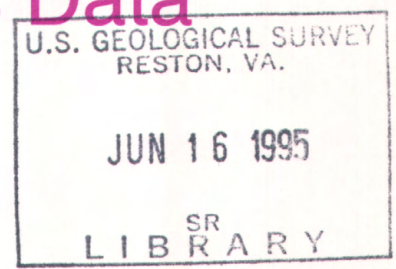


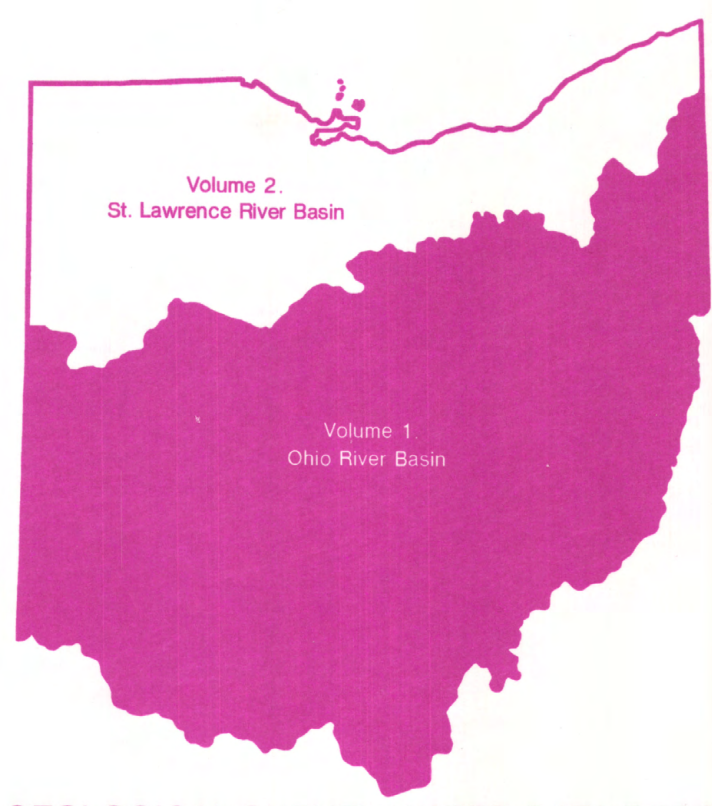
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Water Resources Data Ohio Water Year 1994



Volume 1. Ohio River Basin Excluding
Project Data



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OH-94-1
Prepared in cooperation with the State of Ohio
and with other agencies

CALENDAR FOR WATER YEAR 1994

1993

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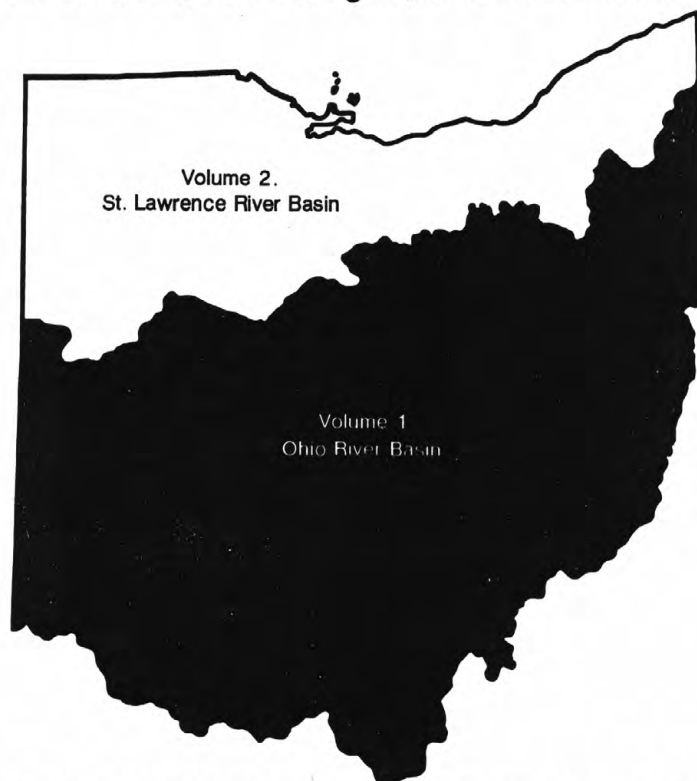
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Water Resources Data Ohio Water Year 1994

Volume 1. Ohio River Basin Excluding Project Data

by H.L. Shindel, J.P. Mangus, and L.E. Trimble



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OH-94-1
Prepared in cooperation with the State of Ohio
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

BRUCE BABBITT, Secretary

U. S. GEOLOGICAL SURVEY

Gordon Eaton, Director

Prepared in cooperation with the
State of Ohio
and with other agencies as listed
under cooperation

For additional information write to
District Chief, Water Resources Division
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975 West Third Avenue
Columbus, OH 43212
1995

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 provides 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
- Volume 2. St. Lawrence River Basin - 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.

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(Letter after station name designates type of data: (c) chemical, (d) discharge, (e) contents and (or) elevation, (HBM) hydrologic bench mark, (M) water-quality monitor, (m) micro-biological, (NASQAN) National stream-quality accounting network, (r) radiochemical, (s) miscellaneous sediment measurements, (S) daily suspended-sediment data, (t) temperature)

OHIO RIVER BASIN

Station Number		Page
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OHIO RIVER BASIN--Continued

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The following continuous-record surface-water discharge or stage-only stations (gaging stations) in Ohio have been discontinued. Daily streamflow or stage records were collected and published for the period of record, expressed in water years, shown for each station. Those stations with an asterisk (*) after the station number are currently operated as crest-stage partial-record stations. Discontinued project stations with less than 3 years of record 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.

[Letters after station name designate type of data collected: (d) discharge]

Station Name	Station Number	Drainage Area (mi ²)	Period of Record
MAHONING RIVER AT ALLIANCE (d)	03086500 *	89.2	1941-93
DEER CREEK AT LIMAVILLE (d)	03088000	33.2	1941-51
MAHONING RIVER NR DEERFIELD (d)	03088500	175	1923-31
WILLOW CREEK NR DEERFIELD (d)	03089000	11.6	1941-43
MILL CREEK NR BERLIN CENTER (d)	03089500	19.1	1941-71
MAHONING R BEL BERLIN DAM NR BERLIN CENTER (d)	03090500	248	1930-91
KALE CREEK NR PRICETOWN	03092000	21.9	1940-93
W B MAHONING R NR RAVENNA	03092090 *	21.8	1966-93
W B MAHONING R BEL MJ KERWIN DAM AT WAYLAND (d)	03092460	81.7	1968-91
W B MAHONING R NR NEWTON FALLS (d)	03092500	96.3	1926-81
DUCK CREEK AT LEAVITTSBURG (d)	03093500	32.3	1941-48
MAHONING RIVER AT WARREN (d)	03094500	594	1924-35
MOSQUITO C BEL MOSQUITO CREEK DAM NR CORTLAND (d)	03095500	97.5	1926-29
			1943-91
MOSQUITO CREEK AT NILES (d)	03096000	138	1929-51
MEANDER CREEK AT OHLESTOWN (d)	03096500	78.4	1926-29
MEANDER CREEK AT MINERAL RIDGE (d)	03097500	84.3	1929-51
MAHONING RIVER AT YOUNGSTOWN (d)	03098000	898	1921-82
MILL CREEK AT YOUNGSTOWN (d)	03098500	66.3	1943-71
MAHONING RIVER AT LOWELLVILLE	03099500	1073	1942-91
LISBON CREEK AT LISBON (d)	03109000	6.19	1946-62
STATELINE CREEK NR NEBLEY (d)	03109320	3.09	1977-78
YELLOW CREEK AT HAMMONDSVILLE (d)	03110500	164	1915-35
CONSOL RUN NR BLOOMINGDALE (d)	03110983	.98	1978-81
LITTLE MUSKINGUM R AT BLOOMFIELD (d)	03115400	210	1958-81
LITTLE MUSKINGUM R AT FAY (d)	03115500	258	1915-35
TUSCARAWAS RIVER AT CLINTON (d)	03116000	174	1926-78
CHIPPEWA CREEK AT EASTON (d)	03116200	146	1960-81
TUSCARAWAS R AT CRYSTAL SPRINGS (d)	03116500	435	1921-29
SANDY CREEK AT SANDYVILLE (d)	03119000	481	1923-47
MCGUIRE CR BEL LEESVILLE DAM NR LEESVILLE (d)	03120500 *	48.3	1938-91
INDIAN F BL ATWOOD DAM NR NEW CUMBERLAND (d)	03121500	70.0	1960-75
TUSCARAWAS R BL DOVER DAM NR DOVER (d)	03122500 *	1045	1924-91
SUGAR C AB BEACH CITY DAM AT BEACH CITY (d)	03123000	160	1945-75
SUGAR C BL BEACH CITY DAM NR BEACH CITY (d)	03124000 *	300	1939-91
HOME C NR NEW PHILADELPHIA (d)	03125000	1.64	1936-79
STILLWATER CR AT PIEDMONT (d)	03126000 *	122	1939-91
STILLWATER CR AT TIPPECANOE (d)	03127000 *	282	1939-91
STILLWATER CR AT URICHSVILLE (d)	03127500 *	367	1922-91
CLEAR FORK TRIB NR HANOVER (d)	03127970	.68	1978-81
L STILLWATER C BL TAPPAN DAM AT TAPPAN (d)	03128500 *	71.1	1939-91
BLACK F BL CHARLES MILLS DAM NR MIFFLIN (d)	03130000 *	217	1939-91
TOUBY RUN AT MANSFIELD (d)	03130500	5.44	1946-78
ROCKY FORK NR MANSFIELD (d)	03131000	39.0	1925-32
BLACK FORK AT LOUDONVILLE (d)	03131500 *	349	1931-91
CLEAR FORK AT BUTLER (d)	03132000	136	1945-75
CLEAR FORK AT NEWVILLE (d)	03132500	174	1934-39
CLEAR FORK BL PLEASANT HILL DAM NR PERRYSVILLE (d)	03133500 *	198	1939-91
JEROME FORK AT JEROMEVILLE (d)	03134000	120	1925-49
LAKE FORK BL MOHICANVILLE DAM (d)	03135000 *	271	1939-93
LAKE FORK NR LOUDONVILLE (d)	03135500	344	1931-39
MOHICAN RIVER AT GREER (d)	03136000	948	1921-82
N B KOKOSING R NR FREDERICKTOWN (d)	03136400	45.5	1973-78
KOKOSING RIVER AT MILLWOOD (d)	03137000	455	1921-74
WALHONDING R BL MOHAWK DAM AT NELLIE (d)	03138500 *	1505	1921-91
KILLBUCK CREEK AT LAYLAND (d)	03139500	503	1923-30
SENECA F BL SENECAVILLE DAM NR SENECAVILLE	03141500 *	118	1938-91
SALT FORK BL SALT F DAM NR CAMBRIDGE (d)	03142295	159	1970-81
WILLS CREEK AT BIRDS RUN (d)	03142500	730	1928-39
WILLS CR BL WILLS CREEK DAM AT WILLS CREEK (d)	03143500 *	842	1939-91

DISCONTINUED SURFACE-WATER STATIONS - OHIO RIVER BASIN

IX

Station Name	Station Number	Drainage Area (mi ²)	Period of Record
SAND FORK NR WAKATOMIKA (d)	03144400	1.34	1978-82
OPOSSUM RUN TR NR WAKATOMIKA (d)	03144450	1.27	1978-82
MUSKINGUM RIVER AT DRESDEN (d)	03144500	5,993	1921-84
RACCOON C AT GRANVILLE (d)	03145500	82.7	1939-48
NORTH FORK LICKING R AT UTICA (d)	03146000	116	1939-48
LICKING R AT TOBOSO (d)	03147000	672	1902
			1904-06
			1921-61
LICKING R BL DILLON DAM NR DILLON FALLS (d)	03147500 *	742	1939-91
MUSKINGUM R AT ZANESVILLE (d)	03148000	6,850	1939-55
SALT C NR CHANDLERSVILLE (d)	03149500	75.7	1935-47
MUSKINGUM R AT MCCONNELLSVILLE (d)	03150000	7422	1921-92
MEIGS CREEK NR BEVERLY (d)	03150250	136	1972-75
HUNTERS RN AT LANCASTER (d)	03156000	10.0	1956-80
HOCKING RN AT LANCASTER (d)	03156400	48.2	1956-74
HOCKING RN NR LANCASTER (d)	03156500	90.3	1923-32
CLEAR FORK NR LOGAN (d)	03158000	14.8	1942-47
HOCKING RIVER BELOW ATHENS (d)	03159510	957	1976-93
SANDY R AB BIG FOUR HOLLOW C NR LAKE HOPE (d)	03201600	.98	1970-81
BIG FOUR HOLLOW C BL E F NR LAKE HOPE (d)	03201660	.73	1978-81
BIG FOUR HOLLOW C NR LAKE HOPE (d)	03201700	1.01	1971-83
HULL HOLLOW C NR LAKE HOPE (d)	03201720	.22	1921-61
			1978-81
SANDY RUN NR LAKE HOPE (d)	03201800	4.99	1957-78
ZINNS RUN NR RADCLIFF (d)	03201929	3.41	1988-91
STRONGS RUN NR EWINGTON (d)	03201947	15.8	1988-91
SYMME C AT GETAWAY (d)	03205500	335	1938-47
SCIOTO R AT LARUE (d)	03217500	257	1926-35
			1938-51
L SCIOTO R AB MARION (d)	03218000	72.4	1938-71
L SCIOTO R AT STP NR MARION (d)	03218500	85.8	1926-35
			1938-39
L SCIOTO R NR MARION (d)	03219000	93.3	1923-25
			1939
EAGON RUN NR WARRENSBURG (d)	03219600	.123	1949-62
OLENTANGY R NR NEW WINCHESTER (d)	03222500	49.4	1946-49
WHETSTONE C NR SHAWTOWN (d)	03223500	61.8	1946-55
SHAW C AT SHAWTOWN (d)	03224000	25.4	1946-55
WHETSTONE C NR ASHLEY (d)	03224500	98.7	1954-74
OLENTANGY R AT DELAWARE (d)	03226000	421	1921-23
OLENTANGY R AT STRATFORD (d)	03226500	445	1934-35
			1938-58
OLENTANGY R NR WORTHINGTON (d)	03226800	497	1955-84
RUSH RUN AT WORTHINGTON (d)	03226865	1.65	1978-81
LINWORTH RD C AT COLUMBUS (d)	03226870	2.03	1978-81
BETHEL ROAD C AT COLUMBUS (d)	03226875	.22	1978-81
OLENTANGY R AT HENDERSON RD AT COL (d)	03226885	518	1978-81
SCIOTO BIG RUN AT BRIGGS DALE (d)	03228000	11.0	1946-58
ALUM CR AT KILBOURNE (d)	03228750	64.9	1973-82
SCIOTO RIVER NR CIRCLEVILLE (d)	03230000	2,638	1939-56
SCIOTO RIVER AT CIRCLEVILLE (d)	03230700	3,217	1973-79
DEER C AT MT STERLING (d)	03230800	228	1966-81
DEER C AT WILLIAMSPORT (d)	03231000 *	333	1926-35
			1938-56
			1962-91
PAINT C NR GREENFIELD (d)	03232000	249	1926-35
			1939-56
			1966-81
RATTLESNAKE C AT CENTERFIELD (d)	03232300	209	1971-81
PAINT C BL PAINT CREEK DAM NR BAINBRIDGE (d)	03232470 *	570	1963-91
SALT C AT TARLTON (d)	03235000	11.5	1946-61
TAR HOLLOW C AT TAR HOLLOW STATE PARK (d)	03235500	1.35	1946-78
SALT C NR LONDONDERRY (d)	03236000	286	1938-50
L SALT C NR JACKSON (d)	03236500	76.1	1925-32
L MIAMI R NR SELMA (d)	03239000	48.9	1952-58
N F L MIAMI R NR PITCHIN (d)	03239500	28.9	1952-58
N F MASSIE C AT CEDARVILLE (d)	03240500	28.9	1954-68
S F MASSIE C NR CEDARVILLE (d)	03241000	17.1	1954-68

DISCONTINUED SURFACE-WATER STATIONS - OHIO RIVER BASIN

Station Name	Station Number	Drainage Area (mi ²)	Period of Record
L MIAMI R AT SPRING VALLEY (d)	03242000	360	1925-35 1939-51
L MIAMI R NR SPRING VALLEY(d)	03242050	366	1968-83
CAESAR C NR XENIA (d)	03242150	71.4	1900 1968-83
ANDERSON F NR NEW BURLINGTON (d)	03242200	77.8	1968-83
CAESAR C AT HARVEYSBURG (d)	03242300	209	1960-75
CAESAR C NR WELLMAN (d)	03242350	239	1965-74
L MIAMI R NR FORT ANCIENT (d)	03242500	680	1939-51
TODD FORK NR WILMINGTON (d)	03243000	22.2	1923 1942-44
COWAN C NR WILMINGTON (d)	03243500	32.0	1942-50
TODD FORK NR ROACHESTER (d)	03244000	219	1952-74
E F L MIAMI R NR DODSONVILLE (d)	03246000	91.4	1947-48
E F L MIAMI R NR MARATHON (d)	03246200	195	1968-83
E F L MIAMI R AT WILLIAMSBURG (d)	03246500	237	1949-53 1960-74
E F L MIAMI R NR BANTAM (d)	03247000	330	1948-53
SHAYLER RUN NR PERINTOWN (d)	03247400	11.8	1968-73
L MIAMI R AT PLAINVILLE (d)	03248000	1,713	1965-71
MILL C AT READING (d)	03255500	73.0	1939-91
W F MILL C AT MT HEALTHY (d)	03256000	7.90	1949-53
W F MILL C NR GREENHILLS (d)	03257000	29.9	1945-53
W F MILL C AT WOODLAW (d)	03257500	32.2	1952-83
W F MILL C AT LOCKLAND (d)	03258000	35.6	1938-57
STONY C NR DEGRAFF (d)	03260800	59.1	1957-75
G MIAMI R AT QUINCY (d)	03261000	405	1946-49
G MIAMI R AT PIQUA (d)	03262500	866	1914-17
GREENVILLE C NR GREENVILLE (d)	03263500	142	1929-31
STILLWATER R AT COVINGTON (d)	03264500	437	1930-35
MAD R AT TREMONT CITY (d)	03267500	264	1931-33 1965-74
CHAPMAN C AT TREMONT CITY (d)	03267600	24.0	1967-69
MOORE RUN NR EAGLE CITY (d)	03267700	18.2	1965-72
MAD RIVER AT EAGLE CITY (d)	03267800	307	1965-71
BUCK C NR NEW MOOREFIELD (d)	03267950	30.5	1967-76
E F BUCK C NR NEW MOOREFIELD (d)	03267960	28.7	1967-76
BUCK C AT NEW MOOREFIELD (d)	03268000	65.3	1942-58
BEAVER C NR SPRINGFIELD (d)	03268500	39.2	1942-58 1972-76
BUCK C AT SPRINGFIELD (d)	03269000	139	1914-21 1924-49 1973-74
WOLF C AT TROTWOOD (d)	03270800	22.7	1962-84
SEVENMILE C AT COLLINSVILLE (d)	03272800	120	1960-62
SEVENMILE C AT SEVENMILE (d)	03273000	135	1914-20
FOURMILE C NR HAMILTON (d)	03273500	307	1937-60
G MIAMI R AT VENICE (d)	03274500	3,789	1915-27 1932-33

DISCONTINUED SURFACE-WATER-QUALITY STATIONS - OHIO RIVER BASIN

XI

The following stations were discontinued as continuous-record surface-water-quality stations prior to the 1991 water year. Daily records of temperature, specific conductance, pH, dissolved oxygen or sediment were collected and published for the record shown for each station.

Station Name	Station Number	Drainage Area (mi ²)	Type of Record	Period of Record
BEECH CREEK NR BOLTON	03087000		Temp.	1043-56
BEECH CREEK NR BOLTON	03087000	17.4	Temp.	1943-51
MAHONING R AB DUCK C AT LEAVITTSBURG	03093800	542	Temp., S.C., D.O., pH	1968-81
MAHONING RIVER AT WARREN	03094500	594	Temp.	1924-35
MAHONING RIVER AT LOWELLVILLE	03099500	1,073	Temp.	1953-61
			Temp., S.C., D.O., pH	1963-67
MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE	03099510	1,075	Temp., S.C., D.O., pH	1967-91
OHIO RIVER AT STRATTON	03110700	23,500	Temp.	1961
			S.C.	1964-70
CONSOL RUN NR BLOOMINGDALE	03110983	.98	Sed.	1979-81
TUSCARAWAS R AT NAVARRE	03117100	534	Temp., S.C., D.O., pH	1968-84
			Temp., S.C., D.O., pH	1987-91
BLACK FORK AT LONDONVILLE	03131500	349	Temp., S.C., D.O., pH	1968-76
SAND FORK NR WAKATOMIKA	03144400	1.34	Sed.	1978-81
NORTH FORK LICKING R AT UTICA	03146000	116	Temp.	1970-73
LICKING R NR NEWARK	03146500	537	Temp.	1962-68
			Temp., S.C., D.O., pH	1968-80
MUSKINGUM R AT PHILO	03149200	7,196	Temp., S.C., D.O., pH	1965-74
MUSKINGUM R NR BEVERLY	03150300	7,626	Temp.,	1963-70
			S.C.	1964-70
B. HUNTERS RUN NR HOOKER	03155900	104	Sed.	1956-62
HOCKING RIVER AT ATHENS	03159500	943	Temp.	1954-64
			Cond.	1964-65
			Sed.	1956-65
HOCKING RIVER BELOW ATHENS	03159510		Temp., S.C., D.O.	1966-72
			Temp., S.C., D.O., pH.	1972-80
SANDY R AB BIG FOUR HOLLOW C NR LAKE HOPE	03201600	98	Temp., S.C., pH.	1971-78
BIG FOUR HOLLOW C NR LAKE HOPE	03201700	1.01	Temp., S.C., pH.	1971-83
			Sed.	1978-83
SANDY RUN NR LAKE HOPE	03201800	4.99	Temp., S.C., D.O.	1970-78
RACCOON CREEK AT ADAMSVILLE	03202000	585	Temp., S.C., D.O., pH.	1967-84
			Sed.	1969-74
				1985
WHETSTONE C NR ASHLEY	03224500	98.7	S.C.	1964-68
OLENTANGY R NR WORTHINGTON	03226800	497	Temp.	1955-68
			Sed.	1978-81
RUSH RUN AT WORTHINGTON	03226865	1.65	Sed.	1978-81
LINWORTH RD C AT COLUMBUS	03226870	2.03	Sed.	1978-81
BETHEL ROAD C AT COLUMBUS	03226875	.22	Sed.	1978-81
OLENTANGY R AT HENDERSON RD AT COL	03226885	518	Sed.	1978-81
ALUM CR AT AFRICA	03228805	122	Temp., S.C.	1965-70
SCIOTO RIVER BL SHADEVILLE	03229600	2,266	Temp., S.C., D.O.	1965-80
			pH	1971-80
PAINT C NR GREENFIELD	03232000	249	Temp.	1974-78
RATTLESNAKE C AT CENTERFIELD	03232300	209	Temp.	1974-78
SALT C NR LONDONDERRY	03235995	268	Temp.	1973-74
SCIOTO RIVER AT LUCASVILLE	03237100	6,178	Temp.	1956-74
			S.C.	1965-74
MIAMI R NR SELMA	03239000	48.9	Temp., Sed.	1952-58
N F L MIAMI R NR PITCHIN	03239500	28.9	Temp., Sed.	1952-58
N F MASSIE C AT CEDARVILLE	03240500	28.9	Temp., Sed.	1954-68
S F MASSIE C NR CEDARVILLE	03241000	17.1	Temp., Sed.	1954-68
L MIAMI R NR SPRING VALLEY	03242050	366	Temp., S.C., D.O., pH	1968-80
CAESAR C AT HARVEYSBURG	03242300	209	Temp., S.C.	1970-75
TODD FORK NR ROACHESTER	03244000	219	Temp., Sed.	1952-58
L MIAMI R AT MIAMIVILLE	03245300	1,189	Temp., S.C., D.O., pH	1970-75
L MIAMI R AT MILFORD	03245500	1,203	Temp., S.C., D.O., pH	1975-84
			Sed.	1978-84
E F L MIAMI R AT WILLIAMSBURG	03246500	237	Temp., S.C.	1970-75
G MIAMI R AT TIPP CITY	03262745	970	Temp., S.C., D.O., pH	1978-80
MAD RIVER AT EAGLE CITY	03267800	307	Temp., Sed.	1965-69
BUCK C AT NEW MOOREFIELD	03268000	65.3	Temp., S.C.	1970-76
MAD RIVER NR DAYTON	03270000	635	Temp., S.C., D.O., PH	1968-80
G MIAMI R NR STEWART ST AT DAYTON	03271075	2,587	Temp., S.C., D.O., PH	1978-80
G MIAMI R NR MIAMISBURG	03271600	2,715	Temp., S.C., D.O., pH	1964-78
G MIAMI R AT ROCKDALE	03272410	3,275	Temp., S.C., D.O., pH	1978-80
G. MIAMI R AT NEW BALTIMORE	03274600	3,814	Temp., S.C.	1966
			Temp., S.C., D.O.	1968-82
			pH	1975-82
G MIAMI R AT ELIZABETHTOWN	03276600	5,356	Temp.	1956-74
			S.C.	1964-74

(Letter after station location designates type of data: (c) chemical, (l) water level.)

<u>Well Number</u>	<u>Local Number</u>	<u>Location</u>	<u>Page</u>
ASHLAND COUNTY			
405303082170700	AS-2	Ashland (l)	184
405425082173000	AS-3	Jerome Fork (l)	185
ATHENS COUNTY			
392004082071600	AT-2A	Athens (l)	186
392009082072200	AT-5	Athens (l)	187
AUGLAIZE COUNTY			
403233083574500	AU-3	Southwest of New Hampshire (l)	188
BELMONT COUNTY			
400118081082200	B-3	Mount Olivett (l)	189
BROWN COUNTY			
385932083412400	BR-20	Fincastle (l)	190
BUTLER COUNTY			
391805084261800	BU-9	Northwest of Sharonville (l)	191
391904084371800	BU-12	East of Ross (l)	192
392017084345200	BU-7	Fairfield (l)	193
392048084311400	BU-8	East of Hamilton (l)	194
392445084333000	BU-36	Hamilton (c)	195
393202084241500	BU-15	Middletown (l)	196
392733084293000	BU-16	Wayne (l)	197
392743084295500	BU-17	Trenton (l)	198
392939084231700	BU-3	Middletown (l)	199
393103084240900	BU-2	Middletown (l)	200
CARROLL COUNTY			
403709081052800	C-1	North of Carrollton (l)	201
CHAMPAIGN COUNTY			
400638083453900	CH-3	Urbana (l)	202
CLARK COUNTY			
395639084012200	CL-9	New Carlisle (l)	203
395840083495200	CL-7	Northwest of Springfield (l)	204
COSHOCTON COUNTY			
401256081525100	CS-3	North of Conesville (l)	205
401735081523800	CS-2	Coshocton (l)	206
DARKE COUNTY			
400514084345700	D-2	East of Greenville (l)	207
DELAWARE COUNTY			
402126083040400	DL-3	Delaware (l)	208
FAIRFIELD COUNTY			
393450082403600	F-7	Southeast of Amanda (l)	209
394257082362900	F-6	Lancaster (l)	210
394544082271000	F-1	West Rushville (l)	211
395053082361900	F-5	Baltimore (l)	212
FAYETTE COUNTY			
393153083322000	FA-1	West of Washington Court House (l)	213
FRANKLIN COUNTY			
394956083002700	FR-18	South of Shadeville (l)	214
395118082573300	FR-3	Southwest of Rees (l)	215
400101083021800	FR-10	Columbus (l)	216
GALLIA COUNTY			
383638082103300	G-2	East of Crown City (l)	217
GREENE COUNTY			
394330083531400	GR-11	Near Wilberforce (l)	218
394411083561300	GR-1	North of Xenia (l)	219
394425083551100	GR-10	North of Xenia (l)	220

(Letter after station location designates type of data: (c) chemical, (l) water level.)

<u>Well Number</u>	<u>Local Number</u>	<u>Location</u>	<u>Page</u>
HAMILTON COUNTY			
391039084291500	H-11	Cincinnati (l).....	221
391101084172100	H-3	Southeast of Miamiville (1).....	222
391201084281600	H-10	Cincinnati (1).....	223
391214084470100	H-1	Southeast of Harrison (1).....	224
391324084272500	H-9	Cincinnati (l).....	225
391341084275300	H-8	Wyoming (1).....	226
391442084262900	H-7	Evendale (1).....	227
391608084254400	H-6	Glendale (l).....	228
391733084392400	H-2	South of Ross (1).....	229
391748084393800	H-19	Southwest of Venice (c).....	230
391817084393300	H-4	Southwest of Ross (l).....	231
HARDIN COUNTY			
404218083503700	HN-1	Alger (1).....	232
HOCKING COUNTY			
393200082235300	HK-1	Logan (1).....	233
KNOX COUNTY			
402344082300700	K-1	Mt. Vernon (1).....	234
LICKING COUNTY			
400848082251100	LI-4	St. Louisville (1).....	235
LOGAN COUNTY			
401510083444400	LO-3	West Liberty (1).....	236
MADISON COUNTY			
395301083272200	M-2	London (l).....	237
395352083292100	M-5	Northwest of London (l).....	238
395357083304400	M-4	Northwest of London (l).....	239
395740083255700	M-3	North of London (l).....	240
MAHONING COUNTY			
410042080453800	MA-1	Canfield (l).....	241
MARION COUNTY			
403413083170500	MN-4	Southeast of New Bloomington (1).....	242
403443083230400	MN-1	LaRue (1).....	243
403601083110400	MN-2	West of Marion (1).....	244
MEDINA COUNTY			
410120081431800	MD-3	Wadsworth (l).....	245
MERCER COUNTY			
402833084375200	MR-2	Coldwater (l).....	246
MIAMI COUNTY			
395848084085500	MI-3	Northeast of Tipp City (l).....	247
400308084112900	MI-44	Troy (c).....	248
MONTGOMERY COUNTY			
393757084173600	MT-928	Miamisburg (c).....	249
394012084151700	MT-55	West Carrollton (l).....	250
394025084162800	MT-49	West Carrollton (l).....	251
394425084113200	MT-3	Dayton (l).....	252
394533084113800	MT-6	Dayton (l).....	253
394811084095000	MT-74	Dayton (l).....	254
MUSKINGUM COUNTY			
395804081593200	MU-1A	Zanesville (l).....	255
PICKAWAY COUNTY			
393327082571600	PK-7	South of Circleville (l).....	256
393402082572500	PK-4	South of Circleville (1).....	257
393638082572300	PK-6	Northwest of Circleville (l).....	258
393438083072200	PK-8	Williamsport (l).....	259
394742083094800	PK-9	Near Orient (1).....	260

(Letter after station location designates type of data: (c) chemical, (1) water level.)

<u>Well Number</u>	<u>Local Number</u>	<u>Location</u>	<u>Page</u>
PIKE COUNTY			
390359083015100	PI-2	West of Piketon (1).....	261
PORTAGE COUNTY			
411401081025000	PO-1	Windham (1).....	262
PREBLE COUNTY			
394438084335900	PR-2	East of Eaton (1).....	263
RICHLAND COUNTY			
404625082305100	R-4	Mansfield (1).....	264
ROSS COUNTY			
391341083172200	RO-7	West of Bainbridge (1).....	265
391913082580500	RO-8	Chillicothe (1).....	266
SHELBY COUNTY			
401707084103100	SH-5	Sidney (1).....	267
STARK COUNTY			
404939081203800	ST-5A	Canton (1).....	268
405211081253500	ST-27	North Canton (1).....	269
TRUMBULL COUNTY			
411604080505600	T-3	Near Warren (1).....	270
TUSCARAWAS COUNTY			
403207081293800	TU-3	Dover (1).....	271
403557081313600	TU-4	Strasburg (1).....	272
403653081321800	TU-1	North of Strasburg (1).....	273
403823081324200	TU-5	Near Strasburg (1).....	274
UNION COUNTY			
401826083255200	U-4	Southeast of Raymond (1).....	275
402010083321900	U-5	East of East Liberty (1).....	276
VINTON COUNTY			
391452082282900	V-1	McArthur (1).....	277
WARREN COUNTY			
392712084191700	W-5	East of Monroe (1).....	278
WASHINGTON COUNTY			
392553081281600	WA-2	Marietta (1).....	279
393241081353500	WA-3	Beverly (1).....	280
WAYNE COUNTY			
404655081553200	WN-3	Near Wooster (1).....	281
404802081583100	WN-2A	Near Wooster (1).....	282
405745081510200	WN-7	Near Sterling (1).....	283
405805081462300	WN-6	Rittman (1).....	284

VOLUME 1: OHIO RIVER BASIN
EXCLUDING PROJECT DATA

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 8a through 8b. The data in this report represent that part of the National Water Data 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 the 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, Open-File Reports Section, Box 25286, Mail Stop 517, 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-94-1". 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, Springfield, VA 22161. Beginning with the 1990 water year, all water-data reports will also be available on Compact Disc - Read Only Memory (CD-ROM). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc.

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) 469-5553. A limited number of CD-ROM discs will be available for sale by the U.S. Geological Survey, Map Distribution Section, Box 25286, Building 810, Federal Center, Denver, Colorado 80225 and (or) U.S. Geological Survey, Open-File Reports Section, Box 25286, Mail Stop 517, Denver, Colorado 80225.

COOPERATION

The USGS and agencies of the State of Ohio have had cooperative agreements for the collection of water-resource data since 1898. The following organizations assisted in collecting data in this report:

Ohio Department of Natural Resources, Frances Buchholzer, Director;
Ohio Department of Natural Resources; Natural Areas and Preserves, Ralph Ramey, Chief;
U.S. Air Force, Air Force Materiel Command, Air Force Guidance and Metrology Center,
Office of Environmental Management, Vincent A. Power, Chief;
Ohio Department of Transportation, Jerry H. Wray, Director;
Miami Conservancy District, J. L. Rozelle, General Manager and Chief Engineer;
City of Columbus Department of Public Service, J. R. Douth, Administrator;
City of Canton Water Department, J. D. Williams, Superintendent;
Ross County, James Kennard, Administrative Assistant;
Summit County, Jeffrey Lintern, Director, Environmental Services;

Seneca Soil and Water Conservation District, Norman Daniel, Board Chairman;
 Cuyahoga River Community Planning Organization, John Beeker;
 Northeast Regional Sewer District, E. J. Deal, Executive Director;
 City of Fremont, Warren Curtis, City Engineer;
 City of Akron, Linda Sowa, Administrator;
 Northeast Regional Sewer District, E. J. Deal, Executive Director;
 City of Lima, A. Godsey, City Sanitary Engineer;
 Eastgate Development and Transportation Agency, J. Wells, Environment Project Manager;
 U.S. Air Force, Air Force Materiel Command, 645 Air Base Wing, Office of Environmental Management, A. F. Sculimbrene, Director;
 Ohio State University, Ohio Agricultural Research and Development Center (OARDC), Professor Warren Dick;
 Ohio State University Research Foundation, Sharon Coulter, Associate Director;
 Washington County Board of Commissioners, Sandra Matthews, Commissioner;
 Geauga County, Board of Commissioners, Tony Gall, Neil C. Hofstetter and William M. Repke;
 U. S. Air Force, Air Force Materiel Command, Aeronautical Systems Center, Environmental Management Directorate, Restoration Branch, Susan A. Schmidt, Chief.

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. 1) 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 Plains section (fig. 1) 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 Plains section of the Interior Low Plateau province (fig. 1) 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. 1) 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. 1), successive waves of glaciation have subdued the relief, buried many precocial valleys, and rerouted many streams.

