /s)							
Jan. 4	0415	*910	*9.38				
<u>03144000 WAKATOMIKA CREEK NEAR FRAZEYSBURG, OHIO</u> (Base discharge: 1,600 ft <sup>3</sup> /s)							
Jan. 4	1500	2400	5.87	Mar. 21	0200	2190	5.61
Feb. 14	1500	2240	5.67	Apr. 8	1800	*3000	*6.57
<u>03146500 LICKING RIVER NEAR NEWARK, OHIO</u> (Base discharge: 6,500 ft <sup>3</sup> /s)							
Jan. 4	1300	8500e	--b	Apr. 4	1100	*10400	*11.56
Feb. 14	1100	7950	10.39	Apr. 8	1500	9530	11.15
Mar. 20	2100	8990	10.90				
<b>Hocking River Basin</b>							
<u>03157000 CLEAR CREEK NEAR ROCKBRIDGE, OHIO</u> (Base discharge: 1,900 ft <sup>3</sup> /s)							
Jan. 4	0515	2240	7.42	Feb. 18	2400	*3270	*9.40
Feb. 14	0300	2080	7.07				
<u>03157500 HOCKING RIVER AT ENTERPRISE, OHIO</u> (Base discharge: 3,500 ft <sup>3</sup> /s)							
Jan. 4	1500	4770	10.65	Mar. 20	2400	5250	11.30
Feb. 14	1400	5430	11.51	Apr. 4	1500	6240	12.41
Feb. 19	0800	*8040	*14.23	June 17	0415	465	7.53
<u>03158195 SNOW FORK MONDAY CREEK AT BUCHTEL, OHIO</u> (Base discharge: 250 ft <sup>3</sup> /s)							
Nov. 2	1630	283	6.39	Feb. 18	1945	902	9.68
Dec. 14	1115	495	7.70	Mar. 16	2115	377	7.01
Jan. 4	0615	504	7.75	Mar. 20	1730	870	9.54
Feb. 11	0815	361	6.91	Apr. 4	0645	347	6.82
Feb. 14	0415	*904	*9.69				
<u>03158200 MONDAY CREEK AT DOANVILLE, OHIO</u> (Base discharge: 600 ft <sup>3</sup> /s)							
Jan. 5	0015	990	11.29	June 17	1430	813	10.09
Apr. 4	--	*1610	*14.32				
<b>SHADE RIVER BASIN</b>							
<u>03159540 SHADE RIVER NEAR CHESTER, OHIO</u> (Base discharge: 2,400 ft <sup>3</sup> /s)							
Jan. 4	2100	*1920	*15.10				

**PEAK DISCHARGE AND STAGE  
AT CONTINUOUS-RECORD SURFACE DISCHARGE STATIONS**

PEAK DISCHARGES EQUAL TO OR GREATER THAN BASE DISCHARGES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000—Continued

[ft<sup>3</sup>/s, cubic feet per second;\*, maximum peak discharge and gage height; --, no data; b, ice jam; e, estimated]

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (feet)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (feet)
<b>Raccoon Creek Basin</b>							
<u>03201980 LITTLE RACCOON CREEK AT EWINGTOWN, OHIO</u> (Base discharge: 860 ft <sup>3</sup> /s)							
Feb. 15	0645	1570	12.39	Feb. 19	0545	*8450	*15.83
<u>03202000 RACCOON CREEK NEAR ADAMSVILLE, OHIO</u> (Base discharge: 3,000 ft <sup>3</sup> /s)							
Feb. 20	1700	*9290	*21.64	Mar. 23	0800	4160	14.23
<b>Scioto River Basin</b>							
<u>03219500 SCIOTO RIVER NEAR PROSPECT, OHIO</u> (Base discharge: 3,600 ft <sup>3</sup> /s)							
Apr. 8	0900	3610	8.88	Apr. 10	1600	*4310	*9.80
<u>03220000 MILL CREEK NEAR BELLEPOINT, OHIO</u> (Base discharge: 2,500 ft <sup>3</sup> /s)							
Apr. 8	1200	*5710	*9.14	No other peaks greater than base discharge			
<u>03228300 BIG WALNUT CREEK AT SUNBURY, OHIO</u> (Base discharge: 2,200 ft <sup>3</sup> /s)							
Jan. 4	0630	*4690	*10.49	Apr. 8	--	e3330	--
Feb. 14	1230	2200	8.81	May 29	0315	2770	9.28
<u>03230310 LITTLE DARBY CREEK AT WEST JEFFERSON, OHIO</u> (Base discharge: 1000 ft <sup>3</sup> /s)							
Feb. 15	0345	1210	9.21	Apr. 8	2315	*2770	*11.90
<u>03230450 HELLBRANCH RUN NEAR HARRISBURG, OHIO</u> (Base discharge: 300 ft <sup>3</sup> /s)							
Jan. 4	0600	701	7.03	Apr. 4	0245	609	6.93
Feb. 14	0548	*960	*7.60	Apr. 8	1345	806	7.35
Feb. 18	1833	639	6.99	May 29	0015	572	6.84
Mar. 20	1415	556	6.80				
<u>03230500 BIG DARBY CREEK AT DARBYVILLE, OHIO</u> (Base discharge: 4,500 ft <sup>3</sup> /s)							
Apr. 9	2100	*8930	*11.50	No other peaks greater than base discharge			
<u>03230800 DEER CREEK AT MOUNT STERLING, OHIO</u> (Base discharge: 1,900 ft <sup>3</sup> /s)							
Feb. 14	1000	2960	8.65	Apr. 9	0100	*3530	*9.09
Feb. 19	0200	2720	8.44	June 17	1300	2020	7.79
Apr. 4	0800	2290	8.05				
<u>03232000 PAINT CREEK NEAR GREENFIELD, OHIO</u> (Base discharge: 2,000 ft <sup>3</sup> /s)							
Jan. 4	0200	2180	6.52	June 18	1800	2010	6.28
Feb. 15	0900	2890	7.39	July 15	1700	2100	6.41
Feb. 18	2200	*4710	*9.17				
<b>Upper Twin Creek Basin</b>							
<u>03237280 UPPER TWIN CREEK AT MCGAW, OHIO</u> (Base discharge: 450 ft <sup>3</sup> /s)							
Sept. 26	--	e41000	--	No other peaks greater than base discharge			
<b>Ohio Brush Creek Basin</b>							
<u>03237500 OHIO BRUSH CREEK NEAR WEST UNION, OHIO</u> (Base discharge: 11,000 ft <sup>3</sup> /s)							
Feb. 14	0845	19500	15.27	Apr. 4	0400	12700	14.35
Feb. 19	0415	*55700	*25.97				

**PEAK DISCHARGE AND STAGE  
AT CONTINUOUS-RECORD SURFACE DISCHARGE STATIONS**

PEAK DISCHARGES EQUAL TO OR GREATER THAN BASE DISCHARGES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000—Continued

[ft<sup>3</sup>/s, cubic feet per second; \*, maximum peak discharge and gage height; --, no data; b, ice jam; e, estimated]

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (feet)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (feet)
<b>Whiteoak Creek Basin</b>							
<u>03238500 WHITEOAK CREEK NEAR GEORGETOWN, OHIO</u> (Base discharge: 5,500 ft <sup>3</sup> /s)							
Feb. 14	1400	9690	7.42	Apr. 8	1430	6000	6.28
Feb. 19	1730	*15700	*8.88	Aug. 10	0800	5890	6.24
Apr. 4	0830	9030	7.24	Sept. 26	0300	8540	7.10
<b>Little Miami River Basin</b>							
<u>03240000 LITTLE MIAMI RIVER NEAR OLDTOWN, OHIO</u> (Base discharge: 800 ft <sup>3</sup> /s)							
Feb. 14	0830	1040	5.05	Apr. 8	2030	*2720	*7.91
Apr. 4	1500	1060	5.10				
<u>03241500 MASSIES CREEK AT WILBERFORCE, OHIO</u> (Base discharge: 600 ft <sup>3</sup> /s)							
Apr. 8	0200	1150	6.91	July 19	1200	*1170	*6.96
<u>03245500 LITTLE MIAMI RIVER AT MILFORD, OHIO</u> (Base discharge: 15,000 ft <sup>3</sup> /s)							
Jan. 4	0100	26400	17.05	Feb. 18	2100	*28800	17.80
Feb. 14	0400	24700	16.51	Apr. 8	0800	16000	13.49
<u>03246500 EAST FORK LITTLE MIAMI RIVER AT WILLIAMSBURG, OHIO</u> (Base discharge: 5,000 ft <sup>3</sup> /s)							
Feb. 18	2230	*13900	*12.71	Apr. 4	0430	7520	9.38
Jan. 4	0530	6390	9.07	Sept. 24	1230	5320	7.94
Feb. 14	1400	10200	10.89				
<b>Great Miami River Basin</b>							
<u>03261500 GREAT MIAMI RIVER AT SIDNEY, OHIO</u> (Base discharge: 4,000 ft <sup>3</sup> /s)							
Apr. 8	1130	*4800	*8.42	No other peaks greater than base discharge			
<u>03261950 LORAMIE CREEK NEAR NEWPORT, OHIO</u> (Base discharge: 1,500 ft <sup>3</sup> /s)							
Apr. 8	1930	*1730	*10.37	No other peaks greater than base discharge			
<u>03264000 GREENVILLE CREEK NEAR BRADFORD, OHIO</u> (Base discharge: 1,500 ft <sup>3</sup> /s)							
Apr. 9	0400	*2300	*6.16	No other peaks greater than base discharge			
<u>03265000 STILLWATER RIVER AT PLEASANT HILL, OHIO</u> (Base discharge: 5,000 ft <sup>3</sup> /s)							
Apr. 8	1100	*7210	*10.65	No other peaks greater than base discharge			
<u>03267900 MAD RIVER AT ST. PARIS PIKE AT EAGLE CITY, OHIO</u> (Base discharge: 2,500 ft <sup>3</sup> /s)							
Apr. 8	0300	*6460	*14.34	No other peaks greater than base discharge			
<u>03272700 SEVENMILE CREEK AT CAMDEN, OHIO</u> (Base discharge: 1,500 ft <sup>3</sup> /s)							
Apr. 8	0045	*3140	*9.66	No other peaks greater than base discharge			

**GROUND-WATER RECORDS**  
**Ashland County**

**405303082170700. LOCAL NUMBER, AS-2**

LOCATION.—Latitude 40°53'03", longitude 82°17'07", Hydrologic Unit 05040002, Jerome Fork well field 2 mi northeast of Ashland, Ohio. Owner: Ashland Water Department.

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, Division of Water.

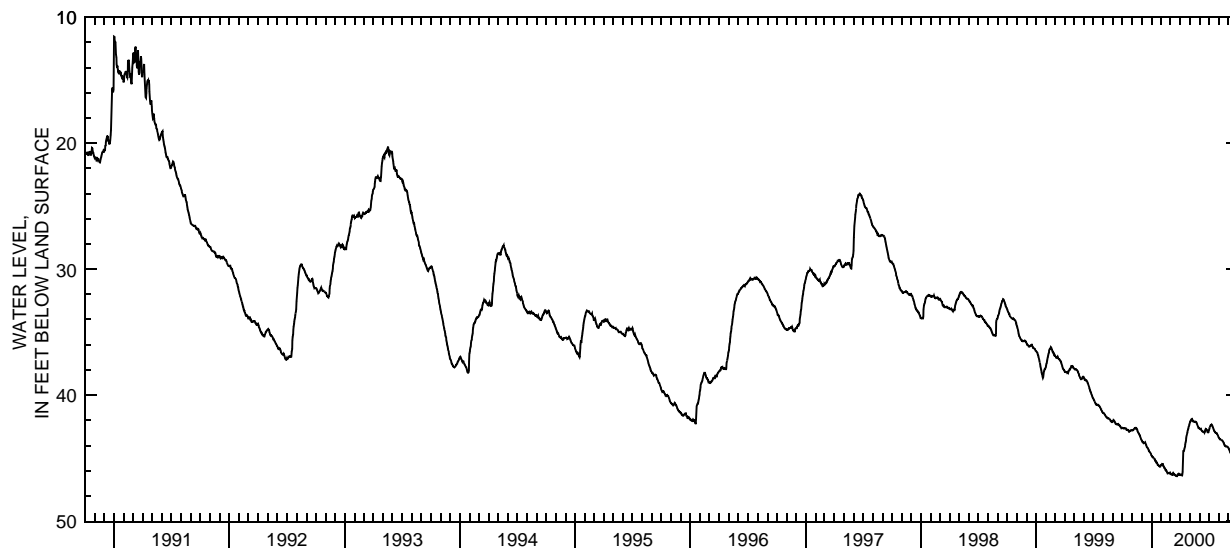
PERIOD OF RECORD.—March 1964 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 46.44 ft below land-surface datum, Mar. 21 and 22, 2000; minimum daily low, 11.56 ft below land-surface datum, Jan. 1, 1991.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42.59	42.80	43.58	44.77	45.54	46.22	46.31	42.24	42.66	42.82	43.36	44.21
2	42.63	42.79	43.66	44.85	45.53	46.24	46.31	42.15	42.69	42.71	43.40	44.25
3	42.63	42.78	43.70	44.87	45.47	46.26	46.32	42.11	42.69	42.62	43.43	44.30
4	42.63	42.77	43.73	44.89	45.49	46.29	46.36	42.04	42.68	42.56	43.47	44.39
5	42.65	42.73	43.73	44.94	45.49	46.32	46.36	42.00	42.67	42.45	43.48	44.45
6	42.65	42.71	43.77	44.94	45.47	46.31	46.35	41.95	42.73	42.39	43.53	44.50
7	42.65	42.69	43.76	44.97	45.59	46.26	46.36	41.92	42.78	42.39	43.53	44.57
8	42.63	42.66	43.77	44.98	45.61	46.21	46.30	41.90	42.81	42.37	43.54	44.62
9	42.63	42.63	43.78	45.02	45.67	46.31	46.10	41.93	42.84	42.34	43.57	44.65
10	42.62	42.61	43.81	45.07	45.70	46.31	44.94	42.02	42.86	42.36	43.58	44.68
11	42.63	42.63	43.81	45.12	45.79	46.30	44.46	42.02	42.90	42.42	43.59	44.70
12	42.66	42.61	43.77	45.13	45.80	46.23	44.45	42.03	42.91	42.47	43.59	44.71
13	42.73	42.61	43.83	45.21	45.83	46.26	44.40	42.09	42.92	42.52	43.62	44.75
14	42.73	42.65	43.91	45.22	45.91	46.29	44.30	42.10	42.93	42.58	43.66	44.79
15	42.74	42.65	43.97	45.24	45.92	46.32	44.19	42.11	42.94	42.64	43.69	44.83
16	42.76	42.72	44.03	45.34	46.00	46.34	44.08	42.11	42.95	42.71	43.75	44.88
17	42.76	42.78	44.11	45.34	46.00	46.39	43.92	42.10	42.97	42.79	43.78	44.92
18	42.77	42.87	44.15	45.40	46.03	46.39	43.77	42.12	42.88	42.85	43.87	45.00
19	42.79	42.93	44.18	45.43	46.12	46.39	43.62	42.12	42.80	42.89	43.93	45.07
20	42.83	42.98	44.21	45.50	46.17	46.42	43.44	42.11	42.73	42.91	43.98	45.14
21	42.85	43.02	44.24	45.52	46.20	46.44	43.27	42.12	42.68	42.96	44.02	45.18
22	42.90	43.07	44.29	45.53	46.18	46.44	43.18	42.15	42.71	42.98	44.03	45.20
23	42.89	43.11	44.36	45.57	46.17	46.37	43.05	42.21	42.74	42.99	44.06	45.23
24	42.88	43.18	44.44	45.60	46.19	46.30	42.94	42.26	42.76	43.00	44.07	45.26
25	42.85	43.21	44.45	45.62	46.21	46.28	42.83	42.36	42.85	43.00	44.08	45.28
26	42.81	43.29	44.52	45.66	46.19	46.30	42.72	42.42	42.90	43.03	44.08	45.29
27	42.80	43.35	44.54	45.68	46.18	46.23	42.62	42.48	42.95	43.08	44.09	45.29
28	42.80	43.47	44.57	45.68	46.18	46.23	42.52	42.57	42.96	43.12	44.09	45.31
29	42.81	43.51	44.61	45.67	46.16	46.26	42.43	42.61	42.96	43.17	44.09	45.35
30	42.81	43.54	44.67	45.60	---	46.33	42.36	42.59	42.91	43.24	44.12	45.38
31	42.81	---	44.74	45.57	---	46.33	---	42.63	---	43.31	44.16	---
MAX	42.90	43.54	44.74	45.68	46.21	46.44	46.36	42.63	42.97	43.31	44.16	45.38

CAL YR 1999   LOW 44.74  
WTR YR 2000   LOW 46.44



**GROUND-WATER RECORDS**  
**Ashland County**

**405425082173000. LOCAL NUMBER, AS-3**

LOCATION.—Latitude 40°54'25", longitude 82°17'30", Hydrologic Unit 05040002, Ashland Bates well field along Jerome Fork near Ashland, Ohio.

Owner: Ashland Water Department.

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, Division of Water.

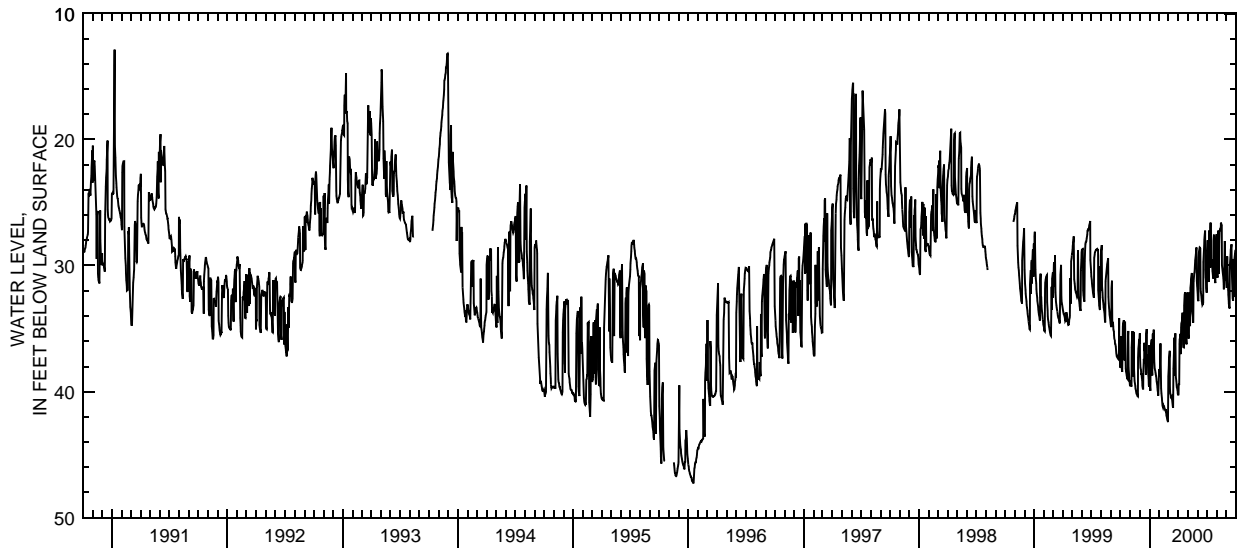
PERIOD OF RECORD.—August 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 47.29 ft below land-surface datum, Jan. 17, 1996; minimum daily low, 3.10 ft above land-surface, Feb. 23, 1978.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38.10	39.57	35.38	36.31	38.22	38.79	40.29	35.02	31.93	32.15	27.51	31.42
2	35.61	39.13	37.10	38.77	38.85	38.05	40.18	35.45	32.36	28.81	30.21	31.77
3	37.36	39.41	37.74	39.67	38.01	37.45	39.38	35.65	32.73	28.36	30.84	29.28
4	37.90	39.55	38.12	39.94	37.52	37.20	39.48	35.73	32.82	28.00	30.97	30.40
5	38.17	39.60	38.26	36.79	36.18	36.78	36.24	35.73	29.36	30.34	27.72	31.36
6	38.35	36.50	38.67	36.34	39.31	39.66	35.80	32.14	28.94	31.17	27.24	31.95
7	38.45	35.59	38.55	36.14	39.75	40.18	35.67	34.36	28.71	31.30	30.18	32.32
8	35.44	35.20	38.93	35.88	40.12	40.26	35.41	34.70	28.56	27.92	30.66	32.70
9	34.82	38.23	39.12	38.38	40.51	40.47	37.03	34.81	28.58	27.20	28.17	33.03
10	34.55	38.79	39.54	38.72	40.70	40.50	34.91	31.78	28.63	29.98	27.31	33.35
11	34.42	36.01	39.78	35.50	40.99	40.49	34.63	31.40	31.82	30.16	27.22	33.42
12	34.33	35.26	39.78	35.40	41.18	40.43	34.53	31.09	32.10	26.98	27.09	30.12
13	37.15	38.22	38.39	37.70	41.30	40.67	34.35	30.89	32.36	26.60	27.02	29.57
14	37.53	38.77	37.41	35.38	41.19	40.93	34.20	30.60	32.66	29.57	26.94	29.12
15	34.63	39.15	37.79	35.10	41.12	41.18	33.74	33.53	32.82	29.90	26.59	28.75
16	34.45	39.40	36.13	37.54	41.21	41.30	36.23	33.79	33.00	29.94	26.74	28.52
17	37.58	39.58	36.79	38.01	41.24	38.17	36.46	34.04	33.11	29.53	26.82	28.31
18	38.18	39.76	36.57	38.20	41.34	37.25	36.49	34.47	33.06	29.99	29.96	30.21
19	38.42	39.91	37.85	38.32	41.42	36.43	36.50	34.53	32.96	30.45	30.35	31.56
20	38.60	40.03	38.39	38.49	41.50	35.72	33.17	31.29	29.72	30.84	30.58	32.16
21	38.77	40.19	38.67	38.60	41.53	38.73	32.65	30.92	29.11	31.03	30.70	32.62
22	38.83	40.20	35.42	38.77	41.41	36.27	32.33	30.61	28.45	28.04	31.02	32.81
23	38.98	40.19	35.03	39.00	41.68	35.38	32.13	30.53	27.96	27.55	31.49	29.92
24	39.02	40.35	37.17	39.20	41.89	38.18	34.91	30.02	27.60	30.32	31.90	29.47
25	35.65	40.40	37.20	39.43	42.03	38.83	35.43	29.58	27.24	30.68	29.37	32.26
26	35.19	37.31	37.10	39.67	42.12	39.16	35.88	29.33	30.33	31.00	28.42	32.49
27	38.13	36.58	37.78	39.88	42.28	39.49	36.19	29.12	30.92	31.26	28.06	29.38
28	38.50	36.19	38.49	40.12	42.37	39.70	36.26	28.78	31.29	31.39	30.97	29.00
29	38.89	35.83	38.99	40.33	42.42	39.82	32.75	28.56	31.77	28.51	31.17	29.02
30	39.17	36.20	39.48	39.73	---	39.93	32.14	31.19	32.06	28.20	30.69	29.05
31	39.48	---	39.61	38.77	---	40.15	---	31.60	---	27.68	31.23	---
MAX	39.48	40.40	39.78	40.33	42.42	41.30	40.29	35.73	33.11	32.15	31.90	33.42

CAL YR 1999    LOW 40.40  
WTR YR 2000    LOW 42.42



**GROUND-WATER RECORDS**  
**Athens County**

225

**392004082071600. LOCAL NUMBER, AT-2A**

LOCATION.—Latitude 39°20'04", longitude 82°07'16", 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, 5.80 ft above land-surface datum.

REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water. Prior to water year 1978, well depth reported as 43 ft.

PERIOD OF RECORD.—March 1954 to September 1982 continuous, periodic thereafter.

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

DATE	WATER LEVEL
10/01/99	20.84
04/13/00	16.53

**GROUND-WATER RECORDS**  
**Athens County**

**392009082072200. LOCAL NUMBER, AT-5**

LOCATION.—Latitude 39°20'09", longitude 82°07'22", Hydrologic Unit 05030204, well field along Hocking River in Athens, Ohio.

Owner: Athens Water Department.

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, Division of Water.

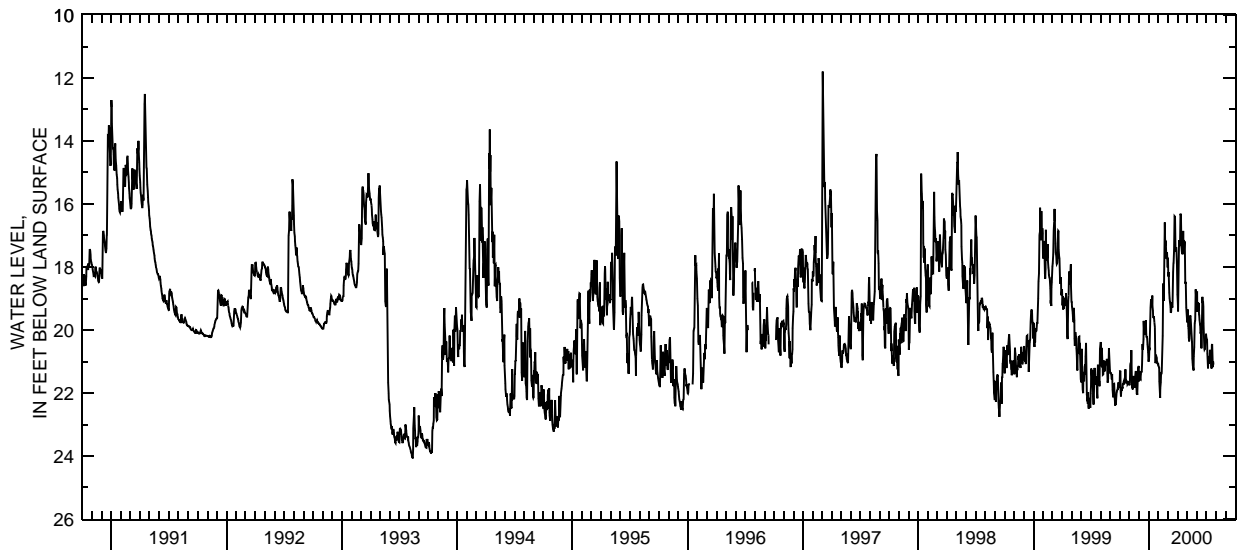
PERIOD OF RECORD.—July 1982 to current year.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.71	21.76	21.63	21.01	21.14	18.02	18.88	19.61	18.81	20.14	---	---
2	21.31	21.66	21.33	20.87	21.17	17.71	19.19	19.76	18.80	20.25	---	---
3	21.32	21.15	21.33	20.58	21.20	18.30	19.41	19.46	19.43	20.30	---	---
4	21.93	21.09	21.54	20.59	21.63	18.16	18.90	19.35	19.12	20.29	---	---
5	22.11	21.10	21.57	20.01	21.91	18.53	17.51	19.91	19.27	20.75	---	---
6	21.87	21.16	21.58	19.46	22.16	18.82	17.15	19.94	19.40	21.10	---	---
7	21.90	20.64	21.43	19.29	21.84	18.99	17.34	20.24	19.14	21.22	---	---
8	21.92	21.32	21.34	19.02	21.66	19.10	17.18	20.36	19.50	20.93	---	---
9	21.82	21.80	21.34	19.11	21.35	19.17	17.33	20.28	19.53	20.84	---	---
10	21.86	21.85	21.33	19.17	21.41	19.29	16.84	19.85	19.68	21.07	---	---
11	21.70	21.89	21.09	19.25	21.32	19.46	16.31	19.58	19.82	20.89	---	---
12	21.74	21.55	20.45	18.91	20.95	19.42	16.37	19.54	19.82	20.82	---	---
13	21.68	21.61	20.60	19.24	20.62	19.13	16.99	19.66	20.12	20.63	---	---
14	21.62	21.46	20.60	19.39	20.19	19.19	17.36	19.91	20.06	20.77	---	---
15	21.59	21.68	20.29	19.57	19.25	19.27	17.54	20.10	20.07	20.82	---	---
16	21.62	21.77	19.71	19.62	18.53	19.29	17.56	20.24	20.59	20.87	---	---
17	21.66	21.80	19.95	19.57	18.89	19.00	17.60	20.38	20.32	20.94	---	---
18	21.64	21.83	20.07	19.62	19.07	18.16	17.56	20.91	19.55	21.23	---	---
19	21.25	21.79	20.16	19.75	18.14	17.90	16.86	21.04	18.95	20.47	---	---
20	21.58	21.42	19.97	19.91	16.92	17.87	17.17	21.13	19.15	20.45	---	---
21	21.60	21.30	19.80	20.56	16.59	17.46	17.47	21.22	19.08	20.82	---	---
22	21.65	21.52	20.05	21.05	17.13	16.76	17.47	21.29	19.26	21.18	---	---
23	21.67	21.73	19.69	21.02	17.33	16.39	17.19	20.85	19.78	21.00	---	---
24	21.66	22.04	20.12	20.79	17.17	16.41	17.21	20.54	20.19	21.10	---	---
25	21.62	22.00	20.24	20.85	17.46	16.77	17.79	20.03	20.59	---	---	---
26	21.73	22.06	20.21	20.89	17.72	17.44	18.53	19.79	20.62	---	---	---
27	21.70	21.54	20.28	21.02	17.74	17.52	18.47	19.69	20.59	---	---	---
28	21.71	21.27	20.46	21.02	17.53	17.37	18.72	19.09	20.32	---	---	---
29	21.66	21.19	20.59	21.06	17.74	17.49	19.28	18.71	20.19	---	---	---
30	21.68	21.14	20.71	21.09	---	17.94	19.52	19.00	20.14	---	---	---
31	21.73	---	20.99	21.08	---	18.45	---	18.98	---	---	---	---
MAX	22.11	22.06	21.63	21.09	22.16	19.46	19.52	21.29	20.62	21.23	---	---

CAL YR 1999   LOW 22.50  
WTR YR 2000   LOW 22.16





**GROUND-WATER RECORDS**  
**Auglaize County**

227

**403233083574500. LOCAL NUMBER, AU-3**

LOCATION.—Latitude 40°32'33", longitude 83°57'45", Hydrologic Unit 05080001, 1.0 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.—Periodic measurements 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, Division of Water.

PERIOD OF RECORD.—December 1974 to September 1982 continuous, periodic 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.

WATER LEVEL  
IN FEET BELOW LAND-SURFACE DATUM  
INSTANTANEOUS OBSERVATION

DATE	WATER LEVEL
10/19/99	9.55
04/19/00	7.37

**GROUND-WATER RECORDS**  
**Belmont County**

**400118081082200. LOCAL NUMBER, B-3**

LOCATION.—Latitude 40°01'18", longitude 81°08'22", 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, Division of Water.

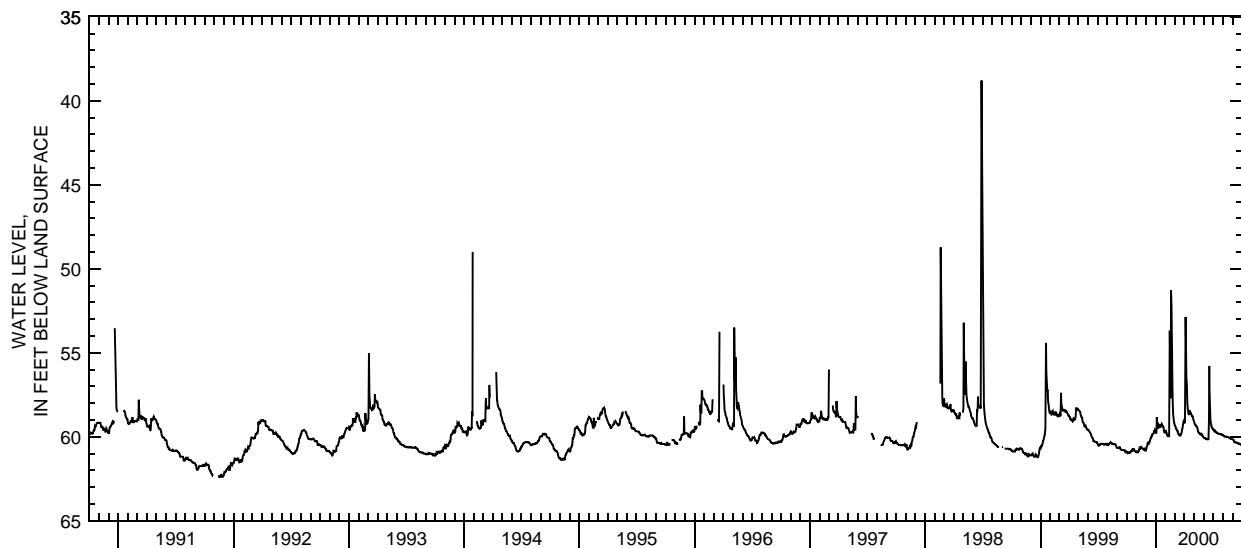
PERIOD OF RECORD.—July 19, 1984, to current year.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60.89	60.93	60.83	59.74	59.68	59.25	59.16	59.06	60.04	59.57	59.89	60.16
2	60.90	60.90	60.77	59.76	59.74	59.34	59.16	59.13	60.06	59.58	59.91	60.17
3	60.95	60.83	60.66	59.78	59.74	59.37	59.13	59.21	60.09	59.58	59.93	60.18
4	60.93	60.92	60.59	59.74	59.72	59.40	57.60	59.25	60.09	59.60	59.96	60.20
5	60.93	60.93	60.54	58.85	59.81	59.46	52.88	59.28	60.09	59.66	59.97	60.24
6	60.93	60.93	60.43	59.27	59.88	59.54	54.75	59.31	60.08	59.64	59.98	60.33
7	60.98	60.92	60.45	59.45	59.91	59.58	56.03	59.33	60.11	59.67	59.99	60.33
8	60.98	60.90	60.45	59.49	59.97	59.60	56.48	59.34	60.11	59.72	60.00	60.34
9	60.96	60.83	60.45	59.49	59.97	59.60	56.91	59.34	60.12	59.72	60.00	60.35
10	60.95	60.77	60.42	59.40	59.96	59.67	57.60	59.40	60.14	59.73	60.00	60.35
11	60.93	60.69	60.35	59.28	59.94	59.68	58.02	59.43	60.14	59.74	60.01	60.35
12	60.95	60.71	60.35	59.33	59.97	59.78	58.37	59.46	60.16	59.76	60.01	60.35
13	60.93	60.71	60.29	59.36	59.97	59.84	58.53	59.54	60.17	59.78	60.01	60.35
14	60.87	60.64	60.21	59.43	57.81	59.85	58.61	59.63	60.17	59.78	60.02	60.36
15	60.87	60.60	60.14	59.43	53.70	59.87	58.67	59.70	60.16	59.79	60.02	60.36
16	60.86	60.60	60.08	59.37	55.88	59.87	58.71	59.73	60.14	59.80	60.02	60.36
17	60.84	60.64	60.06	59.39	57.21	59.93	58.58	59.76	60.14	59.82	60.03	60.39
18	60.81	60.68	60.06	59.39	57.71	59.94	58.44	59.79	59.01	59.82	60.03	60.41
19	60.83	60.69	60.03	59.29	51.29	59.94	58.54	59.82	55.80	59.83	60.03	60.41
20	60.84	60.69	59.96	59.24	52.24	59.91	58.59	59.85	57.15	59.83	60.04	60.41
21	60.84	60.70	59.88	59.28	54.38	59.88	58.59	59.87	58.02	59.84	60.06	60.42
22	60.79	60.72	59.88	59.33	55.82	59.79	58.65	59.87	58.61	59.84	60.09	60.43
23	60.68	60.74	59.86	59.36	56.93	59.78	58.68	59.87	58.99	59.85	60.09	60.43
24	60.78	60.75	59.84	59.39	57.75	59.72	58.70	59.81	59.19	59.85	60.10	60.44
25	60.81	60.77	59.82	59.39	58.31	59.60	58.73	59.82	59.31	59.86	60.11	60.44
26	60.81	60.75	59.79	59.45	58.65	59.51	58.79	59.89	59.39	59.86	60.12	60.45
27	60.86	60.72	59.67	59.61	58.89	59.40	58.80	59.90	59.46	59.87	60.12	60.47
28	60.89	60.78	59.66	59.72	59.09	59.28	58.85	59.92	59.49	59.87	60.13	60.48
29	60.90	60.81	59.61	59.74	59.18	59.12	58.95	59.96	59.51	59.88	60.13	60.51
30	60.92	60.83	59.63	59.74	---	59.07	59.03	60.00	59.54	59.88	60.14	60.51
31	60.93	---	59.72	59.67	---	59.13	---	60.03	---	59.89	60.15	---
MAX	60.98	60.93	60.83	59.78	59.97	59.94	59.16	60.03	60.17	59.89	60.15	60.51

CAL YR 1999   LOW 60.98  
WTR YR 2000   LOW 60.98



**GROUND-WATER RECORDS**  
**Brown County**

**385932083412400. LOCAL NUMBER, BR-20**

LOCATION.—Latitude 38°59'32", longitude 83°41'24", 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, Division of Water.

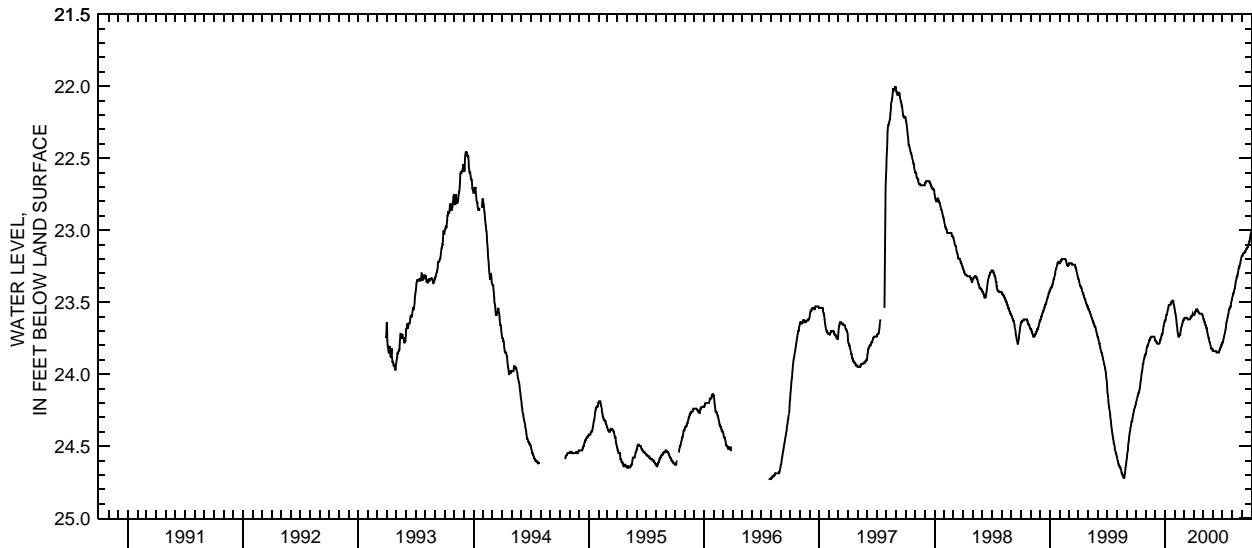
PERIOD OF RECORD.—March 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 24.73 ft below land-surface datum, July 24-31, 1996; minimum daily low, 22.00 ft below land-surface datum, Aug. 29, 1997.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.20	23.86	23.77	23.63	23.55	23.62	23.59	23.61	23.84	23.78	23.47	23.18
2	24.19	23.85	23.77	23.63	23.57	23.62	23.59	23.62	23.84	23.78	23.46	23.18
3	24.18	23.83	23.77	23.62	23.58	23.61	23.59	23.62	23.84	23.77	23.45	23.17
4	24.17	23.82	23.77	23.61	23.59	23.61	23.58	23.63	23.84	23.76	23.44	23.17
5	24.16	23.81	23.78	23.59	23.61	23.61	23.57	23.64	23.84	23.75	23.44	23.16
6	24.15	23.81	23.78	23.59	23.63	23.61	23.57	23.64	23.84	23.74	23.43	23.16
7	24.15	23.80	23.78	23.58	23.65	23.61	23.56	23.65	23.84	23.73	23.42	23.16
8	24.14	23.80	23.79	23.57	23.67	23.61	23.56	23.66	23.84	23.72	23.41	23.16
9	24.13	23.79	23.79	23.56	23.69	23.61	23.55	23.66	23.84	23.71	23.40	23.16
10	24.13	23.78	23.79	23.55	23.71	23.61	23.55	23.67	23.84	23.70	23.40	23.15
11	24.12	23.77	23.79	23.54	23.72	23.61	23.55	23.68	23.84	23.69	23.37	23.15
12	24.11	23.77	23.79	23.53	23.73	23.62	23.55	23.68	23.85	23.67	23.36	23.15
13	24.10	23.76	23.79	23.52	23.74	23.62	23.56	23.69	23.85	23.65	23.35	23.14
14	24.08	23.76	23.79	23.52	23.74	23.62	23.56	23.71	23.85	23.64	23.34	23.13
15	24.06	23.75	23.78	23.52	23.73	23.62	23.57	23.72	23.85	23.63	23.33	23.13
16	24.05	23.75	23.77	23.52	23.73	23.62	23.57	23.73	23.85	23.62	23.32	23.13
17	24.03	23.74	23.76	23.52	23.73	23.62	23.57	23.74	23.85	23.61	23.32	23.12
18	24.01	23.74	23.76	23.52	23.73	23.62	23.58	23.75	23.85	23.60	23.31	23.12
19	23.99	23.74	23.75	23.51	23.71	23.62	23.58	23.75	23.85	23.59	23.30	23.12
20	23.98	23.74	23.74	23.51	23.69	23.62	23.58	23.77	23.85	23.58	23.28	23.11
21	23.97	23.74	23.73	23.50	23.68	23.61	23.58	23.78	23.84	23.56	23.27	23.10
22	23.95	23.74	23.73	23.50	23.67	23.61	23.58	23.78	23.83	23.55	23.26	23.10
23	23.93	23.74	23.72	23.49	23.66	23.60	23.58	23.79	23.83	23.55	23.26	23.10
24	23.93	23.74	23.72	23.49	23.66	23.60	23.58	23.80	23.82	23.54	23.25	23.08
25	23.91	23.74	23.70	23.49	23.65	23.60	23.58	23.81	23.81	23.54	23.24	23.08
26	23.90	23.74	23.69	23.49	23.64	23.60	23.58	23.82	23.81	23.53	23.23	23.06
27	23.89	23.74	23.67	23.49	23.63	23.59	23.59	23.82	23.80	23.53	23.22	23.05
28	23.88	23.74	23.66	23.51	23.63	23.59	23.59	23.83	23.80	23.51	23.21	23.03
29	23.87	23.75	23.65	23.52	23.62	23.58	23.59	23.83	23.79	23.50	23.20	23.02
30	23.87	23.76	23.64	23.53	---	23.59	23.60	23.83	23.79	23.49	23.19	23.01
31	23.86	---	23.63	23.54	---	23.59	---	23.83	---	23.48	23.18	---
MAX	24.20	23.86	23.79	23.63	23.74	23.62	23.60	23.83	23.85	23.78	23.47	23.18

CAL YR 1999    LOW 24.72  
WTR YR 2000    LOW 24.20



**GROUND-WATER RECORDS**  
**Butler County**

**391805084261800. LOCAL NUMBER, BU-9**

LOCATION.—Latitude 39°18'05", longitude 84°26'18", Hydrologic Unit 05090203, 2.5 mi northwest of Sharonville, Ohio. Owner: Olinkraft, Inc.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 8 in., depth 85 ft.

INSTRUMENTATION.—Periodic measurement with chalked tape by Ohio Department of Natural Resources personnel.

DATUM.—Elevation of land-surface datum is 586.89 ft above sea level. Measuring point: Floor of instrument shelter, 4.66 ft above land-surface datum.

REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water. Prior to water year 1978, well diameter reported as 26 in.

PERIOD OF RECORD.—July 1938 to September 1982 continuous, periodic thereafter.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 24.40 ft below land-surface datum, Mar. 16, 1954; minimum daily low, 4.40 ft below land-surface datum, Aug. 3, 1958.

WATER LEVEL,  
IN FEET BELOW LAND-SURFACE DATUM  
INSTANTANEOUS OBSERVATION

DATE	WATER LEVEL
10/26/99	9.09
04/25/00	9.44

**GROUND-WATER RECORDS**  
**Butler County**

**391942084345700. LOCAL NUMBER, BU-18**

LOCATION.—Latitude 39°19'42", longitude 84°34'57", 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, Division of Water.

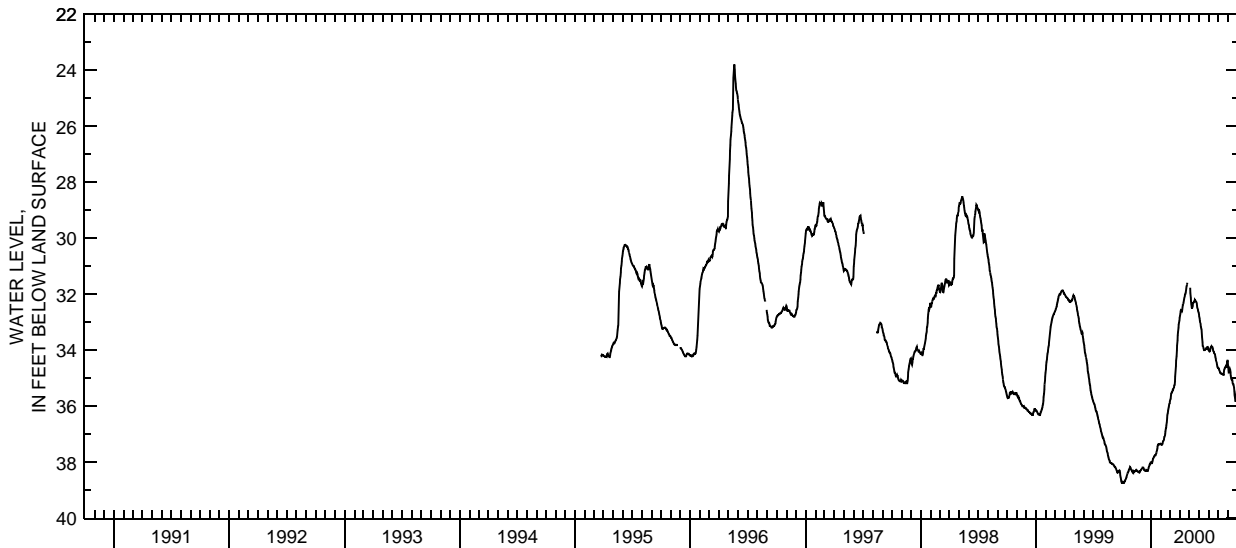
PERIOD OF RECORD.—March 24, 1995, to current year.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38.69	38.33	38.25	38.01	37.37	35.77	32.78	---	32.79	34.00	34.65	34.62
2	38.70	38.35	38.23	38.03	37.38	35.73	32.69	---	32.86	34.02	34.66	34.76
3	38.72	38.36	38.21	38.06	37.38	35.67	32.61	31.77	32.93	34.05	34.70	34.75
4	38.74	38.34	38.19	38.02	37.36	35.55	32.57	31.96	33.01	34.05	34.73	34.76
5	38.74	38.36	38.19	37.95	37.35	35.53	32.58	32.13	33.07	34.02	34.76	34.73
6	38.73	38.33	38.20	37.90	37.32	35.50	32.59	32.25	33.14	33.96	34.79	34.68
7	38.73	38.35	38.20	37.87	37.26	35.48	32.60	32.36	33.20	33.92	34.82	34.71
8	38.68	38.35	38.25	37.85	37.24	35.45	32.47	32.56	33.26	33.89	34.83	34.79
9	38.68	38.32	38.27	37.82	37.22	35.41	32.47	32.51	33.36	33.86	34.84	34.90
10	38.64	38.32	38.27	37.79	37.19	35.41	32.39	32.47	33.53	33.87	34.84	35.00
11	38.62	38.31	38.30	37.78	37.10	35.38	32.35	32.42	33.71	33.87	34.84	35.02
12	38.60	38.30	38.31	37.77	37.09	35.35	32.31	32.32	33.83	33.88	34.85	35.04
13	38.57	38.29	38.31	37.75	37.05	35.33	32.25	32.30	33.87	33.89	34.86	35.04
14	38.53	38.27	38.31	37.75	36.99	35.26	32.18	32.29	33.92	33.95	34.87	35.10
15	38.49	38.28	38.29	37.73	36.91	35.24	32.11	32.28	33.94	34.00	34.87	35.18
16	38.46	38.30	38.28	37.70	36.80	35.12	32.07	32.25	34.00	34.04	34.87	35.22
17	38.40	38.31	38.29	37.66	36.75	34.93	32.01	32.23	34.00	34.06	34.88	35.22
18	38.38	38.31	38.31	37.61	36.68	34.73	31.99	32.20	34.00	34.10	34.81	35.24
19	38.37	38.33	38.31	37.58	36.57	34.56	31.94	32.22	33.99	34.12	34.69	35.34
20	38.34	38.35	38.31	37.51	36.42	34.37	31.87	32.25	33.97	34.14	34.66	35.47
21	38.31	38.35	38.31	37.44	36.32	34.21	31.78	32.26	33.95	34.16	34.63	35.60
22	38.27	38.35	38.26	37.39	36.24	34.01	31.72	32.27	33.94	34.23	34.61	35.71
23	38.25	38.36	38.21	37.35	36.17	33.83	31.66	32.28	33.94	34.31	34.59	35.80
24	38.22	38.37	38.17	37.35	36.11	33.65	31.59	32.33	33.92	34.38	34.58	35.84
25	38.19	38.33	38.14	37.37	36.04	33.47	---	32.42	33.90	34.41	34.60	35.78
26	38.17	38.33	38.10	37.37	36.00	33.35	---	32.49	33.89	34.46	34.60	35.68
27	38.19	38.31	38.08	37.35	35.92	33.20	---	32.53	33.94	34.51	34.53	35.57
28	38.23	38.29	38.07	37.35	35.90	33.09	---	32.57	33.95	34.56	34.46	35.43
29	38.26	38.27	38.03	37.34	35.83	33.02	---	32.62	33.93	34.60	34.38	35.30
30	38.28	38.26	38.01	37.33	---	32.94	---	32.66	33.97	34.63	34.38	35.18
31	38.31	---	38.01	37.34	---	32.85	---	32.72	---	34.63	34.49	---
MAX	38.74	38.37	38.31	38.06	37.38	35.77	32.78	32.72	34.00	34.63	34.88	35.84

CAL YR 1999    LOW 38.74  
WTR YR 2000    LOW 38.74



**GROUND-WATER RECORDS**  
**Butler County**

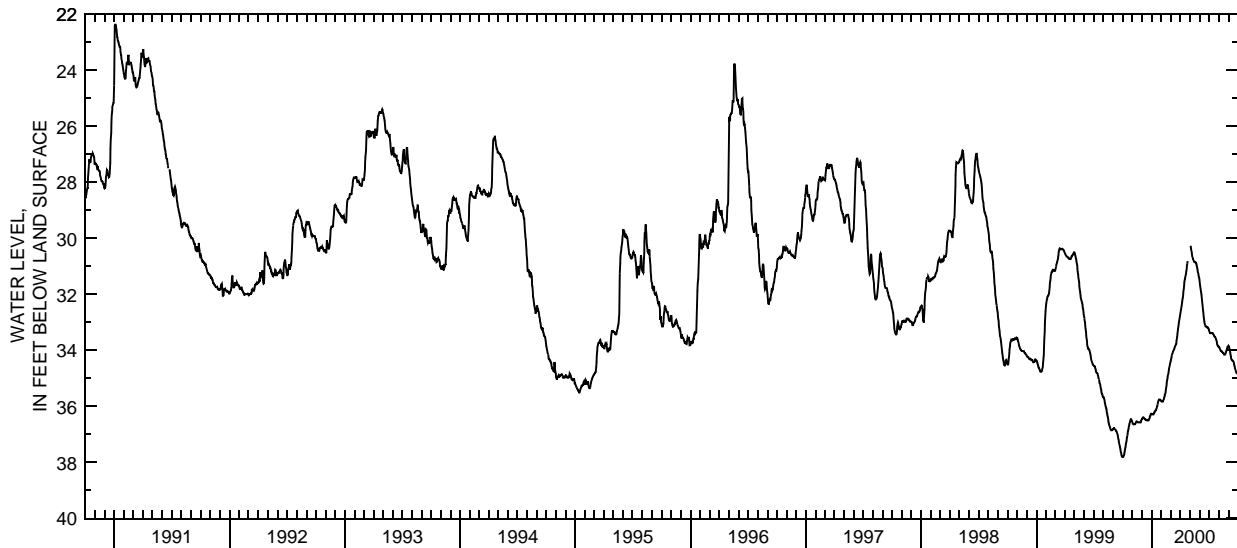
**392017084345200. LOCAL NUMBER, BU-7**

LOCATION.—Latitude 39°20'17", longitude 84°34'52", 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, Division of Water.  
 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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37.81	36.58	36.46	36.27	35.82	34.41	32.69	---	31.52	33.29	33.87	33.85
2	37.81	36.61	36.44	36.28	35.84	34.36	32.63	---	31.62	33.33	33.88	33.88
3	37.80	36.63	36.42	36.29	35.84	34.32	32.57	30.27	31.71	33.37	33.91	33.92
4	37.78	36.64	36.40	36.29	35.84	34.25	32.50	30.30	31.79	33.39	33.94	33.96
5	37.75	36.65	36.39	36.29	35.84	34.19	32.42	30.37	31.87	33.39	33.96	34.02
6	37.71	36.65	36.39	36.29	35.81	34.14	32.34	30.43	31.94	33.39	33.99	34.09
7	37.65	36.65	36.40	36.28	35.78	34.10	32.26	30.49	32.01	33.39	34.02	34.14
8	37.59	36.64	36.42	36.26	35.75	34.07	32.19	30.58	32.11	33.39	34.03	34.21
9	37.54	36.64	36.44	36.24	35.72	34.04	32.11	30.65	32.21	33.39	34.03	34.28
10	37.48	36.63	36.45	36.21	35.68	34.01	32.01	30.70	32.32	33.38	34.04	34.32
11	37.41	36.60	36.46	36.19	35.64	33.99	31.91	30.73	32.44	33.38	34.05	34.35
12	37.34	36.57	36.47	36.17	35.60	33.97	31.79	30.76	32.57	33.38	34.07	34.36
13	37.27	36.55	36.48	36.15	35.56	33.94	31.68	30.79	32.67	33.39	34.08	34.37
14	37.20	36.54	36.49	36.14	35.51	33.90	31.57	30.82	32.79	33.41	34.09	34.37
15	37.12	36.54	36.49	36.13	35.44	33.87	31.48	30.84	32.89	33.44	34.10	34.38
16	37.05	36.56	36.49	36.10	35.35	33.84	31.42	30.85	32.97	33.45	34.11	34.40
17	36.98	36.57	36.49	36.06	35.26	33.82	31.36	30.85	33.04	33.47	34.14	34.43
18	36.91	36.57	36.50	36.02	35.17	33.79	31.31	30.86	33.09	33.50	34.16	34.47
19	36.84	36.57	36.51	35.98	35.08	33.75	31.25	30.86	33.12	33.52	34.16	34.53
20	36.79	36.57	36.51	35.94	35.00	33.68	31.18	30.87	33.14	33.53	34.16	34.59
21	36.72	36.57	36.51	35.88	34.94	33.60	31.09	30.89	33.15	33.54	34.15	34.63
22	36.67	36.58	36.50	35.82	34.88	33.50	31.00	30.93	33.16	33.57	34.12	34.68
23	36.63	36.58	36.49	35.78	34.82	33.41	30.91	30.97	33.16	33.60	34.09	34.73
24	36.58	36.58	36.47	35.76	34.76	33.32	30.82	31.02	33.17	33.63	34.05	34.76
25	36.53	36.58	36.44	35.76	34.69	33.23	---	31.09	33.18	33.68	34.01	34.79
26	36.49	36.58	36.40	35.76	34.62	33.15	---	31.16	33.19	33.74	33.97	34.81
27	36.46	36.58	36.36	35.76	34.56	33.06	---	31.23	33.19	33.79	33.94	34.82
28	36.46	36.55	36.34	35.77	34.51	32.98	---	31.28	33.21	33.83	33.90	34.82
29	36.48	36.51	36.30	35.78	34.46	32.91	---	31.33	33.22	33.85	33.87	34.82
30	36.51	36.48	36.28	35.79	---	32.84	---	31.38	33.25	33.86	33.86	34.81
31	36.55	---	36.26	35.80	---	32.77	---	31.44	---	33.86	33.86	---
MAX	37.81	36.65	36.51	36.29	35.84	34.41	32.69	31.44	33.25	33.86	34.16	34.82

CAL YR 1999 LOW 37.81  
 WTR YR 2000 LOW 37.81



**GROUND-WATER RECORDS**  
**Butler County**

**392048084311400. LOCAL NUMBER, BU-8**

LOCATION.—Latitude 39°20'48", longitude 84°31'14", Hydrologic Unit 05080002, Symmes and Gilmore Road, east of Hamilton, Ohio. Owner: Hamilton Water Department.

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, Division of Water.

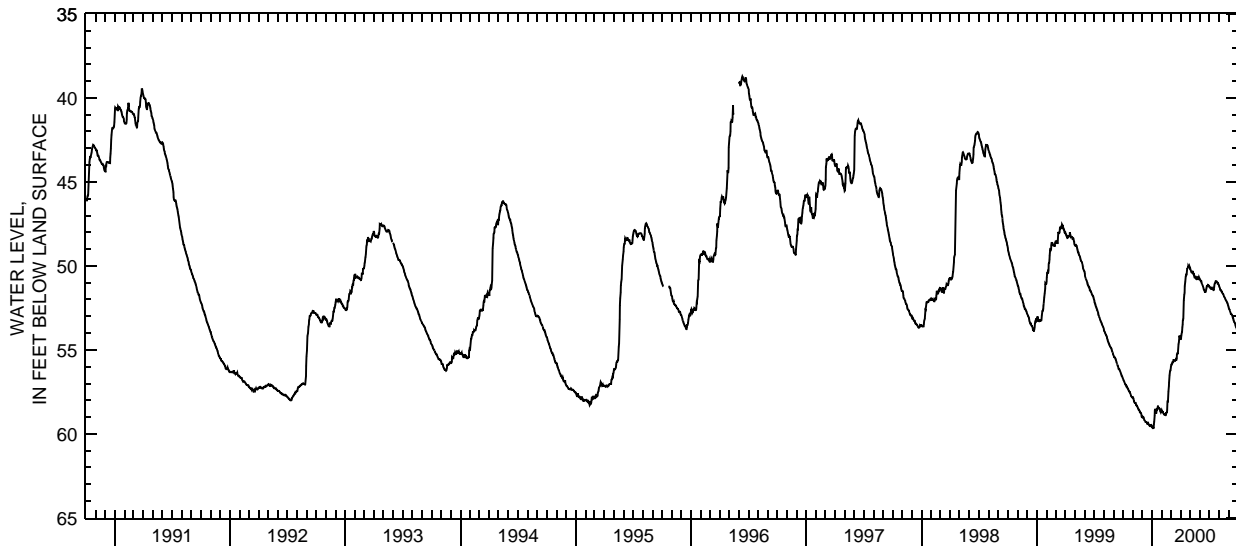
PERIOD OF RECORD.—April 1944 to current year.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56.72	57.86	59.02	59.61	58.61	55.98	54.36	50.16	50.82	51.26	51.23	52.55
2	56.77	57.85	59.02	59.62	58.67	55.88	54.29	50.25	50.84	51.28	51.28	52.59
3	56.81	57.91	58.99	59.63	58.67	55.88	54.12	50.32	50.90	51.29	51.34	52.62
4	56.86	57.99	59.01	59.61	58.65	55.82	53.98	50.35	50.91	51.32	51.42	52.67
5	56.90	58.05	59.01	59.65	58.74	55.74	53.93	50.38	50.90	51.34	51.45	52.77
6	56.95	58.10	59.06	59.64	58.78	55.74	53.64	50.39	50.99	51.34	51.45	52.83
7	57.01	58.14	59.13	59.41	58.80	55.74	53.49	50.38	51.08	51.36	51.48	52.85
8	57.04	58.15	59.19	59.28	58.84	55.72	53.24	50.34	51.11	51.38	51.52	52.86
9	57.06	58.15	59.22	58.91	58.84	55.60	53.14	50.34	51.16	51.38	51.53	52.88
10	57.07	58.16	59.23	58.60	58.82	55.60	52.42	50.45	51.21	51.33	51.58	52.91
11	57.14	58.24	59.29	58.51	58.81	55.60	52.06	50.49	51.27	51.35	51.62	52.95
12	57.17	58.30	59.29	58.62	58.86	55.62	51.71	50.47	51.33	51.40	51.64	52.99
13	57.17	58.31	59.29	58.66	58.86	55.65	51.62	50.54	51.40	51.44	51.66	53.08
14	57.23	58.31	59.29	58.76	58.73	55.65	51.19	50.65	51.45	51.45	51.71	53.12
15	57.25	58.36	59.30	58.76	58.77	55.62	50.94	50.69	51.47	51.43	51.76	53.20
16	57.28	58.40	59.35	58.54	58.72	55.56	50.74	50.70	51.51	51.24	51.82	53.28
17	57.31	58.46	59.37	58.55	58.70	55.60	50.65	50.68	51.56	51.07	51.84	53.33
18	57.37	58.49	59.41	58.53	58.58	55.60	50.52	50.66	51.56	51.04	51.87	53.37
19	57.43	58.52	59.41	58.42	58.07	55.51	50.52	50.70	51.53	51.00	51.93	53.39
20	57.48	58.55	59.39	58.31	58.07	55.25	50.48	50.77	51.48	50.96	51.97	53.42
21	57.49	58.57	59.43	58.42	57.85	55.21	50.17	50.79	51.34	50.91	52.02	53.54
22	57.49	58.61	59.46	58.45	57.48	55.22	50.15	50.79	51.24	50.90	52.05	53.59
23	57.50	58.65	59.48	58.46	57.15	55.19	50.13	50.78	51.21	50.91	52.07	53.61
24	57.59	58.71	59.50	58.50	56.92	54.95	50.07	50.68	51.20	50.92	52.11	53.65
25	57.64	58.73	59.54	58.50	56.63	54.66	50.00	50.70	51.15	50.95	52.17	53.68
26	57.68	58.73	59.54	58.54	56.51	54.56	50.03	50.77	51.13	50.99	52.19	53.75
27	57.75	58.75	59.48	58.64	56.26	54.36	50.03	50.78	51.16	51.04	52.21	53.76
28	57.79	58.84	59.48	58.70	56.22	54.14	50.01	50.74	51.17	51.04	52.28	53.76
29	57.81	58.92	59.47	58.71	56.21	54.27	50.08	50.69	51.17	51.07	52.35	53.77
30	57.83	59.00	59.51	58.66	---	54.33	50.16	50.74	51.22	51.11	52.42	53.77
31	57.86	---	59.58	58.59	---	54.36	---	50.77	---	51.16	52.48	---
MAX	57.86	59.00	59.58	59.65	58.86	55.98	54.36	50.79	51.56	51.45	52.48	53.77

CAL YR 1999   LOW 59.58  
WTR YR 2000   LOW 59.65



**GROUND-WATER RECORDS**  
**Butler County**

**392737084291300. LOCAL NUMBER, BU-16**

LOCATION.—Latitude 39°27'37", longitude 84°29'13", 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, Division of Water. Prior to 1992 published as 392733084293000.

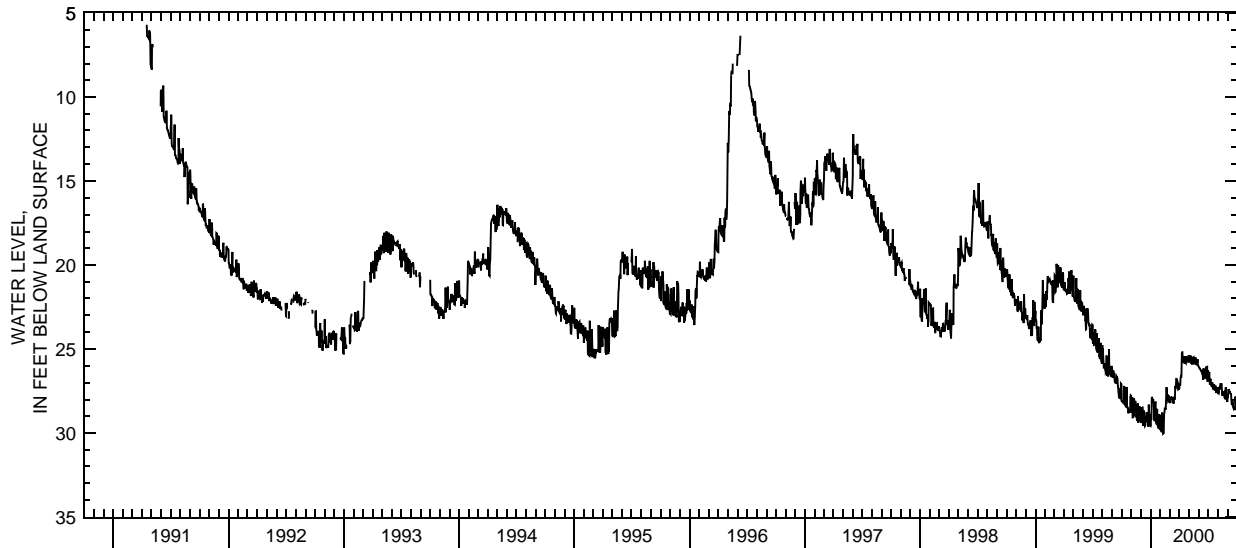
PERIOD OF RECORD.—May 1982 to July 1987, April 1991 to current year.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.08	28.67	29.37	29.58	29.78	28.18	27.36	25.71	26.03	26.28	27.35	27.92
2	28.10	28.73	29.36	29.15	28.95	28.18	27.06	25.76	26.08	26.67	27.69	27.86
3	28.13	28.79	28.52	29.22	29.83	28.17	27.13	25.74	26.12	26.72	27.56	27.47
4	28.15	27.87	28.52	29.04	29.90	28.17	27.13	25.37	26.13	26.72	27.58	27.39
5	28.14	29.07	28.52	27.86	29.91	27.83	26.68	25.79	26.16	26.36	27.35	27.47
6	28.20	29.06	28.50	27.93	28.79	27.88	26.63	25.74	26.21	27.05	27.38	27.53
7	28.18	29.06	28.55	28.02	29.06	27.90	26.70	25.40	26.24	27.11	27.36	27.57
8	27.29	28.82	29.51	28.10	29.06	27.90	26.64	25.82	26.27	26.83	27.23	27.56
9	27.30	27.95	29.57	27.98	29.08	27.93	25.28	25.82	26.30	26.83	27.11	27.62
10	27.29	28.01	28.70	28.13	30.05	28.04	25.16	25.85	26.34	27.13	27.05	27.65
11	28.23	28.97	28.70	28.18	30.02	27.92	25.20	25.59	26.34	27.17	27.11	27.68
12	28.31	29.00	28.82	29.15	29.68	27.90	25.61	25.86	26.42	27.17	27.09	27.65
13	28.37	28.10	29.45	29.24	28.88	28.22	25.63	25.85	26.40	27.23	27.09	27.98
14	28.40	28.13	29.57	29.30	28.70	28.22	25.73	25.52	26.45	27.24	27.47	28.33
15	28.43	28.31	29.52	28.22	28.50	27.98	25.82	25.52	26.78	26.99	27.75	28.20
16	28.43	29.01	29.15	28.18	28.53	27.95	25.43	25.49	26.83	27.26	27.75	28.35
17	27.26	29.03	29.12	28.18	28.59	28.02	25.82	25.85	26.16	27.38	27.60	28.13
18	28.41	29.12	29.15	29.38	28.61	27.95	25.82	25.83	26.58	27.38	27.57	28.38
19	28.47	29.24	29.16	29.43	28.02	27.21	25.52	25.86	26.57	27.13	27.56	28.49
20	28.47	29.27	28.76	29.42	27.27	27.38	25.80	25.58	26.63	27.40	27.60	28.49
21	28.55	28.25	29.37	28.62	27.38	27.29	25.83	25.79	26.63	27.13	27.57	28.58
22	28.61	28.29	29.24	28.62	27.74	26.78	25.44	25.49	26.72	27.47	27.88	28.56
23	28.83	29.38	29.28	29.52	27.88	26.78	25.50	25.82	26.73	27.27	27.88	28.58
24	28.63	28.79	29.25	29.61	27.71	26.83	25.61	25.85	26.10	27.23	27.95	28.46
25	28.58	28.77	29.63	29.63	27.98	26.88	25.65	25.88	26.08	27.23	27.95	28.52
26	28.79	28.43	28.31	29.70	28.07	26.93	25.73	25.93	26.12	27.53	27.29	27.84
27	28.73	29.10	28.46	29.76	28.02	26.99	25.70	25.93	26.15	27.62	27.68	28.20
28	28.71	28.44	29.00	28.89	27.78	27.35	25.73	25.67	26.12	27.32	27.71	28.55
29	27.83	29.27	28.93	28.92	28.11	27.32	25.73	25.61	26.90	27.32	27.93	28.55
30	27.77	29.34	28.90	28.97	---	27.03	25.38	25.97	26.90	27.32	28.07	28.53
31	27.80	---	29.57	29.78	---	27.38	---	26.00	---	27.62	28.15	---
MAX	28.83	29.38	29.63	29.78	30.05	28.22	27.36	26.00	26.90	27.62	28.15	28.58

CAL YR 1999    LOW 29.63  
WTR YR 2000    LOW 30.05





**GROUND-WATER RECORDS**  
**Butler County**

**392743084295500. LOCAL NUMBER, BU-17**

LOCATION.—Latitude 39°27'43", longitude 84°29'55", Hydrologic Unit 05080002, southwest of Trenton, Ohio. Owner: Southwest Regional Water District.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled test water -able 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, Division of Water. Prior to 1992 published as 392733084293000.