PRECIPITATION

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

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

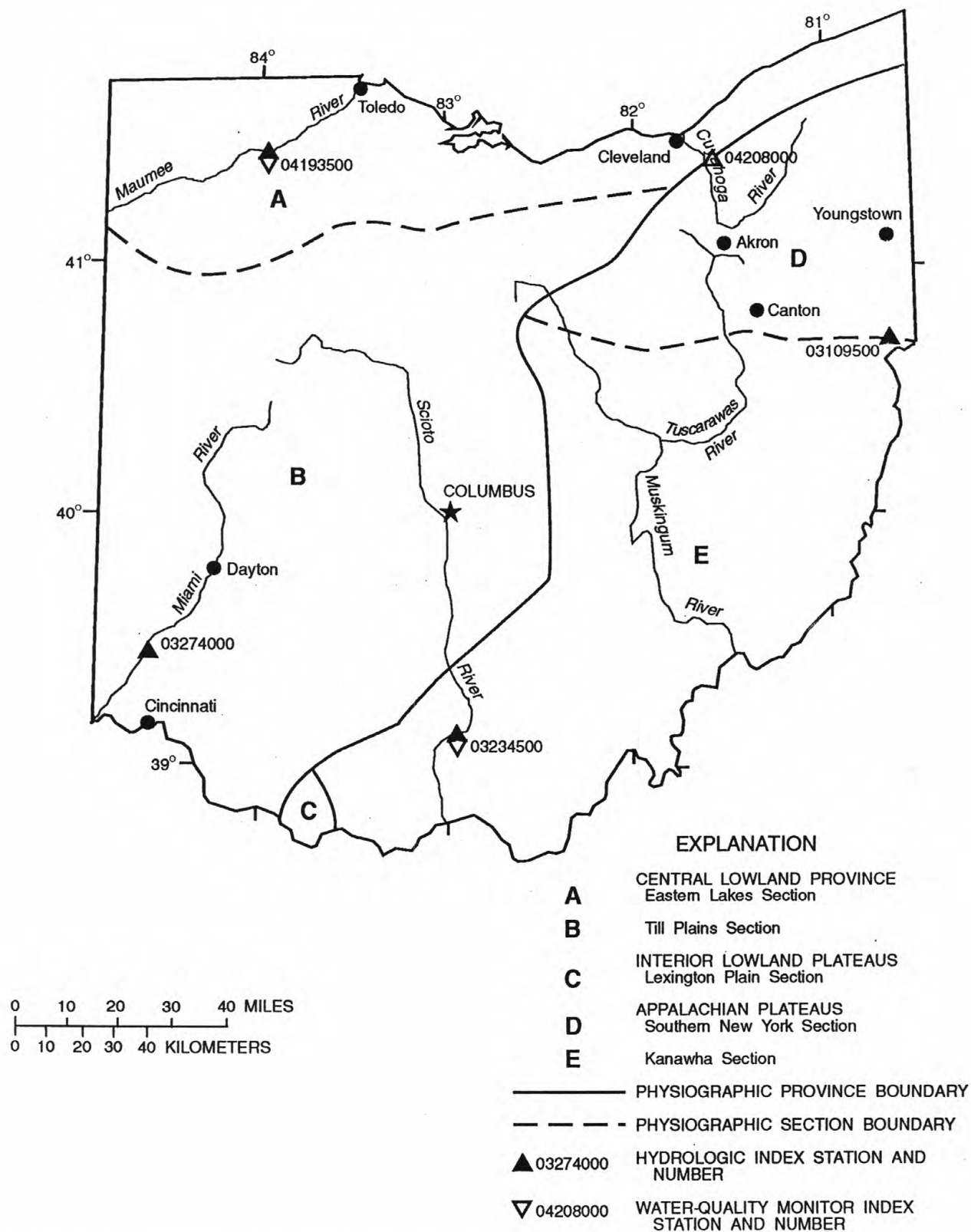


Figure 1. Physiographic divisions and location of Hydrologic Index Stations.

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 12 to 7,420 square miles and represent a wide diversity of topography and other physical characteristics. Streamflow ranges from unregulated to highly regulated.

Statewide Streamflow, Water Year 1994

At the beginning of the water year 1994, streamflow was deficient in parts of northeastern and south-central Ohio and in the normal¹ range in the remainder of the State. Above-normal precipitation during October and November brought flows to near normal statewide in October and caused excessive flows in southern Ohio in November. Near-record monthly flows were recorded at some gages in southwestern Ohio in November.

A decline in precipitation in December brought streamflow back to normal range statewide. In January, above-normal precipitation throughout Ohio caused excessive flows statewide except for northwestern Ohio, where streamflow remained in the normal range. Excessive flows prevailed in south-central Ohio during February, but below-normal precipitation caused a return to normal flows elsewhere.

Below-normal precipitation continued into March, causing a decline in streamflow into the deficient range in western Ohio; elsewhere, flows were normal. A return to normal precipitation in April resulted in near-normal flows statewide, a condition that prevailed throughout May and June except for northwestern Ohio, where flows declined into the deficient range in response to below-normal precipitation.

In July, streamflow remained normal for most of the State except for south-central Ohio, where above-normal precipitation caused streamflow to rise into the excessive range.

In August, streamflow was normal statewide and remained so until the end of the water year; the exception was northwestern Ohio, where below-normal precipitation caused streamflow to fall into the deficient range.

Water Quality

The USGS collects long-term water-quality data in Ohio at six fixed stations (fig. 1). Five National Stream Quality Accounting Network (NASQAN) stations are in major river basins in Ohio, and one Hydrologic Benchmark station is in a small, relatively pristine basin in southern Ohio. Samples are collected quarterly at four stations, every two months at one station, and every two months at the Benchmark station. Because of the fixed schedule, samples are collected at various streamflows (fig. 2). Samples are analyzed for major anions and cations, nutrients, trace elements, suspended sediment, selected physical properties, and fecal coliform and fecal streptococci.

Box plots of selected constituents measured from 1984 through 1993 are shown in figures 3a and 3b. Results of analysis of samples collected in water year 1994 are superimposed on the box plots and are represented by solid circles.

For the Little Miami River at Milford, streamflows were above the 75th percentile for two samplings and below the 25th percentile for one sampling. Chloride concentrations at this station reflect these extreme streamflows and follow the typical pattern found in most streams in Ohio: the two higher streamflows resulted in low chloride concentrations, whereas the low streamflow resulted in a high chloride concentration. In the lower Grand River Basin, chloride concentrations were lower than the extremely high concentrations found in the previous 10-year period. In this area, salt mining and processing and runoff from abandoned chemical industries may have contributed to high chloride concentrations in the past.

None of the streams sampled had nitrate concentrations above the maximum contaminant level for finished drinking water, 10 milligrams per liter (as N). In Ohio streams, runoff from agriculture is a major source of nitrate.

Agricultural runoff and municipal and industrial point discharges are the principal sources of phosphorus in Ohio. Increased phosphorus concentrations may lead to a high rate of production of plant materials in the water and eutrophication of the stream. Total phosphorus concentrations were greatest and most variable in the Little Miami, Maumee, and Sandusky Rivers. The basins drained by these rivers contain agricultural and urban lands that contribute runoff of agricultural chemicals and discharges from municipal and industrial point sources.

¹For streamflow, "normal" is defined as being between the 25th and 75th percentiles as measured during the base period water years 1961-90.

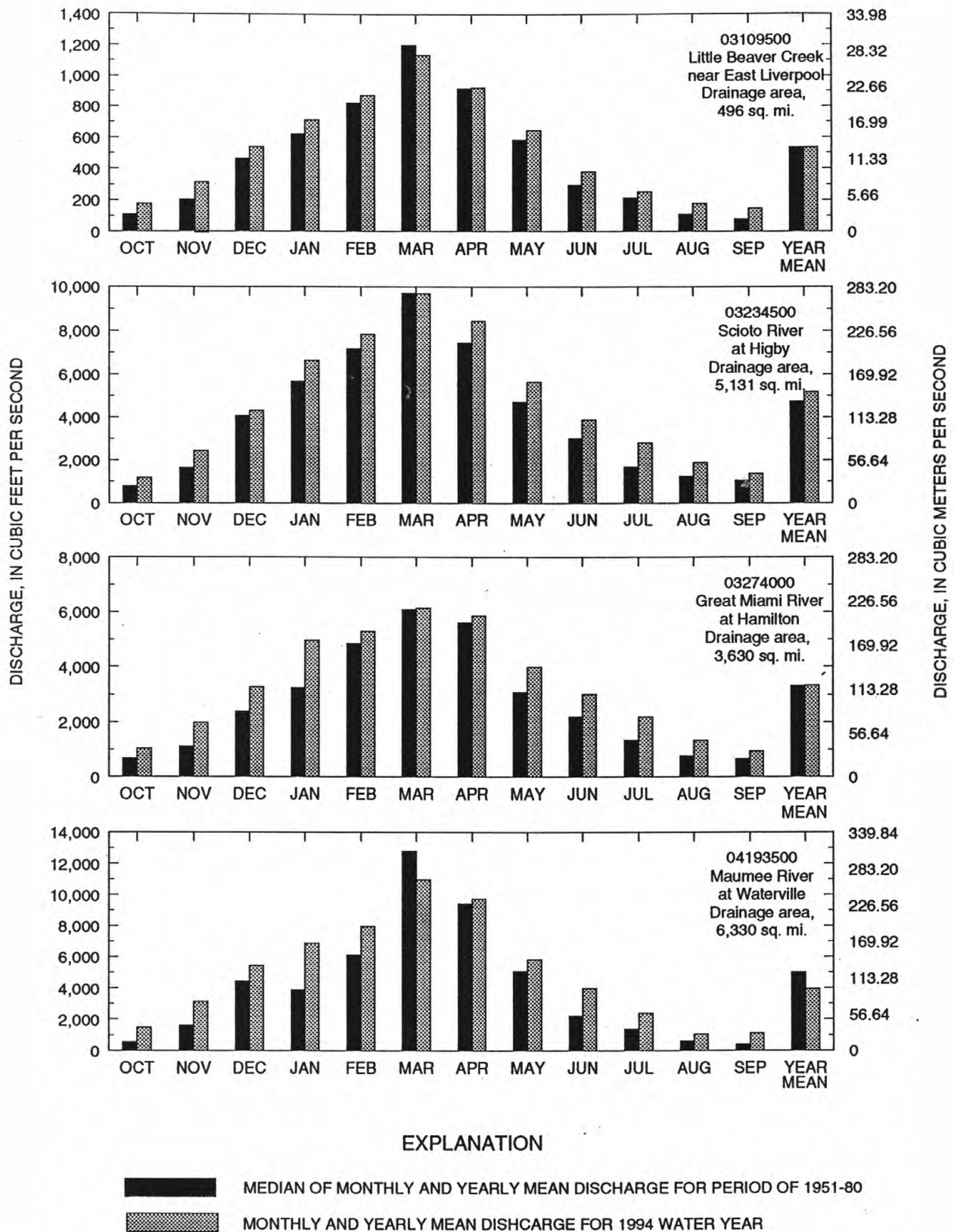


Figure 2. Discharge during 1994 water-year compared with median discharge for period 1951-80 for four representative gaging stations.

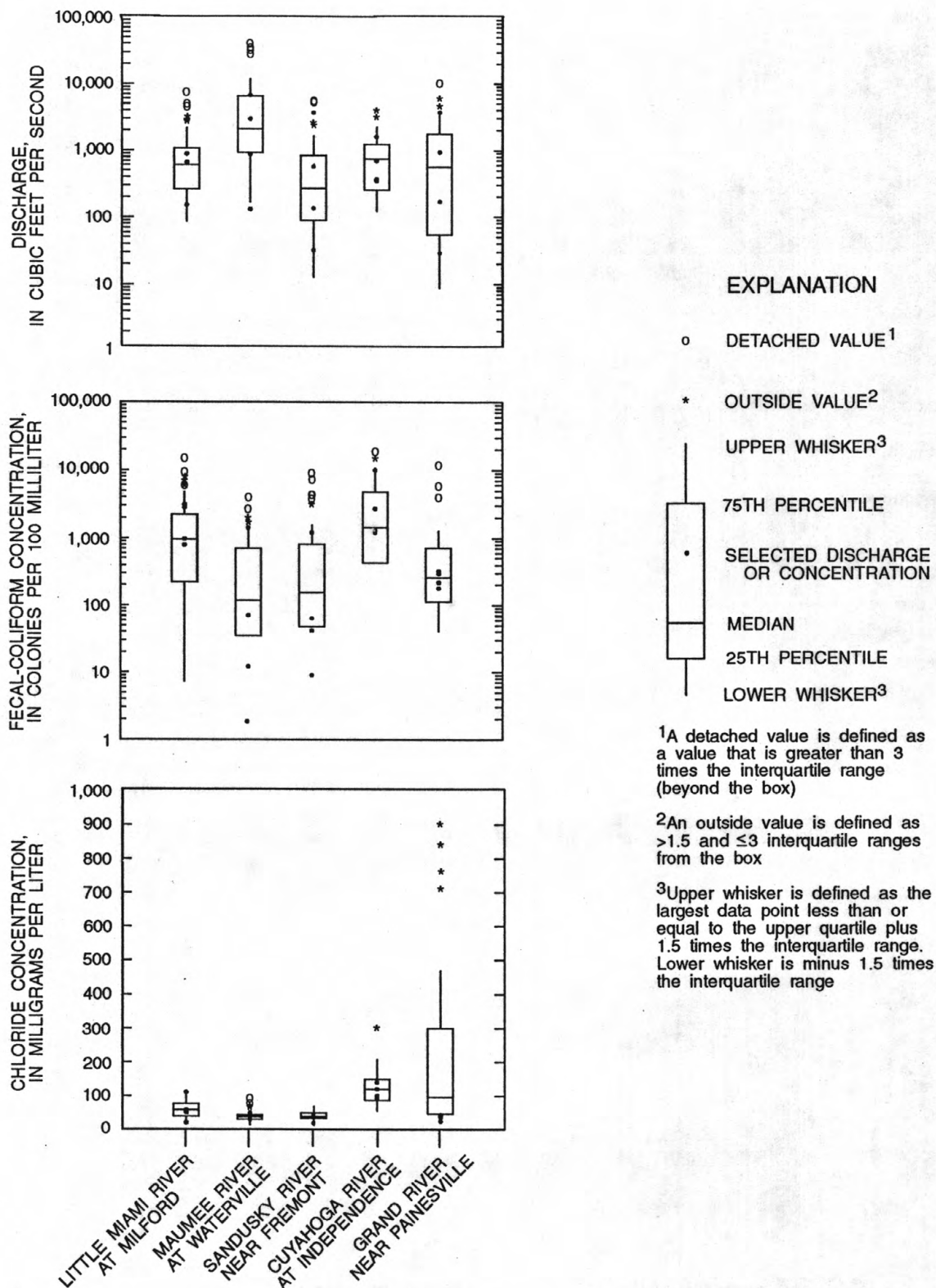


Figure 3a. Discharge, fecal-coliform, and chloride concentrations measured in water year 1994 and the distribution of those constituents from measurements made during water years 1984-1993 at NASQAN stations.

For the Little Miami and Cuyahoga Rivers, fecal coliform concentrations for water year 1994 were near or above the 10-year median concentrations. For the Grand River, fecal coliform concentrations for water year 1994 were similar to concentrations found in the previous 10-year period. Lower fecal coliform concentrations, however, were found in water year 1994 for the Maumee and Sandusky Rivers.

At the Grand River near Painesville dissolved solids concentrations were less than the median and the extremely high concentrations found in previous years. For all other sites, however, dissolved solids for water year 1994 were similar to concentrations found from 1984 through 1993.

GROUND WATER

Ground water serves the needs of 45 percent of Ohio's population. An estimated 658 million gallons of ground water per day is withdrawn for public supply, domestic, industrial, and agricultural purposes. Many people in Ohio depend on ground water as the only practical source of supply.

Ohio's unconsolidated aquifers are composed of either coarse- or fine-grained sediments. Both types are composed mainly of materials of glacial origin. The coarse-grained unconsolidated aquifers generally consist of highly permeable sand and gravel. Much of the sand and gravel is alluvium derived from glaciofluvial outwash along the courses of some modern streams; thus, these aquifers sometimes are referred to as "watercourse" aquifers. Coarse-grained unconsolidated aquifers in the northwestern corner of the State (fig. 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 1994 below-normal² ground-water levels prevailed throughout much of Ohio. Seasonal declines continued through November despite above-normal precipitation in October and November. Record lows were established at some wells in eastern Ohio.

There were net rises in ground-water levels throughout Ohio during December in response to precipitation in November, although levels remained below normal in eastern Ohio and near-normal elsewhere. In January and February, ground-water levels were generally stable but remained below normal in eastern Ohio and near to above normal in the western part of the State.

²For ground-water levels, "normal" is defined as being between the 25th and 75th percentiles of the range of values recorded during the reference period 1960-75.

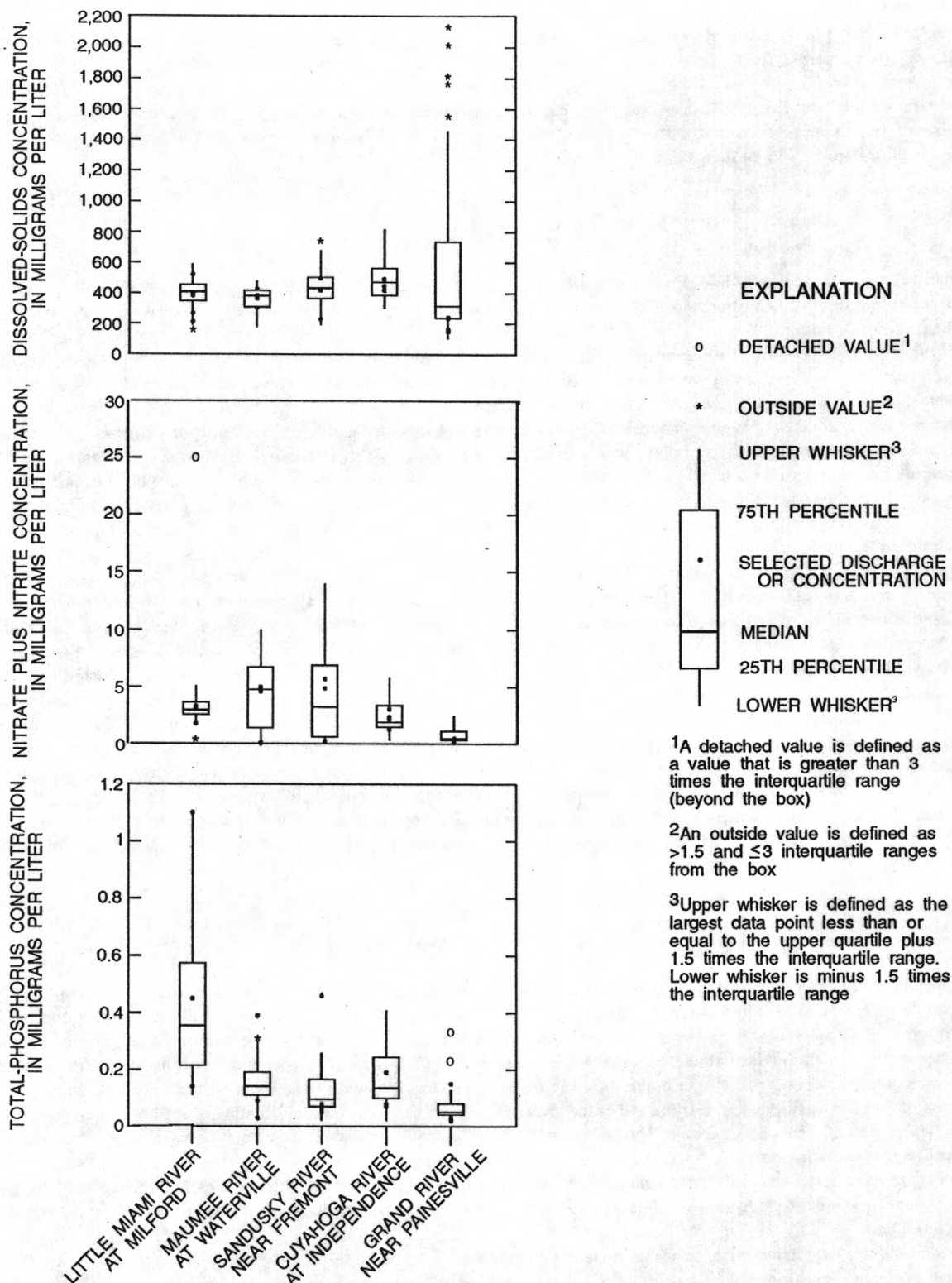


Figure 3b. Dissolved-solids, nitrate plus nitrite, and total-phosphorus concentrations measured in water year 1994 and the distribution of those constituents from measurements made during waters years 1984-1993 at NASQAN stations.

Ground-water levels showed some net rises in March but generally were below normal in response to below-normal precipitation. A return to above-normal precipitation in April caused rises throughout Ohio, although ground-water levels remained in the normal to below-normal range.

Water levels generally declined throughout the State during May through September; normal or below-normal water levels prevailed throughout much of the State. Near-record lows were established in eastern Ohio during September.

SPECIAL NETWORKS AND PROGRAM

Hydrologic Bench-Mark Network is a network of 53 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology (including water quality), related factors in representative undeveloped watersheds nationwide, and to describe conditions in basins more obviously affected by human activities.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the USGS to meet many of the information needs of government agencies and other groups involved in national or regional water-quality planning and management. The 284 sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the USGS Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) to describe the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) to detect changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) to provide a nationally consistent data base useful for water-quality assessment and hydrologic research.

The National Trends Network (NTN) is a 150-station network for sampling atmospheric deposition in the United States. The purpose of the network is to determine the variability, both in location and in time, of the composition of atmospheric deposition, which includes snow, rain, dust particles, aerosols, and gases. The core from which the NTN was built was the already-existing deposition-monitoring network of the National Atmospheric Deposition Program (NADP).

The National Water-Quality Assessment (NAWQA) Program of the USGS is a long-term program with goals to describe the status and trends of water-quality conditions for a large, diverse, and geographically distributed part of the Nation's ground- and surface-water resources, and to identify, describe, and explain the major natural and human factors that affect these observed conditions and trends.

Assessment activities have begun in more than two-thirds of the study units and ultimately will be conducted in 60 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for the aggregation and comparison of findings to address water-quality issues of regional and national interest.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Tritium network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

EXPLANATION OF THE RECORDS

The records in this report are for the 1994 water year that began October 1, 1993, and ended September 30, 1994. 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.

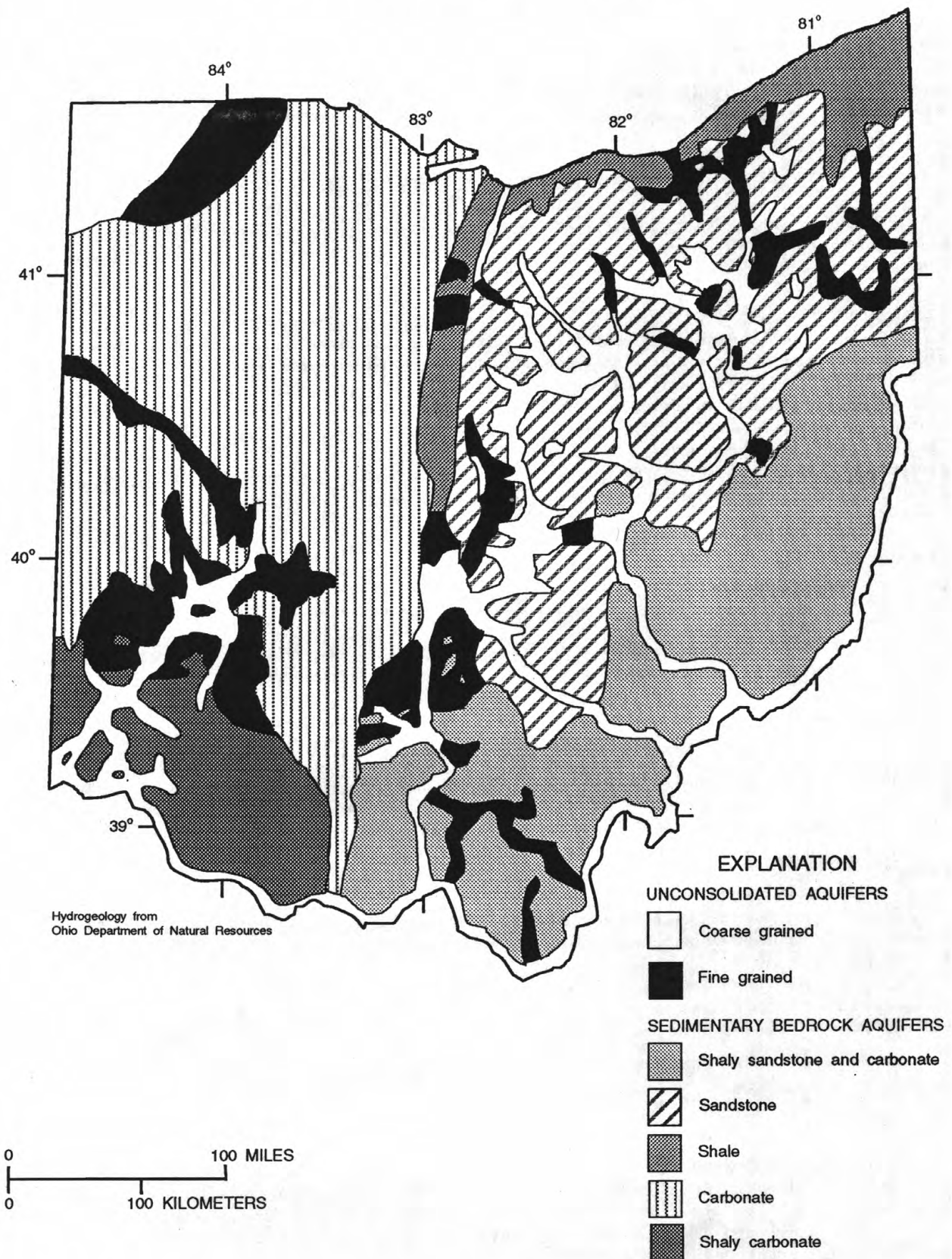


Figure 4. Geographic distribution of principal aquifers in Ohio.

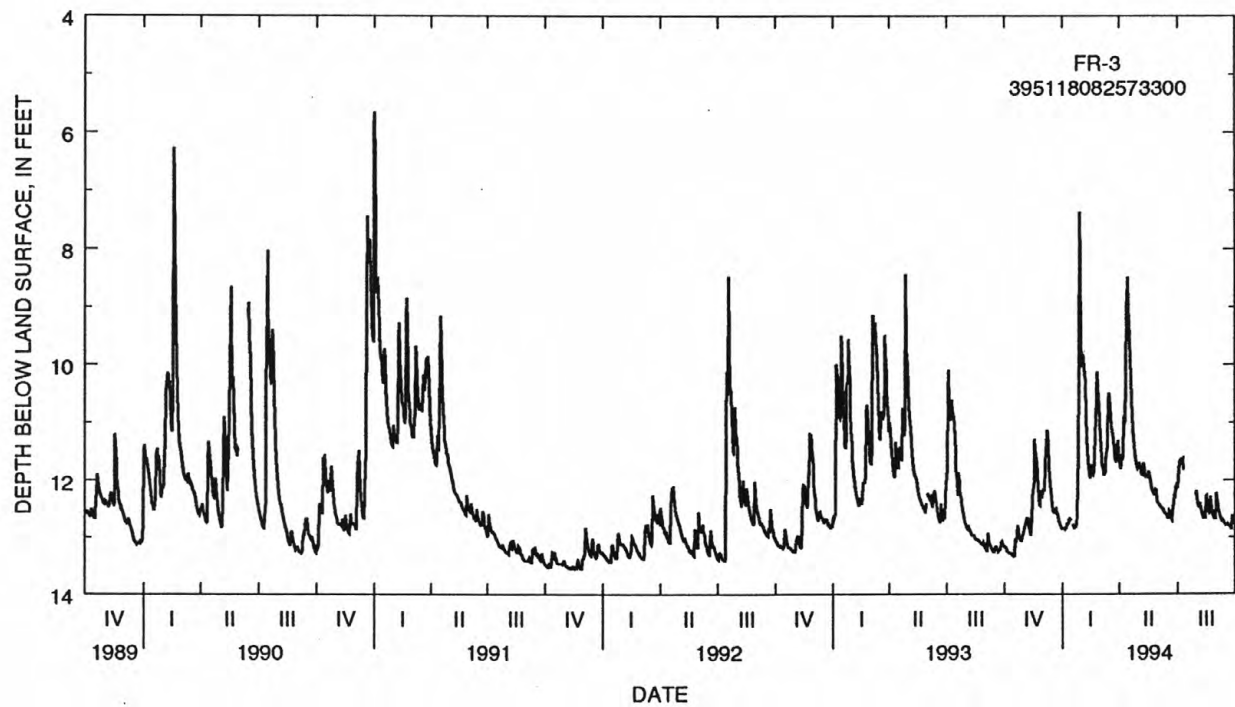
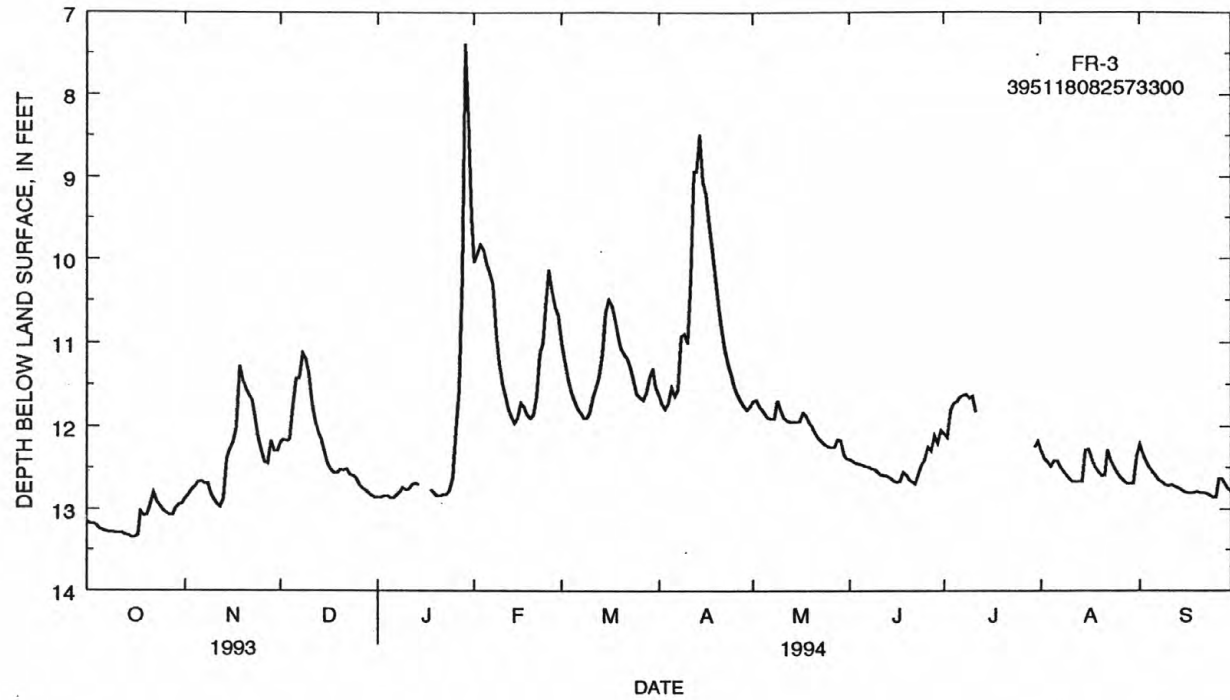


Figure 5. Sample 1-year and 5-year hydrographs of a well completed in an unconfined unconsolidated aquifer.

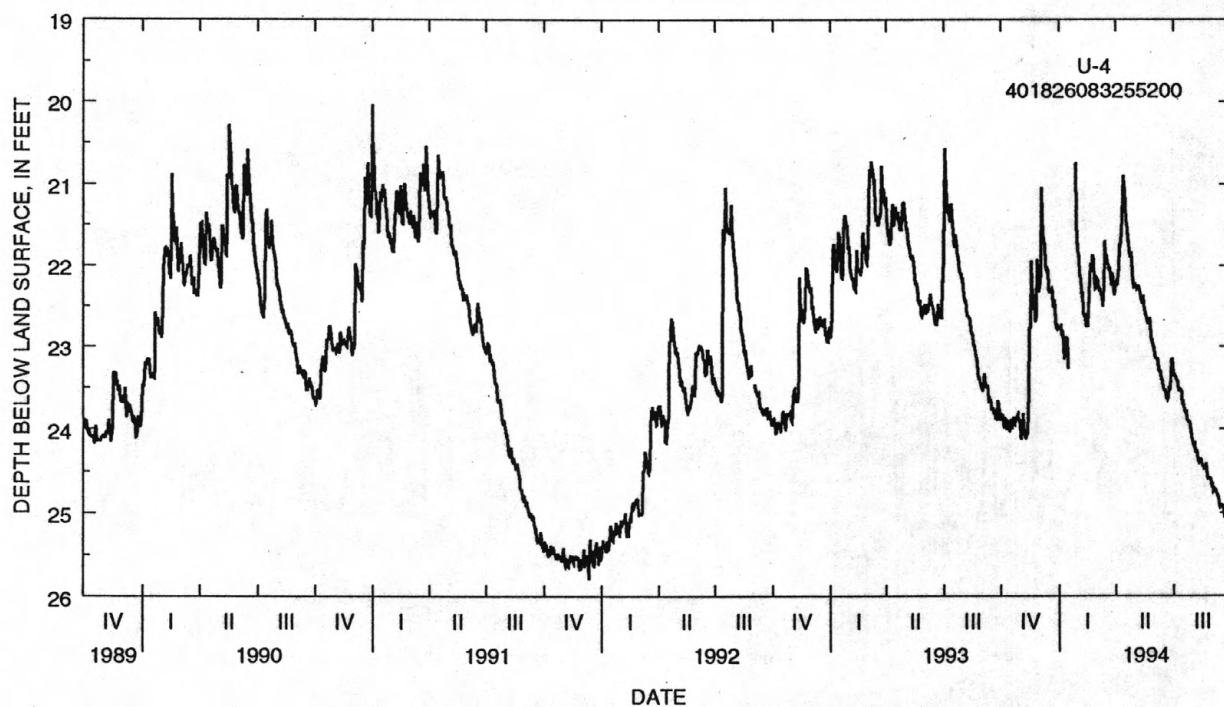
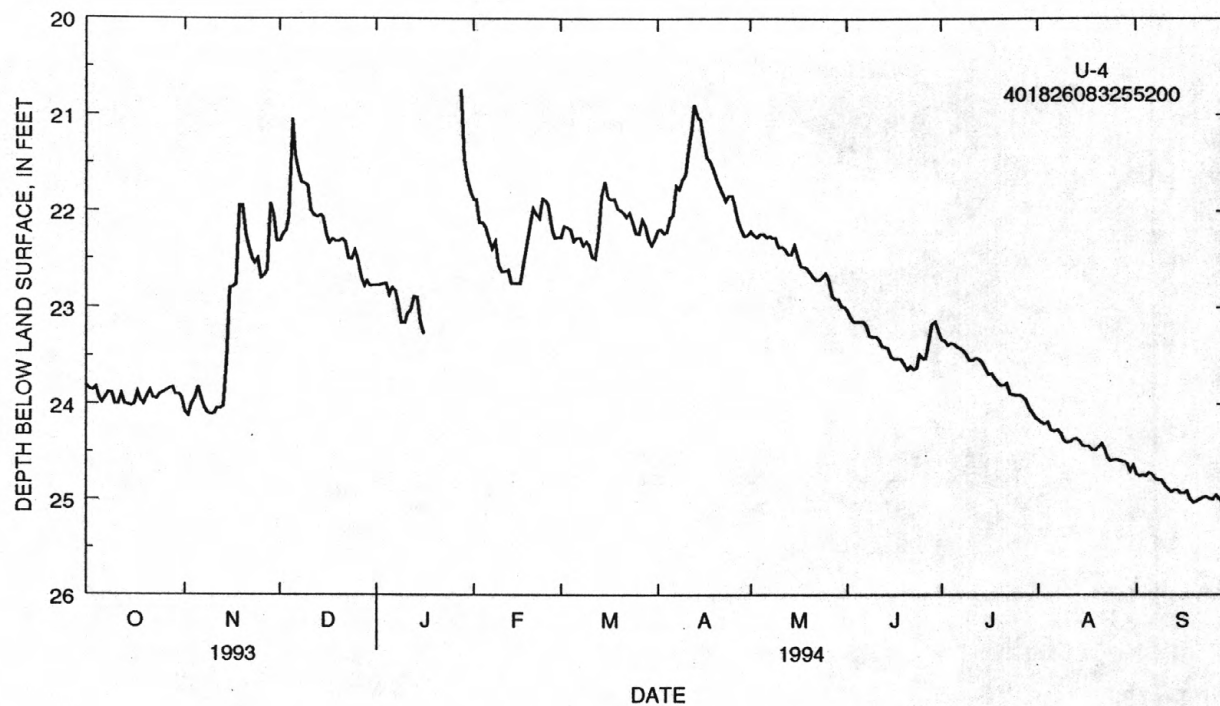


Figure 6. Sample 1-year and 5-year hydrographs of a well completed in a confined carbonate-rock aquifer.