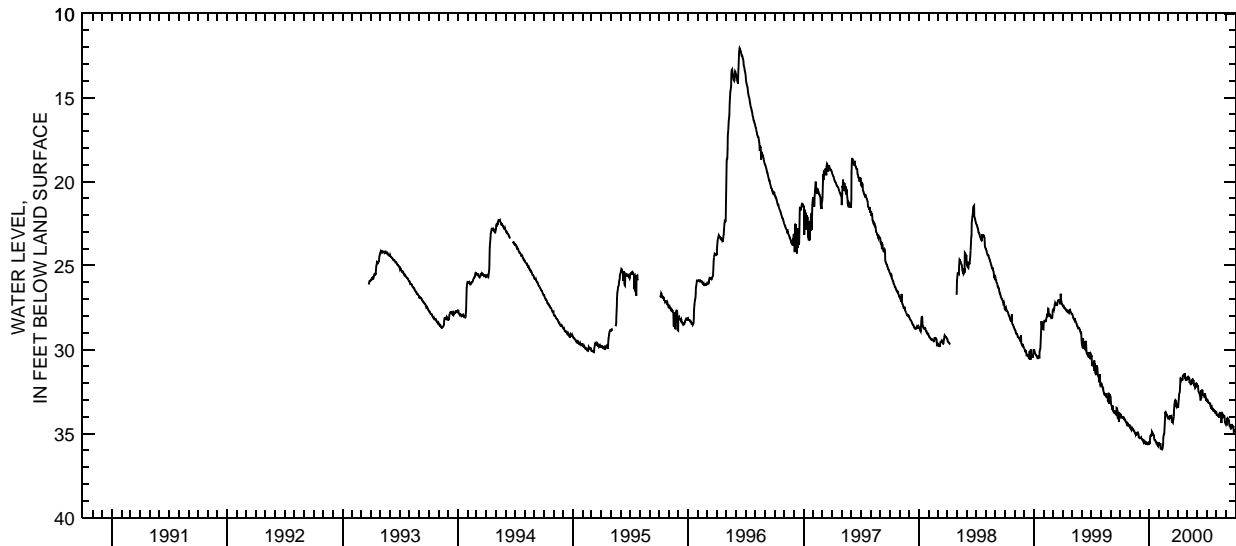
PERIOD OF RECORD.—March 1993 to current year.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33.87	34.63	35.27	35.55	35.57	34.10	33.42	31.61	32.09	32.94	33.74	34.44
2	33.87	34.68	35.27	35.55	35.72	34.10	33.42	31.68	32.13	33.06	33.88	34.41
3	33.87	34.71	35.28	35.63	35.58	34.08	33.12	31.61	32.16	33.07	33.88	34.43
4	34.00	34.70	35.31	35.34	35.63	34.02	32.94	31.61	32.18	33.09	33.88	34.10
5	33.98	34.77	35.25	35.13	35.64	34.08	32.63	31.67	32.46	33.06	33.90	34.08
6	34.03	34.80	35.22	35.09	35.64	34.05	32.57	31.71	32.53	33.17	33.93	34.13
7	34.03	34.74	35.27	35.10	35.88	34.05	32.53	31.71	32.58	33.18	33.92	34.19
8	34.05	34.65	35.30	35.12	35.88	33.95	32.30	31.98	32.61	33.18	33.95	34.17
9	34.07	34.68	35.34	35.04	35.90	33.95	31.79	31.93	32.66	33.18	33.88	34.23
10	34.08	34.71	35.37	34.89	35.93	33.99	31.82	31.98	32.73	33.18	33.93	34.26
11	34.02	34.77	35.38	34.92	35.94	33.98	31.74	31.95	32.75	33.24	34.03	34.53
12	34.02	34.78	35.37	34.98	35.90	33.96	31.77	32.07	33.03	33.23	33.93	34.53
13	34.10	34.82	35.46	35.01	35.84	34.29	31.76	32.07	32.43	33.36	34.02	34.56
14	34.14	34.83	35.52	35.07	35.60	34.28	31.79	32.04	32.90	33.41	33.74	34.65
15	34.17	34.89	35.46	35.07	35.22	34.31	31.80	31.80	32.55	33.38	33.78	34.67
16	34.17	34.92	35.50	35.10	35.09	34.35	31.79	31.79	32.55	33.45	34.00	34.71
17	34.17	34.97	35.45	35.30	35.03	34.26	31.56	31.83	32.42	33.42	34.38	34.70
18	34.25	35.00	35.53	35.37	34.98	34.14	31.55	31.82	32.43	33.53	33.85	34.43
19	34.29	35.00	35.53	35.40	34.56	33.99	31.53	32.04	32.66	33.54	33.81	34.50
20	34.34	35.06	35.48	35.40	34.08	33.57	31.56	31.83	32.69	33.48	33.85	34.52
21	34.35	35.00	35.50	35.43	33.74	33.32	31.58	31.86	32.70	33.57	34.08	34.57
22	34.43	35.03	35.61	35.46	33.71	33.09	31.50	32.10	32.72	33.56	33.88	34.60
23	34.50	35.00	35.67	35.49	33.84	33.03	31.41	32.15	32.73	33.69	33.90	34.57
24	34.52	35.01	35.58	35.57	33.82	33.00	31.71	32.16	32.84	33.60	33.96	34.55
25	34.41	34.97	35.60	35.55	33.85	33.03	31.67	32.22	32.88	33.62	33.96	34.85
26	34.44	34.89	35.50	35.60	33.90	33.06	31.79	32.27	32.61	33.66	33.96	34.83
27	34.49	35.00	35.58	35.68	33.92	33.38	31.77	32.25	32.75	33.69	34.02	34.85
28	34.50	35.04	35.61	35.70	34.00	33.42	31.80	32.22	32.84	33.69	34.32	34.91
29	34.52	35.19	35.58	35.73	34.00	33.35	31.80	31.98	32.96	33.78	34.32	34.88
30	34.55	35.19	35.61	35.76	---	33.32	31.79	32.03	32.94	33.78	34.44	34.91
31	34.53	---	35.61	35.52	---	33.36	---	32.06	---	33.75	34.47	---
MAX	34.55	35.19	35.67	35.76	35.94	34.35	33.42	32.27	33.03	33.78	34.47	34.91

CAL YR 1999    LOW 35.67  
WTR YR 2000    LOW 35.94



**GROUND-WATER RECORDS**  
**Butler County**

**392939084231700. LOCAL NUMBER, BU-3**

LOCATION.—Latitude 39°29'39", longitude 84°23'17", 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, Division of Water.

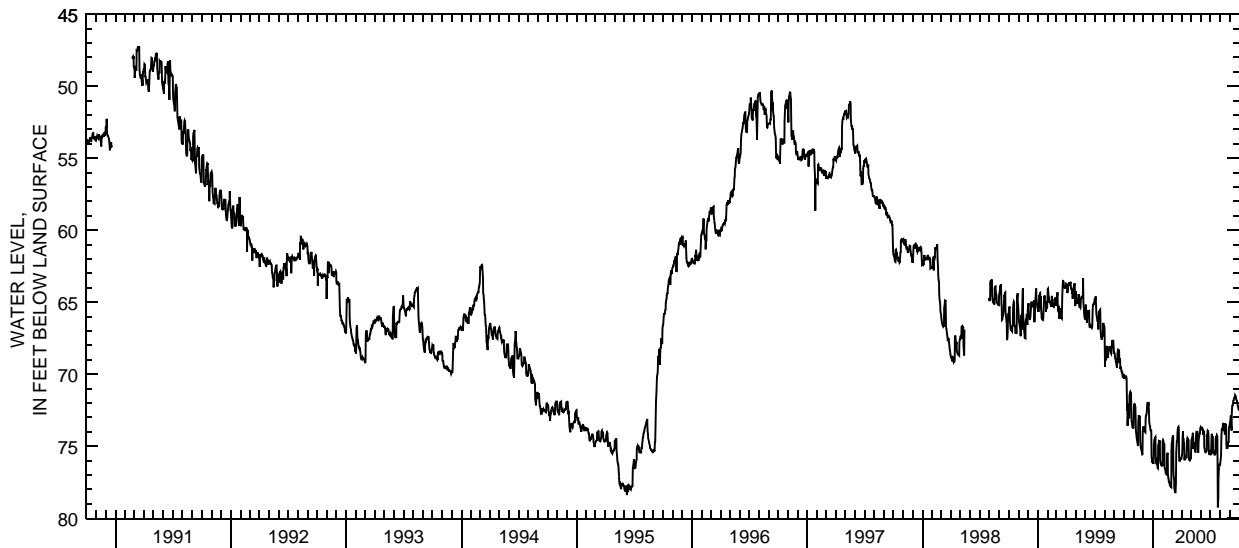
PERIOD OF RECORD.—July 1938 to current year.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70.22	73.72	73.72	76.13	74.63	74.78	75.72	75.70	73.75	75.46	76.29	73.44
2	70.21	72.10	73.61	76.13	74.56	74.63	75.61	74.56	73.74	75.62	76.08	73.30
3	70.29	72.08	73.72	76.22	74.66	74.47	75.59	74.48	73.74	75.42	75.85	72.98
4	70.12	72.07	73.90	74.90	74.80	74.32	74.32	74.45	73.72	75.43	75.64	72.85
5	70.17	72.10	73.90	74.68	74.88	74.25	73.95	74.59	73.66	74.22	74.36	73.49
6	70.18	72.21	73.96	74.52	74.88	76.64	74.42	74.24	73.86	74.13	73.89	73.91
7	70.21	72.29	73.97	74.49	76.45	77.11	74.49	74.07	73.86	74.32	73.74	72.67
8	70.17	73.89	74.02	74.38	76.58	77.29	74.75	75.17	74.20	74.32	73.86	72.33
9	70.20	74.02	73.13	74.35	76.66	77.89	74.76	74.98	73.99	74.35	73.87	72.16
10	70.29	74.23	72.89	75.88	76.75	78.03	75.98	74.71	74.03	75.37	73.39	72.15
11	72.50	74.53	72.84	76.02	76.93	78.10	75.74	74.98	73.92	75.33	73.45	72.01
12	72.02	74.56	72.70	75.98	76.90	78.25	75.71	75.05	75.06	75.41	73.67	71.84
13	73.58	74.70	72.63	76.22	76.84	78.14	75.74	75.28	75.17	75.48	73.48	71.82
14	72.66	74.92	72.03	76.21	77.02	77.60	75.61	75.38	75.37	75.28	73.61	71.71
15	72.78	74.99	71.97	76.22	75.58	75.41	75.68	75.38	75.40	75.63	73.83	71.63
16	72.83	73.28	71.93	76.54	75.50	75.02	75.81	74.45	75.34	75.44	74.18	71.60
17	73.04	72.83	72.10	76.55	75.45	74.57	75.61	74.10	75.36	75.45	73.40	71.56
18	73.06	72.93	72.06	74.92	76.91	74.74	74.64	74.02	75.37	74.45	73.50	71.47
19	71.41	73.00	72.04	74.81	77.22	74.01	74.44	74.04	75.33	74.39	73.52	71.53
20	71.31	72.97	73.22	74.74	77.35	73.77	74.47	74.06	74.17	74.29	73.85	71.60
21	71.34	72.96	73.36	74.76	77.45	73.68	74.48	74.04	74.29	74.34	74.85	71.72
22	71.26	74.62	73.55	74.59	77.50	73.65	74.56	75.24	73.96	74.27	75.19	71.81
23	71.29	74.93	73.64	74.78	77.61	73.84	74.57	75.40	73.98	74.34	75.00	71.84
24	71.47	75.14	73.85	75.97	77.71	75.72	75.65	75.40	73.90	77.24	75.18	71.93
25	72.95	75.22	73.87	76.18	77.74	76.05	75.92	74.58	74.35	79.24	74.80	72.03
26	73.27	75.33	73.91	76.22	77.74	75.96	75.96	74.39	75.22	78.53	74.70	72.19
27	73.45	75.40	73.93	76.30	77.82	75.97	75.90	74.25	75.40	77.21	74.75	72.27
28	73.67	75.56	75.77	76.33	77.86	75.94	75.92	74.11	75.33	76.62	74.67	72.42
29	73.67	75.55	75.95	76.25	75.30	75.86	75.77	74.09	75.57	76.39	73.70	72.46
30	73.74	73.96	75.94	76.22	---	75.86	75.89	73.78	75.50	76.19	73.66	72.43
31	73.74	---	76.12	76.38	---	75.91	---	73.70	---	76.28	73.52	---
MAX	73.74	75.56	76.12	76.55	77.86	78.25	75.98	75.70	75.57	79.24	76.29	73.91

CAL YR 1999    LOW 76.12  
WTR YR 2000    LOW 79.24



**GROUND-WATER RECORDS  
Butler County**

**393103084240900. LOCAL NUMBER, BU-2**

LOCATION.—Latitude 39°31'03", longitude 84°24'09", Hydrologic Unit 05080002, in basement of YMCA in Middletown, Ohio. Owner: Middletown YMCA.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 12 in., depth 88 ft, cased.

INSTRUMENTATION.—Digital recorder, 60-minute punch.

DATUM.—Elevation of land-surface datum is 636.27 ft above sea level. Measuring point: Top of platform 14.77 ft below land-surface datum.

REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

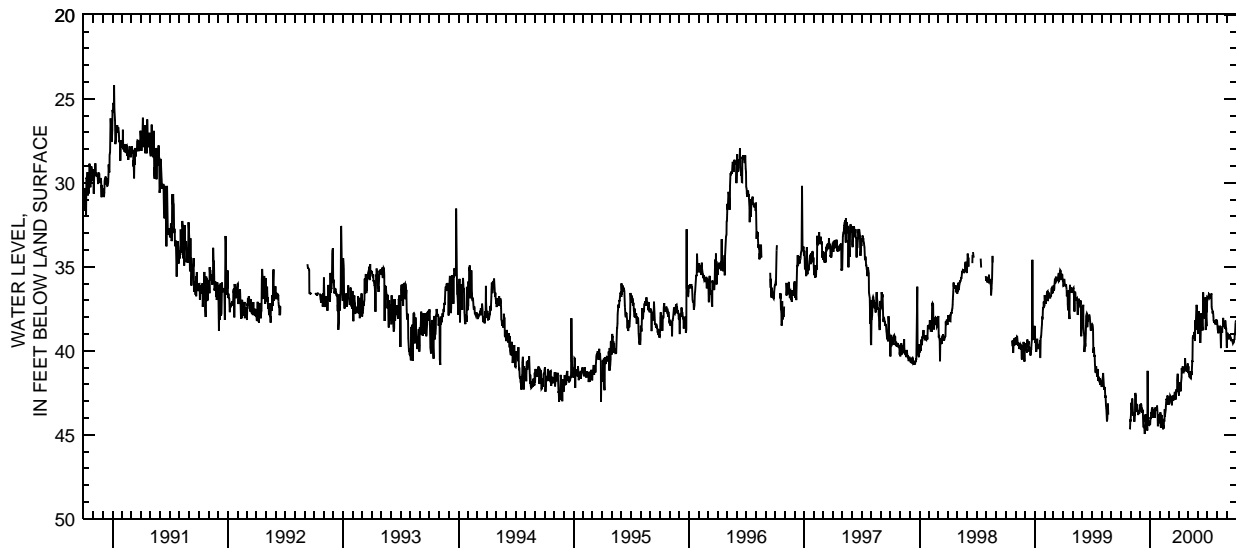
PERIOD OF RECORD.—October 1942 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 52.15 ft below land-surface datum, Sept. 28, Nov. 5, 1953, and Jan. 22, 1954; minimum daily low, 24.21 ft below land-surface datum, Jan. 6, 1991.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	44.20	43.43	44.40	44.05	42.94	42.53	41.29	37.97	36.80	38.26	39.84
2	---	43.79	43.34	44.38	44.10	43.14	42.66	40.92	39.00	36.83	38.49	38.98
3	---	43.10	43.26	43.95	43.67	43.14	42.09	41.38	38.02	36.89	38.74	38.98
4	---	43.32	43.14	44.07	44.47	43.07	41.89	41.36	37.65	36.86	38.85	39.07
5	---	43.55	43.23	43.67	44.58	42.68	42.29	41.38	38.19	36.72	38.96	39.11
6	---	42.85	43.67	43.72	43.95	42.70	41.89	41.58	38.37	36.76	38.52	39.13
7	---	42.90	43.45	43.51	43.82	42.85	42.42	41.22	38.98	36.64	38.60	39.27
8	---	43.63	43.68	43.44	44.36	42.82	42.09	41.37	38.35	36.67	38.60	39.32
9	---	43.87	43.54	43.37	44.34	42.70	41.87	41.64	39.54	36.76	38.63	39.19
10	---	43.68	43.56	43.61	44.18	42.86	41.58	41.66	38.75	36.86	38.61	39.10
11	---	43.82	44.53	43.99	44.16	43.25	41.04	41.21	37.78	36.82	38.76	39.02
12	---	43.70	44.54	43.78	44.68	42.78	41.25	41.45	37.92	36.75	38.74	39.17
13	---	44.23	44.52	43.72	44.43	42.77	41.34	41.23	38.05	36.69	39.85	39.22
14	---	43.80	44.58	43.69	44.63	42.96	40.94	40.59	38.24	36.59	38.94	39.35
15	---	43.87	44.73	43.47	44.15	42.66	41.24	40.68	38.56	37.39	38.78	39.34
16	---	42.51	44.95	43.61	44.22	42.95	41.28	39.18	38.79	37.53	38.76	39.42
17	---	42.69	44.30	43.99	43.48	42.75	41.19	39.26	37.36	37.63	38.93	39.33
18	---	43.61	43.80	43.38	43.91	42.70	41.22	39.08	36.54	37.78	38.54	39.36
19	---	43.37	44.23	43.50	43.64	42.60	41.22	39.29	37.87	37.64	38.60	39.47
20	---	43.32	43.98	43.51	43.52	42.45	41.17	38.95	37.92	37.95	38.04	39.57
21	---	43.17	44.44	43.58	43.32	42.71	41.09	38.92	37.63	38.23	38.28	39.54
22	---	43.55	44.12	43.48	42.87	42.91	40.45	39.06	37.45	38.29	38.41	39.52
23	---	43.57	44.54	43.57	42.92	42.78	40.98	39.42	38.08	38.30	38.56	39.47
24	---	43.67	44.75	43.27	42.85	42.49	40.98	38.20	37.67	38.32	38.53	39.36
25	---	43.83	41.20	43.76	43.22	42.30	41.09	38.78	36.82	38.21	38.62	39.33
26	---	43.59	44.34	44.49	42.66	42.37	41.18	38.04	38.78	38.29	38.67	39.08
27	---	43.63	44.44	44.31	42.85	42.35	41.21	37.58	38.03	38.38	38.21	38.98
28	---	43.75	44.27	44.31	43.06	41.75	41.24	37.27	38.55	38.43	38.54	38.43
29	44.68	43.56	44.17	43.90	43.20	41.37	41.01	37.47	37.62	38.17	38.67	38.31
30	44.65	43.21	44.27	44.18	---	42.22	40.77	37.96	37.63	38.17	38.69	38.19
31	44.09	---	44.21	43.78	---	42.44	---	38.31	---	38.26	39.66	---
MAX	44.68	44.23	44.95	44.49	44.68	43.25	42.66	41.66	39.54	38.43	39.85	39.84

CAL YR 1999   LOW 44.95  
WTR YR 2000   LOW 44.95



**GROUND-WATER RECORDS**  
**Butler County**

**393202084241500. LOCAL NUMBER, BU-15**

LOCATION.—Latitude 39°32'02", longitude 84°24'15", 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, Division of Water. Water level affected by pumping wells nearby in Middletown well field.

PERIOD OF RECORD.—June 1972 to September 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

DATE	WATER LEVEL
10/29/99	15.24
04/25/00	11.08

**GROUND-WATER RECORDS**  
**Carroll County**

**403709081052800. LOCAL NUMBER, C-1**

LOCATION.—Latitude 40°37'09", longitude 81°05'28", Hydrologic Unit 05040001, Carrollton well field, State Route 171, 3 mi north of Carrollton, Ohio. Owner: Carrollton Water Department.

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 3.0 ft above land-surface datum.

REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

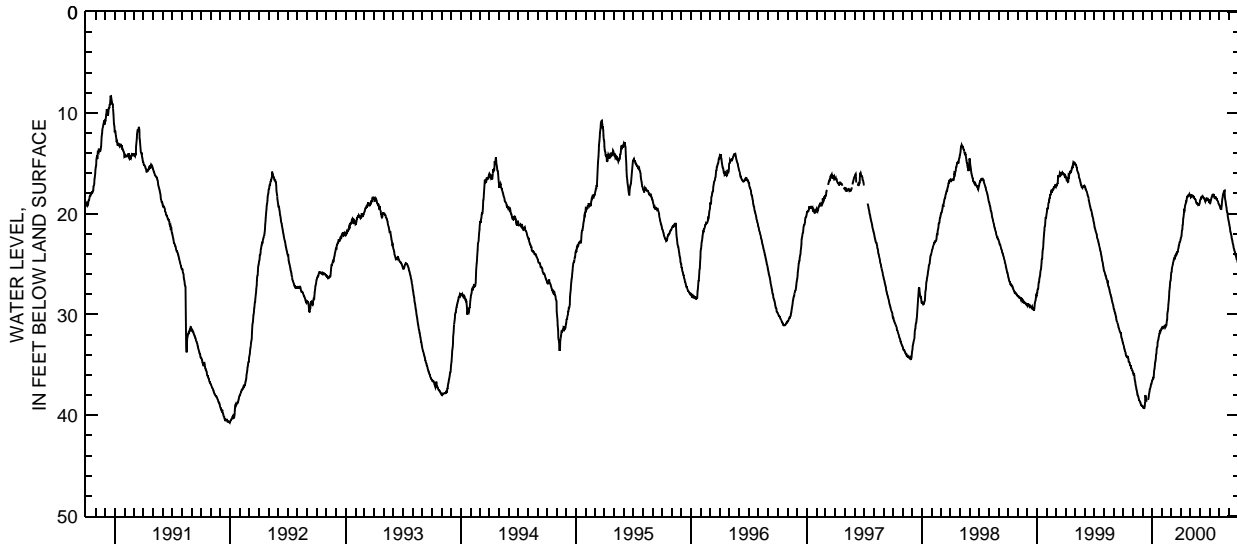
PERIOD OF RECORD.—August 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 40.76 ft below land-surface datum, Dec. 30, 1991; minimum daily low, 7.20 ft below land-surface datum, Jan. 10, 1971.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32.98	35.77	39.10	36.56	31.38	25.86	22.39	18.10	18.65	18.91	19.20	21.10
2	33.13	35.94	39.16	36.48	31.39	25.78	22.25	18.37	18.56	18.97	19.26	21.24
3	33.21	35.91	39.19	36.44	31.17	25.52	22.13	18.30	18.53	18.93	19.44	21.42
4	33.38	35.94	39.26	36.28	31.34	25.27	21.69	18.21	18.38	18.76	19.50	21.73
5	33.48	36.05	39.24	36.29	31.34	25.13	21.54	18.20	18.34	18.64	19.50	21.85
6	33.66	36.35	39.32	35.95	31.31	25.04	21.16	18.26	18.44	18.47	19.62	21.98
7	33.70	36.56	39.31	35.64	31.28	24.83	21.05	18.25	18.40	18.40	19.57	22.10
8	33.82	36.75	39.10	35.39	31.27	24.68	20.51	18.23	18.30	18.32	19.14	22.30
9	33.94	36.95	38.63	35.06	31.12	24.57	20.36	18.25	18.36	18.16	18.77	22.46
10	34.10	37.11	38.02	34.83	31.10	24.55	20.06	18.36	18.37	18.14	18.58	22.63
11	34.18	37.32	38.16	34.61	31.28	24.45	19.69	18.33	18.44	18.15	18.37	22.76
12	34.18	37.44	38.39	34.39	31.24	24.47	19.72	18.34	18.47	18.15	18.19	22.98
13	34.26	37.56	38.57	34.05	31.08	24.40	19.44	18.49	18.50	18.11	18.01	23.11
14	34.26	37.83	38.65	33.84	31.07	24.18	19.20	18.55	18.53	18.14	17.93	23.21
15	34.13	37.91	38.67	33.48	31.06	24.10	19.07	18.56	18.63	18.31	17.84	23.42
16	34.30	38.06	---	33.29	30.61	24.04	19.00	18.59	18.72	18.46	17.76	23.58
17	34.46	38.16	---	33.18	30.51	24.15	18.80	18.65	18.81	18.47	17.72	23.63
18	34.67	38.20	---	32.82	29.93	24.08	18.80	18.77	18.72	18.45	18.27	23.75
19	34.73	38.35	38.50	32.62	29.65	23.87	18.57	18.89	18.68	18.39	18.58	23.85
20	34.76	38.51	38.25	32.49	29.44	23.87	18.37	18.95	18.62	18.39	18.82	23.98
21	34.78	38.55	38.09	32.34	29.07	23.82	18.31	18.99	18.51	18.47	18.99	24.17
22	34.97	38.63	37.86	32.21	28.61	23.76	18.34	19.00	18.56	18.56	19.20	24.21
23	35.07	38.66	37.63	31.97	28.17	23.53	18.31	19.07	18.58	18.56	19.46	24.35
24	35.13	38.76	37.48	31.95	27.75	23.41	18.25	19.08	18.55	18.64	19.69	24.50
25	35.13	38.80	37.36	31.69	27.36	23.20	18.18	19.17	18.65	18.68	19.84	24.49
26	35.33	38.98	37.22	31.73	27.11	23.16	18.16	19.15	18.64	18.77	19.93	24.57
27	35.36	39.02	37.10	31.66	26.70	22.87	18.07	19.08	18.75	18.83	20.24	24.50
28	35.47	39.03	36.95	31.56	26.60	22.82	18.11	19.08	18.67	18.94	20.40	24.51
29	35.53	39.08	36.92	31.52	26.30	22.77	18.21	19.11	18.68	19.00	20.60	24.45
30	35.58	39.10	36.75	31.41	---	22.65	18.26	18.95	18.82	19.09	20.75	24.30
31	35.69	---	36.65	31.38	---	22.56	---	18.73	---	19.15	20.89	---
MAX	35.69	39.10	39.32	36.56	31.39	25.86	22.39	19.17	18.82	19.15	20.89	24.57

CAL YR 1999   LOW 39.32  
WTR YR 2000   LOW 39.32



**GROUND-WATER RECORDS**  
**Champaign County**

**400638083453900. LOCAL NUMBER, CH-3**

LOCATION.—Latitude 40°06'38", longitude 83°45'39", 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 4.50 ft above land-surface datum.

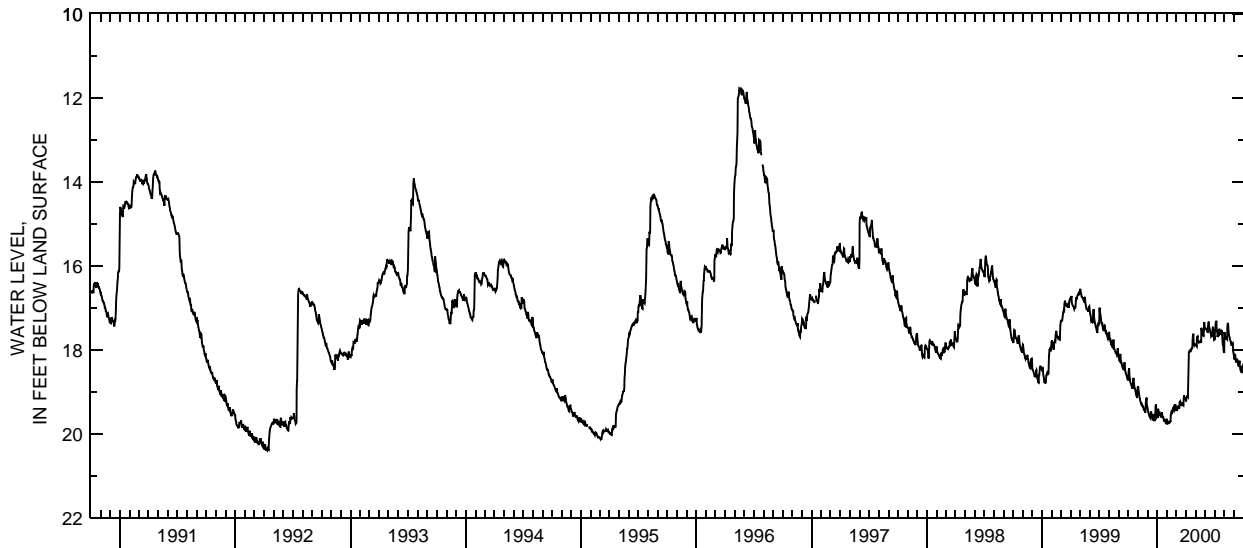
REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.—May 1957 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 24.80 ft below land-surface datum, Feb. 26-29, Mar. 13, 1964; minimum daily low, 11.76 ft below land-surface datum, May 20, 1996.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.73	18.87	19.39	19.55	19.76	19.38	19.23	17.89	17.51	17.77	17.58	18.21
2	18.54	18.91	19.42	19.52	19.76	19.39	19.19	17.88	17.51	17.54	17.64	18.24
3	18.46	19.00	19.48	19.62	19.75	19.46	19.13	17.89	17.51	17.47	17.73	18.12
4	18.45	19.05	19.50	19.41	19.73	19.40	19.11	17.91	17.51	17.38	17.76	18.10
5	18.64	19.09	19.51	19.46	19.72	19.39	19.11	17.92	17.52	17.38	17.71	18.21
6	18.71	19.15	19.56	19.51	19.75	19.40	19.11	17.75	17.51	17.31	17.73	18.29
7	18.76	19.17	19.58	19.52	19.75	19.37	19.12	17.69	17.54	17.47	17.73	18.30
8	18.79	19.22	19.59	19.54	19.73	19.33	18.71	17.68	17.56	17.55	17.73	18.24
9	18.80	19.25	19.62	19.52	19.73	19.36	18.27	17.78	17.60	17.58	17.75	18.23
10	18.83	19.27	19.60	19.53	19.73	19.37	18.06	17.82	17.42	17.70	17.48	18.23
11	18.86	19.29	19.60	19.54	19.69	19.40	18.05	17.83	17.35	17.66	17.39	18.25
12	18.87	19.28	19.47	19.57	19.72	19.25	18.02	17.81	17.33	17.67	17.36	18.28
13	18.88	19.31	19.50	19.57	19.57	19.23	18.02	17.81	17.44	17.65	17.43	18.34
14	18.91	19.34	19.53	19.59	19.50	19.28	18.04	17.81	17.47	17.65	17.57	18.37
15	18.93	19.34	19.58	19.62	19.47	19.30	18.04	17.81	17.50	17.50	17.65	18.40
16	18.75	19.34	19.62	19.49	19.47	19.32	18.03	17.82	17.54	17.54	17.68	18.30
17	18.68	19.37	19.66	19.57	19.49	19.32	18.00	17.82	17.55	17.55	17.70	18.28
18	18.67	19.38	19.68	19.61	19.47	19.32	17.99	17.80	17.62	17.60	17.75	18.28
19	18.80	19.41	19.54	19.61	19.41	19.32	17.96	17.81	17.63	17.61	17.78	18.40
20	18.87	19.43	19.58	19.61	19.39	19.28	17.98	17.48	17.67	17.61	17.80	18.49
21	18.91	19.43	19.64	19.65	19.41	19.29	17.93	17.52	17.65	17.65	17.82	18.50
22	18.93	19.44	19.68	19.69	19.38	19.26	17.77	17.65	17.66	17.55	17.86	18.51
23	18.95	19.46	19.68	19.70	19.42	19.32	17.69	17.65	17.68	17.56	17.85	18.54
24	18.98	19.50	19.70	19.69	19.44	19.33	17.62	17.63	17.52	17.56	17.87	18.54
25	19.04	19.34	19.54	19.68	19.42	19.14	17.78	17.66	17.45	17.72	17.90	18.54
26	19.08	19.26	19.46	19.69	19.44	19.08	17.84	17.66	17.58	17.82	17.85	18.40
27	19.10	19.18	19.32	19.70	19.30	19.14	17.88	17.67	17.66	17.88	17.84	18.39
28	19.12	19.14	19.30	19.75	19.34	19.16	17.87	17.46	17.73	17.89	17.96	18.41
29	19.15	19.31	19.50	19.77	19.37	19.16	17.87	17.34	17.76	17.98	18.05	18.43
30	18.96	19.36	19.62	19.64	---	19.17	17.89	17.46	17.74	18.06	18.10	18.32
31	18.89	---	19.60	19.68	---	19.19	---	17.49	---	18.06	18.17	---
MAX	19.15	19.50	19.70	19.77	19.76	19.46	19.23	17.92	17.76	18.06	18.17	18.54
CAL YR 1999	LOW	19.70										
WTR YR 2000	LOW	19.77										



**GROUND-WATER RECORDS**  
**Clark County**

**395639084012200. LOCAL NUMBER, CL-9**

LOCATION.—Latitude 39°56'39", longitude 84°01'22", Hydrologic Unit 05080001, at north edge of New Carlisle, Ohio. Owner: New Carlisle Water Department.

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 2.50 ft above land-surface datum.

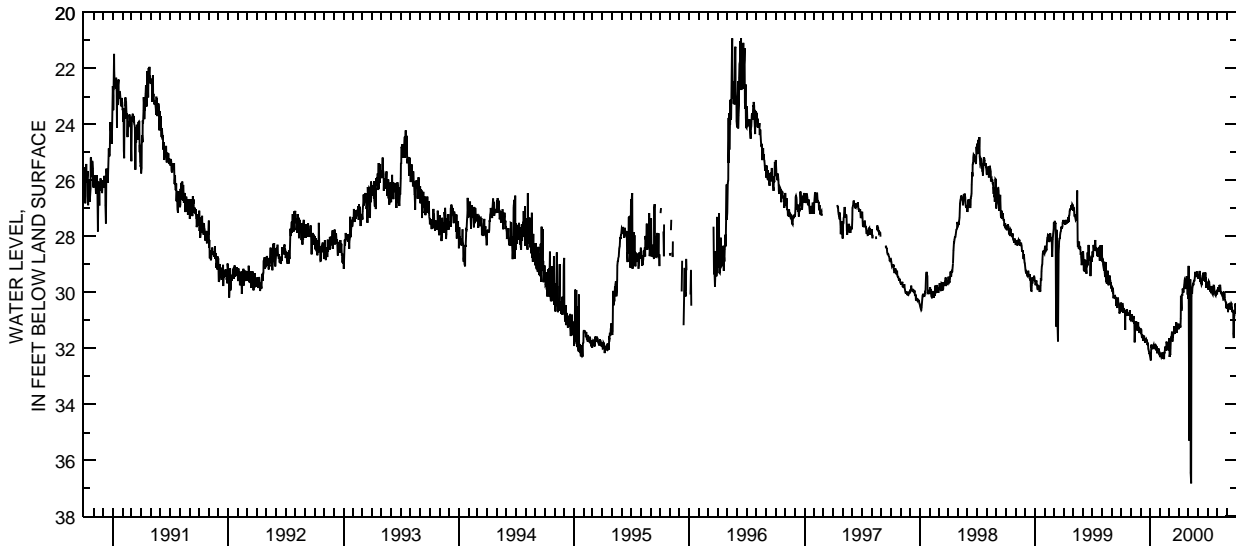
REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.37	31.00	31.28	32.25	32.24	31.78	31.20	30.24	29.44	29.65	29.99	30.43
2	30.50	30.99	31.30	32.33	32.21	31.64	31.17	29.06	29.52	29.80	29.88	30.56
3	30.50	30.86	31.44	32.43	32.23	32.31	31.13	34.96	29.43	29.90	29.93	30.48
4	30.68	30.78	31.32	32.24	32.26	32.19	31.20	35.30	29.44	29.75	29.82	30.71
5	30.38	30.89	31.50	31.87	32.32	32.23	31.16	34.73	29.33	29.61	29.93	30.47
6	30.50	31.00	31.64	31.98	32.29	31.99	31.26	29.65	29.24	29.64	29.84	30.46
7	30.73	31.06	31.53	31.92	32.30	31.58	30.94	29.54	29.41	29.73	29.98	30.42
8	30.66	30.94	31.60	31.99	32.15	31.71	30.13	29.57	29.63	29.82	29.74	30.41
9	30.69	30.92	31.52	32.01	32.30	31.60	30.66	36.44	29.52	29.85	29.83	30.50
10	30.56	30.85	31.73	32.03	32.25	31.40	30.56	36.82	29.66	29.98	29.73	30.42
11	30.74	31.09	31.68	31.91	32.37	31.57	30.07	30.14	29.66	29.86	29.85	30.53
12	30.62	31.09	31.72	31.86	32.32	31.76	30.12	29.98	29.73	29.96	30.00	30.62
13	30.68	31.79	31.55	31.90	32.30	31.54	29.87	30.05	29.70	30.03	30.00	30.48
14	31.34	31.43	31.67	31.95	32.39	31.55	29.91	29.82	29.48	29.77	30.06	30.40
15	30.77	31.36	31.75	31.99	32.16	31.48	30.01	29.79	29.42	29.84	30.09	30.41
16	30.64	31.35	31.81	32.01	32.16	31.44	29.98	29.67	29.43	29.87	30.03	30.51
17	30.68	31.28	31.66	31.91	32.00	31.22	29.86	29.75	29.41	30.07	30.02	30.71
18	30.85	31.03	31.68	31.89	31.94	31.47	29.72	29.66	29.30	30.09	30.02	30.64
19	30.61	31.20	31.66	31.93	32.01	31.27	29.59	29.56	29.58	29.91	30.01	30.66
20	30.69	31.32	31.70	32.07	32.08	31.47	29.55	29.61	29.39	29.76	30.26	30.69
21	30.74	31.29	31.72	31.94	32.02	31.27	29.59	29.58	29.38	29.76	30.25	31.47
22	30.84	31.31	31.72	31.95	31.76	31.27	29.89	29.39	29.36	29.81	30.17	31.64
23	30.77	31.36	31.82	32.18	31.85	31.23	29.59	29.27	29.62	30.01	29.98	30.83
24	30.83	31.06	31.88	32.10	31.82	31.07	29.74	29.33	29.29	30.01	30.09	30.82
25	30.73	31.36	31.80	32.10	31.92	31.45	29.48	29.45	29.61	30.06	30.22	30.69
26	30.75	31.31	32.01	32.12	31.84	31.34	29.43	29.33	29.47	30.11	30.31	30.75
27	30.75	31.23	32.03	32.11	32.07	31.28	29.51	29.33	29.84	30.12	30.35	30.40
28	30.84	31.45	32.11	32.01	31.91	31.26	29.67	29.29	29.65	30.03	30.36	30.46
29	30.64	31.39	32.17	32.17	31.83	31.26	30.09	29.26	29.74	29.98	30.48	30.54
30	30.99	31.41	32.17	32.22	---	31.12	29.51	29.35	29.62	29.94	30.46	30.57
31	30.95	---	32.25	32.19	---	31.32	---	29.49	---	30.07	30.59	---
MAX	31.34	31.79	32.25	32.43	32.39	32.31	31.26	36.82	29.84	30.12	30.59	31.64
CAL YR 1999	LOW 32.25											
WTR YR 2000	LOW 36.82											



**GROUND-WATER RECORDS**  
**Clark County**

**395840083495200. LOCAL NUMBER, CL-7**

LOCATION.—Latitude 39°58'40", longitude 83°49'52", 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.

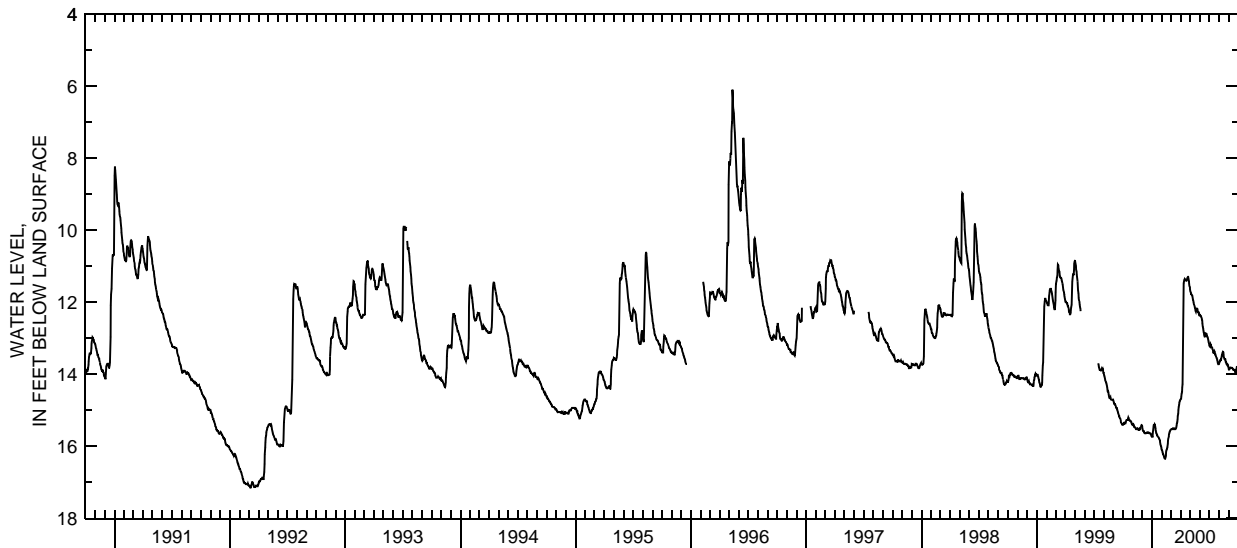
REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.—September 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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.40	15.42	15.45	15.74	16.10	15.54	14.70	11.66	12.33	13.21	13.70	13.87
2	15.40	15.42	15.51	15.74	16.12	15.53	14.68	11.71	12.38	13.23	13.67	13.87
3	15.39	15.41	15.56	15.74	16.15	15.53	14.63	11.74	12.39	13.25	13.64	13.85
4	15.36	15.42	15.58	15.64	16.17	15.53	14.55	11.78	12.39	13.22	13.62	13.83
5	15.35	15.45	15.59	15.53	16.22	15.53	14.49	11.78	12.42	13.18	13.62	13.82
6	15.35	15.47	15.59	15.45	16.23	15.53	14.37	11.79	12.44	13.22	13.60	13.82
7	15.37	15.47	15.59	15.42	16.26	15.51	14.28	11.81	12.46	13.25	13.60	13.83
8	15.37	15.48	15.63	15.42	16.29	15.51	13.95	11.83	12.52	13.25	13.54	13.83
9	15.37	15.49	15.64	15.39	16.32	15.51	12.22	11.88	12.59	13.26	13.50	13.83
10	15.34	15.51	15.65	15.40	16.34	15.53	11.72	11.93	12.67	13.27	13.45	13.83
11	15.30	15.52	15.65	15.45	16.35	15.53	11.48	11.96	12.74	13.31	13.41	13.83
12	15.28	15.53	15.65	15.51	16.35	15.52	11.40	12.01	12.78	13.34	13.40	13.84
13	15.28	15.53	15.64	15.58	16.32	15.53	11.37	12.07	12.83	13.39	13.38	13.86
14	15.28	15.53	15.63	15.62	16.27	15.53	11.36	12.09	12.89	13.41	13.39	13.87
15	15.28	15.53	15.63	15.65	16.17	15.53	11.38	12.11	12.92	13.40	13.45	13.89
16	15.28	15.51	15.63	15.66	16.11	15.52	11.39	12.15	12.96	13.39	13.54	13.89
17	15.25	15.52	15.62	15.69	16.09	15.51	11.39	12.18	12.96	13.37	13.58	13.89
18	15.21	15.53	15.62	15.72	16.07	15.48	11.39	12.25	12.87	13.40	13.58	13.86
19	15.23	15.55	15.62	15.73	16.03	15.43	11.41	12.27	12.87	13.45	13.59	13.90
20	15.28	15.55	15.62	15.74	15.94	15.38	11.41	12.25	12.89	13.45	13.59	13.93
21	15.28	15.55	15.62	15.75	15.85	15.33	11.37	12.20	12.89	13.49	13.62	13.96
22	15.29	15.55	15.64	15.76	15.78	15.26	11.36	12.18	12.89	13.52	13.67	13.96
23	15.29	15.54	15.65	15.78	15.74	15.17	11.32	12.18	12.95	13.54	13.68	13.97
24	15.29	15.51	15.65	15.80	15.68	15.10	11.30	12.19	12.96	13.55	13.71	13.97
25	15.30	15.51	15.65	15.82	15.65	15.00	11.30	12.26	12.97	13.58	13.73	13.86
26	15.31	15.50	15.65	15.85	15.61	14.92	11.36	12.28	12.98	13.61	13.75	13.80
27	15.33	15.45	15.65	15.91	15.58	14.85	11.42	12.29	13.04	13.66	13.76	13.80
28	15.35	15.43	15.66	15.95	15.56	14.80	11.49	12.29	13.08	13.71	13.74	13.83
29	15.38	15.42	15.68	15.98	15.55	14.75	11.56	12.33	13.11	13.73	13.75	13.85
30	15.39	15.43	15.71	16.01	---	14.73	11.60	12.35	13.16	13.73	13.79	13.91
31	15.39	---	15.73	16.06	---	14.71	---	12.39	---	13.70	13.83	---
MAX	15.40	15.55	15.73	16.06	16.35	15.54	14.70	12.39	13.16	13.73	13.83	13.97
CAL YR 1999	LOW	15.73										
WTR YR 2000	LOW	16.35										





**GROUND-WATER RECORDS**  
**Coshocton County**

**401256081525100. LOCAL NUMBER, CS-3**

LOCATION.—Latitude 40°12'56", longitude 81°52'51", 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 2.80 ft above land-surface datum.

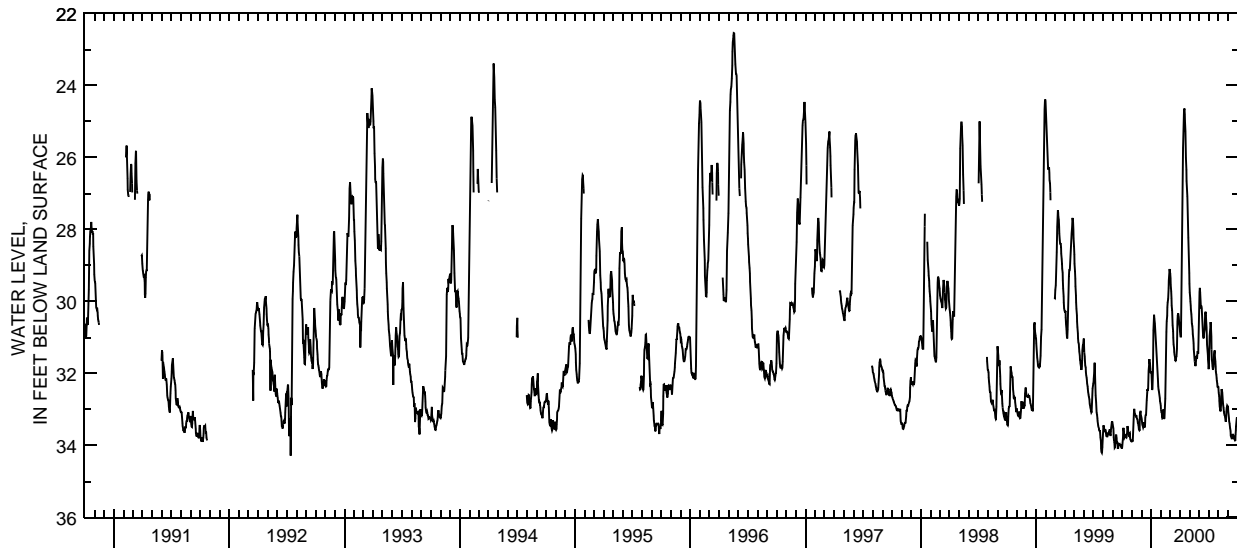
REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.—April 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 36.98 ft below land-surface datum, Oct. 16, 1973; minimum daily low, 21.40 ft below land-surface datum, July 10, 1969.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34.04	33.87	33.25	31.94	33.01	29.23	30.83	29.51	30.16	31.88	32.40	33.03
2	33.94	33.88	33.28	32.01	33.07	29.35	30.92	29.75	29.74	31.77	32.54	33.15
3	33.77	33.87	33.39	32.33	33.08	29.53	30.99	29.91	29.62	31.30	32.64	33.24
4	33.56	33.77	33.42	32.46	33.14	29.72	30.97	30.00	29.75	30.96	32.76	33.33
5	33.51	33.53	33.45	32.41	33.25	29.92	30.60	30.11	29.94	30.86	32.92	33.39
6	33.62	33.28	33.50	31.96	33.24	30.11	29.85	30.22	30.11	30.70	33.00	33.48
7	33.73	33.10	33.49	31.34	33.11	30.26	28.91	30.35	30.16	30.57	33.05	33.52
8	33.78	32.98	33.41	30.80	33.00	30.49	28.08	30.49	30.15	30.67	33.03	33.60
9	33.77	33.05	33.36	30.46	33.26	30.66	27.30	30.61	30.20	30.97	32.84	33.73
10	33.71	33.13	33.49	30.37	33.24	30.82	26.45	30.69	30.34	31.34	32.60	33.76
11	33.73	33.14	33.49	30.48	33.24	31.01	25.74	30.79	30.51	31.61	32.43	33.80
12	33.76	33.17	33.40	30.61	33.23	31.19	25.24	30.90	30.75	31.73	32.50	33.80
13	33.77	33.19	33.23	30.70	33.00	31.30	24.91	31.04	30.94	31.79	32.52	33.80
14	33.78	33.18	33.16	30.87	32.70	31.40	24.70	31.16	31.01	31.88	32.65	33.71
15	33.76	33.18	33.14	31.02	32.35	31.48	24.64	31.32	31.01	31.90	32.79	33.68
16	33.68	33.24	33.05	31.15	31.84	31.55	24.80	31.49	30.92	31.82	32.89	33.70
17	33.54	33.26	32.88	31.35	31.32	31.64	24.98	31.61	30.86	31.67	32.96	33.72
18	33.46	33.28	32.75	31.55	30.85	31.65	25.27	31.67	30.79	31.51	33.05	33.76
19	33.56	33.34	32.54	31.73	30.55	31.61	25.67	31.74	30.54	31.38	33.11	33.80
20	33.62	33.39	32.43	31.87	30.40	31.54	26.01	31.79	30.34	31.36	33.15	33.82
21	33.70	33.43	32.48	32.02	30.16	31.53	26.34	31.76	30.28	31.52	33.17	33.84
22	33.74	33.49	32.42	32.15	30.03	31.31	26.65	31.60	30.38	31.66	33.22	33.86
23	33.74	33.55	32.11	32.35	29.93	30.92	26.81	31.51	30.50	31.81	33.29	33.85
24	33.68	33.58	31.92	32.45	29.83	30.55	27.08	31.57	30.72	31.95	33.34	33.70
25	33.66	33.57	31.76	32.49	29.63	30.40	27.46	31.56	30.98	32.03	33.25	33.58
26	33.77	33.16	31.60	32.56	29.42	30.33	27.85	31.48	31.20	32.13	33.06	33.46
27	33.84	33.06	31.69	32.62	29.21	30.36	28.23	31.38	31.35	32.19	32.94	33.33
28	33.85	33.06	31.75	32.69	29.10	30.43	28.54	31.43	31.47	32.29	32.92	33.22
29	33.88	33.15	31.87	32.77	29.14	30.53	28.88	31.43	31.61	32.36	32.89	33.23
30	33.89	33.20	31.97	32.83	---	30.64	29.21	31.21	31.79	32.36	32.91	33.25
31	33.88	---	31.97	32.90	---	30.71	---	30.68	---	32.37	32.93	---
MAX	34.04	33.88	33.50	32.90	33.26	31.65	30.99	31.79	31.79	32.37	33.34	33.86
CAL YR 1999	LOW	34.21										
WTR YR 2000	LOW	34.04										



**GROUND-WATER RECORDS**  
**Coshocton County**

**401735081523800. LOCAL NUMBER, CS-2**

LOCATION.—Latitude 40°17'35", longitude 81°52'38", Hydrologic Unit 05040003, 1.7 mi northwest of courthouse in Coshocton, Ohio. Owner: City of Coshocton.

AQUIFER.—Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.—Drilled test well, diameter 6 in., depth 40 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 8.50 ft above land-surface datum.

REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

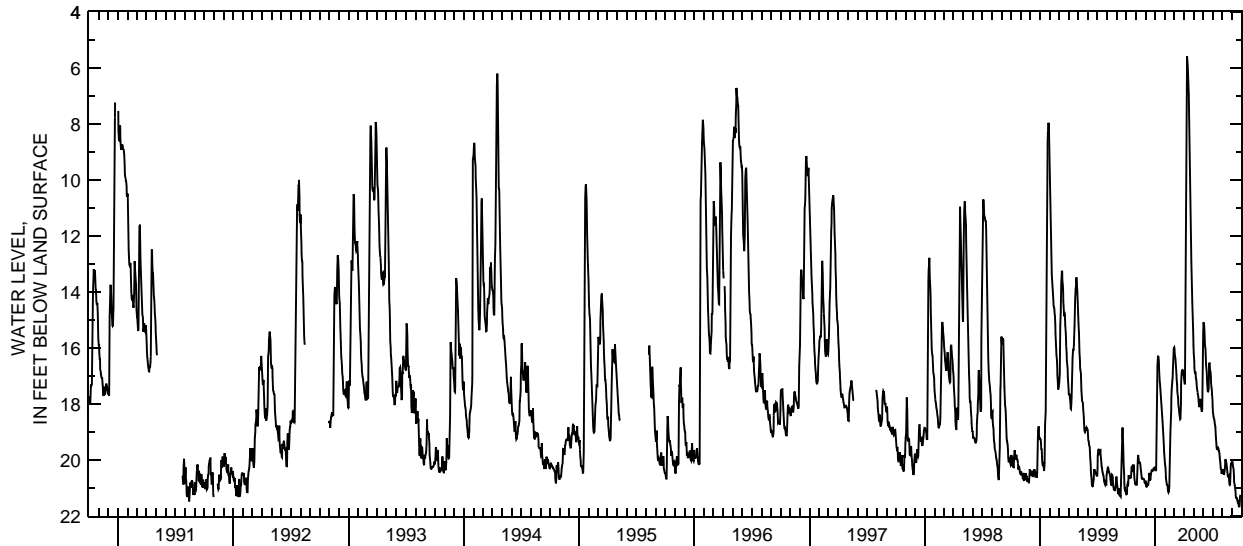
PERIOD OF RECORD.—May 1949 to September 1982. Reactivated March 24, 1989.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 21.66 ft below land-surface datum, Sept. 22-23, 2000; minimum measured low, 0.43 ft below land-surface datum, Feb. 21, 1951.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.23	20.88	20.74	20.37	20.12	15.97	17.08	15.89	15.41	18.09	20.33	20.01
2	21.23	20.88	20.86	20.37	20.25	16.05	17.18	16.20	15.08	18.30	20.36	20.11
3	21.21	20.88	20.95	20.37	20.45	16.21	17.27	16.44	15.14	18.43	20.39	20.24
4	20.93	20.81	20.96	20.34	20.64	16.33	17.27	16.71	15.20	18.47	20.45	20.27
5	20.87	20.53	20.96	19.70	20.77	16.42	15.33	16.86	15.41	18.51	20.50	20.33
6	20.91	20.16	20.91	18.51	20.83	16.53	11.66	16.87	15.76	18.57	20.50	20.55
7	20.91	19.90	20.87	17.37	20.88	16.75	9.10	16.83	15.97	18.64	20.44	20.77
8	20.66	19.82	20.89	16.63	20.90	16.95	8.16	16.93	16.01	18.72	20.38	20.89
9	20.54	19.94	20.89	16.35	20.94	17.11	6.60	17.06	16.27	18.82	20.18	20.90
10	20.60	20.04	20.87	16.30	21.05	17.31	5.93	17.14	16.61	18.95	20.00	20.99
11	20.63	20.10	20.75	16.31	21.13	17.52	5.57	17.28	16.73	19.16	20.00	21.13
12	20.64	20.10	20.60	16.46	21.15	17.65	5.80	17.40	16.86	19.39	20.07	21.26
13	20.64	20.09	20.46	16.73	21.12	17.76	6.00	17.51	17.16	19.51	20.08	21.35
14	20.64	20.10	20.61	16.99	20.99	17.92	6.24	17.58	17.35	19.60	20.16	21.35
15	20.64	20.21	20.71	17.18	20.59	18.09	6.66	17.64	17.54	19.60	20.26	21.36
16	20.62	20.31	20.71	17.27	20.02	18.21	6.96	17.73	17.56	19.52	20.37	21.37
17	20.42	20.43	20.70	17.44	19.45	18.31	7.48	17.84	17.56	19.57	20.48	21.45
18	20.25	20.54	20.55	17.61	19.03	18.38	8.49	17.97	17.47	19.61	20.59	21.47
19	20.24	20.64	20.45	17.77	18.70	18.50	9.56	18.09	16.94	19.60	20.60	21.45
20	20.22	20.66	20.39	17.95	18.25	18.54	10.47	18.11	16.55	19.68	20.60	21.47
21	20.26	20.66	20.37	18.11	17.79	18.52	11.21	18.05	16.54	19.65	20.58	21.59
22	20.38	20.66	20.37	18.29	17.47	18.00	11.82	17.91	16.72	19.76	20.72	21.66
23	20.38	20.68	20.38	18.46	17.26	17.31	12.41	17.81	16.79	19.86	20.87	21.66
24	20.28	20.68	20.38	18.62	17.16	16.99	12.96	17.92	16.85	19.95	20.89	21.63
25	20.17	20.68	20.35	18.83	17.06	16.85	13.53	18.06	17.04	20.10	20.87	21.46
26	20.44	20.68	20.32	19.03	16.86	16.80	14.00	18.16	17.25	20.26	20.47	21.27
27	20.65	20.73	20.30	19.26	16.48	16.78	14.41	18.25	17.42	20.32	20.22	21.24
28	20.77	20.81	20.28	19.44	16.19	16.79	14.80	18.24	17.51	20.34	20.13	---
29	20.82	20.81	20.27	19.64	16.00	16.83	15.16	18.17	17.64	20.47	20.11	---
30	20.86	20.80	20.27	19.89	---	16.92	15.54	17.71	17.86	20.47	20.10	---
31	20.87	---	20.32	20.05	---	16.99	---	16.41	---	20.40	20.06	---
MAX	21.23	20.88	20.96	20.37	21.15	18.54	17.27	18.25	17.86	20.47	20.89	21.66

CAL YR 1999    LOW 21.30  
WTR YR 2000    LOW 21.66



**GROUND-WATER RECORDS**  
**Darke County**

**400514084345700. LOCAL NUMBER, D-2**

LOCATION.—Latitude 40°05'14", longitude 84°34'57", Hydrologic Unit 05080001, State Route 571, 3 mi east of Greenville, Ohio. Owner: Greenville Water Department.

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, Division of Water. Water-quality data collected at this site and published in volume 2, project data, Ground-Water Data for Ohio Department of Natural Resources Wells.

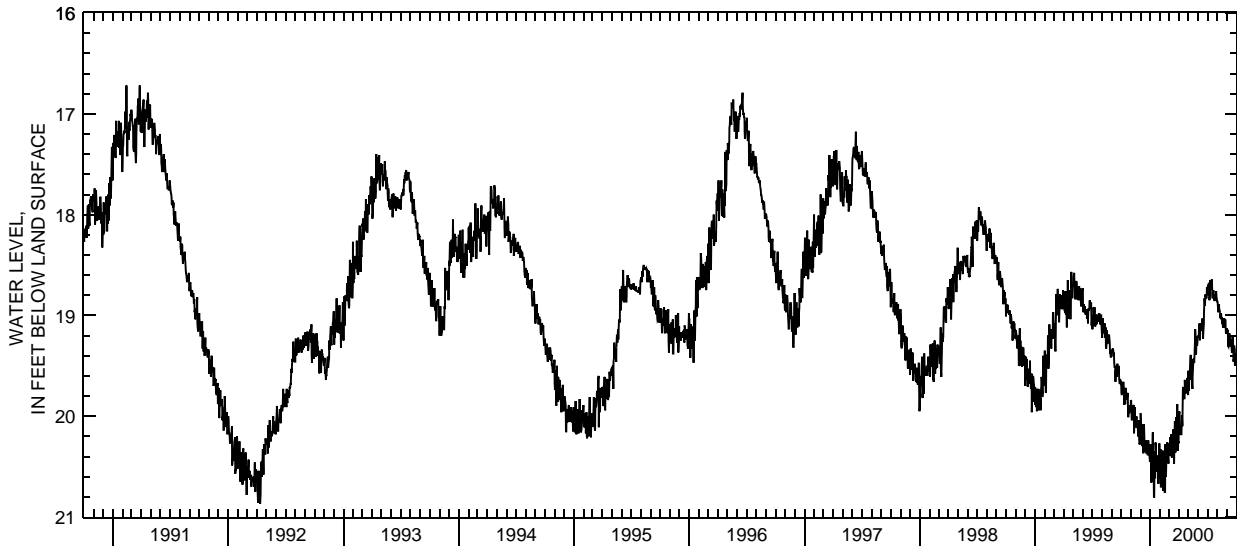
PERIOD OF RECORD.—August 1977 to current year.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.65	19.84	20.11	20.38	20.61	20.34	20.16	19.55	19.21	18.79	18.86	19.16
2	19.77	19.85	19.97	20.28	20.61	20.39	19.96	19.75	19.21	18.71	18.87	19.15
3	19.79	20.01	20.07	20.34	20.33	20.33	19.96	19.69	19.22	18.70	18.94	19.16
4	19.72	20.04	20.18	20.56	20.70	20.21	20.18	19.61	19.09	18.72	18.97	19.30
5	19.72	19.99	20.08	20.66	20.70	20.31	20.16	19.62	19.09	18.68	18.92	19.31
6	19.74	20.03	20.29	20.42	20.61	20.39	20.11	19.57	19.24	18.76	18.89	19.28
7	19.78	20.01	20.29	20.46	20.60	20.31	20.11	19.47	19.24	18.85	18.95	19.23
8	19.66	19.89	20.25	20.38	20.61	20.18	20.18	19.40	19.08	18.79	18.95	19.18
9	19.70	19.90	20.21	20.16	20.38	20.40	20.18	19.40	19.14	18.65	18.97	19.22
10	19.74	19.90	20.36	20.26	20.34	20.41	20.07	19.64	19.14	18.67	19.02	19.21
11	19.89	20.17	20.36	20.64	20.74	20.29	19.99	19.59	19.14	18.71	19.02	19.20
12	19.80	20.09	20.08	20.64	20.67	20.40	20.10	19.44	19.15	18.72	18.99	19.29
13	19.80	19.91	20.16	20.80	20.39	20.37	19.94	19.69	19.07	18.70	18.98	19.31
14	19.88	20.10	20.25	20.80	20.68	20.25	19.73	19.73	19.05	18.65	19.04	19.24
15	19.72	20.10	20.26	20.35	20.69	20.13	19.71	19.60	19.03	18.65	19.02	19.31
16	19.73	20.06	20.35	20.61	20.75	20.24	19.79	19.51	19.15	18.78	19.08	19.37
17	19.78	20.11	20.34	20.61	20.75	20.47	19.77	19.43	19.23	18.83	19.03	19.32
18	19.83	20.01	20.34	20.26	20.28	20.33	19.83	19.47	19.13	18.78	19.10	19.29
19	19.83	20.01	20.24	20.31	20.60	20.05	19.79	19.46	19.09	18.76	19.12	19.21
20	19.81	20.09	20.36	20.54	20.56	20.26	19.64	19.47	18.97	18.76	19.10	19.33
21	19.79	20.04	20.37	20.54	20.50	20.36	19.77	19.36	18.83	18.79	19.12	19.46
22	19.77	20.11	20.33	20.46	20.33	20.33	19.78	19.24	18.87	18.85	19.07	19.43
23	19.95	20.11	20.32	20.49	20.37	20.18	19.73	19.14	18.90	18.85	19.03	19.30
24	20.01	20.20	20.38	20.50	20.26	20.01	19.69	19.21	18.79	18.82	19.09	19.39
25	19.92	20.16	20.38	20.39	20.35	20.04	19.73	19.39	18.82	18.85	19.12	19.38
26	19.90	20.04	20.24	20.61	20.27	20.07	19.75	19.37	18.79	18.84	19.04	19.50
27	19.97	20.23	20.31	20.67	20.42	19.88	19.63	19.23	18.83	18.80	19.11	19.44
28	19.90	20.28	20.30	20.60	20.47	20.24	19.62	19.21	18.79	18.76	19.18	19.50
29	19.90	20.27	20.37	20.48	20.33	20.34	19.76	19.30	18.72	18.79	19.13	19.46
30	19.90	20.27	20.39	20.27	---	20.25	19.79	19.26	18.79	18.83	19.18	19.33
31	19.90	---	20.45	20.37	---	20.27	---	19.20	---	18.86	19.13	---
MAX	20.01	20.28	20.45	20.80	20.75	20.47	20.18	19.75	19.24	18.86	19.18	19.50

CAL YR 1999    LOW 20.45  
WTR YR 2000    LOW 20.80



**GROUND-WATER RECORDS**  
**Delaware County**

**402126083040400. LOCAL NUMBER, DL-3**

LOCATION.—Latitude 40°21'26", longitude 83°04'04", 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, Division of Water.

PERIOD OF RECORD.—October 1948 to current year.

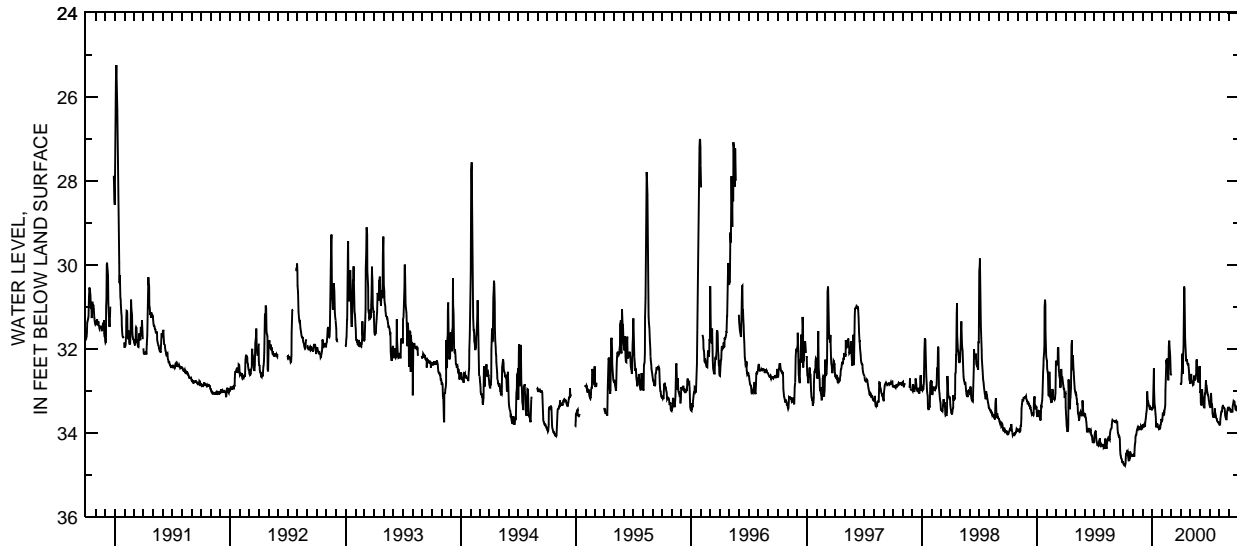
EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 37.04 ft below land-surface datum, Nov. 1, 1948, Dec. 2, 3, 1948; minimum daily low, 20.43 ft below land-surface datum, Jan. 27, 1959.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34.70	34.53	33.86	33.44	33.71	32.60	32.85	32.78	33.05	33.36	33.81	33.42
2	34.75	34.52	33.82	33.43	33.69	---	32.80	32.71	33.02	33.39	33.81	33.43
3	34.76	34.52	33.82	33.41	33.55	---	32.64	32.60	33.30	33.39	33.79	33.43
4	34.75	34.55	33.83	33.25	33.56	---	32.50	32.72	33.32	33.36	33.68	33.48
5	34.76	34.55	33.81	32.82	33.58	---	32.12	32.81	33.35	33.05	33.59	33.50
6	34.77	34.42	33.85	32.47	33.58	---	32.57	32.79	33.24	33.19	33.53	33.50
7	34.78	34.29	33.85	32.97	33.51	---	32.60	32.80	32.97	33.31	33.50	33.50
8	34.73	34.22	33.83	33.30	33.52	---	32.15	32.84	33.12	33.32	33.50	33.48
9	34.60	34.10	33.83	33.38	33.45	---	31.95	32.83	33.17	33.40	33.47	33.49
10	34.50	34.06	33.75	33.40	33.41	---	30.85	32.87	33.21	33.53	33.39	33.50
11	34.50	34.05	33.67	33.55	33.35	---	30.52	32.80	33.27	33.60	33.36	33.50
12	34.50	34.01	33.59	33.63	32.99	---	30.58	32.64	33.38	33.63	33.36	33.38
13	34.44	33.95	33.55	33.83	32.64	---	31.20	32.70	33.40	33.60	33.39	33.31
14	34.45	33.92	33.47	33.87	32.41	---	31.75	32.70	33.40	33.64	33.40	33.27
15	34.44	33.92	33.31	33.79	32.26	---	31.97	32.73	33.17	33.62	33.40	33.25
16	34.54	33.88	33.02	33.80	32.37	---	32.13	32.74	33.07	33.60	33.41	33.26
17	34.62	33.89	33.24	33.80	32.40	---	32.25	32.72	33.07	33.42	33.43	33.26
18	34.66	33.86	33.26	33.80	32.23	---	32.30	32.65	32.90	33.51	33.46	33.29
19	34.66	33.87	33.26	33.85	32.35	---	32.28	32.61	32.75	33.54	33.58	33.36
20	34.65	33.90	33.31	33.88	32.69	---	32.25	32.30	32.87	33.60	33.63	33.42
21	34.50	33.89	33.35	33.88	32.75	---	32.35	32.25	32.88	33.63	33.66	33.45
22	34.45	33.90	33.36	33.90	31.95	---	32.35	32.39	32.94	33.66	33.68	33.46
23	34.50	33.90	33.40	33.88	31.82	---	32.37	32.48	33.02	33.67	33.68	33.44
24	34.55	33.90	33.42	33.92	31.81	---	32.35	32.61	33.05	33.70	33.61	33.40
25	34.53	33.91	33.45	33.90	32.04	---	32.40	32.74	33.10	33.73	33.51	33.38
26	34.51	33.84	33.40	33.88	32.07	---	32.53	32.80	33.11	33.75	33.45	33.40
27	34.55	33.85	33.41	33.81	32.19	---	32.70	32.73	33.15	33.75	33.43	33.39
28	34.55	33.88	33.43	33.80	32.59	---	32.75	32.64	33.23	33.75	33.44	33.33
29	34.54	33.90	33.43	33.75	32.63	---	32.78	32.47	33.27	33.76	33.42	33.28
30	34.54	33.90	33.45	33.67	---	---	32.83	32.41	33.33	33.77	33.42	33.25
31	34.54	---	33.45	33.70	---	32.82	---	32.58	---	33.80	33.41	---
MAX	34.78	34.55	33.86	33.92	33.71	32.82	32.85	32.87	33.40	33.80	33.81	33.50

CAL YR 1999    LOW 34.78

WTR YR 2000    LOW 34.78



**GROUND-WATER RECORDS**  
**Fairfield County**

**393450082403600. LOCAL NUMBER, F-7**

LOCATION.—Latitude 39°34'50", longitude 82°40'36", 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, Division of Water. Water-quality data collected at this site and published in volume 2, project data, Ground-Water Data for Ohio Department of Natural Resources Wells.

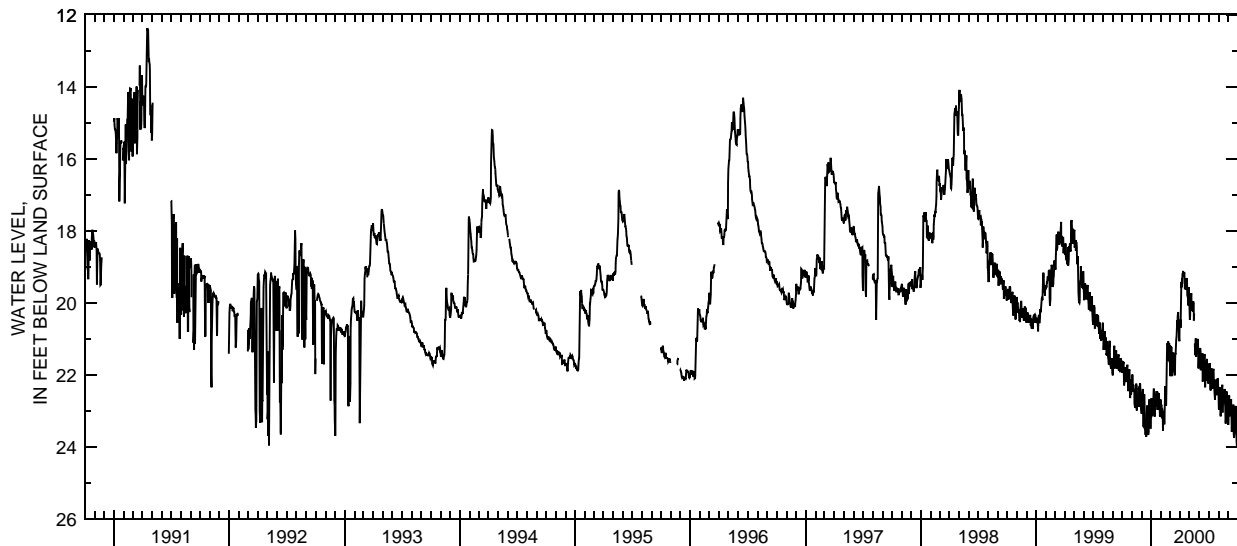
PERIOD OF RECORD.—August 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 25.36 ft below land-surface datum, Sept. 20, 1988; minimum daily low, 12.38 ft below land-surface datum, Apr. 17, 1991.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.95	22.42	23.09	22.74	23.18	22.04	20.55	20.08	21.48	21.98	22.52	23.39
2	21.66	22.00	22.56	22.65	22.83	21.83	20.47	20.48	21.51	21.72	22.94	23.07
3	21.63	22.35	23.01	22.99	23.10	21.66	20.70	20.36	21.34	21.91	22.97	22.61
4	21.72	22.48	22.61	23.12	23.21	21.23	19.95	19.93	21.26	21.68	22.70	22.58
5	21.65	22.28	22.40	23.10	22.95	21.25	19.43	20.23	21.36	22.22	22.39	23.05
6	21.96	22.40	23.12	22.65	23.24	21.91	19.58	19.90	21.88	22.36	22.35	23.15
7	22.30	22.42	23.43	22.93	23.55	22.04	19.32	19.74	21.69	22.44	23.11	23.11
8	22.21	22.43	23.45	22.56	23.26	21.38	19.48	20.23	21.64	22.26	23.16	23.07
9	21.79	22.81	23.13	22.39	23.24	21.70	19.20	20.18	21.69	21.82	22.86	22.78
10	22.00	22.89	22.54	22.79	23.03	21.67	19.17	20.14	21.45	22.01	22.62	22.68
11	22.20	22.92	23.26	23.17	23.28	21.40	19.12	19.98	21.41	22.02	22.69	23.21
12	22.06	22.71	23.53	23.14	23.38	21.42	19.23	20.26	22.19	22.12	22.38	23.59
13	22.11	22.75	23.64	22.71	22.67	21.93	19.25	19.97	22.11	22.40	22.28	23.35
14	22.21	22.25	23.63	22.66	22.32	21.73	19.18	20.02	21.76	22.14	23.05	23.10
15	21.95	22.92	23.61	22.57	22.80	22.02	19.18	20.50	21.69	21.89	22.88	23.24
16	21.80	23.00	23.73	22.57	22.83	21.94	19.63	20.30	21.70	21.84	22.71	22.94
17	21.73	22.76	23.66	22.56	22.86	21.42	19.40	---	21.52	22.17	22.77	22.83
18	22.10	22.80	23.10	22.46	22.19	21.42	19.33	21.14	21.43	22.12	22.70	23.63
19	21.95	22.82	22.86	22.89	21.53	21.23	19.52	21.46	22.33	22.48	22.47	23.76
20	22.46	22.73	23.46	22.48	21.13	21.02	19.43	21.18	22.35	22.64	22.40	23.65
21	22.25	22.37	23.48	22.98	21.14	20.95	19.64	20.99	22.07	22.70	22.75	23.49
22	21.93	22.39	23.67	22.67	21.13	20.70	19.37	21.50	22.15	22.24	22.85	23.42
23	21.87	22.89	23.64	22.60	21.15	20.49	19.32	21.29	21.91	22.14	23.29	23.04
24	21.87	22.83	23.59	22.68	21.08	20.68	19.79	21.08	21.69	22.46	23.36	22.87
25	22.31	22.39	23.05	22.52	21.62	20.38	19.81	21.24	21.56	22.57	23.11	23.17
26	22.65	22.24	22.68	22.77	21.38	20.26	19.86	21.18	22.17	22.39	22.68	23.42
27	22.47	22.27	23.07	22.71	21.13	20.52	20.08	21.10	21.95	22.39	22.47	23.84
28	22.49	22.81	22.77	23.17	21.66	20.64	19.76	21.01	21.86	22.37	22.92	23.99
29	22.55	22.91	23.08	22.89	21.26	21.03	19.58	21.78	21.82	22.12	23.22	23.73
30	22.46	22.94	23.50	22.69	---	21.07	19.92	21.83	22.25	22.12	23.25	23.81
31	22.12	---	22.97	22.73	---	20.57	---	21.55	---	22.45	23.10	---
MAX	22.65	23.00	23.73	23.17	23.55	22.04	20.70	21.83	22.35	22.70	23.36	23.99

CAL YR 1999    LOW 23.73  
WTR YR 2000    LOW 23.99



GROUND-WATER RECORDS  
Fairfield County

394257082362900. LOCAL NUMBER, F-6

LOCATION.—Latitude 39°42'57", longitude 82°36'29", Hydrologic Unit 05030204, near Hocking River in well field at Lancaster, Ohio. Owner: Lancaster Water Department.

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, Division of Water.

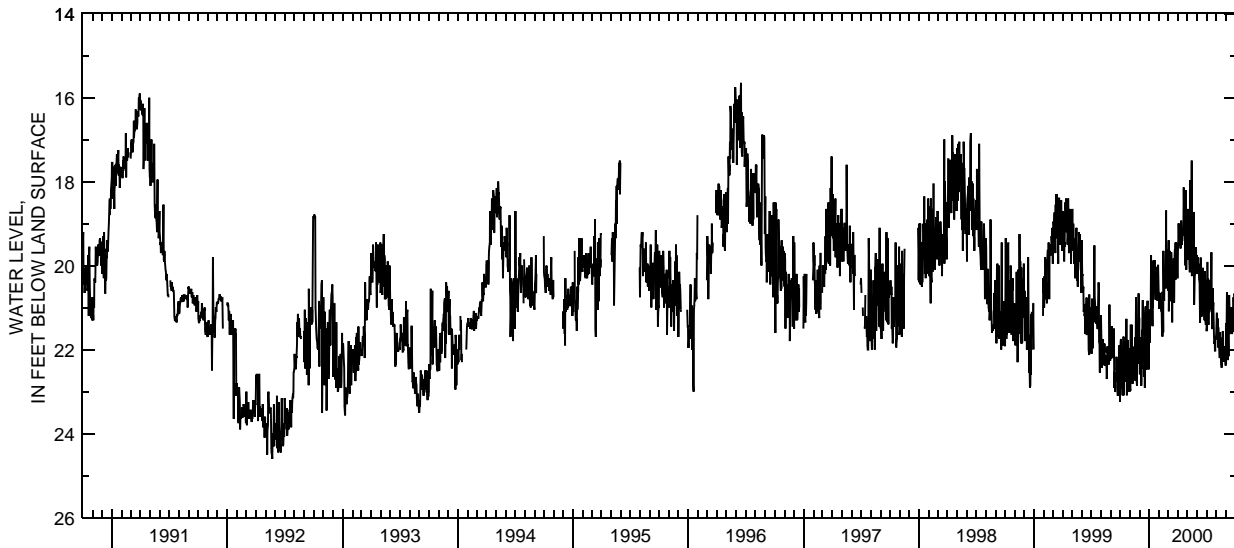
PERIOD OF RECORD.—June 1978 to current year.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.10	22.88	22.16	21.05	20.93	20.60	19.64	19.06	20.20	21.56	21.50	22.14
2	21.80	22.98	22.59	21.33	21.03	19.40	19.31	19.86	20.15	21.44	21.12	21.66
3	21.75	21.41	21.71	21.83	20.67	21.09	18.99	19.43	19.80	19.92	21.75	20.64
4	22.82	22.79	21.97	21.17	20.67	20.60	19.38	18.65	19.95	20.63	21.75	20.72
5	22.92	22.37	21.84	21.38	20.96	19.65	19.38	19.62	19.97	20.30	21.26	22.25
6	22.76	21.62	21.89	20.03	20.93	20.20	19.43	19.11	20.03	21.36	21.95	21.74
7	22.37	21.41	22.86	19.75	20.99	20.69	19.52	19.80	20.33	21.41	21.47	21.51
8	23.09	22.64	21.93	21.18	21.06	20.15	19.08	20.16	20.40	20.47	21.89	22.16
9	22.04	22.82	21.53	20.82	21.05	20.85	19.59	17.97	21.02	21.11	21.84	21.05
10	22.49	22.55	21.65	20.70	21.50	20.11	19.50	19.64	21.36	20.36	21.93	20.70
11	21.69	22.68	20.82	21.44	20.63	19.68	18.93	19.72	20.91	20.36	22.20	20.91
12	23.09	22.04	21.27	20.45	21.69	20.00	19.22	19.97	19.81	21.05	21.68	21.11
13	22.70	21.93	22.46	21.00	20.90	20.60	19.50	19.70	20.79	20.67	21.59	21.56
14	22.07	22.55	22.04	19.88	21.59	21.35	19.41	17.50	20.84	20.55	22.11	21.63
15	22.59	22.72	22.65	20.57	19.65	20.00	19.40	20.25	21.21	20.34	22.08	21.03
16	21.80	22.41	22.20	20.66	20.73	20.33	19.22	19.59	21.11	19.68	22.31	21.53
17	22.53	21.71	22.04	20.58	20.84	20.87	19.20	19.29	20.18	20.36	22.43	21.54
18	22.43	22.74	22.91	20.46	20.47	19.83	19.04	20.10	20.07	21.51	22.31	21.24
19	22.76	21.53	21.21	19.88	20.37	19.85	18.14	20.01	20.07	21.11	21.71	21.63
20	21.27	20.75	20.97	20.42	20.54	20.88	18.77	19.90	20.73	20.54	21.95	21.57
21	22.62	21.75	22.19	20.81	20.15	19.75	19.13	18.72	20.85	21.02	21.56	20.99
22	23.09	22.76	21.89	20.03	20.24	19.61	19.29	20.93	20.69	20.87	22.28	21.38
23	21.97	22.86	22.46	20.54	18.69	20.04	18.56	20.78	21.09	21.36	22.17	21.26
24	22.76	21.41	22.46	20.75	19.89	19.45	19.23	20.24	21.30	21.68	22.28	20.75
25	21.77	21.81	21.18	20.54	20.39	20.33	20.00	20.20	20.13	21.86	22.19	21.48
26	22.05	22.34	20.84	20.67	20.54	19.85	18.20	20.10	21.05	21.80	22.07	21.57
27	22.97	21.38	21.08	20.84	19.62	19.45	20.10	19.72	21.29	22.01	21.92	20.66
28	22.35	20.66	22.01	20.10	19.94	20.09	19.55	19.56	21.41	22.04	22.25	20.84
29	21.97	21.66	21.32	19.98	20.45	19.81	19.52	19.85	20.33	21.71	22.11	20.93
30	23.01	21.24	22.47	20.27	---	20.16	19.80	19.75	21.15	21.71	22.38	20.45
31	22.05	---	21.26	20.72	---	20.30	---	20.06	---	21.62	21.38	---
MAX	23.09	22.98	22.91	21.83	21.69	21.35	20.10	20.93	21.41	22.04	22.43	22.25

CAL YR 1999 LOW 23.24  
WTR YR 2000 LOW 23.09



**GROUND-WATER RECORDS**  
**Fairfield County**

**394544082271000. LOCAL NUMBER, F-1**

LOCATION.—Latitude 39°45'44", longitude 82°27'10", 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 84 ft, cased.

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, Division of Water.

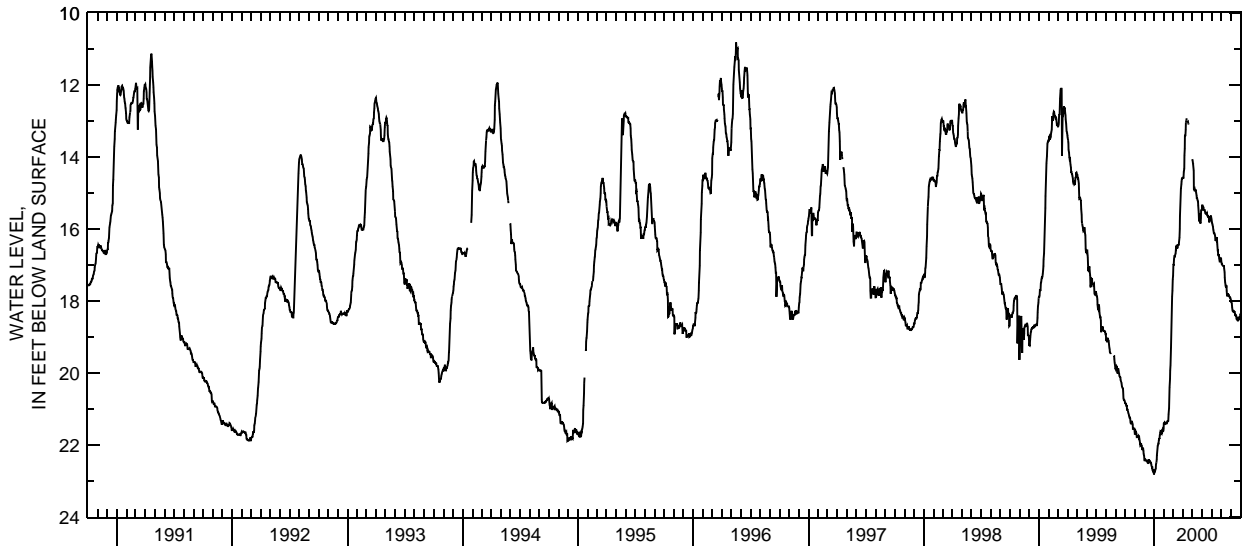
PERIOD OF RECORD.—March 1946 to current year.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.84	21.69	22.42	22.80	21.40	17.30	14.58	14.06	15.35	15.73	16.89	18.04
2	20.85	21.69	22.42	22.76	21.39	17.00	14.58	14.10	15.35	15.82	16.97	18.05
3	20.85	21.65	22.40	22.74	21.40	17.00	14.58	14.20	15.36	15.85	16.97	18.07
4	20.88	21.63	22.40	22.73	21.37	16.83	14.42	14.24	15.41	15.88	17.00	18.18
5	20.91	21.67	22.43	22.67	21.38	16.76	14.32	14.38	15.41	15.93	17.02	18.25
6	20.91	21.69	22.43	22.65	21.39	16.77	13.95	14.90	15.45	16.01	17.03	18.28
7	21.02	21.77	22.43	22.55	21.40	16.74	13.77	14.92	15.47	16.03	17.03	18.29
8	21.02	21.76	22.43	22.48	21.39	16.70	13.41	14.89	15.47	16.12	17.03	18.25
9	21.02	21.76	22.43	22.40	21.40	16.67	13.40	14.92	15.47	16.12	17.03	18.30
10	21.05	21.76	22.43	22.28	21.40	16.54	13.24	14.92	15.51	16.12	17.10	18.30
11	21.11	21.77	22.49	22.14	21.35	16.55	13.05	14.93	15.56	16.16	17.20	18.30
12	21.14	21.78	22.50	22.03	21.35	16.50	12.98	14.93	15.56	16.21	17.35	18.29
13	21.17	21.75	22.50	22.00	21.35	16.52	12.93	14.99	15.58	16.31	17.47	18.38
14	21.20	21.77	22.50	21.96	21.34	16.52	---	15.07	15.58	16.31	17.57	18.38
15	21.24	21.82	22.40	21.96	21.33	16.52	---	15.14	15.57	16.31	17.60	18.40
16	21.24	21.88	22.43	21.87	21.14	16.47	13.00	15.14	15.55	16.32	17.61	18.40
17	21.27	21.95	22.43	21.81	20.97	16.45	13.00	15.20	15.62	16.25	17.60	18.42
18	21.36	22.00	22.44	21.83	20.82	16.45	13.07	15.21	15.63	16.25	17.72	18.50
19	21.40	21.99	22.47	21.73	20.40	16.43	13.10	15.25	15.63	16.42	17.85	18.51
20	21.40	21.97	22.48	21.67	20.16	16.37	---	15.35	15.67	16.60	17.85	18.53
21	21.38	21.98	22.48	21.64	19.93	16.24	---	15.53	15.67	16.60	17.81	18.52
22	21.33	22.04	22.49	21.65	19.78	16.00	---	15.77	15.65	16.73	17.81	18.52
23	21.35	22.04	22.55	21.59	19.30	15.65	---	15.77	15.80	16.73	17.82	18.52
24	21.40	22.10	22.60	21.67	18.80	15.29	---	15.57	15.80	16.70	17.85	18.44
25	21.44	22.14	22.62	21.68	18.42	15.12	---	15.65	15.77	16.82	17.85	18.50
26	21.55	22.11	22.60	21.62	18.19	14.88	---	15.83	15.70	16.90	17.89	18.49
27	21.55	22.10	22.70	21.57	17.88	14.75	---	15.83	15.70	16.93	17.90	18.48
28	21.55	22.17	22.70	21.55	17.72	14.69	---	15.70	15.65	16.90	17.91	18.46
29	21.54	22.24	22.73	21.59	17.40	14.60	---	15.49	15.65	16.83	17.91	18.41
30	21.54	22.30	22.72	21.60	---	14.59	---	15.49	15.70	16.81	17.93	18.35
31	21.63	---	22.80	21.55	---	14.58	---	15.48	---	16.82	17.97	---
MAX	21.63	22.30	22.80	22.80	21.40	17.30	14.58	15.83	15.80	16.93	17.97	18.53

CAL YR 1999   LOW 22.80  
WTR YR 2000   LOW 22.80



**GROUND-WATER RECORDS**  
**Fairfield County**

**395053082361900. LOCAL NUMBER, F-5**

LOCATION.—Latitude 39°50'53", longitude 82°36'19", 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, Division of Water.

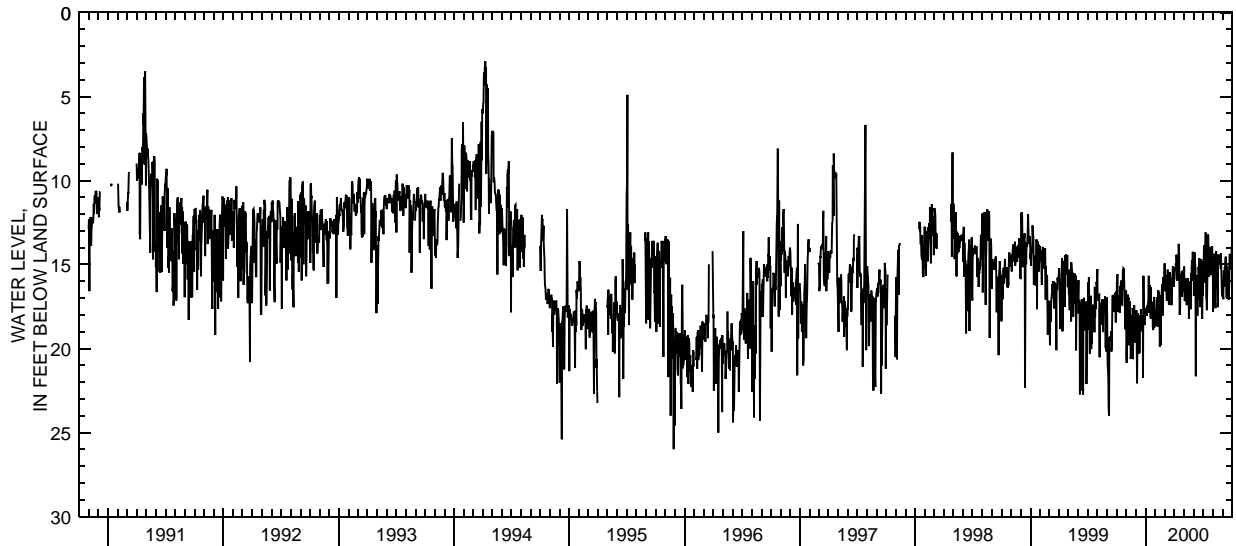
PERIOD OF RECORD.—June 1971 to current year.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.46	20.40	18.25	18.03	18.38	14.94	15.89	16.64	14.78	16.83	14.79	16.91
2	16.14	20.84	19.13	17.58	18.65	16.17	15.56	15.12	16.85	14.82	17.81	16.67
3	15.72	18.96	17.73	17.91	18.35	16.59	15.40	15.98	15.56	15.09	15.98	17.06
4	15.58	18.45	19.62	17.67	17.99	15.62	15.15	17.18	14.28	13.88	15.03	16.05
5	17.81	17.06	22.08	18.06	17.30	15.80	15.39	16.32	15.36	15.01	15.83	15.36
6	17.39	16.80	20.60	17.45	16.95	16.17	14.94	15.85	14.79	16.08	14.37	16.32
7	17.75	16.92	18.09	17.56	17.15	16.62	15.27	17.06	15.23	14.40	16.36	15.83
8	16.86	17.07	17.91	17.42	18.66	17.16	14.42	17.20	21.66	13.85	17.19	15.12
9	17.39	17.03	18.18	17.22	18.66	15.85	14.79	15.85	15.75	13.10	17.60	15.33
10	17.06	19.81	20.31	16.47	16.53	16.64	15.65	17.42	17.39	13.28	14.81	14.75
11	17.88	18.83	18.60	15.68	17.42	15.32	15.98	17.07	15.74	16.95	15.96	14.54
12	17.05	17.20	18.02	17.86	16.68	15.89	15.17	16.94	15.66	17.06	14.21	15.81
13	16.28	17.64	20.28	16.59	16.67	16.43	15.14	16.08	18.05	17.73	15.54	16.59
14	17.06	17.60	18.38	16.59	17.31	17.01	14.46	15.81	16.89	15.84	14.64	17.03
15	15.97	20.63	18.44	16.25	19.88	17.40	13.77	16.43	15.62	14.85	15.76	15.83
16	16.26	20.28	18.99	17.22	19.35	16.00	14.42	16.56	17.07	13.75	16.44	15.08
17	17.03	18.69	17.67	18.22	17.76	15.45	15.78	18.25	15.14	13.22	17.54	15.38
18	17.39	18.05	18.81	16.35	19.80	15.75	17.99	16.32	15.50	13.46	15.00	15.62
19	17.40	19.06	18.14	17.81	16.85	15.89	17.65	16.98	14.63	14.99	14.40	16.34
20	16.78	20.55	18.06	17.54	16.91	16.56	16.71	16.61	15.17	15.71	15.01	17.10
21	15.33	18.36	18.20	17.55	16.86	16.08	16.13	16.68	15.48	14.07	14.82	16.74
22	15.74	20.64	18.77	17.22	16.16	16.41	15.75	15.98	17.54	13.95	14.65	16.25
23	15.24	17.61	18.56	17.37	16.53	17.43	15.60	17.67	15.99	14.30	14.90	14.42
24	15.27	18.21	21.75	18.66	18.03	16.26	15.59	15.51	16.10	15.03	14.94	14.42
25	16.08	18.09	15.68	18.90	17.49	15.96	15.39	15.98	14.70	15.03	14.75	14.81
26	16.43	17.42	17.01	17.97	15.75	15.72	16.92	15.23	16.23	14.73	15.25	15.32
27	16.72	18.00	18.39	18.78	16.13	15.33	16.34	14.75	16.77	15.63	14.34	15.08
28	17.67	18.48	18.44	16.94	16.53	15.10	15.71	14.96	18.25	14.65	15.01	14.97
29	18.87	18.81	18.61	18.77	16.17	15.74	15.33	14.25	16.35	14.61	15.36	14.70
30	16.88	19.67	18.25	17.81	---	16.34	15.57	14.31	15.15	13.92	16.72	13.90
31	16.55	---	17.91	17.79	---	15.68	---	15.68	---	14.99	16.74	---
MAX	18.87	20.84	22.08	18.90	19.88	17.43	17.99	18.25	21.66	17.73	17.81	17.10

CAL YR 1999 LOW 24.01  
WTR YR 2000 LOW 22.08





**GROUND-WATER RECORDS**  
**Fayette County**

**393153083322000. LOCAL NUMBER, FA-1**

LOCATION.—Latitude 39°31'53", longitude 83°32'20", 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.

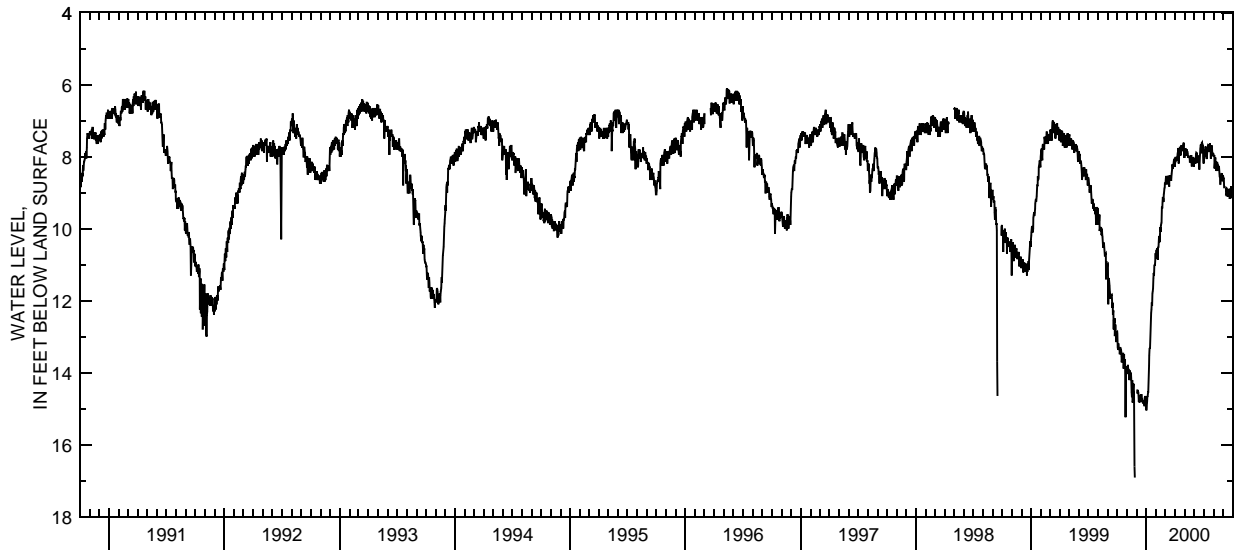
REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

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, 2000; minimum daily low, 3.26 ft below land-surface datum, Apr. 28, 1964.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.91	14.04	---	15.05	10.62	8.78	8.17	7.87	8.13	7.98	7.95	8.61
2	13.30	13.89	---	14.87	10.60	8.66	8.13	7.87	8.04	7.87	8.00	8.58
3	13.37	13.78	14.47	14.80	10.59	8.60	8.03	7.77	8.17	8.02	7.96	8.88
4	13.19	13.88	14.58	14.67	10.54	8.54	8.03	7.78	8.12	7.81	8.33	---
5	13.37	13.94	14.49	14.66	10.70	8.60	8.03	7.82	8.19	7.96	8.19	---
6	13.29	13.96	14.56	14.54	10.87	8.59	8.09	7.97	7.95	7.72	8.02	---
7	13.37	13.95	14.62	14.54	10.53	8.77	8.08	7.79	7.89	7.80	8.24	---
8	13.39	14.21	14.81	14.15	10.51	8.64	8.04	7.85	7.90	7.91	8.15	9.08
9	13.49	13.99	14.65	13.80	10.33	8.69	7.89	7.85	7.91	7.99	8.16	9.08
10	13.29	13.94	14.83	13.53	10.23	8.69	7.86	7.86	8.04	8.07	8.40	8.87
11	13.39	14.08	14.76	13.33	10.22	8.53	7.76	7.92	8.17	7.98	8.20	8.88
12	13.37	14.02	14.62	13.32	10.38	8.69	8.19	8.03	8.00	7.74	8.15	8.97
13	13.40	14.02	14.64	13.18	10.16	8.83	8.05	8.00	7.97	7.81	8.18	8.91
14	13.54	14.21	14.79	12.87	9.96	8.54	7.90	8.00	8.11	7.71	8.23	9.01
15	13.72	14.54	14.64	12.55	10.09	8.62	7.80	8.03	8.19	7.68	8.28	9.11
16	13.57	14.68	14.60	12.34	9.91	8.53	7.82	7.98	8.23	7.69	8.39	8.98
17	13.46	14.21	14.68	12.24	9.85	8.55	7.73	8.07	8.36	7.87	8.27	9.09
18	13.57	14.83	14.77	12.05	9.83	8.52	7.97	8.16	8.11	7.77	8.28	8.92
19	13.45	14.78	14.76	12.15	9.42	8.67	7.74	8.03	7.89	7.75	8.40	8.91
20	13.53	14.46	14.83	11.80	9.42	8.59	7.73	8.10	7.78	7.63	8.55	9.02
21	13.89	14.31	14.84	11.75	9.28	8.48	7.68	8.04	7.67	7.71	8.55	9.18
22	13.49	14.49	14.84	11.66	9.12	8.35	7.76	7.96	7.73	7.74	8.78	8.96
23	13.72	14.54	14.81	11.38	9.17	8.25	7.71	8.16	7.91	8.06	8.67	9.07
24	13.68	16.61	14.77	11.23	9.26	8.21	7.85	8.27	7.62	7.83	8.61	9.16
25	13.64	16.92	14.91	11.32	9.05	8.33	7.70	8.14	7.61	7.80	8.52	8.97
26	14.48	---	14.91	11.02	9.02	8.27	7.76	8.12	7.73	7.69	8.46	8.82
27	15.24	---	14.70	11.01	8.88	8.20	7.63	8.07	7.68	7.75	8.55	8.99
28	14.00	---	14.69	11.01	8.85	8.10	7.63	8.01	7.71	7.97	8.68	9.11
29	13.87	---	14.65	10.91	8.72	8.08	7.76	8.16	7.93	7.99	8.52	9.03
30	13.83	---	14.71	10.68	---	8.12	8.04	8.28	8.19	7.90	8.54	9.04
31	13.87	---	14.77	10.84	---	8.28	---	8.15	---	7.93	8.55	---
MAX	15.24	16.92	14.91	15.05	10.87	8.83	8.19	8.28	8.36	8.07	8.78	9.18
CAL YR 1999		LOW 16.92										
WTR YR 2000		LOW 16.92										



**GROUND-WATER RECORDS**  
**Franklin County**

**394956083002700. LOCAL NUMBER, FR-18**

LOCATION.—Latitude 39°49'56", longitude 83°00'27", 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.

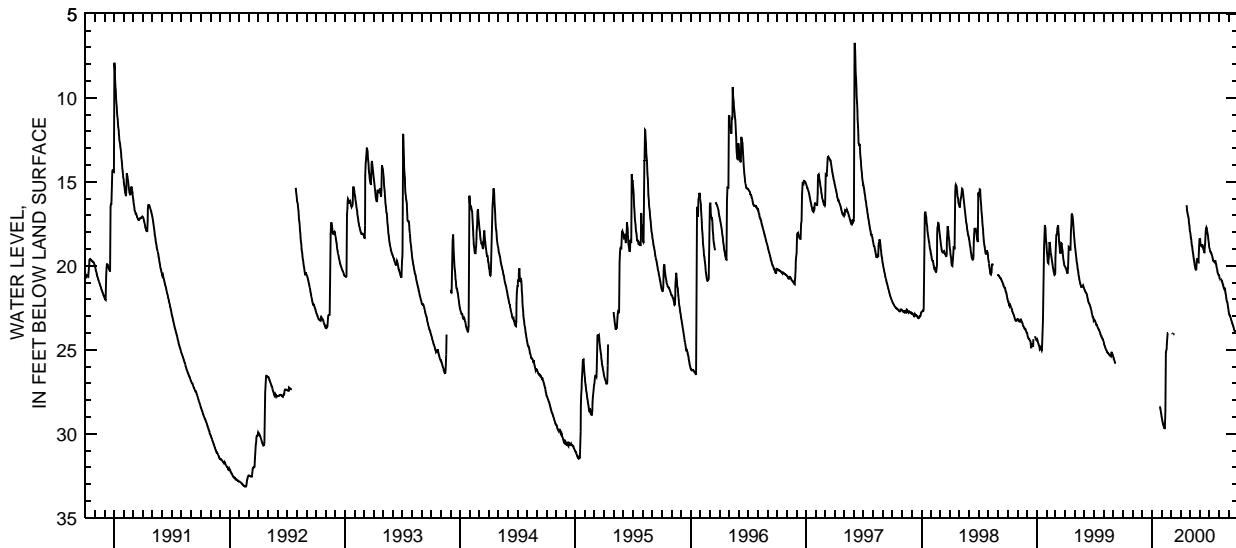
REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.—November 22, 1985, to March 26, 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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	28.97	---	---	17.97	18.36	18.86	20.58	22.76
2	---	---	---	---	29.07	---	---	18.06	18.44	19.00	20.66	22.88
3	---	---	---	---	29.18	---	---	18.21	18.57	19.06	20.75	22.94
4	---	---	---	---	29.28	---	---	18.33	18.74	19.14	20.81	22.97
5	---	---	---	---	29.37	23.99	---	18.45	18.80	19.20	20.87	22.98
6	---	---	---	---	29.45	24.02	---	18.60	18.84	19.20	---	23.06
7	---	---	---	---	29.52	24.05	---	18.77	18.86	19.22	---	23.12
8	---	---	---	---	29.60	---	---	18.87	18.83	19.28	---	23.18
9	---	---	---	---	29.65	24.09	---	19.02	18.74	19.35	20.96	23.24
10	---	---	---	---	29.67	24.09	---	19.17	18.80	19.41	20.90	23.31
11	---	---	---	---	29.68	24.02	---	19.31	18.89	19.49	20.96	23.37
12	---	---	---	---	29.58	---	---	19.44	18.97	19.58	21.02	23.43
13	---	---	---	---	28.63	---	---	19.58	19.05	19.67	21.09	23.47
14	---	---	---	---	26.28	---	---	19.71	19.14	19.72	21.15	23.54
15	---	---	---	---	25.17	---	---	19.83	19.19	19.70	21.22	23.60
16	---	---	---	---	25.01	---	---	19.95	19.20	19.72	21.32	23.66
17	---	---	---	---	24.97	---	---	20.07	18.90	19.74	21.39	23.75
18	---	---	---	---	24.66	---	---	20.18	18.70	19.77	21.38	23.81
19	---	---	---	---	24.24	---	---	20.20	18.35	19.79	21.36	23.88
20	---	---	---	---	24.02	---	16.41	20.24	17.95	19.68	21.42	23.93
21	---	---	---	---	24.02	---	16.50	20.22	17.81	19.75	21.53	23.85
22	---	---	---	---	---	---	16.70	19.90	17.73	19.86	21.65	23.93
23	---	---	---	---	---	---	16.86	19.72	17.79	19.95	21.78	23.96
24	---	---	---	---	---	---	16.94	19.56	17.88	20.04	21.90	---
25	---	---	---	---	---	---	17.00	19.62	17.99	20.15	22.02	---
26	---	---	---	---	---	---	17.11	19.72	18.12	20.25	22.14	---
27	---	---	---	28.37	---	---	17.25	19.79	18.21	20.34	22.16	---
28	---	---	---	28.50	---	---	17.42	19.80	18.39	20.42	22.22	---
29	---	---	---	28.58	---	---	17.61	19.43	18.54	20.47	22.37	---
30	---	---	---	28.71	---	---	17.82	18.78	18.70	20.55	22.50	---
31	---	---	---	28.83	---	---	---	18.48	---	20.55	22.64	---
MAX	---	---	---	28.83	29.68	24.09	17.82	20.24	19.20	20.55	22.64	23.96
CAL YR 1999	LOW	25.83										
WTR YR 2000	LOW	29.68										



**GROUND-WATER RECORDS**  
**Franklin County**

**395055083000600. LOCAL NUMBER, FR-19**

LOCATION.—Latitude 39°50'55", longitude 83°00'06", 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.

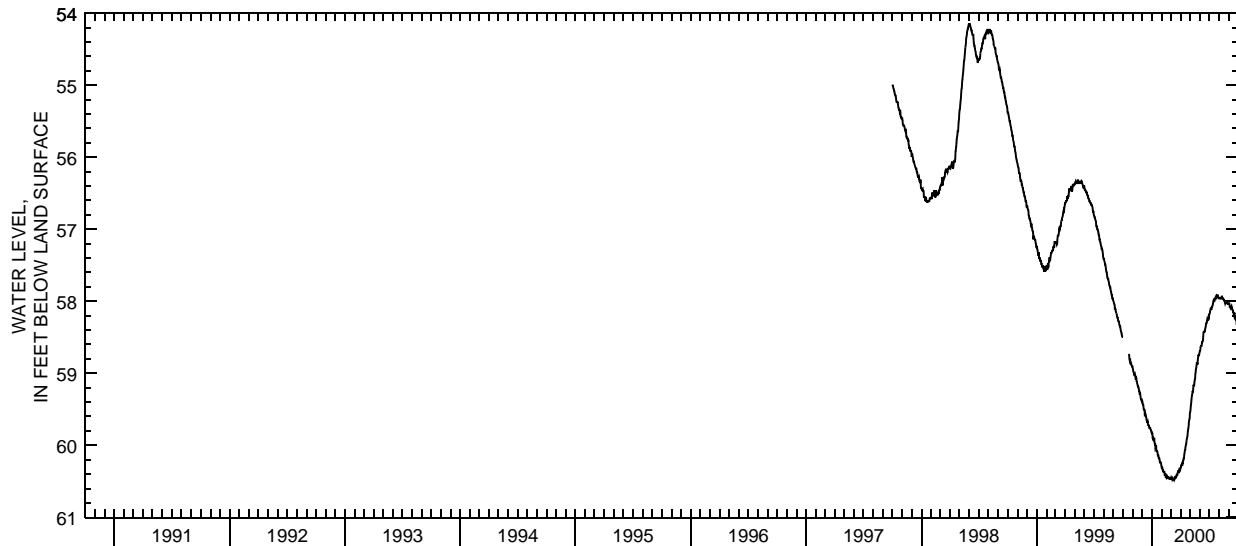
REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.—September 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 60.48 ft below land-surface datum, Mar. 8-10, and 12, 2000; minimum daily low, 54.15 ft below land-surface datum, May 31 to June 4, 1998.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	58.91	59.38	59.82	60.30	60.47	60.32	59.55	58.70	58.20	57.96	58.04
2	---	58.94	59.39	59.84	60.32	60.46	60.30	59.53	58.69	58.17	57.96	58.03
3	---	58.97	59.42	59.84	60.30	60.45	60.27	59.48	58.68	58.16	57.96	58.04
4	---	58.98	59.43	59.90	60.34	60.46	60.28	59.45	58.63	58.14	57.97	58.08
5	---	59.00	59.44	59.92	60.35	60.46	60.26	59.40	58.62	58.11	57.95	58.08
6	---	59.02	59.49	59.91	60.35	60.47	60.25	59.36	58.62	58.09	57.95	58.09
7	---	59.02	59.50	59.93	60.37	60.46	60.24	59.32	58.62	58.11	57.96	58.08
8	---	59.01	59.51	59.91	60.37	60.48	60.25	59.29	58.57	58.11	57.96	58.07
9	---	59.03	59.51	59.91	60.37	60.48	60.22	59.26	58.57	58.08	57.95	58.09
10	---	59.04	59.57	59.96	60.37	60.48	60.21	59.26	58.56	58.08	57.96	58.08
11	---	59.09	59.56	59.99	60.42	60.46	60.18	59.22	58.54	58.06	57.96	58.10
12	---	59.08	59.57	59.99	60.41	60.48	60.18	59.16	58.50	58.05	57.95	58.11
13	---	59.07	59.58	60.05	60.39	60.47	60.13	59.17	58.43	58.03	57.96	58.13
14	---	59.12	59.61	60.04	60.44	60.45	60.10	59.17	58.42	58.00	57.97	58.12
15	---	59.11	59.64	60.00	60.44	60.44	60.07	59.13	58.42	57.99	57.97	58.14
16	---	59.15	59.65	60.08	60.45	60.43	60.06	59.10	58.42	58.00	57.98	58.17
17	---	59.17	59.68	60.08	60.42	60.46	60.01	59.07	58.42	58.00	57.98	58.17
18	---	59.18	59.68	60.08	60.42	60.44	60.00	59.01	58.39	57.98	58.00	58.18
19	---	59.18	59.67	60.09	60.45	60.42	59.98	58.99	58.37	57.97	58.01	58.16
20	---	59.20	59.72	60.14	60.43	60.41	59.94	58.96	58.35	57.96	58.02	58.25
21	58.73	59.22	59.72	60.14	60.45	60.41	59.91	58.92	58.31	57.95	58.03	58.23
22	58.79	59.25	59.72	60.14	60.45	60.41	59.90	58.89	58.31	57.96	58.02	58.22
23	58.81	59.25	59.73	60.18	60.46	60.39	59.87	58.86	58.30	57.94	57.99	58.22
24	58.84	59.30	59.76	60.18	60.46	60.36	59.82	58.86	58.28	57.93	58.01	58.26
25	58.83	59.27	59.76	60.18	60.45	60.36	59.79	58.88	58.25	57.94	58.02	58.26
26	58.85	59.31	59.76	60.22	60.45	60.36	59.76	58.82	58.26	57.93	58.02	58.32
27	58.87	59.35	59.76	60.24	60.47	60.34	59.71	58.77	58.26	57.92	58.03	58.32
28	58.87	59.36	59.78	60.24	60.47	60.35	59.67	58.74	58.24	57.92	58.03	58.33
29	58.89	59.38	59.79	60.24	60.47	60.36	59.64	58.76	58.21	57.92	58.03	58.33
30	58.90	59.39	59.80	60.24	---	60.34	59.62	58.74	58.22	57.96	58.04	58.33
31	58.91	---	59.82	60.27	---	60.34	---	58.71	---	57.96	58.04	---
MAX	58.91	59.39	59.82	60.27	60.47	60.48	60.32	59.55	58.70	58.20	58.04	58.33
CAL YR 1999	LOW	59.82										
WTR YR 2000	LOW	60.48										



**GROUND-WATER RECORDS**  
**Franklin County**

**395118082573300. LOCAL NUMBER, FR-3**

LOCATION.—Latitude 39°51'14", longitude 82°57'32", Hydrologic Unit 05060001, 0.7 mi southwest of Reese, Ohio. Owner: R. Hann.

AQUIFER.—Sand and gravel of Pleistocene Age.

CHARACTERISTICS.—Drilled test water table well, diameter 12 in., depth drilled 60 ft, present depth 53 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 712.94 ft above sea level. Measuring point: Floor of instrument shelter 3.43 ft above land-surface datum.

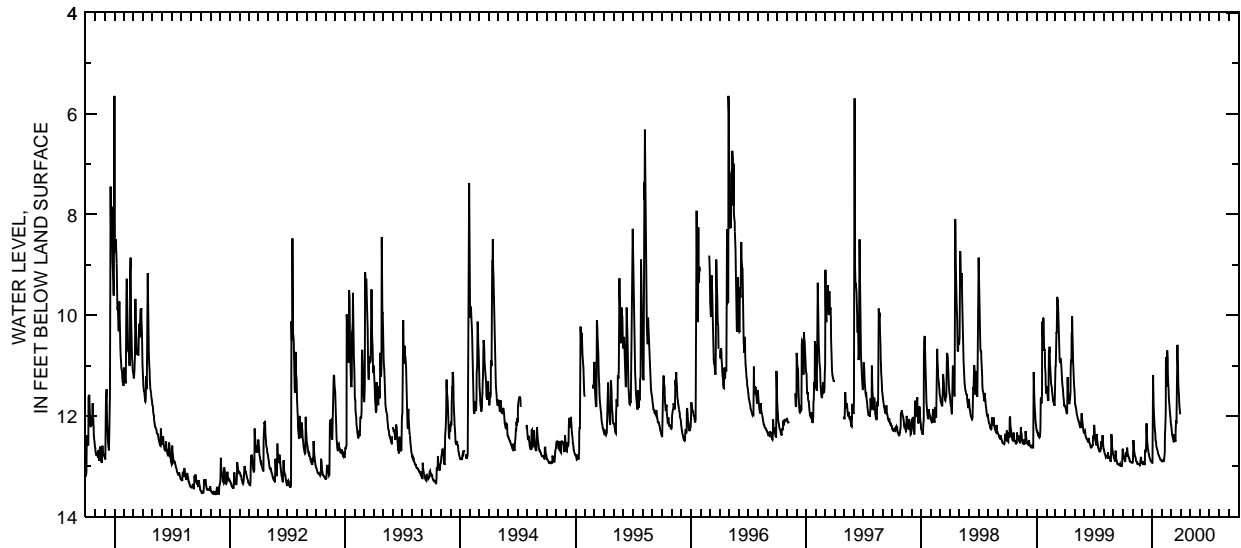
REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.—April 1946 to September 1982, continuous; October 1982 to September 1989, periodic; October 1989 to March 2000, continuous (station discontinued).

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 20.75 ft below land-surface datum, July 7, 1966; minimum daily low, 0.0 ft below land-surface datum, Jan. 22, 1959.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.65	12.93	12.93	12.92	12.89	12.11	---	---	---	---	---	---
2	12.72	12.90	12.93	12.93	12.93	12.90	12.18	---	---	---	---	---
3	12.78	12.56	12.95	12.93	12.87	12.21	---	---	---	---	---	---
4	12.80	12.48	12.96	12.60	12.90	12.27	---	---	---	---	---	---
5	12.81	12.59	12.96	11.19	12.90	12.35	---	---	---	---	---	---
6	12.85	12.67	12.96	11.51	12.90	12.39	---	---	---	---	---	---
7	12.87	12.74	12.90	11.78	12.90	12.41	---	---	---	---	---	---
8	12.90	12.77	12.95	11.94	12.90	12.44	---	---	---	---	---	---
9	12.90	12.80	12.96	12.09	12.85	12.47	---	---	---	---	---	---
10	12.81	12.81	12.96	12.20	12.83	12.51	---	---	---	---	---	---
11	12.72	12.85	12.67	12.30	12.72	12.51	---	---	---	---	---	---
12	12.77	12.89	12.71	12.36	12.35	12.50	---	---	---	---	---	---
13	12.81	12.90	12.72	12.47	12.26	12.36	---	---	---	---	---	---
14	12.71	12.92	12.62	12.51	11.92	12.44	---	---	---	---	---	---
15	12.63	12.92	12.15	12.54	10.83	12.48	---	---	---	---	---	---
16	12.71	12.95	12.32	12.62	11.15	12.51	---	---	---	---	---	---
17	12.77	12.95	12.44	12.65	11.36	12.26	---	---	---	---	---	---
18	12.78	12.95	12.54	12.67	11.42	12.09	---	---	---	---	---	---
19	12.80	12.95	12.60	12.69	10.70	12.15	---	---	---	---	---	---
20	12.83	12.96	12.67	12.72	10.86	11.96	---	---	---	---	---	---
21	12.83	12.96	12.69	12.75	11.12	11.03	---	---	---	---	---	---
22	12.85	12.96	12.74	12.77	11.33	10.59	---	---	---	---	---	---
23	12.89	12.96	12.77	12.78	11.48	10.83	---	---	---	---	---	---
24	12.90	12.98	12.81	12.80	11.61	11.09	---	---	---	---	---	---
25	12.92	12.96	12.83	12.81	11.72	11.31	---	---	---	---	---	---
26	12.92	12.92	12.85	12.84	11.78	11.49	---	---	---	---	---	---
27	12.92	12.84	12.87	12.85	11.88	11.60	---	---	---	---	---	---
28	12.92	12.81	12.89	12.87	11.96	11.72	---	---	---	---	---	---
29	12.92	12.89	12.90	12.87	12.02	11.82	---	---	---	---	---	---
30	12.93	12.92	12.90	12.87	---	11.92	---	---	---	---	---	---
31	12.93	---	12.92	12.87	---	11.97	---	---	---	---	---	---
MAX	12.93	12.98	12.96	12.93	12.90	12.51	---	---	---	---	---	---
CAL YR 1999	LOW	13.00										
WTR YR 2000	LOW	12.98										



**GROUND-WATER RECORDS**  
**Franklin County**

**400101083021800. LOCAL NUMBER, FR-10**

LOCATION.—Latitude 40°01'01", longitude 83°02'18", 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.

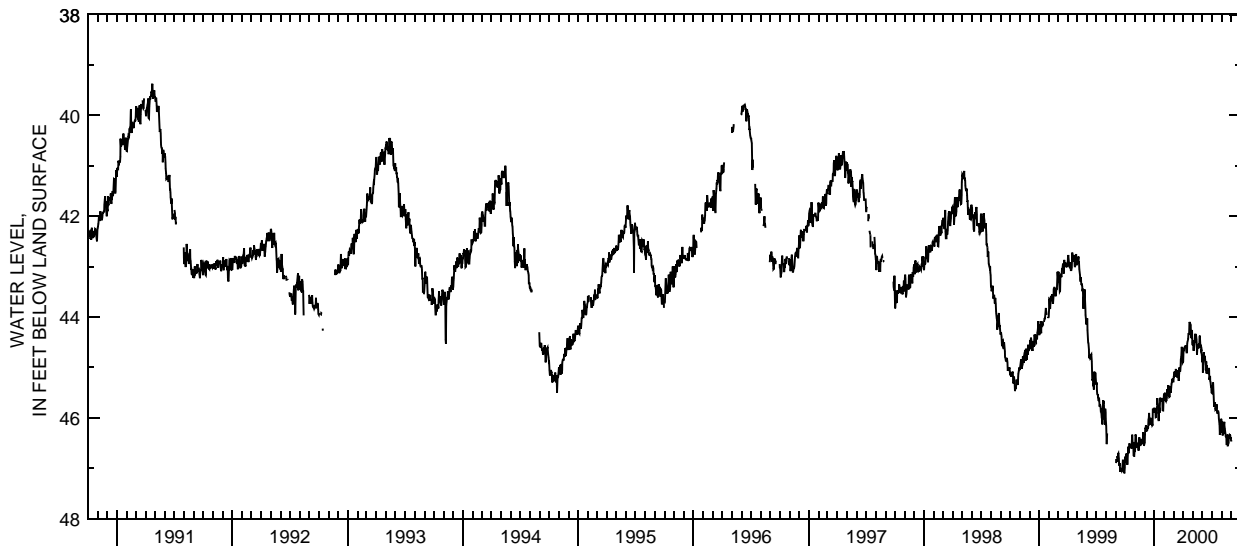
REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46.77	46.57	46.49	45.88	45.61	45.28	44.88	44.56	44.90	45.51	46.07	46.45
2	46.83	46.33	46.34	45.82	45.65	45.19	44.68	44.47	44.80	45.46	46.10	---
3	46.88	46.37	46.20	45.82	45.50	45.19	44.63	44.51	45.10	45.45	46.10	---
4	46.71	46.43	46.21	45.83	45.58	45.08	44.63	44.67	44.85	45.30	46.35	---
5	46.78	46.55	46.15	45.99	45.65	45.10	44.64	44.55	44.87	45.31	46.32	---
6	46.79	46.57	46.21	45.98	45.67	45.17	44.60	44.62	44.70	45.50	46.31	---
7	46.93	46.60	46.26	45.90	45.65	45.17	44.60	44.51	44.86	45.63	46.30	---
8	46.82	46.50	46.26	45.90	45.67	45.10	44.58	44.43	44.84	45.78	46.15	---
9	46.77	46.52	46.25	45.76	45.60	45.03	44.58	44.35	44.77	45.73	46.08	---
10	46.57	46.50	46.17	45.61	45.43	45.13	44.61	44.35	44.87	45.73	46.18	---
11	46.67	46.62	46.22	45.71	45.51	45.13	44.58	44.50	44.94	45.69	46.21	---
12	46.70	46.65	46.20	45.77	45.52	45.17	44.70	44.35	45.06	45.83	46.24	---
13	46.52	46.59	46.04	45.88	45.47	45.20	44.70	44.44	44.88	45.82	46.32	---
14	46.52	46.39	46.01	46.05	45.35	45.18	44.53	44.55	45.12	45.85	46.37	---
15	46.52	46.55	45.90	46.05	45.48	45.13	44.48	44.75	44.96	45.82	46.38	---
16	46.60	46.44	46.03	45.80	45.43	45.05	44.45	44.59	45.05	45.73	46.40	---
17	46.52	46.56	46.04	45.90	45.59	45.20	44.43	44.57	45.06	45.87	46.54	---
18	46.55	46.51	46.12	45.85	45.58	45.27	44.32	44.55	45.03	45.90	46.43	---
19	46.60	46.53	46.11	45.62	45.37	45.11	44.34	44.61	45.13	45.90	46.33	---
20	46.60	46.47	46.00	45.60	45.43	45.00	44.34	44.61	45.11	45.90	46.55	---
21	46.55	46.42	46.12	45.63	45.49	45.05	44.10	44.54	45.01	45.86	46.55	---
22	46.35	46.49	46.13	45.68	45.49	45.08	44.11	44.53	45.05	45.90	46.51	---
23	46.35	46.45	46.12	45.62	45.40	45.05	44.13	44.39	45.25	46.02	46.49	---
24	46.51	46.52	46.08	45.65	45.33	44.97	44.14	44.37	45.23	46.05	46.34	---
25	46.53	46.50	46.15	45.64	45.30	44.85	44.16	44.56	45.17	46.14	46.36	---
26	46.48	46.28	46.14	45.67	45.25	44.78	44.40	44.61	45.28	46.34	46.42	---
27	46.75	46.34	45.84	45.85	45.23	44.65	44.40	44.55	45.30	46.27	46.34	---
28	46.76	46.48	45.84	45.86	45.23	44.59	44.42	44.66	45.39	46.30	46.35	---
29	46.76	46.56	45.82	45.86	45.28	44.73	44.26	44.65	45.35	46.27	46.40	---
30	46.67	46.52	45.82	45.67	---	44.85	44.50	44.75	45.50	46.02	46.40	---
31	46.66	---	45.88	45.52	---	44.90	---	44.82	---	46.04	46.47	---
MAX	46.93	46.65	46.49	46.05	45.67	45.28	44.88	44.82	45.50	46.34	46.55	46.45
CAL YR 1999	LOW 47.09											
WTR YR 2000	LOW 46.93											



**GROUND-WATER RECORDS**  
**Gallia County**

**383638082103300. LOCAL NUMBER, G-2**

LOCATION.—Latitude 38°36'38", longitude 82°10'33", 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.—Periodic measurement with chalked tape by Ohio Department of Natural Resources personnel.

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, Division of Water.

PERIOD OF RECORD.—June 1975 to September 1982 continuous, periodic thereafter.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 33.94 ft below land-surface datum, Oct. 4, 1982; minimum daily low 16.43 ft below land-surface datum, Mar. 8, 1979.

WATER LEVEL  
IN FEET BELOW LAND-SURFACE DATUM  
INSTANTANEOUS OBSERVATION

DATE	WATER LEVEL
10/01/99	33.59
04/13/00	26.30

**GROUND-WATER RECORDS**  
**Greene County**

**394411083561300. LOCAL NUMBER, GR-1**

LOCATION.—Latitude 39°44'11", longitude 83°56'13", Hydrologic Unit 05090202, along Massies Creek near U.S. 68 north of Xenia, Ohio. Owner: Xenia Water Department.

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, Division of Water.

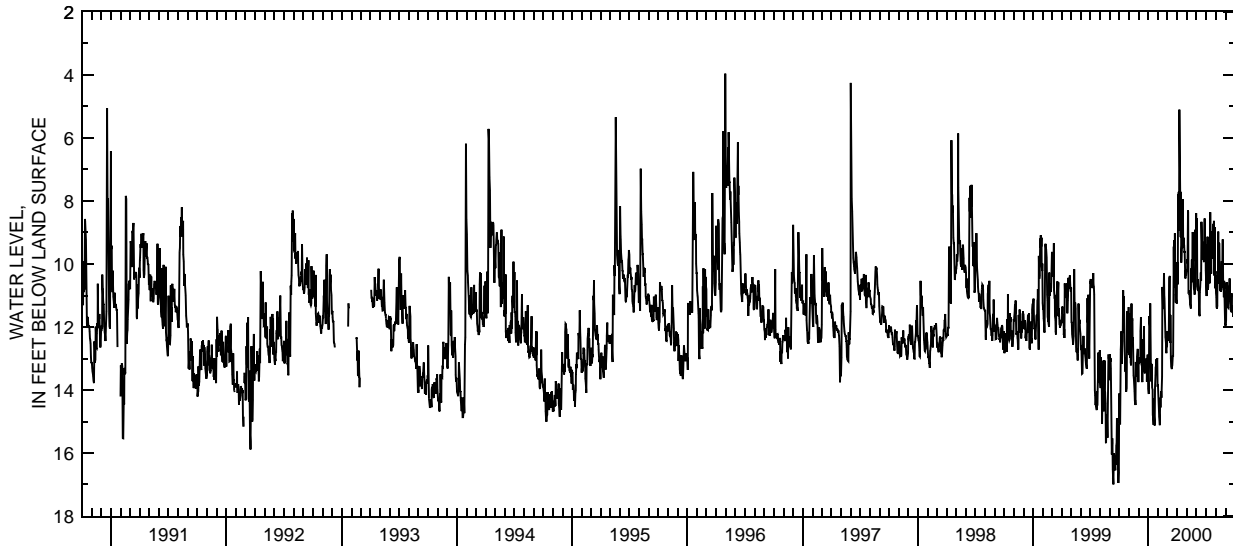
PERIOD OF RECORD.—August 1944 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 21.60 ft below land-surface datum, July 7, 1966; minimum daily low, 0.70 ft above land-surface datum, Aug. 3, 1958.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.14	12.89	13.02	13.96	14.19	12.13	9.94	10.18	9.77	10.21	10.37	11.93
2	15.01	12.58	13.05	14.13	14.43	12.43	9.97	10.25	9.50	10.78	10.92	11.93
3	15.09	12.46	13.09	13.36	14.65	12.45	10.65	9.85	8.55	11.02	11.05	11.78
4	13.76	12.98	12.98	11.66	14.85	12.15	7.78	9.98	10.71	10.44	11.36	10.59
5	12.71	11.57	13.09	11.91	14.96	12.23	8.69	8.30	10.83	10.33	11.42	10.79
6	12.45	13.12	13.07	12.01	15.12	11.91	7.71	8.35	10.49	9.14	11.33	10.59
7	12.14	13.22	12.13	11.25	14.25	10.43	8.95	10.89	10.84	10.82	10.23	10.93
8	12.89	11.26	11.69	12.41	14.56	10.38	5.10	10.88	10.86	10.74	10.59	11.01
9	13.17	12.40	12.71	13.73	14.23	12.41	5.95	10.95	11.19	10.39	8.97	11.37
10	12.79	11.78	13.17	13.66	14.04	12.50	7.72	10.96	11.61	9.24	10.62	11.39
11	12.45	11.77	13.24	13.17	14.25	11.62	8.51	11.14	11.66	10.13	10.57	10.70
12	11.41	12.43	13.73	13.61	14.00	13.01	9.15	11.29	10.89	10.57	9.35	11.09
13	10.84	12.32	13.75	13.94	13.58	13.26	7.71	11.34	10.73	10.61	9.36	11.05
14	12.19	13.15	13.27	13.99	10.73	13.27	9.96	11.42	10.37	10.29	10.82	10.46
15	11.03	13.54	12.66	14.80	10.82	13.34	9.59	10.15	10.27	8.36	10.84	11.10
16	11.67	13.65	12.39	14.81	11.43	13.23	9.42	10.59	10.53	10.28	10.32	11.17
17	12.53	13.95	12.82	15.11	11.37	13.21	7.99	9.87	8.66	10.05	10.88	11.27
18	12.89	14.04	11.98	14.27	11.36	12.91	9.50	10.50	8.93	10.31	10.69	11.43
19	13.28	14.36	13.41	14.84	10.29	12.95	7.94	10.49	9.30	9.12	10.75	11.51
20	13.43	14.32	13.47	15.06	11.03	11.23	9.44	8.99	9.86	8.98	9.91	10.93
21	12.98	14.48	13.03	15.13	11.09	9.45	9.17	9.04	9.29	9.67	10.48	11.54
22	14.03	13.11	13.09	13.91	11.52	10.75	9.29	10.04	9.43	9.83	10.27	11.31
23	14.05	13.45	13.01	13.53	11.97	9.24	9.41	10.53	9.69	8.73	9.22	11.36
24	13.94	13.59	13.07	13.27	12.32	10.27	9.64	10.81	9.87	9.63	10.05	11.46
25	12.60	13.27	13.15	13.25	12.49	9.03	9.59	10.83	9.94	9.65	10.80	11.68
26	11.51	12.94	13.22	13.02	12.73	10.74	10.24	10.95	9.51	8.63	10.83	11.56
27	12.82	12.82	13.74	13.22	12.83	11.23	10.46	10.95	8.56	10.36	11.06	11.37
28	12.75	12.70	13.12	13.05	12.46	10.95	10.21	10.63	9.79	9.87	10.54	11.50
29	12.42	13.14	12.88	12.99	12.64	11.17	10.37	8.91	9.46	8.83	10.91	11.97
30	11.37	13.75	13.14	13.90	---	11.20	10.25	9.91	9.38	10.52	11.39	12.06
31	12.27	---	13.52	13.82	---	11.26	---	8.38	---	10.78	11.96	---
MAX	15.09	14.48	13.75	15.13	15.12	13.34	10.65	11.42	11.66	11.02	11.96	12.06

CAL YR 1999    LOW 17.00  
WTR YR 2000    LOW 15.13



**GROUND-WATER RECORDS**  
**Greene County**

**394425083551100. LOCAL NUMBER, GR-10**

LOCATION.—Latitude 39°44'25", longitude 83°55'11", Hydrologic Unit 05090202, in well field along Massies Creek north of Xenia, Ohio. Owner: Xenia Water Department.

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.

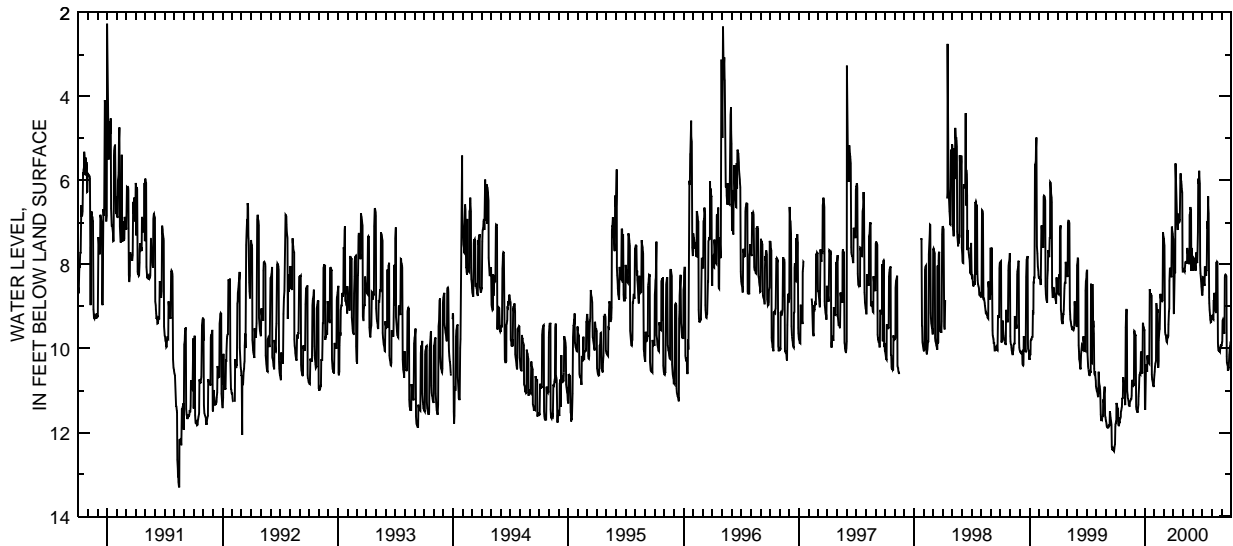
REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.81	11.35	9.66	9.57	10.63	7.34	7.40	8.17	7.93	8.71	9.23	9.93
2	11.75	9.50	9.67	11.43	10.56	7.39	9.17	8.17	7.98	8.74	9.22	9.87
3	11.76	9.21	9.68	11.46	10.43	7.48	9.18	8.14	8.08	8.60	9.26	9.84
4	11.30	9.08	9.67	11.09	10.37	7.55	8.73	8.15	8.15	8.31	9.29	9.33
5	11.34	9.08	11.39	10.52	10.33	9.45	8.11	8.15	7.99	8.32	9.31	9.31
6	11.40	9.10	11.45	10.39	10.30	9.61	8.19	8.16	7.86	8.35	9.32	9.34
7	11.43	11.01	11.47	10.44	8.92	9.67	8.21	8.17	7.87	8.43	8.85	9.42
8	11.44	11.11	11.49	10.48	8.98	9.69	5.60	8.03	7.95	8.48	8.88	9.47
9	11.44	11.19	11.52	10.56	9.08	9.75	5.87	7.95	8.00	8.51	8.68	9.62
10	11.82	11.21	11.53	10.17	9.12	9.81	6.29	7.94	8.12	8.05	8.92	9.65
11	11.84	11.26	11.42	10.28	9.12	9.84	6.60	7.94	8.15	8.07	8.98	8.32
12	11.84	11.35	11.34	10.32	9.07	9.86	6.80	7.95	7.72	8.17	9.08	8.26
13	11.76	11.36	11.15	10.32	10.46	9.73	6.97	7.95	7.84	8.25	9.12	8.24
14	11.76	11.39	10.93	10.35	10.30	9.74	7.07	7.98	7.88	8.27	9.16	8.25
15	11.67	11.31	10.69	10.35	9.82	9.70	7.18	7.61	7.94	8.15	7.96	8.26
16	11.67	11.26	10.62	10.36	9.63	9.70	6.79	7.70	7.97	8.14	7.96	8.28
17	11.63	11.25	10.61	8.59	9.55	9.43	6.86	7.75	7.48	6.98	7.97	10.19
18	11.50	11.22	10.60	8.62	9.54	9.12	6.97	7.78	7.23	7.12	7.94	10.34
19	11.48	11.20	10.61	8.73	9.03	9.05	7.02	7.87	5.96	7.12	7.95	10.38
20	11.41	11.20	10.08	8.72	8.70	8.39	6.93	7.94	6.08	6.38	9.87	10.41
21	11.39	11.13	10.13	8.74	8.79	8.08	6.94	7.96	6.00	6.63	9.95	10.53
22	11.18	10.75	10.34	8.73	8.84	8.13	6.89	8.00	5.77	6.78	10.05	10.45
23	11.19	10.77	10.44	8.75	8.85	8.16	5.99	6.81	5.97	8.79	10.06	10.46
24	11.16	10.84	10.56	10.62	8.86	8.24	5.83	6.77	6.08	8.92	10.03	10.41
25	10.69	10.88	10.60	10.74	8.86	8.27	5.95	6.63	8.02	9.08	10.06	10.15
26	10.78	10.89	9.41	10.78	8.87	8.31	6.03	6.69	8.21	9.22	10.07	10.10
27	10.80	10.86	9.39	10.82	8.86	7.10	6.11	6.70	8.31	9.31	10.08	9.98
28	10.81	10.88	9.48	10.88	7.23	7.11	6.20	8.16	8.40	9.34	9.96	9.92
29	10.83	9.58	9.50	10.90	7.28	7.21	6.29	7.61	8.53	9.38	9.94	9.86
30	10.84	9.59	9.53	10.92	---	7.27	8.07	7.74	8.62	9.37	9.90	9.86
31	11.34	---	9.57	10.74	---	7.35	---	7.85	---	9.27	9.93	---
MAX	11.84	11.39	11.53	11.46	10.63	9.86	9.18	8.17	8.62	9.38	10.08	10.53
CAL YR 1999	LOW	12.45										
WTR YR 2000	LOW	11.84										





**GROUND-WATER RECORDS**  
**Hamilton County**

259

**391039084291500. LOCAL NUMBER, H-11**

LOCATION.—Latitude 39°10'39", longitude 84°29'15", 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, Division of Water.

PERIOD OF RECORD.—August 1939 to September 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, 44.04 ft below land-surface datum, Apr. 25, 2000.

WATER LEVEL  
IN FEET BELOW LAND-SURFACE DATUM  
INSTANTANEOUS OBSERVATION

DATE	WATER LEVEL
10 / 26 / 99	45 . 00
04 / 25 / 00	44 . 04

**GROUND-WATER RECORDS**  
**Hamilton County**

**391101084172100. LOCAL NUMBER, H-3**

LOCATION.—Latitude 39°11'01", longitude 84°17'21", Hydrologic Unit 05090202, southeast of Miami, Ohio. Owner: Indian Hills Water Department.