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.)

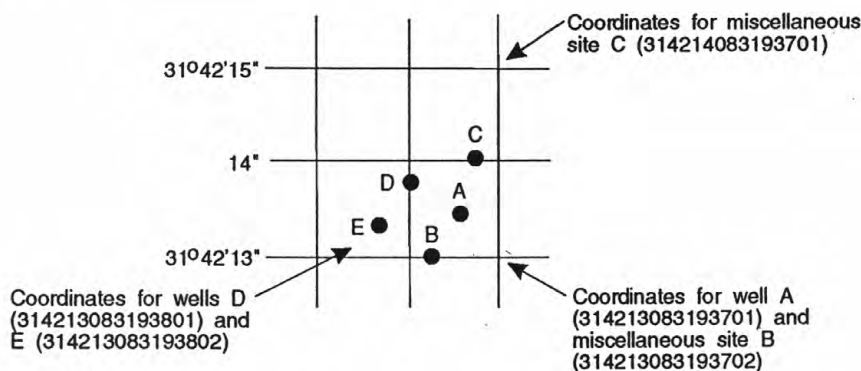


Figure 7. System for numbering wells and miscellaneous sites (latitude and longitude).

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 daily 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 mean daily 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 8a through 8d.

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 relationships 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 relationship 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 analog recorders that trace continuous graphs of stage, or with digital recorders that punch stage values on paper tapes or 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. The manuscript provides, under various headings, descriptive information, such as station location; period of record; average discharge; historical extremes; 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.

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, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of 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 Mean Sea Level (MSL) (see glossary), 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 flagged in the daily-discharge table. (See next 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, 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.--Extremes for period of record is presented as a separate paragraph where outside summary statistical period. 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, 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 station 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.

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

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 "CFSM"), or in inches (line headed "IN."), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches 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 title "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 table "PEAK DISCHARGES AND STAGES AT CONTINUOUS-RECORD SURFACE DISCHARGE STATIONS."

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 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to three significant figures for more than 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to 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

Records of discharge, ground water, reservoir contents, and water quality not published by the USGS are collected in Ohio at several sites by State and other Federal agencies. The National Water Data Exchange (NAWDEX), U.S. Geological Survey, Reston, VA 22092, maintains an index of these sites as well as an index of records of discharge collected by other agencies but not published by the USGS. Information on records at specific sites can be obtained from that office upon request.

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 graph or a series of discrete values punched at short intervals on a paper tape or 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 8a and 8b.

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."

On-Site Measurements and Sample Collection

In obtaining water-quality data, a major concern is that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made on site when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the sample to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations" (TWRI), Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A4, and USGS Open-File Report 93-125 "Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory--Determination of Inorganic and Organic Constituents in Water and Fluvial Sediments." The TWRI references are listed in this report. Also, detailed information on collecting, treating, and shipping samples may be obtained from the USGS District office.

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 biochemical oxygen demand (BOD), and daily samples for specific conductance are analyzed locally. All other samples are analyzed in the USGS laboratories in Arvada, CO. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the USGS laboratory are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A4, and USGS Open-File Report 93-125 "Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory--Determination of Inorganic and Organic Constituents in Water and Fluvial Sediments."

In March 1989 the National Water-Quality Laboratory discovered a bias in the turbidimetric method for sulfate analysis, indicating that values below 75 mg/L have a median positive bias of 2 mg/L above the true value for the period between 1982 and 1989.

Historical and current (1994) dissolved trace-element concentrations are reported herein for water that was collected, processed, and analyzed by using either ultraclean or other than ultraclean techniques. If ultraclean techniques were used, then those concentrations are reported in nanograms per liter. If other than ultraclean techniques were used, then those concentrations are reported in micrograms per liter and could reflect contamination introduced during some phase of the procedure.

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 to the Water-Quality File in the USGS computerized data system, the National Water Data Storage and Retrieval System (WATSTORE), and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. 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 insure the most recent updates.

Remark Codes

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

PRINTED OUTPUT	REMARK
E	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptable range (non-ideal colony count)
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted)
M	Presence of material verified but not quantified
D	Biological organism count equal to or greater than 15 percent (dominant)
&	Biological organism estimated as dominant

Dissolved Trace-Element Concentrations

NOTE.--Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (ug/L) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's to 100's of nanograms per liter (ng/L). Data above the ug/L level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the USGS began using new trace-element protocols at some stations in water year 1994. Full implementation of the protocols will take place during the 1995 water year.

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 Coordination Office, Colorado State University, Fort Collins, CO 80523 (Telephone: 303-491-5643).

RECORDS OF GROUND-WATER LEVELS

Water-level data from a network of observation wells (as well as 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 8c and 8d. 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) Mean Sea Level (MSL); 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. 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 assure that the water collected came directly from 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 WATSTORE DATA

The USGS is the principal Federal water-data agency and, as such, collects and disseminates about 70 percent of the water data currently being used by numerous State, local, private, and other Federal agencies to develop and manage our water resources. As part of the USGS's program of releasing water data to the public, a large-scale computerized system has been developed for the storage and retrieval of water data collected through its activities. WATSTORE was established in 1972 to provide an effective and efficient means for the processing and maintenance of water data collected through the activities of the USGS and to facilitate release of the data to the public. A variety of useful products, ranging from data tables to complex statistical analyses such as Log Pearson Type III, can be produced using WATSTORE. The system resides on the central computer facilities of the USGS at its National Center in Reston, Virginia, and consists of related files and data bases.

- Station Header File - Contains descriptive information on more than 440,000 sites throughout the United States and its territories where the USGS collects or has collected data.
- Daily Values File - Contains more than 220 million daily values of stream flows, stages, reservoir contents, water temperatures, specific conductances, sediment concentrations, sediment discharges, and ground-water levels.
- Peak Flow File - Contains approximately 500,000 maximum (peak) streamflow and gage-height values at surface-water sites.
- Water Quality File - Contains approximately 2 million analyses of water samples that describe the chemical, physical, biological, and radio-chemical characteristics of both surface and ground water.
- Ground-Water Site Inventory Data Base - Contains inventory data for more than 900,000 wells, springs, and other sources of ground water. The data includes site location, geohydrologic characteristics, well-construction history, and one-time field measurements such as water temperature.

In 1976, the USGS opened WATSTORE to the public for direct access. The signing of a Memorandum of Agreement with the USGS is required to obtain direct access to WATSTORE. The system can be accessed either synchronously or asynchronously. The requestor will be expected to pay all computer costs incurred. Direct access may be obtained by contacting:

U.S. Geological Survey
National Water Data Exchange
421 USGS National Center
Reston, Virginia 22092

In addition to providing direct access to WATSTORE, data can be provided in various machine-readable formats on magnetic tape or 5-1/4 inch floppy disk; and, as noted in the introduction, on CD-ROM discs. Beginning with the 1990 water year, all water-data reports will also be available on CD-ROM. All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc. 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's District offices. (See address on the back of the title page.) A limited number of CD-ROM discs will be available for sale by the U.S. Geological Survey, Map Distribution Section, Box 25286, Building 810, Federal Center, Denver, Colorado 80225 and (or) U.S. Geological Survey, Open-File Reports Section, Box 25286, Mail Stop 517, Denver, Colorado 80225.

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.

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.

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, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. 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.

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.

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

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), and periphyton and benthic organisms in grams per square meter (g/m).

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 is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, 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 natural water color or 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.

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 or to prevent the intrusion of salt water.

Cubic foot per second (cfs, ft³/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.

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.

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 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.

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.

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 (CaCO_3).

Hydrologic Bench-Mark 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 bench-mark station may be used to separate effects of natural from human-induced changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark 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 1.

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.

Mean Sea Level (MSL) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. 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.

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

Microgram per kilogram (UG/KG, $\mu\text{g/kg}$) 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 liter (UG/L, $\mu\text{g/L}$) 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, mg/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 mg/L , and is based on the mass of dry sediment per liter of water-sediment mixture.

National Stream-Quality Accounting Network (NASQAN) is a data-collection network designed by the USGS to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

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 habitat, usually square meters (m^2), 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 USGS computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The U.S. Environmental Protection Agency assigns and approves all requests for new codes.

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 (pipet, bottom-withdrawal tube, visual-accumulation tube) 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.

The classifications are as follows:

Classification	Size (mm)	Method of analysis
Clay	0.00024 - 0.004	Sedimentation
Silt	0.004 - 0.062	Sedimentation
Sand	0.062 - 2.0	Sedimentation 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.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams where potential contamination could result from the application of commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

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 (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{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 in water.

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 millimeter (cells/mm) 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 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.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

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.

Return period 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 recurrence interval.

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.

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 usage, 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 (tons/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 (tons/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.

7-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 of 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" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

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

Artificial substrate is a device which 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 plexuses 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 in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. 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 hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata*, is the following:

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

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

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

Tons per acre-foot 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 mg/L of the constituent, 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.

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 the "1980 water year."

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.

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.

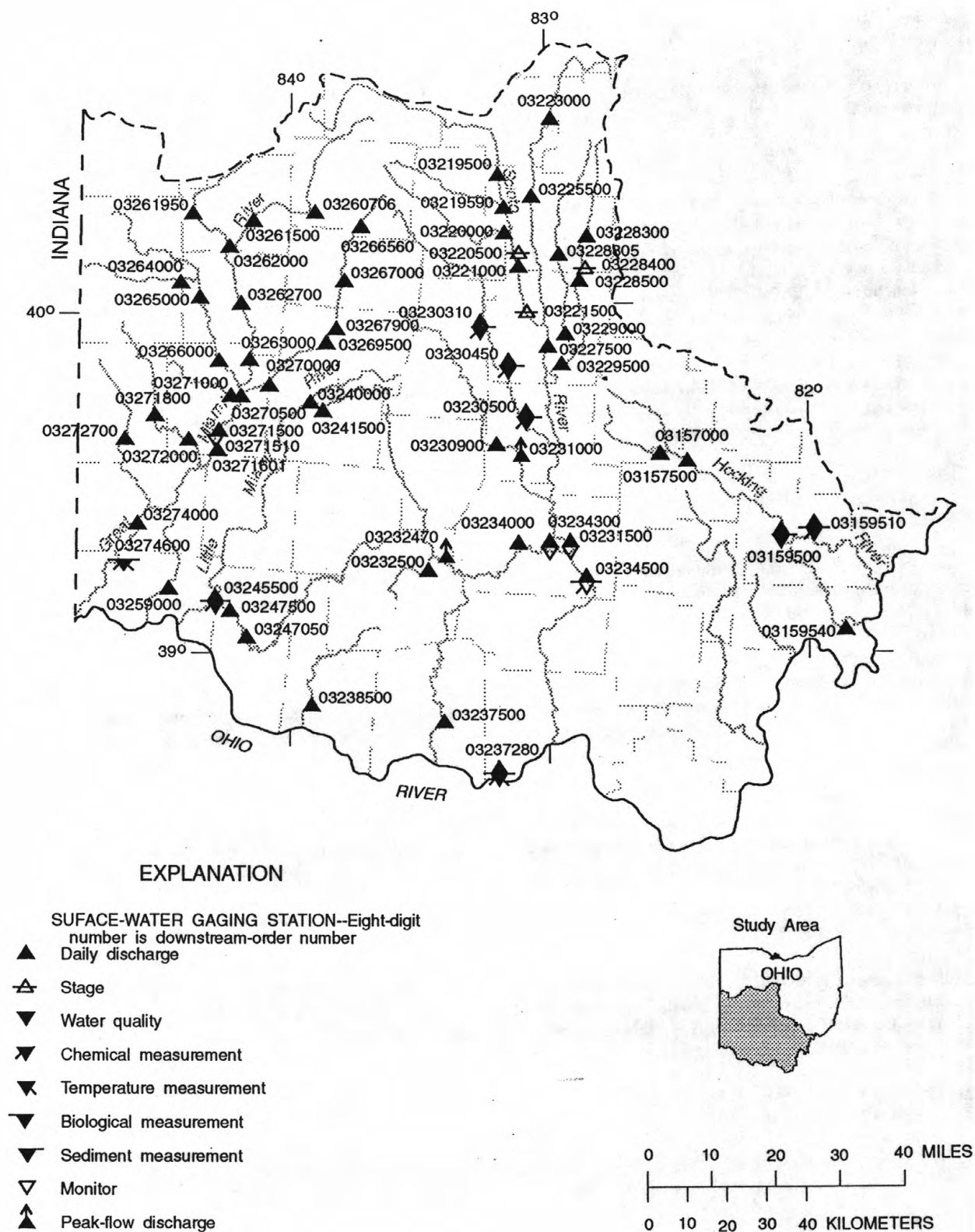


Figure 8a. Location of data-collection stations.

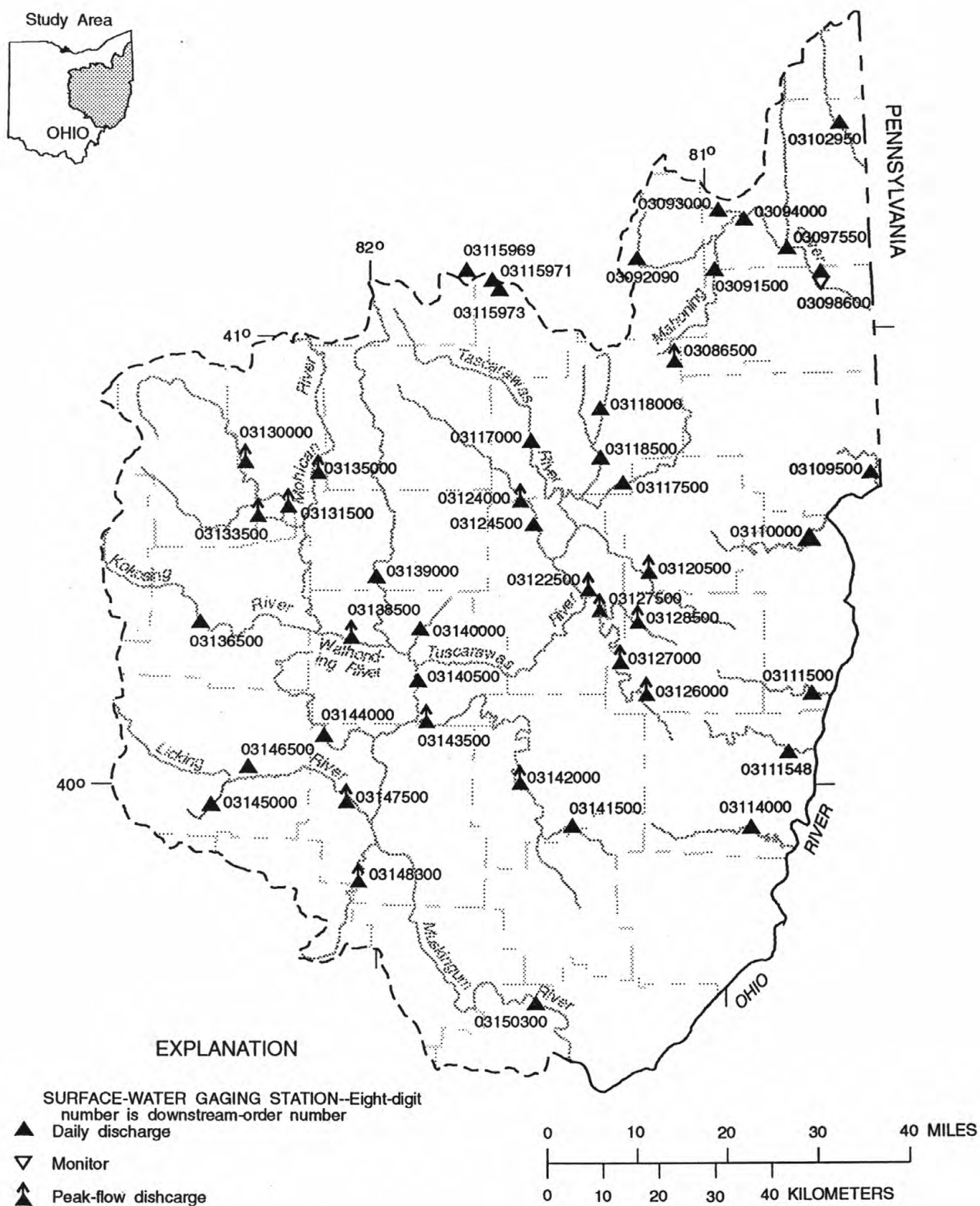


Figure 8b. Location of data-collection stations.

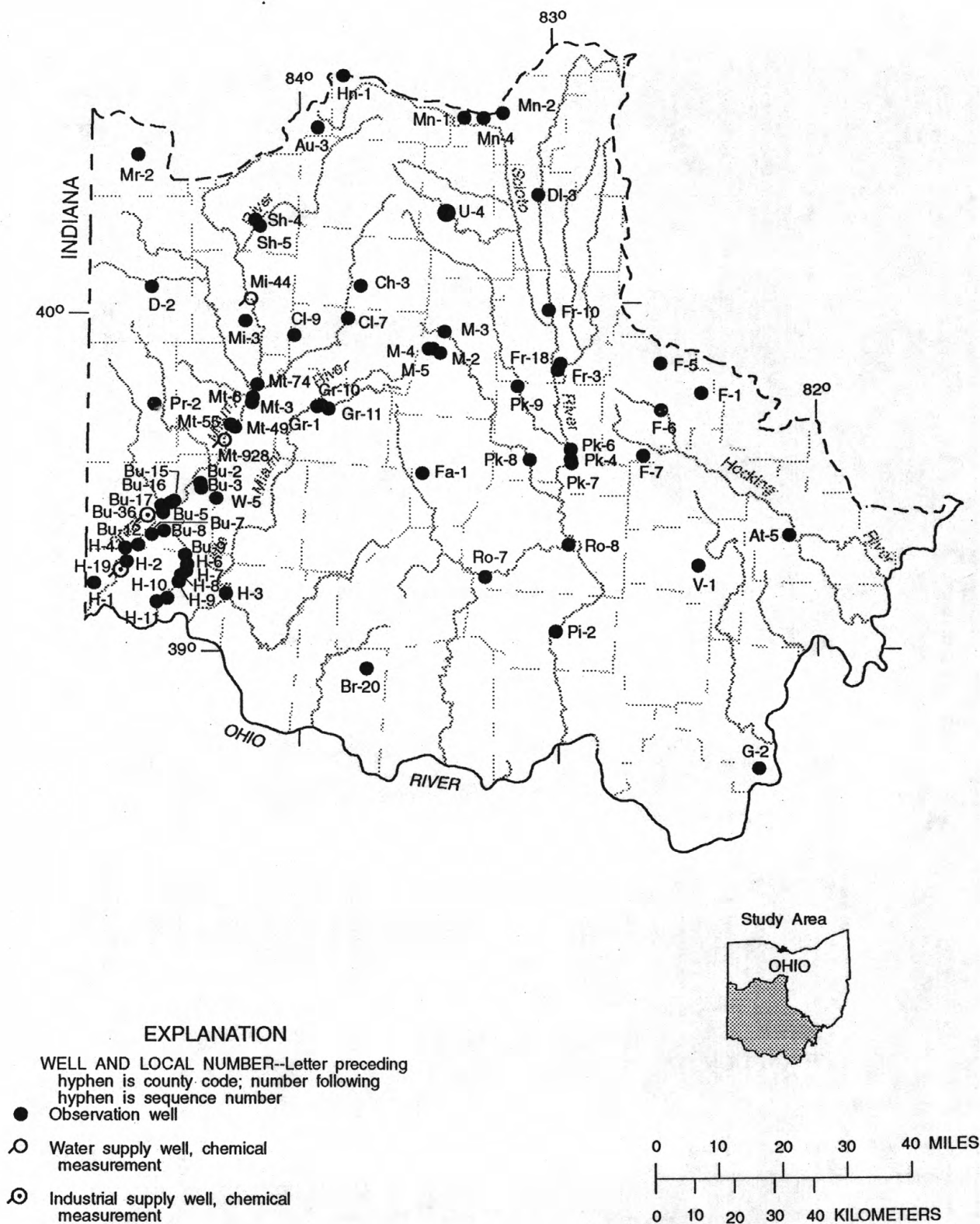


Figure 8c. Location of wells.

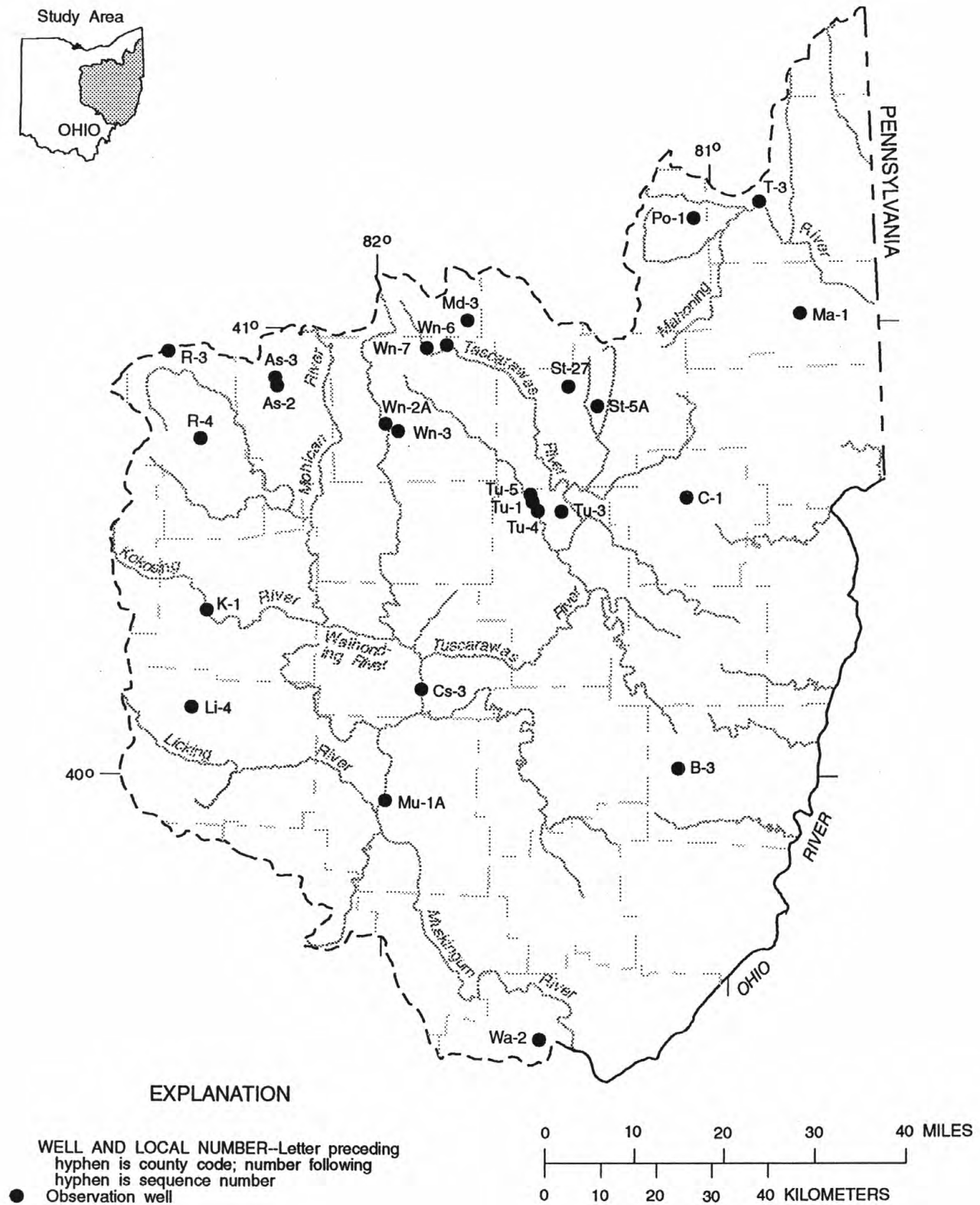


Figure 8d. Location of wells.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The USGS 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.

The reports listed below are for sale by the U.S. Geological Survey, Branch of Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

- 1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficken, 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.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F. P. Haeni: USGS--TWRI Book 2, Chapter D2. 1988. 86 pages.
- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L.M. McCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
- 2-E2. *Borehole geophysics applied to ground-water investigations*, by W. S. Keys: USGS--TWRI Book 2, Chapter E2. 1990. 150 pages.
- 2-F1. *Application of drilling, coring, and sampling techniques to test holes and wells*, by Eugene Shuter and W. E. Teasdale: USGS--TWRI Book 2, Chapter F1. 1989. 97 pages.
- 3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3. Chapter A5. 1967. 29 pages.
- 3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
- 3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.
- 3-A9. *Measurement of time of travel in streams by dye tracing*, by F. A. Kilpatrick and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1989. 27 pages.
- 3-A10. *Discharge ratings at gaging stations*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.
- 3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-A12. *Fluorometric procedures for dye tracing*, Revised, by J. F. Wilson, Jr., E. D. Cobb, and F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A12. 1986. 41 pages.
- 3-A13. *Computation of continuous records of streamflow*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.

- 3-A14. *Use of flumes in measuring discharge*, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.
- 3-A16. *Measurement of discharge using tracers*, by F. A. Kilpatrick and E. D. Cobb: USGS--TWRI Book 3, Chapter A16. 1985. 52 pages.
- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS--TWRI Book 3, Chapter A17. 1985. 38 pages.
- 3-A18. *Determination of stream reaeration coefficients by use of tracers*, by F. A. Kilpatrick, R. E. Rathburn, Nobuhiro Yotsukura, G. W. Parker, and L. L. DeLong: USGS--TWRI Book 3, Chapter A18. 1989. 52 pages.
- 3-A19. *Levels of streamflow gaging stations*, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A19. 1990. 31 pages.
- 3-A20. *Simulation of soluble waste transport and buildup in surface waters using tracers*, by F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A20. 1993. 38 pages.
- 3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
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BEAVER RIVER BASIN

39

03091500 MAHONING RIVER AT PRICETOWN, OH

LOCATION.--Lat 41°07'53", long 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, and 3 mi upstream from Kale Creek.

DRAINAGE AREA.--273 mi².

PERIOD OF RECORD.--July 1929 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 905.00 ft above sea level. Prior to Aug. 14, 1929 nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. 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 collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	311	258	938	172	937	1170	233	222	151	176	156	153
2	264	259	933	172	994	1160	171	222	151	175	156	153
3	264	261	929	172	1090	1160	172	222	152	175	154	153
4	237	261	715	172	1160	1030	172	176	154	175	153	153
5	182	261	460	172	1160	955	172	151	155	175	153	153
6	105	261	703	172	1150	955	175	106	157	175	153	153
7	69	261	924	172	1150	715	176	75	159	175	153	153
8	68	258	924	172	1150	489	268	75	158	174	151	153
9	68	258	771	172	1150	489	313	122	159	172	152	154
10	68	258	667	172	1150	489	322	143	161	172	153	156
11	68	258	664	172	955	492	241	140	162	172	153	156
12	143	257	646	172	769	494	214	140	163	172	153	156
13	203	256	470	172	767	498	272	140	163	172	154	156
14	233	262	362	171	476	500	641	141	165	172	156	156
15	253	258	362	170	245	500	1320	142	167	172	94	156
16	253	256	360	170	245	500	1990	124	171	172	53	157
17	256	263	359	170	245	350	2360	114	174	172	84	159
18	289	260	359	170	245	250	2340	114	175	172	131	160
19	312	258	357	170	246	251	2330	114	179	172	147	161
20	337	258	257	170	249	253	2320	114	181	170	149	163
21	357	258	180	170	250	259	2080	116	182	170	151	163
22	354	256	177	170	250	259	1620	116	185	169	151	163
23	353	256	177	170	252	353	1440	124	185	164	151	169
24	353	256	177	170	353	430	1430	129	185	162	151	163
25	300	256	177	166	583	357	1280	129	185	159	151	164
26	261	256	177	163	823	308	723	129	185	159	151	165
27	259	256	176	163	974	311	368	126	184	160	151	165
28	258	258	175	177	1090	314	368	127	181	160	151	165
29	258	329	175	171	---	317	274	128	179	159	151	165
30	258	649	175	168	---	321	221	128	177	158	153	161
31	258	---	174	490	---	325	---	141	---	156	153	---
TOTAL	7252	8212	14100	5605	20108	16254	26006	4190	5085	5238	4473	4757
MEAN	234	274	455	181	718	524	867	135	169	169	144	159
MAX	357	649	938	490	1160	1170	2360	222	185	176	156	169
MIN	68	256	174	163	245	250	171	75	151	156	53	153

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1994, BY WATER YEAR (WY)

	MEAN	227	231	268	273	319	369	299	260	262	234	254	267
MAX	855	891	895	1059	1211	1098	867	806	983	582	904	1134	
(WY)	1991	1986	1986	1991	1959	1956	1994	1956	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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1942 - 1994

ANNUAL TOTAL	125083	121280	
ANNUAL MEAN	343	332	272
HIGHEST ANNUAL MEAN			490
LOWEST ANNUAL MEAN			131
HIGHEST DAILY MEAN	1730	Mar 13	3370
LOWEST DAILY MEAN	35	Apr 12	40
ANNUAL SEVEN-DAY MINIMUM	35	Apr 12	94
INSTANTANEOUS PEAK FLOW			2390
INSTANTANEOUS PEAK STAGE		7.67	4120
INSTANTANEOUS LOW FLOW			10.62
10 PERCENT EXCEEDS	922	53	650
50 PERCENT EXCEEDS	193	176	175
90 PERCENT EXCEEDS	89	143	60

BEAVER RIVER BASIN

03093000 EAGLE CREEK AT PHALANX STATION, OH

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

DRAINAGE AREA.--97.6 mi².

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

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

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

REMARKS.--Estimated daily discharges: Dec. 25-Jan. 26, 31-Feb. 18, 27-Mar. 5. Records good except estimated records which are fair. 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	118	113	39	500	94	105	125	36	126	20	19
2	23	110	93	39	200	88	92	116	38	59	19	19
3	20	76	92	39	130	84	101	81	32	51	19	17
4	18	93	153	39	110	78	203	66	29	41	20	16
5	17	77	663	38	90	74	152	62	28	32	33	16
6	16	57	444	38	80	184	154	60	27	28	32	16
7	16	47	227	38	72	289	644	58	27	253	22	18
8	16	41	168	38	66	369	409	68	26	787	20	18
9	16	38	122	38	58	220	178	69	25	180	19	16
10	20	36	100	38	54	148	702	63	24	73	19	16
11	21	34	93	38	50	158	1210	56	24	50	19	15
12	21	32	85	37	49	127	1310	57	25	40	19	14
13	22	31	76	37	47	201	2290	61	24	33	108	14
14	23	119	71	37	46	522	1250	49	24	29	1270	14
15	24	743	71	37	45	683	390	46	23	31	794	14
16	24	325	72	37	44	541	295	134	23	28	125	14
17	29	335	65	37	43	230	216	120	23	26	63	15
18	75	1430	59	37	42	173	151	83	22	24	44	17
19	44	537	66	37	310	141	131	64	21	23	35	17
20	40	196	74	37	801	154	112	54	20	22	29	15
21	55	135	75	37	1530	306	96	48	21	22	49	14
22	79	99	82	36	820	1120	81	42	21	30	49	14
23	45	79	72	36	281	432	72	37	20	28	32	14
24	36	68	61	36	550	204	66	35	20	24	25	14
25	32	62	54	36	414	162	62	45	34	23	22	14
26	31	56	49	50	234	124	58	76	34	22	21	16
27	29	98	45	70	150	147	55	76	49	21	20	20
28	28	529	42	111	110	212	52	49	47	21	19	24
29	28	349	41	1190	---	178	74	41	81	26	20	26
30	30	162	40	3330	---	149	112	36	286	24	20	31
31	38	---	40	1300	---	121	---	35	---	21	19	---
TOTAL	948	6112	3508	6987	6926	7713	10823	2012	1134	2198	3025	507
MEAN	30.6	204	113	225	247	249	361	64.9	37.8	70.9	97.6	16.9
MAX	79	1430	663	3330	1530	1120	2290	134	286	787	1270	31
MIN	16	31	40	36	42	74	52	35	20	21	19	14
CFSM	.31	2.09	1.16	2.31	2.53	2.55	3.70	.66	.39	.73	1.00	.17
IN.	.36	2.33	1.34	2.66	2.64	2.94	4.13	.77	.43	.84	1.15	.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 1994, BY WATER YEAR (WY)

	MEAN	45.7	85.1	139	157	203	240	196	118	69.4	50.1	31.5	40.8
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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1926 - 1994

ANNUAL TOTAL	49171	51893	
ANNUAL MEAN	135	142	114
HIGHEST ANNUAL MEAN			170
LOWEST ANNUAL MEAN			34.3
HIGHEST DAILY MEAN	1500	Mar 24	5500
LOWEST DAILY MEAN	11	Aug 29	14
ANNUAL SEVEN-DAY MINIMUM	12	Aug 25	14
INSTANTANEOUS PEAK FLOW			4390
INSTANTANEOUS PEAK STAGE			12.71
INSTANTANEOUS LOW FLOW			14
ANNUAL RUNOFF (CFSM)	1.38	1.46	1.16
ANNUAL RUNOFF (INCHES)	18.74	19.78	15.82
10 PERCENT EXCEEDS	321	308	262
50 PERCENT EXCEEDS	52	47	44
90 PERCENT EXCEEDS	16	19	13

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

BEAVER RIVER BASIN

41

03094000 MAHONING RIVER AT LEAVITTSBURG, OH

LOCATION.--Lat 41°14'21", long 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, 300 ft downstream from Duck Creek and 1.2 mi downstream from Eagle Creek.

DRAINAGE AREA.--575 mi².

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

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 871.25 ft 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.--Estimated daily discharges: Dec. 27-Jan. 2, 16-26, 30-Feb. 10, 26-Mar. 4, Apr. 15-20. 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 collected at this site 1943 to 1971. U.S. Army Corps of Engineers satellite telemeter at station.

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

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	395	427	1460	270	2000	1300	672	649	304	425	267	254
2	294	475	1460	290	1500	1300	514	639	304	311	269	250
3	271	432	1300	307	1500	1250	434	582	295	277	269	249
4	262	423	1360	318	1600	1250	638	484	294	288	270	257
5	217	423	1830	314	1650	1250	583	405	293	297	285	258
6	225	380	1690	311	1700	1420	583	389	296	306	295	260
7	230	355	1580	315	1600	1610	1590	284	290	571	278	266
8	235	340	1550	314	1550	1450	1410	281	285	825	271	265
9	239	332	1420	295	1500	1170	930	294	282	642	267	267
10	240	328	1110	299	1500	984	2270	337	280	313	267	263
11	241	325	1050	305	1520	1010	2920	326	280	263	266	261
12	248	323	966	310	1050	1010	3500	318	280	281	267	260
13	265	322	868	318	905	1290	6780	320	283	281	427	258
14	231	736	606	326	797	1910	4450	311	283	280	1100	250
15	272	1560	547	298	392	1850	3500	311	277	281	1440	248
16	279	1080	530	290	395	1600	2800	382	276	278	390	246
17	293	1090	517	290	439	1110	3200	399	290	274	186	255
18	327	2670	507	280	518	700	3100	319	313	269	229	260
19	385	1710	521	280	806	616	3100	287	286	266	287	242
20	384	911	520	270	1530	619	3100	263	282	265	289	236
21	530	743	389	270	2300	1130	3100	266	287	275	320	234
22	498	636	388	270	1850	2830	2730	259	282	288	301	239
23	449	644	371	260	1090	1650	1990	253	279	281	266	245
24	422	632	346	260	1650	1120	1830	267	282	275	249	247
25	400	613	332	300	1580	996	1780	282	288	273	255	256
26	316	599	298	350	1400	776	1620	317	309	267	253	296
27	305	678	280	386	1350	813	967	330	311	266	260	250
28	301	1340	270	1660	1300	1070	888	303	329	271	261	245
29	299	1350	260	4860	---	1010	891	282	309	273	264	254
30	302	1150	250	4000	---	841	804	274	459	277	262	233
31	333	---	260	3200	---	723	---	272	---	268	266	---
TOTAL	9688	23027	24836	21816	36972	37658	62674	10685	8908	10007	10576	7604
MEAN	313	768	801	704	1320	1215	2089	345	297	323	341	253
MAX	530	2670	1830	4860	2300	2830	6780	649	459	825	1440	296
MIN	217	322	250	260	392	616	434	253	276	263	186	233

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1994, BY WATER YEAR (WY)

	371	468	663	729	852	1022	840	605	478	389	366	394
MEAN	371	468	663	729	852	1022	840	605	478	389	366	394
MAX	1575	2077	2010	2595	2313	2132	2219	1711	2116	1103	1190	1705
(WY)	1991	1986	1978	1952	1959	1955	1957	1956	1989	1958	1958	1975
MIN	128	111	116	125	114	212	217	118	125	152	157	114
(WY)	1963	1964	1964	1961	1963	1969	1946	1941	1941	1941	1942	1942

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1941 - 1994

ANNUAL TOTAL	283295	264451	597
ANNUAL MEAN	776	725	981
HIGHEST ANNUAL MEAN			327
LOWEST ANNUAL MEAN			1975
HIGHEST DAILY MEAN	4220	Jan 14	15500
LOWEST DAILY MEAN	217	Oct 5	60
ANNUAL SEVEN-DAY MINIMUM	232	Oct 5	73
INSTANTANEOUS PEAK FLOW			9300
INSTANTANEOUS PEAK STAGE		14.03	15.91
INSTANTANEOUS LOW FLOW		186	1400
10 PERCENT EXCEEDS	1930	1600	328
50 PERCENT EXCEEDS	358	320	171
90 PERCENT EXCEEDS	265	258	

BEAVER RIVER BASIN

03097550 MAHONING RIVER AT OHIO EDISON POWER PLANT AT NILES, OH

LOCATION.--Lat 41°10'21", long 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.