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.

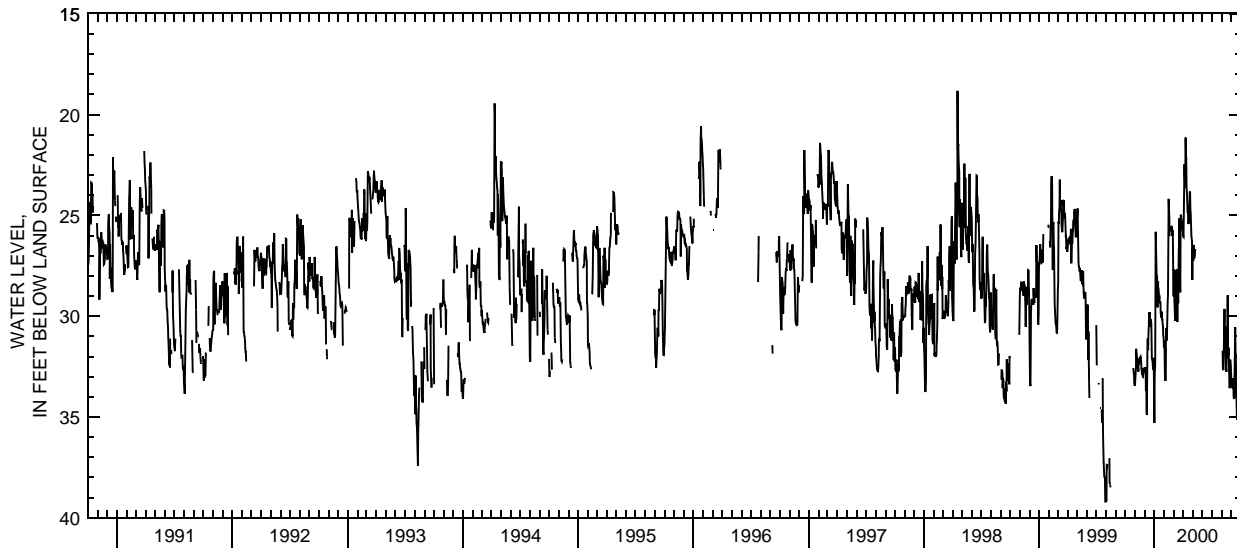
REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	33.24	32.68	35.30	31.21	28.93	26.04	26.64	---	---	---	33.42
2	---	32.95	32.66	32.88	31.42	29.03	26.07	26.74	---	---	---	33.51
3	---	32.53	32.83	32.44	33.07	27.70	25.30	27.27	---	---	---	33.31
4	---	31.62	32.54	30.25	31.57	29.22	23.10	26.47	---	---	31.72	33.29
5	---	31.82	33.68	25.82	33.22	29.62	22.47	26.56	---	---	32.59	33.59
6	---	31.90	32.77	26.78	31.00	29.90	22.95	27.09	---	---	32.68	33.12
7	---	32.11	34.74	27.15	30.59	30.24	23.62	27.09	---	---	32.52	33.09
8	---	32.08	34.90	27.95	30.98	27.71	22.84	26.97	---	---	31.87	33.99
9	---	32.49	32.06	28.05	31.21	29.78	21.14	26.69	---	---	30.16	34.11
10	---	32.57	31.17	28.84	30.81	30.23	22.21	26.74	---	---	29.65	33.97
11	---	32.75	31.11	29.56	30.25	28.13	22.13	---	---	---	30.86	33.13
12	---	32.37	31.70	28.28	29.30	27.68	23.63	---	---	---	31.10	31.23
13	---	32.37	30.82	28.60	28.97	30.29	23.98	---	---	---	30.99	30.55
14	---	32.26	30.55	28.67	27.50	30.26	24.32	---	---	---	31.90	31.70
15	---	32.11	29.81	28.77	24.18	28.37	24.79	---	---	---	32.48	33.03
16	---	32.22	30.47	29.09	24.79	29.36	24.76	---	---	---	32.76	34.00
17	---	32.03	30.52	29.07	24.95	28.02	25.32	---	---	---	30.50	34.10
18	---	32.01	29.82	29.28	26.04	26.85	25.43	---	---	---	32.12	34.95
19	---	32.18	30.51	29.32	---	26.22	25.30	---	---	---	31.35	35.10
20	---	32.22	30.30	29.33	---	25.15	24.99	---	---	---	28.96	35.13
21	---	32.60	30.16	29.80	---	26.77	24.36	---	---	---	31.72	31.86
22	---	32.80	30.39	30.00	25.51	28.74	23.85	---	---	---	31.93	32.10
23	---	32.92	31.53	30.08	25.69	28.82	23.86	---	---	---	31.56	31.43
24	---	32.61	32.08	29.78	25.81	25.27	24.71	---	---	---	32.32	28.61
25	---	33.01	32.17	30.16	25.55	24.97	24.92	---	---	---	33.07	28.87
26	32.57	33.02	32.29	30.17	25.53	25.12	25.57	---	---	---	33.57	27.71
27	32.72	32.71	32.42	30.33	26.02	25.25	26.00	---	---	---	33.49	26.92
28	32.91	32.57	32.67	30.52	25.75	25.35	26.17	---	---	---	32.16	28.12
29	33.28	32.63	32.08	30.94	26.18	25.30	26.26	---	---	---	32.27	29.29
30	33.46	32.56	32.32	31.02	---	25.71	28.20	---	---	---	32.47	30.64
31	33.38	---	34.16	31.57	---	25.73	---	---	---	---	32.96	---
MAX	33.46	33.24	34.90	35.30	33.22	30.29	28.20	27.27	---	---	33.57	35.13
CAL YR 1999	LOW 39.20											
WTR YR 2000	LOW 35.30											



**GROUND-WATER RECORDS**  
**Hamilton County**

**391201084281600. LOCAL NUMBER, H-10**

LOCATION.—Latitude 39°12'01", longitude 84°28'16", 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.

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, Division of Water. Water-quality data collected at this site and published in volume 2, project data, Ground-Water Data for Ohio Department of Natural Resources Wells.

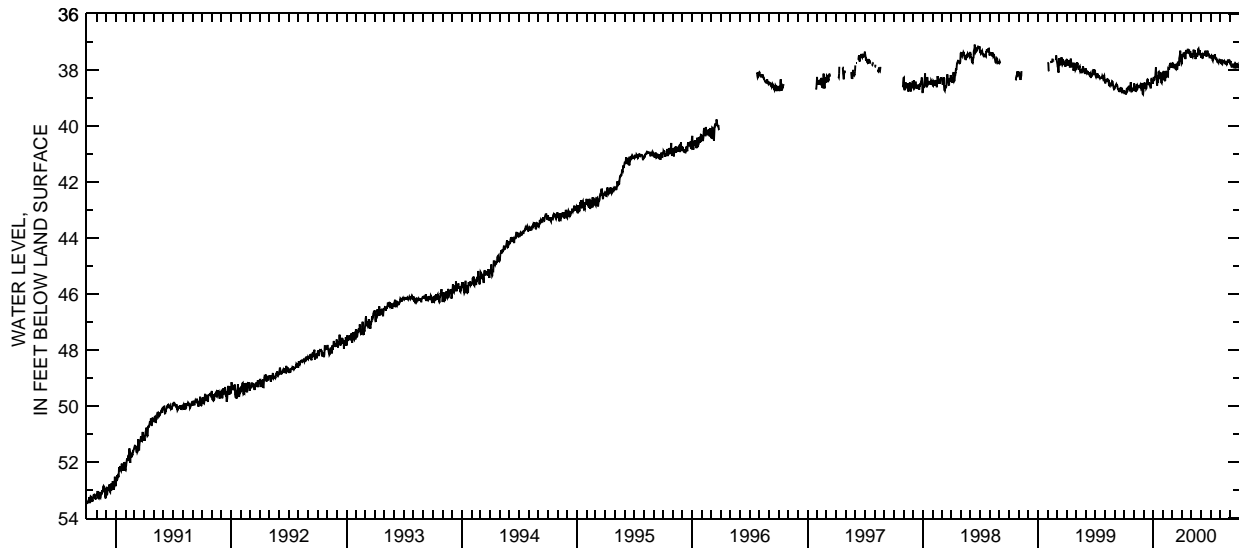
PERIOD OF RECORD.—January 1944 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 121.58 ft below land-surface datum, Nov. 3, 10, 1950; minimum daily low, 37.10 ft below land-surface datum, July 15, 1998.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38.74	38.62	38.76	38.47	38.29	37.82	37.76	37.40	37.54	37.59	37.69	37.73
2	38.82	38.48	38.59	38.38	38.35	37.87	37.57	37.49	37.54	37.54	37.68	37.71
3	38.86	38.64	38.48	38.37	38.04	37.85	37.44	37.52	37.56	37.52	37.74	37.69
4	38.82	38.71	38.55	38.26	38.28	37.75	37.51	37.53	37.46	37.55	37.77	37.84
5	38.82	38.72	38.45	38.37	38.36	37.80	37.51	37.55	37.40	37.51	37.78	37.89
6	38.81	38.74	38.62	38.24	38.37	37.91	37.41	37.52	37.55	37.55	37.63	37.90
7	38.87	38.78	38.65	38.27	38.34	37.91	37.41	37.43	37.59	37.65	37.73	37.87
8	38.77	38.63	38.65	38.23	38.39	37.80	37.52	37.32	37.45	37.68	37.76	37.82
9	38.74	38.59	38.61	37.99	38.21	37.84	37.52	37.28	37.46	37.58	37.68	37.82
10	38.65	38.50	38.66	37.91	38.05	37.90	37.47	37.42	37.46	37.49	37.70	37.82
11	38.76	38.71	38.64	38.23	38.29	37.83	37.49	37.43	37.47	37.52	37.70	37.80
12	38.75	38.69	38.45	38.24	38.26	37.97	37.62	37.29	37.47	37.56	37.69	37.79
13	38.64	38.57	38.36	38.49	38.09	37.98	37.54	37.53	37.41	37.55	37.67	37.85
14	38.71	38.59	38.34	38.56	38.11	37.91	37.36	37.62	37.36	37.53	37.73	37.81
15	38.61	38.59	38.35	38.34	38.15	37.80	37.29	37.59	37.32	37.44	37.76	37.85
16	38.59	38.59	38.46	38.39	38.23	37.80	37.35	37.53	37.45	37.56	37.75	37.92
17	38.60	38.65	38.49	38.41	38.24	38.00	37.31	37.44	37.52	37.62	37.74	37.92
18	38.68	38.60	38.52	38.08	37.95	37.97	37.38	37.39	37.47	37.62	37.73	37.88
19	38.72	38.58	38.45	38.07	37.96	37.71	37.41	37.45	37.51	37.63	37.78	37.78
20	38.71	38.58	38.51	38.19	37.95	37.73	37.28	37.52	37.47	37.62	37.79	37.80
21	38.67	38.54	38.55	38.23	37.98	37.81	37.28	37.47	37.32	37.63	37.81	37.91
22	38.44	38.60	38.58	38.19	37.84	37.85	37.31	37.38	37.40	37.71	37.79	37.91
23	38.64	38.59	38.55	38.17	37.83	37.77	37.32	37.26	37.46	37.73	37.73	37.78
24	38.75	38.68	38.63	38.24	37.76	37.60	37.28	37.25	37.45	37.72	37.70	37.83
25	38.73	38.66	38.63	38.10	37.80	37.53	37.39	37.41	37.44	37.72	37.74	37.81
26	38.64	38.47	38.35	38.32	37.75	37.56	37.43	37.47	37.44	37.74	37.68	37.89
27	38.75	38.63	38.36	38.45	37.86	37.32	37.37	37.38	37.53	37.70	37.63	37.90
28	38.72	38.76	38.33	38.47	37.93	37.55	37.33	37.30	37.52	37.65	37.69	37.92
29	38.71	38.85	38.38	38.36	37.86	37.66	37.49	37.45	37.47	37.63	37.70	37.95
30	38.72	38.87	38.38	38.13	---	37.70	37.57	37.48	37.56	37.64	37.74	37.86
31	38.72	---	38.49	38.12	---	37.78	---	37.48	---	37.67	37.71	---
MAX	38.87	38.87	38.76	38.56	38.39	38.00	37.76	37.62	37.59	37.74	37.81	37.95

CAL YR 1999    LOW 38.87  
WTR YR 2000    LOW 38.87



**GROUND-WATER RECORDS**  
**Hamilton County**

**391214084470100. LOCAL NUMBER, H-1**

LOCATION.—Latitude 39°12'14", longitude 84°47'01", 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.

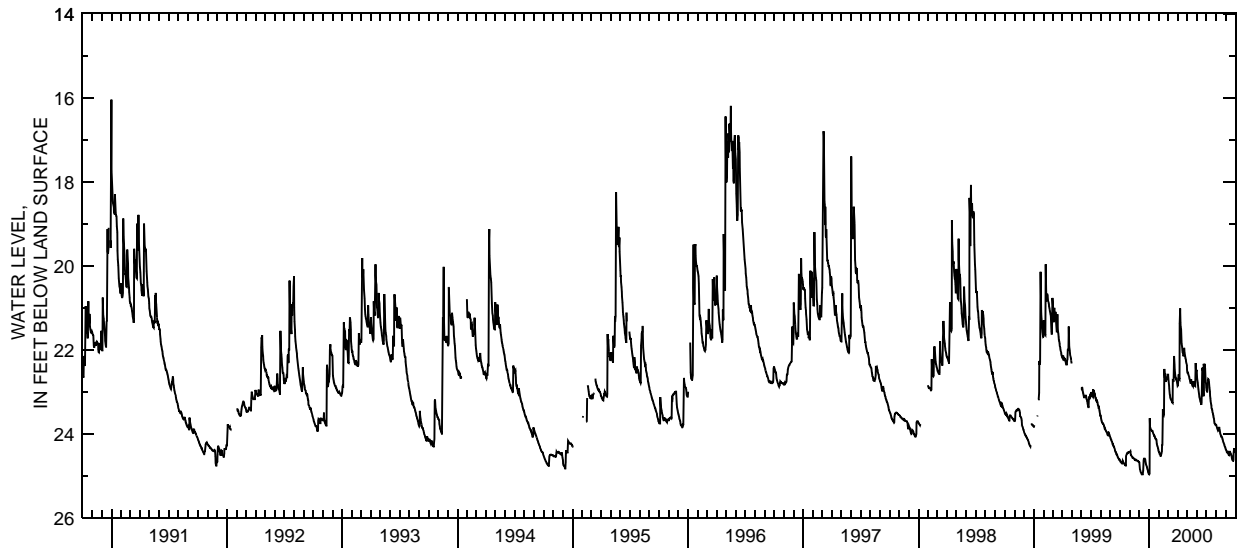
REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.64	24.44	24.68	24.96	24.42	22.60	22.86	22.48	22.53	22.90	23.77	24.38
2	24.66	24.43	24.69	24.97	24.44	22.60	22.85	22.55	22.69	22.96	23.81	24.40
3	24.66	24.42	24.81	24.95	24.45	22.67	22.74	22.55	22.74	23.00	23.85	24.42
4	24.67	24.45	24.86	23.63	24.48	22.78	22.59	22.55	22.79	23.00	23.86	24.43
5	24.69	24.51	24.88	23.85	24.49	22.86	22.61	22.59	22.87	22.90	23.89	24.45
6	24.69	24.52	24.92	23.88	24.51	22.93	22.69	22.61	22.94	22.77	23.92	24.47
7	24.70	24.53	24.93	23.90	24.53	23.06	22.70	22.64	23.00	22.70	23.93	24.41
8	24.71	24.54	24.95	23.91	24.53	23.10	21.38	22.66	23.06	22.71	23.92	24.45
9	24.71	24.56	24.97	23.92	24.48	23.14	21.02	22.70	23.12	22.77	23.91	24.49
10	24.65	24.57	24.97	23.93	24.47	23.18	21.35	22.73	23.15	22.81	23.87	24.51
11	24.67	24.57	24.97	23.94	24.42	23.19	21.44	22.76	23.19	22.90	23.84	24.52
12	24.68	24.57	24.97	23.94	24.28	23.20	21.52	22.79	23.22	22.99	23.90	24.51
13	24.70	24.58	24.94	23.96	24.27	23.22	21.74	22.79	23.26	23.10	23.94	24.43
14	24.71	24.59	24.88	23.98	23.42	23.23	21.85	22.71	23.28	23.16	23.99	24.43
15	24.72	24.60	24.62	24.00	23.49	23.26	21.93	22.78	23.31	23.22	24.02	24.46
16	24.73	24.61	24.61	24.02	23.53	23.27	22.01	22.82	23.26	23.29	24.04	24.47
17	24.74	24.62	24.58	24.03	23.56	22.74	22.07	22.84	22.98	23.33	24.07	24.49
18	24.75	24.62	24.59	24.06	23.54	22.75	22.09	22.83	22.45	23.40	24.07	24.51
19	24.76	24.63	24.60	24.06	22.46	22.75	22.14	22.86	22.43	23.42	24.07	24.53
20	24.76	24.62	24.61	24.08	22.65	22.63	22.16	22.87	22.50	23.45	24.09	24.61
21	24.53	24.62	24.63	24.11	22.65	22.15	22.11	22.75	22.53	23.50	24.12	24.62
22	24.49	24.63	24.70	24.11	22.57	22.36	21.96	22.79	23.11	23.53	24.15	24.62
23	24.48	24.63	24.73	24.12	22.75	22.47	22.06	22.81	22.34	23.57	24.18	24.65
24	24.47	24.64	24.75	24.14	22.75	22.55	22.13	22.83	22.43	23.60	24.21	24.65
25	24.47	24.65	24.78	24.15	22.72	22.63	22.15	22.82	22.43	23.64	24.23	24.62
26	24.46	24.65	24.80	24.24	22.69	22.68	22.20	22.86	22.34	23.70	24.25	24.46
27	24.45	24.65	24.82	24.28	22.69	22.70	22.24	22.87	22.45	23.75	24.27	24.35
28	24.45	24.66	24.87	24.30	22.65	22.67	22.29	22.32	22.62	23.77	24.30	24.40
29	24.44	24.67	24.89	24.32	22.72	22.71	22.33	22.44	22.74	23.78	24.31	24.44
30	24.44	24.67	24.92	24.35	---	22.77	22.37	22.51	22.82	23.79	24.33	24.45
31	24.44	---	24.94	24.39	---	22.81	---	22.48	---	23.79	24.36	---
MAX	24.76	24.67	24.97	24.97	24.53	23.27	22.86	22.87	23.31	23.79	24.36	24.65
CAL YR 1999	LOW 24.97											
WTR YR 2000	LOW 24.97											



**GROUND-WATER RECORDS**  
**Hamilton County**

**391341084275300. LOCAL NUMBER, H-8**

LOCATION.—Latitude 39°13'41", longitude 84°27'53", Hydrologic Unit 05090203, Vine and Water Streets, Wyoming, Ohio. Owner: Wyoming Water Department.

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.

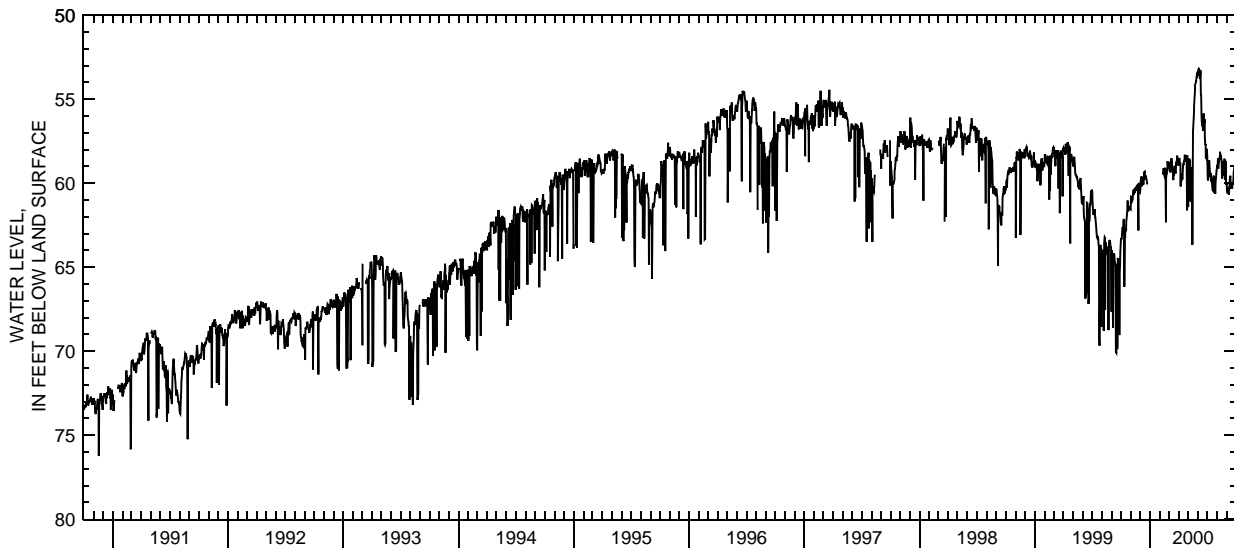
REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.—June 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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63.29	61.24	60.39	---	---	59.06	58.85	61.43	53.45	58.97	58.91	60.43
2	63.33	60.81	60.15	---	---	58.93	58.61	58.54	53.31	59.78	59.07	60.54
3	63.32	60.83	59.79	---	---	58.85	58.50	58.68	53.34	59.84	58.54	60.63
4	63.11	60.92	59.84	---	---	58.74	58.73	58.74	53.19	59.28	59.10	60.23
5	62.84	60.98	59.60	---	---	59.18	58.82	59.85	53.21	58.89	59.14	60.56
6	62.63	61.04	59.81	---	---	59.36	58.83	58.73	53.49	58.70	58.58	60.56
7	62.73	60.96	60.18	---	---	59.04	60.21	58.70	53.81	58.70	58.64	60.68
8	62.60	60.63	60.03	---	---	58.70	59.42	61.10	53.60	59.12	58.59	60.29
9	62.21	60.60	59.81	---	---	58.53	59.66	59.07	53.29	59.43	58.37	60.23
10	62.14	60.39	59.72	---	---	58.74	59.76	59.27	54.71	59.64	58.14	59.70
11	62.36	60.68	60.09	---	59.33	58.71	59.79	59.21	54.79	59.39	58.44	59.57
12	66.17	60.59	59.78	---	59.48	59.14	59.72	59.25	55.92	59.87	58.44	59.60
13	62.81	60.33	59.49	---	59.12	59.13	59.73	59.60	56.39	59.91	58.32	60.32
14	63.26	60.56	59.34	---	59.39	59.68	59.24	63.68	56.54	59.81	58.61	60.08
15	62.78	60.27	59.31	---	59.52	59.82	58.85	59.58	56.51	59.82	58.76	60.02
16	62.76	60.47	59.64	---	59.58	59.39	58.93	56.93	56.48	60.21	59.68	60.24
17	62.78	60.41	59.58	---	59.70	59.57	58.74	56.52	56.88	60.39	59.72	60.33
18	62.31	60.26	59.79	---	59.09	59.45	58.67	56.31	56.55	60.43	59.45	60.12
19	62.01	60.21	59.55	---	59.54	58.97	58.59	55.82	55.86	60.47	59.14	59.97
20	61.82	60.23	59.74	---	62.33	59.21	58.37	55.34	56.64	59.60	58.70	60.08
21	61.68	60.26	59.81	---	59.66	59.36	58.37	54.98	56.39	59.60	59.54	59.81
22	61.04	60.21	59.89	---	59.52	59.37	58.70	54.57	56.21	60.17	59.16	59.36
23	61.43	60.24	60.08	---	59.42	59.18	58.46	54.17	57.29	60.20	58.59	59.19
24	61.68	60.29	---	---	59.18	58.83	58.39	54.06	57.74	60.04	58.59	59.29
25	61.59	62.82	---	---	59.29	58.86	58.54	53.97	57.68	60.63	58.62	58.98
26	61.41	59.99	---	---	58.70	58.77	58.49	53.97	58.49	60.59	59.81	59.36
27	61.53	60.03	---	---	59.01	58.37	61.62	53.79	58.52	59.94	59.16	58.95
28	61.37	60.43	---	---	59.14	58.52	58.34	53.54	57.96	59.63	58.67	59.57
29	61.47	60.57	---	---	59.07	58.64	60.33	53.57	58.02	59.48	60.09	59.27
30	61.54	60.59	---	---	---	58.92	58.97	53.60	58.34	59.27	60.03	59.67
31	61.58	---	---	---	---	58.91	---	53.51	---	59.06	60.09	---
MAX	66.17	62.82	60.39	---	62.33	59.82	61.62	63.68	58.52	60.63	60.09	60.68
CAL YR 1999	LOW	70.11										
WTR YR 2000	LOW	66.17										



**GROUND-WATER RECORDS**  
**Hamilton County**

**391442084262900. LOCAL NUMBER, H-7**

LOCATION.—Latitude 39°14'42", longitude 84°26'29", 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.

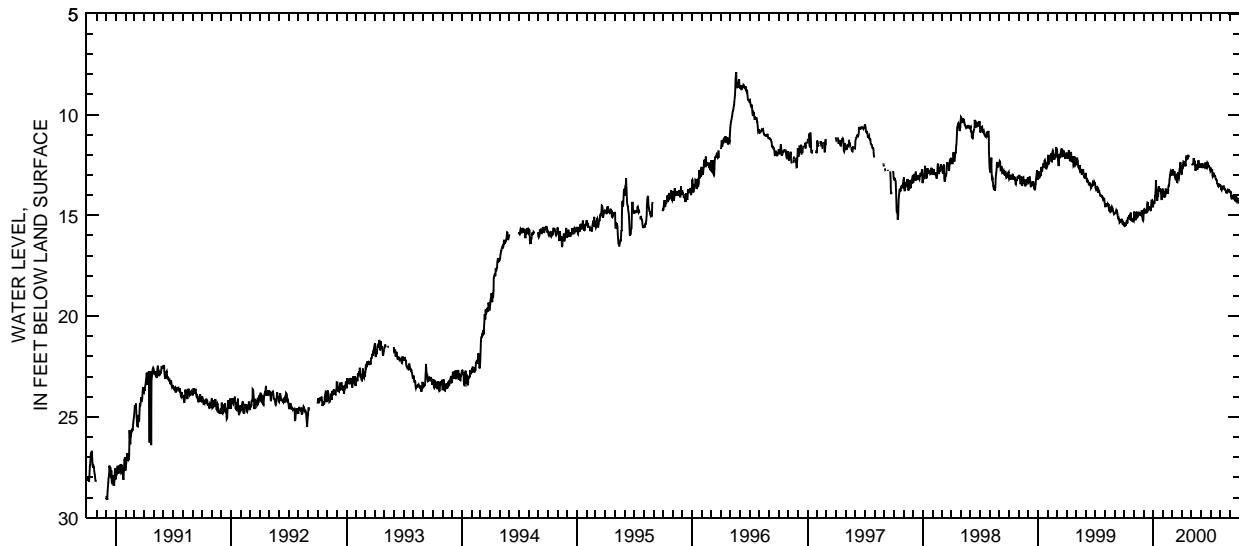
REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.40	15.20	15.21	14.57	13.85	12.73	12.93	---	12.56	12.82	13.52	13.86
2	15.43	14.82	14.94	14.46	14.00	12.91	12.71	---	12.50	12.79	13.53	13.87
3	15.55	15.03	14.68	14.33	13.79	12.91	12.54	12.44	12.65	12.73	13.62	13.86
4	15.45	15.15	14.73	14.29	13.83	12.72	12.53	12.46	12.58	12.77	13.72	14.05
5	15.46	15.18	14.71	14.43	14.05	12.81	12.56	12.51	12.43	12.76	13.75	14.16
6	15.41	15.20	14.80	14.29	14.11	12.96	12.34	12.49	12.58	12.76	13.64	14.18
7	15.51	15.25	14.87	14.04	13.96	12.99	12.35	12.42	12.66	13.01	13.62	14.17
8	15.41	15.12	14.87	14.02	14.07	12.87	12.48	12.29	12.55	13.08	13.66	14.10
9	15.35	14.89	14.87	13.65	13.95	12.82	12.53	12.16	12.52	13.03	13.62	14.11
10	15.23	14.82	14.82	13.26	13.68	13.07	12.39	12.41	12.55	12.89	13.68	14.11
11	15.36	15.08	14.90	13.62	13.90	13.07	12.33	12.44	12.57	12.96	13.68	14.07
12	15.36	15.10	14.73	13.73	13.95	13.21	12.53	12.29	12.60	13.03	13.66	13.99
13	15.11	15.00	14.48	14.05	13.84	13.24	12.52	12.59	12.51	13.06	13.62	14.11
14	15.18	14.85	14.37	14.29	13.72	13.11	12.28	12.79	12.43	13.06	13.67	14.09
15	15.13	14.91	14.39	14.17	13.84	13.00	12.11	12.77	12.37	13.00	13.71	14.14
16	15.04	14.89	14.60	13.94	13.84	12.94	12.14	12.68	12.44	13.08	13.72	14.27
17	15.02	14.99	14.61	14.07	13.92	13.35	12.05	12.52	12.65	13.20	13.73	14.29
18	15.13	14.97	14.70	13.78	13.65	13.36	12.16	12.51	12.65	13.21	13.76	14.19
19	15.18	14.93	14.65	13.57	13.52	13.08	12.22	12.58	12.67	13.22	13.86	14.07
20	15.19	14.89	14.54	13.66	13.53	12.85	12.13	12.70	12.63	13.26	13.88	13.97
21	15.17	14.88	14.64	13.79	13.44	13.12	12.00	12.70	12.39	13.27	13.87	14.27
22	14.87	14.89	14.69	13.79	13.23	13.17	12.09	12.58	12.41	13.44	13.83	14.30
23	15.04	14.90	14.63	13.66	13.06	13.10	12.08	12.40	12.53	13.48	13.78	14.15
24	15.25	15.01	14.71	13.79	12.97	12.92	12.04	12.27	12.53	13.45	13.75	14.17
25	15.27	15.02	14.78	13.71	12.90	12.68	---	12.53	12.54	13.45	13.82	14.17
26	15.13	14.75	14.49	13.88	12.85	12.71	---	12.64	12.54	13.51	13.78	14.27
27	15.22	14.84	14.28	14.17	12.91	12.40	---	12.60	12.63	13.56	13.70	14.31
28	15.24	15.09	14.28	14.24	13.03	12.40	---	12.44	12.66	13.53	13.75	14.34
29	15.24	15.21	14.26	14.19	13.00	12.70	---	12.52	12.60	13.48	13.76	14.40
30	15.26	15.27	14.32	13.83	---	12.82	---	12.57	12.74	13.48	13.81	14.30
31	15.30	---	14.57	13.68	---	12.94	---	12.53	---	13.50	13.82	---
MAX	15.55	15.27	15.21	14.57	14.11	13.36	12.93	12.79	12.74	13.56	13.88	14.40
CAL YR 1999	LOW 15.55											
WTR YR 2000	LOW 15.55											



**GROUND-WATER RECORDS**  
**Hamilton County**

**391608084254400. LOCAL NUMBER, H-6**

LOCATION.—Latitude 39°16'08", longitude 84°25'44", Hydrologic Unit 05090203, Water Treatment Plant in Glendale, Ohio. Owner: Glendale Water Department.

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, Division of Water.

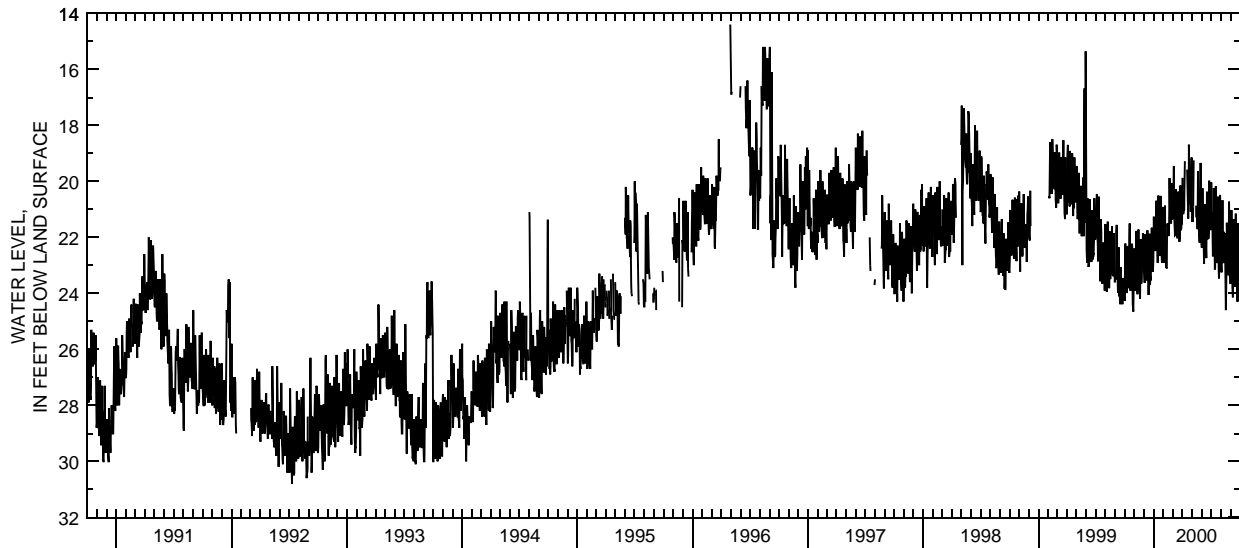
PERIOD OF RECORD.—July 1938 to current year.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.27	23.13	22.85	22.19	22.38	21.30	20.90	20.87	22.25	21.14	22.52	23.66
2	23.37	22.97	23.15	21.26	22.31	21.02	19.88	21.45	22.37	20.04	22.80	22.64
3	22.22	23.28	23.57	22.13	22.68	20.97	20.55	21.26	20.87	21.30	23.25	21.71
4	22.72	23.52	23.63	22.08	22.91	20.49	21.17	21.45	20.25	21.12	22.56	21.03
5	23.31	23.91	21.89	21.99	22.05	19.45	21.06	21.33	21.30	21.22	22.38	22.53
6	23.45	23.70	22.64	22.49	20.87	21.06	20.99	20.90	21.80	22.05	20.67	23.57
7	23.63	21.77	23.27	22.26	21.89	21.50	21.03	19.25	21.90	22.68	21.66	23.79
8	23.99	22.91	23.51	22.04	22.25	21.78	20.34	---	22.38	22.28	22.64	24.14
9	23.87	22.91	23.36	20.78	23.10	21.92	19.28	---	22.95	20.25	22.92	22.80
10	22.31	23.34	23.42	20.69	23.04	21.90	---	---	21.68	21.71	21.80	21.35
11	22.76	24.03	23.54	22.13	23.09	21.48	---	---	20.82	22.05	22.76	22.28
12	22.98	23.40	21.75	22.28	23.09	20.28	---	---	21.51	22.46	22.80	23.47
13	23.21	23.12	22.79	22.65	21.59	21.21	---	---	22.38	23.15	21.87	23.57
14	23.40	21.72	23.07	22.91	21.50	21.74	---	---	22.50	23.07	21.89	23.51
15	23.82	23.27	23.58	22.67	21.57	21.65	---	20.87	22.38	21.63	22.88	23.76
16	22.80	23.33	24.06	20.51	21.68	21.95	19.58	21.29	22.74	20.18	23.82	22.76
17	21.50	23.39	23.51	21.17	21.93	22.04	20.18	20.97	21.53	21.47	24.60	21.15
18	23.75	23.55	22.97	22.08	21.93	21.53	20.84	21.06	20.37	22.49	23.61	22.31
19	23.88	24.20	21.87	22.02	21.83	20.36	21.17	21.71	21.24	22.13	23.15	23.30
20	23.90	23.78	23.07	22.26	19.88	20.46	21.33	20.93	21.56	22.59	21.48	23.25
21	23.63	22.07	23.70	22.67	20.49	21.30	20.52	19.64	22.07	22.92	22.14	23.75
22	23.01	22.98	23.39	22.14	21.00	21.38	18.69	20.96	21.71	22.02	22.83	24.29
23	22.88	23.66	23.54	20.52	21.03	22.16	19.10	21.54	22.05	20.55	23.30	22.97
24	22.23	23.57	23.27	21.83	21.21	21.96	19.94	21.81	21.72	21.75	23.31	21.50
25	22.32	23.21	22.22	22.19	21.39	21.51	20.81	22.05	19.98	23.10	23.28	21.83
26	23.55	22.16	21.66	22.41	21.50	20.15	20.55	22.19	20.90	23.47	22.07	23.45
27	24.38	22.28	22.25	22.86	20.06	20.55	20.55	20.66	21.57	23.31	20.73	24.18
28	24.59	21.86	22.68	22.91	20.28	21.74	21.09	20.28	21.48	22.89	21.63	24.24
29	24.65	22.28	23.00	22.20	21.36	21.63	20.39	19.34	21.74	21.86	22.86	24.29
30	24.03	23.10	23.24	20.91	---	21.50	19.15	21.02	21.51	20.49	23.27	22.79
31	22.40	---	22.83	21.47	---	21.53	---	21.56	---	21.90	23.39	---
MAX	24.65	24.20	24.06	22.91	23.10	22.16	21.33	22.19	22.95	23.47	24.60	24.29

CAL YR 1999    LOW 24.65  
WTR YR 2000    LOW 24.65



**GROUND-WATER RECORDS**  
**Hamilton County**

**391733084392400. LOCAL NUMBER, H-2**

LOCATION.—Latitude 39°17'33", longitude 84°39'24", 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.

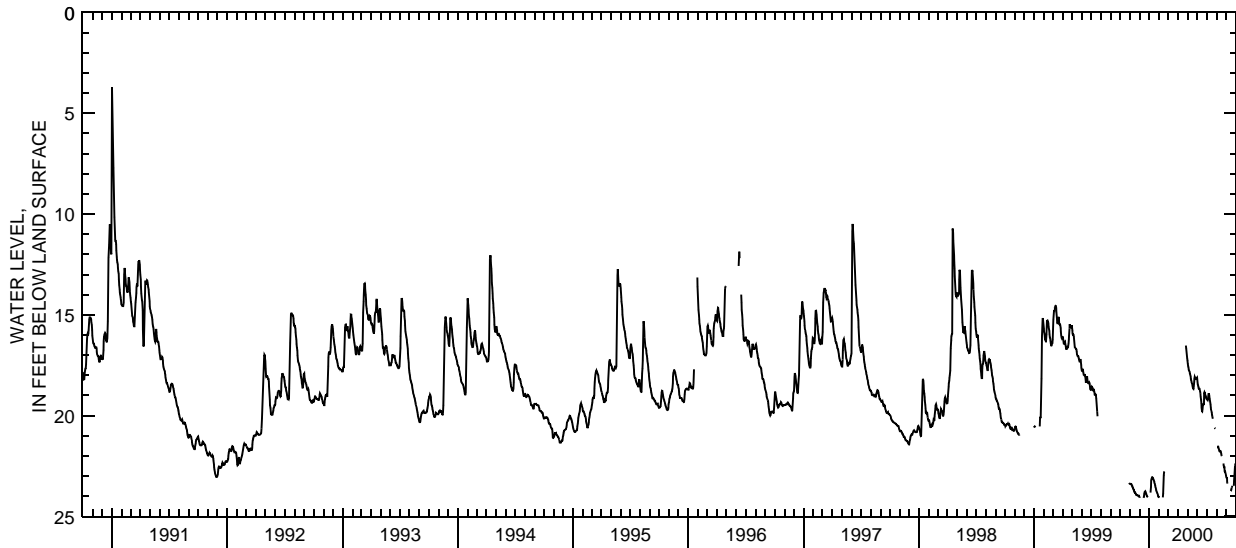
REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.—August 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 24.37 ft below land-surface datum, Sept. 24 and 25, 1972; minimum daily low 1.60 ft below land-surface datum, June, 16, 1958. (Water level above land surface but could not be measured during January 1959 flood.)

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	23.40	24.05	---	24.05	---	---	17.27	18.18	19.19	---	23.06
2	---	23.40	24.08	---	24.06	---	---	17.43	18.35	19.19	---	23.10
3	---	23.40	---	---	---	---	---	17.54	18.44	19.20	21.54	23.10
4	---	23.39	---	---	---	---	---	17.60	18.53	19.22	21.54	23.33
5	---	23.40	---	23.82	---	---	---	17.72	18.59	19.15	21.54	23.37
6	---	23.43	---	23.54	---	---	---	17.76	18.66	19.02	21.54	---
7	---	23.46	---	23.25	---	---	---	17.81	18.68	18.90	21.59	---
8	---	23.49	---	23.13	---	---	---	17.85	18.68	18.93	21.65	---
9	---	23.54	---	23.07	---	---	---	17.91	18.72	18.99	21.71	---
10	---	23.57	---	23.06	---	---	---	18.00	18.80	19.13	21.75	---
11	---	23.63	---	23.07	---	---	---	18.06	18.92	19.25	21.78	---
12	---	23.67	---	23.09	---	---	---	18.17	19.05	19.35	21.78	---
13	---	23.69	---	23.13	24.06	---	---	18.27	19.22	19.45	21.77	---
14	---	23.75	24.08	23.15	23.87	---	---	18.35	19.40	19.61	21.77	---
15	---	23.79	24.02	23.19	23.39	---	---	18.40	19.61	19.71	21.83	23.73
16	---	23.82	23.88	23.25	22.95	---	---	18.47	19.79	19.79	21.90	23.72
17	---	23.82	23.81	23.30	22.79	---	---	18.53	19.80	19.86	21.99	23.66
18	---	23.85	23.78	23.36	22.77	---	---	18.61	19.68	19.95	22.01	23.58
19	---	23.88	23.75	23.43	---	---	---	18.68	19.45	20.07	---	23.54
20	---	23.91	23.79	23.49	---	---	---	18.69	19.44	20.16	---	23.49
21	---	23.93	23.84	23.57	---	---	---	18.57	19.44	---	---	---
22	---	23.93	23.88	23.64	---	---	---	18.33	19.44	---	---	---
23	---	23.94	23.94	23.70	---	---	---	18.18	18.90	---	22.37	---
24	---	23.96	23.97	23.75	---	---	---	18.09	18.84	---	22.47	23.49
25	---	23.97	24.00	23.81	---	---	---	18.15	18.90	---	22.56	23.42
26	---	23.97	24.05	23.84	---	---	16.52	18.18	18.95	20.60	22.56	23.24
27	---	23.97	24.06	23.88	---	---	16.67	18.17	19.00	20.63	22.76	22.92
28	---	23.97	---	23.93	---	---	16.85	18.17	19.05	20.64	22.77	22.67
29	23.34	24.00	---	24.00	---	---	17.01	18.15	19.13	---	22.80	22.50
30	23.36	24.02	---	24.03	---	---	17.15	18.14	19.17	---	22.89	22.37
31	23.39	---	---	24.03	---	---	---	18.11	---	---	22.97	---
MAX	23.39	24.02	24.08	24.03	24.06	---	17.15	18.69	19.80	20.64	22.97	23.73
CAL YR 1999	LOW	24.08										
WTR YR 2000	LOW	24.08										





**GROUND-WATER RECORDS**  
**Hamilton County**

**391748084393800. LOCAL NUMBER, H-19**

LOCATION.—Latitude 39°17'48", longitude 84°39'38", Hydrologic Unit 05080002, on left bank of Great Miami River, 1.3 mi southwest of Venice, Ohio. Owner: Southwest Ohio Water Company.  
 AQUIFER.—Sand and gravel of Pleistocene Age.  
 WELL CHARACTERISTICS.—Collector-type industrial supply water-table well, diameter 20 ft, depth 144 ft, and horizontal intakes at 95-100 ft.  
 PERIOD OF RECORD.—1964 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[µS/cm, microsiemens per centimeter; (00095), USGS National Water Information System parameter code; deg C, degrees Celsius; mg/L, milligrams per liter; IT, incremental titration; µg/L, micrograms per liter; <, concentration or value reported is less than that indicated; --, no data; e, estimated]

Date	Time	Specific conductance, field (µS/cm) (00095)	pH, water, field (standard units) (00400)	Air temperature (deg C) (00020)	Water temperature (deg C) (00010)	Oxygen demand, chemical (high level) (mg/L) (00340)	Calcium, dissolved (mg/L as Ca) (00915)	Magnesium, dissolved (mg/L as Mg) (00925)	Sodium, dissolved (mg/L as Na) (00930)	
Nov.	16	0830	812	7.3	3.2	15.8	<10	85	30	44
Mar.	9	0830	807	7.3	16.6	15.7	<10	83	30	44
Aug.	16	0830	772	7.2	26.0	15.7	<10	74	28	38

Date	Potassium, dissolved (mg/L as K) (00935)	Bicarbonate, IT, field (mg/L as HCO <sub>3</sub> ) (99440)	ANC, unfiltered, carbonate, IT, field (mg/L as CaCO <sub>3</sub> ) (99430)	Sulfate, dissolved (mg/L as SO <sub>4</sub> ) (00945)	Chloride, dissolved (mg/L as Cl) (00940)	Fluoride, dissolved (mg/L as F) (00950)	Silica, dissolved (mg/L as SiO <sub>2</sub> ) (00955)	Dissolved solids, residue at 180 deg C (mg/L) (70300)	Nitrogen, nitrite, dissolved (mg/L as N) (00613)	
Nov.	16	4.7	277	227	72	72	.34	9.1	473	.011
Mar.	9	4.2	310	254	78	71	.31	8.0	497	<.010
Aug.	16	3.7	286	234	68	64	.33	8.5	460	.024

Date	Nitrogen, nitrite plus nitrate, dissolved (mg/L as N) (00631)	Nitrogen, ammonia, dissolved (mg/L as N) (00608)	Phosphorus, ortho-phosphate, dissolved (mg/L as P) (00671)	Arsenic, total (µg/L as As) (01002)	Arsenic, dissolved (µg/L as As) (01000)	Chromium, dissolved (µg/L as Cr) (01030)	Chromium, total recoverable (µg/L as Cr) (01034)	Copper, total recoverable (µg/L as Cu) (01042)	Copper, dissolved (µg/L as Cu) (01040)	
Nov.	16	.813	.050	<.010	<3	<2	<.80	<1	4	2.2
Mar.	9	.988	.040	<.010	--	--	--	--	--	--
Aug.	16	2.43	.044	.011	<3	<2	<.80	<1	1	1.6

Date	Iron, dissolved (µg/L as Fe) (01046)	Lead, total recoverable (µg/L as Pb) (01049)	Lead, dissolved (µg/L as Pb) (01049)	Manganese, dissolved (µg/L as Mn) (01056)	Zinc, total recoverable (µg/L as Zn) (01092)	Zinc, dissolved (µg/L as Zn) (01090)	Carbon, organic, total (mg/L as C) (00680)	
Nov.	16	24	<1	<1.0	268	<31	e11	1.4
Mar.	9	16	--	--	264	--	--	5.3
Aug.	16	13	<1	<1.0	246	<31	e13	1.3

**GROUND-WATER RECORDS**  
**Hamilton County**

**391817084393300. LOCAL NUMBER, H-4**

LOCATION.—Latitude 39°18'17", longitude 84°39'33", 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, Division of Water.

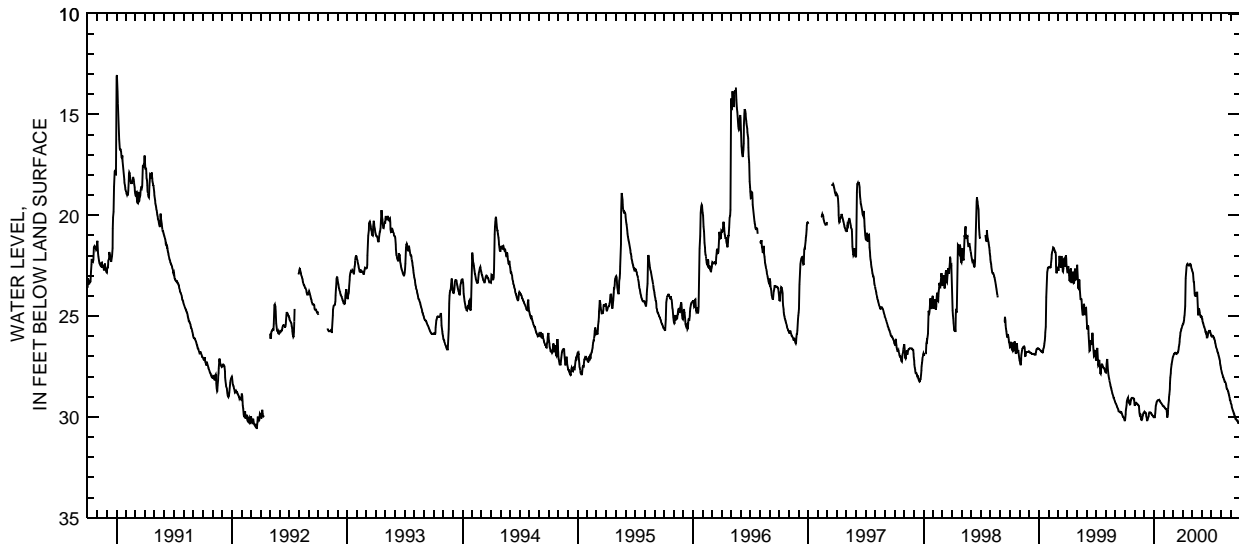
PERIOD OF RECORD.—December 1954 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 32.16 ft below land-surface datum, Nov. 20, 1971; minimum daily low, 11.60 ft below land-surface datum, June 16, 1958.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.21	29.42	29.76	30.02	29.48	27.03	25.43	22.72	25.10	26.00	27.65	29.33
2	30.12	29.42	29.78	30.02	29.49	26.99	25.41	22.80	25.14	26.01	27.72	29.38
3	29.87	29.37	29.79	30.02	29.52	26.94	25.38	22.86	25.25	25.93	27.80	29.43
4	29.68	29.33	29.79	30.02	29.54	26.90	25.31	22.89	25.31	25.98	27.86	29.51
5	29.58	29.30	29.78	29.81	29.57	26.88	25.20	23.09	25.37	26.00	27.92	29.60
6	29.42	29.30	29.81	29.61	29.58	26.85	25.07	23.31	25.44	26.00	27.96	29.64
7	29.28	29.31	29.82	29.46	29.61	26.83	24.97	23.33	25.49	26.01	28.01	29.68
8	29.18	29.34	30.00	29.37	29.61	26.82	24.86	23.61	25.53	26.06	28.05	29.73
9	29.12	29.36	30.08	29.30	29.61	26.82	24.50	23.88	25.58	26.07	28.10	29.76
10	29.07	29.37	30.17	29.25	29.61	26.85	23.70	24.02	25.63	26.10	28.14	29.81
11	29.04	29.40	30.17	29.21	29.82	26.85	23.12	23.97	25.70	26.18	28.18	29.85
12	29.24	29.42	30.11	29.19	30.00	26.88	22.80	23.84	25.79	26.24	28.25	29.91
13	29.27	29.43	30.06	29.18	30.00	26.87	22.61	24.00	25.82	26.31	28.26	29.94
14	29.22	29.46	30.02	29.18	29.88	26.85	22.50	24.00	25.74	26.37	28.29	30.00
15	29.15	29.55	29.96	29.18	29.65	26.82	22.43	23.91	25.80	26.46	28.31	30.06
16	29.27	29.79	29.83	29.18	29.40	26.82	22.41	23.84	25.95	26.54	28.35	30.11
17	29.38	29.94	29.78	29.18	29.19	26.79	22.44	23.84	26.06	26.60	28.47	30.12
18	29.37	29.94	29.78	29.16	29.01	26.73	22.47	24.18	26.06	26.64	28.53	30.13
19	29.25	29.85	29.78	29.19	28.89	26.64	22.47	24.57	26.01	26.68	28.61	30.15
20	29.16	29.91	29.79	29.24	28.63	26.54	22.49	24.92	25.95	26.75	28.63	30.17
21	29.10	30.13	29.79	29.25	28.33	26.43	22.50	24.92	25.86	26.81	28.67	30.20
22	29.07	30.13	29.82	29.28	28.05	26.28	22.50	24.68	25.80	26.82	28.70	30.23
23	29.06	30.06	29.83	29.31	27.84	26.12	22.46	24.62	25.77	26.90	28.74	30.27
24	29.06	30.11	29.87	29.33	27.66	25.97	22.41	24.72	25.76	26.96	28.80	30.30
25	29.06	30.09	29.88	29.34	27.53	25.85	22.41	24.83	25.70	27.02	28.86	30.30
26	29.06	29.99	29.91	29.37	27.40	25.76	22.43	24.93	25.73	27.09	28.95	30.29
27	29.07	29.91	29.91	29.38	27.30	25.70	22.47	25.01	25.77	27.15	29.03	30.24
28	29.08	29.85	29.93	29.42	27.20	25.62	22.55	25.04	25.83	27.24	29.08	30.17
29	29.12	29.81	29.96	29.45	27.11	25.58	22.64	25.05	25.88	27.35	29.15	30.13
30	29.13	29.78	29.99	29.48	---	25.50	22.70	25.01	25.93	27.47	29.19	30.11
31	29.34	---	30.02	29.48	---	25.46	---	25.05	---	27.57	29.25	---
MAX	30.21	30.13	30.17	30.02	30.00	27.03	25.43	25.05	26.06	27.57	29.25	30.30

CAL YR 1999 LOW 30.21  
WTR YR 2000 LOW 30.30



**GROUND-WATER RECORDS**  
**Hardin County**

**404218083503700. LOCAL NUMBER, HN-1**

LOCATION.—Latitude 40°42'18", longitude 83°50'37", 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, Division of Water.

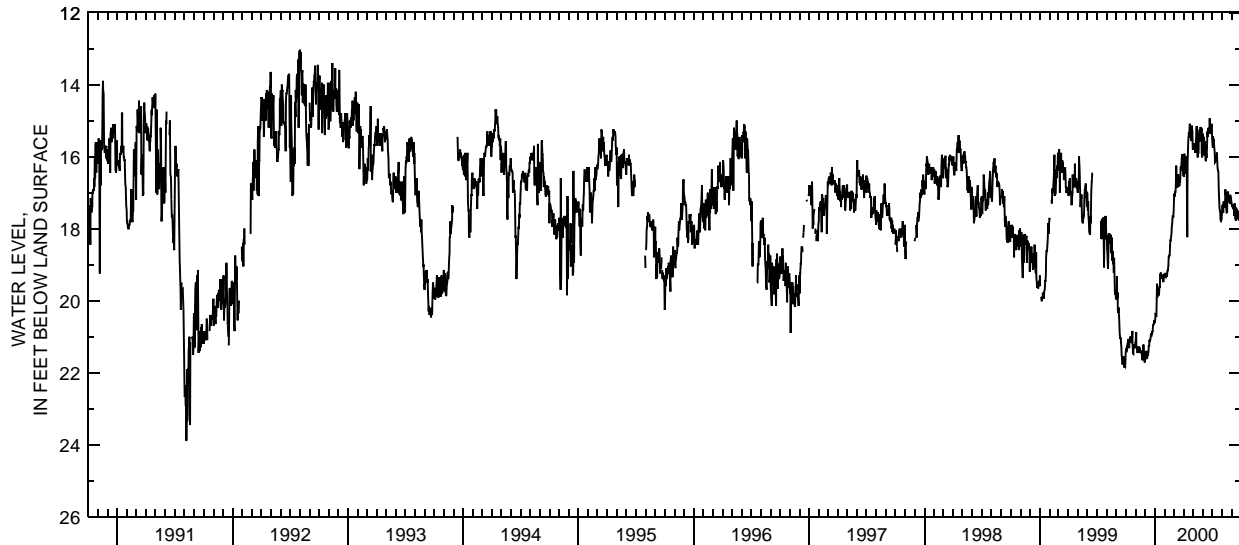
PERIOD OF RECORD.—April 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 23.90 ft below land-surface datum, Aug. 7, 1991;  
minimum daily low, 5.85 ft below land-surface datum, July 1, 1946.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.45	21.17	21.65	20.63	19.31	17.50	16.50	15.80	15.36	15.48	17.61	17.33
2	21.36	21.05	21.59	20.55	19.35	17.06	16.56	15.63	15.56	15.68	17.40	17.40
3	21.36	20.88	21.50	20.43	19.28	17.03	16.02	15.78	15.83	15.76	17.34	17.36
4	21.33	21.27	21.50	20.34	19.23	17.11	15.92	15.75	15.96	15.44	17.46	17.33
5	21.36	21.33	21.39	20.43	19.28	16.97	16.19	15.63	15.45	15.54	17.56	17.45
6	21.29	21.36	21.59	20.43	19.32	17.01	16.34	15.75	15.83	15.54	17.25	17.34
7	21.21	21.45	21.60	20.28	19.29	16.95	16.47	15.80	15.78	15.66	17.34	17.46
8	21.09	21.42	21.59	19.53	19.34	16.56	16.35	15.90	15.57	15.80	17.39	17.46
9	21.09	21.38	21.51	19.68	19.28	16.25	16.19	15.78	15.84	15.96	17.34	17.65
10	21.18	21.33	21.42	19.68	19.19	16.64	15.99	15.63	16.10	16.16	17.42	17.30
11	21.27	21.27	21.45	19.75	19.14	16.58	16.04	15.40	16.13	16.14	17.16	17.39
12	21.32	21.44	21.39	19.81	19.17	16.74	16.44	15.24	15.92	15.98	16.91	17.73
13	21.09	21.42	21.26	19.85	19.02	16.86	18.24	15.15	16.04	15.99	17.07	17.76
14	21.06	21.30	21.26	19.83	18.78	16.81	16.19	15.63	15.78	16.11	17.16	17.78
15	21.09	21.41	21.09	19.77	18.78	16.49	15.95	15.90	15.62	16.06	17.46	17.42
16	20.99	21.38	21.12	19.62	18.74	16.62	15.57	16.02	15.30	15.89	17.55	17.64
17	21.08	21.41	21.11	19.62	18.74	16.83	15.44	15.87	15.45	16.22	17.54	17.45
18	21.15	21.44	21.09	19.26	18.63	16.75	15.32	15.92	15.40	16.31	16.98	17.63
19	21.05	21.44	21.02	19.29	18.33	16.81	15.47	15.80	15.20	16.38	17.16	17.50
20	21.18	21.41	20.90	19.22	18.33	16.71	15.20	15.36	15.36	16.40	16.97	17.64
21	21.05	21.48	21.00	19.29	18.30	16.71	15.09	15.59	15.21	16.53	17.07	17.64
22	20.84	21.63	20.93	19.34	18.20	16.53	15.21	15.25	15.29	16.97	17.19	17.75
23	21.18	21.66	20.93	19.32	18.09	16.29	15.39	15.44	14.94	17.30	17.19	17.55
24	21.47	21.38	20.85	19.38	17.95	16.32	15.27	15.39	15.21	17.40	17.27	17.70
25	21.48	21.45	20.88	19.36	17.85	16.29	15.35	15.18	15.36	17.49	17.19	17.78
26	21.24	21.22	20.69	19.40	17.75	16.17	15.57	15.47	15.29	17.56	17.31	17.64
27	21.27	21.39	20.67	19.44	17.64	15.93	15.40	15.57	15.33	17.73	17.06	17.75
28	21.22	21.54	20.67	19.49	17.67	16.11	15.14	15.21	15.15	17.78	17.10	17.73
29	21.24	21.66	20.63	19.44	17.67	16.14	15.32	15.90	15.09	17.79	17.13	17.97
30	21.32	21.72	20.55	19.31	---	16.35	15.75	16.02	15.20	17.76	17.20	17.78
31	21.27	---	20.60	19.26	---	16.50	---	15.56	---	17.72	17.28	---
MAX	21.48	21.72	21.65	20.63	19.35	17.50	18.24	16.02	16.13	17.79	17.61	17.97

CAL YR 1999    LOW 21.86  
WTR YR 2000    LOW 21.72



**GROUND-WATER RECORDS**  
**Hocking County**

**393200082235300. LOCAL NUMBER, HK-1**

LOCATION.—Latitude 39°32'00", longitude 82°23'53", 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.—Periodic measurement with chalked tape by Ohio Department of Natural Resources personnel.

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, Division of Water.

PERIOD OF RECORD.—August 1962 to September 1982 continuous, periodic 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.

WATER LEVEL  
IN FEET BELOW LAND-SURFACE DATUM  
INSTANTANEOUS OBSERVATION

DATE	WATER LEVEL
10/22/99	18.84
04/13/00	14.50

**GROUND-WATER RECORDS**  
**Knox County**

**402344082300700. LOCAL NUMBER, K-1**

LOCATION.—Latitude 40°23'44", longitude 82°30'07", Hydrologic Unit 05040003, in city park, Mt. Vernon, Ohio. Owner: Mt. Vernon Water Department.

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, Division of Water.

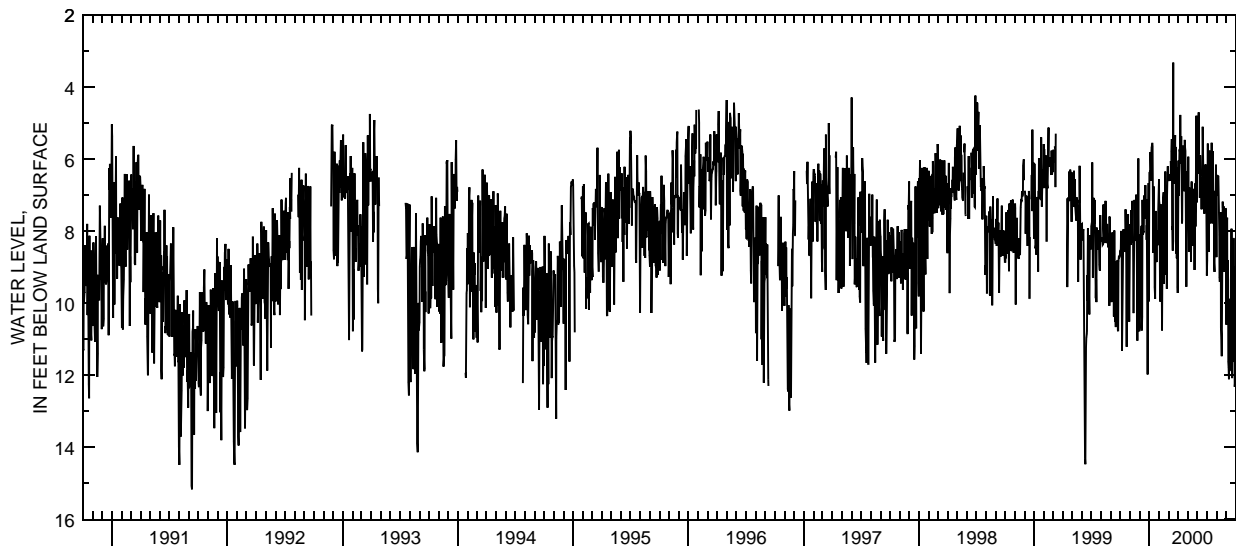
PERIOD OF RECORD.—April 1946 to current year.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.60	8.36	10.66	6.38	7.14	6.51	8.91	7.33	6.04	9.23	7.02	10.60
2	8.60	8.15	8.94	6.37	7.23	6.58	6.04	7.42	6.04	8.82	6.96	7.87
3	7.99	8.37	8.47	6.31	9.73	6.58	7.02	5.93	5.76	6.03	6.97	7.62
4	8.39	7.42	8.09	5.80	9.95	6.48	6.21	8.09	5.86	5.56	7.02	9.76
5	8.49	8.24	8.23	6.02	8.32	6.48	5.74	8.57	4.70	7.19	6.47	8.80
6	11.32	8.32	8.01	6.60	7.61	6.41	5.74	7.07	6.12	8.48	6.48	9.35
7	10.35	7.50	7.85	5.87	7.26	6.54	5.84	6.79	6.40	8.57	6.84	11.62
8	9.22	7.16	10.76	5.68	7.35	6.59	4.77	7.14	6.04	6.80	7.64	11.79
9	8.77	7.94	10.38	5.59	8.99	6.05	6.11	7.50	7.07	5.76	8.10	12.11
10	7.99	8.18	7.13	5.54	10.76	6.50	5.71	7.62	5.89	6.95	9.28	10.36
11	7.94	9.87	8.07	5.64	8.76	5.78	5.36	8.38	6.08	7.19	9.40	9.88
12	8.40	10.27	8.07	8.26	7.59	5.44	6.58	8.85	6.17	7.78	9.30	9.98
13	8.47	8.07	8.01	8.60	7.35	7.96	7.78	6.64	6.49	6.56	9.36	11.84
14	8.55	7.29	8.03	6.75	7.05	7.88	7.67	6.64	7.39	7.53	7.48	11.85
15	8.55	7.13	7.01	8.07	6.92	8.54	6.15	7.54	6.81	6.38	10.67	10.31
16	8.55	8.09	7.60	8.15	9.46	3.32	5.89	7.54	7.09	5.54	10.99	8.54
17	7.39	8.27	7.65	8.31	7.52	6.37	5.62	8.41	5.65	6.41	11.47	7.93
18	7.81	7.70	7.21	9.55	6.95	6.68	5.67	7.58	5.10	6.97	9.48	8.92
19	8.34	7.17	6.72	9.88	6.67	5.75	5.70	8.13	5.69	7.78	7.83	12.08
20	10.99	7.02	7.12	7.44	6.34	6.17	6.89	7.67	5.94	5.78	7.18	11.08
21	11.21	6.98	7.38	7.45	9.20	6.21	5.75	6.82	7.11	7.46	7.35	11.63
22	7.88	7.78	7.12	8.18	7.54	5.33	5.46	7.73	6.79	7.62	7.38	11.51
23	8.22	8.12	8.24	8.83	6.73	6.67	5.68	9.08	7.51	7.15	7.34	10.36
24	8.43	11.04	7.83	8.86	8.88	5.66	5.77	8.55	6.30	8.88	7.31	8.20
25	7.53	8.27	11.33	7.98	9.60	8.27	7.46	6.67	6.15	9.13	9.13	9.46
26	9.34	6.85	11.98	8.36	7.08	8.62	8.91	7.87	6.86	6.88	7.52	8.98
27	8.57	5.98	9.89	8.35	6.41	6.23	9.54	6.22	6.19	6.90	7.40	12.32
28	9.87	7.26	7.15	8.36	6.20	8.75	8.05	5.57	6.15	6.90	7.82	12.21
29	10.51	10.41	6.66	7.48	6.41	8.25	6.76	4.79	7.91	6.87	7.36	12.13
30	8.95	10.78	9.95	7.12	---	9.55	6.34	7.20	8.40	6.15	7.38	9.82
31	7.81	---	7.77	6.56	---	9.72	---	5.68	---	8.72	9.60	---
MAX	11.32	11.04	11.98	9.88	10.76	9.72	9.54	9.08	8.40	9.23	11.47	12.32

CAL YR 1999   LOW 14.47  
WTR YR 2000   LOW 12.32



**GROUND-WATER RECORDS**  
**Knox County**

**402747082374300. LOCAL NUMBER, K-4**

LOCATION.—Latitude 40°27'47", longitude 82°37'43", 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, Division of Water.

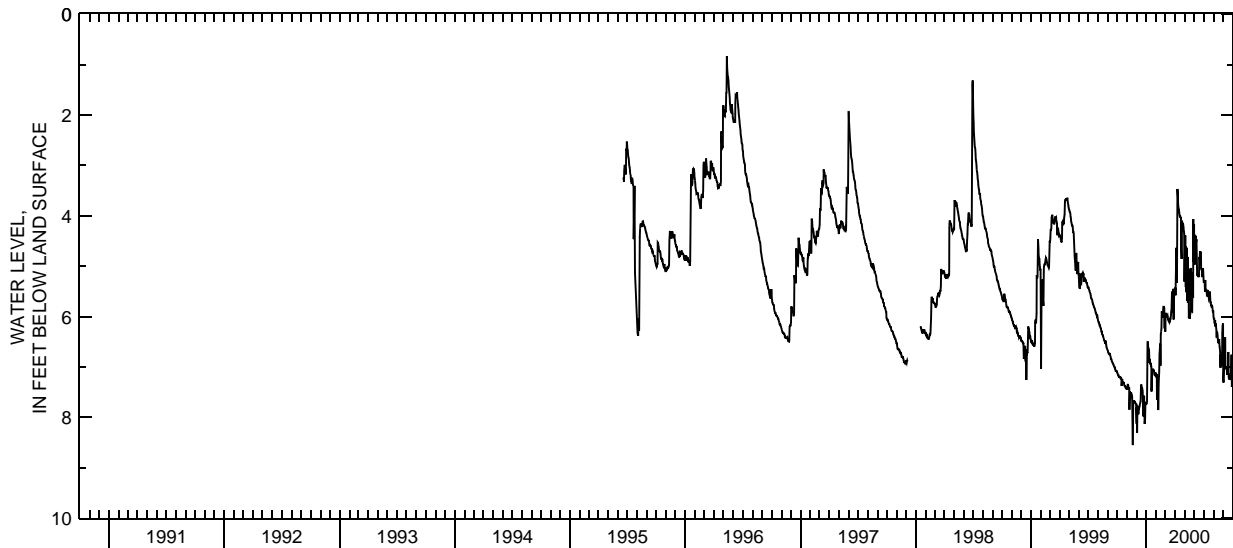
PERIOD OF RECORD.—June 19, 1995, to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 8.55 ft below land-surface datum, Nov. 19, 1999; minimum daily low 0.84 ft below land-surface datum, May 12, 1996.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.11	7.44	8.13	7.74	7.19	6.30	5.48	5.31	4.93	5.31	5.99	7.23
2	7.14	7.41	7.80	7.73	7.20	5.99	5.43	4.71	4.95	5.31	6.05	7.31
3	7.16	7.34	8.31	7.71	7.14	5.96	5.58	4.41	4.97	5.28	6.05	7.01
4	7.17	7.36	7.83	7.02	7.65	5.93	4.86	4.41	4.38	5.31	6.11	6.98
5	7.17	7.38	7.80	6.51	7.26	5.97	4.64	5.42	4.89	5.51	6.14	6.94
6	7.20	7.41	7.81	6.51	7.26	6.00	5.24	4.61	4.41	5.28	6.08	6.81
7	7.20	7.43	7.94	6.61	7.26	6.00	5.33	5.52	4.52	5.48	6.20	6.41
8	7.20	7.43	7.83	6.63	7.86	5.99	3.98	5.28	4.47	5.48	6.14	7.01
9	7.20	7.85	7.83	6.66	7.31	6.03	3.47	4.64	4.74	5.46	6.23	7.04
10	7.20	7.50	7.80	6.69	7.23	6.06	3.63	5.69	5.18	5.49	6.26	6.99
11	7.23	7.51	7.77	6.92	7.11	6.06	3.74	4.82	5.18	5.57	6.42	7.04
12	7.23	7.64	7.73	6.84	6.74	6.09	3.84	5.73	5.16	5.57	6.30	7.04
13	7.22	7.51	7.71	6.93	6.66	6.11	3.87	5.66	5.19	5.61	6.32	7.16
14	7.23	7.53	7.68	6.94	6.54	6.08	3.90	5.06	5.22	5.58	6.38	7.10
15	7.38	7.53	7.43	6.92	6.98	6.06	3.96	6.03	5.13	5.48	6.44	7.11
16	7.26	7.56	7.35	6.98	6.35	6.08	4.02	5.91	5.22	5.55	6.53	7.14
17	7.26	7.58	7.40	6.99	6.30	6.06	4.02	6.05	4.83	5.64	6.50	6.71
18	7.29	7.86	7.43	7.49	6.24	6.05	4.02	5.88	4.88	5.66	6.50	7.19
19	7.31	8.55	7.43	7.08	5.90	5.96	4.05	5.96	4.71	5.64	6.45	7.25
20	7.32	8.07	7.47	7.04	5.94	5.90	4.05	5.70	4.74	5.60	6.59	7.19
21	7.32	7.71	7.50	7.05	6.02	5.87	4.71	5.04	4.73	5.51	6.61	7.17
22	7.32	7.68	7.98	7.06	5.97	5.51	4.86	5.66	4.73	5.72	6.71	7.22
23	7.36	7.68	7.67	7.06	5.90	5.91	4.14	5.37	5.06	5.72	7.02	7.13
24	7.38	7.68	7.59	7.08	5.81	5.93	4.13	5.90	5.07	5.76	6.76	7.26
25	7.38	7.69	7.59	7.06	5.81	5.55	4.16	5.91	5.10	5.77	6.90	7.13
26	7.38	7.68	7.85	7.13	5.81	5.51	4.18	5.77	5.16	5.82	6.92	7.26
27	7.41	7.71	8.13	7.16	5.84	5.45	4.18	5.13	5.22	5.77	6.98	6.76
28	7.41	7.73	8.03	7.17	6.24	6.06	4.23	5.63	5.10	5.81	6.96	7.40
29	7.43	7.74	7.71	7.16	5.94	5.61	4.31	4.07	5.04	5.84	6.35	7.32
30	7.43	7.74	7.71	7.11	---	5.49	4.35	4.91	5.19	5.90	6.18	7.26
31	7.44	---	7.74	7.14	---	5.49	---	4.17	---	5.90	6.14	---
MAX	7.44	8.55	8.31	7.74	7.86	6.30	5.58	6.05	5.22	5.90	7.02	7.40

CAL YR 1999    LOW 8.55  
WTR YR 2000    LOW 8.55



**GROUND-WATER RECORDS**  
**Licking County**

**400848082251100. LOCAL NUMBER, LI-4**

LOCATION.—Latitude 40°08'48", longitude 82°25'11", 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, Division of Water.

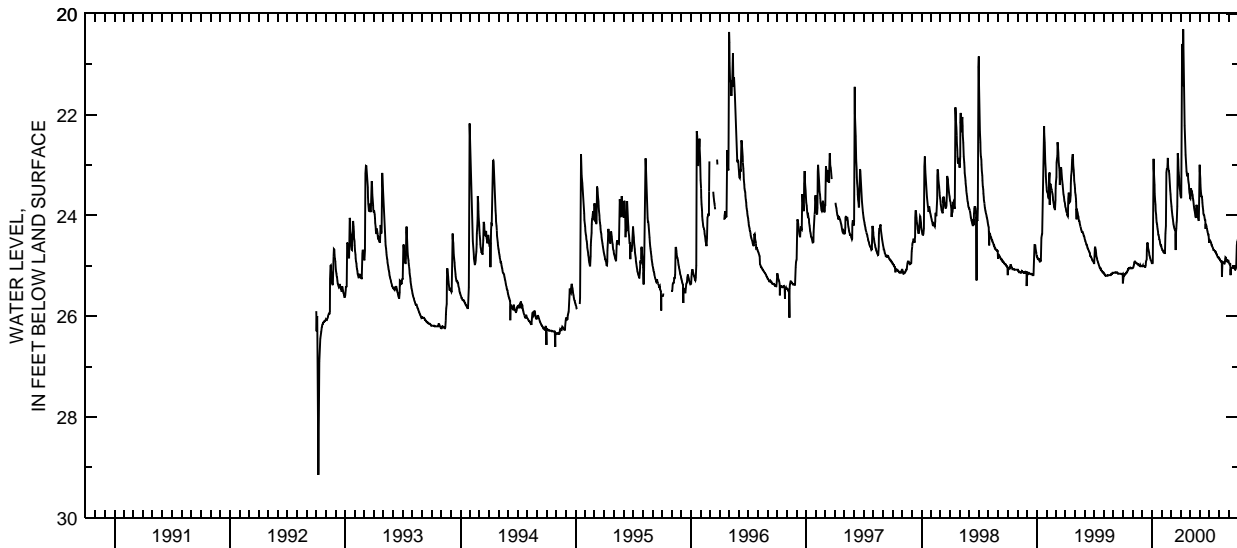
PERIOD OF RECORD.—October 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 29.15 ft below land-surface datum, Oct. 8 1992; minimum daily low, 20.31 ft below land-surface datum, Apr. 9, 2000.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.35	25.05	25.01	24.95	24.65	23.69	23.63	23.66	23.12	24.47	24.86	24.95
2	25.29	25.04	25.01	24.95	24.68	23.76	23.66	23.67	23.27	24.50	24.86	24.96
3	25.20	25.02	24.99	24.95	24.68	23.82	23.64	23.57	23.40	24.51	24.87	24.96
4	25.20	25.01	25.01	24.93	24.69	23.90	23.13	23.46	23.51	24.51	24.89	24.97
5	25.20	24.97	25.01	23.75	24.72	23.96	20.60	23.52	23.60	24.53	24.90	24.97
6	25.19	24.93	25.01	22.88	24.72	24.02	20.97	23.52	23.64	24.54	24.92	25.19
7	25.17	24.92	25.01	23.07	24.72	24.06	21.42	23.54	23.61	24.56	24.92	25.07
8	25.17	24.92	25.01	23.24	24.74	24.11	21.44	23.58	23.69	24.59	24.92	25.04
9	25.16	24.92	25.01	23.40	24.75	24.17	20.31	23.60	23.75	24.60	24.90	25.04
10	25.16	24.93	25.02	23.57	24.75	24.20	20.69	23.67	23.82	24.62	25.22	25.04
11	25.14	24.95	25.02	23.72	24.75	24.22	21.20	23.70	23.90	24.63	24.96	25.04
12	25.14	24.95	24.99	23.79	24.63	24.27	21.63	23.76	23.96	24.65	24.93	25.04
13	25.13	24.95	24.93	23.91	24.36	24.29	21.95	23.82	23.99	24.66	24.93	25.04
14	25.13	24.96	24.90	23.99	24.21	24.29	22.22	23.87	24.00	24.69	24.93	25.04
15	25.11	24.96	24.87	24.05	23.70	24.30	22.44	23.90	24.02	24.69	24.93	25.02
16	25.10	24.96	24.68	24.14	23.15	24.69	22.65	23.94	24.06	24.71	24.95	25.04
17	25.07	24.97	24.56	24.18	23.07	24.38	22.80	23.99	24.08	24.71	24.96	25.04
18	25.07	24.97	24.54	24.22	23.09	24.26	22.95	24.03	24.09	24.71	24.96	25.05
19	25.05	24.97	24.57	24.27	23.07	24.14	23.06	24.05	24.27	24.72	24.93	25.05
20	25.05	24.99	24.65	24.33	22.86	24.11	23.13	23.94	24.17	24.72	24.86	25.08
21	25.05	24.99	24.68	24.38	22.97	23.82	23.21	23.79	24.20	24.74	24.83	25.08
22	25.04	24.99	24.71	24.39	23.07	22.91	23.21	23.82	24.22	24.74	24.84	25.07
23	25.04	24.99	24.74	24.44	23.12	22.77	23.16	23.88	24.26	24.77	24.87	25.04
24	25.05	25.01	24.80	24.47	23.12	22.89	23.22	23.94	24.29	24.78	24.89	25.02
25	25.05	25.01	24.81	24.48	23.18	23.04	23.28	24.00	24.32	24.78	24.89	24.77
26	25.04	24.99	24.84	24.53	23.28	23.15	23.34	24.05	24.35	24.81	24.90	24.59
27	25.05	25.01	24.86	24.56	23.40	23.27	23.40	24.08	24.38	24.83	24.92	24.54
28	25.05	25.01	24.89	24.59	23.51	23.39	23.47	24.11	24.38	24.84	24.92	24.51
29	25.05	25.01	24.90	24.60	23.58	23.46	23.55	24.03	24.41	24.84	24.90	24.53
30	25.05	25.01	24.92	24.60	---	23.52	23.60	23.25	24.54	24.84	24.90	24.57
31	25.05	---	24.93	24.63	---	23.57	---	23.00	---	24.84	24.92	---
MAX	25.35	25.05	25.02	24.95	24.75	24.69	23.66	24.11	24.54	24.84	25.22	25.19

CAL YR 1999    LOW 25.35  
WTR YR 2000    LOW 25.35



**GROUND-WATER RECORDS**  
**Logan County**

**401510083444400. LOCAL NUMBER, LO-3**

LOCATION.—Latitude 40°15'10", longitude 83°44'44", 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.

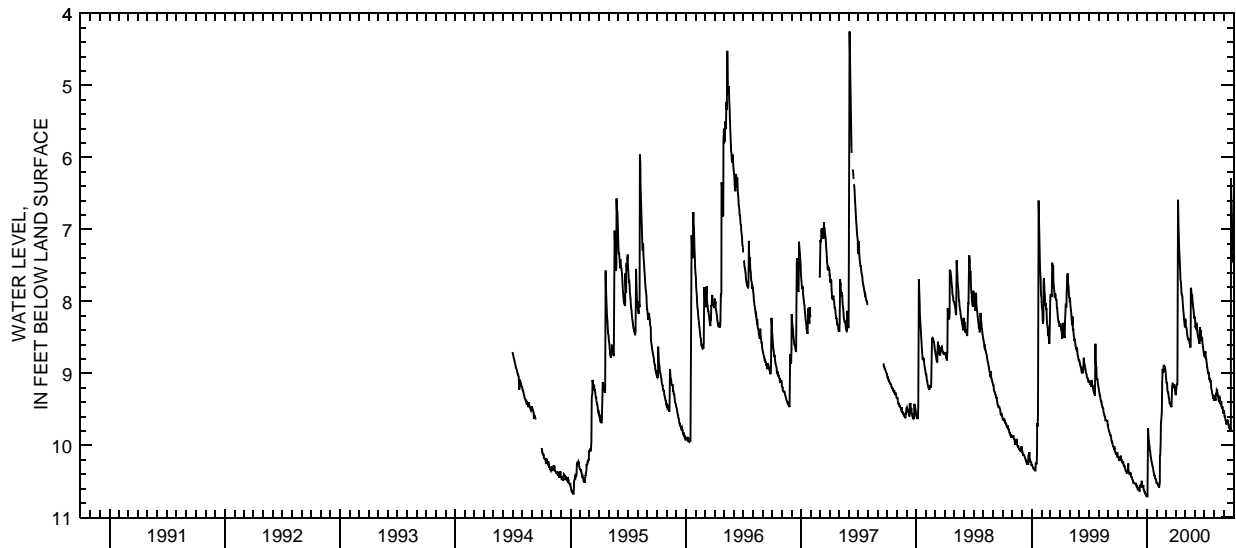
REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.—July 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, 4.25 ft below land-surface, June 3, 1997.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.16	10.38	10.58	10.70	10.52	9.01	9.29	8.36	8.21	8.76	9.38	9.54
2	10.16	10.37	10.58	10.71	10.52	9.06	9.29	8.24	8.27	8.73	9.30	9.51
3	10.16	10.25	10.61	10.71	10.52	9.11	9.26	8.27	8.36	8.78	9.33	9.59
4	10.19	10.34	10.61	10.25	10.53	9.14	9.18	8.34	8.34	8.73	9.33	9.60
5	10.20	10.37	10.61	9.76	10.55	9.12	9.15	8.36	8.39	8.69	9.36	9.60
6	10.20	10.38	10.59	9.86	10.55	9.21	9.15	8.37	8.30	8.79	9.38	9.65
7	10.22	10.40	10.61	9.90	10.56	9.26	9.15	8.40	8.31	8.79	9.31	9.66
8	10.19	10.40	10.61	9.96	10.58	9.27	8.17	8.45	8.36	8.82	9.27	9.67
9	10.17	10.38	10.64	10.01	10.58	9.27	6.59	8.49	8.41	8.87	9.29	9.69
10	10.17	10.41	10.56	10.02	10.56	9.31	6.75	8.51	8.45	8.90	9.23	9.71
11	10.14	10.38	10.56	10.08	10.52	9.33	6.96	8.52	8.48	8.92	9.24	9.67
12	10.20	10.42	10.58	10.09	10.14	9.36	7.13	8.54	8.49	8.97	9.26	9.65
13	10.20	10.44	10.58	10.14	10.13	9.41	7.32	8.51	8.52	8.99	9.30	9.65
14	10.22	10.44	10.53	10.17	9.91	9.41	7.35	8.55	8.56	8.99	9.33	9.67
15	10.23	10.46	10.55	10.19	9.69	9.42	7.53	8.56	8.55	9.01	9.34	9.67
16	10.23	10.47	10.49	10.22	9.65	9.44	7.62	8.59	8.59	8.99	9.38	9.72
17	10.25	10.49	10.55	10.25	9.56	9.44	7.71	8.56	8.41	9.08	9.39	9.74
18	10.22	10.49	10.56	10.26	9.51	9.45	7.73	8.64	8.36	9.09	9.34	9.76
19	10.26	10.52	10.58	10.28	9.12	9.47	7.80	8.55	8.48	9.06	9.33	9.75
20	10.28	10.52	10.59	10.31	8.94	9.36	7.88	7.81	8.40	9.12	9.36	9.78
21	10.28	10.52	10.55	10.32	8.99	9.18	7.91	7.85	8.49	9.09	9.39	9.75
22	10.29	10.52	10.61	10.35	8.96	9.16	7.91	7.91	8.52	9.11	9.42	9.78
23	10.29	10.52	10.62	10.38	8.91	9.14	7.94	7.92	8.55	9.20	9.44	9.80
24	10.32	10.53	10.64	10.40	8.88	9.15	8.04	7.92	8.49	9.23	9.39	6.29
25	10.34	10.53	10.65	10.42	8.92	9.20	8.06	8.01	8.56	9.24	9.47	6.57
26	10.35	10.53	10.65	10.42	8.96	9.16	8.13	8.03	8.59	9.27	9.48	6.65
27	10.35	10.53	10.67	10.46	8.96	9.20	8.19	8.09	8.63	9.30	9.47	6.93
28	10.37	10.53	10.67	10.46	8.90	9.15	8.24	8.12	8.67	9.31	9.47	7.16
29	10.38	10.56	10.68	10.46	8.96	9.20	8.28	8.15	8.69	9.34	9.48	7.31
30	10.37	10.56	10.70	10.47	---	9.23	8.34	8.21	8.73	9.34	9.53	7.46
31	10.38	---	10.70	10.50	---	9.26	---	8.24	---	9.33	9.56	---
MAX	10.38	10.56	10.70	10.71	10.58	9.47	9.29	8.64	8.73	9.34	9.56	9.80
CAL YR 1999	LOW	10.70										
WTR YR 2000	LOW	10.71										





**GROUND-WATER RECORDS**  
**Madison River Basin**

**395301083272200. LOCAL NUMBER, M-2**

LOCATION.—Latitude 39°53'01", longitude 83°27'22", 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.

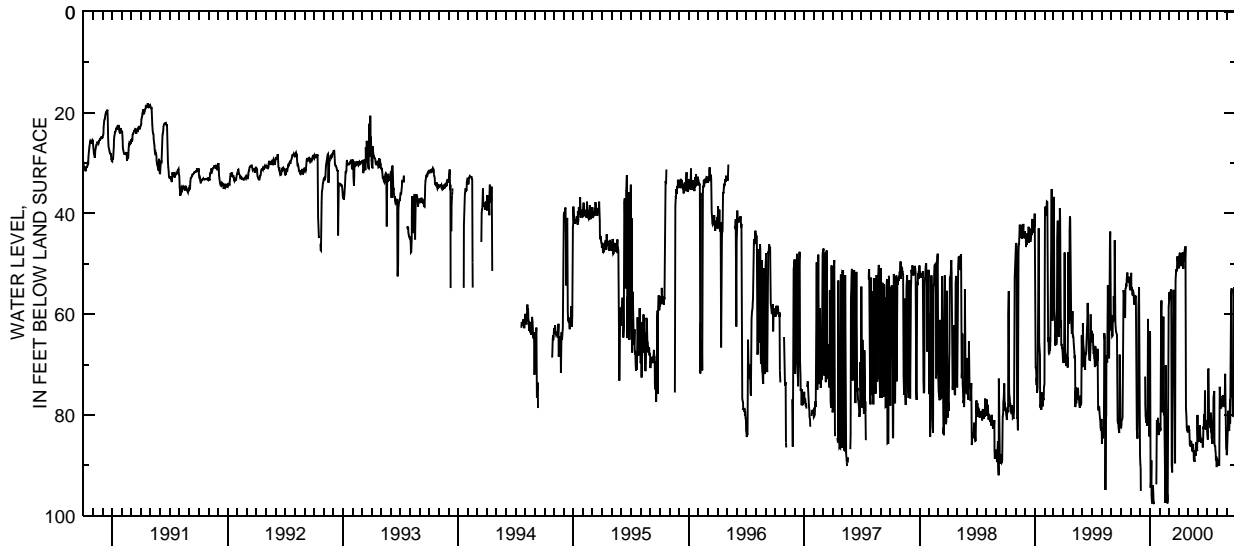
REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82.45	55.29	88.01	63.37	81.90	58.51	49.58	83.27	83.06	82.95	88.59	87.96
2	82.52	53.83	89.70	63.97	83.24	57.38	50.95	82.80	85.42	84.47	89.58	87.11
3	81.96	51.81	90.46	85.71	82.55	55.65	50.14	82.14	84.88	84.88	88.86	85.61
4	81.04	54.90	95.09	94.41	83.13	57.01	48.29	83.40	84.30	71.12	90.14	83.98
5	80.94	54.72	---	92.92	69.83	56.97	47.80	82.91	85.34	70.77	89.43	81.41
6	80.65	54.62	---	89.02	59.25	56.32	50.08	83.66	84.87	76.37	89.32	79.17
7	80.36	56.08	---	95.99	57.29	55.36	49.17	85.84	82.22	79.47	89.64	82.52
8	63.94	56.38	---	97.58	70.80	55.18	50.48	85.03	82.22	81.96	90.05	82.62
9	61.47	55.17	---	97.14	78.58	55.11	50.29	86.25	83.79	80.70	86.13	83.18
10	55.23	55.55	---	94.09	79.21	76.34	49.02	85.71	84.29	82.59	74.41	81.02
11	56.09	56.13	---	94.09	79.47	89.89	49.18	85.22	84.94	81.48	76.37	76.94
12	57.66	57.62	---	95.44	78.03	91.39	48.02	85.58	85.19	79.55	77.82	81.71
13	59.43	58.08	---	96.68	60.51	81.29	48.77	86.32	85.57	83.32	77.59	65.19
14	60.47	56.78	---	97.58	76.68	79.46	47.74	86.42	84.66	83.49	78.71	58.18
15	60.78	56.73	---	97.58	79.81	63.13	48.73	87.22	85.39	84.48	76.95	56.69
16	54.90	56.21	---	---	79.78	56.29	51.03	86.47	84.64	84.79	78.34	54.91
17	54.70	56.74	72.37	---	83.86	55.17	48.32	85.75	86.43	85.73	78.14	62.07
18	53.99	56.51	77.97	---	87.95	60.74	48.42	87.25	85.42	82.90	76.44	76.17
19	54.51	65.19	80.16	---	97.43	55.39	48.57	87.34	82.29	81.44	76.47	76.74
20	52.45	77.81	81.50	---	95.59	79.99	47.70	88.86	82.82	80.13	76.07	80.34
21	52.48	83.00	80.30	---	70.18	89.61	47.77	88.96	79.82	76.51	77.91	79.37
22	51.72	83.37	80.47	93.78	78.61	66.19	49.48	89.29	80.70	76.04	77.76	61.95
23	53.04	84.67	82.16	81.02	90.66	53.25	46.56	87.22	80.20	75.26	77.40	56.50
24	53.49	82.11	81.55	81.22	94.96	51.54	70.99	87.21	75.17	85.63	77.24	54.69
25	53.77	66.56	78.90	81.30	95.88	51.12	78.58	88.12	81.38	86.16	78.44	74.49
26	52.67	58.72	60.94	81.31	97.58	51.45	80.42	87.07	82.82	86.22	74.46	78.34
27	53.79	56.78	77.35	80.57	96.78	51.30	82.46	85.38	81.56	87.03	71.86	80.12
28	52.57	54.67	81.00	82.29	82.72	49.29	82.79	87.12	82.92	87.59	75.03	78.61
29	53.52	69.82	82.41	83.99	66.78	48.50	82.69	85.81	81.00	88.98	81.07	74.66
30	55.09	81.68	84.26	82.08	---	49.60	83.46	87.15	81.87	88.23	86.58	75.71
31	53.30	---	81.84	81.71	---	50.29	---	80.01	---	90.31	86.75	---
MAX	82.52	84.67	95.09	97.58	97.58	91.39	83.46	89.29	86.43	90.31	90.14	87.96
CAL YR 1999	LOW	95.09										
WTR YR 2000	LOW	97.58										



**GROUND-WATER RECORDS**  
**Madison River Basin**

**395352083292100. LOCAL NUMBER, M-5**

LOCATION.—Latitude 39°53'52", longitude 83°29'21", Hydrologic Unit 05060002, at London Correctional Institute near London, Ohio. Owner: State of Ohio.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused water table well, diameter 8 in., depth 55 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 3.50 ft above land-surface datum.

REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

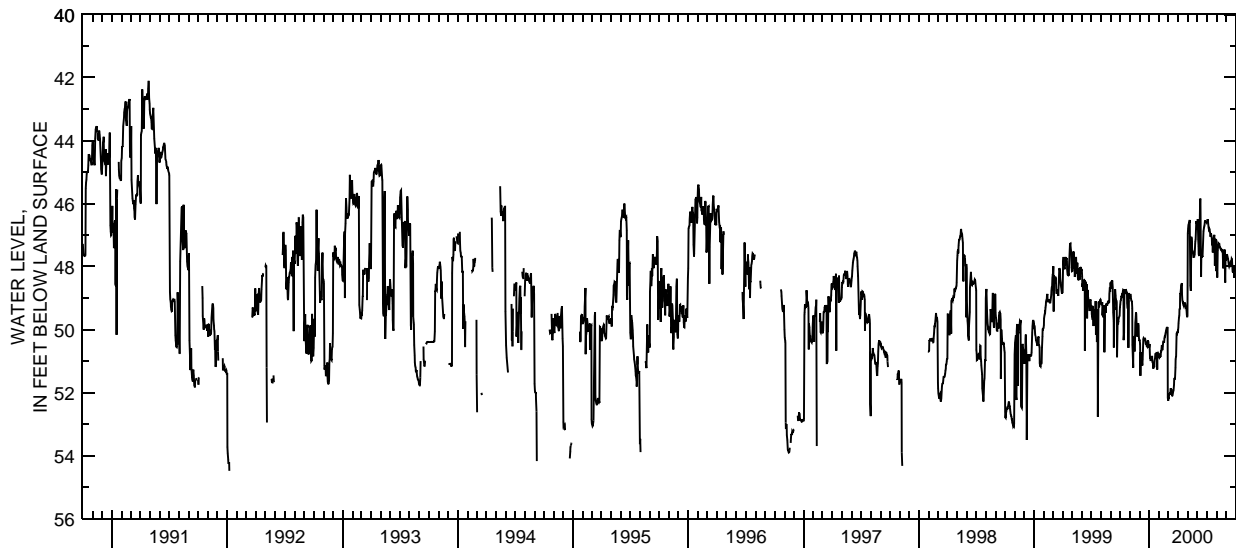
PERIOD OF RECORD.—October 1, 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 54.65 ft below land-surface datum, Jan. 17, 1992; minimum daily low, 40.47 ft below land-surface datum, Apr. 11, 1989.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49.20	48.98	50.34	50.55	50.87	52.26	50.04	49.56	46.77	46.61	48.15	47.64
2	49.08	48.87	50.36	50.46	50.88	52.18	49.92	46.95	46.83	46.59	47.93	47.64
3	49.07	48.96	50.46	50.93	50.79	52.18	49.80	46.79	46.50	46.55	48.35	47.63
4	48.96	49.02	51.47	50.85	50.87	52.05	49.62	46.67	47.13	46.50	48.21	47.64
5	48.96	49.07	50.72	50.97	50.87	52.04	49.56	46.65	47.36	46.57	47.49	47.69
6	48.92	49.10	50.90	50.97	50.85	52.05	49.35	46.62	47.60	46.67	47.32	47.75
7	48.93	49.11	50.96	50.97	50.70	52.04	49.34	46.59	47.67	46.77	47.28	47.79
8	48.87	49.32	51.03	50.97	50.69	51.95	48.87	46.52	47.28	46.82	47.30	47.85
9	48.84	50.49	51.03	50.90	50.55	51.87	48.86	47.85	47.07	46.80	47.25	47.96
10	48.74	50.97	51.14	50.84	50.49	51.92	48.71	48.60	45.87	46.83	47.30	48.00
11	48.75	51.21	50.94	51.04	50.63	51.89	48.62	48.72	45.87	46.89	47.36	47.96
12	50.34	50.27	50.55	51.06	50.63	52.05	48.56	48.77	46.86	46.95	47.39	47.94
13	50.10	50.25	50.31	51.21	50.54	52.10	48.53	47.06	48.32	47.06	47.40	47.96
14	48.72	50.39	50.27	51.24	50.39	52.10	48.89	47.12	47.54	47.00	47.45	47.93
15	48.77	50.60	50.29	51.17	50.40	52.08	49.07	47.24	47.70	46.95	47.46	47.85
16	48.78	50.70	50.34	51.17	50.40	51.99	49.14	47.54	47.70	47.04	47.48	47.85
17	48.72	50.21	50.34	51.17	50.40	51.96	49.14	47.49	47.67	47.10	47.49	47.84
18	48.82	49.79	50.34	51.00	50.28	51.93	49.22	47.55	47.70	47.25	47.46	47.76
19	48.84	49.59	50.32	50.93	50.22	51.75	49.26	47.63	47.30	47.22	47.48	47.78
20	48.82	49.46	50.40	50.78	50.22	51.57	49.23	47.70	47.12	47.55	47.49	47.96
21	48.80	49.50	50.45	50.78	50.15	51.57	49.14	47.70	46.88	47.42	47.49	48.17
22	48.87	49.95	50.45	50.78	50.10	51.57	49.20	47.69	46.77	47.19	48.06	48.20
23	49.16	50.13	50.46	50.75	50.04	51.48	49.20	47.64	46.74	47.12	47.90	48.11
24	49.31	50.22	50.52	50.76	50.00	51.21	49.19	47.61	46.70	47.04	47.97	48.05
25	49.31	50.10	50.54	50.73	49.95	50.94	49.25	47.28	46.56	47.00	47.73	48.03
26	49.08	49.88	50.39	51.27	49.94	50.85	49.31	47.21	46.56	47.60	47.58	48.35
27	50.58	49.80	50.37	50.91	49.94	50.39	49.32	47.13	46.59	47.97	47.46	48.23
28	48.84	49.88	50.37	50.85	49.95	50.12	49.38	46.74	46.59	47.19	48.42	48.30
29	48.93	50.21	50.40	50.82	52.17	50.09	49.53	46.56	46.55	47.16	48.51	48.30
30	48.98	50.34	50.49	50.76	---	50.07	49.61	46.64	46.59	47.15	47.63	48.26
31	49.02	---	50.58	50.78	---	50.09	---	46.57	---	47.16	47.81	---
MAX	50.58	51.21	51.47	51.27	52.17	52.26	50.04	49.56	48.32	47.97	48.51	48.35

CAL YR 1999 LOW 52.77  
WTR YR 2000 LOW 52.26



**GROUND-WATER RECORDS  
Madison River Basin**

**395357083304400. LOCAL NUMBER, M-4**

LOCATION.—Latitude 39°53'57", longitude 83°30'44", 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, Division of Water.

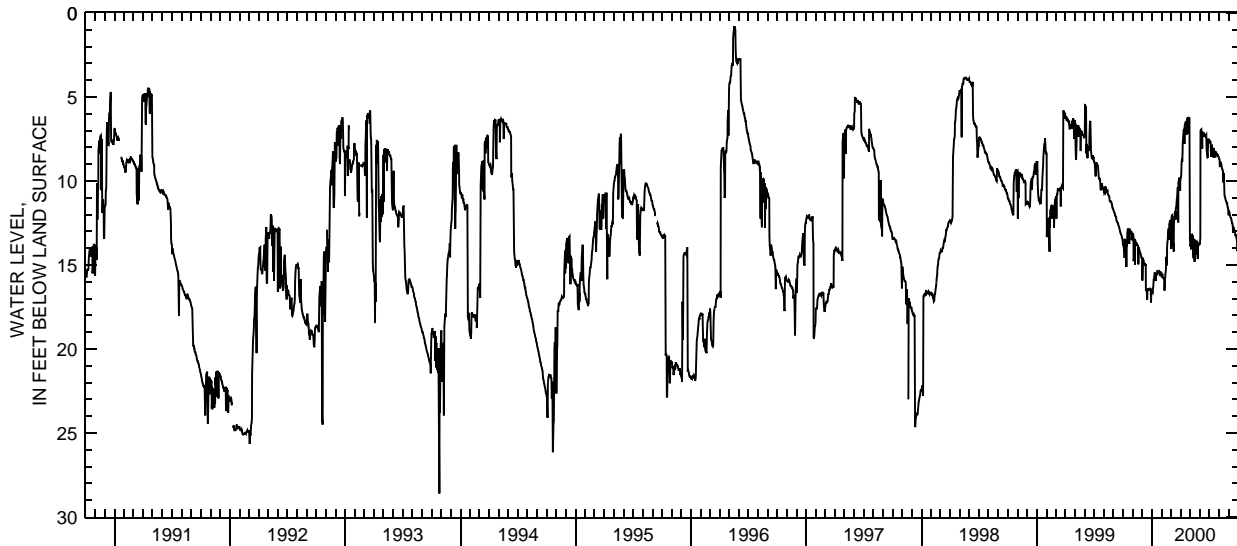
PERIOD OF RECORD.—June 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 28.60 ft below land-surface datum, Oct. 26, 1994; minimum daily low 0.50 ft above land-surface datum, May 13, 14, and 16, 1989.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.80	13.17	14.58	16.65	15.74	13.47	9.87	13.60	13.73	7.61	8.66	11.81
2	13.85	13.15	15.93	16.62	15.66	14.06	9.72	13.90	13.38	7.62	8.72	11.84
3	13.92	13.32	14.65	16.64	15.53	12.24	9.57	13.75	7.02	7.65	9.18	11.90
4	13.98	14.78	14.73	16.49	15.71	12.06	8.88	14.07	6.96	7.67	8.88	12.06
5	13.98	14.49	14.70	16.31	15.76	12.03	8.69	13.22	6.93	7.68	8.88	12.14
6	14.58	13.50	14.85	16.00	15.80	13.28	8.87	13.20	8.10	8.55	8.91	12.18
7	13.50	13.50	14.88	15.81	15.83	13.51	8.33	13.19	7.08	7.94	9.03	12.20
8	13.51	15.01	14.94	15.72	15.85	13.89	7.77	13.50	8.07	7.95	9.03	12.24
9	13.51	13.56	14.94	15.54	15.76	13.70	7.38	13.23	7.08	7.92	9.18	12.30
10	13.51	13.58	14.99	15.44	16.53	14.21	7.10	13.37	7.14	8.00	9.26	12.38
11	13.60	13.73	14.99	15.57	15.89	12.51	6.96	14.40	7.17	8.07	9.33	12.57
12	15.12	13.71	14.94	15.56	15.81	12.09	6.93	14.60	7.17	8.12	9.34	12.51
13	13.56	13.71	16.56	15.96	15.53	12.14	7.79	13.49	7.16	8.15	9.42	12.59
14	13.89	13.80	16.50	15.66	15.27	11.88	6.69	13.50	7.17	8.61	10.09	13.08
15	13.11	13.80	16.49	15.50	15.06	11.78	6.59	14.81	7.38	8.04	9.53	12.72
16	12.93	13.83	16.64	15.56	14.52	12.30	6.57	13.59	7.26	8.17	9.60	12.83
17	12.84	13.86	17.07	15.56	15.03	11.66	6.50	13.50	7.31	8.25	10.56	12.87
18	12.90	13.86	16.49	15.36	14.04	11.51	6.50	14.39	7.31	8.27	10.85	12.93
19	12.90	14.97	16.43	15.36	13.68	11.25	6.48	13.62	7.32	8.27	10.94	12.96
20	13.10	13.97	16.44	15.45	13.44	11.09	7.26	13.67	7.29	8.59	11.03	13.07
21	13.75	14.01	16.47	15.45	13.14	10.86	6.30	13.67	7.25	8.25	11.09	13.22
22	12.85	14.12	16.49	15.45	12.93	10.64	6.30	13.65	8.09	8.31	11.15	13.23
23	12.96	14.13	16.49	15.48	12.81	10.37	6.29	13.62	8.21	8.34	11.22	13.22
24	13.04	14.26	16.47	15.50	13.51	12.47	6.24	13.70	8.39	8.37	11.28	13.32
25	13.02	14.28	16.45	15.42	12.59	10.09	6.24	14.65	8.59	8.39	11.33	13.38
26	13.00	14.30	16.41	15.48	12.48	10.02	6.24	13.86	8.58	8.43	11.34	13.51
27	13.08	14.43	16.45	15.57	12.41	9.81	7.19	13.85	7.56	8.48	11.46	13.58
28	13.07	14.50	16.45	15.57	12.41	9.91	6.21	13.79	7.49	8.48	11.55	14.18
29	13.53	14.58	17.24	15.54	12.32	9.98	6.30	13.73	7.76	8.52	11.61	13.74
30	13.20	14.58	16.59	15.45	---	10.58	13.49	13.73	7.56	8.56	11.69	13.77
31	13.22	---	16.65	15.48	---	9.96	---	13.75	---	8.61	12.05	---
MAX	15.12	15.01	17.24	16.65	16.53	14.21	13.49	14.81	13.73	8.61	12.05	14.18

CAL YR 1999    LOW 17.24  
WTR YR 2000    LOW 17.24



**GROUND-WATER RECORDS**  
**Madison River Basin**

**395740083255700. LOCAL NUMBER, M-3**

LOCATION.—Latitude 39°57'40", longitude 83°25'57", 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, Division of Water.

PERIOD OF RECORD.—November 1974 to September 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, 1975.

WATER LEVEL  
IN FEET BELOW LAND-SURFACE DATUM  
INSTANTANEOUS OBSERVATION

DATE	WATER LEVEL
10/21/99	11.80
04/20/00	6.04

**GROUND-WATER RECORDS**  
**Mahoning County**

279

**410042080453800. LOCAL NUMBER, MA-1**

LOCATION.—Latitude 41°00'42", longitude 80°45'38", Hydrologic Unit, 05030103, in county fairgrounds at south edge of Canfield, Ohio. Owner: Canfield Water Department.

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, Division of Water. Influenced by seasonal water demand at county fairgrounds.

PERIOD OF RECORD.—May 1946 to September 1982 continuous, periodic 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.

WATER LEVEL  
IN FEET BELOW LAND-SURFACE DATUM  
INSTANTANEOUS OBSERVATION

DATE	WATER LEVEL
10/28/99	36.52
04/27/00	33.17

**GROUND-WATER RECORDS**  
**Marion County**

**403413083170500. LOCAL NUMBER, MN-4**

LOCATION.—Latitude 40°34'13", longitude 83°17'05", 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.—Influenced by seasonal water demand for nearby wildlife refuge. Station operated by Ohio Department of Natural Resources, Division of Water.

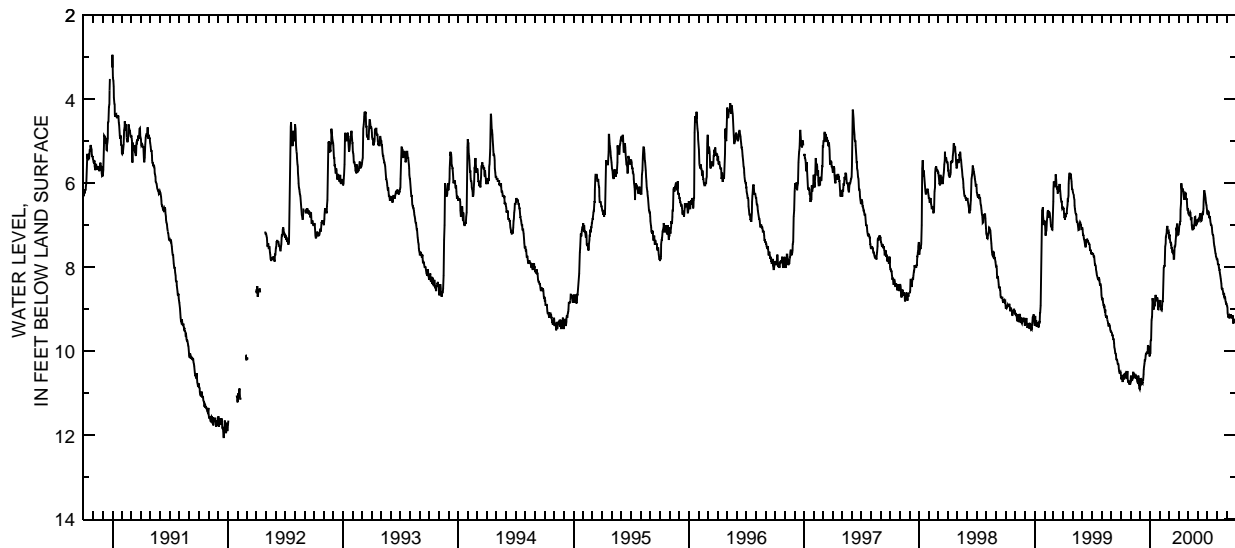
PERIOD OF RECORD.—January 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 32.57 ft below land-surface datum, Aug. 14, 1983; minimum daily low, 0.61 ft below land-surface datum, Mar. 18, 1974.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.52	10.74	10.85	10.11	8.90	7.16	7.22	6.60	6.87	6.72	7.81	8.90
2	10.59	10.58	10.71	10.06	8.94	7.26	7.14	6.72	6.86	6.74	7.81	8.92
3	10.67	10.68	10.64	10.05	8.79	7.25	7.06	6.74	6.93	6.74	7.86	8.96
4	10.62	10.70	10.68	9.75	8.92	7.22	6.98	6.75	6.89	6.69	7.92	9.09
5	10.64	10.68	10.67	9.74	8.97	7.34	6.98	6.76	6.84	6.68	7.94	9.16
6	10.67	10.68	10.74	9.49	9.00	7.41	6.90	6.75	6.87	6.71	7.92	9.20
7	10.73	10.68	10.76	9.26	8.99	7.43	6.92	6.72	6.81	6.80	8.00	9.18
8	10.64	10.62	10.74	9.18	9.01	7.40	6.63	6.69	6.72	6.83	8.06	9.16
9	10.59	10.52	10.76	8.92	8.90	7.46	6.47	6.71	6.74	6.78	8.06	9.20
10	10.56	10.49	10.67	8.74	8.81	7.56	6.00	6.86	6.78	6.81	8.13	9.20
11	10.65	10.62	10.70	8.84	8.81	7.53	6.06	6.86	6.86	6.90	8.19	9.16
12	10.67	10.62	10.55	8.88	8.74	7.64	6.18	6.81	6.90	6.98	8.22	9.12
13	10.53	10.53	10.44	8.97	8.40	7.65	6.17	6.99	6.89	6.99	8.27	9.16
14	10.59	10.58	10.37	9.01	8.01	7.64	6.14	7.06	6.83	6.99	8.36	9.14
15	10.56	10.58	10.29	8.90	8.00	7.61	6.14	7.10	6.72	7.01	8.39	9.14
16	10.53	10.59	10.22	8.91	7.97	7.62	6.20	7.10	6.71	7.06	8.51	9.20
17	10.55	10.65	10.22	8.91	7.97	7.80	6.24	7.06	6.76	7.16	8.52	9.20
18	10.61	10.62	10.19	8.74	7.76	7.80	6.35	7.08	6.71	7.22	8.49	9.20
19	10.64	10.61	10.11	8.66	7.51	7.62	6.39	7.08	6.61	7.23	8.56	9.18
20	10.64	10.64	10.04	8.69	7.44	7.51	6.35	7.05	6.45	7.25	8.59	9.15
21	10.61	10.64	10.06	8.74	7.28	7.51	6.27	6.98	6.20	7.31	8.64	9.30
22	10.47	10.71	10.06	8.76	7.25	7.46	6.30	6.90	6.17	7.41	8.66	9.34
23	10.62	10.73	10.01	8.72	7.19	7.38	6.23	6.81	6.23	7.47	8.61	9.23
24	10.73	10.76	10.04	8.78	7.10	7.25	6.24	6.80	6.26	7.51	8.67	9.27
25	10.73	10.77	10.06	8.72	7.04	7.10	6.35	6.96	6.32	7.56	8.73	9.26
26	10.70	10.58	9.86	8.87	7.02	7.11	6.38	7.02	6.35	7.62	8.72	9.27
27	10.76	10.70	9.91	9.00	7.10	6.96	6.38	6.99	6.47	7.67	8.73	9.27
28	10.79	10.80	9.90	9.01	7.19	7.04	6.44	6.96	6.51	7.68	8.81	9.31
29	10.76	10.88	9.93	9.01	7.17	7.14	6.59	6.98	6.53	7.74	8.82	9.31
30	10.77	10.91	10.01	8.84	---	7.19	6.66	6.92	6.63	7.76	8.87	9.26
31	10.79	---	10.11	8.78	---	7.23	---	6.86	---	7.81	8.87	---
MAX	10.79	10.91	10.85	10.11	9.01	7.80	7.22	7.10	6.93	7.81	8.87	9.34

CAL YR 1999   LOW 10.91  
WTR YR 2000   LOW 10.91



**GROUND-WATER RECORDS**  
**Marion County**

**403443083230400. LOCAL NUMBER, MN-1**

LOCATION.—Latitude 40°34'43", longitude 83°23'04", 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, Division of Water.

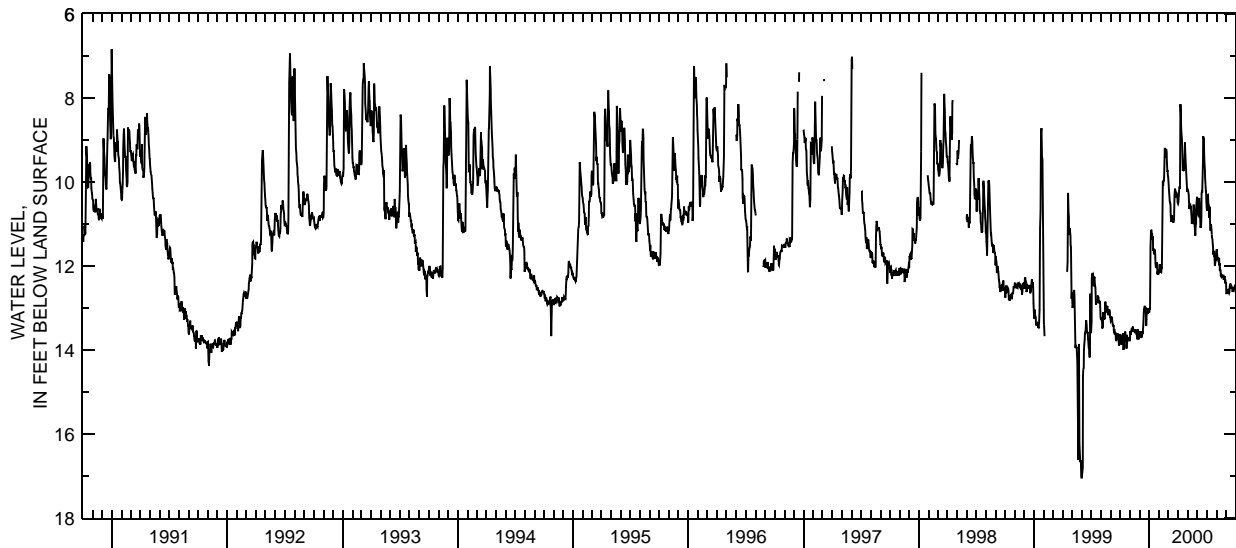
PERIOD OF RECORD.—March 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 17.04 ft below land-surface datum, June 1, 1999; minimum daily low, 5.67 ft below land-surface datum, Jan. 23, 1959.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.64	13.71	13.59	13.11	12.09	9.91	10.52	10.16	10.52	10.61	11.66	12.56
2	13.65	13.55	13.59	13.04	12.12	10.04	10.49	10.22	10.68	10.68	11.60	12.67
3	13.67	13.64	13.58	13.02	11.96	10.11	10.42	10.20	10.76	10.62	11.75	12.60
4	13.79	13.58	13.59	12.39	12.08	10.29	10.26	10.26	10.79	10.32	11.79	12.65
5	13.88	13.55	13.56	11.54	12.09	10.38	10.13	10.31	10.76	10.31	11.84	12.60
6	13.75	13.53	13.71	11.16	12.14	10.47	10.13	10.44	10.49	10.50	11.81	12.66
7	13.77	13.55	13.68	11.15	12.14	10.50	10.16	10.64	10.38	10.53	11.81	12.62
8	13.74	13.55	13.68	11.15	12.15	10.55	9.47	10.55	10.50	10.58	11.91	12.54
9	13.65	13.51	13.68	11.28	12.05	10.77	8.15	10.58	10.80	10.85	11.81	12.63
10	13.60	13.44	13.56	11.22	12.05	10.95	8.40	10.56	10.83	10.59	11.99	12.65
11	14.00	13.56	13.62	11.37	11.75	10.86	8.66	10.64	11.09	10.88	11.94	12.63
12	13.97	13.50	13.50	11.30	11.00	10.79	8.81	10.58	11.07	11.09	12.12	12.47
13	13.80	13.53	13.40	11.57	9.99	10.88	8.96	10.76	11.06	11.16	12.09	12.48
14	13.79	13.53	13.23	11.63	10.09	10.91	9.09	10.86	10.82	11.12	12.12	12.42
15	13.73	13.53	13.02	11.58	9.96	10.88	9.42	11.00	10.28	11.01	12.24	12.45
16	13.56	13.58	13.00	11.72	9.98	10.89	9.74	10.88	10.19	11.13	12.26	12.50
17	13.59	13.58	12.98	11.69	9.89	10.97	9.67	10.91	10.25	11.25	12.23	12.47
18	13.68	13.56	12.95	11.61	9.65	10.95	9.71	10.97	9.89	11.33	12.24	12.53
19	13.74	13.51	13.05	11.63	9.21	10.89	9.74	10.98	9.49	11.37	12.21	12.50
20	13.79	13.55	12.98	11.79	9.21	10.73	9.69	10.56	8.91	11.48	12.27	12.56
21	13.97	13.56	13.02	11.94	9.39	10.31	9.67	10.56	8.96	11.52	12.24	12.62
22	13.64	13.65	13.43	12.05	9.42	10.16	9.31	10.56	8.97	11.73	12.23	12.57
23	13.75	13.60	13.28	12.03	9.23	10.23	9.06	10.65	9.31	11.64	12.23	12.51
24	13.79	13.75	13.13	12.02	9.23	10.22	9.23	11.06	9.53	11.72	12.33	12.56
25	13.71	13.71	13.08	11.92	9.29	10.25	9.47	11.21	9.72	11.70	12.27	12.57
26	13.71	13.51	13.13	11.96	9.47	10.38	9.59	11.28	9.90	11.91	12.27	12.54
27	13.74	13.62	13.14	12.20	9.74	10.25	9.72	11.06	10.04	12.00	12.24	12.50
28	13.71	13.73	13.00	12.12	9.74	10.31	9.87	10.97	10.22	11.92	12.41	12.47
29	13.70	13.73	13.07	12.09	9.83	10.34	10.08	10.70	10.22	11.87	12.32	12.47
30	13.74	13.68	13.04	12.20	---	10.31	10.23	10.47	10.46	11.85	12.42	12.56
31	13.79	---	13.07	12.14	---	10.49	---	10.35	---	11.88	12.38	---
MAX	14.00	13.75	13.71	13.11	12.15	10.97	10.52	11.28	11.09	12.00	12.42	12.67

CAL YR 1999   LOW 17.04  
WTR YR 2000   LOW 14.00



GROUND-WATER RECORDS  
Marion County

403601083110400. LOCAL NUMBER, MN-2

LOCATION.—Latitude 40°36'01", longitude 83°11'04", Hydrologic Unit 05060001, water treatment plant 2 mi west of Marion, Ohio. Owner: Marion Water Department.

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, Division of Water.

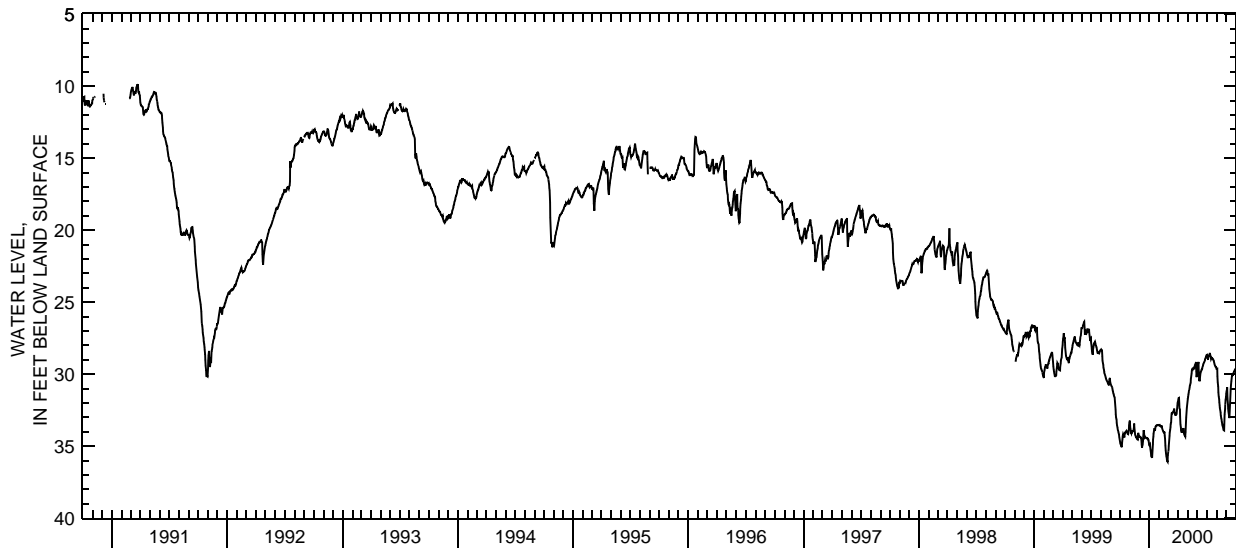
PERIOD OF RECORD.—May 1959 to current year.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34.78	33.51	34.35	34.95	33.56	35.38	31.88	31.92	29.61	28.67	29.64	31.38
2	34.88	33.78	34.37	34.95	33.57	35.25	31.79	31.74	29.45	28.65	29.64	31.20
3	34.92	33.95	34.38	34.89	33.54	35.00	31.68	31.59	29.34	28.83	29.63	31.05
4	35.03	34.08	34.37	35.06	33.57	34.57	31.65	31.41	29.25	28.95	30.15	30.92
5	35.04	34.14	34.38	35.25	33.60	34.29	32.07	31.29	29.16	29.01	30.57	31.67
6	35.03	34.07	34.44	35.49	33.63	34.08	32.40	31.15	29.75	28.82	30.88	32.12
7	34.68	34.00	34.57	35.70	33.65	33.87	32.49	31.04	30.38	28.74	31.25	32.40
8	34.50	34.03	34.91	35.75	33.66	33.68	32.97	30.90	30.51	28.70	31.53	32.63
9	34.32	33.99	35.12	35.78	33.63	33.48	33.48	30.80	30.47	28.65	31.76	32.76
10	34.17	33.96	34.97	35.81	33.63	33.35	33.74	30.68	30.17	28.59	31.98	32.93
11	34.23	33.96	34.89	35.40	33.80	33.05	33.92	30.60	29.94	28.59	32.18	33.05
12	34.29	33.96	34.67	34.86	33.87	32.72	34.02	30.36	29.85	28.67	32.35	32.61
13	34.35	33.78	34.31	34.53	33.93	32.73	34.02	30.11	29.79	28.77	32.53	32.06
14	34.40	33.44	33.90	34.35	33.99	32.73	34.05	29.94	29.75	28.89	32.67	31.55
15	34.22	33.69	33.99	34.16	34.00	32.70	33.95	29.75	29.70	28.95	32.87	31.05
16	34.10	33.99	34.26	33.93	34.05	32.64	33.92	29.67	29.67	28.85	33.06	30.75
17	34.05	34.20	34.37	33.78	34.07	32.60	33.93	29.70	29.61	28.89	33.15	30.51
18	34.02	34.26	34.35	33.84	34.00	32.55	33.75	29.61	29.49	28.92	33.30	30.30
19	33.99	34.32	34.40	33.95	34.28	32.48	34.03	29.58	29.40	28.93	33.45	30.11
20	33.96	34.38	34.41	33.75	34.50	32.40	34.11	29.61	29.34	28.95	33.56	30.11
21	34.00	34.38	34.41	33.66	34.98	32.66	34.19	29.63	29.27	28.98	33.66	30.06
22	33.99	34.41	34.43	33.62	35.30	32.78	34.23	29.63	29.21	29.03	33.77	30.05
23	34.08	34.47	34.44	33.59	35.52	32.84	34.31	29.49	29.18	29.06	33.85	29.97
24	34.13	34.53	34.44	33.57	35.70	32.84	34.35	29.42	29.12	29.12	33.90	29.93
25	34.16	34.56	34.46	33.54	35.78	32.84	34.03	29.36	29.04	29.25	33.92	29.85
26	34.17	34.29	34.47	33.54	35.90	32.84	33.45	29.31	28.95	29.34	33.33	29.81
27	34.08	34.08	34.52	33.56	36.05	32.78	33.00	29.24	28.89	29.40	32.79	29.75
28	33.80	34.20	34.53	33.56	36.09	32.75	32.66	29.18	28.83	29.48	32.43	29.70
29	33.56	34.32	34.56	33.56	35.68	32.43	32.35	29.82	28.76	29.48	32.10	29.67
30	33.38	34.32	34.63	33.53	---	32.19	32.13	30.21	28.70	29.49	31.82	29.63
31	33.24	---	34.85	33.53	---	32.01	---	29.90	---	29.58	31.58	---
MAX	35.04	34.56	35.12	35.81	36.09	35.38	34.35	31.92	30.51	29.58	33.92	33.05

CAL YR 1999 LOW 35.12  
WTR YR 2000 LOW 36.09





**GROUND-WATER RECORDS**  
**Medina County**

**410120081431800. LOCAL NUMBER, MD-3**

LOCATION.—Latitude 41°01'20", longitude 81°43'18", Hydrologic Unit 05040001, Auble Street at water treatment plant in Wadsworth, Ohio. Owner: Wadsworth Water Department.

AQUIFER.—Sandstone of Mississippian Age.

WELL CHARACTERISTICS.—Drilled unused artesian well, diameter 12 in., depth 275 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 1,180 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, Division of Water.

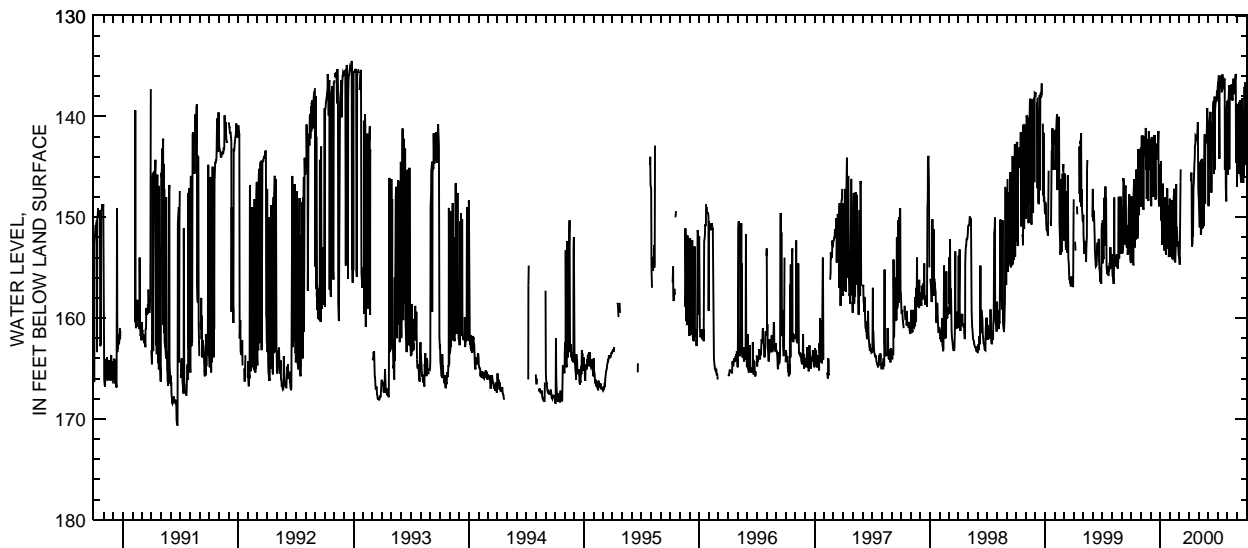
PERIOD OF RECORD.—December 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 186.74 ft below land-surface datum, Jan. 21, 1975; minimum daily low, 134.50 ft below land-surface datum, Dec. 26, 1992.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154.07	148.97	143.22	145.23	152.97	153.95	---	147.56	145.16	137.25	138.96	144.41
2	147.95	144.64	146.34	148.34	153.91	154.39	---	148.17	148.92	136.62	145.79	138.96
3	152.26	141.91	148.91	144.44	153.41	154.70	---	149.06	141.51	136.53	139.16	139.17
4	153.08	149.00	143.17	150.33	153.64	150.30	---	149.48	140.86	136.02	138.51	139.17
5	153.56	143.10	142.04	146.84	148.82	146.46	---	151.01	140.67	136.04	138.09	145.71
6	154.17	142.92	142.68	151.64	148.31	145.26	146.37	144.60	140.04	144.20	136.89	139.11
7	154.68	141.91	143.37	152.73	153.20	---	146.36	144.53	140.14	137.64	145.25	138.57
8	154.71	149.04	143.46	147.48	154.10	---	145.65	150.79	139.54	136.50	137.51	145.25
9	147.60	149.26	147.96	146.66	154.14	---	145.65	151.76	145.26	135.96	138.06	139.11
10	146.24	143.29	143.67	151.32	153.16	---	152.25	151.19	142.23	137.13	138.26	138.41
11	152.73	143.92	142.50	151.65	153.33	---	152.92	146.16	147.59	136.71	138.24	145.82
12	153.03	143.25	141.86	152.36	148.70	---	152.61	144.20	142.46	136.71	138.26	146.01
13	152.06	142.20	142.39	153.18	147.93	---	147.53	149.69	140.79	137.43	136.86	146.34
14	147.26	141.95	141.84	153.29	147.18	---	151.92	151.10	140.91	137.61	137.06	146.57
15	152.25	142.41	142.11	152.11	152.70	---	147.01	145.76	140.06	137.21	137.85	138.57
16	146.37	141.15	142.91	148.04	154.08	---	146.58	144.57	139.38	135.83	138.09	138.21
17	145.28	145.23	148.26	152.33	154.47	---	146.04	150.79	139.16	137.07	138.42	143.06
18	151.39	142.65	143.31	153.23	153.76	---	144.51	150.89	138.47	137.12	136.86	145.86
19	145.44	148.19	142.70	153.72	152.89	---	144.16	144.29	145.71	136.94	137.26	146.26
20	145.58	142.70	142.94	151.79	146.72	---	142.91	143.89	140.17	136.65	136.26	146.57
21	152.11	142.23	143.36	152.61	151.05	---	142.71	141.79	138.03	136.19	137.28	139.42
22	150.50	143.01	143.76	152.29	150.96	---	141.89	148.66	145.25	136.37	137.81	145.94
23	145.05	143.10	144.09	147.14	151.54	---	141.93	143.25	139.35	136.37	137.01	137.91
24	143.24	148.38	144.24	152.41	152.22	---	141.96	141.95	138.72	145.25	136.54	137.07
25	149.79	144.29	142.91	153.08	152.88	---	142.34	142.38	138.09	139.31	136.37	144.20
26	149.76	141.47	141.45	148.85	152.41	---	142.44	142.46	138.41	145.26	136.10	144.84
27	145.29	145.23	147.74	152.09	153.00	---	141.99	142.49	138.53	147.15	135.79	136.59
28	145.25	142.22	148.94	153.96	153.67	---	141.71	140.00	137.82	148.44	144.61	137.61
29	145.26	143.01	144.87	153.36	153.84	---	140.58	139.19	137.45	140.09	139.42	137.03
30	144.41	142.91	144.72	153.47	---	---	147.11	140.51	138.36	139.02	138.76	143.69
31	143.13	---	145.23	148.17	---	---	---	140.61	---	138.45	146.96	---
MAX	154.71	149.26	148.94	153.96	154.47	154.70	152.92	151.76	148.92	148.44	146.96	146.57

CAL YR 1999    LOW 156.93  
WTR YR 2000    LOW 154.71



**GROUND-WATER RECORDS**  
**Mercer County**

**402833084375200. LOCAL NUMBER, MR-2**

LOCATION.—Latitude 40°28'33", longitude 84°37'52", 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, Division of Water.

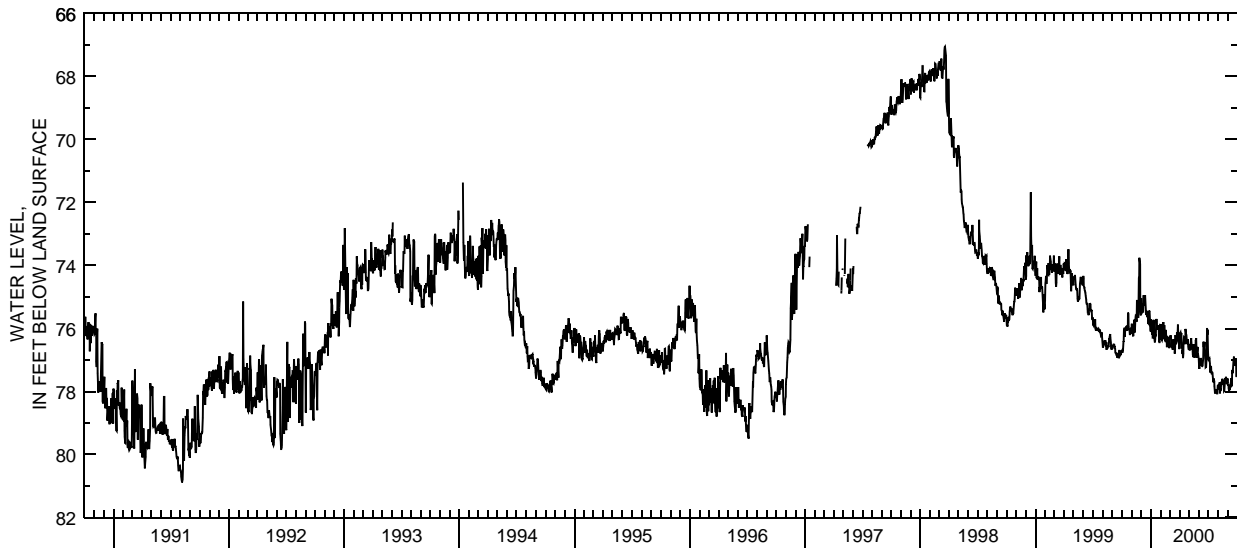
PERIOD OF RECORD.—February 1967 to current year.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76.71	76.02	75.23	76.08	76.04	76.29	76.60	76.50	76.96	76.84	77.81	77.77
2	76.71	75.85	75.04	75.71	76.13	76.33	76.20	76.67	77.18	76.98	77.80	77.80
3	76.77	76.18	75.21	75.82	75.86	76.22	76.15	76.68	77.28	77.04	77.81	77.80
4	76.68	76.14	75.36	76.01	76.35	76.25	76.13	76.68	77.10	76.96	77.93	77.91
5	76.68	76.14	75.22	76.19	76.38	76.26	76.27	76.59	77.09	76.95	77.83	77.97
6	76.41	76.23	75.45	76.05	76.32	76.59	76.17	76.60	77.19	77.11	77.71	77.85
7	76.42	76.22	75.44	76.29	76.29	76.59	76.15	76.39	76.94	77.40	78.06	77.96
8	76.02	75.91	75.45	76.28	76.34	76.38	76.58	76.31	76.97	77.35	77.99	77.82
9	76.12	75.84	74.95	76.00	75.92	76.38	76.57	76.43	77.05	77.22	77.92	77.89
10	75.98	75.72	75.24	75.73	75.80	76.67	76.80	76.60	77.08	77.19	77.93	77.77
11	76.27	76.13	75.23	76.30	76.32	76.45	76.69	76.58	77.19	77.39	77.78	77.68
12	76.11	76.02	75.04	76.32	76.34	76.58	76.94	76.50	77.20	77.45	77.69	77.58
13	76.01	75.72	75.15	76.37	75.90	76.58	76.80	76.82	77.19	77.39	77.79	77.84
14	76.07	75.62	74.95	76.45	76.30	76.51	76.46	76.91	77.08	77.40	77.70	77.61
15	75.99	75.63	75.22	76.36	76.38	76.35	76.27	76.90	76.95	77.42	77.60	77.32
16	76.00	75.71	75.35	76.20	76.41	76.46	76.28	76.90	76.42	77.59	77.73	77.42
17	75.91	75.79	75.56	76.25	76.41	76.80	76.29	76.59	76.60	77.71	77.68	77.28
18	76.02	75.10	75.57	75.78	76.05	76.68	76.50	76.50	76.57	77.58	77.69	77.21
19	76.07	75.63	75.44	75.70	76.29	76.21	76.45	76.79	76.43	77.69	77.81	77.04
20	76.00	75.65	75.64	75.79	76.45	76.33	76.02	76.90	76.65	77.66	77.99	76.90
21	75.50	75.50	75.63	76.02	76.60	76.50	76.12	76.90	76.82	77.83	77.97	77.10
22	75.54	75.67	75.63	76.02	76.39	76.44	76.19	76.39	77.09	78.02	77.83	77.18
23	75.94	75.60	75.64	75.90	76.28	76.38	76.21	76.39	77.24	78.06	77.66	76.95
24	76.02	74.40	75.83	76.04	76.29	76.12	76.41	76.31	77.23	78.02	77.59	77.08
25	76.03	74.36	75.85	75.93	76.39	76.17	76.44	76.82	77.04	77.94	77.61	77.05
26	76.10	73.76	75.44	76.04	76.40	76.18	76.50	76.93	76.99	77.99	77.54	77.08
27	76.21	73.89	75.47	76.38	76.38	75.88	76.34	76.76	75.99	77.99	77.58	77.08
28	76.10	73.96	75.47	76.44	76.63	76.18	76.45	76.59	76.20	77.99	77.77	77.29
29	76.01	75.43	75.67	76.44	76.57	76.41	76.58	76.83	76.04	78.06	77.58	77.54
30	76.00	75.59	75.78	75.89	---	76.45	76.68	76.83	76.72	78.06	77.74	76.94
31	76.02	---	76.08	75.90	---	76.66	---	76.94	---	77.80	77.59	---
MAX	76.77	76.23	76.08	76.45	76.63	76.80	76.94	76.94	77.28	78.06	78.06	77.97

CAL YR 1999 LOW 76.93  
WTR YR 2000 LOW 78.06



**GROUND-WATER RECORDS**  
**Miami County**

285

**395848084085500. LOCAL NUMBER, MI-3**

LOCATION.—Latitude 39°58'48", longitude 84°08'55", Hydrologic Unit 05080001, 2.0 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.—Periodic measurement with chalked tape by Ohio Department of Natural Resources personnel.

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, Division of Water.

PERIOD OF RECORD.—October 1966 to September 1982 continuous, periodic thereafter.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 15.61 ft below land-surface datum, Feb. 4, 1971; minimum daily low, 7.53 ft below land-surface datum, Feb. 25, 1975.

WATER LEVEL  
IN FEET BELOW LAND-SURFACE DATUM  
INSTANTANEOUS OBSERVATION

DATE	WATER LEVEL
10/15/99	12.73
04/12/00	9.27

**GROUND-WATER RECORDS**  
**Miami County**

**400208084112900. LOCAL NUMBER, MI-44**

LOCATION.—Latitude 40°02'08", longitude 84°11'29", Hydrologic Unit 05080001, on left bank of Great Miami River 0.7 mi east of city hall in Troy, Ohio. Owner: City of Troy.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled public supply water-table well, diameter 26 in, depth 105 ft, screened below 89 ft.