DRAINAGE AREA.--854 mi².

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

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

REMARKS.--Estimated daily discharges: Oct. 30-Nov. 18, Dec. 26-Jan. 3, 10-25. Records good except estimated record, which is fair. 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 Corp of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	453	620	1510	360	1840	1940	1090	841	399	548	469	336
2	373	640	1620	390	1900	1930	856	759	395	489	480	308
3	324	600	1510	400	1900	1910	726	676	387	411	484	328
4	307	560	1610	396	2000	1890	945	575	398	359	499	349
5	283	540	2360	381	2060	1800	986	475	400	364	522	338
6	253	500	2250	353	2080	2000	974	441	421	414	490	328
7	273	460	1870	353	2060	2350	2600	391	412	1300	460	344
8	271	420	1890	346	2040	2470	2520	356	403	896	463	334
9	302	400	1770	335	2030	2090	1690	361	394	890	468	326
10	282	390	1460	330	2010	1980	3570	393	384	483	464	303
11	282	380	1310	340	1990	1910	4590	393	404	387	469	306
12	278	370	1260	350	1620	1870	6120	390	394	400	460	305
13	304	370	1190	400	1380	2230	9110	370	411	433	999	305
14	276	1200	919	420	1280	2990	7380	365	421	453	2000	296
15	292	2100	749	410	848	2770	3610	374	385	469	2140	290
16	308	1500	676	400	561	2350	3660	440	381	473	904	271
17	360	2200	651	390	575	1650	3990	502	380	471	347	287
18	336	3500	651	380	700	1060	3960	436	410	456	298	284
19	421	2710	703	370	1110	882	3900	386	395	456	422	266
20	417	1320	721	370	2300	864	3840	352	399	461	490	253
21	672	969	629	360	3260	1910	3740	342	413	502	630	264
22	577	788	571	360	2870	4290	3510	341	403	562	557	275
23	482	732	537	360	1870	3040	2880	328	398	497	472	274
24	425	732	505	370	2640	1810	2570	330	427	486	435	286
25	406	695	495	430	2570	1570	2520	359	430	490	421	478
26	356	673	431	484	2070	1250	2300	387	436	478	421	679
27	315	791	400	541	1880	1270	1490	401	476	480	388	374
28	307	1680	370	2280	1860	1700	1150	395	452	500	385	305
29	310	1800	350	4420	---	1710	1110	375	474	501	375	377
30	340	1330	340	4650	---	1400	981	354	504	487	363	320
31	400	---	340	2470	---	1180	---	338	---	483	372	---
TOTAL	10985	30970	31648	24199	51304	60066	88368	13226	12386	16079	18147	9789
MEAN	354	1032	1021	781	1832	1938	2946	427	413	519	585	326
MAX	672	3500	2360	4650	3260	4290	9110	841	504	1300	2140	679
MIN	253	370	340	330	561	864	726	328	380	359	298	253

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1994, BY WATER YEAR (WY)

	707	859	964	1315	1298	1224	1100	657	944	726	627	697
MEAN	707	859	964	1315	1298	1224	1100	657	944	726	627	697
MAX	2074	1935	2428	3088	2853	2881	2946	1888	3117	1403	1147	1652
(WY)	1991	1993	1991	1993	1990	1993	1994	1989	1989	1990	1992	1990
MIN	247	211	272	268	333	493	540	293	293	370	407	326
(WY)	1989	1992	1992	1992	1992	1990	1988	1992	1992	1988	1988	1994

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1988 - 1994

ANNUAL TOTAL	397881	367167	
ANNUAL MEAN	1090	1006	924
HIGHEST ANNUAL MEAN			1213
LOWEST ANNUAL MEAN			546
HIGHEST DAILY MEAN	6430	Jan 1	9110
LOWEST DAILY MEAN	253	Oct 6	253
ANNUAL SEVEN-DAY MINIMUM	277	Oct 6	271
INSTANTANEOUS PEAK FLOW			9760
INSTANTANEOUS PEAK STAGE			13.35
INSTANTANEOUS LOW FLOW			253
10 PERCENT EXCEEDS	2800		2300
50 PERCENT EXCEEDS	489		478
90 PERCENT EXCEEDS	330		325

BEAVER RIVER BASIN

43

03098600 MAHONING RIVER BELOW WEST AVENUE AT YOUNGSTOWN, OH

LOCATION.--Lat 41°06'18", long 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.
DRAINAGE AREA.--978 mi².

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

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

REMARKS.--Estimated daily discharges: Mar. 15-18. Records good. 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	535	699	1480	410	2100	1980	1190	929	442	647	450	384
2	465	709	1530	440	2040	1930	957	828	431	569	615	343
3	393	659	1420	443	2010	1920	870	743	419	492	680	345
4	371	620	1610	467	2040	1900	1070	659	425	380	525	362
5	342	611	2520	461	2100	1830	1140	560	427	379	601	361
6	296	559	2430	445	2110	2050	1190	515	451	430	505	365
7	318	502	1960	460	2090	2560	3250	469	460	2620	445	400
8	317	468	1930	449	2070	2930	3010	437	437	967	448	377
9	353	454	1790	427	2050	2350	1890	429	429	984	455	364
10	340	433	1470	418	2010	2620	4540	459	422	547	454	337
11	325	432	1290	423	2000	2380	5730	439	431	410	453	334
12	318	427	1220	444	1660	2250	9330	442	434	407	471	332
13	349	429	1130	474	1440	2620	11400	422	453	434	970	333
14	316	1250	925	479	1310	3590	9600	411	474	454	2770	338
15	320	2240	767	449	953	2900	4650	473	432	480	2380	356
16	348	1680	712	427	706	2200	4300	520	440	475	1070	326
17	459	2330	688	439	720	1500	4580	571	442	452	401	385
18	438	3800	680	430	861	1100	4480	500	460	443	318	364
19	493	3050	738	403	1310	981	4340	443	447	445	417	319
20	541	1400	755	393	2830	948	4250	402	452	448	489	295
21	738	983	709	396	4030	2440	4090	380	483	468	635	301
22	685	826	657	388	3480	5540	3810	374	457	559	593	315
23	573	805	626	402	2230	3920	3070	356	451	479	504	318
24	509	832	588	458	3340	2130	2650	368	499	453	455	328
25	479	776	555	538	3180	1750	2570	447	479	469	439	485
26	441	718	502	619	2340	1400	2320	484	484	468	440	931
27	387	866	457	688	2030	1410	1520	479	587	459	419	506
28	378	1760	457	4000	1960	1910	1150	447	566	471	421	385
29	376	1860	396	6370	---	1950	1120	399	573	494	427	449
30	384	1400	400	6090	---	1580	1000	369	600	467	398	394
31	519	---	394	3060	---	1320	---	360	---	461	411	---
TOTAL	13106	33578	32786	31790	57000	67889	105067	15114	13987	17711	20059	11432
MEAN	423	1119	1058	1025	2036	2190	3502	488	466	571	647	381
MAX	738	3800	2520	6370	4030	5540	11400	929	600	2620	2770	931
MIN	296	427	394	388	706	948	870	356	419	379	318	295

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1994, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
MEAN	857	999	1192	1624	1590	1565	1342	547	690	859	739	838
MAX	2303	2117	2967	3608	3323	3456	3502	850	1531	1932	1316	1881
(WY)	1991	1993	1991	1993	1990	1993	1994	1990	1993	1990	1992	1990
MIN	264	222	312	302	432	596	686	437	377	430	419	346
(WY)	1992	1992	1992	1992	1992	1990	1988	1992	1988	1988	1991	1991

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1988 - 1994

ANNUAL TOTAL	461060	419519	
ANNUAL MEAN	1263	1149	1067
HIGHEST ANNUAL MEAN			1402
LOWEST ANNUAL MEAN			643
HIGHEST DAILY MEAN	8510	Jun 9	11400
LOWEST DAILY MEAN	296	Oct 6	295
ANNUAL SEVEN-DAY MINIMUM	324	Oct 6	320
INSTANTANEOUS PEAK FLOW			11900
INSTANTANEOUS PEAK STAGE			15.44
INSTANTANEOUS LOW FLOW			282
10 PERCENT EXCEEDS	3300		2620
50 PERCENT EXCEEDS	564		505
90 PERCENT EXCEEDS	396		369
			2400
			574
			344

BEAVER RIVER BASIN

03098600 MAHONING RIVER BELOW WEST AVENUE AT YOUNGSTOWN, OH--Continued

WATER QUALITY RECORDS

LOCATION.--Lat 41°06'18", long 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.

DRAINAGE AREA.--978 mi².

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 one-hour-interval.

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

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 827 microsiemens Jan. 26, 1994; minimum, 189 microsiemens Aug. 1, 1992.

pH: Maximum, 8.8 units May 14, 23, 31, 1994; minimum, 7.0 units Apr. 15, 1994.

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

DISSOLVED OXYGEN: Maximum, 13.6 mg/L Feb. 9, 1994; minimum, 5.4 mg/L Jun. 18, 19, 1994.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 827 microsiemens Jan. 26; minimum, 213 microsiemens Apr. 14.

pH: Maximum, 8.8 units May 14, 23, 31; minimum, 7.0 units Apr. 15.

WATER TEMPERATURES: Maximum, 32.0°C Jun. 18, 19; minimum, 1.0°C Jan. 29, 30, Feb. 1, 2, 10.

DISSOLVED OXYGEN: Maximum, 13.6 mg/L Feb. 9; minimum, 5.4 mg/L Jun. 18, 19.

BEAVER RIVER BASIN

45

03098600 MAHONING RIVER BELOW WEST AVENUE AT YOUNGSTOWN, OH--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	516	491	506	586	536	567	400	373	389	596	574	582
2	501	490	496	578	547	566	424	400	414	610	591	598
3	515	501	507	591	560	569	430	420	425	623	583	603
4	530	511	523	610	571	597	445	427	436	629	596	618
5	536	526	531	623	584	593	437	380	409	608	588	598
6	542	532	536	621	603	611	380	332	352	608	598	604
7	574	533	544	610	591	600	371	326	337	628	590	611
8	581	554	567	615	591	606	401	371	391	618	582	600
9	578	550	564	606	593	600	413	401	406	615	594	604
10	563	542	553	604	598	601	423	409	413	603	593	599
11	557	529	543	603	596	599	425	415	419	604	593	599
12	529	493	502	604	584	595	437	419	425	645	601	610
13	510	498	503	607	577	593	436	424	430	672	631	652
14	521	501	509	602	438	546	447	430	441	738	663	710
15	514	504	507	438	381	395	464	445	456	723	697	705
16	528	509	517	381	356	366	484	464	475	718	692	711
17	560	528	540	373	327	356	495	478	485	706	690	697
18	561	549	555	361	301	336	493	485	487	703	673	689
19	553	512	534	301	262	274	502	486	492	674	661	668
20	527	511	520	342	289	317	502	486	495	682	638	664
21	540	503	517	396	342	374	518	482	499	663	633	646
22	510	463	482	432	396	410	552	510	527	650	626	637
23	505	480	489	447	432	439	554	523	538	661	626	645
24	517	492	502	460	446	454	539	497	519	696	655	669
25	539	517	529	472	458	464	542	497	522	791	696	721
26	552	526	538	471	458	465	539	525	533	827	779	805
27	545	526	539	471	459	463	543	525	534	818	755	786
28	566	538	551	459	384	428	558	530	541	822	476	661
29	585	550	559	396	347	376	580	530	558	476	304	396
30	586	555	565	375	347	366	578	557	567	304	258	278
31	573	545	560	---	---	---	595	570	582	333	284	303
MONTH	586	463	529	623	262	484	595	326	468	827	258	622
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	371	333	346	---	---	---	420	409	413	421	392	408
2	449	371	419	---	---	---	432	412	420	428	418	421
3	456	447	451	---	---	---	482	432	455	438	414	424
4	462	441	453	447	442	444	479	454	466	444	428	435
5	460	434	448	455	442	447	460	450	454	468	442	446
6	462	428	442	455	444	450	464	450	457	486	466	472
7	441	427	432	452	431	441	450	384	417	500	477	484
8	450	430	440	436	385	419	384	325	341	517	500	511
9	457	440	444	406	372	384	346	328	334	542	517	530
10	---	---	---	475	406	447	362	324	343	538	520	528
11	---	---	---	495	466	480	324	271	294	536	512	523
12	---	---	---	472	452	465	305	246	278	524	508	513
13	---	---	---	471	446	461	296	215	247	535	520	526
14	---	---	---	446	390	416	227	213	218	524	502	516
15	---	---	---	390	366	371	310	227	256	534	490	511
16	---	---	---	---	---	---	331	309	324	539	500	519
17	---	---	---	---	---	---	330	321	325	521	487	502
18	---	---	---	415	393	400	339	325	331	503	483	494
19	---	---	---	453	415	434	342	317	324	514	500	505
20	---	---	---	460	443	450	319	307	314	507	496	503
21	---	---	---	492	400	450	325	316	318	505	496	501
22	---	---	---	400	309	354	328	312	323	521	505	514
23	---	---	---	317	294	301	331	312	327	530	511	519
24	---	---	---	381	317	346	338	313	327	541	509	515
25	---	---	---	404	380	390	330	320	325	579	539	564
26	---	---	---	416	404	410	344	325	332	571	541	548
27	---	---	---	427	408	419	---	---	---	541	524	533
28	---	---	---	428	417	422	---	---	---	551	497	521
29	---	---	---	420	405	410	395	375	382	504	497	501
30	---	---	---	406	403	404	412	391	396	521	500	509
31	---	---	---	422	406	411	---	---	---	511	495	503
MONTH	462	333	431	495	294	416	482	213	348	579	392	500

BEAVER RIVER BASIN

03098600 MAHONING RIVER BELOW WEST AVENUE AT YOUNGSTOWN, OH--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	524	493	504	437	420	431	428	399	413	453	439	445
2	546	517	529	449	412	434	486	387	409	462	453	457
3	531	499	510	412	375	382	447	368	424	475	457	468
4	507	494	500	435	398	420	438	419	426	471	453	464
5	500	482	493	468	422	438	444	421	434	455	444	450
6	500	480	489	480	395	471	431	407	418	458	439	451
7	512	473	491	412	258	346	421	406	413	455	437	444
8	506	475	488	426	386	408	421	414	417	474	443	460
9	491	464	477	432	327	382	422	410	415	473	457	463
10	479	465	474	366	329	347	426	407	415	466	456	460
11	492	468	479	417	366	387	413	403	409	483	458	470
12	475	464	469	452	417	435	415	399	407	482	465	476
13	491	465	477	450	439	445	434	362	403	479	463	470
14	487	462	474	457	439	446	380	292	331	487	462	473
15	478	462	471	463	424	441	356	258	304	511	482	494
16	464	439	456	432	424	428	319	263	293	498	482	489
17	474	439	466	451	421	434	371	319	347	506	474	490
18	466	448	457	436	410	422	434	371	403	522	498	511
19	462	448	457	431	412	420	516	434	475	514	494	505
20	460	436	445	430	403	412	521	426	478	494	476	481
21	450	433	441	413	406	408	440	424	429	509	480	486
22	472	435	457	421	398	407	440	400	415	512	490	503
23	445	429	435	432	386	407	428	408	420	501	487	493
24	435	428	432	416	394	405	435	417	426	498	480	486
25	447	431	440	424	415	418	439	424	429	493	466	473
26	435	422	429	442	405	420	445	429	437	---	---	---
27	441	422	430	417	408	412	438	424	432	---	---	---
28	452	425	437	417	410	413	449	426	439	---	---	---
29	455	426	436	428	405	415	457	441	450	---	---	---
30	449	421	435	445	393	413	460	441	450	---	---	---
31	---	---	---	420	396	404	460	440	448	---	---	---
MONTH	546	421	466	480	258	415	521	258	413	522	437	474
YEAR	827	213	467									

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

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

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PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

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

BEAVER RIVER BASIN

03098600 MAHONING RIVER BELOW WEST AVENUE AT YOUNGSTOWN, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

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

BEAVER RIVER BASIN

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03098600 MAHONING RIVER BELOW WEST AVENUE AT YOUNGSTOWN, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	26.0	22.5	24.0	24.5	23.5	24.0	28.5	26.5	27.5	26.5	24.5	25.5
2	26.0	23.5	25.0	25.0	23.5	24.0	29.0	24.5	27.5	25.5	24.0	25.0
3	25.5	22.5	24.0	26.0	24.0	25.0	28.0	24.0	26.0	25.0	23.0	24.0
4	26.0	23.0	24.5	27.5	24.5	25.5	29.5	27.0	28.0	23.0	21.0	22.0
5	26.5	24.0	25.5	28.5	26.5	27.5	28.0	25.5	26.5	21.0	19.0	20.0
6	26.5	24.5	25.5	31.5	28.5	30.0	25.5	23.5	24.5	20.0	19.5	19.5
7	28.0	25.5	27.0	29.5	23.5	25.5	24.0	22.5	23.5	24.5	20.0	23.0
8	27.5	24.5	26.0	28.0	25.5	27.0	25.0	22.5	24.0	24.5	21.5	23.0
9	25.0	22.0	23.5	27.5	26.5	27.0	26.0	24.0	25.0	25.0	23.0	24.0
10	25.0	22.0	23.5	26.5	26.0	26.5	27.0	24.5	25.5	23.5	21.5	22.5
11	27.5	25.0	26.0	27.5	25.0	26.0	26.0	24.0	25.0	23.0	20.5	21.5
12	27.0	25.5	26.5	28.0	25.5	27.0	25.5	25.0	25.0	21.0	19.0	20.0
13	28.0	26.0	26.5	30.0	27.0	28.5	25.0	23.5	24.5	21.0	19.5	20.5
14	29.0	26.5	27.5	29.5	28.0	29.0	23.5	22.0	22.5	21.5	20.5	21.0
15	30.5	28.0	29.0	29.5	28.0	29.0	22.0	20.5	21.0	22.5	21.0	22.0
16	31.5	29.5	30.5	29.5	27.5	28.5	21.5	20.5	21.0	24.0	22.0	22.5
17	31.5	29.5	30.5	28.5	26.0	27.0	22.0	21.0	21.5	24.5	24.0	24.0
18	32.0	29.5	30.5	27.5	25.5	26.5	24.5	22.0	23.0	25.0	23.0	24.0
19	32.0	30.0	31.0	29.5	26.0	27.5	26.5	24.5	25.5	24.0	23.0	23.5
20	31.0	29.0	30.0	31.0	28.5	29.5	26.5	25.0	26.0	23.5	21.5	22.5
21	31.0	28.5	29.5	31.5	29.5	30.5	25.5	23.5	25.0	24.0	22.5	23.0
22	30.5	28.5	29.5	30.5	28.5	30.0	25.0	23.5	24.0	23.5	22.5	23.0
23	30.0	28.5	29.5	30.0	28.0	29.0	24.5	23.0	24.0	23.0	22.0	22.5
24	30.0	28.0	29.0	30.0	27.5	29.0	24.5	23.0	24.0	23.5	22.0	22.5
25	28.5	27.5	28.0	30.0	28.0	29.0	26.0	23.5	24.5	23.0	20.5	21.5
26	27.5	25.0	25.5	29.0	27.5	28.5	26.5	24.5	25.5	20.5	19.0	20.5
27	25.0	23.0	24.0	28.5	27.0	28.0	27.0	25.0	26.0	19.0	18.5	19.0
28	24.5	22.5	23.5	28.0	26.5	27.0	26.5	25.0	26.0	18.5	18.0	18.0
29	25.0	23.0	24.0	28.0	26.0	27.0	27.0	25.0	26.0	18.0	17.0	17.5
30	24.5	23.5	24.0	28.5	26.0	27.0	28.0	26.0	27.0	18.0	16.5	17.0
31	---	---	---	28.5	26.5	27.5	27.0	25.5	26.0	---	---	---
MONTH	32.0	22.0	27.0	31.5	23.5	27.5	29.5	20.5	25.0	26.5	16.5	22.0
YEAR	32.0	1.0	15.5									

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	8.0	7.8	7.9	9.5	9.1	9.4	11.3	11.2	11.3	11.8	11.5	11.7
2	7.9	7.7	7.8	9.6	9.3	9.4	11.3	11.1	11.2	11.5	11.4	11.5
3	8.0	7.6	7.8	9.5	9.4	9.5	11.1	10.9	11.0	11.6	11.5	11.5
4	7.8	7.5	7.7	9.5	9.2	9.3	10.9	10.8	10.9	11.8	11.5	11.6
5	7.8	7.5	7.7	9.2	8.9	9.0	11.0	10.7	10.9	12.0	11.7	11.8
6	7.8	7.4	7.6	9.1	9.0	9.0	11.0	11.0	11.0	12.0	11.8	11.9
7	7.6	7.0	7.3	9.6	9.0	9.4	11.1	11.0	11.0	11.8	11.6	11.7
8	7.2	6.9	7.1	9.5	9.1	9.3	11.1	11.0	11.1	12.0	11.6	11.8
9	7.3	7.0	7.1	9.3	9.0	9.2	11.2	11.1	11.1	12.2	11.8	12.0
10	7.6	7.3	7.5	9.2	9.0	9.1	11.1	10.8	11.0	12.4	12.0	12.2
11	7.9	7.6	7.8	9.1	8.8	9.0	11.1	10.8	11.0	12.1	11.7	11.9
12	7.8	7.5	7.7	9.0	8.8	8.9	11.2	11.0	11.1	11.8	11.4	11.6
13	7.9	7.5	7.7	8.8	8.5	8.7	11.3	11.1	11.2	11.5	11.4	11.5
14	7.8	7.6	7.7	9.1	8.3	8.6	11.2	11.0	11.1	11.9	11.4	11.6
15	7.9	7.5	7.7	9.2	9.0	9.1	11.0	10.8	10.9	12.7	11.9	12.2
16	7.8	7.5	7.6	9.2	9.1	9.2	10.8	10.7	10.7	12.8	12.6	12.7
17	7.7	7.6	7.7	9.5	9.1	9.3	10.8	10.7	10.8	12.7	12.5	12.6
18	7.9	7.6	7.7	9.9	9.5	9.8	10.8	10.7	10.7	12.5	12.1	12.3
19	7.9	7.6	7.8	10.1	9.9	10.1	10.8	10.7	10.7	12.4	12.3	12.3
20	7.9	7.6	7.8	10.2	10.0	10.1	10.9	10.7	10.8	12.4	12.0	12.2
21	8.0	7.5	7.8	10.2	10.1	10.1	11.1	10.9	11.0	12.2	11.9	12.0
22	8.3	8.0	8.1	10.2	9.9	10.1	11.1	11.0	11.0	12.1	11.7	11.9
23	8.4	8.1	8.3	10.1	9.9	10.0	11.6	11.0	11.2	11.9	11.6	11.8
24	8.4	8.0	8.2	10.1	9.9	10.0	11.8	11.6	11.7	11.8	11.6	11.7
25	8.3	8.0	8.2	10.2	9.9	10.0	12.0	11.7	11.8	11.6	11.5	11.6
26	8.2	8.0	8.1	10.2	10.1	10.2	12.3	12.0	12.2	11.9	11.6	11.8
27	8.2	8.0	8.1	10.2	10.1	10.1	12.4	12.3	12.3	12.1	11.9	12.1
28	8.1	8.0	8.0	10.9	10.2	10.7	12.3	11.8	12.0	12.8	12.0	12.3
29	8.1	8.0	8.0	11.3	10.9	11.2	12.3	11.8	11.9	12.9	12.8	12.8
30	8.3	8.0	8.2	11.3	11.1	11.3	12.4	11.8	12.1	13.0	12.9	13.0
31	9.1	8.3	8.7	---	---	---	11.9	11.7	11.8	13.1	12.9	13.0
MONTH	9.1	6.9	7.8	11.3	8.3	9.6	12.4	10.7	11.2	13.1	11.4	12.0

OXYGEN DISSOLVED (MG/L). WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	13.1	12.9	13.0	---	---	---	11.6	11.3	11.5	8.8	8.5	8.7
2	13.2	13.0	13.1	---	---	---	11.4	10.9	11.2	8.8	8.6	8.7
3	13.1	13.0	13.1	---	---	---	11.0	10.8	10.9	8.9	8.6	8.7
4	13.2	13.1	13.2	---	---	---	11.2	10.7	11.0	8.6	8.5	8.5
5	13.2	13.1	13.2	12.3	12.1	12.2	11.0	10.6	10.8	8.5	8.1	8.3
6	13.2	13.1	13.1	12.2	12.1	12.1	10.9	10.7	10.7	8.4	7.9	8.2
7	13.2	13.0	13.2	12.2	12.1	12.1	11.4	10.9	11.2	8.5	8.1	8.4
8	13.4	13.1	13.3	12.2	12.1	12.2	11.5	11.2	11.3	8.8	8.2	8.5
9	13.6	13.4	13.5	12.3	12.2	12.3	11.2	10.9	11.1	8.7	8.4	8.5
10	---	---	---	12.4	12.2	12.3	11.0	10.9	10.9	8.7	8.2	8.5
11	---	---	---	12.3	12.0	12.1	11.1	10.9	11.0	8.7	8.4	8.5
12	---	---	---	12.0	11.8	11.9	11.0	10.8	10.9	8.9	8.5	8.6
13	---	---	---	12.0	11.8	11.9	10.8	10.5	10.6	8.9	8.2	8.6
14	---	---	---	12.0	11.8	11.9	10.5	10.0	10.3	8.7	8.2	8.5
15	---	---	---	---	---	---	10.1	9.7	9.9	8.3	8.0	8.2
16	---	---	---	---	---	---	10.1	9.7	9.9	8.4	8.2	8.3
17	---	---	---	---	---	---	10.3	10.1	10.2	8.6	8.3	8.5
18	---	---	---	---	---	---	10.3	10.0	10.1	8.9	8.6	8.8
19	---	---	---	11.9	11.5	11.7	10.0	9.8	9.9	9.0	8.4	8.8
20	---	---	---	11.7	11.2	11.5	10.0	9.7	9.9	8.7	7.9	8.3
21	---	---	---	11.7	11.3	11.5	9.9	9.7	9.8	8.3	7.6	8.0
22	---	---	---	12.0	11.7	11.9	10.0	9.6	9.8	7.9	7.2	7.6
23	---	---	---	11.9	11.4	11.6	9.9	9.5	9.7	7.4	7.1	7.3
24	---	---	---	11.4	11.0	11.2	9.6	9.3	9.5	7.3	7.0	7.2
25	---	---	---	11.5	11.0	11.2	9.3	8.8	9.1	7.2	7.0	7.1
26	---	---	---	11.6	11.5	11.5	8.8	8.5	8.7	7.4	7.1	7.2
27	---	---	---	11.7	11.5	11.6	8.5	8.3	8.4	7.6	7.1	7.4
28	---	---	---	11.9	11.7	11.8	8.4	8.3	8.4	7.6	7.1	7.4
29	---	---	---	11.9	11.6	11.8	8.5	8.2	8.4	7.8	7.3	7.5
30	---	---	---	11.7	11.5	11.6	8.5	8.3	8.5	7.9	7.4	7.6
31	---	---	---	11.8	11.5	11.7	---	---	---	7.7	7.2	7.5
MONTH	13.6	12.9	13.2	12.4	11.0	11.8	11.6	8.2	10.1	9.0	7.0	8.1
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	7.2	6.4	6.8	7.3	7.0	7.2	7.1	6.8	6.9	6.9	6.6	6.7
2	6.9	6.4	6.6	7.3	7.1	7.2	7.5	6.7	7.0	7.0	6.7	6.8
3	7.1	6.5	6.8	7.3	6.9	7.1	7.6	6.9	7.3	7.2	6.8	7.0
4	6.9	6.4	6.7	7.2	6.7	7.0	7.1	6.7	6.9	7.7	7.2	7.4
5	6.8	6.3	6.5	6.9	6.6	6.8	7.4	6.9	7.2	8.0	7.7	7.8
6	6.7	6.3	6.5	6.7	6.1	6.4	7.6	7.2	7.4	8.0	7.8	7.9
7	6.5	6.1	6.3	7.5	6.4	7.2	7.8	7.5	7.6	7.9	7.0	7.3
8	6.6	6.2	6.5	7.1	6.7	6.9	7.7	7.3	7.5	7.6	7.0	7.3
9	7.1	6.6	6.8	6.9	6.8	6.8	7.4	7.1	7.3	7.3	6.9	7.1
10	7.1	6.6	6.9	7.0	6.9	7.0	7.4	7.0	7.2	7.5	7.2	7.4
11	6.6	6.2	6.4	7.2	6.7	7.0	7.5	7.2	7.3	7.8	7.3	7.6
12	6.5	6.2	6.4	7.1	6.7	6.9	7.4	7.1	7.2	8.0	7.8	7.9
13	6.5	6.1	6.3	6.9	6.3	6.6	7.5	7.2	7.3	8.1	7.8	7.9
14	6.3	5.9	6.1	6.7	6.4	6.5	7.8	7.5	7.7	7.9	7.6	7.8
15	6.1	5.7	5.9	6.7	6.4	6.6	8.0	7.8	7.9	7.7	7.5	7.6
16	5.8	5.5	5.7	6.8	6.5	6.6	8.1	7.9	8.0	7.6	7.2	7.4
17	5.8	5.5	5.7	7.0	6.6	6.8	7.9	7.7	7.8	7.3	7.1	7.2
18	5.8	5.4	5.6	7.1	6.7	6.9	7.7	7.2	7.5	7.4	7.0	7.2
19	5.8	5.4	5.6	7.0	6.5	6.8	7.2	6.9	7.1	7.4	7.0	7.3
20	5.9	5.6	5.8	6.6	6.2	6.4	7.1	6.9	7.0	7.6	7.1	7.4
21	6.0	5.6	5.8	6.4	6.1	6.3	7.2	6.9	7.1	7.5	7.1	7.4
22	6.1	5.7	5.9	6.7	6.3	6.4	7.3	7.0	7.2	7.5	7.3	7.4
23	6.1	5.8	6.0	6.8	6.5	6.6	7.3	7.1	7.2	7.6	7.4	7.5
24	6.3	5.9	6.1	6.9	6.5	6.7	7.3	7.1	7.2	7.6	7.1	7.5
25	6.4	6.2	6.3	6.8	6.5	6.6	7.3	6.7	7.0	---	---	---
26	6.8	6.4	6.7	6.8	6.6	6.7	7.0	6.7	6.8	---	---	---
27	7.2	6.8	7.0	6.9	6.7	6.8	6.9	6.6	6.7	---	---	---
28	7.3	7.0	7.1	7.1	6.8	6.9	6.9	6.6	6.7	---	---	---
29	7.2	6.9	7.1	7.2	6.8	7.0	6.9	6.5	6.7	---	---	---
30	7.3	7.1	7.2	7.1	6.8	7.0	6.7	6.3	6.5	---	---	---
31	---	---	---	7.2	6.8	7.0	6.7	6.5	6.6	---	---	---
MONTH	7.3	5.4	6.4	7.5	6.1	6.8	8.1	6.3	7.2	8.1	6.6	7.4
YEAR	13.6	5.4	9.0									

03102950 PYMATUNING CREEK AT KINSMAN, OH

LOCATION.--Lat 41°26'34", long 80°35'18", in T.7 N., R.1 W., 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.

DRAINAGE AREA.--96.7 mi².

PERIOD OF RECORD.--October 1965 to current year (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 906.8 ft above sea level.

REMARKS.--Estimated daily discharges: Dec. 26 to Jan. 27, 30 to Feb. 17, 27 to Mar. 6. Records fair, except estimated record, which is poor. Water-quality data collected at this site 1966 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	34	300	56	370	150	120	74	51	123	2.2	15
2	27	54	231	56	260	110	102	78	66	111	2.1	12
3	21	80	170	68	200	90	94	68	54	76	1.8	9.4
4	13	90	168	66	160	80	116	56	38	56	2.0	7.9
5	11	93	336	66	140	74	136	49	29	42	4.4	5.2
6	8.3	80	357	66	120	110	153	45	26	34	5.1	4.0
7	7.7	54	368	64	100	252	354	44	26	64	5.9	4.6
8	6.6	34	355	64	94	371	384	47	24	67	7.0	5.1
9	6.5	25	298	62	86	365	362	46	24	52	5.0	5.7
10	7.7	19	238	62	78	320	499	46	23	41	4.2	6.6
11	7.5	16	185	60	70	290	549	43	29	32	4.5	6.5
12	5.6	14	138	60	64	230	688	42	32	26	4.7	6.8
13	5.1	15	115	58	60	218	926	40	33	21	259	6.8
14	4.7	48	100	58	56	348	845	36	41	18	926	6.9
15	4.4	203	94	58	54	488	614	39	48	17	615	7.4
16	4.8	209	92	56	70	520	472	174	44	15	464	11
17	11	279	88	56	84	462	350	217	37	14	346	13
18	20	566	81	56	130	410	253	196	33	13	231	16
19	39	552	87	56	233	304	180	140	29	9.1	119	15
20	51	534	94	54	507	242	126	99	26	6.2	55	14
21	63	423	102	54	755	305	98	70	25	6.7	34	13
22	53	314	108	54	757	667	78	51	25	8.8	25	13
23	45	218	103	54	596	664	64	41	25	8.9	18	13
24	41	138	93	52	557	527	53	34	26	8.4	15	13
25	31	94	86	52	458	393	48	49	28	6.5	12	17
26	22	72	76	52	366	301	44	58	30	5.8	9.4	73
27	14	87	66	90	290	235	42	57	32	5.3	7.2	95
28	5.8	284	60	294	200	223	43	48	33	4.3	8.1	97
29	3.4	331	60	977	---	219	58	40	52	3.5	14	99
30	8.7	326	58	920	---	195	65	34	90	3.4	20	94
31	18	---	58	620	---	152	---	30	---	2.7	18	---
TOTAL	598.8	5286	4765	4421	6915	9315	7916	2091	1079	901.6	3244.6	705.9
MEAN	19.3	176	154	143	247	300	264	67.5	36.0	29.1	105	23.5
MAX	63	566	368	977	757	667	926	217	90	123	926	99
MIN	3.4	14	58	52	54	74	42	30	23	2.7	1.8	4.0
CFSM	.20	1.82	1.59	1.47	2.55	3.11	2.73	.70	.37	.30	1.08	.24
IN.	.23	2.03	1.83	1.70	2.66	3.58	3.05	.80	.42	.35	1.25	.27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1994, BY WATER YEAR (WY)

MEAN	63.4	149	208	156	231	254	178	114	76.0	46.1	33.3	48.6
MAX	326	560	477	385	578	462	305	316	349	196	186	232
(WY)	1991	1986	1991	1993	1981	1972	1979	1984	1989	1987	1980	1979
MIN	6.03	14.6	22.9	21.4	48.6	73.7	55.7	19.3	2.36	1.60	1.06	2.56
(WY)	1983	1979	1992	1977	1987	1969	1971	1987	1988	1970	1971	1966

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1966 - 1994

ANNUAL TOTAL	46608.52	47238.9	
ANNUAL MEAN	128	129	129
HIGHEST ANNUAL MEAN			174
LOWEST ANNUAL MEAN			82.7
HIGHEST DAILY MEAN	988	Mar 25	2530
LOWEST DAILY MEAN	.94	Sep 1	.02
ANNUAL SEVEN-DAY MINIMUM	1.2	Aug 27	.14
INSTANTANEOUS PEAK FLOW			2740
INSTANTANEOUS PEAK STAGE		11.25	Aug 14
INSTANTANEOUS LOW FLOW		1.8	Aug 3
ANNUAL RUNOFF (CFSM)	1.32	1.34	1.34
ANNUAL RUNOFF (INCHES)	17.93	18.17	18.15
10 PERCENT EXCEEDS	407	365	352
50 PERCENT EXCEEDS	45	56	55
90 PERCENT EXCEEDS	3.8	6.8	5.5

LITTLE BEAVER CREEK BASIN

03109500 LITTLE BEAVER CREEK NEAR EAST LIVERPOOL, OH

LOCATION.--Lat 40°40'33", long 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.