PERIOD OF RECORD.—August 1974 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[µS/cm, microseimens per centimeter; (00095), USGS National Water Information System parameter code; deg C, degrees Celsius; mg/L, milligrams per liter; IT, incremental titration; µg/L, micrograms per liter; <, concentration or value reported is less than that indicated; --, no data; e, estimated]

Date	Time	Specific conductance, field (µS/cm) (00095)	pH, water, field (standard units) (00400)	Air temperature (deg C) (00020)	Water temperature (deg C) (00010)	Oxygen demand, chemical (high level) (mg/L) (00340)	Calcium, dissolved (mg/L as Ca) (00915)	Magnesium, dissolved (mg/L as Mg) (00925)	Sodium, dissolved (mg/L as Na) (00930)
Nov.	16	1400	7.55	6.8	13.1	<10	90	34	25
Mar.	9	1245	7.49	15.2	13.7	<10	81	32	25
Aug.	16	1330	7.71	33.0	13.9	<10	80	31	26

Date	Potassium, dissolved (mg/L as K) (00935)	Bicarbonate, IT, field (mg/L as HCO <sub>3</sub> ) (99440)	ANC, unfiltered, carbonate, IT, field (mg/L as CaCO <sub>3</sub> ) (99430)	Sulfate, dissolved (mg/L as SO <sub>4</sub> ) (00945)	Chloride, dissolved (mg/L as Cl) (00940)	Fluoride, dissolved (mg/L as F) (00950)	Silica, dissolved (mg/L as SiO <sub>2</sub> ) (00955)	Dissolved solids, residue at 180 deg C (mg/L) (70300)	Nitrogen, nitrite, dissolved (mg/L as N) (00613)
Nov.	16	2.7	315	258	62	39	.87	14	<.010
Mar.	9	2.3	350	287	61	39	.92	12	<.010
Aug.	16	2.2	353	289	63	41	.86	14	<.010

Date	Nitrogen, nitrite plus nitrate, dissolved (mg/L as N) (00631)	Nitrogen, ammonia, dissolved (mg/L as N) (00608)	Phosphorus, ortho-phosphate, dissolved (mg/L as P) (00671)	Arsenic, total (µg/L as As) (01002)	Arsenic, dissolved (µg/L as As) (01000)	Chromium, dissolved (µg/L as Cr) (01030)	Chromium, total recoverable (µg/L as Cr) (01034)	Copper, total recoverable (µg/L as Cu) (01042)	Copper, dissolved (µg/L as Cu) (01040)
Nov.	16	<.050	.333	<.010	<3	1	<.80	<1	2
Mar.	9	<.050	.323	<.010	--	--	--	--	--
Aug.	16	<.050	.314	<.010	<3	e1	<.80	<1	<1.3

Date	Iron, dissolved (µg/L as Fe) (01046)	Lead, total recoverable (µg/L as Pb) (01049)	Lead, dissolved (µg/L as Pb) (01049)	Manganese, dissolved (µg/L as Mn) (01056)	Zinc, total recoverable (µg/L as Zn) (01092)	Zinc, dissolved (µg/L as Zn) (01090)	Carbon, organic, total (mg/L as C) (00680)
Nov.	16	1700	<1	<1.0	57	<31	<20
Mar.	9	1500	--	--	48	--	2.0
Aug.	16	1500	3	<1.0	49	<31	.71

**GROUND-WATER RECORDS**  
**Montgomery County**

287

**393757084173600. LOCAL NUMBER MT-928**

LOCATION.—Latitude 39°37'57", longitude 84°17'36", Hydrologic Unit 05080002, on right bank of Great Miami River 0.2 mi south of Linden Avenue bridge, Miamisburg, Ohio. Owner: City of Miamisburg.

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled municipal supply water-table well, diameter 20 in., depth 95 ft, screened below 70 ft.

PERIOD OF RECORD.—September 1983 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[µS/cm, microseimens per centimeter; (00095), USGS National Water Information System parameter code; deg C, degrees Celsius; mg/L, milligrams per liter; IT, incremental titration; µg/L, micrograms per liter; <, concentration or value reported is less than that indicated; --, no data; e, estimated]

Date	Time	Specific conductance, field (µS/cm) (00095)	pH, water, field (standard units) (00400)	Air temperature (deg C) (00020)	Water temperature (deg C) (00010)	Oxygen demand, chemical (high level) (mg/L) (00340)	Calcium, dissolved (mg/L as Ca) (00915)	Magnesium, dissolved (mg/L as Mg) (00925)	Sodium, dissolved (mg/L as Na) (00930)	
Nov.	16	1130	935	7.6	6.4	16.3	<10	87	32	57
Mar.	9	1100	899	7.8	17.5	18.7	<10	78	29	63
Aug.	16	1130	795	7.5	32.5	13.3	<10	73	29	42

Date	Potassium, dissolved (mg/L as K) (00935)	Bicarbonate, IT, field (mg/L as HCO <sub>3</sub> ) (99440)	ANC, unfiltered, carbonate, IT, field (mg/L as CaCO <sub>3</sub> ) (99430)	Sulfate, dissolved (mg/L as SO <sub>4</sub> ) (00945)	Chloride, dissolved (mg/L as Cl) (00940)	Fluoride, dissolved (mg/L as F) (00950)	Silica, dissolved (mg/L as SiO <sub>2</sub> ) (00955)	Dissolved solids, residue at 180 deg C (mg/L) (70300)	Nitrogen, nitrite, dissolved (mg/L as N) (00613)	
Nov.	16	4.6	294	241	68	100	.41	10	534	.062
Mar.	9	4.4	294	241	69	85	.39	8.9	522	.132
Aug.	16	3.2	301	247	60	63	.37	7.9	466	.087

Date	Nitrogen, nitrite, plus nitrate dissolved (mg/L as N) (00631)	Nitrogen, ammonia, dissolved (mg/L as N) (00608)	Phosphorus, ortho-phosphate, dissolved (mg/L as P) (00671)	Arsenic, total (µg/L as As) (01002)	Arsenic, dissolved (µg/L as As) (01000)	Chromium, dissolved (µg/L as Cr) (01030)	Chromium, total recoverable (µg/L as Cr) (01034)	Copper, total recoverable (µg/L as Cu) (01042)	Copper, dissolved (µg/L as Cu) (01040)	
Nov.	16	1.42	<.020	.029	2	e1	<.80	<1	6	5.7
Mar.	9	3.91	<.020	.037	--	--	--	--	--	--
Aug.	16	4.36	<.020	.030	e1	e1	<.80	<1	6	4.8

Date	Iron, dissolved (µg/L as Fe) (01046)	Lead, total recoverable (µg/L as Pb) (01049)	Lead, dissolved (µg/L as Pb) (01049)	Manganese, dissolved (µg/L as Mn) (01056)	Zinc, total recoverable (µg/L as Zn) (01092)	Zinc, dissolved (µg/L as Zn) (01090)	Carbon, organic, total (mg/L as C) (00680)	
Nov.	16	<10	<1	<1.0	263	<31	<20	3.9
Mar.	9	<10	--	--	260	--	--	5.2
Aug.	16	<10	<1	<1.0	237	<31	<20	1.2

**GROUND-WATER RECORDS**  
**Montgomery County**

**394012084151700. LOCAL NUMBER, MT-55**

LOCATION.—Latitude 39°40'12", longitude 84°15'17", 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, Division of Water.

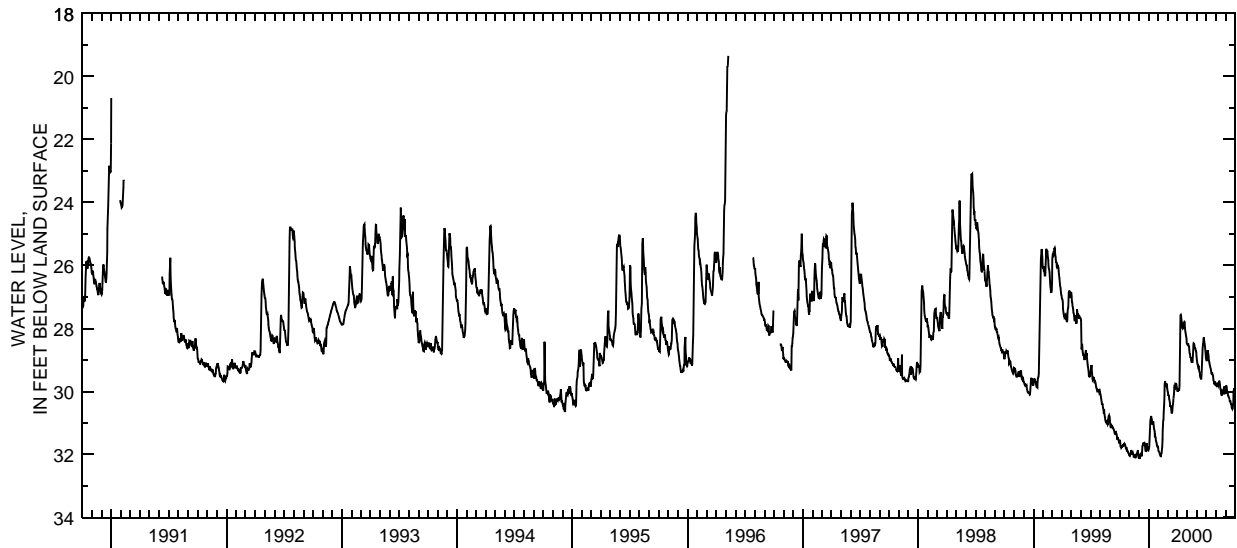
PERIOD OF RECORD.—April 1970 to current year.

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.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31.54	32.04	32.10	31.85	31.87	29.98	29.98	28.48	28.88	28.96	29.79	30.05
2	31.58	32.05	32.11	31.81	31.91	30.03	29.98	28.50	29.02	29.01	29.81	29.99
3	31.65	32.01	32.13	31.75	31.93	30.12	30.00	28.52	29.07	29.04	29.75	29.81
4	31.76	32.01	32.14	31.64	31.96	30.12	29.97	28.52	29.12	28.97	29.73	29.88
5	31.77	32.00	32.00	31.25	31.99	30.14	29.94	28.47	29.18	28.86	29.82	29.94
6	31.74	31.97	31.99	31.01	32.02	30.23	29.94	28.52	29.21	28.69	29.82	30.02
7	31.78	31.86	32.01	30.93	32.05	30.27	29.94	28.57	29.19	28.77	29.80	30.04
8	31.76	31.90	31.98	30.84	32.06	30.37	29.81	28.58	29.22	28.81	29.83	30.08
9	31.78	31.92	32.00	30.78	32.06	30.44	28.87	28.68	29.32	28.89	29.76	30.13
10	31.74	31.95	32.06	30.85	31.97	30.49	28.16	28.79	29.38	29.00	29.73	30.15
11	31.72	31.94	31.93	30.89	31.96	30.45	27.59	28.83	29.41	29.07	29.70	30.19
12	31.76	31.99	31.76	30.98	31.90	30.50	27.57	28.91	29.50	29.13	29.66	30.21
13	31.70	31.99	31.72	31.06	31.76	30.60	27.61	28.93	29.56	29.18	29.70	30.25
14	31.69	32.02	31.70	31.02	31.52	30.67	27.73	28.94	29.60	29.23	29.79	30.31
15	31.68	32.10	31.63	31.02	31.23	30.68	27.80	29.02	29.60	29.26	29.87	30.31
16	31.66	32.07	31.72	30.95	30.93	30.64	27.88	29.06	29.60	29.28	29.94	30.31
17	31.69	32.07	31.68	31.09	30.90	30.54	27.99	29.07	29.44	29.37	29.98	30.37
18	31.67	31.99	31.65	31.16	30.68	30.40	28.00	29.07	29.14	29.43	30.07	30.40
19	31.73	32.07	31.64	31.21	30.42	30.32	27.98	29.07	28.88	29.44	30.11	30.41
20	31.77	32.12	31.74	31.27	30.13	30.23	27.92	29.01	28.68	29.39	30.11	30.50
21	31.81	32.09	31.76	31.46	29.77	30.10	27.88	28.75	28.53	29.45	30.04	30.53
22	31.81	32.04	31.88	31.42	29.67	29.96	27.82	28.50	28.47	29.48	29.99	30.56
23	31.77	32.04	31.87	31.47	29.75	29.86	27.79	28.48	28.34	29.52	30.02	30.53
24	31.87	31.99	31.88	31.55	29.79	29.88	27.81	28.49	28.29	29.61	30.02	30.50
25	31.87	31.99	31.75	31.60	29.82	29.82	27.92	28.53	28.38	29.67	30.06	30.40
26	31.90	31.94	31.65	31.63	29.80	29.76	28.09	28.61	28.47	29.72	30.07	30.06
27	31.91	31.92	31.73	31.71	29.75	29.77	28.14	28.62	28.53	29.76	30.00	29.98
28	31.94	31.86	31.77	31.74	29.83	29.79	28.19	28.64	28.61	29.77	29.84	29.90
29	31.96	32.03	31.83	31.73	29.89	29.78	28.27	28.69	28.73	29.71	29.96	29.93
30	31.97	32.09	31.87	31.74	---	29.87	28.34	28.72	28.86	29.71	30.01	29.97
31	31.98	---	31.88	31.76	---	29.90	---	28.78	---	29.75	30.08	---
MAX	31.98	32.12	32.14	31.85	32.06	30.68	30.00	29.07	29.60	29.77	30.11	30.56

CAL YR 1999 LOW 32.14  
WTR YR 2000 LOW 32.14



**GROUND-WATER RECORDS**  
**Montgomery County**

**394025084162800. LOCAL NUMBER, MT-49**

LOCATION.—Latitude 39°40'25", longitude 84°16'28", 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, Division of Water.

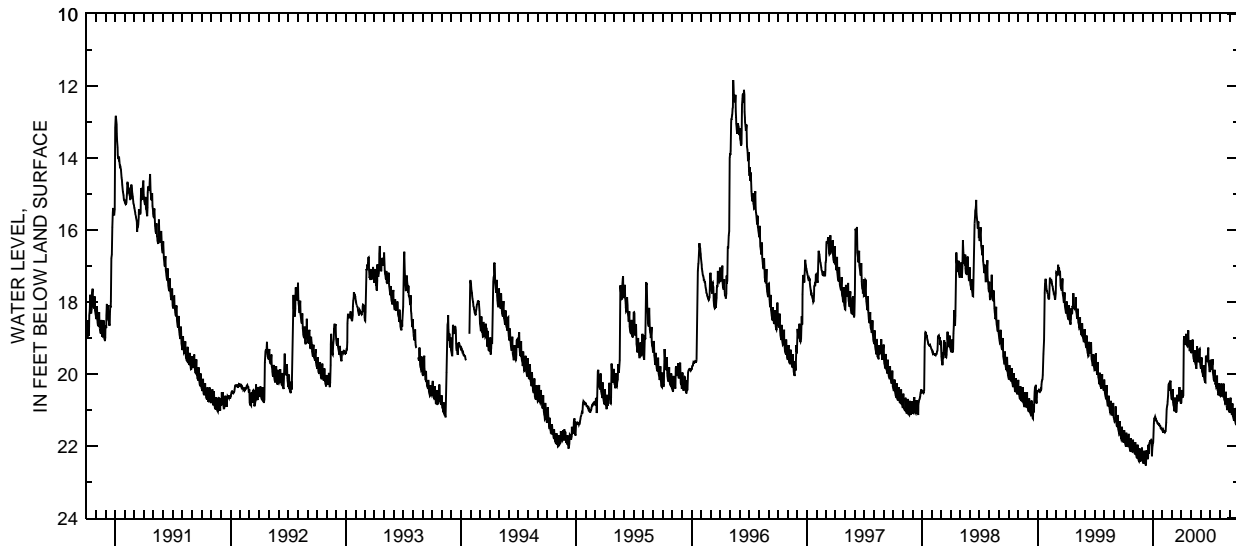
PERIOD OF RECORD.—November 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 36.30 ft below land-surface datum, Dec. 8, 1974; minimum daily low, 10.58 ft below land-surface datum, Jan. 23, 1959.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.91	22.05	22.42	21.99	21.58	20.70	20.79	19.36	19.80	19.90	20.60	21.08
2	21.88	22.10	22.47	21.93	21.59	20.71	20.45	19.39	19.86	19.64	20.60	21.02
3	21.57	22.15	22.48	21.90	21.56	20.70	20.64	19.37	19.78	19.90	20.58	20.71
4	21.83	22.19	22.49	21.66	21.61	20.58	20.65	19.42	19.54	19.61	20.62	20.66
5	21.89	22.22	22.14	21.37	21.61	20.43	20.64	19.35	19.86	19.68	20.61	20.95
6	21.93	22.22	22.40	21.24	21.61	20.79	20.64	19.28	19.94	19.78	20.27	21.04
7	21.98	21.90	22.43	21.24	21.62	20.86	20.60	19.05	19.97	19.87	20.55	21.08
8	22.02	22.14	22.49	21.22	21.63	20.91	20.10	19.41	20.02	19.75	20.57	21.14
9	22.00	22.22	22.52	21.19	21.60	21.00	19.07	19.50	20.08	19.59	20.59	21.13
10	21.64	22.25	22.53	21.22	21.59	21.04	18.95	19.57	19.99	19.94	20.61	20.82
11	21.89	22.32	22.53	21.27	21.59	21.01	19.00	19.62	19.77	20.03	20.59	21.12
12	21.91	22.33	22.13	21.27	21.55	20.66	19.09	19.67	20.08	20.10	20.54	21.19
13	21.98	22.33	22.30	21.32	21.35	20.96	19.15	19.58	20.16	20.17	20.27	21.22
14	22.00	21.97	22.31	21.32	21.13	21.04	19.20	19.35	20.19	20.21	20.62	21.26
15	22.03	22.26	22.32	21.30	20.98	21.06	19.03	19.68	20.23	20.12	20.70	21.30
16	22.01	22.33	22.35	21.37	20.89	21.06	18.89	19.74	20.24	19.89	20.76	21.27
17	21.67	22.38	22.35	21.38	20.85	21.04	19.15	19.78	19.87	20.22	20.78	20.96
18	21.96	22.41	22.32	21.38	20.77	20.80	19.18	19.84	19.50	20.30	20.83	21.25
19	22.03	22.44	21.97	21.38	20.60	20.58	19.22	19.84	19.56	20.27	20.82	21.33
20	22.07	22.42	22.22	21.41	20.35	20.76	19.23	19.63	19.61	20.29	20.50	21.38
21	22.09	22.07	22.00	21.42	20.29	20.74	19.21	19.23	19.62	20.36	20.80	21.39
22	22.13	22.32	21.92	21.41	20.26	20.70	19.04	19.49	19.53	20.35	20.87	21.41
23	22.12	22.39	21.90	21.44	20.41	20.70	18.79	19.53	19.58	20.05	20.93	21.34
24	21.79	22.44	21.87	21.45	20.42	20.73	19.09	19.57	19.48	20.39	20.97	21.01
25	22.05	22.24	21.87	21.45	20.47	20.71	19.21	19.63	19.27	20.46	21.01	21.03
26	22.14	22.34	21.85	21.50	20.24	20.37	19.26	19.68	19.61	20.50	20.84	21.07
27	22.17	22.34	21.87	21.52	20.19	20.61	19.32	19.56	19.72	20.56	20.67	21.08
28	22.13	22.05	21.86	21.53	20.54	20.74	19.37	19.31	19.81	20.60	20.89	21.11
29	22.15	22.35	22.17	21.52	20.59	20.77	19.25	19.30	19.88	20.55	20.95	21.16
30	22.14	22.40	22.29	21.51	---	20.81	19.06	19.63	19.95	20.26	21.00	21.15
31	21.83	---	22.09	21.56	---	20.83	---	19.74	---	20.56	21.05	---
MAX	22.17	22.44	22.53	21.99	21.63	21.06	20.79	19.84	20.24	20.60	21.05	21.41

CAL YR 1999   LOW 22.53  
WTR YR 2000   LOW 22.53



**GROUND-WATER RECORDS**  
**Montgomery County**

**394425084113200. LOCAL NUMBER, MT-3**

LOCATION.—Latitude 39°44'25", longitude 84°11'32", 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, Division of Water.

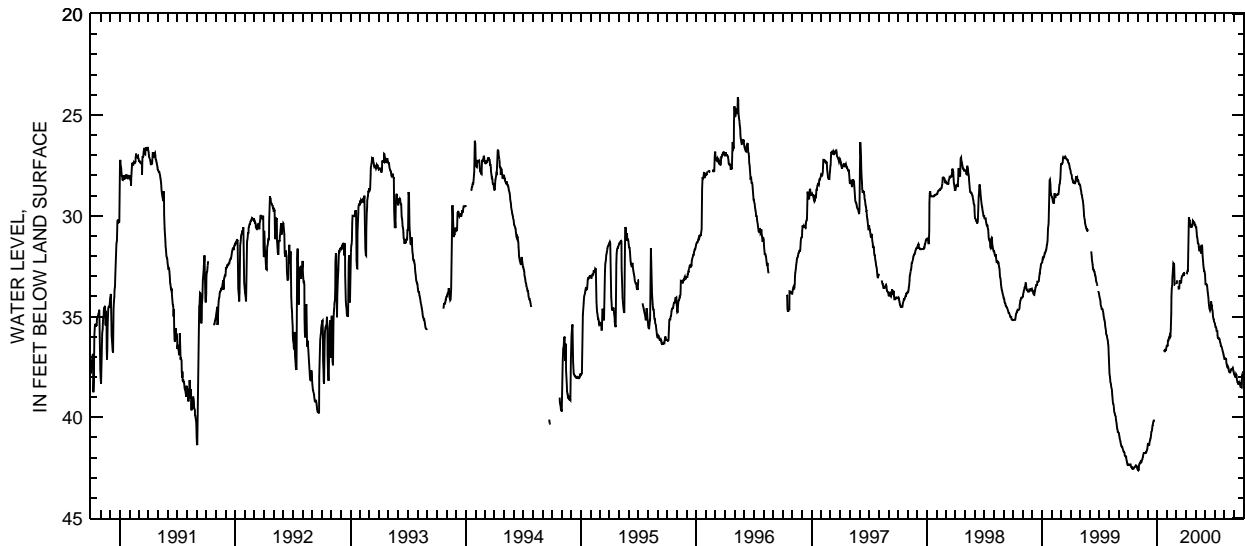
PERIOD OF RECORD.—May 1945 to June 1974. Reactivated June 1980.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low 79.45 ft below land-surface datum, Apr. 6, 1971; minimum daily low, 24.13 ft below land-surface datum, May 12, 1996.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42.35	42.63	41.47	---	36.46	33.35	---	30.53	33.08	35.33	37.11	37.89
2	42.37	42.65	41.35	---	36.45	33.35	---	30.57	33.41	35.37	37.11	37.91
3	42.37	42.61	41.29	---	36.44	33.35	32.88	30.57	33.41	35.51	37.11	37.96
4	42.35	42.43	41.36	---	36.20	33.21	32.88	30.66	33.41	35.51	37.09	37.99
5	42.35	42.32	41.38	---	36.20	---	32.78	30.85	33.41	35.52	37.09	37.99
6	42.35	42.29	41.38	---	36.16	---	32.72	31.01	33.46	35.62	37.12	37.93
7	42.35	42.29	41.32	---	36.06	---	32.72	31.11	33.48	35.71	37.29	37.87
8	42.34	42.23	41.20	---	36.04	33.49	32.41	31.24	33.66	35.71	37.36	37.91
9	42.40	42.20	41.13	---	35.95	33.62	30.68	31.36	33.81	35.73	37.50	38.09
10	42.47	42.23	41.07	---	35.93	33.62	30.09	31.39	33.93	35.93	37.52	38.17
11	42.49	42.24	41.04	---	35.99	33.61	30.14	31.41	34.07	36.07	37.52	38.26
12	42.49	42.21	40.88	---	35.96	33.25	30.23	31.57	34.30	36.07	37.49	38.26
13	42.55	42.14	40.73	---	35.64	33.24	30.25	31.72	34.47	36.09	37.52	38.33
14	42.55	42.10	40.70	---	34.84	33.20	30.38	31.72	34.58	36.09	37.59	38.32
15	42.51	42.08	40.63	---	34.05	33.32	30.49	31.62	34.67	36.10	37.72	38.33
16	42.55	41.98	40.52	---	33.61	33.32	30.56	31.57	34.71	36.12	37.76	38.33
17	42.55	41.92	40.41	---	33.47	33.30	30.56	31.63	34.70	36.16	37.76	38.28
18	42.55	41.81	40.40	---	33.09	33.10	30.56	31.81	34.46	36.27	37.78	38.27
19	42.50	41.77	40.26	---	32.84	33.00	30.51	31.89	34.44	36.31	37.78	38.36
20	42.48	41.77	40.19	---	32.48	33.00	30.52	31.77	34.26	36.37	37.73	38.49
21	42.47	41.77	40.19	36.67	32.36	33.00	30.50	31.45	34.47	36.46	37.63	38.49
22	42.45	41.78	40.11	36.68	32.38	32.98	30.39	31.51	34.47	36.49	37.62	38.47
23	42.45	41.78	---	36.69	32.43	32.90	30.26	31.70	34.61	36.52	37.62	38.51
24	42.44	41.78	---	36.73	32.69	32.89	30.30	32.01	34.73	36.56	37.62	38.52
25	42.43	41.78	---	36.73	33.42	32.94	30.34	32.30	34.90	36.65	37.60	38.39
26	42.39	41.74	---	36.67	33.42	32.94	30.34	32.42	35.02	36.72	37.58	37.93
27	42.40	41.73	---	36.68	---	32.85	30.34	32.57	35.13	36.76	37.55	37.82
28	42.44	41.67	---	36.68	---	32.84	30.39	32.74	35.16	36.84	37.61	37.77
29	42.51	41.64	---	36.63	33.32	32.84	30.45	32.74	35.26	36.89	37.66	37.77
30	42.56	41.58	---	36.52	---	---	30.46	32.78	35.30	36.94	37.76	37.75
31	42.58	---	---	36.46	---	---	---	32.93	---	37.06	37.82	---
MAX	42.58	42.65	41.47	36.73	36.46	33.62	32.88	32.93	35.30	37.06	37.82	38.52

CAL YR 1999 LOW 42.65  
WTR YR 2000 LOW 42.65





**GROUND-WATER RECORDS**  
**Montgomery County**

**394533084113800. LOCAL NUMBER, MT-6**

LOCATION.—Latitude 39°45'33", longitude 84°11'38", 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, Division of Water.

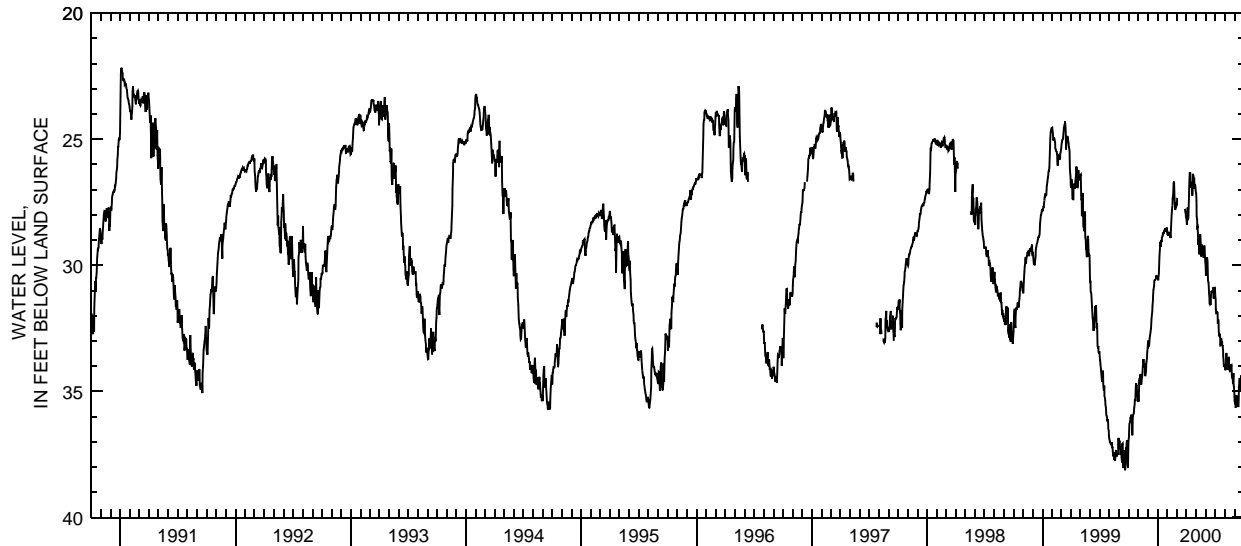
PERIOD OF RECORD.—February 1946 to current year.

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.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36.98	35.42	33.10	30.50	28.74	27.62	28.15	27.05	29.99	30.86	34.05	35.38
2	36.80	35.35	32.99	30.48	28.79	27.56	28.25	27.15	30.42	31.28	34.05	35.43
3	36.48	34.93	33.15	30.60	28.68	27.36	28.40	27.43	29.85	31.37	34.16	35.38
4	36.28	34.55	33.21	30.43	28.82	27.36	28.08	28.07	29.79	31.76	33.93	35.63
5	36.23	34.57	33.18	30.33	28.74	---	27.71	28.18	30.11	31.89	33.80	35.63
6	36.18	34.73	33.03	29.93	28.67	---	28.18	28.49	29.68	31.88	33.48	35.48
7	36.05	34.35	32.91	29.60	28.73	---	28.15	28.47	29.83	31.93	34.02	35.16
8	36.05	34.35	32.79	29.42	28.82	---	28.01	28.88	30.32	31.85	34.10	35.34
9	36.02	34.60	32.69	29.15	28.77	---	27.36	29.18	30.60	31.92	34.05	35.50
10	35.93	34.73	32.64	29.07	28.82	---	26.81	28.97	30.69	32.32	34.14	35.60
11	36.02	34.62	32.50	29.27	28.92	---	26.60	29.25	30.86	32.15	34.08	35.55
12	36.09	34.52	32.27	29.00	28.76	---	26.34	29.49	31.08	32.24	33.98	35.57
13	36.75	34.40	32.12	29.08	28.41	---	26.34	29.57	31.28	32.61	33.63	35.63
14	36.06	34.23	31.93	29.03	28.11	---	26.82	29.04	31.55	32.76	33.72	35.28
15	35.99	34.07	31.82	28.89	27.96	---	26.70	28.76	31.28	32.82	34.13	34.80
16	35.93	33.88	31.62	28.85	27.72	---	26.79	28.90	31.56	32.72	34.19	34.65
17	35.87	33.72	31.40	28.83	27.62	---	26.93	29.36	31.55	32.85	34.16	34.47
18	35.82	33.88	31.20	28.74	27.35	---	26.70	29.65	31.26	33.18	34.23	34.88
19	35.66	34.05	30.99	28.74	27.20	---	26.75	29.55	31.08	33.17	34.07	34.88
20	35.49	33.92	30.87	28.71	26.96	---	27.24	29.40	31.02	32.99	33.92	35.00
21	35.32	33.88	30.81	28.73	26.72	---	26.78	29.18	31.07	32.91	34.00	34.70
22	35.38	34.19	30.60	28.62	26.68	---	26.38	29.33	31.01	33.07	33.98	34.37
23	35.18	34.40	30.58	28.59	27.06	---	26.43	29.54	31.10	33.03	34.40	34.80
24	34.80	34.29	30.58	28.59	27.35	---	26.48	29.30	31.04	33.20	34.44	34.62
25	34.68	34.16	30.57	28.53	27.68	---	26.61	29.67	30.87	33.17	34.53	34.20
26	34.78	33.95	30.53	28.62	27.80	---	26.60	29.67	31.29	33.35	34.57	33.65
27	34.75	33.81	30.51	28.63	27.75	27.77	26.96	29.63	31.33	33.63	34.71	33.33
28	35.12	33.65	30.40	28.65	27.57	27.78	26.82	29.22	31.22	33.75	34.28	33.09
29	35.10	33.48	30.47	28.62	27.58	27.90	26.81	29.46	31.10	34.02	34.75	32.85
30	35.40	33.32	30.43	28.50	---	27.95	26.94	29.67	31.28	33.93	34.83	32.58
31	35.13	---	30.50	28.63	---	28.07	---	29.88	---	33.98	35.12	---
MAX	36.98	35.42	33.21	30.60	28.92	28.07	28.40	29.88	31.56	34.02	35.12	35.63

CAL YR 1999    LOW 38.13  
WTR YR 2000    LOW 36.98



GROUND-WATER RECORDS  
Montgomery County

394811084095000. LOCAL NUMBER, MT-74

LOCATION.—Latitude 39°48'11", longitude 84°09'50", Hydrologic Unit 05080002, Miami Well Field 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, Division of Water.

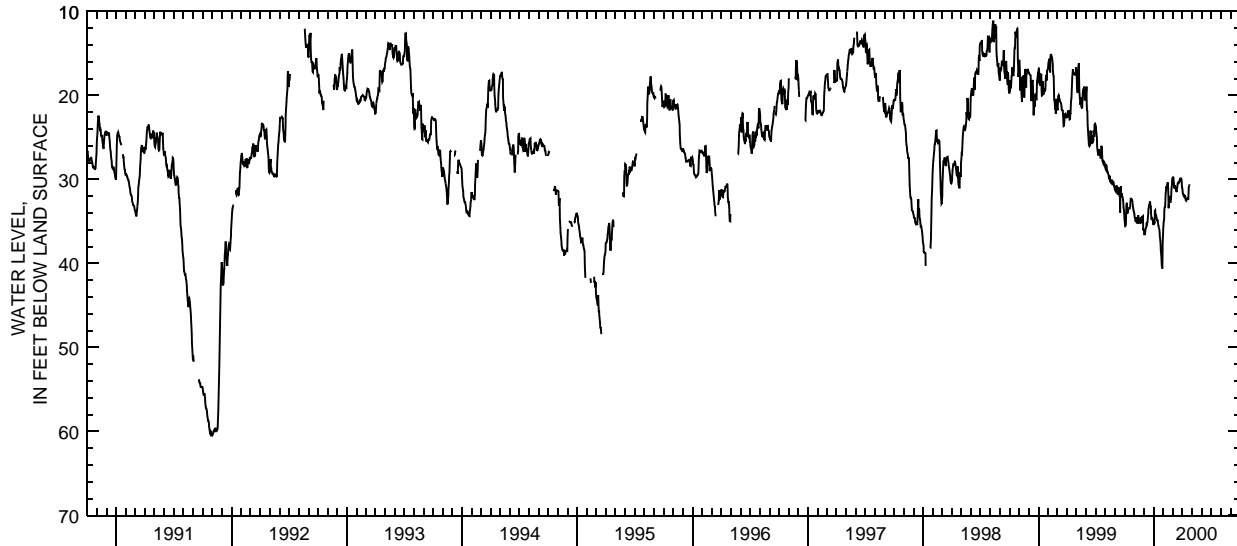
PERIOD OF RECORD.—April 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 60.50 ft below land-surface datum, Oct. 31 and Nov. 1, 1991; minimum daily low, 11.13 ft below land-surface datum, Aug. 11, 1998.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34.71	34.17	36.13	35.43	35.60	29.82	31.11	---	---	---	---	---
2	35.28	34.53	36.42	34.91	35.07	29.78	31.52	---	---	---	---	---
3	35.58	34.59	36.56	35.13	34.77	29.67	31.71	---	---	---	---	---
4	35.55	34.65	36.63	35.25	33.75	29.87	31.85	---	---	---	---	---
5	35.27	35.04	36.33	33.74	33.32	30.45	31.89	---	---	---	---	---
6	33.85	34.59	36.06	33.69	33.28	30.87	32.03	---	---	---	---	---
7	33.17	34.80	35.84	34.34	32.90	31.08	32.12	---	---	---	---	---
8	32.78	35.12	35.76	34.35	31.73	30.69	32.10	---	---	---	---	---
9	33.77	35.12	35.64	34.32	31.32	31.04	31.95	---	---	---	---	---
10	34.08	34.47	35.15	34.49	30.84	30.99	32.00	---	---	---	---	---
11	33.88	35.24	35.25	34.78	31.08	31.05	32.24	---	---	---	---	---
12	33.74	35.28	35.12	34.86	30.99	31.32	32.52	---	---	---	---	---
13	33.53	34.25	35.07	34.85	30.69	31.41	32.57	---	---	---	---	---
14	33.47	34.62	34.40	34.91	30.45	31.50	32.31	---	---	---	---	---
15	33.44	34.77	33.98	35.13	30.35	31.01	32.34	---	---	---	---	---
16	33.45	34.86	33.51	35.48	30.99	30.93	32.34	---	---	---	---	---
17	33.45	35.01	33.27	35.64	32.61	30.51	32.31	---	---	---	---	---
18	33.36	35.09	33.09	35.79	33.44	30.43	32.18	---	---	---	---	---
19	33.18	35.22	32.88	35.97	32.48	30.45	32.45	---	---	---	---	---
20	32.30	35.22	32.73	36.35	32.10	30.45	32.34	---	---	---	---	---
21	32.30	34.65	32.64	36.78	32.12	30.29	31.37	---	---	---	---	---
22	32.28	34.60	33.10	37.26	32.48	30.30	30.90	---	---	---	---	---
23	32.35	34.57	33.25	37.85	32.78	30.27	30.72	---	---	---	---	---
24	32.42	35.18	33.93	38.43	32.52	29.97	30.57	---	---	---	---	---
25	32.50	34.93	34.74	39.06	32.37	29.91	---	---	---	---	---	---
26	32.72	34.56	34.78	39.72	31.83	29.90	---	---	---	---	---	---
27	33.06	34.44	34.49	40.23	31.10	29.88	---	---	---	---	---	---
28	33.39	34.37	34.73	40.57	30.57	29.93	---	---	---	---	---	---
29	33.60	36.05	34.83	40.55	30.09	29.97	---	---	---	---	---	---
30	33.78	35.93	34.92	37.43	---	30.40	---	---	---	---	---	---
31	33.92	---	35.32	36.24	---	30.86	---	---	---	---	---	---
MAX	35.58	36.05	36.63	40.57	35.60	31.50	32.57	---	---	---	---	---

CAL YR 1999 LOW 36.63  
WTR YR 2000 LOW 40.57



**GROUND-WATER RECORDS  
Muskingum County**

**395804081593200. LOCAL NUMBER, MU-1A**

LOCATION.—Latitude 39°58'04", longitude 81°59'32", Hydrologic Unit 05040004, 2.2 mi northeast of the "Y" bridge in Zanesville, Ohio. Owner: Zanesville Water Department.

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.—Water level affected by nearby municipal wells and by stage of the Muskingum River. Prior to water year 1978, well depth reported as 132 ft. Station operated by Ohio Department of Natural Resources, Division of Water.

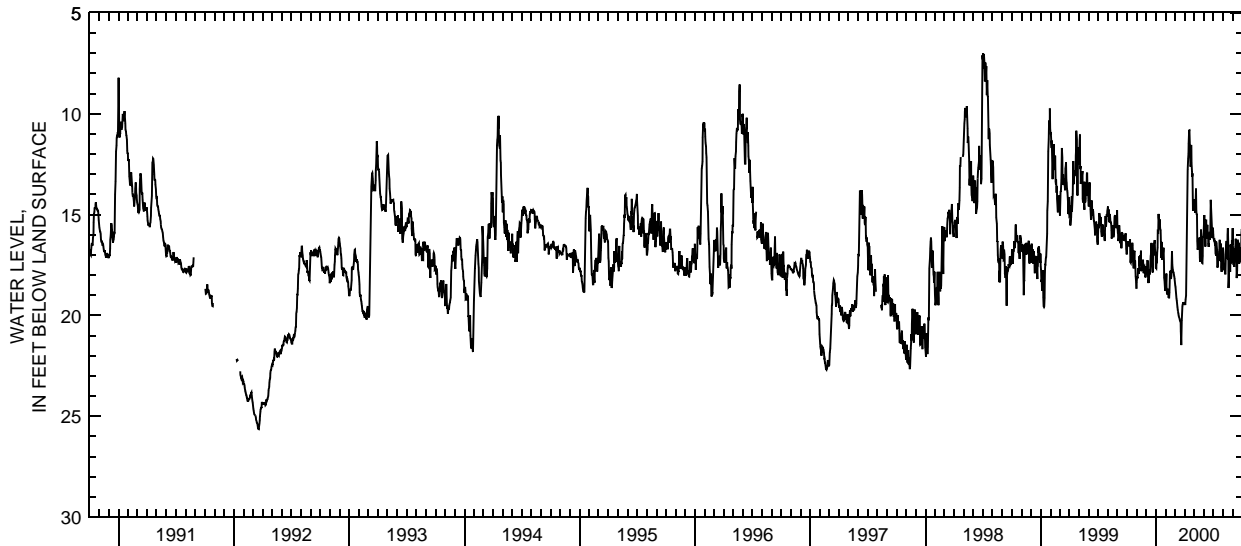
PERIOD OF RECORD.—May 1942 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 37.25 ft below land-surface datum, Aug. 1 and 2, 1954; minimum daily low, 7.01 ft below land-surface datum, July 2, 1998.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.92	18.38	17.75	17.64	18.14	18.33	19.44	14.24	15.57	16.00	16.65	16.50
2	16.58	18.11	17.69	17.67	18.36	18.50	19.47	14.46	15.03	16.22	16.98	16.81
3	16.38	18.12	17.88	17.19	17.93	18.60	19.49	14.63	15.39	16.29	17.76	16.85
4	16.32	18.17	17.90	17.42	18.63	18.78	19.22	14.82	15.59	16.31	17.52	17.46
5	16.53	17.67	17.27	16.83	18.96	18.96	19.02	14.91	16.56	16.29	17.45	17.60
6	16.52	17.75	17.34	16.65	18.89	19.17	18.45	14.18	16.59	16.53	17.58	17.24
7	16.52	17.82	18.06	15.85	18.93	19.28	17.60	13.71	15.30	16.40	17.93	16.81
8	16.53	17.94	18.40	15.87	18.69	19.43	16.38	14.82	15.30	16.95	17.93	16.67
9	16.38	17.09	18.21	14.97	18.93	19.59	15.32	15.01	15.89	17.04	17.15	16.59
10	16.38	17.52	18.38	15.15	19.13	19.71	13.35	14.97	16.19	16.34	16.75	16.20
11	16.23	17.20	17.72	15.39	19.05	19.80	12.78	16.32	15.63	16.45	16.41	16.55
12	17.36	17.01	17.94	15.60	19.15	19.92	12.23	16.75	15.51	16.72	16.31	17.04
13	17.39	17.42	17.97	15.24	18.87	20.03	11.97	16.67	15.87	17.20	17.15	18.15
14	17.15	16.80	17.67	15.68	17.99	20.07	11.49	16.59	16.00	17.64	17.18	17.78
15	17.36	17.52	17.03	15.75	18.12	20.15	10.83	16.59	16.41	17.55	16.00	16.91
16	17.22	17.81	17.00	15.78	17.79	20.20	10.82	16.75	16.61	17.09	15.68	16.25
17	16.59	17.58	16.65	16.79	17.95	20.25	11.28	16.52	15.96	17.10	16.56	16.36
18	16.40	17.70	16.41	17.16	18.20	20.30	11.96	16.14	15.95	17.27	18.65	17.03
19	16.52	17.69	16.86	16.36	18.05	20.31	12.54	17.13	15.87	16.86	18.31	16.40
20	16.88	17.52	17.49	17.15	17.31	20.79	12.63	17.34	16.26	16.74	17.16	17.39
21	17.42	17.24	17.81	17.24	16.83	21.48	12.51	16.94	16.05	16.26	17.34	17.45
22	17.64	17.58	17.88	17.09	17.49	20.88	11.55	16.59	15.09	16.72	17.72	16.71
23	17.67	17.91	17.00	17.07	17.73	20.27	12.44	15.75	14.28	17.31	17.84	16.62
24	16.83	17.85	16.58	16.89	17.79	19.77	12.87	16.20	14.81	17.16	16.55	17.03
25	16.80	17.60	16.53	16.65	17.86	19.56	13.11	16.59	15.14	16.45	16.49	17.37
26	17.33	17.58	16.45	17.36	17.88	19.45	12.95	17.39	15.40	17.61	16.83	16.94
27	17.33	17.91	16.38	18.14	17.99	19.41	14.82	17.42	15.93	17.85	17.34	16.80
28	17.73	17.56	16.28	18.25	18.08	19.34	14.73	17.06	16.17	17.30	17.37	15.92
29	18.06	18.12	16.74	18.38	18.18	19.41	14.67	16.13	15.66	17.47	16.38	15.71
30	18.36	17.84	17.03	18.77	---	19.44	14.28	16.11	15.83	16.89	16.41	15.85
31	18.68	---	16.86	18.20	---	19.43	---	15.81	---	16.89	15.68	---
MAX	18.68	18.38	18.40	18.77	19.15	21.48	19.49	17.42	16.61	17.85	18.65	18.15

CAL YR 1999    LOW 19.59  
WTR YR 2000    LOW 21.48



**GROUND-WATER RECORDS**  
**Pickaway County**

**393327082571600. LOCAL NUMBER, PK-7**

LOCATION.—Latitude 39°33'27", longitude 82°57'16", 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.

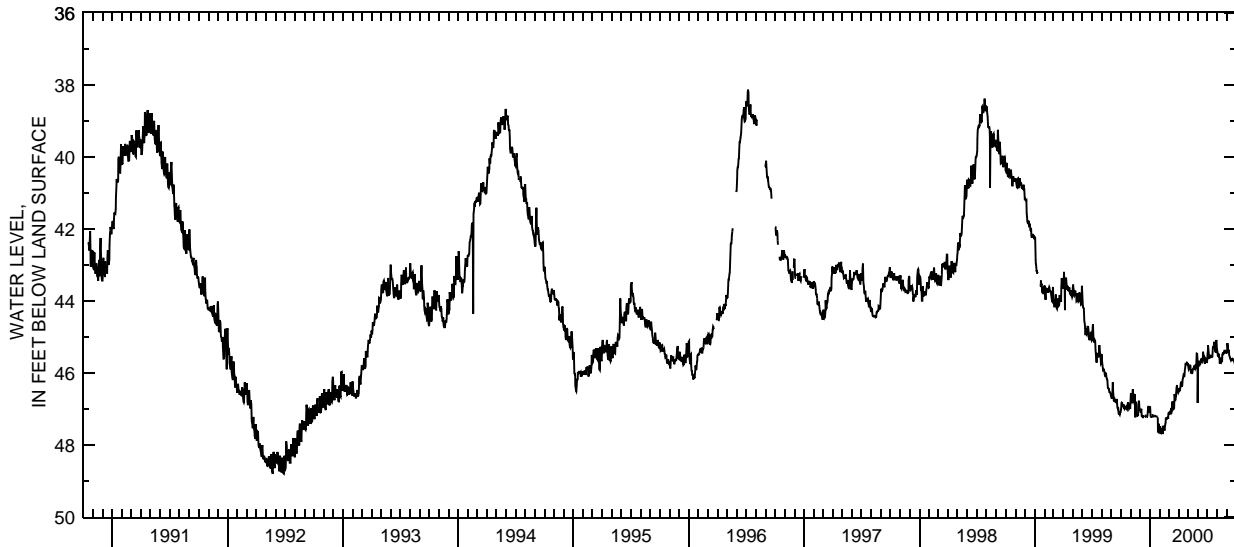
REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.—July 1972 to September 1982 continuous, October 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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47.05	46.81	47.03	46.99	47.61	47.10	46.53	45.73	46.83	45.69	45.33	45.44
2	47.00	46.56	47.01	46.93	47.60	47.15	46.49	45.83	45.78	45.47	45.39	45.43
3	46.83	46.70	47.08	47.09	47.47	47.13	46.41	45.89	45.77	45.38	45.45	45.17
4	46.82	46.79	47.10	47.20	47.67	47.08	46.50	45.88	45.75	45.22	45.52	45.24
5	46.83	46.81	46.99	47.22	47.67	47.07	46.47	45.91	45.66	45.38	45.53	45.35
6	46.90	46.80	47.15	47.22	47.55	47.11	46.43	45.86	45.76	45.48	45.46	45.39
7	46.92	46.63	47.20	---	47.55	47.12	46.41	45.79	45.77	45.58	45.49	45.38
8	46.91	46.45	47.21	---	47.63	46.98	46.30	45.79	45.73	45.57	45.55	45.41
9	46.93	46.53	47.22	47.17	47.61	47.07	46.26	45.82	45.76	45.59	45.61	45.51
10	46.87	46.57	47.21	47.15	47.60	47.08	46.26	45.95	45.71	45.54	45.74	45.55
11	46.97	46.80	47.22	47.21	47.69	47.01	46.27	45.93	45.68	45.52	45.68	45.57
12	46.98	46.81	47.20	47.21	47.66	46.81	46.38	45.91	45.60	45.51	45.64	45.59
13	46.91	46.78	47.20	47.22	47.46	46.79	46.33	46.02	45.68	45.50	45.62	45.63
14	46.97	46.59	47.22	---	47.54	46.89	46.19	45.99	45.69	45.58	45.68	45.60
15	46.98	46.62	---	47.22	47.58	46.85	46.14	45.99	45.65	45.56	45.69	45.62
16	46.98	47.23	---	47.20	47.58	46.86	46.11	45.91	45.61	45.55	45.67	45.62
17	46.97	46.84	47.22	47.20	47.58	46.99	46.06	45.88	45.62	45.54	45.66	45.61
18	46.96	46.86	47.22	47.19	47.52	46.97	46.07	45.87	45.41	45.44	45.49	45.64
19	46.99	46.84	47.19	47.20	47.42	46.72	46.11	45.89	45.50	45.29	45.49	45.63
20	47.01	46.91	47.20	47.22	47.38	46.58	46.06	45.91	45.54	45.26	45.46	45.63
21	46.95	47.14	---	---	47.27	46.73	45.91	45.82	45.52	45.26	45.42	45.63
22	46.91	47.20	47.22	47.23	47.28	46.74	45.90	45.82	45.68	45.28	45.45	45.65
23	46.89	47.20	47.22	47.21	47.28	46.71	45.77	45.77	45.72	45.14	45.45	45.62
24	46.81	---	47.19	47.22	47.27	46.64	45.72	45.80	45.72	45.13	45.41	45.62
25	46.84	47.20	47.16	---	47.24	46.54	45.77	45.87	45.64	45.31	45.42	45.63
26	46.92	46.87	46.98	47.23	47.22	46.42	45.73	45.86	45.61	45.40	45.37	45.71
27	46.99	46.79	46.94	47.63	47.25	46.33	45.72	45.82	45.64	45.40	45.36	45.70
28	46.97	46.79	46.94	47.64	47.25	46.44	45.71	45.61	45.62	45.41	45.41	45.70
29	46.95	46.96	47.10	47.61	47.16	46.51	45.73	45.46	45.60	45.19	45.41	45.69
30	46.97	47.03	47.08	47.41	---	46.54	45.78	45.47	45.72	45.08	45.44	45.59
31	46.97	---	47.08	47.53	---	46.55	---	45.61	---	45.20	45.44	---
MAX	47.05	47.23	47.22	47.64	47.69	47.15	46.53	46.02	46.83	45.69	45.74	45.71
CAL YR 1999	LOW	47.23										
WTR YR 2000	LOW	47.69										



**GROUND-WATER RECORDS**  
**Pickaway County**

**393402082572500. LOCAL NUMBER, PK-4**

LOCATION.—Latitude 39°34'02", longitude 82°57'25", 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, Division of Water.

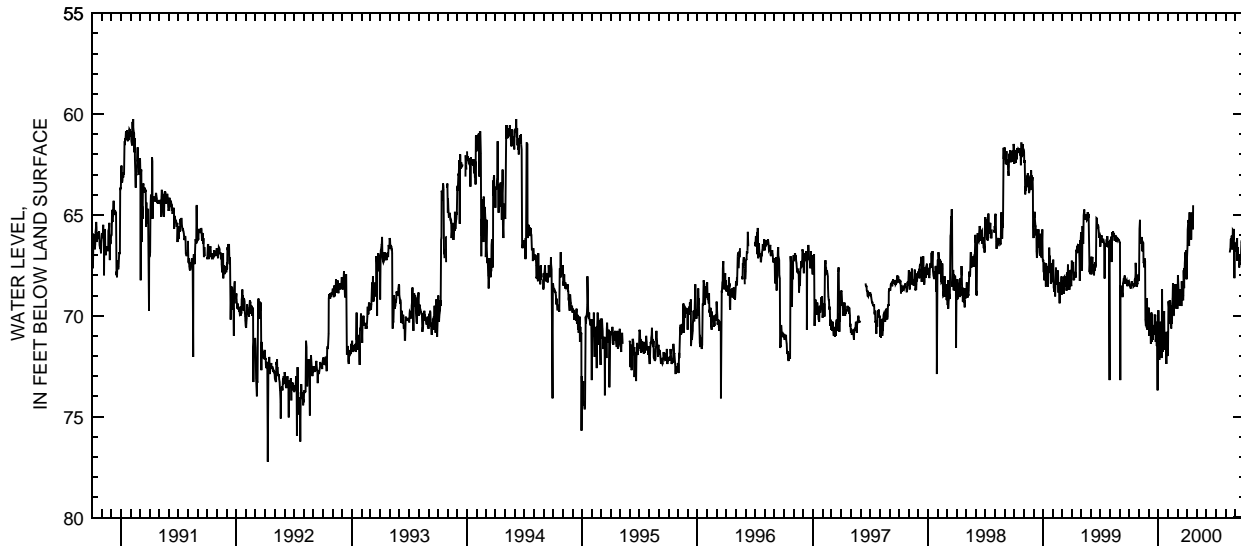
PERIOD OF RECORD.—January 1960 to current year.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68.44	67.58	69.60	69.73	71.00	69.66	66.99	---	---	---	---	66.38
2	68.50	65.70	70.60	70.60	69.29	68.90	66.52	---	---	---	---	66.52
3	68.50	65.25	71.00	71.10	69.56	67.99	65.74	---	---	---	---	66.77
4	68.61	66.40	70.20	72.20	70.00	68.48	65.42	---	---	---	---	66.68
5	68.66	66.40	70.70	71.50	69.26	68.90	65.26	---	---	---	---	66.38
6	68.56	66.24	70.80	70.30	70.40	69.38	66.08	---	---	---	---	66.15
7	68.44	66.26	70.60	71.30	69.24	68.85	66.54	---	---	---	---	67.29
8	68.30	66.20	71.40	70.50	69.96	69.42	65.28	---	---	---	---	66.60
9	68.32	66.10	70.00	71.30	70.40	69.51	64.88	---	---	---	---	67.02
10	68.47	66.40	69.84	71.00	70.60	68.70	65.84	---	---	---	---	67.16
11	68.39	66.81	71.30	72.10	70.60	68.90	65.42	---	---	---	---	67.14
12	68.42	66.68	69.92	68.70	69.48	68.86	66.04	---	---	---	---	67.10
13	68.54	66.36	70.80	69.32	70.40	68.86	65.12	---	---	---	---	67.61
14	68.50	66.40	71.20	71.80	69.37	69.52	66.23	---	---	---	66.87	67.39
15	68.49	67.40	70.50	69.81	69.14	68.30	65.09	---	---	---	66.80	67.46
16	68.53	67.33	70.50	71.30	68.40	69.22	65.38	---	---	---	66.66	66.96
17	68.52	67.60	70.60	70.30	68.78	68.38	65.23	---	---	---	66.21	67.11
18	68.21	67.14	70.90	70.80	69.00	69.05	64.87	---	---	---	66.18	67.25
19	68.16	67.37	70.90	69.77	70.00	69.24	65.71	---	---	---	66.66	66.77
20	68.03	67.30	70.80	71.40	69.25	69.00	64.52	---	---	---	66.03	66.32
21	67.38	70.20	69.94	71.70	68.46	67.74	---	---	---	---	66.19	66.33
22	67.96	70.50	70.40	71.40	69.36	68.64	---	---	---	---	66.71	66.44
23	68.08	70.20	71.30	71.50	69.21	67.64	---	---	---	---	66.11	65.52
24	68.57	70.50	71.20	71.60	68.72	67.76	---	---	---	---	65.75	65.12
25	68.50	70.60	71.20	71.30	68.45	67.40	---	---	---	---	65.79	65.19
26	68.40	69.12	71.20	72.40	69.40	66.91	---	---	---	---	66.24	65.52
27	68.40	70.70	71.50	70.80	69.66	66.84	---	---	---	---	65.70	64.94
28	68.06	69.88	70.30	71.50	68.60	67.38	---	---	---	---	66.75	64.67
29	67.96	70.70	73.70	71.80	69.10	66.74	---	---	---	---	68.14	65.07
30	68.24	70.10	69.96	72.00	---	68.20	---	---	---	---	66.69	65.24
31	68.24	---	70.60	71.80	---	67.48	---	---	---	---	66.71	---
MAX	68.66	70.70	73.70	72.40	71.00	69.66	66.99	---	---	---	68.14	67.61

CAL YR 1999    LOW 73.70  
WTR YR 2000    LOW 73.70



**GROUND-WATER RECORDS**  
**Pickaway County**

**393638082572300. LOCAL NUMBER, PK-6**

LOCATION.—Latitude 39°36'38", longitude 82°57'23", Hydrologic Unit 05060002, water works plant, 1 mi northwest of Circleville, Ohio. Owner: Circleville Water Department

AQUIFER.—Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.—Drilled unused water table well, diameter 6 in., depth 120 ft, cased.

INSTRUMENTATION.—Electronic data logger, 60-minute log interval.

DATUM.—Elevation of land-surface datum is 672 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, Division of Water.

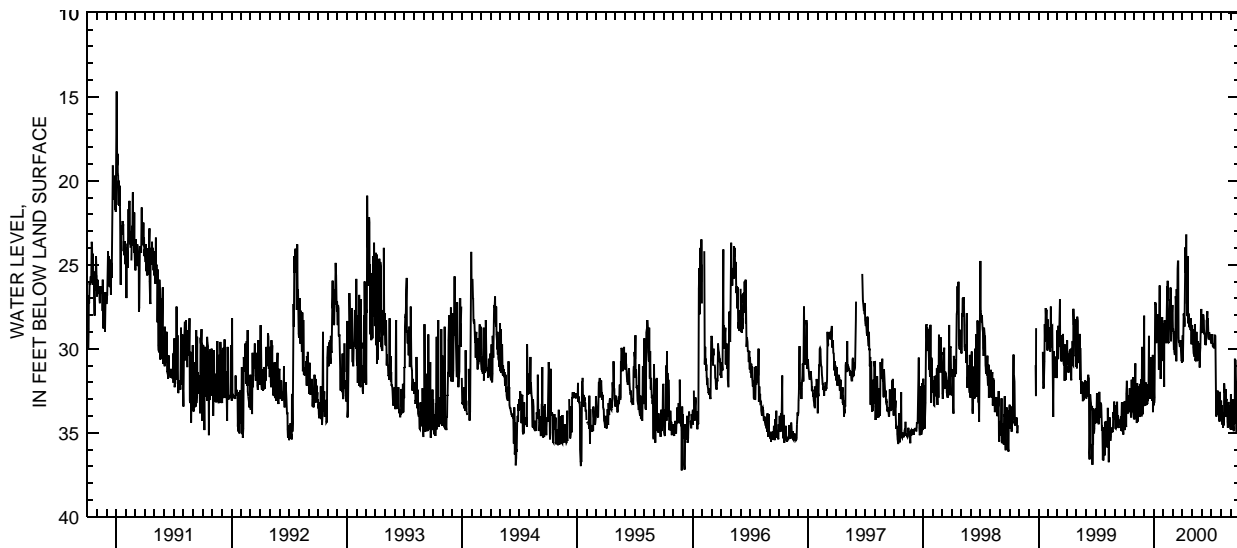
PERIOD OF RECORD.—July 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 37.32 ft below land-surface datum, Feb. 24, 1977; minimum daily low, 14.50 ft below land-surface datum, Feb. 2, 1969.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33.51	34.22	28.65	33.38	28.58	27.40	30.63	29.43	28.95	29.58	34.08	34.80
2	34.85	33.80	28.04	32.10	28.68	28.97	29.21	28.59	28.92	29.65	33.10	32.73
3	34.17	32.81	32.93	33.24	32.27	28.80	30.77	29.27	28.63	29.72	34.31	34.52
4	33.12	30.88	32.61	32.90	28.70	29.12	28.85	28.83	28.67	29.27	33.38	34.82
5	34.50	34.19	32.34	29.42	28.31	30.08	27.92	29.49	29.08	29.15	34.40	34.02
6	34.68	32.45	33.39	27.24	28.67	29.21	28.02	29.91	27.95	29.60	34.53	34.16
7	32.69	33.59	32.00	27.32	28.77	30.18	28.22	30.26	28.04	29.87	33.81	33.00
8	31.92	34.03	33.23	27.35	28.79	30.39	28.70	30.38	28.33	29.67	34.71	34.10
9	32.37	34.43	32.42	28.46	28.65	29.00	26.51	29.57	28.85	29.94	33.87	34.60
10	32.76	32.07	33.36	29.67	29.68	30.35	24.54	30.50	29.15	29.75	34.57	34.74
11	33.87	33.44	33.12	28.83	29.03	26.88	23.97	28.56	29.07	29.99	33.80	34.91
12	33.59	34.34	33.30	29.25	28.47	27.12	25.50	30.69	29.75	29.82	32.07	34.49
13	33.82	32.81	32.96	27.95	26.31	30.75	23.21	30.71	29.58	29.21	32.60	34.22
14	32.79	33.74	32.99	28.02	27.13	26.46	26.18	30.53	29.79	29.22	32.64	34.46
15	33.60	32.70	32.12	28.95	25.97	27.74	27.33	30.69	29.68	29.27	33.88	30.60
16	33.77	33.23	32.88	29.16	29.58	27.40	26.08	29.01	29.27	32.60	34.07	33.63
17	32.35	32.25	29.25	30.57	29.65	25.26	28.07	30.74	28.41	33.96	32.42	34.29
18	32.60	34.07	32.91	31.26	29.63	24.81	24.50	30.71	28.44	34.05	33.13	33.27
19	33.28	33.66	32.45	28.04	28.56	24.81	28.50	29.91	27.77	32.64	32.99	34.75
20	33.02	32.10	32.99	26.24	28.61	29.36	28.04	30.30	28.82	32.73	33.74	35.00
21	33.95	33.78	30.54	28.22	28.20	29.63	28.23	29.58	28.18	33.92	33.35	34.74
22	34.10	32.90	32.82	28.11	27.06	29.58	27.92	30.71	28.97	32.50	34.35	32.16
23	31.85	31.82	32.64	31.80	28.82	29.75	28.70	29.67	29.33	33.06	34.71	30.66
24	31.90	34.03	32.30	31.14	26.37	29.90	28.31	30.65	29.45	33.56	34.28	33.42
25	33.63	29.90	31.71	28.43	29.57	29.87	28.77	29.83	29.03	33.82	33.18	28.90
26	33.77	32.55	30.51	28.49	28.46	29.51	28.37	31.13	29.42	34.14	34.49	32.03
27	33.53	33.92	33.09	28.50	28.49	29.90	28.90	30.29	29.27	34.08	33.38	33.18
28	31.70	31.01	32.70	28.13	28.44	30.09	28.20	29.94	29.49	34.34	34.22	33.00
29	33.80	33.45	30.38	30.68	27.80	30.69	29.03	29.37	29.15	32.57	34.65	32.73
30	34.07	33.15	33.78	30.65	---	30.69	29.75	28.17	29.42	33.38	34.57	26.55
31	34.16	---	33.13	28.59	---	30.83	---	27.65	---	33.72	34.63	---
MAX	34.85	34.43	33.78	33.38	32.27	30.83	30.77	31.13	29.79	34.34	34.71	35.00

CAL YR 1999 LOW 36.92  
WTR YR 2000 LOW 35.00



**GROUND-WATER RECORDS**  
**Pickaway County**

**394742083094800. LOCAL NUMBER, PK-9**

LOCATION.—Latitude 39°47'42", longitude 83°09'48", 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, Division of Water.

PERIOD OF RECORD.—October 1986 to current year.

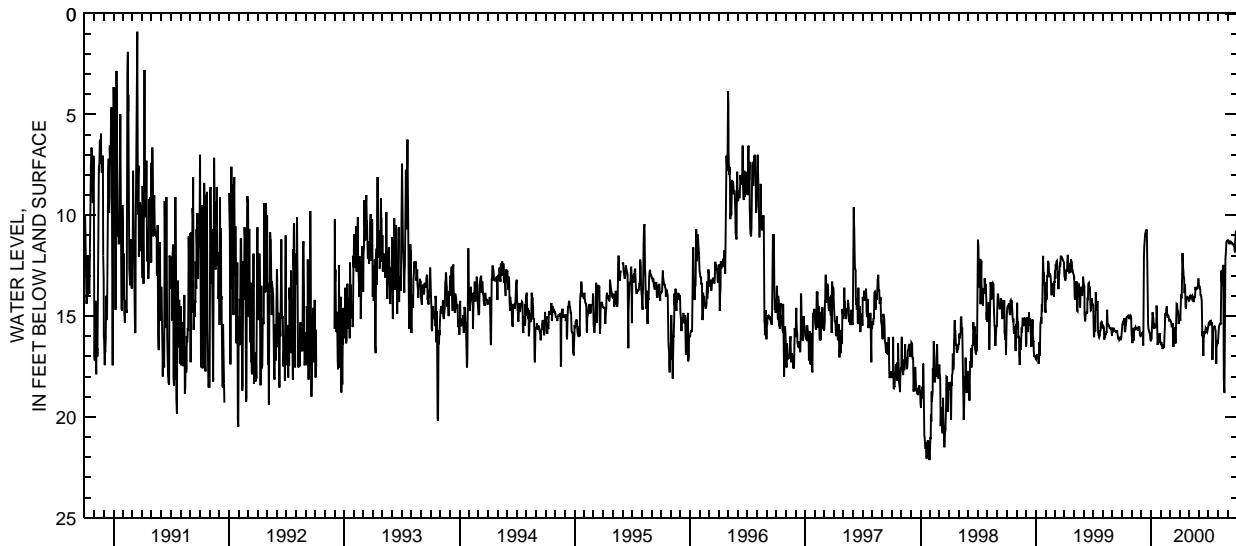
REVISIONS.—Water levels published for the period July 2, 1993, to September 30, 1994, are in error. Depth to water surface values are 1 ft less than reported.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.75	15.95	15.93	16.22	16.34	15.18	15.10	14.24	13.46	15.50	16.26	11.25
2	15.47	16.05	15.89	16.14	16.43	15.20	15.10	14.22	13.53	15.40	15.85	11.24
3	15.35	16.34	15.85	16.13	16.29	15.23	15.25	14.13	13.53	15.42	15.59	11.27
4	15.32	15.99	15.84	15.76	16.44	15.29	14.55	14.00	13.59	15.30	15.51	11.39
5	15.33	15.80	15.89	15.25	16.49	15.30	13.94	13.98	13.70	15.29	15.45	11.39
6	15.23	15.59	15.95	14.81	16.50	15.47	14.07	13.98	13.95	15.27	15.38	11.40
7	15.32	16.22	16.35	14.93	16.64	15.56	14.13	14.03	13.95	15.24	15.38	11.37
8	15.20	15.87	16.47	15.09	16.52	15.47	14.04	14.03	14.00	15.24	15.40	11.36
9	15.10	15.59	13.40	15.25	16.40	15.42	12.81	14.12	14.12	15.32	15.39	11.27
10	15.74	15.71	12.05	15.51	16.47	15.35	11.88	14.16	14.24	15.30	13.92	11.36
11	15.80	15.59	11.54	15.62	16.56	15.99	12.24	14.12	15.75	15.48	12.75	11.37
12	15.68	15.57	11.24	15.50	16.52	16.53	12.63	14.03	16.00	15.33	13.17	11.40
13	15.33	15.54	11.09	15.47	16.02	16.28	12.83	14.07	15.75	15.32	13.38	11.40
14	15.36	15.65	10.91	15.50	15.53	15.85	13.02	14.15	16.59	17.18	13.47	11.40
15	15.25	15.65	10.83	15.45	15.05	15.78	13.13	14.31	16.98	16.49	13.46	11.39
16	15.06	15.63	10.76	15.47	14.87	15.66	13.86	14.21	16.25	15.59	12.66	11.43
17	15.05	15.63	10.82	15.50	14.97	15.56	13.67	14.09	15.89	15.57	12.47	11.43
18	15.05	15.62	10.73	15.44	14.90	16.20	13.41	14.07	15.80	15.56	16.13	11.48
19	15.03	15.65	10.74	14.49	14.65	16.36	14.33	14.07	15.87	15.54	18.18	11.49
20	15.00	15.71	13.05	15.17	14.52	16.11	14.57	14.07	15.85	15.51	18.78	11.43
21	14.97	15.63	14.16	15.68	14.78	14.99	14.63	13.56	15.74	15.51	18.78	11.42
22	14.96	15.69	14.91	16.43	14.96	14.39	14.34	13.71	15.69	15.59	14.10	11.76
23	15.03	15.62	15.38	16.29	15.09	14.40	14.12	13.67	15.59	15.68	12.72	11.85
24	15.15	15.56	15.63	16.29	15.01	14.48	14.09	13.64	15.63	15.78	12.17	11.25
25	15.10	15.56	15.69	16.22	14.99	14.64	14.10	13.55	15.75	16.83	11.97	11.09
26	15.01	15.60	15.74	16.29	15.01	14.76	14.10	13.64	15.74	17.37	11.55	10.83
27	15.01	15.93	15.83	16.29	15.15	14.78	14.09	13.64	15.80	16.19	11.36	10.77
28	14.99	15.99	15.85	15.89	15.23	14.91	14.09	13.62	15.72	16.31	11.30	10.88
29	15.03	16.00	15.92	15.85	15.21	15.40	14.16	13.50	15.69	16.25	11.28	10.94
30	15.09	15.98	16.16	16.19	---	15.14	14.25	13.13	15.56	16.36	11.27	10.85
31	15.54	---	16.22	16.26	---	15.08	---	13.26	---	16.32	11.28	---
MAX	15.80	16.34	16.47	16.43	16.64	16.53	15.25	14.31	16.98	17.37	18.78	11.85

CAL YR 1999    LOW 17.37  
WTR YR 2000    LOW 18.78



**GROUND-WATER RECORDS**  
**Pike County**

**390359083015100. LOCAL NUMBER, PI-2**

LOCATION.—Latitude 39°03'59", longitude 83°01'51", 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, Division of Water.