DRAINAGE AREA.--496 mi².

PERIOD OF RECORD.--May 1915 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 702.77 ft above sea level. Prior to Sept. 22, 1926, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 25 to Jan. 27, Feb. 3-16. Records good except for periods of estimated records, which are fair. Water-quality data collected at this site 1964-1978. Sediment data collected at this site 1969 to 1974. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	227	327	190	1200	875	958	505	273	262	75	92
2	71	264	290	190	803	780	838	471	243	206	66	84
3	69	231	291	180	700	733	798	395	211	195	142	76
4	59	303	488	180	600	684	998	370	194	187	251	72
5	53	354	2130	180	540	719	840	363	179	174	217	66
6	48	275	1330	170	470	867	791	356	168	212	209	71
7	46	193	936	220	420	1070	1750	354	171	191	133	167
8	45	148	716	260	400	1480	1400	431	163	293	99	112
9	45	124	582	240	370	1190	1000	376	154	220	82	93
10	44	112	517	230	350	2470	1840	331	141	164	74	83
11	43	102	481	230	330	2490	2780	302	130	137	71	75
12	43	96	416	220	320	2020	2500	293	130	121	74	67
13	46	105	370	210	310	1920	3610	286	139	108	76	61
14	43	143	352	210	300	2150	3610	264	128	110	623	61
15	44	297	356	200	290	1790	2110	272	117	131	923	95
16	46	284	353	200	360	1460	2090	355	108	131	337	110
17	64	581	319	190	554	1120	1920	328	139	104	210	94
18	85	1850	301	190	654	1020	1380	303	113	92	189	122
19	94	910	394	180	1150	948	1170	283	101	85	151	108
20	102	528	424	180	1880	957	985	272	105	79	128	87
21	128	385	402	180	2590	1830	829	250	197	76	139	78
22	155	306	399	170	2270	4170	722	231	176	78	172	73
23	129	259	348	170	1860	2580	648	218	126	101	200	69
24	97	236	303	170	2820	1880	603	209	320	106	133	67
25	86	219	260	170	2520	1590	558	629	549	91	105	69
26	76	201	230	350	1670	1210	514	1360	288	97	93	388
27	73	242	230	700	1150	1290	475	875	589	85	87	377
28	66	678	220	4640	963	1810	435	526	558	80	87	239
29	61	621	210	6650	---	1680	436	406	358	74	120	170
30	63	411	200	3790	---	1330	410	335	338	98	105	132
31	101	---	200	1750	---	1100	---	287	---	92	88	---
TOTAL	2196	10685	14375	22790	27844	47213	38998	12236	6606	4180	5459	3458
MEAN	70.8	356	464	735	994	1523	1300	395	220	135	176	115
MAX	155	1850	2130	6650	2820	4170	3610	1360	589	293	923	388
MIN	43	96	200	170	290	684	410	209	101	74	66	61
CFSM	.14	.72	.93	1.48	2.00	3.07	2.62	.80	.44	.27	.36	.23
IN.	.16	.80	1.08	1.71	2.09	3.54	2.92	.92	.50	.31	.41	.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 1994, 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
MEAN	179	323	539	709	871	1136	922	644	380	254	176	146																	
MAX	1380	2102	2012	3993	1957	2493	2187	1876	1784	1554	1567	1452																	
(WY)	1955	1986	1991	1937	1956	1945	1940	1929	1989	1990	1980	1926																	
MIN	25.7	38.2	50.7	63.9	50.7	241	202	79.9	40.8	29.6	22.0	17.4																	
(WY)	1964	1931	1931	1931	1934	1969	1946	1934	1934	1930	1930	1932																	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1916 - 1994

ANNUAL TOTAL	204808	196040	
ANNUAL MEAN	561	537	521
HIGHEST ANNUAL MEAN			899
LOWEST ANNUAL MEAN			207
HIGHEST DAILY MEAN	5630	Mar 24	18900
LOWEST DAILY MEAN	29	Aug 30	12
ANNUAL SEVEN-DAY MINIMUM	33	Aug 25	44
INSTANTANEOUS PEAK FLOW			7180
INSTANTANEOUS PEAK STAGE			10.10
INSTANTANEOUS LOW FLOW			41
ANNUAL RUNOFF (CFSM)	1.13	1.08	1.05
ANNUAL RUNOFF (INCHES)	15.36	14.70	14.28
10 PERCENT EXCEEDS	1340	1470	1240
50 PERCENT EXCEEDS	303	242	244
90 PERCENT EXCEEDS	47	75	50

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

03110000 YELLOW CREEK NEAR HAMMONDSVILLE, OH

LOCATION.--Lat 40°32'16", long 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.

DRAINAGE AREA.--147 mi².

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 1907: Drainage area.

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

REMARKS.--Estimated daily discharges: Dec. 25 to Jan. 27, Feb. 1-17. Records good except for estimated daily discharges, which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	108	147	56	360	272	312	110	78	91	58	26
2	24	120	129	56	270	243	269	84	68	63	45	24
3	21	91	125	54	200	232	250	70	59	116	77	20
4	30	135	171	52	170	208	252	66	52	84	62	19
5	25	160	796	52	150	221	208	65	48	59	78	17
6	23	129	497	52	130	230	205	64	45	57	69	16
7	21	90	356	70	110	251	373	65	47	46	48	16
8	20	69	269	90	100	306	309	105	43	43	40	14
9	19	55	219	82	100	292	281	81	39	40	35	14
10	17	47	190	78	96	987	755	70	37	37	32	14
11	15	42	179	76	92	732	1110	61	34	31	30	13
12	15	39	141	74	88	592	787	59	36	28	29	12
13	14	57	118	70	84	533	888	56	47	25	29	11
14	13	352	114	68	82	599	779	49	45	117	217	11
15	14	403	111	66	80	507	616	54	36	144	283	13
16	14	281	107	64	88	412	869	146	31	73	107	16
17	24	461	91	62	110	321	694	97	27	50	75	20
18	42	1230	85	60	149	307	532	80	25	40	71	68
19	33	548	105	60	240	306	430	71	24	35	54	32
20	33	359	101	58	441	278	344	64	23	32	44	23
21	60	245	108	58	945	682	282	57	75	30	49	18
22	74	178	109	56	711	1860	241	51	50	30	49	16
23	86	139	98	56	816	830	203	47	36	43	39	14
24	65	118	90	54	1630	633	176	44	49	46	33	13
25	53	103	78	54	935	473	153	81	82	68	30	13
26	37	88	70	120	602	371	138	475	57	61	30	34
27	26	98	66	400	395	397	113	315	113	41	26	39
28	22	304	64	2750	313	553	99	189	110	35	25	28
29	22	260	62	2940	---	530	92	135	106	61	34	24
30	22	194	60	878	---	429	96	109	154	372	41	19
31	34	---	58	542	---	361	---	90	---	101	29	---
TOTAL	952	6503	4914	9208	9487	14948	11856	3110	1676	2099	1868	617
MEAN	30.7	217	159	297	339	482	395	100	55.9	67.7	60.3	20.6
MAX	86	1230	796	2940	1630	1860	1110	475	154	372	283	68
MIN	13	39	58	52	80	208	92	44	23	25	25	11
CFSM	.21	1.47	1.08	2.02	2.30	3.28	2.69	.68	.38	.46	.41	.14
IN.	.24	1.65	1.24	2.33	2.40	3.78	3.00	.79	.42	.53	.47	.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1994, BY WATER YEAR (WY)

MEAN	47.9	94.5	172	216	281	354	304	208	116	66.8	50.2	38.4
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	2.33
(WY)	1954	1992	1964	1977	1954	1969	1941	1988	1988	1965	1962	1963

SUMMARY STATISTICS FOR 1993 CALENDAR YEAR FOR 1994 WATER YEAR WATER YEARS 1941 - 1994

ANNUAL TOTAL	66792.2	67238	
ANNUAL MEAN	183	184	162
HIGHEST ANNUAL MEAN			266
LOWEST ANNUAL MEAN			73.9
HIGHEST DAILY MEAN	1730	Mar 5	2940
LOWEST DAILY MEAN	4.6	Aug 30	11
ANNUAL SEVEN-DAY MINIMUM	5.0	Aug 27	13
INSTANTANEOUS PEAK FLOW			5530
INSTANTANEOUS PEAK STAGE			9.49
INSTANTANEOUS LOW FLOW			10
ANNUAL RUNOFF (CFSM)	1.24	1.25	1.11
ANNUAL RUNOFF (INCHES)	16.90	17.02	15.02
10 PERCENT EXCEEDS	464	474	389
50 PERCENT EXCEEDS	94	75	75
90 PERCENT EXCEEDS	11	23	10

SHORT CREEK BASIN

03111500 SHORT CREEK NEAR DILLONVALE, OH

LOCATION.--Lat 40°11'38", long 80°44'03", 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, 2.2 mi downstream from Jug Run, and 2.9 mi upstream from Little Short Creek.

DRAINAGE AREA.--123 mi².

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

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

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

REMARKS.--Estimated daily discharges: Dec. 24 to Jan. 27, Feb. 3-13. Records good except for those for periods of estimated record which are fair. Water-quality data collected at this site 1964 to 1977. Sediment data collected 1969 to 1974. U.S. Army Corps of Engineers satellite telemeter at station. Water year 1986 stream flow records published in 1987 water year report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	120	94	48	286	197	249	172	98	69	41	85
2	31	114	88	47	228	189	229	157	87	59	38	66
3	37	91	91	47	200	189	224	149	79	75	39	56
4	31	101	175	46	180	190	227	151	75	64	40	51
5	28	83	381	45	160	209	206	147	71	55	95	46
6	27	72	192	44	150	232	205	147	66	68	61	41
7	26	62	152	80	140	232	302	151	65	96	45	39
8	26	55	129	100	130	279	232	174	59	73	39	37
9	26	52	116	86	120	259	212	147	57	56	36	34
10	27	49	112	80	120	918	840	140	53	51	34	34
11	26	47	109	76	110	461	582	134	50	44	34	33
12	25	47	99	74	110	389	491	143	49	41	44	31
13	27	155	92	70	170	339	575	133	50	38	52	30
14	28	280	91	68	163	368	408	127	45	46	96	29
15	28	427	89	66	197	313	348	131	43	133	122	29
16	32	169	85	62	208	273	457	145	56	80	61	29
17	107	283	79	60	179	239	339	131	42	61	52	35
18	76	334	77	60	178	260	295	125	38	51	60	74
19	56	174	86	58	208	281	269	120	33	46	47	42
20	57	144	81	56	258	239	244	117	32	43	41	34
21	78	117	87	54	416	750	224	112	43	43	101	31
22	80	102	86	54	316	727	211	109	44	63	83	29
23	58	92	81	52	574	390	198	107	34	94	56	28
24	50	85	74	52	660	370	191	107	91	56	46	28
25	46	79	62	52	390	316	182	148	104	68	43	29
26	43	74	56	100	297	273	178	242	70	59	47	97
27	41	99	54	200	232	339	176	164	162	47	43	63
28	38	185	52	3280	205	460	165	129	107	45	40	47
29	37	131	50	1100	---	363	165	113	86	44	390	38
30	40	108	49	496	---	301	165	103	85	65	145	33
31	61	---	48	355	---	271	---	99	---	50	95	---
TOTAL	1324	3931	3117	7068	6585	10616	8789	4274	1974	1883	2166	1278
MEAN	42.7	131	101	228	235	342	293	138	65.8	60.7	69.9	42.6
MAX	107	427	381	3280	660	918	840	242	162	133	390	97
MIN	25	47	48	44	110	189	165	99	32	38	34	28
CFSM	.35	1.07	.82	1.85	1.91	2.78	2.38	1.12	.53	.49	.57	.35
IN.	.40	1.19	.94	2.14	1.99	3.21	2.66	1.29	.60	.57	.66	.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1994, BY WATER YEAR (WY)

	MEAN	53.6	75.5	118	158	207	251	229	169	114	78.0	63.1	51.9
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	28.0	17.4	11.5	8.62	
(WY)	1954	1954	1944	1967	1954	1969	1946	1976	1988	1954	1945	1947	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1942 - 1994

ANNUAL TOTAL	47436	53005		
ANNUAL MEAN	130	145		
HIGHEST ANNUAL MEAN			130	1980
LOWEST ANNUAL MEAN			46.1	1954
HIGHEST DAILY MEAN	959	Apr 26	3620	Mar 6 1945
LOWEST DAILY MEAN	23	Aug 30	2.8	Sep 21 1947
ANNUAL SEVEN-DAY MINIMUM	24	Aug 25	4.9	Dec 14 1943
INSTANTANEOUS PEAK FLOW			8200	Jun 15 1990
INSTANTANEOUS PEAK STAGE			12.27	Jun 15 1990
INSTANTANEOUS LOW FLOW				
ANNUAL RUNOFF (CFSM)	1.06	1.18	1.06	
ANNUAL RUNOFF (INCHES)	14.35	16.03	14.38	
10 PERCENT EXCEEDS	261	301	273	
50 PERCENT EXCEEDS	101	86	78	
90 PERCENT EXCEEDS	27	36	22	

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

03111548 WHEELING CREEK BELOW BLAINE, OH

LOCATION.--Lat 40°04'01", long 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, and 4.8 mi upstream from mouth.
 DRAINAGE AREA.--97.7 mi².
 PERIOD OF RECORD.--December 1982 to September 1987, October 1988 to current year.
 GAGE.--Water-stage recorder. Datum of gage is 699.11 ft above sea level. Prior to Oct. 1, 1988 at datum 1.00 ft higher.
 REMARKS.--Estimated daily discharges: Dec. 24 to Jan. 26, Feb. 2-12. Records poor. U.S. Army Corps of Engineers satellite telemeter at station. Sediment data collected 1982 to 1989.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	113	77	43	262	174	215	122	54	43	31	71
2	33	89	73	41	210	170	193	111	53	39	34	54
3	37	78	74	40	180	172	193	104	51	57	31	47
4	30	87	241	40	160	168	189	106	50	46	31	43
5	27	67	360	39	140	229	169	101	47	37	50	40
6	25	59	174	39	130	254	177	102	45	31	40	39
7	24	53	141	70	120	225	307	118	44	98	30	39
8	23	48	119	80	110	241	187	137	43	59	27	38
9	22	46	105	72	100	223	170	103	44	52	26	37
10	23	45	104	68	94	994	1140	94	40	46	25	43
11	21	42	100	66	90	432	588	89	39	41	23	38
12	23	41	88	62	88	353	448	109	39	39	25	36
13	24	114	82	59	228	298	600	91	40	38	25	35
14	23	230	81	56	149	327	394	83	36	50	45	34
15	22	313	80	54	170	267	340	86	34	69	57	33
16	27	125	75	52	172	228	526	93	34	59	34	33
17	127	249	69	50	146	195	327	83	32	47	35	55
18	59	265	69	49	148	217	270	82	32	41	36	76
19	42	138	82	48	175	217	245	78	32	39	31	53
20	47	114	75	47	216	180	216	82	30	38	27	44
21	56	88	83	46	368	676	191	80	36	38	110	42
22	51	77	78	45	261	638	178	76	51	45	73	39
23	42	69	71	44	510	330	165	73	37	48	46	36
24	37	65	66	110	545	333	155	77	97	40	39	32
25	35	62	62	200	330	265	145	71	106	37	42	35
26	35	57	56	400	261	224	135	90	69	39	41	59
27	36	107	52	876	205	331	128	76	133	34	35	41
28	31	184	50	3900	184	496	121	64	69	33	33	32
29	35	110	47	1100	---	340	127	58	52	37	165	26
30	37	89	45	448	---	271	120	56	51	50	82	25
31	60	---	44	314	---	237	---	54	---	37	87	---
TOTAL	1143	3224	2923	8558	5752	9705	8359	2749	1520	1407	1416	1255
MEAN	36.9	107	94.3	276	205	313	279	88.7	50.7	45.4	45.7	41.8
MAX	127	313	360	3900	545	994	1140	137	133	98	165	76
MIN	21	41	44	39	88	168	120	54	30	31	23	25
CFSM	.38	1.10	.97	2.83	2.10	3.20	2.85	.91	.52	.46	.47	.43
IN.	.44	1.23	1.11	3.26	2.19	3.70	3.18	1.05	.58	.54	.54	.48

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1994, BY WATER YEAR (WY)

MEAN	47.1	107	128	131	160	179	185	140	100	75.7	39.7	40.3
MAX	138	402	395	294	262	330	298	298	288	230	87.5	95.2
(WY)	1991	1986	1991	1991	1986	1993	1983	1983	1989	1990	1992	1990
MIN	17.9	23.7	44.4	51.5	67.9	72.7	73.9	52.8	34.7	35.8	16.6	9.53
(WY)	1989	1992	1989	1992	1992	1987	1986	1986	1992	1991	1986	1985

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1982 - 1994

ANNUAL TOTAL	40993	48011	
ANNUAL MEAN	112	132	
HIGHEST ANNUAL MEAN			110
LOWEST ANNUAL MEAN			143
HIGHEST DAILY MEAN	1120	Mar 4	3900
LOWEST DAILY MEAN	21	Oct 11	21
ANNUAL SEVEN-DAY MINIMUM	23	Oct 9	23
INSTANTANEOUS PEAK FLOW			5110
INSTANTANEOUS PEAK STAGE			7.93
INSTANTANEOUS LOW FLOW			20
ANNUAL RUNOFF (CFSM)	1.15	1.35	1.13
ANNUAL RUNOFF (INCHES)	15.61	18.28	15.30
10 PERCENT EXCEEDS	240	266	224
50 PERCENT EXCEEDS	78	69	70
90 PERCENT EXCEEDS	27	33	24

CAPTINA CREEK BASIN

03114000 CAPTINA CREEK AT ARMSTRONGS MILLS, OH

LOCATION.--Lat 39°54'31", long 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, and 0.7 mi downstream from Anderson Run.

DRAINAGE AREA.--134 mi².

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.--Estimated daily discharges: Dec. 25 to Jan. 27, Feb. 1-15. Records good except for periods of estimated record, which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	169	138	48	350	198	272	98	24	43	12	55
2	15	130	123	47	200	193	228	82	21	26	6.9	34
3	38	100	128	46	150	209	216	73	18	22	5.4	21
4	30	119	328	45	130	204	220	74	18	28	5.6	15
5	21	97	913	43	110	388	186	70	14	21	222	14
6	15	78	410	42	100	577	201	72	12	16	84	11
7	12	64	267	70	94	541	557	103	11	223	29	10
8	11	52	203	120	88	518	313	233	11	95	16	9.8
9	10	45	167	90	84	391	255	119	9.6	43	10	9.9
10	14	41	172	74	78	1700	1960	92	9.6	25	7.4	9.2
11	16	36	164	68	76	749	1110	76	13	18	5.8	8.5
12	12	33	134	62	74	583	717	91	32	12	4.9	7.9
13	11	130	121	58	72	492	1040	80	18	9.9	4.9	6.9
14	13	287	116	56	70	588	646	65	13	67	8.3	6.2
15	11	660	113	54	110	428	578	64	9.7	92	52	5.6
16	10	259	103	52	205	337	1210	95	9.3	61	17	5.2
17	156	405	91	50	190	261	586	71	20	35	11	114
18	90	706	87	49	208	292	403	61	7.7	24	21	227
19	52	301	99	48	308	344	318	54	6.0	16	14	54
20	116	213	94	47	474	266	252	51	7.1	10	8.6	26
21	148	152	107	46	902	1600	210	45	12	8.3	401	17
22	92	124	102	45	519	1230	181	40	47	15	479	13
23	61	106	97	45	1160	569	157	36	30	18	156	11
24	48	96	90	44	1020	454	140	33	22	13	74	11
25	40	87	70	43	550	346	125	34	73	13	42	14
26	34	78	64	200	379	272	116	83	58	37	32	44
27	30	185	60	800	266	485	107	54	144	15	26	40
28	27	458	56	7780	255	1030	96	38	73	9.3	20	21
29	25	250	54	2160	---	616	89	32	56	7.3	31	15
30	24	174	52	855	---	412	84	28	69	24	40	13
31	53	---	50	528	---	325	---	25	---	25	26	---
TOTAL	1252	5635	4773	13715	8222	16598	12573	2172	868.0	1071.8	1872.8	849.2
MEAN	40.4	188	154	442	294	535	419	70.1	28.9	34.6	60.4	28.3
MAX	156	706	913	7780	1160	1700	1960	233	144	223	479	227
MIN	10	33	50	42	70	193	84	25	6.0	7.3	4.9	5.2
CFSM	.30	1.40	1.15	3.30	2.19	4.00	3.13	.52	.22	.26	.45	.21
IN.	.35	1.56	1.33	3.81	2.28	4.61	3.49	.60	.24	.30	.52	.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 1994, BY WATER YEAR (WY)

	MEAN	49.3	110	207	233	288	337	275	183	101	73.2	68.1	53.2
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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1927 - 1994

ANNUAL TOTAL	58787.9	69601.8	
ANNUAL MEAN	161	191	
HIGHEST ANNUAL MEAN			164
LOWEST ANNUAL MEAN			275
HIGHEST DAILY MEAN	2600	7780	1928
LOWEST DAILY MEAN	1.2	4.9	1931
ANNUAL SEVEN-DAY MINIMUM	2.3	7.1	75.2
INSTANTANEOUS PEAK FLOW		11600	8080
INSTANTANEOUS PEAK STAGE		13.42	.00
INSTANTANEOUS LOW FLOW		3.4	.00
ANNUAL RUNOFF (CFSM)	1.20	1.42	21900
ANNUAL RUNOFF (INCHES)	16.32	19.32	17.48
10 PERCENT EXCEEDS	364	481	
50 PERCENT EXCEEDS	78	70	
90 PERCENT EXCEEDS	9.5	11	

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

MUSKINGUM RIVER BASIN

57

03115969 MONTROSE RUN AT MONTROSE, OHIO

LOCATION.--Lat 41 07'51", long 81°38'25", Summit County, Hydrologic Unit 05040001, on left bank of small pond at the Windsong Care Center at 120 Brookmont Dr., 0.25 mi west of Cleveland-Massillon Road, 0.4 mi southwest of intersection of State Route 18 and I-77, 1.6 mi northwest of Akron corporate boundary.

DRAINAGE AREA.--0.263 mi².

PERIOD OF RECORD.--October 1, 1992 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 989 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 15-24, 26, Feb. 8-12, 25 to Mar. 9, 16-20. Record good, except for periods of estimated record, which are fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	1.3	.04	.00	.75	.04	.04	.29	.42	.04	.00	.02
2	.20	.17	.35	.05	.73	.03	.02	.03	.01	1.8	.00	.00
3	.00	.61	.20	.02	.69	.02	.79	.01	.00	.14	.00	.00
4	.00	.14	2.7	.01	.67	.02	.14	.00	.00	.03	.35	.00
5	.00	.07	.61	.00	.60	.02	.13	.00	.00	.19	.38	.00
6	.00	.07	.23	.00	.43	.02	2.8	.00	.00	.09	.03	.00
7	.00	.01	.12	.02	.07	.28	.64	.12	.00	1.4	.00	.00
8	.00	.00	.26	.03	.01	.18	.14	.23	.00	.22	.00	.00
9	.58	.00	.04	.01	.00	.13	.10	.03	.00	.17	.00	.35
10	.05	.00	.09	.00	.00	.34	3.6	.01	.00	.03	.00	.02
11	.00	.00	.30	.00	.00	.35	.33	.00	.00	.00	.04	.00
12	.00	.00	.15	.00	.00	.56	7.4	.03	.00	.00	.04	.00
13	.00	.00	.08	.04	.08	1.3	2.7	.02	.00	.00	3.5	.00
14	.00	5.5	.09	.04	.11	.47	.37	.00	.00	.38	1.9	.00
15	.00	.74	.12	.01	.36	.37	1.1	1.2	.00	.05	.06	.00
16	.00	.13	.08	.00	.23	.20	.32	.21	.00	.01	.01	.00
17	2.5	4.3	.02	.00	.23	.18	.12	.06	.00	.00	.00	.54
18	.06	.35	.26	.00	.39	.15	.09	.01	.00	.00	.00	.05
19	.52	.15	.14	.00	.61	.14	.07	.00	.00	.00	.00	.00
20	.12	.12	.06	.00	.78	.15	.05	.00	.72	.00	.64	.00
21	.28	.04	.46	.00	.35	1.6	.03	.00	.21	.43	1.2	.00
22	.00	.07	.09	.00	.22	.31	.02	.00	.01	1.0	.06	.00
23	.00	.03	.06	.00	.81	.16	.02	.00	.00	.25	.02	.00
24	.00	.02	.03	.03	.41	.85	.02	.00	2.3	.01	.01	.00
25	.00	.00	.02	.37	.14	.10	.01	.68	.40	.69	.00	.00
26	.00	.01	.01	.15	.07	.05	.00	.12	.36	.48	.00	.21
27	.00	4.4	.00	3.1	.06	.44	.02	.02	.69	.01	.00	.29
28	.00	.52	.00	8.3	.04	.21	.00	.00	.06	.09	.00	.03
29	.00	.16	.00	.94	---	.29	.81	.00	5.8	.09	.04	.07
30	.00	.07	.00	.82	---	.11	.32	.00	.26	.08	.01	.00
31	1.5	---	.00	.78	---	.06	---	.14	---	.01	.03	---
TOTAL	5.81	18.98	6.61	14.72	8.84	9.13	22.20	3.21	11.24	7.69	8.32	1.58
MEAN	.19	.63	.21	.47	.32	.29	.74	.10	.37	.25	.27	.053
MAX	2.5	5.5	2.7	8.3	.81	1.6	7.4	1.2	5.8	1.8	3.5	.54
MIN	.00	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00
CFSM	.75	2.53	.85	1.90	1.26	1.18	2.96	.41	1.50	.99	1.07	.21
IN.	.86	2.82	.98	2.19	1.32	1.36	3.30	.48	1.67	1.14	1.24	.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1994, BY WATER YEAR (WY)

	1993	1994	1993	1994	1993	1994	1993	1994	1993	1994	1993	1994
MEAN	.12	.53	.27	.51	.19	.48	.63	.093	.33	.13	.13	.14
MAX	.19	.63	.33	.55	.32	.66	.74	.10	.37	.25	.27	.23
(WY)	1994	1994	1993	1993	1994	1993	1994	1994	1994	1994	1994	1993
MIN	.048	.43	.21	.47	.069	.29	.52	.082	.29	.009	.001	.053
(WY)	1993	1993	1994	1994	1993	1994	1993	1993	1993	1993	1993	1994

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1993 - 1994

ANNUAL TOTAL	104.97	118.33		
ANNUAL MEAN	.29	.32	.30	
HIGHEST ANNUAL MEAN			.32	1994
LOWEST ANNUAL MEAN			.27	1993
HIGHEST DAILY MEAN	6.2	Apr 25	8.3	Jan 28 1994
LOWEST DAILY MEAN	.00	Jan 20	.00	Oct 1 1992
ANNUAL SEVEN-DAY MINIMUM	.00	Feb 1	.00	Oct 1 1992
INSTANTANEOUS PEAK FLOW			57	Jun 29 1994
INSTANTANEOUS PEAK STAGE			12.56	Jun 29 1994
INSTANTANEOUS LOW FLOW			.00	Oct 1 1992
ANNUAL RUNOFF (CFSM)	1.15		1.30	
ANNUAL RUNOFF (INCHES)	15.62		17.61	
10 PERCENT EXCEEDS	.79		.72	
50 PERCENT EXCEEDS	.01		.04	
90 PERCENT EXCEEDS	.00		.00	

MUSKINGUM RIVER BASIN

03115970 SCHOCALOG RUN AT MONTROSE, OHIO

LOCATION.--Lat 41 07'37", long 81°37'54", Summit County, Hydrologic Unit 05040001, on northeast bank of small pond located at Rosemont Country Club golf course, about 300 feet north of Elgin Drive, about 700 feet east of Cleveland-Massillon Road, 1.2 miles west northwest of Akron corporate boundary, 1.2 miles southeast of intersection of SR-18 and I-77, at Fairlawn.

DRAINAGE AREA.--1.59 mi².

PERIOD OF RECORD.--October 1, 1993 to September 30, 1994.

GAGE.--Water-stage recorder. Elevation of gage is 981 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Record good, except for discharges less than 2.0 ft³/s, which are poor. Flow effected by pumping from gage pool to water golf course and into gage pool to dewater peat quarry.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	7.2	1.3	.69	1.2	1.1	1.2	2.5	1.8	3.3	.68	.00
2	1.4	3.0	1.6	1.0	.80	1.1	1.1	.85	.46	7.2	.74	.34
3	.73	3.3	2.5	.81	.69	1.1	3.3	.74	.26	4.2	.72	.01
4	.55	2.0	8.6	.81	.55	1.5	2.3	.69	.22	2.2	1.2	.00
5	.45	1.2	10	.66	.55	1.7	1.6	.81	.16	1.4	2.9	.43
6	.40	1.0	3.1	.69	.45	1.7	8.3	1.1	.16	1.5	1.3	1.4
7	.36	.78	2.2	.83	.38	2.1	9.4	1.1	.60	2.5	.72	1.3
8	.37	.66	1.8	.75	.38	2.1	2.7	1.7	.48	2.7	.72	.13
9	1.9	1.0	1.3	.58	.37	1.4	1.8	.80	.05	1.1	.12	1.4
10	1.3	1.0	1.4	.55	.28	1.6	17	.48	.66	1.1	.61	.52
11	.58	.86	1.8	.60	.28	1.7	5.0	.45	.22	.85	.70	.22
12	.51	.79	1.7	.78	.36	2.3	52	.69	.20	.71	.80	.08
13	.44	1.2	1.4	.89	.44	6.3	24	.56	.01	.27	8.4	.00
14	.45	22	1.2	.84	.39	6.1	5.8	.46	.00	1.2	6.5	.00
15	.44	11	1.6	.72	1.1	4.1	6.1	2.9	.08	1.0	.00	.00
16	.49	2.7	1.5	.50	1.1	2.5	4.4	2.5	.98	.78	.29	.00
17	7.9	19	1.1	.55	1.2	1.7	2.3	.74	1.5	.70	.64	1.2
18	3.0	8.6	1.5	.31	2.1	1.7	1.9	.52	1.0	.58	.51	.86
19	2.2	2.7	2.3	.27	4.6	1.6	1.6	.34	.96	.38	.47	.28
20	2.3	2.0	1.5	.29	6.0	1.4	1.4	.33	1.2	.47	.87	.28
21	2.3	1.3	2.7	.29	4.0	6.7	1.4	.39	3.3	.79	5.9	.03
22	1.0	1.1	1.8	.31	2.0	4.4	.86	.31	1.2	2.5	1.3	.00
23	.76	1.1	1.4	.41	3.7	2.2	.74	.20	.81	3.7	.54	.00
24	.77	1.0	1.1	.89	4.0	4.7	1.0	.12	5.7	1.2	.34	.00
25	.81	.94	1.0	1.5	1.7	2.2	.97	2.1	4.7	1.2	.05	.00
26	.76	.97	.87	1.7	1.3	1.6	.77	3.5	1.6	3.7	.00	.83
27	.71	16	.74	5.9	1.0	2.7	.86	1.9	5.4	1.2	.09	1.5
28	.71	9.3	.71	53	.88	2.1	.84	.92	2.7	1.0	.00	1.1
29	.69	3.0	.71	15	---	2.4	3.4	.22	33	1.1	.00	1.5
30	.87	1.8	.62	3.2	---	1.9	2.1	.27	7.9	.98	.02	1.2
31	4.3	---	.55	1.8	---	1.4	---	.06	---	.77	.04	---
TOTAL	40.55	128.50	61.60	97.12	41.80	77.1	166.14	30.25	77.31	52.28	37.17	14.61
MEAN	1.31	4.28	1.99	3.13	1.49	2.49	5.54	.98	2.58	1.69	1.20	.49
MAX	7.9	22	10	53	6.0	6.7	52	3.5	33	7.2	8.4	1.5
MIN	.36	.66	.55	.27	.28	1.1	.74	.06	.00	.27	.00	.00
CFSM	.82	2.69	1.25	1.97	.94	1.56	3.48	.61	1.62	1.06	.75	.31
IN.	.95	3.01	1.44	2.27	.98	1.80	3.89	.71	1.81	1.22	.87	.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1994, BY WATER YEAR (WY)

	MEAN	1.31	4.28	1.99	3.13	1.49	2.49	5.54	.98	2.58	1.69	1.20	.49
MAX	1.31	4.28	1.99	3.13	1.49	2.49	5.54	.98	2.58	1.69	1.20	.49	
(WY)	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994
MIN	1.31	4.28	1.99	3.13	1.49	2.49	5.54	.98	2.58	1.69	1.20	.49	
(WY)	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994

SUMMARY STATISTICS

FOR 1994 WATER YEAR

ANNUAL TOTAL	824.43	
ANNUAL MEAN	2.26	
HIGHEST DAILY MEAN	53	Jan 28
LOWEST DAILY MEAN	.00	Jun 14
ANNUAL SEVEN-DAY MINIMUM	.02	Aug 26
INSTANTANEOUS PEAK FLOW	101	Apr 12 a
INSTANTANEOUS PEAK STAGE	14.30	Apr 12
INSTANTANEOUS LOW FLOW	.00	Apr 22
ANNUAL RUNOFF (CFSM)	1.42	
ANNUAL RUNOFF (INCHES)	19.29	
10 PERCENT EXCEEDS	4.5	
50 PERCENT EXCEEDS	1.0	
90 PERCENT EXCEEDS	.22	

03115971 SCHOCALOG RUN AT FAIRLAWN, OHIO

LOCATION.--Lat 41 07'28", long 81°37'23", Summit County, Hydrologic Unit 05040001, on right upstream side of triple barrel culvert under Trunko Road, 0.7 mi east of Cleveland-Massillon Road, 0.7 mi west of Akron corporate boundary, 1.6 mi southeast of intersection of State Route 18 and I-77.

DRAINAGE AREA.--2.13 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 978 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 14-28. Record good, except for periods of estimated record and discharges less than 1.0 ft³/s, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	11	1.7	1.0	2.2	1.3	1.6	4.3	2.8	2.5	.69	.04
2	1.8	3.8	2.2	1.5	1.7	1.4	1.4	1.6	.73	8.0	.98	.07
3	.83	4.8	3.5	1.2	1.6	1.5	4.4	1.4	.41	4.2	.85	.09
4	.58	2.7	13	1.2	1.4	1.9	2.9	1.4	.28	1.5	1.7	.01
5	.44	1.4	13	.88	1.3	2.3	1.9	1.5	.17	1.4	3.4	.05
6	.32	.98	4.4	.96	1.2	2.3	11	1.9	.17	1.8	1.3	1.0
7	.29	.71	3.0	1.2	1.1	2.9	12	1.9	.44	4.3	.71	1.0
8	.28	.44	2.2	1.1	1.1	3.0	3.3	2.7	.71	4.3	.55	.14
9	2.9	.31	1.8	.86	.99	2.0	2.2	1.4	.17	1.9	.63	1.8
10	1.7	.32	2.0	.83	.84	2.4	25	1.2	.54	1.6	.35	.39
11	.55	.34	2.8	1.0	.86	2.0	7.1	1.1	.50	1.3	.71	.06
12	.44	.29	2.5	1.3	1.1	3.1	67	2.1	.30	1.0	1.1	.01
13	.30	.88	2.0	1.4	1.4	9.2	32	1.8	.13	.50	12	.01
14	.24	38	1.7	1.3	1.2	8.4	9.7	1.6	.02	1.7	18	.01
15	.20	16	2.2	.86	2.3	5.5	9.8	6.1	.02	1.4	3.8	.05
16	.19	3.5	2.1	.78	2.3	3.0	7.1	4.2	1.3	.90	1.2	.01
17	12	26	1.5	1.5	2.3	1.9	3.6	1.3	1.8	.74	.93	1.6
18	4.8	10	2.0	1.0	3.8	1.9	3.0	.87	1.3	.65	.70	.99
19	3.9	3.4	3.0	2.1	7.3	1.8	2.6	.63	1.2	.47	.59	.08
20	2.9	2.5	1.9	1.7	8.7	1.6	2.1	.72	2.2	.45	1.5	.05
21	3.0	1.8	3.6	2.1	5.6	11	2.2	.68	4.5	1.5	8.0	.04
22	1.1	1.6	2.6	1.0	2.9	7.3	1.5	.57	1.6	3.4	1.9	.02
23	.73	1.5	1.9	1.5	5.6	3.2	1.0	.38	1.1	4.6	.90	.01
24	.65	1.4	1.6	4.5	5.9	8.2	1.6	.21	8.9	1.4	.58	.01
25	.60	1.1	1.5	3.7	2.4	3.6	1.5	3.2	7.0	1.7	.82	.01
26	.58	1.1	1.3	3.1	1.7	2.2	1.2	4.4	2.3	5.0	.13	1.1
27	.56	24	1.0	9.6	1.4	4.6	1.5	2.3	5.8	1.4	.10	1.7
28	.54	12	1.0	70	1.2	3.2	1.5	1.3	2.0	1.4	.10	1.3
29	.61	4.1	1.0	19	---	4.0	6.6	.35	37	1.4	.12	1.6
30	.93	.23	1.0	5.1	---	2.8	3.6	.33	8.3	1.2	.04	.95
31	7.0	---	.92	3.1	---	1.9	---	.32	---	.82	.12	---
TOTAL	52.26	178.27	85.92	146.37	71.39	111.4	231.9	53.76	93.69	64.43	64.50	14.20
MEAN	1.69	5.94	2.77	4.72	2.55	3.59	7.73	1.73	3.12	2.08	2.08	.47
MAX	12	38	13	70	8.7	11	67	6.1	37	8.0	18	1.8
MIN	.19	.29	.92	.78	.84	1.3	1.0	.21	.02	.45	.04	.01
CFSM	.75	2.64	1.23	2.10	1.13	1.60	3.44	.77	1.39	.92	.92	.21
IN.	.86	2.95	1.42	2.42	1.18	1.84	3.83	.89	1.55	1.07	1.07	.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1994, BY WATER YEAR (WY)

	1992	1993	1994	1992	1993	1994	1992	1993	1994	1992	1993	1994
MEAN	1.28	4.45	3.40	4.45	2.24	4.56	6.33	2.00	2.38	3.73	2.04	2.80
MAX	1.69	5.94	3.97	6.45	2.55	7.05	8.00	2.56	3.12	8.66	3.93	6.17
(WY)	1994	1994	1993	1993	1994	1993	1993	1993	1994	1992	1992	1992
MIN	.64	1.90	2.77	2.18	1.85	3.03	3.26	1.70	1.23	.46	.10	.47
(WY)	1992	1992	1994	1992	1993	1992	1992	1992	1992	1993	1993	1994

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1992 - 1994
ANNUAL TOTAL	1260.41	1168.09	
ANNUAL MEAN	3.45	3.20	3.31
HIGHEST ANNUAL MEAN			3.51
LOWEST ANNUAL MEAN			3.20
HIGHEST DAILY MEAN	48	70	70
LOWEST DAILY MEAN	.01 Jul 22	.01 Sep 4	.01 Jul 22 1993
ANNUAL SEVEN-DAY MINIMUM	.01 Aug 13	.03 Sep 19	.01 Aug 13 1993
INSTANTANEOUS PEAK FLOW		104	104
INSTANTANEOUS PEAK STAGE		12.70	12.70
INSTANTANEOUS LOW FLOW			.01
ANNUAL RUNOFF (CFSM)	1.53	1.42	1.47
ANNUAL RUNOFF (INCHES)	20.84	19.31	19.96
10 PERCENT EXCEEDS	7.5	7.0	6.8
50 PERCENT EXCEEDS	1.6	1.5	1.6
90 PERCENT EXCEEDS	.09	.28	.25

MUSKINGUM RIVER BASIN

03115973 SCHOCALOG RUN AT COPLEY JUNCTION, OHIO

LOCATION.--Lat 41°06'11", long 81°36'12", Summit County, Hydrologic Unit 05040001, on right upstream side of six barrel culvert under the Akron Canton and Youngstown Railroad, 150 feet east of Schocalog Road, 0.25 miles west of Copley Junction, 0.3 miles downstream of Schocalog Lake, 0.8 miles southeast of intersection of I-77 and Ridgewood Road.
 DRAINAGE AREA.--3.65 mi².
 PERIOD OF RECORD.--October 1, 1991 to current year.
 GAGE.--Water-stage recorder. Elevation of gage is 969 ft above sea level, from topographic map.
 REMARKS.-- No estimated daily discharges. Records good, except for discharges less than 2.0 ft³/s, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	13	1.7	1.6	4.3	3.0	2.6	6.2	2.6	5.2	1.3	.37
2	2.0	6.5	2.5	2.2	3.3	3.1	2.1	3.5	2.2	6.9	1.6	.30
3	1.6	5.3	4.8	2.1	2.9	3.0	5.6	2.6	1.4	9.1	1.1	.33
4	1.0	4.5	15	2.2	2.6	3.2	6.4	2.3	1.1	3.1	1.9	.28
5	.13	2.3	23	1.8	2.5	3.8	3.5	2.3	1.0	2.3	5.4	.25
6	.14	1.6	7.2	1.7	2.4	4.1	14	2.4	1.0	2.2	2.7	.54
7	.12	1.4	5.0	1.9	2.2	4.3	23	2.5	.76	5.9	1.7	.99
8	.14	.58	2.5	1.9	2.3	6.1	7.3	4.3	1.2	8.9	1.3	.86
9	1.5	.76	2.5	1.8	2.3	4.1	3.9	2.6	1.3	3.4	1.1	1.6
10	4.3	.93	2.6	1.7	2.0	4.6	33	2.0	1.0	2.6	1.1	1.3
11	.42	.90	3.1	1.6	2.0	4.4	14	1.5	1.2	2.2	1.1	.75
12	.31	.60	3.3	1.7	2.0	4.8	93	1.9	.93	1.6	1.2	.38
13	.27	.82	2.8	2.0	2.6	13	53	1.8	1.1	1.3	15	.22
14	.24	47	2.5	2.0	2.4	18	19	1.6	1.0	1.8	30	.19
15	.19	27	2.6	1.8	3.1	12	12	6.4	.87	2.7	7.4	.17
16	.16	6.8	2.8	1.6	4.2	7.3	13	9.1	1.0	1.9	3.4	.13
17	15	32	2.4	1.8	3.5	5.3	7.0	3.6	1.6	1.5	1.7	.68
18	7.0	22	2.3	1.9	4.9	3.7	4.4	2.6	2.0	1.2	1.6	2.0
19	4.0	6.2	4.0	1.6	9.3	4.4	5.1	1.4	1.8	1.1	1.7	.83
20	4.0	4.3	2.9	1.5	13	3.0	3.9	.92	1.8	.88	2.6	.33
21	3.6	2.4	3.6	1.6	11	14	4.3	1.2	6.4	2.1	13	.21
22	1.2	1.4	4.0	1.6	6.2	14	3.6	1.4	2.9	4.9	4.0	.24
23	.88	1.2	2.9	1.6	7.7	6.8	2.5	1.4	1.7	7.2	2.1	.10
24	.16	1.4	2.5	2.4	12	11	2.6	3.5	8.4	2.7	1.3	.10
25	.17	1.3	2.0	3.7	6.5	7.2	2.8	3.1	11	1.9	1.1	.11
26	.27	1.4	2.1	4.0	4.9	3.9	2.8	6.2	3.6	6.7	1.1	.16
27	.27	31	2.0	10	4.0	4.4	2.8	3.5	7.0	2.9	.80	.83
28	.21	22	1.8	103	3.5	4.0	2.4	2.5	4.1	2.2	.59	1.3
29	.27	7.2	1.7	39	---	5.0	10	1.7	43	2.5	.52	1.8
30	.44	3.9	1.7	10	---	4.6	5.5	1.0	17	2.1	.36	.91
31	5.4	---	1.7	5.8	---	2.7	---	1.0	---	1.5	.37	---
TOTAL	57.99	257.69	121.5	219.1	129.6	192.8	365.1	88.02	131.96	102.48	110.14	18.26
MEAN	1.87	8.59	3.92	7.07	4.63	6.22	12.2	2.84	4.40	3.31	3.55	.61
MAX	15	47	23	103	13	18	93	9.1	43	9.1	30	2.0
MIN	.12	.58	1.7	1.5	2.0	2.7	2.1	.92	.76	.88	.36	.10
CFSM	.51	2.35	1.07	1.94	1.27	1.70	3.33	.78	1.21	.91	.97	.17
IN.	.59	2.63	1.24	2.23	1.32	1.96	3.72	.90	1.34	1.04	1.12	.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1994, BY WATER YEAR (WY)

	1992	1993	1994	1992	1993	1994	1992	1993	1994	1992	1993	1994
MEAN	1.81	6.73	4.84	7.09	3.79	7.53	9.59	2.86	3.84	5.97	3.60	4.32
MAX	2.45	9.51	6.44	10.9	4.63	11.0	12.2	3.23	5.11	13.6	6.96	9.96
(WY)	1993	1993	1993	1993	1994	1993	1994	1993	1993	1992	1992	1992
MIN	1.11	2.10	3.92	3.33	2.85	5.39	6.07	2.52	2.01	.95	.28	.61
(WY)	1992	1992	1994	1992	1993	1992	1992	1992	1992	1993	1993	1994

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1992 - 1994

ANNUAL TOTAL	1872.53	1794.64	
ANNUAL MEAN	5.13	4.92	5.16
HIGHEST ANNUAL MEAN			5.47
LOWEST ANNUAL MEAN			4.92
HIGHEST DAILY MEAN	67	Apr 26	103
LOWEST DAILY MEAN	.01	May 23	.10
ANNUAL SEVEN-DAY MINIMUM	.03	Aug 23	.18
INSTANTANEOUS PEAK FLOW			150
INSTANTANEOUS PEAK STAGE			12.79
INSTANTANEOUS LOW FLOW			.04
ANNUAL RUNOFF (CFSM)	1.41	1.35	1.41
ANNUAL RUNOFF (INCHES)	19.08	18.29	19.22
10 PERCENT EXCEEDS	11	10	11
50 PERCENT EXCEEDS	2.5	2.4	2.6
90 PERCENT EXCEEDS	.13	.49	.43

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

MUSKINGUM RIVER BASIN

61

03117000 TUSCARAWAS RIVER AT MASSILLON, OH

LOCATION.--Lat 40°46'13", long 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, and 3 mi downstream from Newman Creek.
 DRAINAGE AREA.--518 mi².
 PERIOD OF RECORD.--October 1937 to current year. Prior to April 1938 monthly discharge only, published in WSP 1305.
 REVISED RECORDS.--WSP 1907: Drainage area.
 GAGE.--Water-stage recorder. Datum of gage is 916.00 ft above sea level. Prior to Aug. 19, 1944, nonrecording gage at same site and datum.
 REMARKS.--Estimated daily discharges: Dec. 27 to Jan. 28, 31 to Feb. 1, 8-17. Records good except those 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 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 1993 TO SEPTEMBER 1994 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	211	340	590	210	2000	474	521	466	229	505	180	184
2	150	453	473	200	1090	449	454	455	203	395	258	151
3	121	297	488	190	716	447	477	412	191	1150	283	134
4	106	240	789	190	513	455	680	328	190	708	213	120
5	97	216	2290	180	421	455	623	311	177	447	300	116
6	94	188	1930	180	360	502	782	317	178	326	259	113
7	91	165	1130	180	333	568	2300	333	196	371	201	115
8	89	149	763	170	290	723	1950	369	185	1000	176	118
9	89	139	611	170	270	622	1160	351	205	839	162	125
10	113	135	528	170	260	586	1980	317	211	433	153	142
11	111	132	493	170	250	560	2750	271	167	310	145	121
12	102	143	456	160	240	573	3460	303	139	236	144	110
13	96	159	428	160	230	853	5850	282	132	222	146	114
14	95	588	390	160	220	1570	6030	225	135	266	1370	116
15	92	2070	410	160	220	1700	4770	231	143	236	1660	132
16	97	1730	492	160	280	1360	3560	407	179	204	913	136
17	176	1510	432	150	350	844	2300	444	201	177	473	144
18	330	2630	408	150	602	660	1450	345	183	172	301	206
19	302	2090	497	150	918	606	1050	294	176	169	236	159
20	348	1140	472	150	1540	543	810	273	192	160	209	150
21	537	649	504	150	1840	900	631	244	282	169	359	121
22	412	498	498	150	1490	1640	641	213	267	195	351	111
23	331	417	437	140	1200	1260	511	192	208	207	275	108
24	257	361	397	140	2070	955	446	219	290	208	209	107
25	155	317	380	140	1540	766	442	614	511	180	174	102
26	112	279	283	240	897	624	483	619	444	194	161	161
27	106	878	270	500	643	650	434	519	590	180	153	204
28	102	2050	250	2000	545	804	402	389	462	175	204	180
29	100	1520	240	6120	---	770	387	305	572	226	193	151
30	98	806	230	5420	---	705	391	274	736	217	171	119
31	149	---	230	3500	---	589	---	256	---	205	175	---
TOTAL	5269	22289	17789	21910	21328	24213	47725	10578	7974	10482	10207	4070
MEAN	170	743	574	707	762	781	1591	341	266	338	329	136
MAX	537	2630	2290	6120	2070	1700	6030	619	736	1150	1660	206
MIN	89	132	230	140	220	447	387	192	132	160	144	102

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1994, BY WATER YEAR (WY)

MEAN	203	306	437	529	729	897	739	494	381	307	230	213
MAX	1206	1628	1621	1989	1659	1827	1591	1392	1852	1812	1273	1465
(WY)	1991	1986	1991	1952	1959	1978	1994	1947	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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1938 - 1994

ANNUAL TOTAL	215967	203834	
ANNUAL MEAN	592	558	454
HIGHEST ANNUAL MEAN			661
LOWEST ANNUAL MEAN			245
HIGHEST DAILY MEAN	4060	Mar 5	9360
LOWEST DAILY MEAN	72	Aug 29	49
ANNUAL SEVEN-DAY MINIMUM	81	Aug 24	53
INSTANTANEOUS PEAK FLOW			6490
INSTANTANEOUS PEAK STAGE			12.77
INSTANTANEOUS LOW FLOW			89
10 PERCENT EXCEEDS	1530		1060
50 PERCENT EXCEEDS	320		229
90 PERCENT EXCEEDS	99		101

MUSKINGUM RIVER BASIN

03117500 SANDY CREEK AT WAYNESBURG, OH

LOCATION.--Lat 40°40'21", long 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, 300 ft downstream from Little Sandy Creek, and 0.6 mi upstream from Indian Run.

DRAINAGE AREA.--253 mi².

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

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

GAGE.--Water-stage recorder. Datum of gage is 955.00 ft above sea level.

REMARKS.--Estimated daily discharges: Dec. 24 to Jan. 27, 30 to Feb. 16, 27 to Mar. 7. Records good except for periods of estimated record, which are fair. Water-quality data collected at this site 1964 to 1977. Sediment data collected 1969 to 1974. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	134	259	140	1800	410	489	216	151	177	54	48
2	49	138	226	130	950	370	430	218	141	156	51	45
3	46	128	215	120	550	350	438	196	128	218	60	42
4	43	143	345	120	380	340	556	185	118	198	81	41
5	41	149	1210	120	280	330	448	181	110	159	110	39
6	39	138	1010	110	230	320	420	178	101	136	112	39
7	36	119	805	110	200	320	891	174	97	117	82	39
8	35	103	575	110	180	525	633	193	93	373	65	39
9	36	97	403	100	165	477	501	196	89	262	57	40
10	38	108	328	100	150	698	1090	169	85	173	53	42
11	37	104	284	98	140	856	1300	155	80	139	51	39
12	39	100	248	96	130	903	1430	147	76	110	50	37
13	38	102	219	95	120	905	2240	141	78	94	48	35
14	37	130	204	94	115	1030	2130	133	76	93	135	35
15	37	189	207	92	110	914	1360	131	71	115	247	37
16	40	171	218	90	150	764	1210	184	66	110	171	39
17	60	369	192	89	274	569	983	171	63	96	106	40
18	73	944	180	88	374	486	754	147	69	84	83	45
19	87	612	253	88	569	471	639	134	102	74	71	44
20	94	469	256	87	956	428	541	126	121	68	64	41
21	101	317	247	86	1260	1020	462	119	129	87	63	39
22	101	232	248	85	1150	1790	391	113	109	77	63	42
23	90	206	230	84	1060	1390	327	107	92	70	60	42
24	79	184	210	84	1600	1130	301	110	143	67	54	41
25	74	169	200	84	1320	875	279	311	198	80	51	91
26	69	155	190	130	1010	640	260	582	168	89	47	119
27	65	224	180	200	620	642	242	523	177	79	46	77
28	69	546	170	2140	480	861	225	362	174	68	46	64
29	86	445	160	4710	---	790	212	234	202	60	54	55
30	79	322	150	3500	---	663	205	189	220	61	52	49
31	91	---	140	2600	---	560	---	164	---	61	47	---
TOTAL	1864	7247	9762	15780	16323	21827	21387	6189	3527	3751	2334	1425
MEAN	60.1	242	315	509	583	704	713	200	118	121	75.3	47.5
MAX	101	944	1210	4710	1800	1790	2240	582	220	373	247	119
MIN	35	97	140	84	110	320	205	107	63	60	46	35
CFSM	.24	.95	1.24	2.01	2.30	2.78	2.82	.79	.46	.48	.30	.19
IN.	.27	1.07	1.44	2.32	2.40	3.21	3.14	.91	.52	.55	.34	.21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1994, BY WATER YEAR (WY)

MEAN	97.3	171	283	345	478	572	473	323	207	138	95.5	82.8
MAX	476	1008	1104	1111	987	1179	867	920	750	651	871	513
(WY)	1991	1986	1991	1952	1956	1945	1957	1956	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 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1939 - 1994	
ANNUAL TOTAL	103879		111416			
ANNUAL MEAN	285		305		271	
HIGHEST ANNUAL MEAN					429	
LOWEST ANNUAL MEAN					140	
HIGHEST DAILY MEAN	2100		4710		11000	
LOWEST DAILY MEAN	29		35		12	
ANNUAL SEVEN-DAY MINIMUM	32		37		12	
INSTANTANEOUS PEAK FLOW			5070		15000	
INSTANTANEOUS PEAK STAGE			8.07		10.05	
INSTANTANEOUS LOW FLOW			35			
ANNUAL RUNOFF (CFSM)	1.12		1.21		1.07	
ANNUAL RUNOFF (INCHES)	15.27		16.38		14.56	
10 PERCENT EXCEEDS	715		825		633	
50 PERCENT EXCEEDS	171		139		136	
90 PERCENT EXCEEDS	40		46		34	

03118000 MIDDLE BRANCH NIMISHILLEN CREEK AT CANTON, OH

LOCATION.--Lat 40°50'29", long 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.

DRAINAGE AREA.--43.1 mi².

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

REVISED RECORDS.--WSP 1033: 1942(M), 1943(P), 1944(M). WSP 1305: 1946(M). WSP 1143: 1948. WSP 1907: Drainage area. GAGE.--Water-stage recorder. Datum of gage is 1,046.60 ft above sea level.

REMARKS.--Estimated daily discharges: Dec. 25 to Jan. 27, Feb. 1-16, 27 to Mar. 7, Apr. 12-15. Records good except for estimated daily discharges 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 1994, 12.1 ft³/s. At times low flow regulated by small pools above station. Water-quality data collected at this site 1965 to 1977.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	17	59	19	74	27	50	55	25	22	17	17
2	8.0	20	49	18	56	25	38	49	23	26	15	15
3	7.4	20	46	18	45	23	43	44	21	29	19	13
4	6.4	28	69	17	34	22	69	42	20	25	19	12
5	6.1	26	242	16	29	21	62	41	20	22	37	13
6	5.8	20	163	16	25	20	73	42	21	20	27	12
7	5.4	16	100	15	23	40	333	42	22	28	20	12
8	5.6	13	70	15	21	86	220	45	20	318	17	12
9	5.5	11	57	14	19	68	118	45	19	173	14	12
10	4.9	10	51	14	18	73	406	43	19	78	12	11
11	4.7	9.1	49	13	17	76	456	41	18	49	11	11
12	4.5	8.5	44	13	16	86	800	43	18	36	11	10
13	4.4	9.0	40	13	15	180	1400	40	19	30	12	9.6
14	4.5	44	37	12	15	296	1200	37	19	35	167	10
15	4.6	124	37	12	14	188	290	41	18	30	244	13
16	4.8	73	38	12	25	113	237	47	18	26	104	12
17	9.2	128	35	12	41	67	174	40	17	20	52	13
18	9.3	317	34	12	59	52	124	35	17	14	34	14
19	8.6	179	39	12	143	45	99	31	18	16	26	12
20	9.2	98	40	11	267	36	82	28	25	15	22	10
21	27	63	41	11	291	114	70	26	29	19	49	9.2
22	40	49	40	11	192	471	63	25	24	28	55	8.8
23	22	40	36	11	155	234	57	24	20	22	39	8.4
24	14	35	32	11	426	138	54	27	24	18	27	7.9
25	11	29	29	11	239	94	51	72	28	18	22	8.9
26	9.0	27	27	15	159	62	49	99	24	19	19	14
27	7.9	85	25	25	60	66	48	68	29	16	17	13
28	7.1	228	24	423	33	125	46	46	26	15	16	11
29	6.2	143	23	698	---	132	44	34	31	16	16	10
30	6.4	82	21	295	---	90	44	29	26	26	15	9.1
31	9.6	---	20	165	---	64	---	25	---	22	18	---
TOTAL	287.7	1951.6	1617	1960	2511	3134	6800	1306	658	1231	1173	343.9
MEAN	9.28	65.1	52.2	63.2	89.7	101	227	42.1	21.9	39.7	37.8	11.5
MAX	40	317	242	698	426	471	1400	99	31	318	244	17
MIN	4.4	8.5	20	11	14	20	38	24	17	14	11	7.9

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1994, BY WATER YEAR (WY)

	MEAN	13.4	23.8	37.8	46.2	60.3	72.7	60.9	43.3	32.5	24.1	17.7	15.7
MAX	84.7	103	140	170	153	142	227	129	150	102	108	97.2	
(WY)	1991	1986	1991	1952	1971	1951	1994	1956	1989	1972	1958	1990	
MIN	.74	1.09	2.78	1.40	1.88	23.7	14.9	10.4	5.17	3.16	2.32	1.25	
(WY)	1992	1992	1964	1963	1963	1969	1946	1988	1988	1954	1962	1991	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1942 - 1994
ANNUAL TOTAL	18758.4	22973.2	
ANNUAL MEAN	51.4	62.9	37.2
HIGHEST ANNUAL MEAN			67.3
LOWEST ANNUAL MEAN			16.0
HIGHEST DAILY MEAN	322	Mar 5	1400
LOWEST DAILY MEAN	4.4	Oct 13	4.4
ANNUAL SEVEN-DAY MINIMUM	4.6	Oct 10	4.6
INSTANTANEOUS PEAK FLOW			1810
INSTANTANEOUS PEAK STAGE			6.62
INSTANTANEOUS LOW FLOW			4.3
10 PERCENT EXCEEDS	109	143	82
50 PERCENT EXCEEDS	37	26	19
90 PERCENT EXCEEDS	7.9	9.8	4.0

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

MUSKINGUM RIVER BASIN

03118500 NIMISHILLEN CREEK AT NORTH INDUSTRY, OH

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

DRAINAGE AREA.--175 mi².

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 mile downstream at datum 5.95 ft lower.

REMARKS.--Estimated daily discharges: Mar. 21 to Apr. 29. Records good, except for periods of estimated record, which are fair. Low flow slightly regulated by plants at Canton. Records include diversion from Sugar Creek well field. Mean pumpage for the 1994 water year, 20.4 ft³/s. See REMARKS for station 03124500. Water-quality data collected at this site 1964 to 1969, 1975, 1977. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	237	223	142	334	213	250	379	204	160	102	119
2	97	163	207	152	271	208	200	269	172	230	111	104
3	90	170	208	150	245	209	220	249	163	221	117	96
4	91	173	580	155	218	214	260	245	158	169	217	94
5	90	148	935	148	205	219	240	236	151	154	249	93
6	91	132	448	143	193	227	300	243	175	146	129	96
7	90	119	327	159	187	292	860	239	156	366	108	96
8	89	114	266	144	175	307	620	248	149	757	105	95
9	95	109	233	137	185	287	520	227	147	340	102	128
10	85	108	224	135	164	417	900	216	143	194	98	97
11	85	106	216	141	164	360	1400	210	141	154	97	88
12	90	103	195	154	165	373	2000	212	135	136	100	91
13	87	127	188	158	179	550	2800	171	144	126	113	91
14	87	391	186	154	170	545	1500	192	141	195	1030	97
15	87	352	206	134	200	374	720	256	139	136	472	161
16	97	214	191	129	225	293	540	275	154	121	235	101
17	220	1240	181	135	252	244	450	214	147	110	168	170
18	122	1090	202	134	305	252	410	204	151	104	143	124
19	140	425	224	126	458	227	360	194	154	105	130	100
20	150	285	205	126	584	214	340	191	187	104	120	94
21	314	219	235	124	515	1120	320	182	247	170	284	91
22	168	188	203	124	350	820	300	176	160	158	185	90
23	126	172	185	130	692	680	280	177	142	116	143	86
24	111	161	173	161	738	580	270	262	230	126	126	86
25	107	145	166	219	391	420	260	724	236	160	119	130
26	104	140	152	269	290	300	250	628	178	122	113	212
27	101	814	154	394	241	350	240	328	231	109	108	130
28	98	735	151	3260	220	500	230	245	169	105	141	116
29	95	393	143	2410	---	520	220	210	336	108	120	101
30	103	270	143	754	---	370	261	191	198	145	106	97
31	191	---	140	440	---	270	---	182	---	107	167	---
TOTAL	3603	9043	7490	11141	8316	11955	17521	7975	5238	5454	5558	3274
MEAN	116	301	242	359	297	386	584	257	175	176	179	109
MAX	314	1240	935	3260	738	1120	2800	724	336	757	1030	212
MIN	85	103	140	124	164	208	200	171	135	104	97	86

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1994, BY WATER YEAR (WY)

	MEAN	99.8	139	190	228	273	329	281	211	172	149	125	110
MAX	438	649	733	843	586	569	584	539	689	483	445	452	
(WY)	1991	1986	1991	1937	1981	1963	1994	1956	1989	1958	1935	1979	
MIN	27.4	30.1	35.5	46.7	33.5	75.5	71.1	37.3	44.9	31.4	28.0	30.0	
(WY)	1931	1931	1931	1945	1934	1931	1935	1934	1932	1930	1932	1932	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1922 - 1994	
ANNUAL TOTAL	90361		96568			
ANNUAL MEAN	248		265		192	
HIGHEST ANNUAL MEAN					308	
LOWEST ANNUAL MEAN					72.4	
HIGHEST DAILY MEAN	1870	Jan 13	3260	Jan 28	5390	Jan 22 1959
LOWEST DAILY MEAN	82	Aug 8	85	Oct 10	14	Aug 20 1923
ANNUAL SEVEN-DAY MINIMUM	88	Oct 9	88	Oct 9	20	Sep 10 1932
INSTANTANEOUS PEAK FLOW			4540	Jan 28 a	8600	Jan 21 1959
INSTANTANEOUS PEAK STAGE			9.87	Jan 28	11.29	Jan 21 1959
INSTANTANEOUS LOW FLOW			66	Oct 10		
10 PERCENT EXCEEDS	447		464		372	
50 PERCENT EXCEEDS	175		178		120	
90 PERCENT EXCEEDS	94		99		53	

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

MUSKINGUM RIVER BASIN

65

03124500 SUGAR CREEK AT STRASBURG, OH

LOCATION.--Lat 40°35'15", long 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.

DRAINAGE AREA.--311 mi².

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

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

GAGE.--Water-stage recorder. Datum of gage is 896.24 ft 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.--Estimated daily discharges: Dec. 27 to Jan. 24, Feb. 10-16, 27 to Mar. 7. Records good, except for periods of estimated record, which are fair. 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 1994, 20.4 ft³/s. Water-quality data collected at this site 1965 to 1977.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	67	270	80	1910	290	405	214	85	146	41	37
2	23	101	210	76	2040	270	358	219	83	95	33	43
3	19	71	188	74	1620	250	335	184	75	167	35	33
4	19	54	238	72	1570	240	445	168	71	301	42	29
5	15	49	1150	70	1620	230	405	165	68	167	128	29
6	13	43	1820	68	1680	230	378	163	65	115	151	28
7	14	39	1080	68	1630	220	849	162	65	88	76	26
8	14	34	577	66	1490	339	1120	180	66	109	50	24
9	14	30	398	66	450	339	738	175	62	105	39	20
10	13	29	316	64	200	389	801	150	58	80	35	19
11	14	27	289	64	170	403	1370	140	55	68	33	19
12	14	25	244	62	150	529	1410	137	56	54	32	19
13	12	28	205	62	140	610	863	135	58	47	34	18
14	12	85	188	62	130	850	1350	127	58	49	47	17
15	12	257	180	62	120	877	1540	128	51	98	318	16
16	12	238	178	60	160	681	1520	170	73	93	184	15
17	19	183	167	60	296	453	1490	164	81	65	84	16
18	44	799	150	60	392	386	1450	137	61	52	56	18
19	44	869	175	60	545	401	1390	125	46	45	46	28
20	32	406	202	58	808	352	1460	117	48	40	40	23
21	48	242	201	58	1070	456	990	110	65	38	59	17
22	96	166	214	58	1030	1360	428	103	79	48	118	15
23	59	128	196	58	751	1200	346	99	62	65	76	16
24	37	108	176	56	1420	856	308	97	77	63	50	18
25	27	94	158	141	1310	851	278	109	170	60	40	20
26	24	86	107	322	871	571	257	200	156	60	36	30
27	22	142	100	589	380	510	233	239	172	49	34	50
28	22	800	94	412	320	664	214	152	166	42	32	41
29	20	780	90	591	---	728	199	115	150	40	32	34
30	19	411	86	1570	---	583	191	104	225	45	51	27
31	25	---	82	1890	---	464	---	94	---	49	39	---
TOTAL	782	6391	9729	7059	24273	16582	23121	4582	2607	2543	2071	745
MEAN	25.2	213	314	228	867	535	771	148	86.9	82.0	66.8	24.8
MAX	96	869	1820	1890	2040	1360	1540	239	225	301	318	50
MIN	12	25	82	56	120	220	191	94	46	38	32	15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1994, BY WATER YEAR (WY)

	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944
MEAN	94.5	192	324	397	506	660	513	290	221	199	159	104	
MAX	583	929	1001	2025	1174	1297	953	803	1008	2128	1219	1048	
(WY)	1991	1986	1978	1937	1981	1963	1980	1983	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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1932 - 1994

ANNUAL TOTAL	103667.3	100485	305
ANNUAL MEAN	284	275	520
HIGHEST ANNUAL MEAN			160
LOWEST ANNUAL MEAN			1980
HIGHEST DAILY MEAN	1820	2040	10200
LOWEST DAILY MEAN	8.9	12	.00
ANNUAL SEVEN-DAY MINIMUM	11	13	.00
INSTANTANEOUS PEAK FLOW		2440	19700
INSTANTANEOUS PEAK STAGE		6.22	14.70
INSTANTANEOUS LOW FLOW		11	
10 PERCENT EXCEEDS	744	850	801
50 PERCENT EXCEEDS	140	101	131
90 PERCENT EXCEEDS	15	24	26

MUSKINGUM RIVER BASIN

03129000 TUSCARAWAS RIVER AT NEWCOMERSTOWN, OH

LOCATION.--Lat 40°15'41", long 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, 2 mi upstream from Buckhorn Creek, and 4 mi downstream from Dunlap Creek.

DRAINAGE AREA.--2,443 mi².

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. Prior to Sept. 28, 1925, and July 18, 1935, to Feb. 13, 1939, nonrecording gage, Sept. 28, 1925, to July 17, 1935, water-stage recorder at site 1.5 mi upstream at datum 5.03 ft higher prior to Oct. 1, 1934, and 0.03 ft higher Oct. 1, 1934, to Feb. 13, 1939.

REMARKS.--Estimated daily discharges: Dec. 27 to Jan. 27. Records good 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 collected at this site 1946 to 1949, 1955 to 1977. 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 ft³/s computed by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	565	908	4480	1000	11000	5270	4490	2510	1300	2230	707	938
2	589	1590	3670	1000	9330	5300	3780	2550	1220	1810	678	867
3	532	1950	3020	980	9050	4010	3380	2390	1090	1450	814	790
4	470	1830	3200	950	9040	3310	3640	2150	998	2270	783	720
5	429	1830	6520	940	9120	3270	3910	1980	950	1930	865	664
6	404	1830	8630	920	9040	3140	3780	1920	908	1530	1160	625
7	390	1730	8360	900	9110	3170	4810	1900	914	1270	929	597
8	384	1600	6960	870	8960	3340	6850	2050	903	1230	763	570
9	381	1330	5320	850	8240	3560	6550	2100	860	2530	675	547
10	380	1190	4330	830	6980	4060	6170	1960	828	2130	626	542
11	378	1310	3650	820	5590	4510	9460	1770	819	1330	595	543
12	392	1320	2960	800	3980	5860	10200	1640	786	1020	591	510
13	390	1490	2600	780	2450	5710	11000	1590	788	863	589	478
14	382	2330	2360	780	2300	6070	10700	1530	755	859	1030	465
15	375	3640	2240	760	2370	6890	10200	1440	736	1120	3290	458
16	391	5040	2090	740	2520	6540	10600	1630	715	1020	3630	513
17	502	5110	2020	740	2670	5410	10300	1910	732	900	2200	528
18	669	7800	1840	730	2800	4160	9780	1770	774	802	1380	575
19	892	8030	1790	720	3100	3710	9430	1560	743	741	1020	666
20	884	7380	1950	710	4410	3490	9070	1420	702	701	861	648
21	1060	5540	2030	700	6580	3780	8800	1310	786	685	811	578
22	1430	4000	2230	690	7810	8300	7940	1200	1110	733	1010	528
23	1300	3680	2280	680	7730	9380	7420	1100	929	842	1060	487
24	994	3480	2070	680	8730	8630	6770	1030	918	795	896	470
25	824	3270	1880	680	9600	7900	6700	1200	1170	821	789	474
26	680	3130	1770	2000	8080	6800	6410	2580	1510	849	718	597
27	592	3160	1400	3500	6440	6170	5740	3050	1410	854	676	780
28	558	5200	1300	11000	5240	6290	4870	2670	1640	769	656	697
29	525	6410	1200	10800	---	6770	3710	1980	1720	710	1150	661
30	500	5830	1100	10900	---	6400	2710	1600	2290	714	1500	597
31	534	---	1100	11600	---	5670	---	1410	---	751	1170	---
TOTAL	18776	102938	96350	70050	182270	166870	209170	56900	31004	36259	33622	18113
MEAN	606	3431	3108	2260	6510	5383	6972	1835	1033	1170	1085	604
MAX	1430	8030	8630	11600	11000	9380	11000	3050	2290	2530	3630	938
MIN	375	908	1100	680	2300	3140	2710	1030	702	685	589	458

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1994, BY WATER YEAR (WY)

	MEAN	988	1692	2549	3232	4067	5046	4568	3119	2239	1599	1143	981
MAX	4257	7201	7137	16130	9762	11090	7909	7762	8339	7663	7390	4691	
(WY)	1991	1986	1978	1937	1959	1945	1948	1983	1981	1969	1980	1979	
MIN	321	285	350	603	600	1152	1171	851	430	343	329	279	
(WY)	1950	1954	1964	1956	1954	1969	1946	1941	1988	1954	1962	1954	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1937 - 1994

ANNUAL TOTAL	1028370	1022322	
ANNUAL MEAN	2817	2801	2593
HIGHEST ANNUAL MEAN			4227
LOWEST ANNUAL MEAN			1150
HIGHEST DAILY MEAN	10600	Mar 5	45000
LOWEST DAILY MEAN	351	Aug 31	216
ANNUAL SEVEN-DAY MINIMUM	379	Aug 26	237
INSTANTANEOUS PEAK FLOW			46800
INSTANTANEOUS PEAK STAGE		9.64	20.65
INSTANTANEOUS LOW FLOW			364
10 PERCENT EXCEEDS	7270	7800	6760
50 PERCENT EXCEEDS	1820	1500	1510
90 PERCENT EXCEEDS	438	585	440

MUSKINGUM RIVER BASIN

67

03136500 KOKOSING RIVER AT MOUNT VERNON, OH

LOCATION.--Lat 40°24'20", long 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, 0.8 mi downstream from North Branch, and 2.7 mi upstream from Dry Creek.