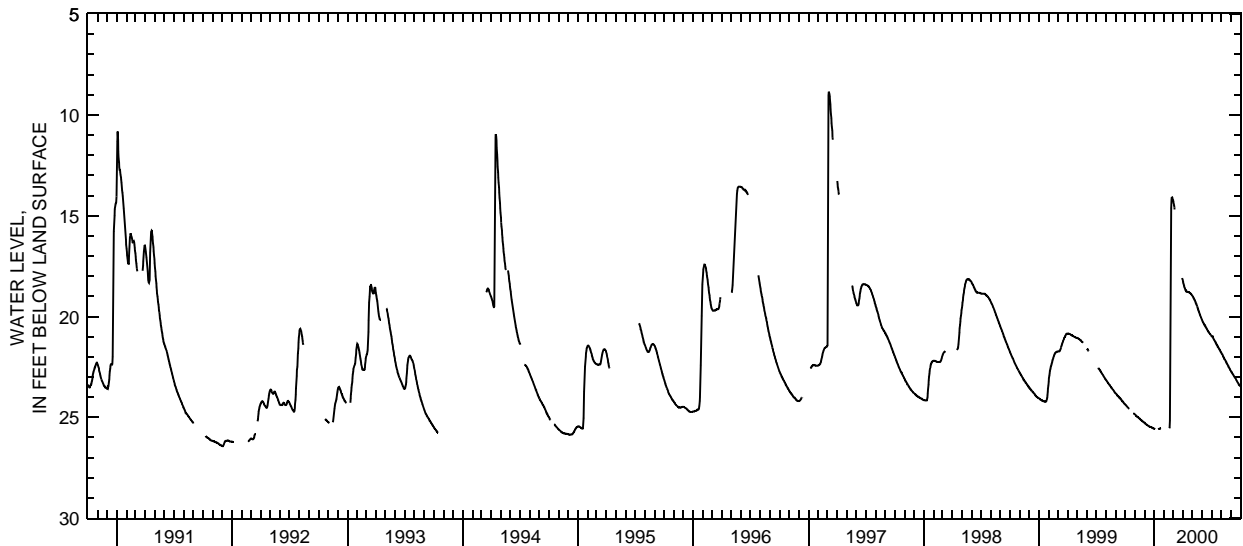
PERIOD OF RECORD.—September 1969 to current year.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.36	24.86	25.27	25.57	---	14.24	18.23	18.98	20.19	20.97	21.81	22.73
2	24.38	24.88	25.28	25.58	---	14.31	18.30	18.99	20.23	20.99	21.84	22.76
3	24.39	24.90	25.30	25.58	---	14.40	18.37	19.03	20.26	20.99	21.87	22.78
4	24.41	24.91	25.31	25.59	---	14.48	18.43	19.05	20.29	20.99	21.89	22.80
5	24.43	24.92	25.32	---	---	14.59	18.49	19.08	20.32	20.99	21.92	22.83
6	24.45	24.94	25.34	---	---	14.70	18.55	19.11	20.35	21.08	21.96	22.86
7	24.47	24.96	25.35	---	---	---	18.60	19.15	20.37	21.10	21.99	22.88
8	24.49	24.97	25.36	---	---	---	18.64	19.17	20.40	21.14	22.02	22.91
9	24.50	24.98	25.38	---	---	15.09	18.68	19.21	20.43	21.16	22.05	22.93
10	24.52	24.99	25.39	---	---	---	18.69	19.25	20.45	21.18	22.09	22.96
11	24.54	24.99	25.40	---	---	---	18.74	19.29	20.48	21.21	22.11	22.99
12	24.55	25.02	25.41	---	---	---	18.76	19.33	20.51	21.23	22.14	23.01
13	24.57	25.04	25.42	---	---	---	18.77	19.37	20.54	21.27	22.17	23.03
14	24.58	25.05	25.44	25.59	---	---	18.77	19.41	20.56	21.29	22.19	23.05
15	---	25.06	25.44	25.58	---	---	18.78	19.45	20.59	21.32	22.22	23.08
16	---	25.08	25.45	25.58	---	---	18.78	19.50	20.62	21.36	22.25	23.11
17	---	25.09	25.46	25.57	---	---	18.78	19.54	20.65	21.38	22.28	23.15
18	---	25.09	25.48	25.57	25.54	---	18.79	19.59	20.68	21.42	22.32	23.17
19	---	25.12	25.49	25.57	25.52	---	18.79	19.63	20.72	21.44	22.35	23.20
20	---	25.13	25.49	25.56	25.17	---	18.80	19.68	20.73	21.47	22.38	23.23
21	---	25.14	25.49	25.55	21.26	---	18.81	19.73	20.76	21.51	22.40	23.26
22	---	25.16	25.49	25.55	18.00	---	18.82	19.77	20.78	21.53	22.44	23.28
23	---	25.17	25.49	---	15.67	---	18.83	19.82	20.81	21.56	22.47	23.31
24	---	25.19	25.49	---	14.63	---	18.84	19.87	20.83	21.59	22.50	23.34
25	---	25.20	25.52	---	14.21	---	18.86	19.91	20.85	21.61	22.53	23.36
26	---	25.21	25.53	---	14.11	---	18.88	19.96	20.87	21.64	22.56	23.39
27	24.80	25.22	25.54	---	14.10	---	18.89	19.99	20.89	21.67	22.59	23.41
28	24.81	25.24	25.54	---	14.14	---	18.91	20.04	20.92	21.70	22.61	23.44
29	24.82	25.25	25.55	---	14.19	---	18.93	20.08	20.93	21.73	22.65	23.46
30	24.84	25.26	25.55	---	---	18.09	18.95	20.12	20.95	21.76	22.67	23.48
31	24.85	---	25.56	---	---	18.16	---	20.16	---	21.79	22.70	---
MAX	24.85	25.26	25.56	25.59	25.54	18.16	18.95	20.16	20.95	21.79	22.70	23.48

CAL YR 1999   LOW 25.56  
WTR YR 2000   LOW 25.59





**GROUND-WATER RECORDS**  
**Portage County**

**411401081025000. LOCAL NUMBER, PO-1**

LOCATION.—Latitude 41°14'01", longitude 81°02'50", 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, Division of Water.

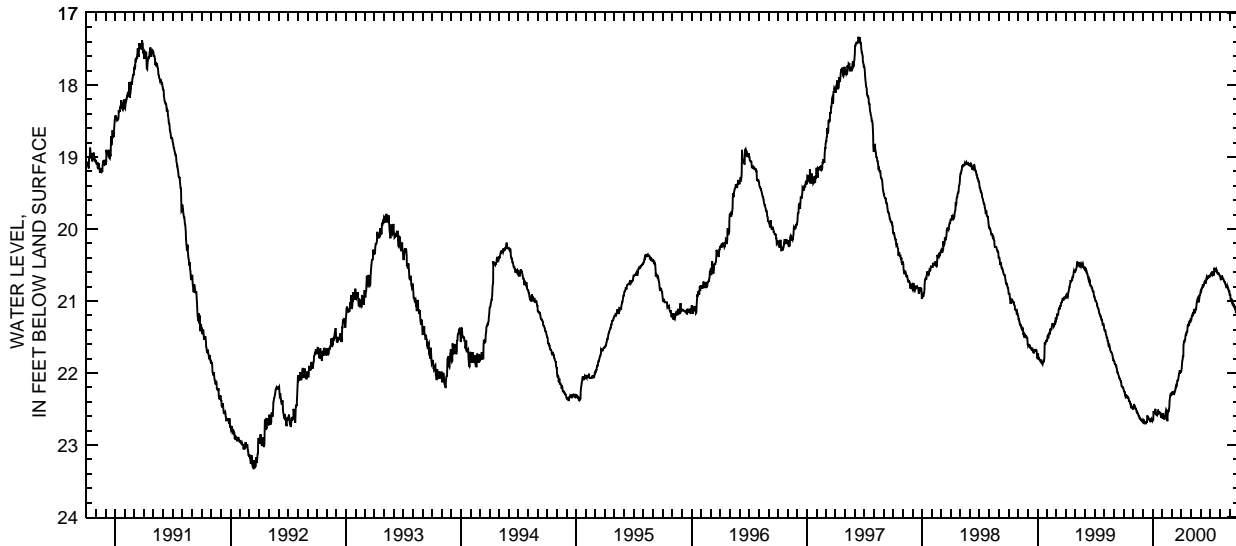
PERIOD OF RECORD.—May 1946 to current year.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.23	22.50	22.67	22.66	22.62	22.30	21.97	21.24	20.87	20.67	20.65	20.91
2	22.25	22.48	22.66	22.65	22.62	22.30	21.93	21.27	20.88	20.65	20.65	20.91
3	22.26	22.43	22.67	22.66	22.56	22.28	21.90	21.25	20.88	20.63	20.68	20.92
4	22.27	22.46	22.68	22.53	22.62	22.26	21.82	21.22	20.84	20.62	20.70	20.98
5	22.27	22.46	22.67	22.55	22.62	22.29	21.81	21.21	20.82	20.61	20.70	20.99
6	22.31	22.49	22.70	22.54	22.63	22.30	21.77	21.20	20.82	20.62	20.67	21.00
7	22.32	22.49	22.70	22.54	22.64	22.28	21.77	21.18	20.81	20.63	20.66	20.98
8	22.30	22.49	22.70	22.54	22.64	22.25	21.62	21.17	20.77	20.64	20.66	20.98
9	22.31	22.50	22.70	22.51	22.60	22.27	21.58	21.15	20.78	20.60	20.66	21.01
10	22.32	22.51	22.70	22.51	22.60	22.28	21.57	21.17	20.79	20.60	20.68	21.04
11	22.35	22.54	22.70	22.56	22.57	22.26	21.54	21.15	20.78	20.62	20.70	21.03
12	22.34	22.54	22.67	22.56	22.55	22.25	21.55	21.11	20.77	20.65	20.69	21.04
13	22.33	22.54	22.69	22.59	22.51	22.24	21.53	21.16	20.74	20.62	20.71	21.06
14	22.34	22.57	22.67	22.58	22.52	22.20	21.49	21.16	20.74	20.61	20.72	21.04
15	22.34	22.56	22.60	22.55	22.53	22.18	21.47	21.15	20.73	20.54	20.73	21.08
16	22.34	22.58	22.60	22.58	22.66	22.19	21.47	21.13	20.74	20.57	20.74	21.09
17	22.36	22.59	22.62	22.57	22.67	22.18	21.44	21.11	20.76	20.57	20.74	21.09
18	22.39	22.60	22.62	22.51	22.57	22.17	21.44	21.11	20.73	20.59	20.76	21.10
19	22.39	22.60	22.62	22.53	22.54	22.11	21.43	21.06	20.69	20.57	20.78	21.09
20	22.40	22.62	22.64	22.55	22.53	22.11	21.41	21.02	20.68	20.56	20.79	21.10
21	22.40	22.62	22.65	22.55	22.53	22.10	21.35	21.00	20.66	20.58	20.80	21.16
22	22.42	22.64	22.65	22.55	22.50	22.09	21.34	20.98	20.67	20.60	20.79	21.16
23	22.44	22.64	22.65	22.56	22.46	22.06	21.34	20.96	20.68	20.61	20.78	21.12
24	22.46	22.65	22.67	22.57	22.39	22.03	21.32	20.95	20.67	20.60	20.81	21.09
25	22.45	22.65	22.67	22.54	22.34	22.01	21.31	21.00	20.66	20.61	20.82	21.08
26	22.47	22.64	22.64	22.58	22.32	22.00	21.32	21.02	20.66	20.62	20.81	21.12
27	22.48	22.66	22.65	22.60	22.30	21.96	21.29	21.00	20.67	20.62	20.82	21.12
28	22.48	22.66	22.64	22.61	22.31	21.98	21.27	20.96	20.66	20.62	20.84	21.16
29	22.49	22.67	22.66	22.62	22.31	21.99	21.29	20.93	20.64	20.62	20.86	21.16
30	22.50	22.68	22.66	22.58	---	21.98	21.30	20.92	20.66	20.64	20.87	21.14
31	22.50	---	22.67	22.58	---	21.98	---	20.90	---	20.65	20.87	---
MAX	22.50	22.68	22.70	22.66	22.67	22.30	21.97	21.27	20.88	20.67	20.87	21.16

CAL YR 1999    LOW 22.70  
WTR YR 2000    LOW 22.70



**GROUND-WATER RECORDS**  
**Preble County**

**394438084335900. LOCAL NUMBER, PR-2**

LOCATION.—Latitude 39°44'38", longitude 84°33'59", Hydrologic Unit 05080002, Stover Road, 4 mi east of Eaton, Ohio. Owner: Eaton Water Department.

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, Division of Water.

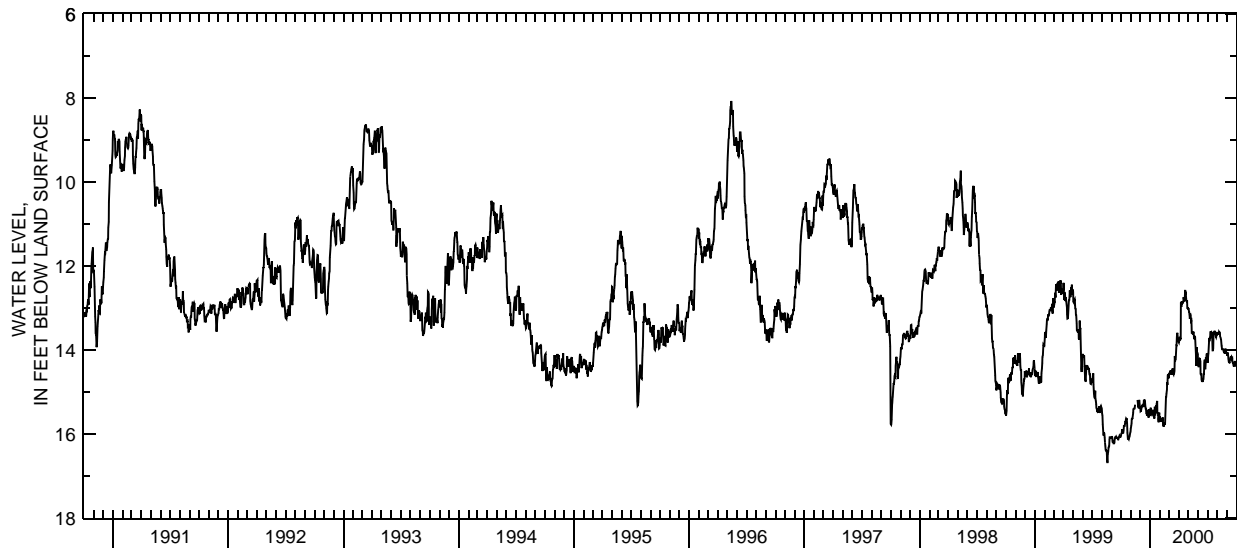
PERIOD OF RECORD.—May 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 17.58 ft below land-surface datum, Jan. 18, 1990; minimum daily low, 7.94 ft below land-surface datum, May 4, 1975.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.03	15.87	15.39	15.47	15.58	14.59	13.82	13.02	14.33	14.29	13.63	14.12
2	15.99	15.80	15.46	15.41	15.66	14.56	13.72	13.02	14.39	14.29	13.62	14.12
3	15.98	15.74	15.45	15.37	15.63	14.56	13.73	13.09	14.39	14.11	13.61	14.08
4	15.89	15.64	15.42	15.44	15.69	14.56	13.74	13.10	14.30	14.08	13.61	14.08
5	15.93	15.63	15.38	15.48	15.69	14.49	13.75	13.16	14.21	13.95	13.61	14.21
6	15.97	15.64	15.32	15.52	15.62	14.56	13.72	13.26	14.20	13.72	13.57	14.27
7	15.97	15.58	15.32	15.51	15.66	14.56	13.72	13.17	14.21	13.79	13.58	14.27
8	15.97	15.50	15.33	15.49	15.70	14.51	12.87	13.16	14.27	13.71	13.58	14.30
9	15.92	15.41	15.31	15.48	15.64	14.49	12.97	13.22	14.57	13.70	13.59	14.30
10	15.81	15.40	15.33	15.42	15.60	14.59	12.84	13.31	14.58	13.58	13.68	14.24
11	15.81	15.39	15.36	15.56	15.79	14.56	12.90	13.30	14.58	13.58	13.71	14.20
12	15.81	15.39	15.19	15.58	15.82	14.44	12.88	13.59	14.70	13.57	13.72	14.18
13	15.78	15.39	15.29	15.55	15.73	14.55	12.88	13.59	14.74	13.62	13.75	14.18
14	15.72	15.30	15.18	15.63	15.82	14.56	12.87	13.56	14.74	13.61	13.88	14.16
15	15.72	---	15.23	15.60	15.73	14.58	12.85	13.61	14.73	13.68	13.91	14.18
16	15.67	---	15.24	15.35	15.75	14.52	12.74	13.61	14.76	13.73	13.98	14.22
17	15.63	---	15.34	15.49	15.78	14.57	12.78	13.56	14.72	14.01	13.98	14.20
18	15.64	---	15.40	15.50	15.68	14.50	12.75	13.59	14.69	14.01	13.98	14.29
19	15.64	---	15.40	15.41	15.42	14.14	12.84	13.72	14.57	13.97	13.98	14.31
20	15.75	---	15.50	15.32	15.11	14.21	12.78	13.72	14.57	13.61	13.98	14.31
21	15.97	---	15.51	15.35	15.13	14.23	12.57	13.70	14.31	13.62	14.02	14.35
22	16.06	15.19	15.56	15.28	15.04	14.19	12.67	13.66	14.23	13.62	14.05	14.38
23	16.11	15.21	15.53	15.21	14.94	14.12	12.61	13.70	14.44	13.54	14.05	14.38
24	16.11	15.35	15.42	15.50	14.77	13.89	12.78	13.92	14.44	13.57	14.07	14.39
25	16.12	15.37	15.45	15.52	14.83	13.89	12.82	14.10	14.31	13.57	14.07	14.26
26	16.10	15.37	15.51	15.55	14.60	13.68	12.84	14.38	14.19	13.59	14.07	14.29
27	16.07	15.19	15.61	15.64	14.59	13.59	12.84	14.31	14.19	13.68	13.97	14.34
28	16.05	15.21	15.56	15.72	14.66	13.76	13.00	13.93	14.10	13.70	14.03	14.30
29	16.02	15.28	15.41	15.63	14.66	13.75	13.00	14.06	14.10	13.68	14.04	14.38
30	15.96	15.38	15.57	15.49	---	13.74	13.00	14.07	14.24	13.57	14.06	14.39
31	15.93	---	15.55	15.68	---	13.81	---	14.10	---	13.60	14.07	---
MAX	16.12	15.87	15.61	15.72	15.82	14.59	13.82	14.38	14.76	14.29	14.07	14.39

CAL YR 1999   LOW 16.67  
WTR YR 2000   LOW 16.12



**GROUND-WATER RECORDS**  
**Richland County**

**404625082305100. LOCAL NUMBER, R-4**

LOCATION.—Latitude 40°46'25", longitude 82°30'51", 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.

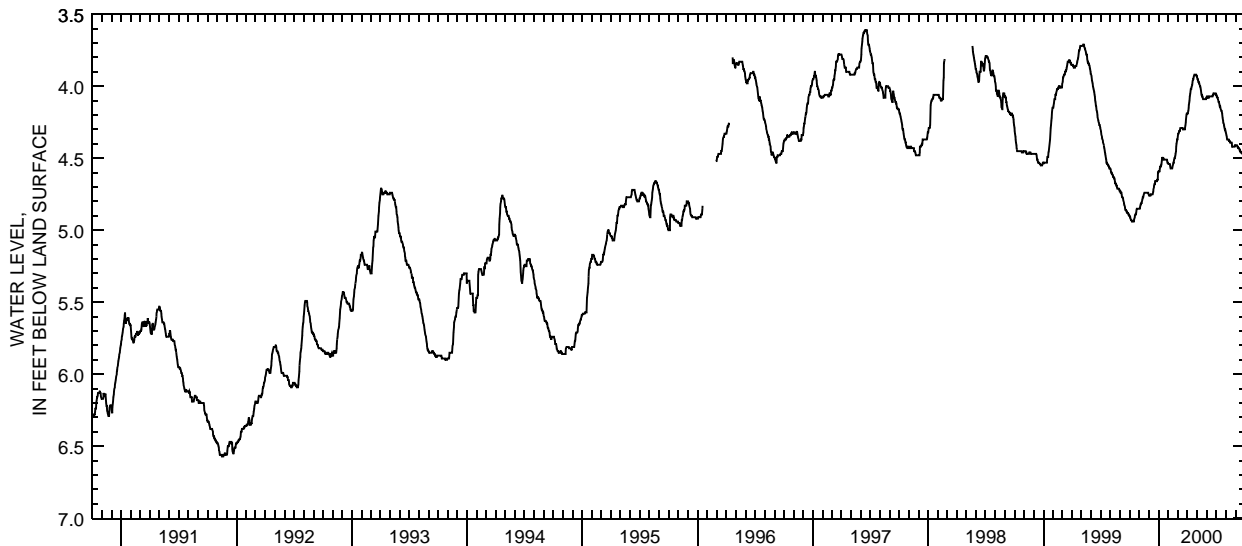
REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.—May 1942 to current year.

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, 3.61 ft below land-surface datum, June 15-20, 1997.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.90	4.85	4.76	4.59	4.54	4.37	4.19	3.93	4.08	4.06	4.32	4.41
2	4.91	4.85	4.76	4.59	4.54	4.34	4.19	3.94	4.07	4.06	4.33	4.41
3	4.91	4.84	4.76	4.59	4.54	4.33	4.18	3.95	4.07	4.07	4.34	4.41
4	4.92	4.83	4.76	4.59	4.54	4.33	4.17	3.95	4.07	4.07	4.35	4.41
5	4.93	4.82	4.76	4.57	4.54	4.32	4.15	3.96	4.08	4.08	4.37	4.41
6	4.93	4.82	4.76	4.56	4.55	4.31	4.13	3.97	4.08	4.08	4.37	4.42
7	4.93	4.81	4.75	4.56	4.56	4.31	4.11	3.97	4.08	4.09	4.37	4.42
8	4.94	4.81	4.75	4.55	4.57	4.31	4.10	3.98	4.08	4.10	4.37	4.42
9	4.94	4.80	4.75	4.55	4.57	4.30	4.07	3.98	4.07	4.11	4.37	4.43
10	4.94	4.79	4.75	4.54	4.57	4.29	4.05	3.99	4.07	4.11	4.37	4.43
11	4.94	4.78	4.75	4.52	4.57	4.29	4.04	4.00	4.07	4.12	4.38	4.43
12	4.94	4.77	4.75	4.50	4.57	4.29	4.02	4.00	4.07	4.13	4.38	4.43
13	4.94	4.77	4.75	4.50	4.57	4.29	4.02	4.01	4.07	4.14	4.38	4.44
14	4.94	4.76	4.74	4.49	4.56	4.29	4.01	4.03	4.07	4.14	4.39	4.44
15	4.93	4.75	4.73	4.50	4.55	4.29	4.00	4.04	4.07	4.15	4.39	4.45
16	4.92	4.74	4.71	4.50	4.54	4.29	3.99	4.06	4.07	4.16	4.39	4.45
17	4.91	4.74	4.70	4.51	4.53	4.29	3.98	4.06	4.07	4.17	4.39	4.46
18	4.90	4.74	4.69	4.51	4.53	4.30	3.96	4.07	4.07	4.17	4.39	4.46
19	4.89	4.74	4.68	4.51	4.51	4.30	3.95	4.07	4.07	4.17	4.39	4.46
20	4.89	4.74	4.68	4.51	4.50	4.30	3.95	4.08	4.07	4.19	4.40	4.46
21	4.89	4.74	4.66	4.51	4.50	4.30	3.94	4.09	4.06	4.20	4.42	4.46
22	4.88	4.74	4.66	4.51	4.49	4.30	3.93	4.09	4.06	4.22	4.42	4.47
23	4.86	4.74	4.66	4.51	4.48	4.30	3.92	4.09	4.05	4.24	4.42	4.47
24	4.85	4.74	4.66	4.51	4.47	4.30	3.92	4.09	4.05	4.25	4.42	4.47
25	4.85	4.74	4.66	4.51	4.45	4.29	3.92	4.09	4.05	4.26	4.42	4.47
26	4.85	4.74	4.66	4.51	4.42	4.27	3.92	4.09	4.05	4.27	4.42	4.47
27	4.85	4.74	4.65	4.51	4.40	4.25	3.92	4.09	4.05	4.28	4.42	4.47
28	4.85	4.74	4.65	4.52	4.38	4.23	3.92	4.09	4.05	4.29	4.42	4.47
29	4.85	4.74	4.65	4.53	4.37	4.20	3.92	4.09	4.05	4.30	4.42	4.48
30	4.85	4.75	4.60	4.53	---	4.19	3.93	4.09	4.05	4.30	4.41	4.48
31	4.85	---	4.60	4.54	---	4.19	---	4.08	---	4.31	4.41	---
MAX	4.94	4.85	4.76	4.59	4.57	4.37	4.19	4.09	4.08	4.31	4.42	4.48
CAL YR 1999	LOW	4.94										
WTR YR 2000	LOW	4.94										



**GROUND-WATER RECORDS**  
**Richland County**

**405753082360800. LOCAL NUMBER, R-3**

LOCATION.—Latitude 40°57'53", longitude 82°36'08", 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, Division of Water. Published in WDR-OH-2 prior to 1995 water year.

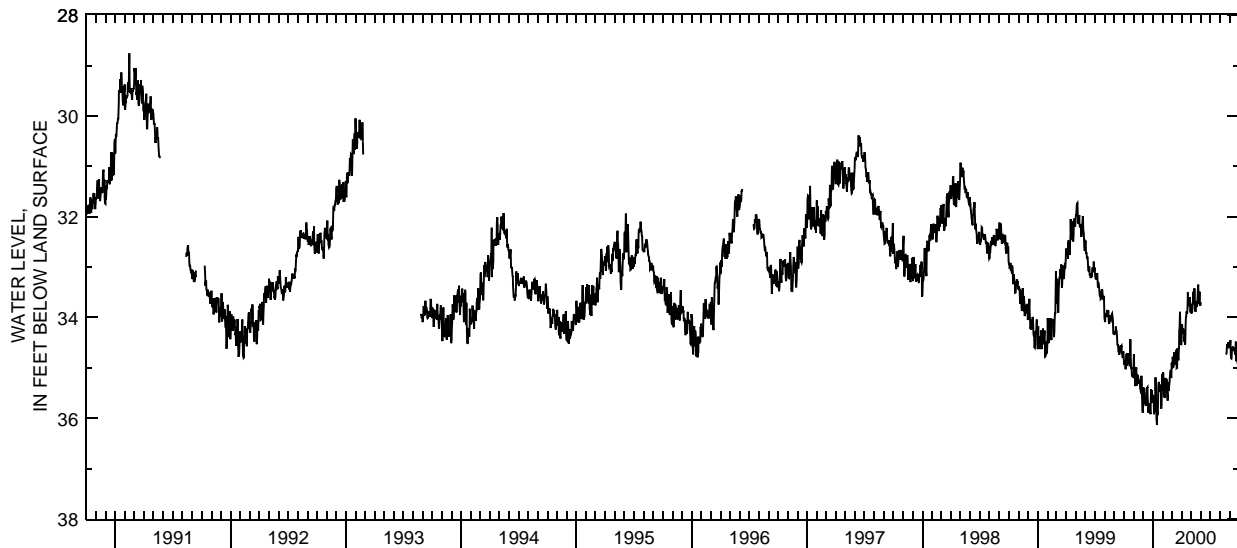
PERIOD OF RECORD.—April 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 36.13 ft below land-surface datum, Jan. 14, 2000; minimum daily low, 23.68 ft below land-surface datum, June 15 and 23, 1947.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34.78	35.11	35.82	35.69	35.35	34.90	34.53	33.73	33.76	---	---	34.55
2	34.92	34.73	35.53	35.58	35.45	35.01	34.28	33.91	---	---	---	34.54
3	34.91	35.04	35.39	35.57	35.09	34.99	34.13	33.91	---	---	---	34.45
4	34.87	35.19	35.49	35.58	35.29	34.78	34.24	33.83	---	---	---	34.70
5	34.87	35.19	35.40	35.92	35.40	34.83	34.28	33.84	---	---	---	34.81
6	34.93	35.31	35.57	35.82	35.57	34.99	34.24	33.80	---	---	---	34.82
7	35.03	35.36	35.67	35.86	35.56	34.94	34.22	33.70	---	---	---	34.77
8	34.82	35.22	35.71	35.82	35.60	34.77	34.31	33.59	---	---	---	34.61
9	34.81	35.07	35.70	35.49	35.31	34.69	34.31	33.49	---	---	---	34.61
10	34.72	34.99	35.66	35.19	35.20	34.86	34.48	33.66	---	---	---	34.59
11	34.95	35.35	35.75	35.59	35.41	34.84	34.38	33.66	---	---	---	34.59
12	34.96	35.31	35.56	35.72	35.44	34.86	34.54	33.42	---	---	---	34.58
13	34.71	35.16	35.47	36.01	35.22	34.93	34.50	33.72	---	---	---	34.66
14	34.90	35.15	35.39	36.13	35.25	34.78	34.16	33.85	---	---	---	34.62
15	34.80	35.16	35.38	35.94	35.42	34.67	34.00	33.89	---	---	---	34.60
16	34.75	35.18	35.59	35.88	35.54	34.64	33.97	33.87	---	---	---	34.68
17	34.72	35.32	35.58	35.94	35.65	35.01	33.88	33.69	---	---	---	34.69
18	34.90	35.29	35.89	35.55	35.29	35.00	33.91	33.69	---	---	---	34.73
19	34.93	35.26	35.83	35.35	35.32	34.62	33.91	33.76	---	---	---	34.62
20	34.91	35.27	35.70	35.28	35.38	34.61	33.80	33.79	---	---	---	34.48
21	34.88	35.29	35.84	35.38	35.46	34.76	33.50	33.75	---	---	34.74	34.81
22	34.43	35.40	35.87	35.42	35.33	34.85	33.61	33.60	---	---	34.70	34.87
23	34.71	35.41	35.79	35.36	35.27	34.76	33.67	33.47	---	---	34.53	34.64
24	34.95	35.49	35.88	35.47	35.20	34.58	33.68	33.35	---	---	34.58	34.73
25	35.02	35.51	35.92	35.33	35.11	34.26	33.73	33.63	---	---	34.58	34.76
26	34.98	35.16	35.42	35.48	35.09	34.23	33.78	33.73	---	---	34.52	34.90
27	35.17	35.46	35.49	35.76	35.04	33.89	33.60	33.69	---	---	34.49	34.95
28	35.14	35.65	35.46	35.81	35.20	33.99	33.62	33.49	---	---	34.53	35.11
29	35.14	35.83	35.46	35.74	35.19	34.29	33.89	33.72	---	---	34.54	35.12
30	35.18	35.89	35.53	35.36	---	34.41	33.90	33.76	---	---	34.58	34.96
31	35.18	---	35.68	35.12	---	34.55	---	33.70	---	---	34.57	---
MAX	35.18	35.89	35.92	36.13	35.65	35.01	34.54	33.91	33.76	---	34.74	35.12

CAL YR 1999    LOW 35.92  
WTR YR 2000    LOW 36.13



**GROUND-WATER RECORDS**  
**Ross County**

**391341083172200. LOCAL NUMBER, RO-7**

LOCATION.—Latitude 39°13'41", longitude 83°17'22", 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, Division of Water.

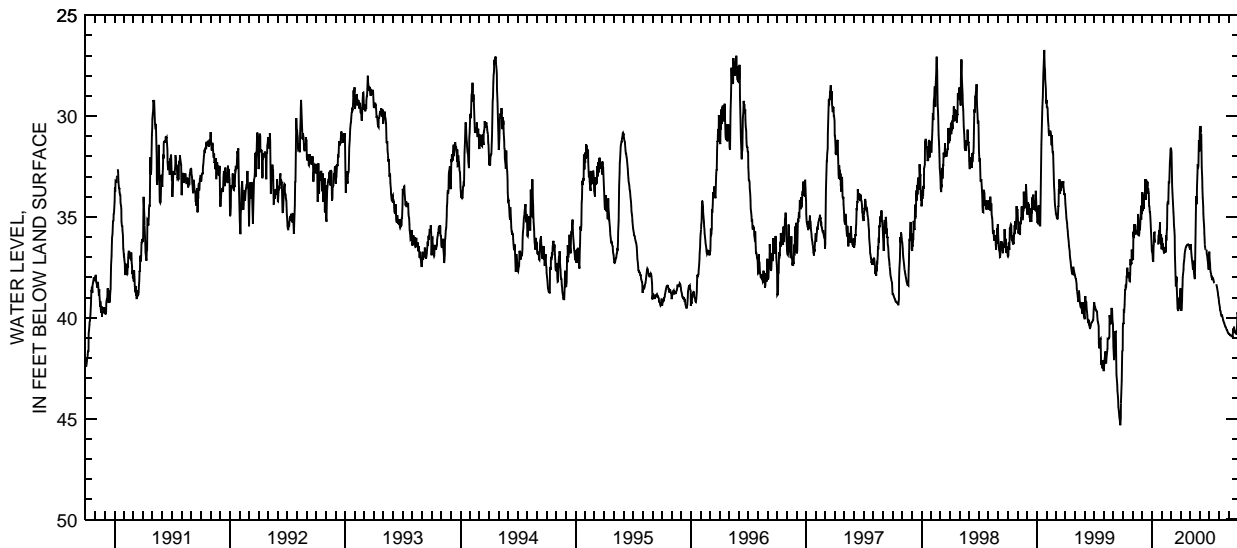
PERIOD OF RECORD.—February 1971 to current year.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40.44	37.09	34.41	36.71	36.61	31.57	38.54	36.56	30.63	36.72	39.26	40.81
2	40.26	37.14	33.78	36.78	36.04	31.68	39.27	36.61	30.80	37.08	39.40	40.82
3	40.32	35.73	34.61	36.90	36.46	31.79	39.67	36.35	30.50	37.34	39.49	40.83
4	39.57	35.95	34.71	37.15	36.31	32.36	39.54	36.60	31.01	37.59	39.62	40.85
5	39.76	36.06	33.98	37.23	36.48	33.47	39.15	36.81	30.98	37.72	39.66	40.86
6	39.35	35.37	34.61	36.46	36.65	33.83	38.71	36.99	31.91	37.82	39.77	40.87
7	39.06	35.89	33.96	36.37	36.62	34.07	38.37	37.14	32.56	37.90	39.84	40.89
8	38.60	35.38	34.15	35.78	36.81	34.38	37.99	37.28	33.11	37.97	39.90	40.90
9	38.64	35.67	33.88	35.77	36.58	34.77	37.78	37.43	33.58	38.07	39.95	40.90
10	38.36	35.77	34.09	36.02	36.74	35.04	37.62	37.62	34.04	38.13	39.85	40.92
11	38.53	35.77	33.13	36.28	36.66	35.36	37.34	37.17	34.46	38.02	39.96	40.92
12	38.29	35.67	33.84	---	36.77	35.67	37.17	37.43	34.84	38.06	40.02	40.93
13	37.92	35.81	34.15	---	36.49	35.97	36.98	37.74	35.16	38.08	40.07	40.93
14	38.03	35.84	33.16	---	36.75	36.80	36.85	37.90	35.49	38.12	40.15	40.54
15	37.52	35.85	33.82	---	35.91	37.63	36.69	38.05	35.83	38.22	40.19	40.63
16	37.97	35.50	33.43	---	36.17	38.26	36.60	38.09	36.11	38.27	40.24	40.65
17	38.02	35.34	33.50	---	35.61	38.45	36.53	36.97	36.38	38.29	40.28	40.45
18	37.78	34.86	33.26	---	35.64	38.16	36.49	35.75	36.58	---	40.34	40.56
19	38.03	35.10	33.87	---	34.39	37.97	36.46	35.06	36.64	---	40.39	40.61
20	37.74	35.35	33.56	36.37	34.22	38.56	36.43	34.38	---	---	40.43	40.68
21	37.98	35.96	33.72	36.22	34.25	39.19	36.39	33.97	36.64	---	40.47	40.73
22	38.19	35.78	33.83	35.89	34.27	39.59	36.39	34.37	36.66	---	40.49	40.76
23	38.20	35.55	34.47	35.93	33.23	39.56	36.39	33.56	36.82	38.34	40.55	40.80
24	37.85	35.66	34.48	35.65	33.29	39.67	36.37	32.86	36.93	38.41	40.58	40.80
25	37.10	35.34	34.76	35.84	33.29	39.57	36.36	32.38	37.09	38.49	40.62	40.80
26	37.40	35.18	34.77	35.28	32.77	39.02	36.39	32.59	37.17	38.58	40.64	40.79
27	37.26	34.64	35.03	35.90	32.25	39.56	36.40	32.48	37.32	38.68	40.68	40.23
28	37.35	35.13	35.43	36.26	32.05	39.46	36.45	31.66	37.53	38.78	40.71	39.73
29	36.63	34.44	35.83	36.35	31.62	39.06	36.53	31.20	37.62	38.89	40.74	39.83
30	36.76	34.87	36.15	35.88	---	38.81	36.57	31.75	36.87	39.02	40.77	39.84
31	36.78	---	36.44	36.33	---	38.63	---	31.22	---	39.14	40.78	---
MAX	40.44	37.14	36.44	37.23	36.81	39.67	39.67	38.09	37.62	39.14	40.78	40.93

CAL YR 1999   LOW 45.33  
WTR YR 2000   LOW 40.93



**GROUND-WATER RECORDS**  
**Shelby County**

**401707084103100. LOCAL NUMBER, SH-5**

LOCATION.—Latitude 40°17'07", longitude 84°10'31", 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.

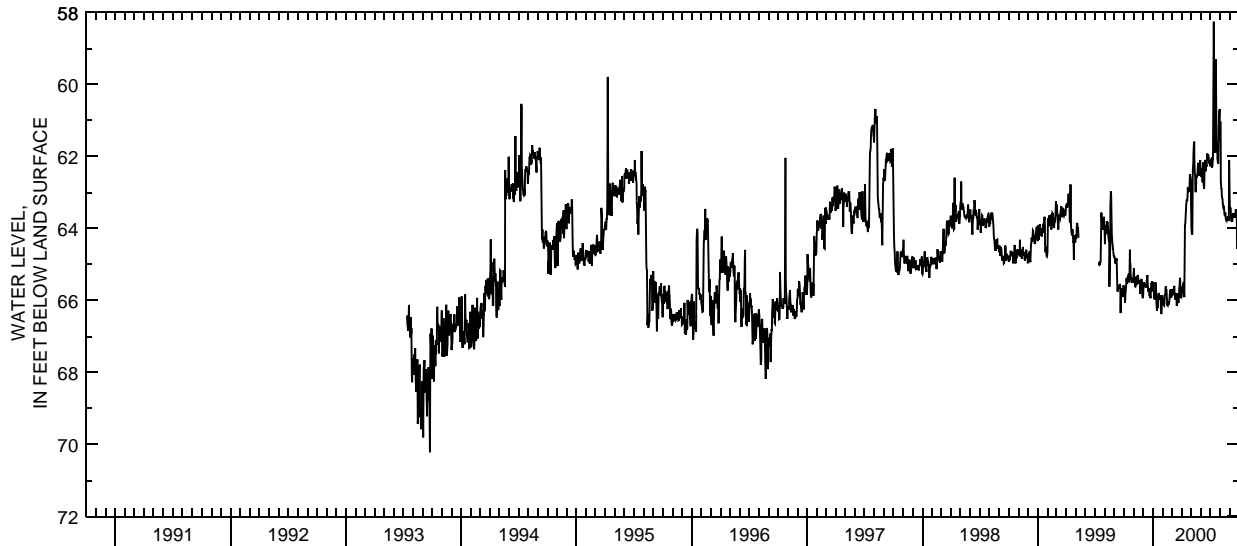
REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

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, 58.26 ft below land-surface datum, July 12, 2000.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65.61	65.34	65.91	65.71	66.03	65.70	65.92	63.13	62.34	62.27	61.57	63.34
2	65.67	65.10	65.76	65.62	66.07	65.84	65.79	63.93	62.41	62.23	61.03	63.46
3	65.85	65.33	65.56	65.50	65.94	65.83	65.64	64.09	62.57	62.15	61.31	63.42
4	65.76	65.50	65.53	65.61	65.97	65.72	65.62	64.14	62.47	62.09	62.69	63.49
5	66.06	65.53	65.50	65.92	66.13	65.73	65.77	64.17	62.33	62.05	62.89	63.73
6	65.87	65.61	65.59	65.92	66.14	65.82	65.65	63.79	62.39	62.05	62.90	63.80
7	65.76	65.62	65.59	65.96	66.06	65.83	65.66	62.39	62.72	62.31	63.09	63.80
8	65.64	65.58	65.61	65.96	65.83	65.74	65.49	62.19	62.17	62.25	63.17	63.78
9	65.53	65.45	65.63	65.76	65.87	65.60	65.77	61.92	62.39	62.08	63.19	63.80
10	65.38	65.34	65.59	65.50	65.78	65.82	65.91	61.73	62.71	62.06	63.30	63.70
11	65.52	65.55	65.64	65.69	65.61	65.79	64.81	61.59	62.89	60.43	63.39	63.60
12	65.54	65.57	65.59	65.81	65.75	65.95	63.91	62.14	62.90	58.26	63.42	63.58
13	65.36	65.50	65.47	66.09	65.69	65.98	63.88	62.42	62.45	58.69	63.41	63.67
14	65.34	65.29	65.33	66.29	65.83	65.93	63.70	62.56	62.30	61.06	63.47	63.60
15	65.36	65.34	65.30	66.22	65.94	65.82	63.50	62.90	62.15	61.51	63.56	63.58
16	65.28	65.38	65.53	66.13	66.14	65.82	63.34	62.99	62.10	61.67	63.63	63.70
17	65.27	65.51	65.68	66.15	66.15	66.15	63.24	62.76	62.41	61.90	63.64	63.68
18	65.43	65.51	65.76	66.01	66.06	66.12	63.20	62.59	62.25	59.80	63.56	63.62
19	65.50	65.48	65.73	65.84	66.02	65.97	63.24	62.53	62.27	59.30	63.69	63.56
20	64.59	65.48	65.67	65.79	66.10	65.80	63.12	62.58	62.26	61.16	63.75	63.47
21	64.98	65.47	65.86	65.94	66.12	65.98	62.86	62.53	61.94	61.57	63.78	63.61
22	64.96	65.82	65.87	65.97	66.04	66.07	62.98	62.44	61.94	61.76	63.79	63.71
23	65.21	65.79	65.85	65.86	65.93	66.03	62.97	62.28	61.98	61.82	63.70	63.69
24	65.40	65.59	65.88	65.95	65.84	65.90	62.93	62.18	61.99	62.06	63.68	64.57
25	65.41	65.62	65.94	65.91	65.76	65.66	62.97	62.40	61.98	62.14	63.71	64.03
26	65.37	65.40	65.68	66.03	65.70	65.63	62.89	62.54	62.03	62.20	63.75	63.89
27	65.48	65.49	65.55	66.28	65.74	65.37	62.64	62.49	62.11	61.90	63.67	63.90
28	65.51	65.69	65.55	66.38	65.92	65.41	62.49	62.33	62.20	61.16	63.79	63.98
29	65.45	65.87	65.47	66.33	65.88	65.71	62.57	62.38	62.12	60.96	63.71	64.01
30	65.44	65.94	65.52	66.06	---	65.85	62.63	62.10	62.20	60.76	62.10	63.94
31	65.46	---	65.72	65.86	---	65.94	---	62.26	---	60.68	62.68	---
MAX	66.06	65.94	65.94	66.38	66.15	66.15	65.92	64.17	62.90	62.31	63.79	64.57
CAL YR 1999	LOW 66.35											
WTR YR 2000	LOW 66.38											



**GROUND-WATER RECORDS**  
**Stark County**

**404939081203800. LOCAL NUMBER, ST-5A**

LOCATION.—Latitude 40°49'39", longitude 81°20'38", Hydrologic Unit 05040001, Northeast well field off Harrisburg Road, Canton, Ohio. Owner: Canton Water Department.

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.

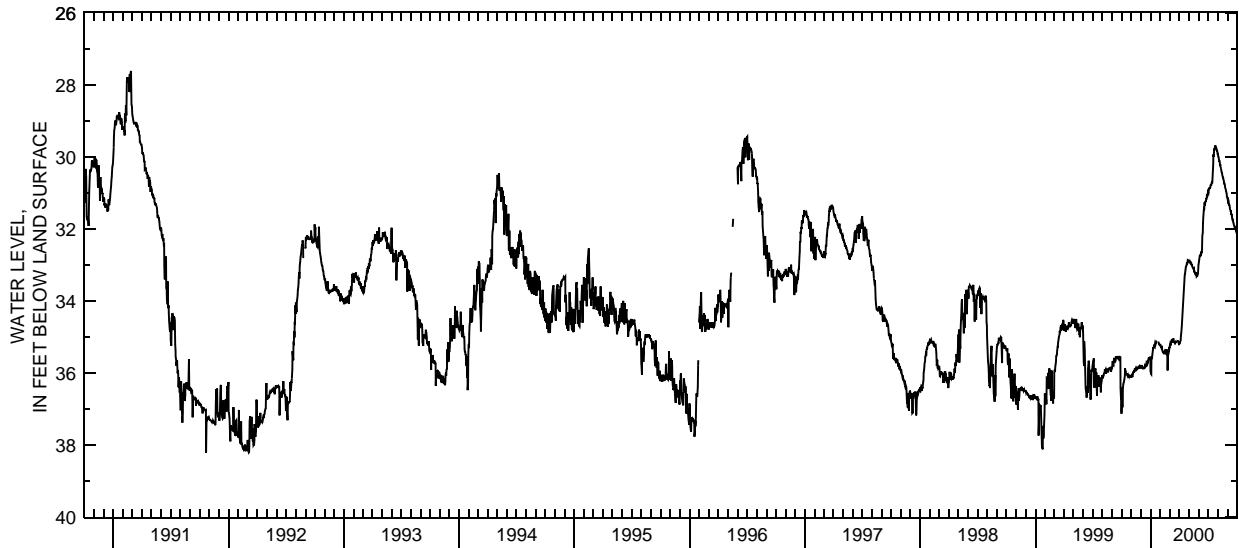
REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37.13	36.10	35.87	35.94	35.22	35.30	35.19	32.90	32.99	30.98	29.91	31.17
2	36.41	36.07	35.84	36.02	35.27	35.22	35.18	32.91	32.91	31.01	29.97	31.22
3	36.85	36.10	35.84	36.03	35.28	35.22	35.15	32.90	32.87	30.93	30.00	31.20
4	36.96	36.10	35.78	35.61	35.25	35.16	35.12	32.93	32.81	30.88	30.02	31.25
5	36.41	36.09	35.85	35.60	35.34	35.18	35.09	32.93	32.72	30.88	30.11	31.33
6	36.33	36.03	35.87	35.53	35.32	35.13	34.98	32.94	32.76	30.86	30.11	31.33
7	36.28	35.96	35.87	35.48	35.37	35.15	34.91	32.93	32.73	30.86	30.13	31.35
8	36.25	36.00	35.85	35.37	35.40	35.06	34.80	32.96	32.72	30.84	30.23	31.41
9	36.23	35.96	35.85	35.28	35.42	35.12	34.68	32.96	32.63	30.77	30.23	31.46
10	36.18	35.96	35.87	35.31	35.42	35.15	34.52	32.99	32.67	30.78	30.29	31.50
11	36.07	35.94	35.87	35.30	35.45	35.09	34.32	33.00	32.64	30.78	30.33	31.50
12	35.87	35.87	35.85	35.21	35.46	35.13	34.11	33.05	32.57	30.72	30.36	31.55
13	35.93	35.91	35.87	35.25	35.46	35.04	33.93	33.06	32.19	30.71	30.42	31.61
14	35.97	35.88	35.79	35.27	35.45	35.12	33.77	33.07	32.10	30.71	30.45	31.58
15	36.00	35.90	35.81	35.21	35.42	35.13	33.63	33.10	31.86	30.65	30.48	31.67
16	36.03	35.91	35.84	35.15	35.45	35.15	33.50	33.12	31.68	30.47	30.54	31.74
17	36.03	35.88	35.78	35.18	35.46	35.12	33.39	33.10	31.55	30.21	30.58	31.74
18	36.05	35.91	35.81	35.16	35.42	35.16	33.28	33.18	31.43	29.93	30.58	31.77
19	36.07	35.90	35.73	35.12	35.35	35.13	33.25	33.18	31.44	29.99	30.62	31.82
20	36.07	35.88	35.75	35.10	35.42	35.15	33.17	33.21	31.26	29.79	30.68	31.86
21	36.10	35.88	35.66	---	35.35	35.13	33.10	33.23	31.35	29.79	30.74	31.89
22	36.09	35.85	35.68	---	35.40	35.15	33.05	33.21	31.28	29.76	30.74	31.93
23	36.07	35.85	35.70	---	35.64	35.15	33.02	33.25	31.22	29.72	30.78	31.93
24	36.10	35.84	35.67	---	35.93	---	33.00	33.24	31.25	29.68	30.83	31.97
25	36.05	35.88	35.63	35.13	35.48	---	32.96	33.28	31.17	29.72	30.88	31.97
26	36.07	35.84	35.57	35.15	35.40	35.13	32.96	33.32	31.17	29.76	30.92	32.01
27	36.10	35.82	35.63	35.19	35.42	35.12	32.90	33.30	31.11	29.76	30.96	32.04
28	36.09	35.85	35.58	35.21	35.31	35.10	32.87	33.30	31.13	29.78	30.98	32.07
29	36.10	35.78	35.57	35.22	35.28	35.15	32.88	33.27	31.05	29.82	31.02	32.10
30	36.10	35.84	35.57	35.21	---	35.19	32.90	33.23	31.04	29.83	31.10	32.10
31	36.13	---	35.57	35.22	---	35.18	---	33.09	---	29.91	31.14	---
MAX	37.13	36.10	35.87	36.03	35.93	35.30	35.19	33.32	32.99	31.01	31.14	32.10
CAL YR 1999		LOW 38.12										
WTR YR 2000		LOW 37.13										



**GROUND-WATER RECORDS**  
**Stark County**

**405211081253500. LOCAL NUMBER, ST-27**

LOCATION.—Latitude 40°52'11", longitude 81°25'35", Hydrologic Unit 05040001, Dresler Road near North Canton, Ohio. Owner: North Canton Water Department

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, Division of Water.

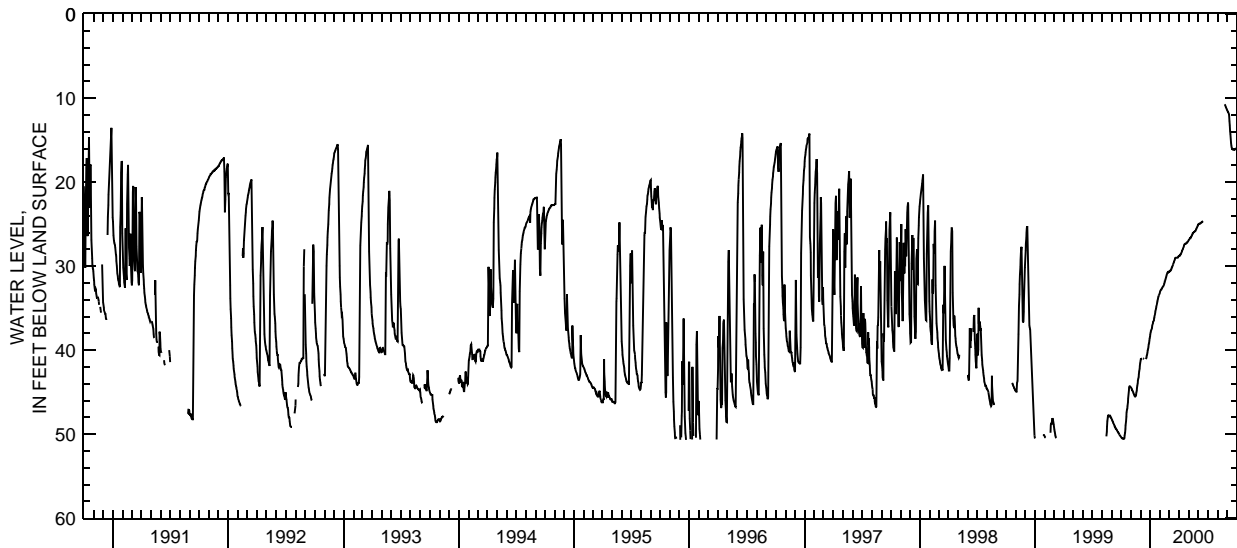
PERIOD OF RECORD.—April 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 51.10 ft below land-surface datum, May 20, 1990; minimum daily low, 7.10 ft below land-surface datum, June 15, 1981.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50.38	44.48	41.25	38.18	33.06	30.63	28.80	26.96	25.02	---	---	11.49
2	50.44	44.55	41.10	37.95	32.93	30.62	28.80	26.91	25.01	---	---	11.58
3	50.48	44.64	41.07	37.70	32.87	30.58	28.76	26.85	25.01	---	---	11.64
4	50.51	44.72	41.03	37.63	32.84	30.57	28.74	26.79	24.97	---	---	11.72
5	50.54	44.78	41.03	37.53	32.78	30.54	28.68	26.75	24.96	---	---	11.81
6	50.54	44.87	41.03	37.37	32.70	30.48	28.62	26.67	24.95	---	---	11.91
7	50.56	44.96	---	37.16	32.65	30.39	28.55	26.65	24.92	---	---	12.09
8	50.59	45.06	---	36.95	32.54	30.32	28.47	26.63	24.92	---	---	12.75
9	50.59	45.15	41.01	36.77	32.49	30.21	28.38	26.57	24.92	---	---	13.23
10	50.57	45.26	41.00	36.65	32.46	30.12	28.29	26.49	24.87	---	---	13.95
11	50.47	45.35	41.06	36.57	32.42	30.03	28.17	26.40	24.81	---	---	14.30
12	50.18	45.45	41.09	36.43	32.36	29.91	28.08	26.33	24.75	---	---	14.88
13	49.84	45.54	---	36.27	32.26	29.82	27.99	26.25	24.74	---	---	15.36
14	49.40	45.56	---	36.09	32.14	29.70	27.88	26.16	24.74	---	---	15.68
15	48.95	45.54	---	35.88	32.01	29.60	27.77	26.08	24.71	---	---	15.92
16	48.47	45.47	---	35.70	31.86	29.49	27.66	26.04	24.66	---	---	16.00
17	47.96	45.29	---	35.48	31.73	29.37	27.56	26.00	---	---	---	16.08
18	47.44	45.07	41.07	35.28	31.61	29.27	27.43	25.97	---	---	---	16.13
19	47.09	44.84	40.97	35.09	31.47	29.15	27.39	25.93	---	---	---	16.14
20	46.96	44.55	40.85	34.89	31.33	29.04	27.36	25.93	---	---	---	16.14
21	46.67	44.27	40.68	34.70	31.18	29.01	27.36	25.90	---	---	---	16.14
22	46.21	43.95	40.47	34.49	31.05	29.01	27.36	25.85	---	---	---	16.16
23	45.76	43.64	40.28	34.28	30.90	29.00	27.33	25.80	---	---	---	16.16
24	45.38	43.43	40.07	34.16	30.78	29.01	27.27	25.73	---	---	10.74	16.14
25	44.80	43.19	39.85	33.92	30.75	29.01	27.23	25.63	---	---	10.83	16.14
26	44.42	42.87	39.63	33.74	30.78	29.01	27.23	25.56	---	---	10.98	16.11
27	44.33	42.54	39.38	33.62	30.78	29.00	27.20	25.49	---	---	11.04	16.06
28	44.33	42.23	39.13	33.54	30.75	29.00	27.15	25.40	---	---	11.16	16.02
29	44.32	41.90	38.88	33.44	30.68	28.93	27.09	25.31	---	---	11.22	15.99
30	44.37	41.57	38.64	33.32	---	28.88	27.02	25.22	---	---	11.31	15.96
31	44.43	---	38.38	33.20	---	28.83	---	25.13	---	---	11.40	---
MAX	50.59	45.56	41.25	38.18	33.06	30.63	28.80	26.96	25.02	---	11.40	16.16

CAL YR 1999 LOW 50.59  
WTR YR 2000 LOW 50.59





**GROUND-WATER RECORDS**  
**Tuscarawas County**

307

**403207081293800. LOCAL NUMBER, TU-3**

LOCATION.—Latitude 40°32'07", longitude 81°29'38", Hydrologic Unit 05040001, in the northwest part of Dover, Ohio. Owner: Dover City Water Department.

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 September 1982 continuous, periodic 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, 3.20 ft below land-surface datum, July 15, 1969.

WATER LEVEL  
IN FEET BELOW LAND-SURFACE DATUM  
INSTANTANEOUS OBSERVATION

DATE	WATER LEVEL
11/01/99	13.08
12/01/99	13.22
01/03/00	13.41
02/01/00	12.80
03/01/00	10.83
04/03/00	10.97
05/01/00	8.66
06/01/00	9.04
07/05/00	9.92
07/31/00	10.39
09/01/00	10.96

**GROUND-WATER RECORDS**  
**Tuscarawas County**

**403557081313600. LOCAL NUMBER, TU-4**

LOCATION.—Latitude 40°35'57", longitude 81°31'36", Hydrologic Unit 05040001, near Fire Department building in Strasburg, Ohio. Owner:

Strasburg Water Department

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, Division of Water.

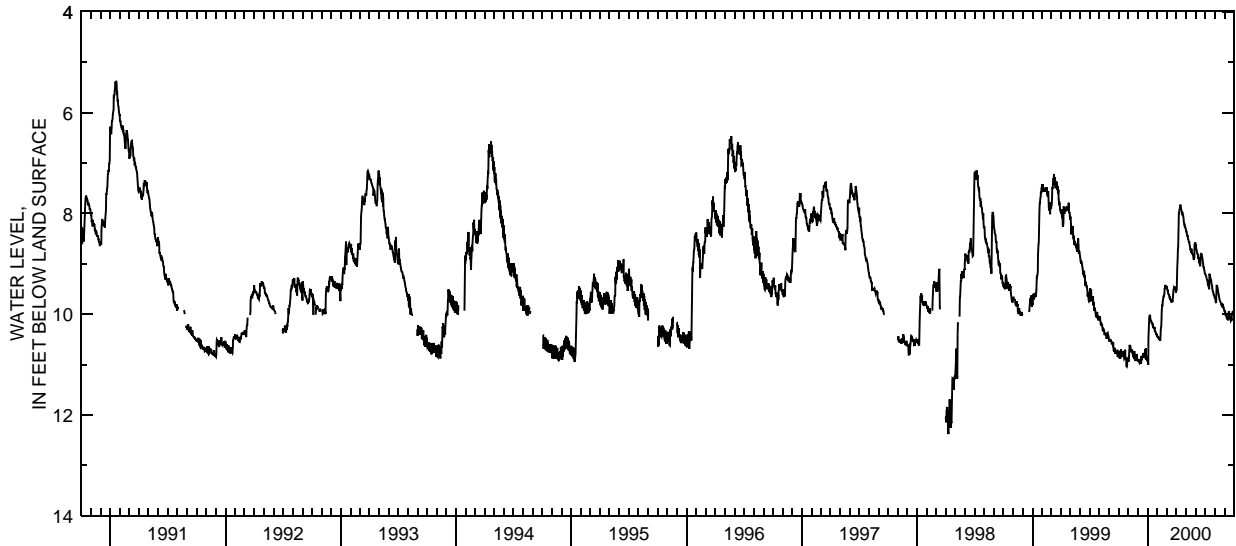
PERIOD OF RECORD.—June 1960 to current year.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.77	10.92	10.92	10.89	10.44	9.44	9.54	8.31	8.61	9.20	9.67	9.93
2	10.73	10.94	10.94	10.95	10.46	9.49	9.51	8.36	8.63	9.21	9.67	9.96
3	10.77	10.85	10.91	11.00	10.46	9.51	9.38	8.36	8.69	9.23	9.71	9.96
4	10.88	10.74	10.89	10.49	10.46	9.53	9.08	8.39	8.72	9.24	9.76	10.02
5	10.85	10.61	10.94	10.25	10.49	9.53	8.87	8.43	8.76	9.27	9.78	10.02
6	10.86	10.65	10.97	10.06	10.49	9.59	8.72	8.45	8.78	9.29	9.60	10.04
7	10.88	10.62	10.98	10.05	10.50	9.60	8.66	8.45	8.81	9.31	9.42	10.05
8	10.70	10.68	10.97	10.01	10.50	9.63	8.25	8.51	8.82	9.33	9.45	10.08
9	10.83	10.73	10.95	10.04	10.50	9.60	8.00	8.52	8.90	9.36	9.47	10.09
10	10.79	10.73	10.97	10.09	10.53	9.67	7.98	8.55	8.88	9.41	9.49	10.09
11	10.83	10.71	10.97	10.13	10.41	9.67	7.92	8.58	8.90	9.42	9.53	10.11
12	10.83	10.77	10.83	10.14	10.31	9.69	7.91	8.56	8.97	9.45	9.57	10.11
13	10.80	10.71	10.92	10.14	10.25	9.72	7.86	8.63	8.99	9.48	9.60	9.99
14	10.76	10.76	10.88	10.19	10.09	9.71	7.83	8.66	9.01	9.51	9.65	9.96
15	10.73	10.80	10.85	10.16	9.93	9.74	7.88	8.72	9.03	9.20	9.67	9.96
16	10.77	10.83	10.83	10.19	9.83	9.76	7.91	8.73	9.05	9.23	9.71	10.02
17	10.76	10.83	10.82	10.23	9.83	9.76	7.94	8.74	8.84	9.26	9.74	10.04
18	10.80	10.86	10.80	10.22	9.76	9.75	7.97	8.78	8.81	9.29	9.75	10.09
19	10.88	10.89	10.77	10.25	9.69	9.74	8.03	8.70	8.82	9.31	9.76	10.11
20	10.86	10.73	10.82	10.26	9.65	9.76	7.97	8.78	8.81	9.33	9.78	10.11
21	10.88	10.86	10.85	10.28	9.65	9.67	8.04	8.79	8.84	9.38	9.81	10.13
22	10.71	10.91	10.86	10.29	9.62	9.59	8.04	8.81	8.88	9.41	9.83	10.11
23	10.88	10.92	10.85	10.26	9.59	9.53	8.06	8.82	8.91	9.44	9.84	10.13
24	10.88	10.92	10.70	10.34	9.49	9.49	8.12	8.82	8.97	9.49	9.78	10.01
25	10.88	10.92	10.83	10.34	9.48	9.47	8.17	8.88	9.01	9.54	9.81	9.99
26	11.03	10.89	10.68	10.35	9.42	9.48	8.22	8.91	9.08	9.56	9.83	9.96
27	11.04	10.79	10.91	10.37	9.44	9.47	8.22	8.91	9.06	9.57	9.83	9.95
28	11.01	10.86	10.89	10.40	9.47	9.47	8.27	8.87	9.12	9.60	9.86	9.96
29	10.92	10.89	10.88	10.40	9.47	9.51	8.27	8.63	9.14	9.62	9.87	9.99
30	10.89	10.91	10.92	10.40	---	9.51	8.30	8.59	9.18	9.63	9.90	9.99
31	10.92	---	10.92	10.44	---	9.57	---	8.59	---	9.67	9.93	---
MAX	11.04	10.94	10.98	11.00	10.53	9.76	9.54	8.91	9.18	9.67	9.93	10.13

CAL YR 1999 LOW 11.04  
WTR YR 2000 LOW 11.04



**GROUND-WATER RECORDS  
Tuscarawas County**

**403653081321800. LOCAL NUMBER, TU-1**

LOCATION.—Latitude 40°36'53", longitude 81°32'18", 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, Division of Water.

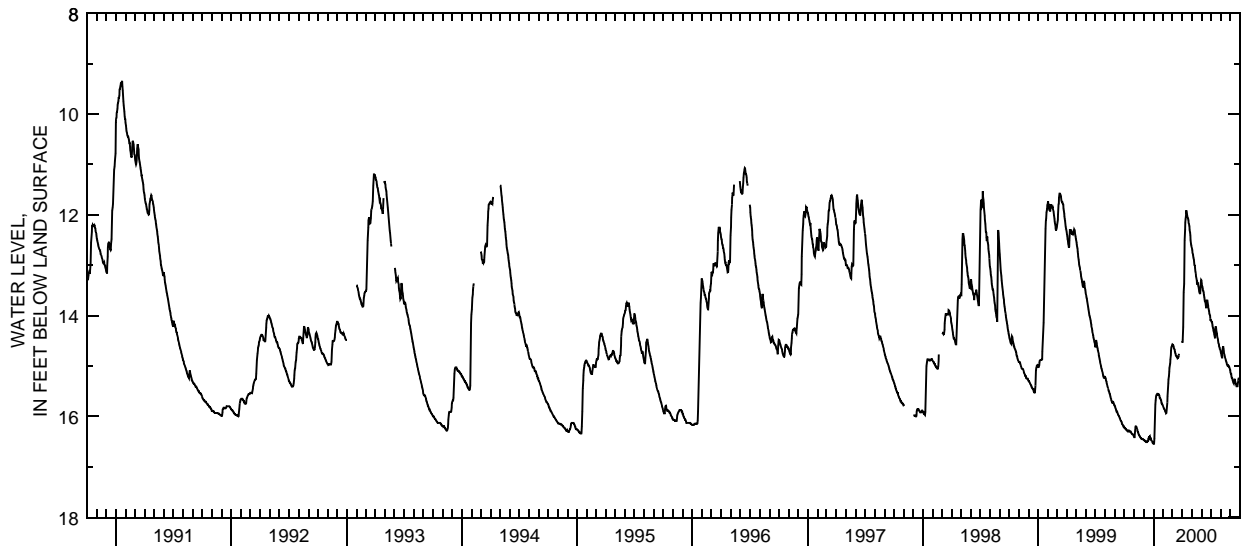
PERIOD OF RECORD.—July 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 16.54 ft below land-surface datum, Jan. 1-3, 2000; minimum daily low, 6.64 ft below land-surface datum, July 14, 1969.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.23	16.41	16.47	16.54	15.81	14.57	14.52	12.64	13.30	14.08	14.71	15.13
2	16.23	16.41	16.47	16.54	15.83	14.58	14.52	12.67	13.36	14.11	14.75	15.15
3	16.23	16.34	16.47	16.54	15.84	14.58	14.48	12.70	13.40	14.12	14.77	15.16
4	16.24	16.27	16.48	16.44	15.85	14.59	14.23	12.76	13.43	14.12	14.80	15.20
5	16.25	16.22	16.49	16.20	15.86	14.62	13.84	12.79	13.46	14.15	14.83	15.23
6	16.26	16.20	16.49	15.95	15.89	14.65	13.53	12.81	13.50	14.19	14.83	15.24
7	16.26	16.20	16.49	15.76	15.90	14.66	13.37	12.85	13.51	14.23	14.67	15.25
8	16.27	16.21	16.50	15.68	15.91	14.68	13.05	12.89	13.54	14.25	14.63	15.29
9	16.28	16.23	16.50	15.62	15.92	14.71	12.50	12.93	13.58	14.29	14.61	15.30
10	16.28	16.25	16.51	15.58	15.94	14.74	12.29	13.00	13.64	14.32	14.66	15.32
11	16.28	16.27	16.51	15.57	15.93	14.75	12.15	13.01	13.68	14.35	14.70	15.34
12	16.28	16.30	16.50	15.57	15.90	14.79	12.08	13.05	13.71	14.38	14.75	15.35
13	16.30	16.31	16.49	15.55	15.80	14.80	12.00	13.12	13.72	14.40	14.78	15.30
14	16.29	16.33	16.49	15.55	15.72	14.81	11.91	13.17	13.75	14.45	14.81	15.27
15	16.29	16.35	16.48	15.55	15.60	14.81	11.94	13.22	13.79	14.27	14.83	15.27
16	16.28	16.37	16.44	15.56	15.44	14.83	12.00	13.25	13.85	14.23	14.86	15.31
17	16.29	16.38	16.42	15.56	15.34	14.85	12.01	13.30	13.77	14.23	14.88	15.33
18	16.30	16.39	16.41	15.57	15.27	14.84	12.05	13.37	13.70	14.26	14.90	15.35
19	16.30	16.40	16.41	15.58	15.20	14.82	12.07	13.37	13.70	14.32	14.92	15.37
20	16.30	16.41	16.40	15.60	15.11	14.82	12.08	13.35	13.70	14.35	14.94	15.40
21	16.31	16.42	16.47	15.63	15.04	14.79	12.11	13.36	13.74	14.40	14.97	15.40
22	16.32	16.43	16.42	15.64	14.98	14.76	12.17	13.40	13.81	14.44	14.99	15.40
23	16.33	16.44	16.43	15.65	14.94	---	12.20	13.43	13.85	14.47	15.00	15.40
24	16.34	16.44	16.45	15.66	14.87	---	12.23	13.47	13.87	14.50	15.00	15.37
25	16.35	16.45	16.47	15.68	14.78	---	12.30	13.52	13.91	14.55	14.99	15.32
26	16.35	16.45	16.48	15.72	14.69	---	12.35	13.55	13.95	14.57	15.00	15.28
27	16.35	16.45	16.49	15.74	14.62	---	12.41	13.56	13.98	14.60	15.01	15.25
28	16.36	16.45	16.50	15.75	14.60	---	12.50	13.57	14.00	14.63	15.02	15.25
29	16.37	16.45	16.51	15.76	14.59	---	12.58	13.45	14.05	14.64	15.04	15.25
30	16.38	16.46	16.53	15.77	---	---	12.61	13.35	14.10	14.67	15.06	15.26
31	16.39	---	16.53	15.80	---	14.51	---	13.29	---	14.69	15.08	---
MAX	16.39	16.46	16.53	16.54	15.94	14.85	14.52	13.57	14.10	14.69	15.08	15.40

CAL YR 1999   LOW 16.53  
WTR YR 2000   LOW 16.54



**GROUND-WATER RECORDS**  
**Tuscarawas County**

**403823081324200. LOCAL NUMBER, TU-5**

LOCATION.—Latitude 40°38'23", longitude 81°32'42", Hydrologic Unit 05040001, Sugar Creek well field near Strasburg, Ohio. Owner: Canton Water Department

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, Division of Water.