DRAINAGE AREA.--202 mi².

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.--Estimated daily discharges: Dec. 12-14, 22 to Jan. 26, Feb. 1 to Mar. 11. Records good, 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 10.0 mi upstream on North Branch Kokosing River, beginning in June 1972. 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 1993 TO SEPTEMBER 1994 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	62	166	66	300	240	168	187	65	295	41	40
2	38	61	157	62	250	210	164	180	63	182	34	40
3	36	59	264	58	230	190	174	155	59	136	35	37
4	34	57	710	56	200	180	231	142	57	190	33	34
5	31	57	2300	54	190	170	225	134	55	141	35	32
6	31	56	1290	52	180	170	280	131	59	111	34	32
7	33	51	600	52	170	160	883	131	58	101	31	31
8	32	47	392	50	160	150	567	153	52	100	29	31
9	32	46	300	49	160	150	384	149	50	276	30	30
10	31	44	257	48	150	150	970	133	48	717	26	30
11	32	44	228	46	150	140	1090	118	47	315	24	29
12	33	43	210	45	200	140	816	118	48	186	26	29
13	33	59	190	44	300	241	1140	114	49	131	26	28
14	34	145	180	43	400	572	864	105	48	105	48	30
15	35	432	142	42	420	552	599	103	79	91	104	30
16	33	327	134	41	380	396	549	111	74	85	59	30
17	38	356	123	40	320	262	407	111	68	75	47	31
18	40	1120	116	39	270	224	328	102	85	65	40	37
19	43	559	127	38	240	211	296	95	65	61	34	39
20	46	320	141	37	500	190	251	91	57	56	30	34
21	63	225	149	36	640	226	220	88	61	53	39	31
22	61	170	130	35	800	357	199	85	67	53	50	31
23	54	142	120	34	1200	285	181	81	68	50	37	26
24	48	126	110	34	900	238	172	77	69	49	31	29
25	47	113	100	33	600	211	163	86	255	46	30	33
26	46	106	90	200	400	182	155	125	199	43	29	41
27	45	132	88	507	300	197	146	112	203	46	28	42
28	42	348	84	3410	270	243	138	87	293	42	30	41
29	41	263	78	2960	---	232	131	77	197	39	45	36
30	42	198	72	1500	---	205	131	70	434	45	41	33
31	52	---	70	1000	---	183	---	65	---	40	40	---
TOTAL	1243	5768	9118	10711	10280	7257	12022	3516	3032	3925	1166	997
MEAN	40.1	192	294	346	367	234	401	113	101	127	37.6	33.2
MAX	63	1120	2300	3410	1200	572	1140	187	434	717	104	42
MIN	31	43	70	33	150	140	131	65	47	39	24	26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1994, BY WATER YEAR (WY)

	MEAN	64.0	149	243	270	352	426	384	254	169	153	78.7	67.4
MAX	275	635	979	1020	805	1068	845	579	586	636	438	587	
(WY)	1991	1973	1991	1959	1975	1963	1964	1957	1989	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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1953 - 1994

ANNUAL TOTAL	102279	69035	
ANNUAL MEAN	280	189	
HIGHEST ANNUAL MEAN			218
LOWEST ANNUAL MEAN			325
HIGHEST DAILY MEAN	2370	3410	14600
LOWEST DAILY MEAN	31	24	8.6
ANNUAL SEVEN-DAY MINIMUM	32	27	11
INSTANTANEOUS PEAK FLOW		4820	38000
INSTANTANEOUS PEAK STAGE		10.11	18.19
INSTANTANEOUS LOW FLOW		24	
10 PERCENT EXCEEDS	649	394	475
50 PERCENT EXCEEDS	140	88	101
90 PERCENT EXCEEDS	38	33	30

03139000 KILLBUCK CREEK AT KILLBUCK, OH

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

DRAINAGE AREA.--464 mi².

PERIOD OF RECORD.--October 1930 to current year.

REVISED RECORDS.--WSP 873: 1935. WSP 1555: 1935. WSP 1907: Drainage area. 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.--Estimated daily discharges: Dec. 26 to Jan. 28, Feb. 8-16. Records good, except for periods of estimated record, which are poor. Water-quality data collected at this site 1962 to 1977. Sediment data collected 1962 to 1969. U.S. Army Corps of Engineers Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	168	390	190	2530	633	609	400	164	307	89	118
2	76	200	355	190	2300	556	545	374	163	260	97	102
3	72	148	351	180	1750	505	543	355	152	286	128	91
4	64	123	622	170	1280	478	605	335	145	300	96	84
5	58	112	1630	170	931	448	548	322	139	267	215	79
6	56	106	1300	160	650	432	599	314	132	230	184	75
7	56	99	1040	160	553	438	1310	308	132	205	134	73
8	56	89	843	150	500	469	1190	327	127	221	113	71
9	57	86	687	150	460	450	1100	308	125	217	101	74
10	57	83	598	150	410	493	1450	287	123	233	95	83
11	59	80	541	140	380	478	1950	266	121	197	92	77
12	60	77	467	140	350	500	1990	257	113	173	95	69
13	61	96	409	140	330	670	2280	248	118	153	94	64
14	60	156	370	140	310	923	2610	235	110	141	160	62
15	61	426	346	140	280	842	2630	232	105	188	296	62
16	62	416	332	140	320	824	2600	251	103	169	248	62
17	79	695	313	130	348	815	2410	240	111	139	196	63
18	136	1060	296	130	449	789	1930	229	108	121	164	83
19	112	748	313	130	626	725	1500	219	109	113	147	85
20	116	695	307	130	975	626	1200	223	100	104	136	71
21	204	613	318	130	1230	765	942	214	130	101	208	66
22	177	518	318	130	1210	1050	749	202	139	128	200	64
23	127	437	306	130	1320	883	643	192	118	136	160	63
24	101	366	288	130	1790	1080	578	188	148	130	135	64
25	87	311	279	130	1590	1100	528	215	236	125	123	65
26	80	271	260	300	1350	890	489	284	199	120	124	95
27	86	342	250	520	1060	847	454	248	305	103	112	135
28	78	563	230	1500	781	950	418	210	282	93	104	112
29	75	485	220	3870	---	903	392	191	302	91	118	101
30	78	436	210	2770	---	787	373	176	334	125	110	95
31	97	---	200	2510	---	682	---	165	---	111	100	---
TOTAL	2637	10005	14389	15150	26063	22031	35165	8015	4693	5287	4374	2408
MEAN	85.1	333	464	489	931	711	1172	259	156	171	141	80.3
MAX	204	1060	1630	3870	2530	1100	2630	400	334	307	296	135
MIN	56	77	200	130	280	432	373	165	100	91	89	62
CFSM	.18	.72	1.00	1.05	2.01	1.53	2.53	.56	.34	.37	.30	.17
IN.	.21	.80	1.15	1.21	2.09	1.77	2.82	.64	.38	.42	.35	.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1994, BY WATER YEAR (WY)

MEAN	133	225	377	540	677	871	755	502	384	290	200	144
MAX	1015	1286	1509	2416	1648	1685	1400	1286	2281	3960	2147	1473
(WY)	1991	1986	1991	1937	1975	1978	1957	1983	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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1931 - 1994

ANNUAL TOTAL	184119		150217				
ANNUAL MEAN	504		412			423.	
HIGHEST ANNUAL MEAN						695	1969
LOWEST ANNUAL MEAN						128	1931
HIGHEST DAILY MEAN	2350	Mar 25	3870	Jan 29		37200	Jul 6 1969
LOWEST DAILY MEAN	48	Aug 31	56	Oct 6		23	Sep 10 1954
ANNUAL SEVEN-DAY MINIMUM	54	Aug 26	57	Oct 5		23	Sep 8 1954
INSTANTANEOUS PEAK FLOW			4620	Jan 29	a	47500	Jul 5 1969
INSTANTANEOUS PEAK STAGE			17.02	Jan 29		26.40	Jul 5 1969
INSTANTANEOUS LOW FLOW			54	Oct 10			
ANNUAL RUNOFF (CFSM)	1.09		.89			.91	
ANNUAL RUNOFF (INCHES)	14.76		12.04			12.40	
10 PERCENT EXCEEDS	1300		1000			1080	
50 PERCENT EXCEEDS	317		210			201	
90 PERCENT EXCEEDS	60		79			55	

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

03140000 MILL CREEK NEAR COSHOCTON, OH

LOCATION.--Lat 40°21'46", long 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.

DRAINAGE AREA.--27.2 mi².

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

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 782.00 ft above sea level.

REMARKS.--Estimated daily discharges: Oct. 1 to Dec. 3, 22 to Feb. 17, 26 to Mar. 7. Records poor, except for March through August, which are fair. Water-quality data collected at this site 1965 to 1977.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	6.6	14	8.6	18	26	41	23	3.7	5.3	1.6	5.4
2	.80	4.5	12	8.4	14	24	36	16	3.2	3.8	1.4	2.4
3	.62	3.7	11	8.2	12	23	51	15	2.9	3.5	1.7	2.0
4	.70	3.2	283	8.0	10	23	50	15	2.8	3.6	4.2	1.7
5	.46	2.8	268	7.8	8.8	22	42	14	2.9	2.7	7.7	1.5
6	.38	2.5	94	7.6	8.2	22	57	14	2.5	2.4	2.3	1.5
7	.62	2.2	55	7.4	7.6	25	97	18	2.5	2.8	1.6	1.4
8	1.0	2.0	41	7.2	7.4	28	59	20	2.3	2.9	1.3	1.3
9	.52	1.8	34	7.0	7.2	27	54	15	2.2	2.2	1.2	1.3
10	.35	1.7	32	7.0	7.2	54	271	13	2.1	1.9	1.2	1.2
11	.30	1.6	29	6.8	7.0	51	152	11	2.0	1.7	1.2	1.2
12	.27	1.5	23	6.6	7.0	59	147	12	2.0	1.6	2.1	1.1
13	.40	8.2	20	6.4	7.0	67	459	10	2.1	1.5	2.1	1.0
14	.80	25	19	6.4	6.8	72	165	8.8	1.9	3.4	30	.98
15	1.5	7.0	18	6.2	8.6	56	133	14	1.7	2.7	8.3	1.0
16	2.2	4.0	16	6.0	16	45	122	19	3.8	1.9	3.0	.92
17	3.5	98	14	6.0	23	37	83	11	2.5	1.6	2.1	.98
18	5.6	40	15	6.0	29	41	63	9.9	2.3	1.6	2.0	1.3
19	3.7	15	21	5.8	38	39	53	8.8	7.1	1.4	1.8	1.5
20	4.0	11	18	5.6	65	34	44	8.2	4.4	1.2	1.6	1.2
21	8.0	9.6	21	5.6	128	223	38	7.2	11	1.3	8.0	1.0
22	5.4	8.4	18	5.6	68	145	34	6.6	3.1	3.4	3.7	.92
23	3.4	7.8	16	5.4	195	81	30	6.0	2.1	5.5	2.0	.85
24	2.3	7.2	14	5.4	158	79	28	5.5	11	1.9	1.6	.89
25	1.5	7.0	13	14	78	58	25	6.9	16	1.7	1.5	.97
26	1.1	7.4	12	28	42	47	23	11	8.3	1.7	1.5	3.8
27	1.0	10	11	120	32	58	21	6.4	16	1.6	1.4	2.1
28	.98	32	10	300	28	87	18	4.8	6.6	1.3	1.4	1.8
29	.92	22	9.6	120	---	65	18	4.4	14	1.7	20	1.7
30	.90	16	9.2	42	---	52	17	4.0	8.9	13	3.6	1.4
31	1.7	---	8.8	23	---	46	---	3.7	---	2.3	3.5	---
TOTAL	56.12	369.7	1179.6	808.0	1036.8	1716	2431	342.2	153.9	85.1	126.6	46.31
MEAN	1.81	12.3	38.1	26.1	37.0	55.4	81.0	11.0	5.13	2.75	4.08	1.54
MAX	8.0	98	283	300	195	223	459	23	16	13	30	5.4
MIN	.27	1.5	8.8	5.4	6.8	22	17	3.7	1.7	1.2	1.2	.85
CFSM	.07	.45	1.40	.96	1.36	2.04	2.98	.41	.19	.10	.15	.06
IN.	.08	.51	1.61	1.11	1.42	2.35	3.32	.47	.21	.12	.17	.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1994, BY WATER YEAR (WY)

	MEAN	7.00	15.4	29.4	41.6	50.2	58.7	55.0	31.6	23.1	15.7	7.82	6.68
MAX	56.4	92.1	138	206	106	174	134	75.5	102	161	73.9	96.1	
(WY)	1978	1986	1991	1937	1951	1963	1979	1956	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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1937 - 1994

ANNUAL TOTAL	10278.50	8351.33	
ANNUAL MEAN	28.2	22.9	28.1
HIGHEST ANNUAL MEAN			54.5
LOWEST ANNUAL MEAN			7.66
HIGHEST DAILY MEAN	292	459	2360
LOWEST DAILY MEAN	.27	.27	.00
ANNUAL SEVEN-DAY MINIMUM	.49	.49	.06
INSTANTANEOUS PEAK FLOW		961	8720
INSTANTANEOUS PEAK STAGE		9.55	15.38
INSTANTANEOUS LOW FLOW		.27	
ANNUAL RUNOFF (CFSM)	1.04	.84	1.03
ANNUAL RUNOFF (INCHES)	14.06	11.42	14.03
10 PERCENT EXCEEDS	65	56	64
50 PERCENT EXCEEDS	13	7.1	10
90 PERCENT EXCEEDS	1.0	1.2	1.0

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

LOCATION.--Lat 40°14'54", long 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, and 2 mi downstream from confluence of Tuscarawas and Walhonding Rivers.

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 1994, BY WATER YEAR (WY)

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1936 - 1994	
ANNUAL TOTAL	2067520		1887591		4993	
ANNUAL MEAN	5664		5171		7545	1980
HIGHEST ANNUAL MEAN					2082	1954
LOWEST ANNUAL MEAN					77900	Jan 26 1937
HIGHEST DAILY MEAN	21100	Mar 6	23600	Apr 14	420	Sep 13 1954
LOWEST DAILY MEAN	700	Sep 1	706	Oct 15	452	Sep 26 1954
ANNUAL SEVEN-DAY MINIMUM	718	Oct 9	718	Oct 9	78700	Jan 26 1937
INSTANTANEOUS PEAK FLOW			28400	Jan 28	21.98	Jan 26 1937
INSTANTANEOUS PEAK STAGE			17.12	Jan 28		
INSTANTANEOUS LOW FLOW			683	Oct 15		
10 PERCENT EXCEEDS	14800		13700		12800	
50 PERCENT EXCEEDS	3580		2610		2920	
90 PERCENT EXCEEDS	847		1030		847	

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

DRAINAGE AREA.--406 mi².

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

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

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

REMARKS.--Estimated daily discharges: Dec. 24 to Jan. 31, Feb. 2-4. Records fair, except for periods of estimated record, which are poor. Flow regulated by Senecaville Lake on Seneca Fork, 22 mi upstream, beginning in 1937. Water is diverted 2.7 mi upstream from station for municipal supply of city of Cambridge; diversion not included in figures of daily discharge. Water-quality data collected at this site 1964 to 1975, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 8, 1935, reached a stage of 25.4 ft.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	111	765	46	2940	871	1080	179	55	105	49	394
2	18	199	799	45	2300	440	701	196	49	88	37	215
3	15	109	798	45	1500	315	352	145	41	260	154	107
4	13	70	833	64	900	402	395	129	37	186	88	70
5	15	68	1560	90	660	789	738	213	32	75	315	55
6	16	59	1410	130	860	822	559	252	31	183	341	47
7	14	46	1040	180	867	707	710	269	37	334	126	41
8	13	37	1030	340	835	1030	986	499	61	294	62	37
9	18	195	962	300	424	1200	726	428	42	176	44	35
10	22	69	914	220	251	1780	1320	308	33	48	35	32
11	21	32	754	160	203	2310	2710	264	31	35	30	29
12	19	28	568	140	220	2030	3080	256	26	30	32	28
13	21	337	512	180	286	1430	2630	197	25	25	32	27
14	21	825	334	240	344	1310	2200	126	25	43	95	27
15	20	1300	169	120	594	1200	1650	142	24	125	309	28
16	79	1150	219	94	621	862	1550	285	23	129	151	30
17	104	986	592	70	552	756	1490	478	27	83	76	80
18	151	1570	605	62	353	591	1250	296	25	44	65	137
19	78	1460	517	56	530	709	1130	146	23	30	64	100
20	51	1070	540	52	841	593	1050	120	21	26	57	33
21	123	884	376	50	1160	1020	975	107	24	42	225	24
22	120	801	202	50	1310	2150	947	87	27	50	699	17
23	75	768	169	48	1560	2130	907	78	33	50	494	16
24	48	761	120	46	1870	1410	871	139	69	37	397	15
25	37	737	105	100	1560	1190	849	175	70	35	256	16
26	32	709	90	1270	1220	756	848	244	70	52	71	25
27	28	725	80	1800	1080	588	514	285	100	56	50	54
28	24	1270	70	2500	976	1220	278	165	118	43	47	33
29	25	1170	60	3500	---	1490	504	77	81	50	145	24
30	27	802	54	3400	---	1200	292	61	138	90	197	18
31	46	---	50	3150	---	1160	---	55	---	110	201	---
TOTAL	1311	18348	16297	18548	26817	34461	33292	6401	1398	2934	4944	1794
MEAN	42.3	612	526	598	958	1112	1110	206	46.6	94.6	159	59.8
MAX	151	1570	1560	3500	2940	2310	3080	499	138	334	699	394
MIN	13	28	50	45	203	315	278	55	21	25	30	15
(+)	4.93	4.91	4.75	5.14	5.74	5.66	5.54	5.98	6.48	6.12	5.94	5.55

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1994, BY WATER YEAR (WY)

MEAN	105	307	501	590	798	871	788	508	348	183	153	115
MAX	835	1911	1615	1674	1789	2361	1710	1496	1602	596	1937	1139
(WY)	1976	1986	1991	1950	1939	1945	1940	1983	1981	1951	1980	1974
MIN	3.18	4.31	7.55	48.1	25.0	109	87.7	30.5	20.6	11.6	3.77	3.59
(WY)	1954	1954	1954	1954	1954	1969	1941	1941	1988	1966	1962	1963

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1938 - 1994

ANNUAL TOTAL	161719.9		166545				
ANNUAL MEAN	443		456			437	
HIGHEST ANNUAL MEAN						762	1979
LOWEST ANNUAL MEAN						118	1954
HIGHEST DAILY MEAN	3640	Apr 28	3500	Jan 29		8130	Mar 11 1964
LOWEST DAILY MEAN	8.4	Aug 10	13	Oct 4		1.70	Oct 6 1960
ANNUAL SEVEN-DAY MINIMUM	8.1	Aug 10	15	Oct 2		1.6	Sep 13 1966
INSTANTANEOUS PEAK FLOW			3300	Jan 31		8500	Jun 6 1963
INSTANTANEOUS PEAK STAGE			14.21	Jan 31		24.51	Aug 13 1980
INSTANTANEOUS LOW FLOW			12	Oct 8			
10 PERCENT EXCEEDS	1300		1260			1180	
50 PERCENT EXCEEDS	156		151			178	
90 PERCENT EXCEEDS	12		27			17	

(+) Diversion, in cubic feet per second, furnished by city of Cambridge.

MUSKINGUM RIVER BASIN

03144000 WAKATOMIKA CREEK NEAR FRAZEYSBURG, OH

LOCATION.--Lat 40°07'57", long 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 Frazeyburg, 2.0 mi downstream from Fivemile Run, and 2.5 mi upstream from Black Run.

DRAINAGE AREA.--140 mi².

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.--Estimated daily discharges: Dec. 22 to Feb. 18, 27 to Mar. 11. Records good, except for periods of estimated record, which are poor. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1970 to 1974. U. S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	34	75	34	220	150	192	131	29	59	16	84
2	11	34	71	32	180	130	175	135	25	42	17	57
3	11	20	73	31	160	120	187	132	22	35	55	45
4	9.8	18	415	30	140	110	242	128	21	31	37	39
5	10	17	1600	29	130	100	203	125	20	26	92	34
6	8.4	16	516	28	120	98	212	122	19	23	45	30
7	8.6	14	279	27	110	94	441	127	21	66	27	29
8	8.2	12	201	25	110	92	314	188	19	42	20	25
9	9.3	11	163	24	100	90	266	151	18	34	16	22
10	10	9.8	151	24	98	130	1080	136	17	28	15	21
11	12	9.5	142	23	94	200	1250	121	16	20	13	19
12	11	9.1	113	22	92	313	986	117	15	17	31	17
13	12	69	95	21	150	352	2280	106	15	15	41	15
14	13	173	91	21	250	416	1230	94	15	16	547	15
15	13	130	84	21	280	340	718	111	13	19	342	14
16	15	77	74	20	210	266	672	146	13	16	103	13
17	26	518	70	20	170	207	433	110	14	14	64	14
18	46	1370	99	19	140	210	329	91	13	13	50	18
19	33	326	96	19	139	214	279	83	13	13	42	15
20	21	187	107	19	229	176	230	77	11	11	36	13
21	27	132	104	19	509	451	194	70	16	11	61	12
22	36	101	92	18	387	686	172	63	17	22	53	12
23	14	83	80	18	852	373	154	57	14	21	38	11
24	9.3	73	68	18	1090	282	143	53	46	16	29	11
25	7.6	65	58	18	496	226	135	51	53	22	25	15
26	7.1	58	50	35	325	187	127	55	37	27	22	58
27	9.3	80	45	58	200	218	119	55	103	17	20	37
28	7.9	142	41	4000	170	304	108	42	57	13	19	25
29	7.5	112	38	1900	---	284	118	36	122	12	154	19
30	7.9	88	36	800	---	239	116	32	112	26	77	16
31	12	---	35	400	---	211	---	30	---	27	75	---
TOTAL	444.9	3988.4	5162	7773	7151	7269	13105	2975	926	754	2182	755
MEAN	14.4	133	167	251	255	234	437	96.0	30.9	24.3	70.4	25.2
MAX	46	1370	1600	4000	1090	686	2280	188	122	66	547	84
MIN	7.1	9.1	35	18	92	90	108	30	11	11	13	11
CFSM	.10	.95	1.19	1.79	1.82	1.67	3.12	.69	.22	.17	.50	.18
IN.	.12	1.06	1.37	2.07	1.90	1.93	3.48	.79	.25	.20	.58	.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1994, BY WATER YEAR (WY)

	MEAN	38.0	88.2	156	217	260	312	185	111	83.6	59.9	38.6
	MAX	155	396	786	1219	560	883	654	491	432	720	617
	(WY)	1987	1986	1991	1937	1990	1963	1940	1937	1990	1980	1979
	MIN	4.78	7.39	10.1	14.3	15.0	73.8	47.9	21.7	12.6	9.48	3.45
	(WY)	1964	1954	1964	1964	1964	1983	1941	1941	1988	1944	1953

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1937 - 1994
ANNUAL TOTAL	63589.9	52485.3	
ANNUAL MEAN	174	144	154
HIGHEST ANNUAL MEAN			270
LOWEST ANNUAL MEAN			51.9
HIGHEST DAILY MEAN	3180	4000	8910
LOWEST DAILY MEAN	7.0	7.1	2.6
ANNUAL SEVEN-DAY MINIMUM	8.1	8.1	2.7
INSTANTANEOUS PEAK FLOW		5760	16800
INSTANTANEOUS PEAK STAGE		9.18	14.07
INSTANTANEOUS LOW FLOW		7.1	
ANNUAL RUNOFF (CFSM)	1.24	1.03	1.10
ANNUAL RUNOFF (INCHES)	16.90	13.95	14.92
10 PERCENT EXCEEDS	388	308	347
50 PERCENT EXCEEDS	80	53	63
90 PERCENT EXCEEDS	9.8	13	11

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

MUSKINGUM RIVER BASIN

73

03145000 SOUTH FORK LICKING RIVER NEAR HEBRON, OH

LOCATION.--Lat 39°59'19", long 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, and 2.5 mi upstream from Ramp Creek.

DRAINAGE AREA.--133 mi².

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

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

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

REMARKS.--Estimated daily discharges: Dec. 23 to Jan. 30, Feb. 4-11, Apr. 8-15, Jul. 30 to Aug. 1. 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 collected at this site 1969 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	29	247	27	308	83	158	105	17	53	e18	25
2	9.9	22	264	26	205	78	142	86	17	44	16	20
3	6.9	19	198	26	183	82	149	68	14	38	15	11
4	8.5	18	272	25	170	105	253	54	11	38	23	8.0
5	10	18	951	24	160	109	177	51	11	25	33	6.7
6	7.4	17	420	23	150	94	192	47	12	58	18	6.1
7	6.1	13	365	22	150	87	461	69	12	14	11	6.4
8	5.5	11	298	22	140	81	260	161	12	14	9.4	7.5
9	6.7	11	246	21	140	82	230	96	15	10	7.9	7.2
10	6.9	10	221	21	130	312	500	68	12	18	7.5	7.7
11	7.9	9.5	193	20	130	344	1400	57	10	14	7.4	7.6
12	7.8	13	169	20	130	370	1100	53	8.4	9.6	9.9	7.8
13	8.8	125	152	19	131	401	1700	46	8.3	7.5	8.1	8.8
14	7.7	325	140	19	151	473	900	42	8.8	15	9.8	8.0
15	6.4	517	132	19	219	337	500	54	6.8	14	20	6.1
16	11	355	119	18	232	244	463	84	6.9	7.8	19	5.3
17	26	816	107	18	185	189	304	60	7.2	7.7	11	6.7
18	20	1540	104	18	182	183	253	52	9.8	7.6	8.0	6.8
19	14	865	145	17	222	200	217	45	7.8	7.1	6.5	5.1
20	27	517	184	17	296	167	176	33	8.2	7.0	6.9	6.8
21	57	324	272	17	506	344	152	30	9.2	9.2	15	5.0
22	40	270	283	17	361	559	134	28	6.5	37	34	3.8
23	19	328	100	30	587	337	118	28	6.7	20	16	3.6
24	15	309	60	50	509	276	104	27	14	10	10	3.5
25	12	287	50	100	224	238	87	24	20	9.6	8.1	20
26	11	273	45	1000	145	204	92	25	32	25	7.2	29
27	11	269	40	920	105	242	80	27	81	19	5.9	11
28	8.6	319	37	1200	90	354	47	21	34	12	5.9	8.0
29	11	285	35	900	---	263	51	19	41	8.9	32	6.9
30	8.8	259	32	600	---	229	53	23	66	e60	23	4.8
31	18	---	30	562	---	190	---	18	---	e35	17	---
TOTAL	426.9	8173.5	5911	5818	6141	7257	10453	1601	525.6	655.0	439.5	270.2
MEAN	13.8	272	191	188	219	234	348	51.6	17.5	21.1	14.2	9.01
MAX	57	1540	951	1200	587	559	1700	161	81	60	34	29
MIN	5.5	9.5	30	17	90	78	47	18	6.5	7.0	5.9	3.5

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1994, BY WATER YEAR (WY)

	MEAN	43.5	190	208	184	253	265	245	157	123	97.5	59.5	51.0
MAX	177	858	666	460	536	860	616	547	536	572	503	607	
(WY)	1976	1986	1991	1991	1990	1945	1970	1947	1990	1992	1979	1979	
MIN	4.79	3.50	7.77	12.7	32.7	27.2	25.6	4.07	8.42	4.92	3.48	4.70	
(WY)	1945	1945	1944	1944	1944	1941	1941	1941	1988	1944	1942	1991	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1940 - 1994

ANNUAL TOTAL	55915.4	47671.7	
ANNUAL MEAN	153	131	
HIGHEST ANNUAL MEAN			156
LOWEST ANNUAL MEAN			273
HIGHEST DAILY MEAN	1540	Nov 18	4500
LOWEST DAILY MEAN	5.4	Sep 1	56.9
ANNUAL SEVEN-DAY MINIMUM	6.9	Oct 6	.00
INSTANTANEOUS PEAK FLOW			.87
INSTANTANEOUS PEAK STAGE			5200
INSTANTANEOUS LOW FLOW			12.10
10 PERCENT EXCEEDS	378		425
50 PERCENT EXCEEDS	50		46
90 PERCENT EXCEEDS	8.9		7.8

e Estimated

03146500 LICKING RIVER NEAR NEWARK, OH

LOCATION.--Lat 40°03'33", long 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.

DRAINAGE AREA.--537 mi².

PERIOD OF RECORD.--October 1939 to current year.

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

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

REMARKS.--Estimated daily discharges: Dec. 23 to Jan. 27, Feb. 4-12, 17-20. Records fair, except for periods of estimated record, which are poor. Occasional regulation by Buckeye Lake, capacity, 27,300 acre-ft, on South Fork 15.2 mi upstream. Water-quality data collected at this site 1962 to 1980. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	120	529	180	1610	593	659	546	153	221	132	275
2	74	100	536	170	1230	553	587	486	141	180	166	208
3	70	99	540	160	1060	543	618	433	141	202	395	148
4	67	98	1710	160	820	564	1000	390	132	251	190	126
5	66	97	6020	150	740	570	769	372	128	205	185	114
6	65	94	1980	140	680	533	743	359	164	220	149	108
7	64	89	1270	140	620	525	2330	412	136	222	124	106
8	63	84	978	130	580	544	1240	589	143	310	112	102
9	65	80	792	130	540	553	885	491	138	306	104	98
10	61	78	715	130	500	1000	4540	399	128	275	100	95
11	62	78	654	120	490	1100	4810	352	120	210	99	94
12	61	78	566	120	480	1310	3540	335	117	171	102	89
13	63	309	507	110	482	1710	5330	311	117	153	104	89
14	65	785	477	110	526	2230	3450	292	110	204	864	86
15	64	1150	460	110	700	1510	2110	352	107	224	644	81
16	84	708	431	100	939	1090	2220	437	108	167	246	77
17	101	2850	400	100	800	804	1550	379	146	146	162	87
18	87	5180	399	100	740	776	1220	313	155	138	134	82
19	85	2090	508	98	800	915	1070	286	129	129	117	74
20	101	1240	602	96	1100	757	906	261	129	123	113	73
21	151	816	698	94	2450	1290	796	239	134	227	229	73
22	134	625	710	94	1740	1750	732	221	122	175	292	72
23	106	647	540	92	3140	1120	671	212	117	156	181	70
24	92	595	400	190	3390	919	620	201	185	129	136	67
25	86	554	350	350	1490	780	576	191	139	154	118	163
26	82	518	300	900	1000	664	518	194	251	204	110	197
27	78	543	260	2000	719	789	509	195	311	183	103	131
28	75	830	240	15300	633	1330	432	180	227	144	105	104
29	74	693	220	10700	---	1160	432	168	246	141	248	94
30	77	591	200	4260	---	929	419	158	308	218	179	85
31	99	---	190	2340	---	766	---	151	---	181	194	---
TOTAL	2495	21819	24182	38874	29999	29677	45282	9905	4682	5969	6137	3268
MEAN	80.5	727	780	1254	1071	957	1509	320	156	193	198	109
MAX	151	5180	6020	15300	3390	2230	5330	589	311	310	864	275
MIN	61	78	190	92	480	525	419	151	107	123	99	67

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1994, BY WATER YEAR (WY)

MEAN	170	440	680	832	1041	1186	1044	671	521	376	239	175
MAX	914	2402	2867	2926	2577	3454	2404	2493	2151	2115	2017	2207
(WY)	1987	1986	1991	1950	1990	1963	1940	1968	1989	1990	1979	1979
MIN	39.5	41.1	43.1	65.0	59.5	207	165	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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1940 - 1994

ANNUAL TOTAL	237123		222289			
ANNUAL MEAN	650		609		612	
HIGHEST ANNUAL MEAN					1138	1990
LOWEST ANNUAL MEAN					156	1954
HIGHEST DAILY MEAN	7330	Apr 26	15300	Jan 28	25600	Jan 22 1959
LOWEST DAILY MEAN	61	Oct 10	61	Oct 10	28	Sep 27 1954
ANNUAL SEVEN-DAY MINIMUM	63	Oct 7	63	Oct 7	31	Sep 26 1954
INSTANTANEOUS PEAK FLOW			18800	Jan 28 a	45000	Jan 21 1959
INSTANTANEOUS PEAK STAGE			14.23	Jan 28	20.30	Jan 21 1959
INSTANTANEOUS LOW FLOW			61	Oct 10		
10 PERCENT EXCEEDS	1490		1230		1430	
50 PERCENT EXCEEDS	370		222		251	
90 PERCENT EXCEEDS	75		85		67	

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

MUSKINGUM RIVER BASIN

75

031503000 MUSKINGUM RIVER NEAR BEVERLY, OH

LOCATION.--Lat 39°34'50", long 81°40'17", Washington County, Hydrologic Unit 05040004, on right bank, 400 ft. upstream from Olive Green Creek, 2.0 mi downstream from Meigs Creek and 2.5 mi northwest of Beverly, OH.

DRAINAGE AREA.--7627 mi².

PERIOD OF RECORD.--April 1993 to current year.

GAGE.--Water-stage recorder. Datum of gage is 614.92 ft above sea level. Water quality sampling site previously located 0.8 mi upstream.

REMARKS.--Estimated daily discharges noted in table. Records good except for estimated daily discharges and those below 2500 ft³/s which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1600	1910	e13000	e3000	e27000	15400	15600	8410	3760	7100	2460	3750
2	1370	2440	e11000	e3100	e29000	14400	13500	8070	3490	6500	2520	3300
3	1340	2870	e10000	e3200	e29000	14000	12200	7640	3330	5670	2330	3060
4	1270	3400	e9200	e3400	e29000	13000	11600	7170	3150	4970	2370	2880
5	1180	3520	e16000	e3600	e29000	12300	11900	6720	2940	5400	2740	2400
6	1090	3480	e25000	e4000	e28000	11100	11400	6370	2770	5060	2880	2120
7	1030	3410	e25000	5350	e28000	10600	13000	6490	2850	4350	3120	1970
8	987	3230	e23000	e5600	e28000	10500	16800	7700	2600	3800	2990	1830
9	1060	3070	e19000	e5400	e27000	10800	19300	7040	2660	3640	2560	1740
10	993	2910	e15000	e4500	e26000	17500	35800	6760	2610	4610	2170	1660
11	978	2680	e13000	e4100	e25000	15900	37200	6410	2370	5950	1950	1590
12	983	2690	10600	e4400	e21000	16900	36100	6050	2280	4880	1830	1550
13	958	2950	9150	5650	14500	18300	39700	5650	2190	3910	1770	1510
14	945	4610	8330	5480	7550	20100	37800	5010	2070	3520	1750	1440
15	947	10600	7520	e4800	6920	22100	35700	4820	2030	3380	3430	1370
16	1020	10400	6860	e3300	e6800	21700	36600	5380	1990	3410	5770	1310
17	1360	12600	6330	2900	e6800	18400	34200	5550	1980	3550	6230	1420
18	1530	23400	5970	e2800	e7400	16200	33100	5540	1960	3150	5000	1860
19	1610	25200	5900	e2800	e8400	14500	32300	5440	2080	2710	3770	1620
20	2500	21500	6040	e2700	e11000	13200	30600	5180	2100	2440	2990	1550
21	2820	18400	6440	e2700	e15000	14100	27100	4590	2060	2240	2880	1660
22	2610	14900	6680	e2800	e21000	21600	24500	4290	2140	2150	2870	1640
23	2840	10600	6780	e2900	e25000	24200	22200	4020	2290	2360	3000	1550
24	2830	9570	6580	e3200	e28000	22800	20100	3770	2550	2560	3280	1450
25	2440	8740	e5800	e4000	e29000	21700	17900	3770	2850	2550	3270	1410
26	2130	7940	e5000	e6000	e27000	20100	15400	4720	3370	2350	2890	1650
27	1940	8180	e4200	e10000	e24000	18100	13700	5580	3940	2260	2520	1900
28	1750	11100	e3600	54200	e20000	19800	12100	5750	4550	2210	2310	1970
29	1650	12600	e3400	41400	---	19700	10700	5350	5490	2080	2520	1980
30	1620	14600	e3200	e28000	---	19000	9270	4720	6540	2320	3580	1810
31	1650	---	e3100	e25000	---	17500	---	4140	---	2560	3660	---
TOTAL	49031	263500	300680	260280	584370	525500	687370	178100	86990	113640	93410	56950
MEAN	1582	8783	9699	8396	20870	16950	22910	5745	2900	3666	3013	1898
MAX	2840	25200	25000	54200	29000	24200	39700	8410	6540	7100	6230	3750
MIN	945	1910	3100	2700	6800	10500	9270	3770	1960	2080	1750	1310
MED	1370	8060	6860	4000	25000	17500	19700	5550	2600	3410	2880	1660
CFSM	.21	1.15	1.27	1.10	2.74	2.22	3.00	.75	.38	.48	.40	.25
IN.	.24	1.29	1.47	1.27	2.85	2.56	3.35	.87	.42	.55	.46	.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1994, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	1582	8783	9699	8396	20870	16950	19570	7057	3976	4311	2439	1943
MAX	1582	8783	9699	8396	20870	16950	22910	8370	5053	4955	3013	1987
(WY)	1994	1994	1994	1994	1994	1994	1994	1993	1993	1993	1994	1993
MIN	1582	8783	9699	8396	20870	16950	16240	5745	2900	3666	1865	1898
(WY)	1994	1994	1994	1994	1994	1994	1993	1994	1994	1994	1993	1994

SUMMARY STATISTICS

FOR 1994 WATER YEAR

WATER YEARS 1993 - 1994

ANNUAL TOTAL	3199821	
ANNUAL MEAN	8767	8767
HIGHEST ANNUAL MEAN		8767
LOWEST ANNUAL MEAN		8767
HIGHEST DAILY MEAN	54200	54200
LOWEST DAILY MEAN	945	945
ANNUAL SEVEN-DAY MINIMUM	975	975
INSTANTANEOUS PEAK FLOW	66900	66900
INSTANTANEOUS PEAK STAGE	14.71	14.71
INSTANTANEOUS LOW FLOW	945	945
ANNUAL RUNOFF (CFSM)	1.15	1.15
ANNUAL RUNOFF (INCHES)	15.61	15.62
10 PERCENT EXCEEDS	24100	21300
50 PERCENT EXCEEDS	4610	4130
90 PERCENT EXCEEDS	1660	1760

e Estimated

HOCKING RIVER BASIN

03157000 CLEAR CREEK NEAR ROCKBRIDGE, OH

LOCATION.--Lat 39°35'18", long 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.