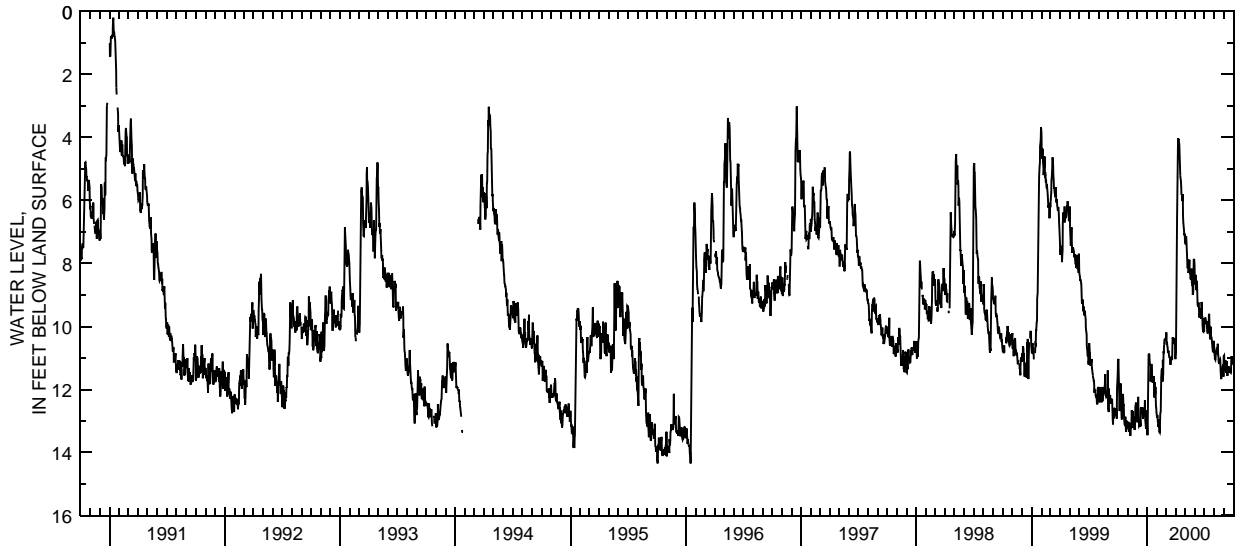
PERIOD OF RECORD.—June 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 14.35 ft below land-surface datum, Oct. 4, 1995 and Jan. 17, 1996; minimum daily low, 0.20 ft below land-surface datum, Jan. 13, 1991.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.55	13.19	13.04	12.67	12.72	10.37	11.04	7.29	8.31	10.17	10.46	10.95
2	11.07	13.17	12.99	13.19	12.85	10.46	10.83	7.34	8.67	9.87	10.85	10.92
3	11.03	13.05	12.95	13.46	12.89	10.19	10.23	7.40	8.49	9.78	10.91	11.28
4	11.43	13.13	13.04	13.32	12.81	10.58	9.38	7.16	8.36	9.74	11.03	11.31
5	11.69	13.35	12.24	11.69	13.04	10.49	7.02	7.14	8.64	9.74	11.06	11.30
6	12.27	13.31	12.98	11.09	12.95	10.61	6.54	7.34	8.85	9.81	10.97	11.07
7	12.69	13.08	12.98	10.89	13.19	10.67	6.20	7.67	8.55	9.89	10.79	11.37
8	12.32	13.10	13.17	10.88	13.08	10.83	5.82	7.88	8.69	9.93	10.77	11.48
9	12.39	13.29	13.15	10.89	13.20	10.80	4.02	8.12	8.92	9.84	10.82	11.34
10	11.81	13.47	13.17	11.06	13.35	10.77	4.09	8.16	9.30	10.05	10.67	11.31
11	12.57	13.26	12.95	11.24	13.37	10.85	4.05	7.88	9.38	10.17	10.80	11.10
12	12.38	13.17	13.17	11.21	13.23	10.98	4.16	8.31	9.33	10.23	10.88	11.52
13	12.81	13.23	12.63	11.75	12.78	10.98	4.22	8.25	9.24	10.06	10.55	11.57
14	12.95	12.66	12.56	11.36	12.69	10.98	4.39	8.09	9.45	10.09	10.91	11.36
15	12.42	12.84	12.69	11.54	12.24	11.00	4.82	7.89	9.63	10.08	10.94	11.36
16	12.35	12.90	12.75	11.19	11.61	11.22	5.22	8.28	9.72	9.60	11.15	11.42
17	12.14	13.20	12.72	11.51	11.37	11.01	5.28	8.34	9.69	9.63	11.19	11.27
18	12.24	12.69	12.56	11.54	11.40	11.01	5.39	8.19	9.47	10.17	11.15	11.39
19	12.51	13.04	12.74	11.76	11.33	11.06	5.57	8.51	9.48	10.29	11.07	11.45
20	12.51	13.11	12.92	11.76	11.75	11.04	5.81	8.22	9.45	10.41	11.04	11.34
21	12.92	12.85	12.81	11.60	11.06	11.07	5.82	8.19	9.72	10.01	11.09	11.36
22	13.05	13.00	12.69	11.79	11.55	10.55	5.90	8.19	9.76	10.26	11.40	11.45
23	13.11	13.28	12.85	11.58	10.79	10.35	6.02	8.61	9.23	10.34	11.67	11.48
24	13.13	13.25	12.60	11.88	10.85	10.41	5.81	8.69	9.67	10.35	11.57	11.45
25	12.87	13.04	12.71	12.26	10.58	10.41	6.47	8.69	9.69	10.42	11.58	10.95
26	13.04	12.57	12.35	11.78	10.46	10.40	6.71	9.00	9.95	10.56	11.43	10.97
27	13.35	12.47	12.95	12.17	10.40	10.38	6.87	8.92	10.16	10.68	11.42	10.98
28	13.25	12.42	13.07	12.14	10.46	10.37	6.93	8.40	10.17	10.76	11.30	11.15
29	12.99	12.75	13.20	11.92	10.40	10.56	7.11	7.89	9.75	10.82	11.27	11.21
30	13.14	12.99	13.25	12.53	---	10.50	7.06	7.89	10.09	10.74	11.30	11.00
31	13.17	---	13.17	12.59	---	11.01	---	8.03	---	10.58	11.60	---
MAX	13.35	13.47	13.25	13.46	13.37	11.22	11.04	9.00	10.17	10.82	11.67	11.57

CAL YR 1999 LOW 13.47  
WTR YR 2000 LOW 13.47



**GROUND-WATER RECORDS**  
**Union County**

**401826083255200. LOCAL NUMBER, U-4**

LOCATION.—Latitude 40°18'26", longitude 83°25'52", 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, Division of Water.

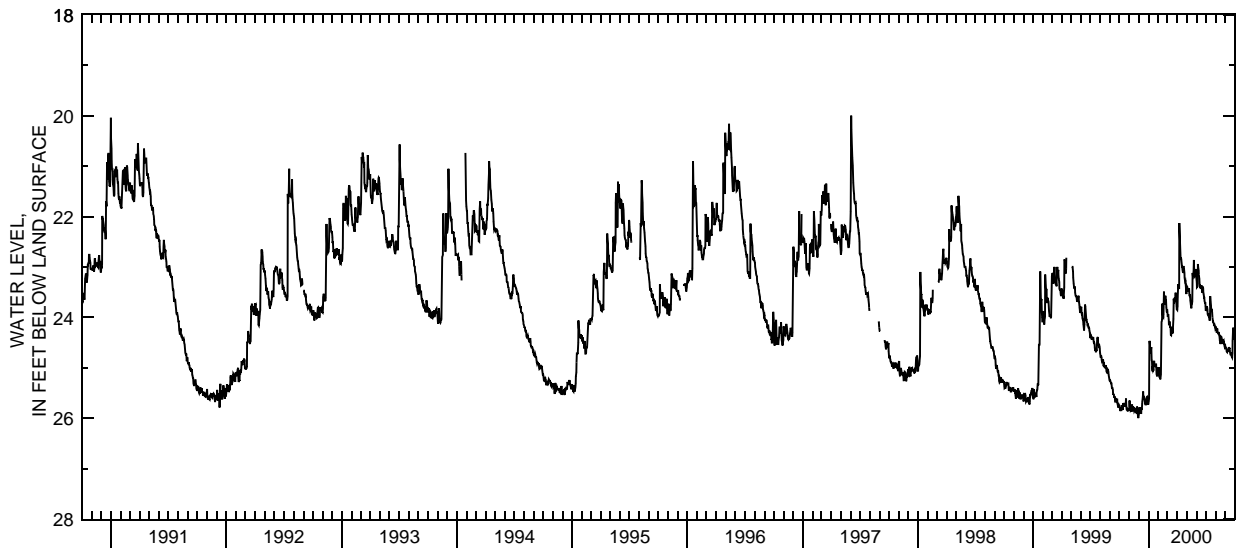
PERIOD OF RECORD.—January 1973 to current year.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.74	25.82	25.93	25.70	25.13	23.87	23.85	23.46	23.24	23.87	24.21	24.60
2	25.79	25.65	25.82	25.67	25.14	23.99	23.78	23.39	23.30	23.85	24.20	24.60
3	25.86	25.76	25.79	25.61	24.99	23.97	23.60	23.40	23.40	23.81	24.22	24.62
4	25.80	25.82	25.82	24.47	25.16	23.94	23.34	23.43	23.39	23.78	24.29	24.63
5	25.82	25.79	25.79	24.48	25.19	24.05	23.39	23.46	23.33	23.81	24.29	24.68
6	25.82	25.86	25.89	24.56	25.20	24.14	23.42	23.49	22.94	23.85	24.22	24.69
7	25.86	25.85	25.89	24.69	25.22	24.14	23.42	23.47	23.04	23.94	24.30	24.68
8	25.79	25.82	25.90	24.71	25.22	24.08	22.13	23.45	23.07	23.96	24.32	24.63
9	25.77	25.76	25.90	24.65	25.13	24.11	22.25	23.42	23.15	23.94	24.32	24.65
10	25.74	25.73	25.82	24.59	25.04	24.20	22.50	23.57	23.24	23.94	24.29	24.66
11	25.82	25.85	25.82	24.84	24.68	24.18	22.61	23.58	23.36	23.99	24.32	24.63
12	25.82	25.85	25.71	24.87	24.08	24.35	22.83	23.54	23.39	24.05	24.35	24.59
13	25.70	25.77	25.67	25.02	24.05	24.36	22.83	23.67	23.39	24.05	24.38	24.62
14	25.77	25.79	25.58	25.07	23.73	24.29	22.85	23.75	23.43	24.05	24.45	24.60
15	25.76	25.80	25.47	24.97	23.87	24.22	22.91	23.78	23.40	23.58	24.45	24.65
16	25.73	25.80	25.55	25.05	23.99	24.21	23.00	23.82	23.42	23.69	24.53	24.72
17	25.70	25.86	25.61	25.04	24.00	24.32	23.00	23.72	23.36	23.79	24.50	24.74
18	25.73	25.85	25.63	24.89	23.94	24.29	23.06	23.72	23.42	23.85	24.38	24.75
19	25.76	25.83	25.61	24.86	23.49	24.17	23.12	23.69	23.51	23.84	24.39	24.71
20	25.76	25.83	25.65	24.95	23.66	24.03	23.06	23.12	23.49	23.87	24.42	24.71
21	25.73	25.82	25.68	24.96	23.75	23.63	22.98	23.19	23.39	23.90	24.47	24.78
22	25.61	25.89	25.67	24.97	23.69	23.70	23.03	23.16	23.42	24.00	24.47	24.80
23	25.77	25.88	25.63	24.95	23.60	23.69	23.06	23.10	23.51	24.08	24.53	24.71
24	25.83	25.90	25.73	24.97	23.57	23.63	23.12	22.86	23.54	24.08	24.44	24.47
25	25.83	25.90	25.74	24.92	23.66	23.60	23.21	23.09	23.61	24.11	24.48	24.22
26	25.82	25.77	25.58	25.05	23.66	23.63	23.28	23.19	23.61	24.14	24.47	24.22
27	25.85	25.86	25.59	25.14	23.81	23.51	23.27	23.18	23.69	24.15	24.50	24.29
28	25.85	25.93	25.58	25.17	23.90	23.57	23.30	23.13	23.72	24.14	24.54	24.44
29	25.82	25.98	25.61	25.14	23.88	23.70	23.45	23.04	23.70	24.17	24.56	24.42
30	25.82	26.00	25.65	25.01	---	23.78	23.54	23.12	23.79	24.18	24.59	24.39
31	25.85	---	25.73	25.01	---	23.84	---	23.18	---	24.22	24.57	---
MAX	25.86	26.00	25.93	25.70	25.22	24.36	23.85	23.82	23.79	24.22	24.59	24.80

CAL YR 1999    LOW 26.00  
WTR YR 2000    LOW 26.00



**GROUND-WATER RECORDS**  
**Union County**

**402010083321900. LOCAL NUMBER, U-5**

LOCATION.—Latitude 40°20'10", longitude 83°32'19", 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 4.00 ft. above land-surface datum.

REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water. Water-quality data collected at this site and published in volume 2, project data, Ground-Water Data for Ohio Department of Natural Resources Wells.

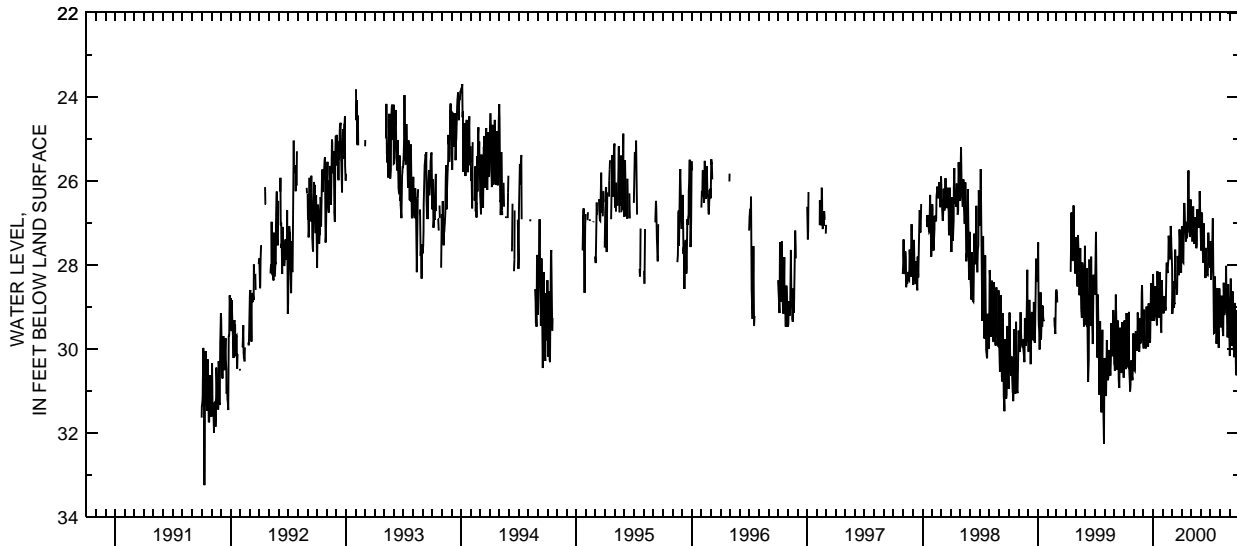
PERIOD OF RECORD.—October 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 33.25 ft below land-surface datum, Oct. 10, 1991; minimum daily low, 23.70 ft below land-surface datum, Jan. 4, 1994.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.69	30.01	29.74	28.56	29.12	27.73	27.93	26.58	27.33	27.95	29.19	30.17
2	30.24	30.27	29.87	28.23	28.98	28.11	27.09	26.98	27.66	27.45	29.39	29.91
3	29.33	30.45	29.99	28.76	29.01	29.17	27.34	27.03	27.49	28.09	29.40	28.87
4	29.90	30.51	29.82	29.12	29.16	29.05	27.69	27.16	26.76	28.36	29.49	28.33
5	30.09	30.53	29.07	29.33	29.07	28.39	27.81	27.45	26.80	28.07	29.28	29.10
6	30.37	30.43	29.21	29.25	28.77	28.45	27.94	27.35	27.35	27.83	28.74	29.57
7	30.49	29.68	29.65	29.22	28.75	28.75	27.95	26.63	27.55	27.74	28.97	29.80
8	30.40	29.58	29.85	29.03	28.99	29.02	27.19	26.63	27.83	27.21	29.28	29.92
9	30.06	29.78	29.92	28.67	29.03	28.91	26.63	27.25	27.95	26.90	29.44	29.56
10	29.15	29.79	29.99	28.51	29.03	28.94	26.53	27.30	27.72	27.91	29.56	28.64
11	29.73	30.00	29.85	28.91	29.09	28.57	26.63	27.49	27.02	28.60	29.70	29.19
12	30.03	30.04	29.00	29.09	28.95	27.64	26.99	27.50	27.62	29.09	29.48	29.67
13	30.41	29.93	29.23	29.27	28.12	28.09	26.97	27.42	27.87	29.63	28.43	29.94
14	30.43	29.14	29.47	29.44	27.95	28.36	27.19	26.87	27.92	29.62	28.83	30.06
15	30.40	29.38	29.57	29.17	28.03	28.44	27.45	27.05	28.14	29.38	29.20	30.20
16	30.02	29.67	29.85	28.16	28.18	28.57	27.12	27.18	28.32	28.28	29.12	29.86
17	29.12	29.84	29.95	28.67	28.20	28.71	26.99	27.31	28.17	28.68	28.87	28.91
18	30.28	29.96	29.75	28.87	28.05	28.65	27.37	27.61	27.60	29.15	29.03	29.41
19	30.58	30.08	28.92	29.02	27.90	28.22	27.32	27.53	27.96	29.33	28.84	29.91
20	30.84	29.97	29.18	29.17	27.31	27.79	27.12	27.19	28.13	29.48	28.03	30.24
21	31.02	29.27	29.55	29.27	27.34	28.06	26.84	26.68	28.22	29.88	28.56	30.63
22	30.93	29.42	29.64	29.05	27.61	28.12	26.09	26.80	28.24	29.64	28.99	30.60
23	30.84	29.66	29.86	28.18	27.78	28.25	25.76	26.79	28.25	28.56	29.23	30.21
24	30.35	29.87	29.73	28.64	27.70	28.22	26.09	27.07	28.04	28.99	29.53	29.08
25	30.28	29.81	28.96	28.88	27.87	27.95	26.92	26.99	27.24	29.52	29.73	29.19
26	30.49	29.04	28.44	29.24	27.75	27.16	27.21	27.12	27.47	29.59	29.51	29.44
27	30.66	28.67	29.31	29.43	27.08	27.49	27.21	27.02	27.76	29.78	28.46	29.60
28	30.69	28.48	29.09	29.62	27.37	27.76	27.34	26.47	27.84	29.98	29.02	29.66
29	30.75	29.07	29.20	29.32	27.57	27.94	27.15	26.25	27.98	29.72	29.35	29.68
30	30.39	29.42	29.33	28.37	---	28.06	26.45	26.74	28.07	28.57	29.61	29.36
31	29.64	---	29.09	28.74	---	28.19	---	27.12	---	28.91	29.95	---
MAX	31.02	30.53	29.99	29.62	29.16	29.17	27.95	27.61	28.32	29.98	29.95	30.63

CAL YR 1999    LOW 32.26  
WTR YR 2000    LOW 31.02



**GROUND-WATER RECORDS**  
**Vinton County**

**391452082282900. LOCAL NUMBER, V-1**

LOCATION.—Latitude 39°14'52", longitude 82°28'29", 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, Division of Water. Water-quality data collected at this site and published in volume 2, project data, Ground-Water Data for Ohio Department of Natural Resources Wells.

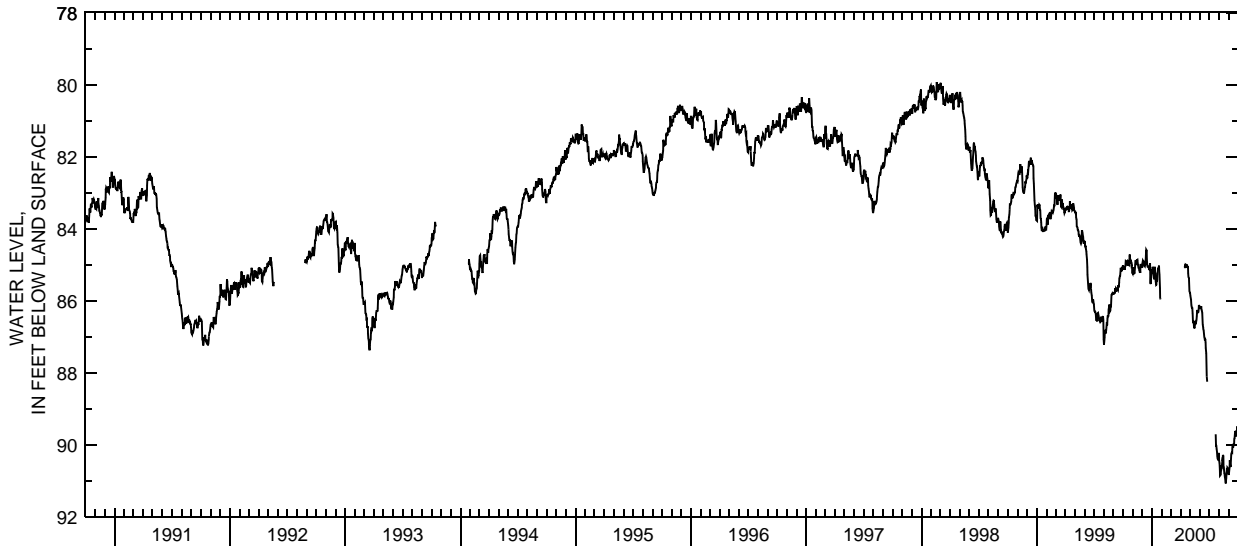
PERIOD OF RECORD.—September 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 93.23 ft below land-surface datum, Apr. 12, 1979; minimum daily low, 49.55 ft below land-surface datum, Mar. 20, 1963.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85.04	85.25	85.07	85.23	---	---	---	85.79	86.19	---	90.43	90.84
2	85.07	85.07	84.97	85.22	---	---	---	85.87	86.19	---	90.51	90.70
3	85.14	85.20	84.89	85.06	---	---	---	85.95	86.23	---	90.69	90.62
4	85.07	85.25	84.90	85.07	---	---	---	85.98	86.20	---	90.86	90.43
5	85.07	85.25	84.91	85.29	---	---	---	86.12	86.16	---	90.84	90.57
6	85.10	85.23	84.91	85.32	---	---	---	86.17	86.24	---	90.82	90.62
7	85.14	85.23	84.93	85.37	---	---	---	86.20	86.27	---	90.65	90.55
8	85.06	85.08	85.04	85.41	---	---	---	86.21	86.34	---	90.67	90.29
9	85.04	85.00	85.05	85.20	---	---	---	86.36	86.44	---	90.63	90.24
10	84.90	84.88	84.93	85.06	---	---	---	86.59	86.66	---	90.57	90.22
11	84.91	84.91	85.02	85.23	---	---	---	86.61	86.75	---	90.44	90.23
12	85.00	85.01	84.86	85.25	---	---	---	86.56	86.81	---	90.45	90.07
13	84.90	84.99	84.73	85.45	---	---	85.08	86.70	86.83	---	90.29	90.07
14	84.92	84.85	84.59	85.57	---	---	85.08	86.75	86.97	---	90.32	90.07
15	85.01	84.88	84.62	85.56	---	---	85.03	86.75	87.02	---	90.60	90.06
16	85.01	84.87	84.84	85.45	---	---	85.04	86.68	87.04	---	90.64	89.97
17	84.90	84.99	84.99	85.45	---	---	85.00	86.64	87.10	---	90.79	90.00
18	84.91	85.01	85.05	85.42	---	---	85.01	86.61	87.06	---	90.80	89.84
19	85.01	85.06	85.05	85.23	---	---	85.07	86.62	87.17	---	90.89	89.82
20	85.02	85.10	85.05	85.09	---	---	85.04	86.61	87.31	---	90.97	89.65
21	84.93	85.11	85.07	85.14	---	---	85.00	86.54	87.46	89.71	91.03	89.65
22	84.78	85.15	85.10	85.10	---	---	85.07	86.43	87.77	90.03	91.08	89.64
23	84.72	85.18	85.14	85.03	---	---	85.07	86.35	88.10	90.03	90.93	89.65
24	84.87	85.16	85.09	85.17	---	---	85.04	86.26	88.25	90.12	90.85	89.72
25	84.90	85.23	85.16	85.28	---	---	85.24	86.32	---	90.19	90.73	89.77
26	84.89	85.01	84.96	85.66	---	---	85.35	86.33	---	90.32	90.75	89.63
27	84.93	85.01	85.52	85.94	---	---	85.38	86.32	---	90.40	90.64	89.64
28	85.02	85.03	85.54	85.97	---	---	85.52	86.23	---	90.42	90.65	89.49
29	85.01	85.07	85.25	---	---	---	85.75	86.12	---	90.43	90.66	89.62
30	85.11	85.07	85.13	---	---	---	85.79	86.15	---	90.23	90.73	89.47
31	85.24	---	85.23	---	---	---	---	86.17	---	90.26	90.82	---
MAX	85.24	85.25	85.54	85.97	---	---	85.79	86.75	88.25	90.43	91.08	90.84

CAL YR 1999 LOW 87.22  
WTR YR 2000 LOW 91.08



**GROUND-WATER RECORDS**  
**Warren County**

**392119084142000. LOCAL NUMBER, W-6**

LOCATION.—Latitude 39°21'19", longitude 84°14'20", Hydrologic Unit 05090202, southeast of Kings Mills, Ohio Owner: Ohio Department of Natural Resources.

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, Division of Water. Water-quality data collected at this site and published in volume 2, project data, Ground-Water Data for Ohio Department of Natural Resources Wells.

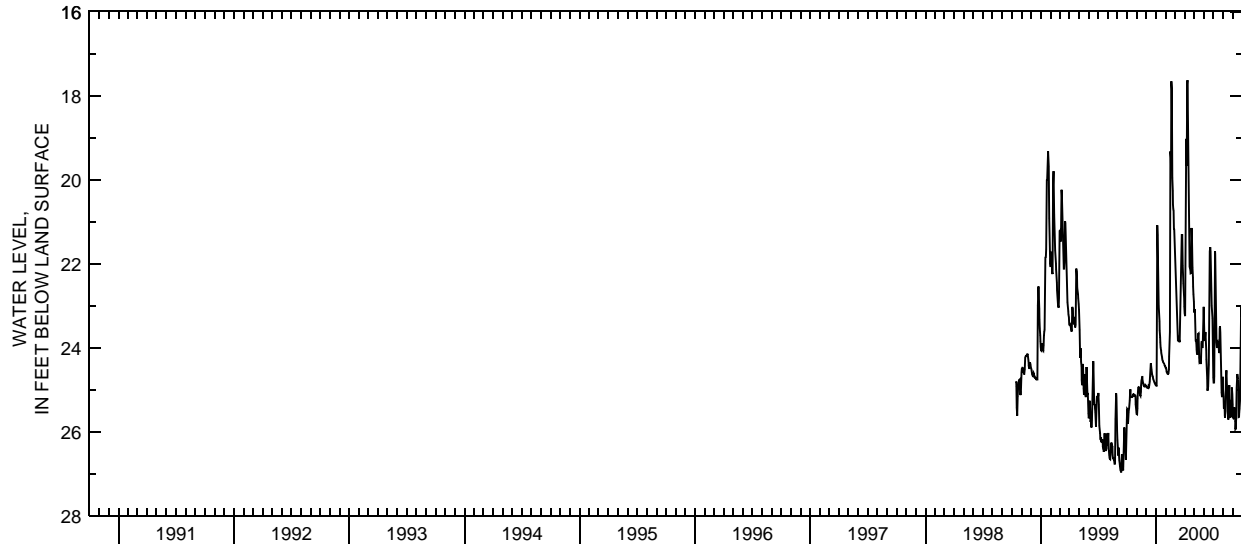
PERIOD OF RECORD.—Oct. 14, 1998 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 26.97 ft below land-surface datum, Sept. 13, 1999; minimum daily low, 17.63 ft below land-surface datum, Apr. 10, 2000.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.71	25.58	24.92	24.90	24.48	21.95	23.18	23.09	23.24	24.71	25.00	25.66
2	25.46	25.59	24.93	24.91	24.49	22.39	23.25	23.17	23.62	24.83	25.16	25.68
3	25.47	25.45	24.95	24.91	24.52	22.69	23.04	23.09	23.82	24.83	25.45	25.67
4	25.81	25.20	24.95	24.42	24.57	22.93	22.07	23.25	23.82	24.68	25.44	25.53
5	25.77	25.02	24.95	21.09	24.59	23.12	19.69	23.55	23.67	22.91	25.33	25.42
6	25.54	24.95	24.96	21.32	24.60	23.26	19.03	23.83	23.63	21.71	25.60	25.49
7	25.49	24.94	24.96	21.93	24.62	23.39	19.65	23.83	23.78	21.77	25.67	25.49
8	25.45	24.95	24.93	22.43	24.63	23.53	19.67	23.89	24.06	22.43	25.51	25.75
9	25.36	24.97	24.95	22.77	24.62	23.65	17.71	24.05	24.28	23.00	24.97	25.94
10	25.26	25.03	24.94	23.01	24.61	23.77	17.63	24.15	24.43	23.45	24.71	25.93
11	25.08	25.11	24.90	23.21	24.52	23.83	18.41	24.15	24.74	23.87	24.54	25.68
12	24.99	25.14	24.81	23.37	24.21	23.83	19.42	23.98	25.01	24.01	24.62	25.33
13	25.16	25.15	24.75	23.59	23.96	23.80	20.25	23.79	25.01	23.86	24.88	24.96
14	25.17	25.05	24.61	23.76	23.63	23.79	20.87	23.67	24.93	23.85	25.05	24.73
15	25.18	24.89	24.41	23.87	20.15	23.84	21.37	23.66	24.79	23.93	25.15	24.63
16	25.18	24.79	24.37	24.00	19.33	23.87	21.76	24.01	24.55	23.86	25.56	24.68
17	25.18	24.74	24.44	24.07	19.47	23.74	22.07	24.24	24.41	23.93	25.71	24.76
18	25.17	24.70	24.52	24.13	19.79	23.16	22.12	24.36	23.12	24.01	25.63	25.33
19	25.16	24.70	24.58	24.17	17.66	22.91	22.15	24.35	22.23	24.13	25.18	25.65
20	25.13	24.78	24.64	24.23	17.85	22.74	22.23	24.29	21.71	24.11	24.89	25.64
21	25.11	24.83	24.68	24.27	19.10	21.99	22.22	24.35	21.61	23.55	25.03	25.55
22	25.11	24.86	24.69	24.31	19.96	21.48	21.69	24.39	21.71	23.49	25.49	25.46
23	25.14	24.89	24.73	24.33	20.27	21.32	21.15	24.34	22.05	23.64	25.67	25.26
24	25.15	24.92	24.77	24.35	20.59	21.32	21.43	23.91	22.52	23.89	25.59	24.99
25	25.15	24.93	24.79	24.36	20.70	21.69	21.79	23.85	22.82	24.19	25.25	23.91
26	25.14	24.93	24.81	24.38	20.74	22.05	22.09	23.95	23.00	24.73	25.55	23.53
27	25.14	24.93	24.83	24.39	21.16	22.32	22.33	24.01	23.17	25.07	25.65	23.04
28	25.16	24.91	24.85	24.41	21.19	22.47	22.55	23.95	23.30	25.16	25.41	23.11
29	25.35	24.89	24.86	24.43	21.47	22.61	22.73	23.73	23.67	25.16	24.95	23.27
30	25.47	24.91	24.87	24.44	---	22.82	22.91	23.30	24.29	24.90	25.11	23.52
31	25.54	---	24.89	24.46	---	23.02	---	23.03	---	24.70	25.35	---
MAX	25.81	25.59	24.96	24.91	24.63	23.87	23.25	24.39	25.01	25.16	25.71	25.94
MIN	24.99	24.70	24.37	21.09	17.66	21.32	17.63	23.03	21.61	21.71	24.54	23.04

CAL YR 1999 HIGH 19.33 LOW 26.97  
WTR YR 2000 HIGH 17.63 LOW 25.94





**GROUND-WATER RECORDS**  
**Warren County**

**392712084191700. LOCAL NUMBER, W-5**

LOCATION.—Latitude 39°27'12", longitude 84°19'17", 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, Division of Water.

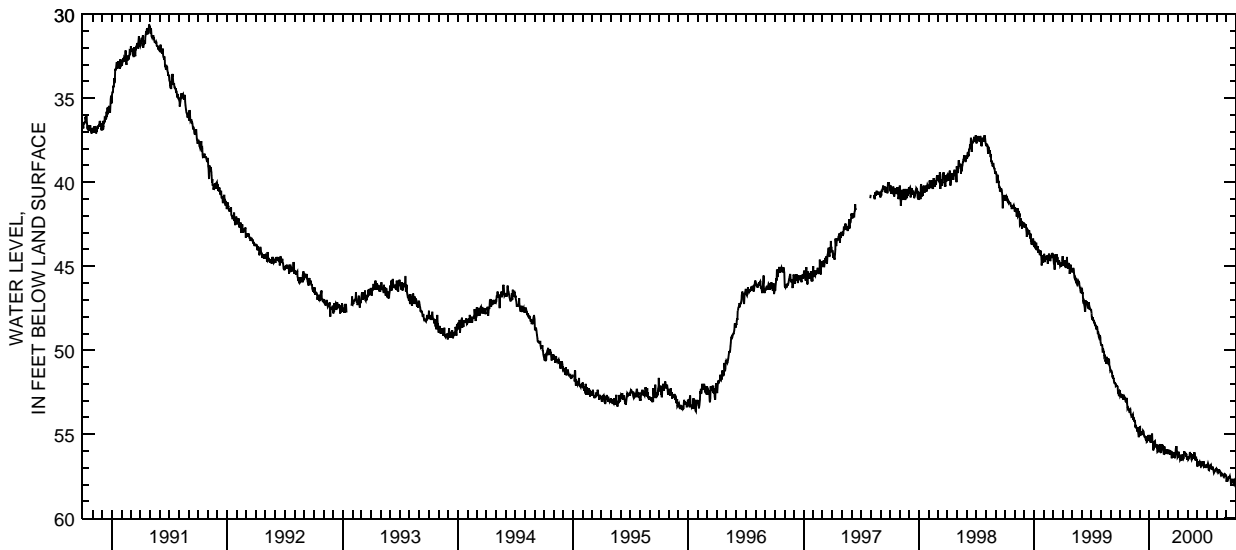
PERIOD OF RECORD.—March 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 58.07 ft below land-surface datum, Sept. 17 and 29, 2000; minimum daily low, 17.70 ft below land-surface datum, Apr. 30, 1975.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52.71	53.55	54.84	55.28	55.92	55.92	56.34	56.39	56.93	56.94	57.08	57.49
2	52.68	53.52	54.57	55.10	55.95	56.12	56.13	56.39	56.85	56.93	57.09	57.83
3	52.64	53.81	54.56	55.10	55.58	56.04	56.03	56.49	56.63	56.85	57.20	57.68
4	52.67	53.88	55.04	55.39	55.92	55.92	56.22	56.46	56.78	56.79	57.27	57.78
5	52.76	53.82	55.04	55.50	56.03	56.12	56.24	56.34	56.74	56.72	57.27	57.78
6	52.73	53.96	54.98	55.38	56.04	56.21	56.29	56.39	56.67	56.79	57.17	57.69
7	52.68	53.93	54.96	55.49	56.07	56.12	56.27	56.33	56.66	57.12	57.27	57.60
8	52.62	53.82	54.90	55.37	56.06	55.97	56.54	56.18	56.63	57.14	57.23	57.54
9	52.79	53.85	54.83	55.10	55.79	56.06	56.51	56.06	56.68	56.99	57.09	57.54
10	52.77	53.81	54.99	54.96	55.59	56.18	56.52	56.28	56.82	56.96	57.20	57.56
11	52.95	54.15	54.99	55.49	55.85	56.03	56.43	56.21	56.87	56.87	57.20	57.53
12	52.82	54.04	54.78	55.41	55.79	56.42	56.58	56.12	56.79	56.84	57.21	57.48
13	52.80	54.02	54.81	55.91	55.62	56.33	56.45	56.45	56.88	56.91	57.27	57.60
14	52.88	54.24	54.86	55.91	55.85	56.21	56.21	56.52	56.85	56.87	57.35	57.63
15	52.79	54.14	54.99	55.64	55.97	56.09	56.39	56.48	56.68	56.84	57.32	57.75
16	52.85	54.21	55.13	55.79	56.19	56.12	56.34	56.42	56.70	57.04	57.41	58.01
17	52.97	54.29	55.13	55.76	56.12	56.39	56.40	56.18	56.79	57.11	57.36	58.07
18	53.04	54.59	55.14	55.43	55.73	56.29	56.46	56.33	56.79	57.06	57.35	57.86
19	53.07	54.43	55.14	55.39	56.03	56.07	56.37	56.33	56.84	57.00	57.42	57.71
20	53.09	54.53	55.29	55.61	56.14	56.14	56.18	56.43	56.78	56.93	57.41	57.71
21	52.98	54.62	55.31	55.70	56.13	56.34	56.01	56.36	56.60	57.00	57.41	57.87
22	52.83	54.68	55.29	55.61	55.98	56.42	56.12	56.28	56.72	57.18	57.47	57.79
23	53.19	54.56	55.32	55.76	55.92	56.31	56.13	56.07	56.89	57.23	57.38	57.66
24	53.45	54.83	55.46	55.77	56.16	56.14	56.12	56.18	56.87	57.29	57.41	57.78
25	53.39	54.68	55.44	55.61	55.97	56.01	56.28	56.45	56.91	57.23	57.47	57.75
26	53.42	54.57	55.11	55.91	55.88	56.06	56.28	56.55	56.89	57.21	57.36	57.93
27	53.52	54.89	55.23	56.07	56.13	55.70	56.18	56.39	56.93	57.18	57.35	57.89
28	53.52	55.13	55.22	56.03	56.18	55.95	56.19	56.33	56.88	57.14	57.38	58.05
29	53.57	55.17	55.04	55.89	56.03	56.13	56.45	56.57	56.81	57.09	57.42	58.07
30	53.68	55.10	55.20	55.70	---	56.27	56.52	56.52	56.89	57.08	57.45	57.83
31	53.68	---	55.38	55.65	---	56.39	---	56.57	---	57.04	57.45	---
MAX	53.68	55.17	55.46	56.07	56.19	56.42	56.58	56.57	56.93	57.29	57.47	58.07

CAL YR 1999    LOW 55.46  
WTR YR 2000    LOW 58.07



**GROUND-WATER RECORDS**  
**Washington County**

**392553081281600. LOCAL NUMBER, WA-2**

LOCATION.—Latitude 39°25'53", longitude 81°28'16", Hydrologic Unit 05040004, near county fairgrounds north of Marietta, Ohio. Owner: Marietta Water Dept.

AQUIFER.—Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.—Drilled unused water table well, diameter 8 in., depth, 50 ft, cased.

INSTRUMENTATION.—Type F continuous recorder.

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.

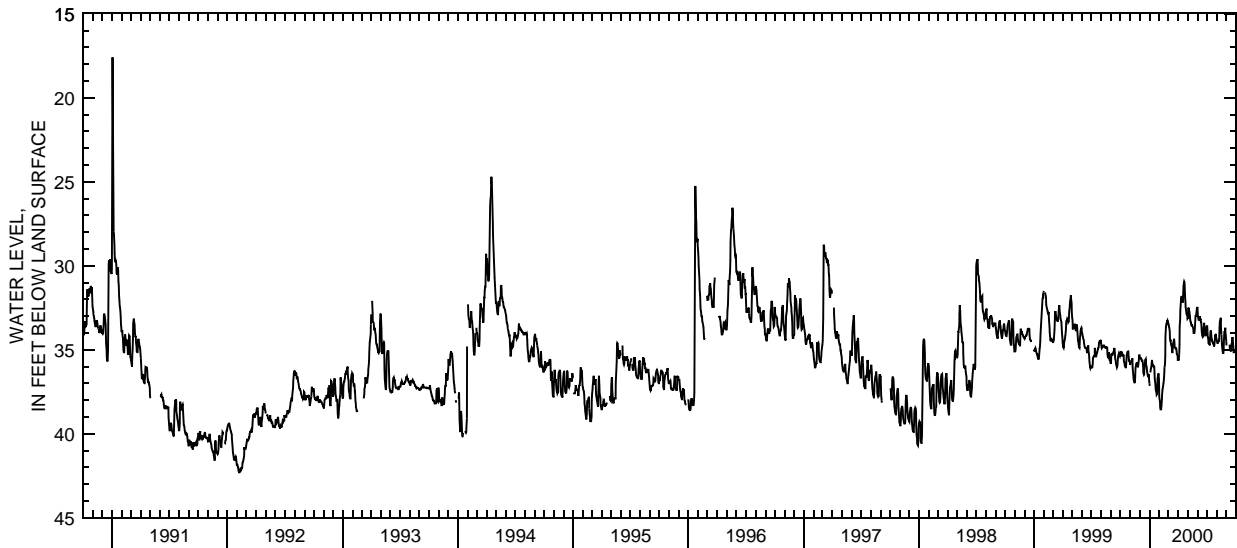
REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

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, 17.60 ft below land-surface datum, Jan. 2, 1991.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35.25	35.90	35.45	37.00	37.70	33.45	35.60	33.15	32.45	33.60	34.40	34.75
2	35.35	35.85	35.50	37.15	37.95	33.55	35.60	33.10	32.85	33.60	34.50	---
3	35.35	35.75	35.50	---	38.10	33.60	35.60	32.70	33.05	33.90	34.60	---
4	35.15	35.70	35.50	36.35	38.40	33.70	35.30	32.50	33.10	34.20	34.60	---
5	35.15	35.65	35.50	36.20	38.55	33.90	34.70	32.70	33.25	34.30	34.60	---
6	35.20	35.65	35.55	36.10	38.55	34.30	33.60	32.75	33.20	34.60	34.50	---
7	35.30	35.55	35.60	36.00	38.55	34.45	33.20	32.75	33.15	34.60	34.50	---
8	35.30	35.55	35.65	35.80	38.35	34.45	32.65	33.00	33.00	34.65	34.50	---
9	35.35	36.05	35.65	35.60	37.95	34.65	32.35	33.15	33.20	34.70	34.35	---
10	35.35	36.40	35.65	35.80	37.70	34.70	31.95	33.30	33.20	34.70	33.65	---
11	35.35	36.60	35.80	35.90	37.45	34.80	32.00	33.40	33.15	34.30	33.35	34.70
12	35.60	36.75	36.00	35.95	37.35	34.85	31.80	33.40	33.35	34.00	33.35	34.95
13	35.75	36.85	36.40	35.95	37.20	35.15	32.05	33.55	33.40	33.90	33.15	35.00
14	35.85	36.95	36.50	36.00	37.05	35.15	32.10	33.55	33.75	33.90	33.10	35.05
15	35.95	36.95	36.45	36.00	37.00	34.90	32.15	33.50	33.95	34.10	33.70	35.10
16	36.00	36.90	36.20	36.00	36.70	34.60	32.15	33.60	34.15	34.30	34.10	35.00
17	36.05	36.40	36.00	36.40	36.35	34.55	31.60	33.65	34.20	34.45	34.50	34.70
18	36.05	36.10	35.80	36.70	36.05	34.50	31.20	33.70	34.25	34.45	34.70	34.65
19	35.95	35.95	35.60	36.95	35.90	34.35	31.00	33.75	34.20	34.55	35.00	34.50
20	35.55	35.85	35.55	37.15	35.40	34.55	30.95	34.00	33.90	34.60	35.10	34.25
21	35.35	35.80	35.70	37.35	34.25	34.85	31.00	34.00	33.65	34.65	35.20	34.50
22	35.25	35.80	35.95	37.50	33.65	34.90	31.15	34.00	33.40	34.70	35.20	34.65
23	35.15	35.80	36.00	37.55	33.55	34.90	31.90	33.95	33.60	34.70	34.90	35.00
24	35.15	35.90	36.15	37.65	33.45	34.90	32.15	33.70	33.75	34.80	34.55	35.15
25	35.10	36.00	36.35	37.60	33.40	34.95	32.45	33.35	33.90	34.70	33.95	35.15
26	35.10	36.00	36.50	36.90	33.30	34.95	32.65	33.00	34.15	34.40	33.95	35.20
27	35.35	35.85	36.50	36.65	33.25	35.10	32.80	33.00	34.15	34.20	33.95	35.05
28	35.60	35.60	36.60	36.55	33.45	35.25	32.90	32.95	34.05	34.20	33.70	---
29	35.70	35.40	36.60	36.45	33.50	35.30	32.95	32.75	33.80	34.05	34.00	---
30	35.70	35.30	36.45	36.45	---	35.35	33.00	32.60	33.60	34.15	34.15	---
31	35.75	---	36.80	36.80	---	35.60	---	32.50	---	34.35	34.50	---
MAX	36.05	36.95	36.80	37.65	38.55	35.60	35.60	34.00	34.25	34.80	35.20	35.20
CAL YR 1999	LOW 36.95											
WTR YR 2000	LOW 38.55											



**GROUND-WATER RECORDS**  
**Wayne County**

**404655081553200. LOCAL NUMBER, WN-3**

LOCATION.—Latitude 40°46'55", longitude 81°55'32", Hydrologic Unit 05040003, OARDC-OSU Experiment Station near Wooster, Ohio. Owner: OARDC-OSU.

AQUIFER.—Shale of Mississippian Age.

WELL CHARACTERISTICS.—Drilled test water table well, diameter 8 in., depth 20 ft, cased.

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, Division of Water.

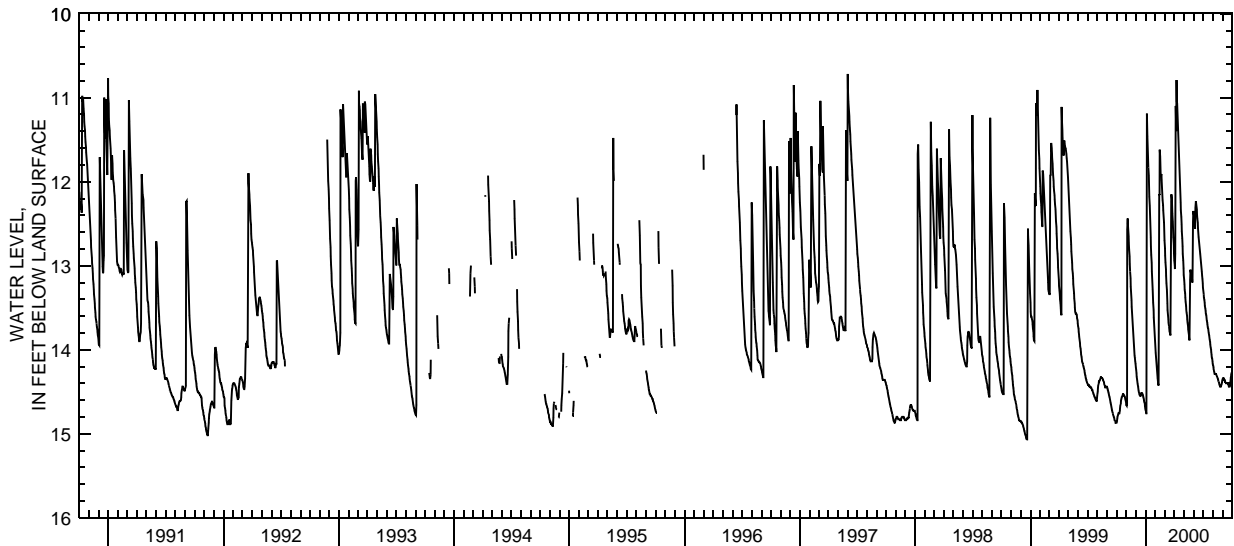
PERIOD OF RECORD.—June 1955 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 16.17 ft below land-surface datum, Jan. 27, 29, 1956; minimum daily low, 8.00 ft below land-surface datum, July 6, 1969.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.87	14.66	14.21	14.72	13.97	12.70	12.94	13.11	12.37	13.26	14.17	14.35
2	14.85	14.67	14.24	14.74	14.04	12.79	13.00	13.17	12.40	13.31	14.19	14.34
3	14.82	14.64	14.28	14.76	14.09	12.88	13.04	13.23	12.44	13.34	14.21	14.34
4	14.80	12.57	14.32	14.76	14.15	12.96	12.86	13.29	12.49	13.38	14.24	14.34
5	14.78	12.44	14.36	11.19	14.20	13.04	11.10	13.33	12.54	13.41	14.26	14.35
6	14.77	12.50	14.39	11.33	14.25	13.12	11.26	13.38	12.56	13.44	14.28	14.36
7	14.76	12.57	14.41	11.46	14.29	13.21	11.40	13.43	12.31	13.48	14.29	14.36
8	14.76	12.65	14.44	11.60	14.34	13.29	10.79	13.48	12.23	13.51	14.29	14.38
9	14.76	12.73	14.47	11.72	14.38	13.36	11.05	13.53	12.25	13.54	14.29	14.38
10	14.76	12.81	14.49	11.83	14.42	13.45	11.07	13.56	12.28	13.57	14.29	14.39
11	14.73	12.89	14.52	11.93	14.42	13.53	11.17	13.60	12.33	13.59	14.29	14.40
12	14.70	12.98	14.53	12.06	12.53	13.59	11.30	13.64	12.39	13.63	14.30	14.40
13	14.66	13.07	14.54	12.18	12.15	13.64	11.42	13.68	12.44	13.65	14.31	14.40
14	14.64	13.15	14.55	12.29	12.16	13.68	11.54	13.72	12.49	13.68	14.32	14.40
15	14.61	13.25	14.55	12.42	11.62	13.72	11.64	13.76	12.55	13.70	14.33	14.40
16	14.59	13.32	14.55	12.54	11.70	13.75	11.74	13.79	12.60	13.73	14.34	14.40
17	14.57	13.41	14.54	12.66	11.83	13.78	11.84	13.83	12.66	13.75	14.35	14.40
18	14.56	13.49	14.52	12.77	11.92	13.80	11.94	13.87	12.70	13.77	14.36	14.41
19	14.55	13.57	14.52	12.87	11.92	13.82	12.06	13.89	12.74	13.80	14.38	14.42
20	14.54	13.65	14.52	12.97	11.91	13.83	12.16	13.71	12.78	13.83	14.39	14.43
21	14.53	13.72	14.52	13.07	11.98	13.47	12.25	13.17	12.82	13.85	14.40	14.44
22	14.53	13.79	14.53	13.17	12.08	12.24	12.34	13.05	12.86	13.88	14.42	14.44
23	14.53	13.85	14.54	13.28	12.16	12.15	12.42	13.07	12.91	13.91	14.43	14.44
24	14.54	13.92	14.55	13.35	12.22	12.20	12.51	13.09	12.95	13.94	14.44	14.43
25	14.55	13.98	14.57	13.44	12.28	12.28	12.59	13.11	12.99	13.97	14.44	14.41
26	14.55	14.03	14.59	13.53	12.34	12.38	12.68	13.14	13.03	14.00	14.44	14.38
27	14.56	14.07	14.61	13.62	12.41	12.48	12.77	13.17	13.07	14.03	14.43	14.34
28	14.58	14.10	14.63	13.69	12.49	12.56	12.86	13.20	13.12	14.06	14.42	14.30
29	14.59	14.14	14.65	13.77	12.59	12.66	12.94	13.17	13.16	14.09	14.41	14.28
30	14.61	14.17	14.68	13.84	---	12.75	13.03	12.48	13.21	14.11	14.39	14.27
31	14.63	---	14.70	13.91	---	12.85	---	12.35	---	14.14	14.36	---
MAX	14.87	14.67	14.70	14.76	14.42	13.83	13.04	13.89	13.21	14.14	14.44	14.44

CAL YR 1999   LOW 14.87  
WTR YR 2000   LOW 14.87



GROUND-WATER RECORDS  
Wayne County

404802081583100. LOCAL NUMBER, WN-2A

LOCATION.—Latitude 40°48'02", longitude 81°58'31", Hydrologic Unit 05040003, in well field by Killbuck Creek near Wooster, Ohio. Owner: Wooster Water Department.

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, Division of Water.

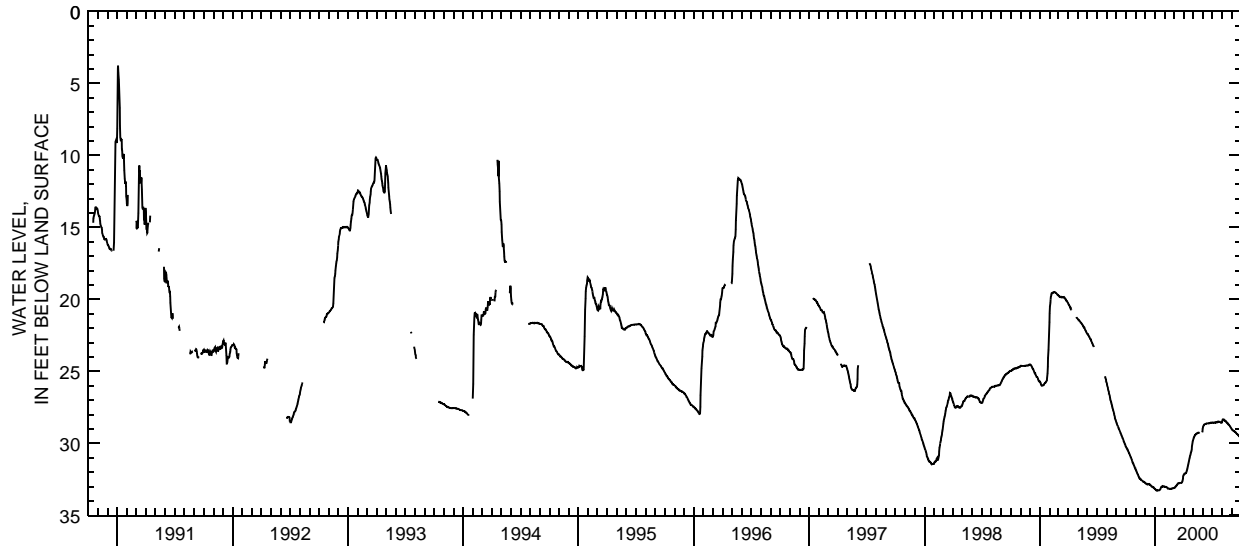
PERIOD OF RECORD.—July 1951 to current year.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.22	31.79	32.73	33.15	32.99	33.09	32.21	29.78	29.00	28.57	28.56	29.02
2	30.27	31.84	32.75	33.16	33.01	33.09	32.17	29.70	28.84	28.57	28.44	29.05
3	30.30	31.89	32.77	33.18	33.02	33.09	32.13	29.64	28.79	28.57	28.35	29.06
4	30.33	31.95	32.79	33.21	33.03	33.08	32.11	29.58	28.75	28.56	28.33	29.08
5	30.37	32.00	32.80	33.24	33.03	33.05	32.10	29.53	28.71	28.56	28.33	29.10
6	30.41	32.05	32.82	33.27	33.03	33.02	32.10	29.48	28.68	28.56	28.34	29.12
7	30.46	32.10	32.84	33.28	33.03	32.98	32.09	29.44	28.67	28.56	28.35	29.14
8	30.51	32.15	32.85	33.28	33.05	32.95	32.07	29.41	28.66	28.57	28.37	29.16
9	30.56	32.20	32.85	33.28	33.08	32.93	32.05	29.38	28.65	28.57	28.39	29.18
10	30.61	32.25	32.83	33.26	33.11	32.92	31.99	29.35	28.65	28.54	28.41	29.18
11	30.66	32.31	32.83	33.25	33.13	32.90	31.93	29.34	28.64	28.54	28.43	29.19
12	30.71	32.36	32.83	33.25	33.14	32.86	31.85	29.32	28.63	28.53	28.45	29.21
13	30.76	32.40	32.82	33.25	33.14	32.82	31.77	29.31	28.62	28.54	28.47	29.23
14	30.82	32.42	32.83	33.25	33.14	32.79	31.67	29.30	28.62	28.54	28.49	29.26
15	30.87	32.45	32.85	33.26	33.14	32.78	31.58	29.29	28.62	28.54	28.52	29.29
16	30.92	32.47	32.86	33.26	33.15	32.77	31.46	29.27	28.62	28.54	28.55	29.32
17	30.98	32.50	32.88	33.23	33.16	32.77	31.36	29.26	28.62	28.53	28.57	29.33
18	31.03	32.51	32.90	33.20	33.17	32.77	31.25	29.26	28.61	28.50	28.60	29.35
19	31.09	32.53	32.91	33.16	33.17	32.76	31.15	29.25	28.61	28.48	28.62	29.37
20	31.15	32.55	32.93	33.07	33.17	32.75	31.04	29.25	28.60	28.49	28.64	29.40
21	31.21	32.57	32.96	33.04	33.16	32.75	30.95	29.25	28.60	28.49	28.66	29.42
22	31.26	32.59	32.99	33.03	33.14	32.75	30.86	29.24	28.60	28.50	28.69	29.45
23	31.32	32.61	33.01	33.02	33.13	32.75	30.78	---	28.59	28.50	28.72	29.46
24	31.37	32.63	33.03	32.99	33.13	32.75	30.68	---	28.59	28.50	28.75	29.47
25	31.42	32.65	33.04	32.97	33.13	32.75	30.60	---	28.58	28.50	28.78	29.48
26	31.47	32.66	33.04	32.98	33.13	32.73	30.54	---	28.57	28.52	28.80	29.51
27	31.53	32.66	33.05	32.98	33.12	32.69	30.43	---	28.56	28.53	28.84	29.54
28	31.59	32.67	33.07	33.00	33.11	32.66	30.21	---	28.56	28.55	28.87	29.57
29	31.64	32.69	33.09	33.00	33.10	32.61	30.00	---	28.56	28.56	28.91	29.60
30	31.69	32.71	33.11	33.00	---	32.46	29.87	29.24	28.56	28.57	28.95	29.62
31	31.74	---	33.14	33.00	---	32.29	---	29.17	---	28.57	28.99	---
MAX	31.74	32.71	33.14	33.28	33.17	33.09	32.21	29.78	29.00	28.57	28.99	29.62

CAL YR 1999 LOW 33.14  
WTR YR 2000 LOW 33.28



**GROUND-WATER RECORDS**  
**Wayne County**

**405745081510200. LOCAL NUMBER, WN-7**

LOCATION.—Latitude 40°57'45", longitude 81°51'02", Hydrologic Unit 05040001, in well field along Steele Ditch near Sterling, Ohio. Owner: Rittman Water Department

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.

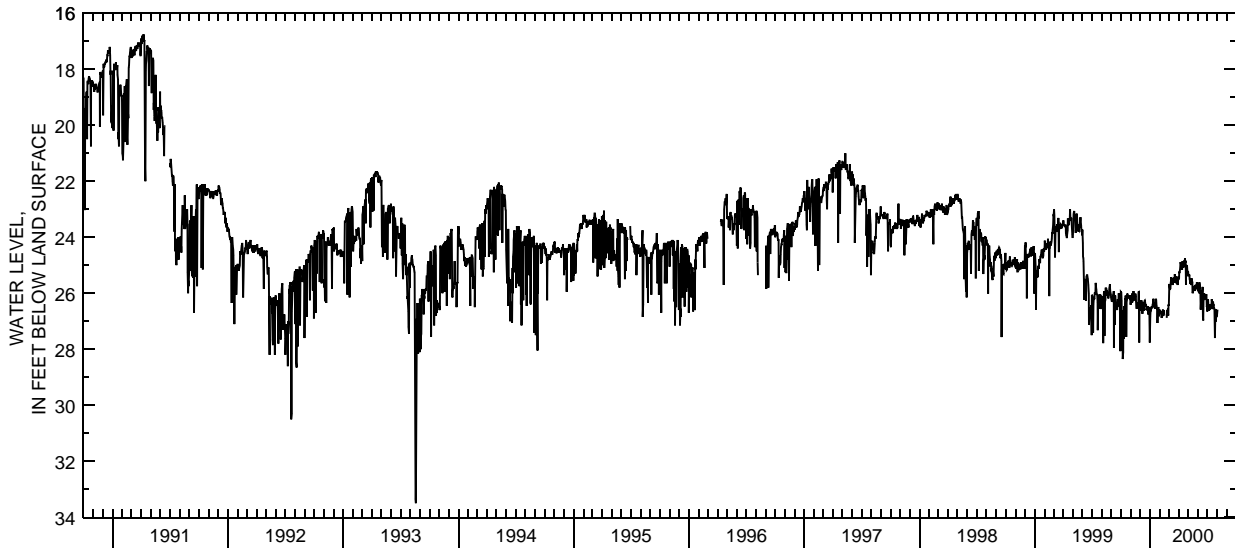
REMARKS.—Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.—April 1979 to current year.

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 BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.95	26.41	26.62	27.76	26.63	26.45	25.49	25.20	25.89	26.65	26.78	---
2	25.97	26.17	26.52	26.85	26.63	25.70	25.46	25.37	25.92	26.42	26.58	---
3	26.27	26.32	26.26	26.59	26.70	25.67	25.22	25.31	25.88	26.21	---	---
4	26.60	26.31	26.43	26.61	26.63	25.82	25.28	25.37	25.88	26.31	---	---
5	28.04	26.01	26.25	26.56	26.70	25.83	25.14	25.37	25.82	26.60	---	---
6	27.35	26.33	26.40	26.52	26.74	25.82	25.10	25.52	25.61	26.60	---	---
7	28.35	26.28	26.37	26.46	26.88	25.62	24.89	25.55	25.70	26.52	---	---
8	28.10	26.22	26.73	26.53	26.79	25.43	24.95	25.67	26.01	26.54	---	---
9	26.60	26.22	26.52	26.46	26.83	25.58	24.96	25.49	25.90	26.42	---	---
10	27.63	25.92	26.31	26.41	26.73	25.55	24.97	25.62	26.58	26.42	---	---
11	27.26	26.13	26.52	26.31	26.58	25.55	24.92	25.70	26.22	26.42	---	---
12	26.46	26.25	26.37	26.20	26.79	25.61	25.16	25.46	26.28	26.52	---	---
13	26.87	26.23	26.62	26.43	26.65	25.70	24.86	25.63	25.97	26.51	---	---
14	26.19	26.22	26.29	26.46	26.60	25.63	25.07	25.62	26.01	26.37	---	---
15	26.21	26.17	26.26	26.38	26.76	25.46	25.04	26.00	25.95	26.21	---	---
16	26.08	26.01	26.25	26.49	26.79	25.61	25.05	25.97	25.77	26.33	---	---
17	26.24	26.13	26.37	26.55	---	25.50	25.05	25.77	26.85	26.57	---	---
18	27.56	26.29	26.46	26.31	---	25.52	24.83	25.85	26.97	26.40	---	---
19	26.27	26.43	26.40	26.37	---	25.63	24.92	25.74	26.08	26.30	---	---
20	26.21	26.55	26.46	26.20	---	25.32	24.89	25.76	26.15	26.42	---	---
21	26.03	26.33	26.61	26.25	---	25.49	24.74	25.79	26.00	26.42	---	---
22	26.03	26.52	26.56	26.43	---	25.38	24.92	25.92	26.24	26.51	---	---
23	26.06	26.55	26.50	26.55	26.88	25.52	24.83	25.70	26.03	26.57	---	---
24	26.15	26.37	26.61	26.59	26.63	25.43	25.70	25.79	26.19	26.78	---	---
25	26.18	26.44	26.56	27.06	26.61	25.65	25.07	25.83	26.03	27.60	---	---
26	26.13	25.96	26.47	26.55	26.76	25.53	24.99	25.77	26.13	26.58	---	---
27	26.13	25.95	26.76	26.53	26.72	25.46	25.10	25.79	26.07	27.02	---	---
28	26.15	27.76	26.55	26.49	26.79	25.65	25.04	25.67	26.03	26.58	---	---
29	26.07	26.29	26.73	26.76	26.40	25.70	25.33	25.61	26.49	26.78	---	---
30	26.23	26.33	26.50	26.82	---	25.53	25.31	25.67	26.42	26.83	---	---
31	26.07	---	27.00	26.58	---	25.40	---	25.76	---	26.79	---	---
MAX	28.35	27.76	27.00	27.76	26.88	26.45	25.70	26.00	26.97	27.60	26.78	---
CAL YR 1999	LOW 28.35											
WTR YR 2000	LOW 28.35											



**GROUND-WATER RECORDS**  
**Wayne County**

**405805081462300. LOCAL NUMBER, WN-6**

LOCATION.—Latitude 40°58'05", longitude 81°46'23", 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, Division of Water.

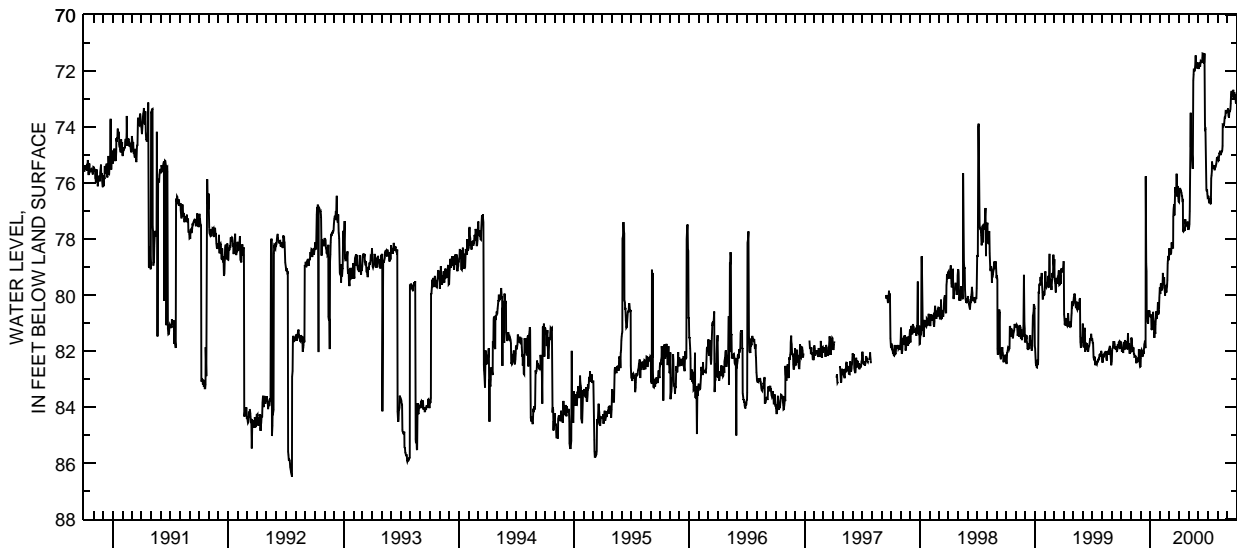
PERIOD OF RECORD.—May 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.—Maximum daily low, 92.80 ft below land-surface datum, July 21, 1971; minimum daily low, 69.87 ft below land-surface datum, Apr. 22, 1984.

DEPTH BELOW LAND SURFACE (WATER LEVEL), FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81.70	81.92	82.55	80.76	79.79	78.33	76.68	77.50	71.87	76.52	75.12	73.44
2	81.86	81.52	82.28	80.68	79.96	78.57	76.46	77.55	71.80	76.51	75.15	73.38
3	82.02	81.58	82.02	80.76	79.62	78.55	76.27	77.57	71.93	76.46	75.19	73.34
4	81.89	81.78	82.04	80.77	79.58	78.34	76.18	77.47	71.84	76.52	75.20	73.46
5	81.92	81.82	81.97	81.24	79.68	78.40	76.22	77.01	71.69	76.68	75.18	73.59
6	81.97	81.95	82.00	81.18	79.83	78.55	76.24	75.37	71.76	76.67	74.97	73.66
7	82.07	82.03	82.17	81.22	79.70	78.49	76.27	73.89	71.84	76.65	74.92	73.55
8	81.87	81.92	82.18	81.21	79.77	78.26	76.32	73.49	71.71	76.67	74.95	73.41
9	81.79	81.87	82.16	80.81	79.48	78.12	76.33	74.69	71.66	76.55	74.85	73.47
10	81.67	82.10	81.99	80.60	79.21	78.32	76.47	74.95	71.69	76.73	74.94	73.41
11	81.93	82.11	82.10	80.85	79.52	78.29	76.44	75.02	71.69	76.73	74.98	73.36
12	81.93	82.20	81.94	80.98	79.57	78.29	76.63	74.84	71.71	75.83	74.98	73.16
13	81.60	82.19	81.77	81.35	79.40	78.34	76.62	75.19	71.63	75.73	74.92	72.84
14	81.78	82.17	81.72	81.53	79.36	77.20	77.71	75.42	71.52	75.59	74.87	72.76
15	81.73	82.17	81.63	81.42	79.72	76.92	77.73	75.49	71.37	75.23	74.89	72.71
16	81.67	82.19	81.84	81.30	79.87	76.77	77.69	72.33	71.38	75.38	74.83	72.87
17	81.65	82.33	81.90	81.39	80.02	77.14	77.60	72.13	71.65	75.42	74.68	72.91
18	81.87	82.43	75.76	81.06	79.71	77.13	77.65	71.95	71.67	75.47	73.90	72.91
19	81.91	82.29	78.88	80.73	79.69	76.30	77.71	71.95	71.73	75.43	73.91	72.78
20	81.92	82.27	79.15	80.58	79.79	76.15	77.64	72.01	71.68	75.39	73.93	72.67
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28	82.06	82.36	80.58	80.58	78.73	76.10	77.38	71.68	76.31	75.30	73.45	73.15
29	82.02	82.49	80.55	80.52	78.73	76.40	77.56	71.84	76.22	75.24	73.42	73.17
30	82.04	82.56	80.60	80.10	---	76.54	77.67	71.92	76.39	75.13	73.48	72.98
31	82.01	---	80.76	79.72	---	76.66	---	71.84	---	75.14	73.47	---
MAX	82.07	82.56	82.55	81.53	80.02	78.57	77.73	77.57	76.39	76.73	75.20	73.66

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## CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
<i>Length</i>		
inch (in.)	$2.54 \times 10^1$	millimeter
	$2.54 \times 10^{-2}$	meter
foot (ft)	$3.048 \times 10^{-1}$	meter
mile (mi)	$1.609 \times 10^0$	kilometer
<i>Area</i>		
acre	$4.047 \times 10^3$	square meter
	$4.047 \times 10^{-1}$	square hectometer
	$4.047 \times 10^{-3}$	square kilometer
square mile (mi <sup>2</sup> )	$2.590 \times 10^0$	square kilometer
<i>Volume</i>		
gallon (gal)	$3.785 \times 10^0$	liter
	$3.785 \times 10^0$	cubic decimeter
	$3.785 \times 10^{-3}$	cubic meter
million gallons (Mgal)	$3.785 \times 10^3$	cubic meter
	$3.785 \times 10^{-3}$	cubic hectometer
cubic foot (ft <sup>3</sup> )	$2.832 \times 10^1$	cubic decimeter
	$2.832 \times 10^{-2}$	cubic meter
cubic-foot-per-second day [(ft <sup>3</sup> /s) d]	$2.447 \times 10^3$	cubic meter
	$2.447 \times 10^{-3}$	cubic hectometer
acre-foot (acre-ft)	$1.233 \times 10^3$	cubic meter
	$1.233 \times 10^{-3}$	cubic hectometer
	$1.233 \times 10^{-6}$	cubic kilometer
<i>Flow</i>		
cubic foot per second (ft <sup>3</sup> /s)	$2.832 \times 10^1$	liter per second
	$2.832 \times 10^1$	cubic decimeter per
second		
	$2.832 \times 10^{-2}$	cubic meter per second
gallon per minute (gal/min)	$6.309 \times 10^{-2}$	liter per second
	$6.309 \times 10^{-2}$	cubic decimeter per
second		
	$6.309 \times 10^{-5}$	cubic meter per second
million gallons per day (Mgal/d)	$4.381 \times 10^1$	cubic decimeter per
second		
	$4.381 \times 10^{-2}$	cubic meter per second
<i>Mass</i>		
ton (short)	$9.072 \times 10^{-1}$	megagram or metric ton

*Sea level:* In this report “sea level” refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment for the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

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