DRAINAGE AREA.--89.0 mi².

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.--Estimated daily discharges: Dec. 24 to Jan. 26, Apr. 12, 13, May 8 to Jun. 14, Aug. 4 to Sep. 30. Records good, except for periods of estimated record, which are fair. Water-quality data collected at this site 1965 to 1977.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	77	80	29	155	96	111	109	43	65	57	37
2	19	57	78	28	131	96	101	89	42	61	47	31
3	19	50	82	27	114	98	104	81	39	130	41	25
4	19	49	146	26	101	117	105	81	37	67	37	18
5	18	49	383	25	98	115	95	76	36	50	44	16
6	18	44	175	25	86	102	113	82	35	42	40	17
7	20	40	132	45	79	95	190	135	48	43	35	16
8	19	37	113	80	81	90	125	220	42	56	31	15
9	22	35	101	60	107	94	114	160	36	39	29	14
10	33	34	99	48	78	323	1780	120	33	33	27	18
11	26	34	88	44	72	263	833	100	32	31	26	22
12	23	34	79	40	67	271	700	96	31	29	24	15
13	23	113	75	38	76	271	900	88	30	29	23	15
14	21	448	76	37	107	283	346	84	29	70	23	14
15	21	668	75	35	149	193	306	150	29	102	22	14
16	39	217	69	34	114	148	311	370	30	90	21	13
17	70	959	65	32	91	124	202	260	27	50	20	30
18	42	1110	65	31	93	126	164	180	26	40	19	52
19	34	305	73	31	113	115	145	130	26	34	18	40
20	385	195	69	30	140	102	125	100	25	31	18	30
21	154	148	78	30	202	175	113	90	38	31	32	20
22	94	125	73	29	152	229	104	80	29	37	29	17
23	66	111	69	29	404	145	98	70	27	41	25	16
24	53	102	56	70	274	123	95	64	62	31	20	15
25	45	90	50	150	171	106	90	70	76	100	17	26
26	41	84	46	500	142	95	85	90	66	228	16	37
27	38	104	41	587	111	126	83	80	103	78	16	30
28	35	125	38	2250	99	212	77	66	59	56	15	25
29	34	102	34	760	---	165	89	56	48	50	40	22
30	33	87	31	319	---	134	90	50	136	263	30	21
31	45	---	30	209	---	121	---	46	---	83	28	---
TOTAL	1526	5633	2669	5678	3607	4753	7794	3473	1320	2090	870	681
MEAN	49.2	188	86.1	183	129	153	260	112	44.0	67.4	28.1	22.7
MAX	385	1110	383	2250	404	323	1780	370	136	263	57	52
MIN	17	34	30	25	67	90	77	46	25	29	15	13
CFSM	.55	2.11	.97	2.06	1.45	1.72	2.92	1.26	.49	.76	.32	.26
IN.	.64	2.35	1.12	2.37	1.51	1.99	3.26	1.45	.55	.87	.36	.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1994, BY WATER YEAR (WY)

	MEAN	29.4	54.6	89.5	114	147	171	157	118	71.6	55.7	43.1	30.2
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	11.7	11.2	
(WY)	1964	1965	1964	1977	1954	1941	1941	1988	1988	1944	1988	1955	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1940 - 1994

ANNUAL TOTAL	35271		40094										
ANNUAL MEAN	96.6		110							89.8			
HIGHEST ANNUAL MEAN										164		1979	
LOWEST ANNUAL MEAN										28.8		1954	
HIGHEST DAILY MEAN	1110	Nov 18	2250	Jan 28						4690	May 24	1968	
LOWEST DAILY MEAN	16	Sep 11	13	Sep 16						3.5	Aug 27	1942	
ANNUAL SEVEN-DAY MINIMUM	16	Sep 18	16	Sep 10						6.3	Aug 25	1942	
INSTANTANEOUS PEAK FLOW			4100	Apr 10						16000	Jul 22	1948	
INSTANTANEOUS PEAK STAGE			10.87	Apr 10						17.68	Jul 22	1948	
INSTANTANEOUS LOW FLOW			13	Sep 16									
ANNUAL RUNOFF (CFSM)	1.09		1.23							1.01			
ANNUAL RUNOFF (INCHES)	14.74		16.76							13.71			
10 PERCENT EXCEEDS	183		202							182			
50 PERCENT EXCEEDS	57		66							44			
90 PERCENT EXCEEDS	19		21							16			

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

HOCKING RIVER BASIN

77

03157500 HOCKING RIVER AT ENTERPRISE, OH

LOCATION.--Lat 39°33'54", long 82°28'30", 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, 4.0 mi downstream from Buck Run, and 4.3 mi upstream from Scott Creek.

DRAINAGE AREA.--459 mi².

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

REVISED RECORDS.--WSP 873: 1938. 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.--Estimated daily discharges: Dec. 24 to Jan. 26. Records fair, 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 collected at this site 1965 to 1977. 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 floodmark, discharge, 36,000 ft³/s, from reports of U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	303	372	120	1240	668	770	585	202	450	194	145
2	68	256	352	115	945	646	685	510	186	329	164	112
3	69	214	355	110	805	682	663	457	172	365	150	92
4	64	210	530	110	643	814	700	456	163	273	140	81
5	63	197	1800	105	636	852	630	440	156	221	162	77
6	58	184	1150	100	575	736	628	441	153	191	146	79
7	62	162	748	160	538	671	1170	558	214	192	127	76
8	58	148	584	340	518	637	918	1030	188	328	117	72
9	64	139	503	260	678	629	788	718	159	224	109	70
10	117	137	469	230	494	1880	3780	583	145	179	105	81
11	92	133	438	210	504	1790	7130	507	139	153	101	98
12	79	127	382	190	464	1770	3560	506	133	139	100	71
13	71	300	351	180	474	1650	2980	464	122	133	97	67
14	68	1100	333	170	492	1810	2220	418	115	215	95	64
15	67	3140	322	160	804	1390	1660	591	111	371	96	62
16	89	1270	300	150	707	1070	1890	1660	118	552	88	60
17	301	1780	272	140	591	863	1370	784	139	262	85	92
18	206	5510	259	130	579	820	1100	557	105	199	83	187
19	137	2180	293	130	641	808	946	464	146	170	80	118
20	1240	1240	287	130	802	705	807	412	105	149	78	89
21	672	827	318	120	1190	931	704	368	194	138	113	78
22	406	621	323	120	1100	1730	634	333	135	162	105	73
23	274	490	302	110	2260	1170	579	313	131	180	91	70
24	216	425	250	250	2160	946	544	287	268	143	79	69
25	179	382	220	1000	1410	795	514	298	408	251	75	89
26	162	351	200	2700	1120	696	488	413	307	720	72	148
27	149	386	180	2400	825	802	472	356	603	291	72	106
28	136	642	160	7880	715	1300	448	289	366	224	69	90
29	131	497	150	8210	---	1270	466	253	278	185	148	80
30	131	418	140	3450	---	1020	487	229	771	492	123	74
31	168	---	130	1690	---	870	---	215	---	263	118	---
TOTAL	5665	23769	12473	31170	23910	32421	39731	15495	6432	8144	3382	2670
MEAN	183	792	402	1005	854	1046	1324	500	214	263	109	89.0
MAX	1240	5510	1800	8210	2260	1880	7130	1660	771	720	194	187
MIN	58	127	130	100	464	629	448	215	105	133	69	60
CFSM	.40	1.73	.88	2.19	1.86	2.28	2.89	1.09	.47	.57	.24	.19
IN.	.46	1.93	1.01	2.53	1.94	2.63	3.22	1.26	.52	.66	.27	.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1994, BY WATER YEAR (WY)

	MEAN	126	254	429	629	788	942	864	586	353	284	225	160
MAX	670	1864	1844	3605	1899	2875	2228	2499	1445	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	61.0	39.9	30.4	
(WY)	1954	1954	1964	1977	1954	1941	1941	1934	1936	1988	1932	1953	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1931 - 1994
ANNUAL TOTAL	172810	205262	
ANNUAL MEAN	473	562	467
HIGHEST ANNUAL MEAN			860
LOWEST ANNUAL MEAN			110
HIGHEST DAILY MEAN	5510	Nov 18	21600
LOWEST DAILY MEAN	56	Sep 12	23
ANNUAL SEVEN-DAY MINIMUM	61	Aug 27	27
INSTANTANEOUS PEAK FLOW			10300
INSTANTANEOUS PEAK STAGE			15.93
INSTANTANEOUS LOW FLOW			56
ANNUAL RUNOFF (CFSM)	1.03	1.23	1.02
ANNUAL RUNOFF (INCHES)	14.01	16.64	13.84
10 PERCENT EXCEEDS	988	1210	1060
50 PERCENT EXCEEDS	256	287	209
90 PERCENT EXCEEDS	71	81	57

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

HOCKING RIVER BASIN

03159500 HOCKING RIVER AT ATHENS, OH

LOCATION.--Lat 39°19'44", long 82°05'16", in T.9 N., R.14 W., Athens County, Hydrologic Unit 05030204, on right bank 0.8 mi east of business section of Athens, 1.4 mi downstream from Coats Run, and 3.0 mi downstream from Margaret Creek.

DRAINAGE AREA.--943 mi².

PERIOD OF RECORD.--May 1915 to current year.

REVISED RECORDS.--WSP 523: 1918-19(M). WSP 743: 1922(M). WSP 873: 1920, 1922, 1924-28, 1937. WSP 1113: 1932. WDR-OH-90-1: 1979(M), 1983(M), 1985(M), 1986(M).

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

REMARKS.--Estimated daily discharges: 1993 - Oct. 25-27, Mar. 25-31. Records fair, except for periods of estimated record, which are poor. 1994 - Dec. 23 to Jan. 28, Sep. 9-11, 13-17, 22-26, 30. Records good, except for periods of estimated record, which are poor. Water-quality data collected at this site 1954 to 1974. Some regulation by Burr Oak Reservoir, capacity 26,900 acre-ft, on East Branch Sunday Creek 29 mi upstream beginning 1952 (see station 0315800); by Hocking Lake, capacity 3,080 acre-ft, on Clear Fork 39.4 mi upstream beginning in 1949; and by temporary retention in 8 retarding basins, combined capacity, 8,710 acre-ft, constructed between 1955 and 1961 upstream from Lancaster (see station 03156400).

EXTREMES OUTSIDE PERIOD RECORD.--Flood in March 1907 reached a stage of about 27 ft, site and datum then in use, from flood marks, discharge 50,000 ft³/s, estimated by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	139	107	370	344	658	1080	1500	2040	309	249	128	84
2	135	129	342	419	605	1120	2100	1710	303	392	120	86
3	132	161	323	398	515	1620	1800	1500	275	1280	116	97
4	129	209	311	368	497	3960	1500	1360	279	814	111	267
5	124	204	292	1090	483	8620	1300	1460	317	540	110	362
6	121	184	270	1740	464	9100	1200	1560	352	407	108	206
7	116	189	246	1220	447	4580	1050	1070	311	325	102	143
8	116	192	247	945	426	3160	980	892	267	277	99	119
9	133	174	292	770	416	3050	900	785	258	246	94	105
10	124	157	296	630	399	2610	1100	704	266	219	88	96
11	127	150	350	584	387	2040	1500	649	740	205	84	90
12	123	181	485	682	416	1880	1200	626	578	231	81	89
13	118	364	472	1120	482	1660	1100	668	335	482	81	84
14	115	661	418	2020	557	1480	950	741	274	404	85	83
15	106	471	384	1710	521	1350	1200	601	258	367	83	81
16	103	353	370	1250	719	1390	1700	527	264	495	76	90
17	102	295	457	935	1740	3480	2600	488	223	328	93	125
18	111	263	577	800	1520	5880	2000	463	200	253	105	109
19	108	250	510	689	1100	3280	1500	453	280	291	106	102
20	103	245	500	592	993	2510	1300	441	507	1540	102	89
21	104	263	534	637	1260	2950	1200	411	330	821	95	82
22	102	333	550	1840	5570	2650	1400	395	515	475	87	78
23	107	511	476	2030	7480	2440	1200	377	515	348	89	78
24	113	638	433	1730	3910	5150	1010	355	333	279	90	81
25	110	665	376	2490	2350	4000	1030	347	264	245	101	82
26	105	888	310	1960	1960	3000	5710	334	274	221	125	86
27	104	716	252	1590	1460	2000	9770	311	248	192	112	146
28	102	554	303	1230	1210	1600	6710	289	222	175	99	149
29	102	463	302	942	---	1400	3250	274	231	161	90	118
30	106	408	303	801	---	1200	2570	263	282	155	84	100
31	108	---	323	699	---	1300	---	272	---	139	81	---
TOTAL	3548	10378	11674	34255	38545	91540	62330	22366	9810	12556	3025	3507
MEAN	114	346	377	1105	1377	2953	2078	721	327	405	97.6	117
MAX	139	888	577	2490	7480	9100	9770	2040	740	1540	128	362
MIN	102	107	246	344	387	1080	900	263	200	139	76	78

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 1993, BY WATER YEAR (WY)

	MEAN	249	543	1017	1417	1740	2098	1822	1315	737	505	407	304
MAX	1539	3194	3830	7796	3928	5975	4268	5672	3143	2957	3054	2031	
(WY)	1976	1920	1924	1937	1951	1963	1940	1968	1928	1958	1980	1979	
MIN	36.1	46.4	64.5	75.5	91.6	262	385	174	77.8	52.2	39.6	44.8	
(WY)	1931	1954	1931	1931	1954	1931	1925	1934	1930	1930	1930	1930	

SUMMARY STATISTICS

FOR 1992 CALENDAR YEAR

FOR 1993 WATER YEAR

WATER YEARS 1916 - 1993

ANNUAL TOTAL	251213		303534									
ANNUAL MEAN	686		832							1009		
HIGHEST ANNUAL MEAN										1794		1989
LOWEST ANNUAL MEAN										233		1954
HIGHEST DAILY MEAN	7200	Jul 28		9770	Apr 27					31200	Mar 11	1964
LOWEST DAILY MEAN	102	Oct 17		76	Aug 16					10	Oct 11	1930
ANNUAL SEVEN-DAY MINIMUM	105	Oct 16		82	Sep 20					24	Oct 11	1930
INSTANTANEOUS PEAK FLOW				10500	Apr 27					32900	Mar 11	1964
INSTANTANEOUS PEAK STAGE				17.07	Apr 27					24.18	Mar 11	1964
INSTANTANEOUS LOW FLOW				76	Aug 16							
10 PERCENT EXCEEDS	1400			1960						2420		
50 PERCENT EXCEEDS	411			368						421		
90 PERCENT EXCEEDS	153			101						88		

HOCKING RIVER BASIN

79

03159500 HOCKING RIVER AT ATHENS, OH--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	256	899	280	3320	1640	2130	1290	418	895	374	314
2	91	442	829	270	2610	1830	1740	1450	391	563	302	263
3	92	389	730	260	2380	2310	1550	1110	364	522	273	211
4	88	335	791	250	2000	2500	1610	1010	344	574	253	177
5	85	319	2930	250	1440	3080	1510	1040	327	401	544	159
6	85	300	3020	250	1200	2340	1480	997	309	325	448	147
7	84	280	1900	350	1050	1930	2560	1500	298	310	300	142
8	78	254	1430	450	1260	2120	2420	4530	331	275	246	139
9	78	235	1190	350	4410	2160	1900	2680	321	445	222	130
10	77	222	1040	320	2270	6190	7130	1980	285	396	206	120
11	95	215	919	300	1540	5900	14600	1590	259	259	193	110
12	100	209	780	270	1250	4430	13800	1260	248	224	188	140
13	94	226	689	500	1130	4120	9280	1080	232	223	180	120
14	86	754	647	800	1130	4780	6780	931	219	254	173	110
15	82	3510	620	580	1380	3960	5020	849	219	307	173	100
16	99	3730	594	450	1570	3070	6110	1670	213	729	170	95
17	138	1880	545	360	1420	2400	4400	1990	207	660	167	110
18	360	4590	505	310	1430	2030	3280	1290	217	377	153	186
19	265	5990	503	270	1490	1770	2840	1130	192	288	149	257
20	310	2730	540	240	1820	1610	2460	911	207	244	151	193
21	1730	1740	555	220	2870	2400	2060	791	190	218	272	154
22	954	1280	613	210	3440	4340	1560	693	234	239	394	130
23	581	1180	500	200	5620	3230	1350	629	221	229	248	120
24	407	1060	450	190	6700	2560	1220	590	224	237	196	115
25	331	804	400	450	4430	1970	1120	540	350	213	170	110
26	280	648	370	2000	3180	1590	1030	627	465	779	156	120
27	246	763	350	5000	2380	2370	1010	779	491	823	147	190
28	223	1880	320	13000	1860	4840	1010	631	718	434	142	159
29	209	1400	310	15100	---	4050	933	537	497	357	151	142
30	201	993	300	13700	---	2970	1000	478	493	365	181	125
31	205	---	290	6090	---	2440	---	442	---	634	253	---
TOTAL	7844	38614	25559	63270	66580	92930	104893	37025	9484	12799	7175	4588
MEAN	253	1287	824	2041	2378	2998	3496	1194	316	413	231	153
MAX	1730	5990	3020	15100	6700	6190	14600	4530	718	895	544	314
MIN	77	209	290	190	1050	1590	933	442	190	213	142	95

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 1994, BY WATER YEAR (WY)

MEAN	249	553	1015	1425	1748	2110	1843	1313	732	504	405	302
MAX	1539	3194	3830	7796	3928	5975	4268	5672	3143	2957	3054	2031
(WY)	1976	1920	1924	1937	1951	1963	1940	1968	1928	1958	1980	1979
MIN	36.1	46.4	64.5	75.5	91.6	262	385	174	77.8	52.2	39.6	44.8
(WY)	1931	1954	1931	1931	1954	1931	1925	1934	1930	1930	1930	1930

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1916 - 1994

ANNUAL TOTAL	349951	470761	
ANNUAL MEAN	959	1290	1013
HIGHEST ANNUAL MEAN			1794
LOWEST ANNUAL MEAN			233
HIGHEST DAILY MEAN	9770	15100	31200
LOWEST DAILY MEAN	76	77	10
ANNUAL SEVEN-DAY MINIMUM	82	82	24
INSTANTANEOUS PEAK FLOW		16500	32900
INSTANTANEOUS PEAK STAGE		21.81	24.18
INSTANTANEOUS LOW FLOW		77	
10 PERCENT EXCEEDS	2060	3120	2430
50 PERCENT EXCEEDS	464	493	422
90 PERCENT EXCEEDS	90	145	88

SHADE RIVER BASIN

03159540 SHADE RIVER NEAR CHESTER, OH

LOCATION.--Lat 39°03'49", long 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, and 8.5 mi northeast of Pomeroy.

DRAINAGE AREA.--156 mi², 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.--Estimated daily discharges: Oct. 1-23, Nov. 4-17, Dec. 8 to Jan. 4, 9-12, 14-25, Feb. 4-7, 10-12. Records fair, except for periods of estimated record, which are poor. Water-quality data collected at this site 1965-77, 1979-81. Sediment data collected 1970-74.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	5.2	112	24	246	197	259	104	29	10	43	227
2	4.3	8.7	71	23	133	341	207	100	25	8.5	28	111
3	4.3	11	55	23	174	1070	181	83	21	7.1	61	49
4	4.2	14	46	80	120	756	175	74	16	5.1	76	29
5	4.2	18	261	472	100	751	155	74	14	14	266	19
6	4.1	13	445	350	84	401	182	72	13	10	296	15
7	4.0	11	249	1060	66	294	965	242	25	72	83	13
8	4.0	9.9	190	2050	171	373	438	1460	86	112	42	10
9	3.8	9.2	150	1500	2640	502	280	420	50	67	28	8.1
10	3.8	9.0	120	490	3500	2020	1280	256	29	81	21	6.9
11	3.8	9.0	100	250	4700	1240	4540	195	19	60	16	6.0
12	3.6	8.8	82	220	3500	740	1750	172	13	26	13	4.8
13	3.6	12	74	643	832	567	1050	157	10	15	10	4.2
14	3.8	44	66	350	401	570	727	134	7.9	46	8.8	3.8
15	3.8	60	60	200	407	440	585	125	6.0	116	7.8	3.6
16	3.9	90	56	150	368	320	1950	126	5.0	66	7.3	3.8
17	4.0	140	52	120	307	234	935	118	14	46	7.9	5.2
18	4.2	442	50	110	274	202	391	98	15	27	6.7	12
19	5.0	223	47	100	292	214	296	88	8.8	17	6.4	19
20	10	149	43	94	362	184	230	82	8.4	11	4.3	17
21	40	109	40	90	581	372	181	77	6.0	7.3	34	8.0
22	50	67	37	84	599	1360	154	71	4.8	5.3	181	4.8
23	35	47	35	80	1700	473	131	61	4.1	14	116	3.6
24	14	38	33	160	1720	311	115	55	6.7	13	48	3.4
25	9.5	31	32	250	622	235	103	51	57	24	26	13
26	8.2	28	30	2120	402	181	93	57	47	371	17	60
27	7.5	26	29	1660	264	589	86	64	62	109	13	50
28	7.4	233	28	3430	199	1850	85	55	46	54	10	24
29	5.3	260	27	5060	---	1120	85	45	29	37	8.6	12
30	4.6	171	26	1660	---	426	103	38	18	191	7.2	7.2
31	4.6	---	25	487	---	312	---	33	---	91	90	---
TOTAL	272.9	2296.8	2671	23390	24764	18645	17712	4787	695.7	1733.3	1583.0	753.4
MEAN	8.80	76.6	86.2	755	884	601	590	154	23.2	55.9	51.1	25.1
MAX	50	442	445	5060	4700	2020	4540	1460	86	371	296	227
MIN	3.6	5.2	25	23	66	181	85	33	4.1	5.1	4.3	3.4
CFSM	.06	.49	.55	4.84	5.67	3.86	3.78	.99	.15	.36	.33	.16
IN.	.07	.55	.64	5.58	5.91	4.45	4.22	1.14	.17	.41	.38	.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1994, BY WATER YEAR (WY)

	MEAN	60.5	115	215	240	320	338	292	216	82.9	72.9	67.7	38.5
MAX	259	386	765	755	884	812	633	912	423	384	406	261	
(WY)	1976	1974	1991	1994	1994	1967	1972	1968	1981	1980	1980	1979	
MIN	.42	.99	20.2	24.0	40.7	53.4	52.9	33.2	2.37	2.40	.72	.38	
(WY)	1988	1988	1988	1977	1978	1969	1971	1986	1988	1987	1988	1987	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1965 - 1994

ANNUAL TOTAL	46668.11	99304.1	
ANNUAL MEAN	128	272	172
HIGHEST ANNUAL MEAN			272
LOWEST ANNUAL MEAN			45.4
HIGHEST DAILY MEAN	2830	5060	6260
LOWEST DAILY MEAN	.78	3.4	.18
ANNUAL SEVEN-DAY MINIMUM	.92	3.7	.21
INSTANTANEOUS PEAK FLOW		5660	8170
INSTANTANEOUS PEAK STAGE		24.48	27.39
INSTANTANEOUS LOW FLOW		2.9	
ANNUAL RUNOFF (CFSM)	.82	1.74	1.10
ANNUAL RUNOFF (INCHES)	11.13	23.68	15.00
10 PERCENT EXCEEDS	293	593	381
50 PERCENT EXCEEDS	42	62	58
90 PERCENT EXCEEDS	2.3	5.3	4.2

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

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REMARKS.--Estimated daily discharges: Dec. 16 to Jan. 3, 11 to Feb. 2, 9-13, 15-19, Mar. 2-7, 9-13, May 9-12, Jul. 16-19, Aug. 31 to Sep. 30. Records fair, except for periods of estimated record, which are poor. Sediment data collected at this site 1969 to 1974.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	69	385	64	6000	1050	2070	722	145	168	79	540
2	9.7	72	283	64	5000	1100	1330	820	128	142	64	350
3	9.6	69	230	140	1930	1600	1100	849	115	226	75	200
4	9.4	60	242	745	861	1200	983	752	103	338	63	140
5	8.7	60	834	701	790	820	915	688	95	460	115	100
6	8.6	63	1150	656	721	700	1050	634	91	381	141	70
7	9.2	68	1110	1760	640	2000	1870	1480	85	238	422	56
8	9.0	67	781	2100	847	1570	1870	2600	83	147	259	46
9	8.4	62	520	1710	3100	2500	1580	1900	101	136	150	40
10	8.4	59	410	1310	4400	3600	2260	1500	93	147	103	33
11	8.5	54	358	970	6200	4500	4050	1200	83	120	85	26
12	9.1	50	304	840	5200	5600	6300	1000	76	151	66	22
13	9.2	70	256	760	3200	3400	8000	853	69	140	47	19
14	9.2	186	226	680	1550	3970	8000	713	65	126	35	17
15	9.0	301	207	640	1300	3410	7320	636	59	174	47	14
16	16	496	190	600	1200	2550	6580	604	57	150	42	20
17	24	731	170	560	1100	1870	5040	622	69	130	36	30
18	42	996	160	540	980	1380	4220	613	63	110	35	40
19	51	1120	140	520	900	1190	3040	501	63	100	25	56
20	166	866	130	500	1200	1060	1520	432	69	85	30	40
21	180	525	120	470	1540	1190	1160	390	60	64	34	27
22	128	338	110	460	1920	1750	964	350	113	60	105	17
23	88	251	100	440	3300	2260	820	310	85	60	238	15
24	83	201	94	430	3770	1960	721	275	79	78	314	25
25	63	167	88	520	3980	1400	650	255	87	58	173	52
26	55	144	82	1000	3920	1100	596	288	204	76	92	150
27	49	243	78	1500	3160	1590	563	271	276	127	70	120
28	41	411	74	2500	1670	2960	536	224	231	103	50	100
29	36	458	70	3500	---	3250	557	207	228	161	41	56
30	45	477	68	5200	---	3390	749	197	217	147	51	45
31	61	---	66	6800	---	3150	---	168	---	105	140	---
TOTAL	1264.0	8734	9036	38680	70379	69070	76414	22054	3292	4708	3227	2466
MEAN	40.8	291	291	1248	2514	2228	2547	711	110	152	104	82.2
MAX	180	1120	1150	6800	6200	5600	8000	2600	276	460	422	540
MIN	8.4	50	66	64	640	700	536	168	57	58	25	14
CFSM	.07	.50	.50	2.13	4.30	3.81	4.35	1.22	.19	.26	.18	.14
IN.	.08	.56	.57	2.46	4.48	4.39	4.86	1.40	.21	.30	.21	.16

MEAN	124	290	661	934	1202	1485	1223	872	394	242	203	134
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

ANNUAL TOTAL	211918.1			309324.0					
ANNUAL MEAN	581			847			644		
HIGHEST ANNUAL MEAN							1095		1916
LOWEST ANNUAL MEAN							186		1954
HIGHEST DAILY MEAN	7600	Mar	5	8000	Apr	13	19600	May	28 1968
LOWEST DAILY MEAN	8.4	Oct	9	8.4	Oct	9	1.1	Oct	17 1964
ANNUAL SEVEN-DAY MINIMUM	8.7	Oct	5	8.7	Oct	5	1.3	Oct	14 1964
INSTANTANEOUS PEAK FLOW				8110	Apr	13	19600	May	28 1968
INSTANTANEOUS PEAK STAGE				20.19	Apr	13	28.69	May	28 1968
INSTANTANEOUS LOW FLOW				8.4	Oct	9			
ANNUAL RUNOFF (CFSM)	.99			1.45			1.10		
ANNUAL RUNOFF (INCHES)	13.48			19.67			14.96		
10 PERCENT EXCEEDS	1520			2520			1710		
50 PERCENT EXCEEDS	180			228			239		
90 PERCENT EXCEEDS	15			38			24		

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

SCIOTO RIVER BASIN

03219500 SCIOTO RIVER NEAR PROSPECT, OH

LOCATION.--Lat 40°25'10", long 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, and 2.5 mi downstream from Patton Run.

DRAINAGE AREA.--567 mi².

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.--Estimated daily discharges: Dec. 27 to Jan. 29, 31 to Feb. 20. Records good, except for periods of estimated record, which are poor. Water-quality data collected at this site 1964 to 1977. Sediment data collected 1951 to 1953. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 25, 1913, reached a stage of 21.1 ft, discharge, 27,000 ft³/s,

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	21	725	100	1200	306	172	173	58	1370	151	44
2	19	25	504	94	660	243	163	203	56	1100	104	38
3	18	23	502	86	430	203	158	201	49	1610	81	33
4	14	24	1070	83	310	213	167	169	47	1800	63	28
5	13	30	2440	80	230	210	180	149	43	1570	55	25
6	11	28	3210	77	190	216	414	137	42	708	49	23
7	11	23	3850	75	160	266	1320	131	40	367	53	26
8	11	20	2880	73	135	378	1720	150	37	449	53	28
9	11	19	1410	71	115	438	1720	166	36	710	45	23
10	11	19	719	69	105	379	1790	175	36	875	38	21
11	11	18	510	68	92	299	2170	152	37	777	32	21
12	12	18	388	67	84	263	3410	139	37	361	31	18
13	12	40	307	65	76	373	4290	126	37	220	28	18
14	15	741	271	64	71	1200	4850	120	39	161	42	17
15	13	2030	251	63	67	1720	3970	117	110	136	48	17
16	13	2200	235	62	140	1620	2360	116	70	113	80	17
17	15	3000	217	61	280	1020	1180	105	49	94	84	18
18	21	3610	200	61	480	580	672	97	41	83	60	28
19	20	4140	196	60	900	444	493	88	33	71	44	23
20	28	4170	214	60	1600	369	388	81	30	63	37	18
21	32	2840	259	62	2670	337	312	76	39	56	103	18
22	26	1330	277	66	2200	381	268	73	41	51	184	18
23	22	611	275	70	1550	440	234	70	35	48	136	17
24	27	410	248	110	1460	375	212	65	186	64	93	17
25	29	314	221	190	1410	305	196	66	1050	112	66	21
26	28	263	176	380	809	252	183	74	1400	83	51	22
27	22	923	160	740	392	225	168	126	1610	79	42	20
28	18	1800	145	1500	339	216	150	134	1490	72	37	20
29	16	1910	130	2800	---	211	140	105	1210	58	46	20
30	15	1390	115	5380	---	197	135	78	1340	152	46	18
31	15	---	105	2500	---	184	---	63	---	212	44	---
TOTAL	549	31990	22210	15237	18155	13863	33585	3725	9328	13625	2026	675
MEAN	17.7	1066	716	492	648	447	1119	120	311	440	65.4	22.5
MAX	32	4170	3850	5380	2670	1720	4850	203	1610	1800	184	44
MIN	11	18	105	60	67	184	135	63	30	48	28	17
CFSM	.03	1.88	1.26	.87	1.14	.79	1.97	.21	.55	.78	.12	.04
IN.	.04	2.10	1.46	1.00	1.19	.91	2.20	.24	.61	.89	.13	.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 1994, BY WATER YEAR (WY)

	MEAN	121	265	484	698	790	1015	874	467	382	271	113	100
MAX	1643	2023	2451	3305	2166	3008	2771	1429	1915	2049	606	1651	
(WY)	1927	1973	1991	1950	1975	1978	1957	1989	1947	1992	1958	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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1926 - 1994

ANNUAL TOTAL	244782	164968	
ANNUAL MEAN	671	452	463
HIGHEST ANNUAL MEAN			833
LOWEST ANNUAL MEAN			127
HIGHEST DAILY MEAN	5240	Mar 6	10000
LOWEST DAILY MEAN	11	Sep 20	4.5
ANNUAL SEVEN-DAY MINIMUM	11	Oct 6	5.9
INSTANTANEOUS PEAK FLOW			10100
INSTANTANEOUS PEAK STAGE			15.00
INSTANTANEOUS LOW FLOW			11
ANNUAL RUNOFF (CFSM)	1.18	.80	.82
ANNUAL RUNOFF (INCHES)	16.06	10.82	11.10
10 PERCENT EXCEEDS	2260	1490	1260
50 PERCENT EXCEEDS	240	113	126
90 PERCENT EXCEEDS	15	20	19

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

03219590 BOKES CREEK NEAR WARRENSBURG, OH

LOCATION.--Lat 40°19'20", long 83°10'30", Delaware County, Hydrologic Unit 05060001, on right bank at downstream side of bridge on State Highway 257, 3.4 mi downstream from Fulton Creek, 0.7 mi upstream from Moors Run, and 1.2 mi north of Warrensburg.

DRAINAGE AREA.--83.2 mi².

PERIOD OF RECORD.--May 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 870 ft above sea level from topographic map.

REMARKS.--Estimated daily discharges: Oct. 19, 20, 23 to Nov. 11, 17 to Dec. 8, 22 to Jan. 22, 24-29, 31 to Feb. 24, Apr. 12-21, Jun. 28-30, Jul. 8 to Aug. 17. Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.82	.88	18	10	21	34	25	13	3.0	17	1.6	1.0
2	.83	1.4	16	9.7	19	32	23	28	2.2	29	1.5	.78
3	.75	2.3	18	9.0	17	31	24	32	1.9	58	1.5	.69
4	.63	3.0	21	8.6	15	27	30	22	1.7	49	1.6	1.1
5	.52	3.3	25	8.1	15	25	32	18	1.5	53	1.8	1.3
6	.46	3.2	30	7.7	14	32	115	17	1.4	25	2.0	1.4
7	.44	2.7	36	7.3	13	43	461	17	1.2	14	1.6	1.3
8	.41	2.0	47	7.0	12	58	252	18	1.1	6.0	1.4	1.0
9	.40	1.4	62	6.8	12	59	123	23	1.1	32	1.4	.81
10	.39	1.1	64	6.6	12	47	279	34	.97	22	1.5	.66
11	.39	2.4	57	6.4	11	36	578	24	.91	14	1.3	.55
12	.37	5.3	47	6.2	11	36	260	19	.86	10	1.4	.46
13	.37	16	43	5.9	11	81	160	16	.88	7.6	1.7	.42
14	.36	90	35	5.7	10	320	100	15	1.0	6.0	2.3	.38
15	.36	312	32	5.6	10	253	74	15	1.0	4.7	2.9	.34
16	.36	55	29	5.4	10	138	56	12	.95	3.9	.62	.29
17	.69	33	26	5.3	10	76	43	11	.92	3.4	.44	.29
18	.86	25	25	5.2	10	56	36	10	.83	3.0	1.3	.30
19	.72	21	24	5.1	40	48	31	9.9	15	2.6	2.0	.26
20	.61	18	24	5.0	87	46	26	8.7	16	2.5	1.4	.22
21	1.5	15	28	5.0	190	42	23	8.4	6.2	2.9	2.6	.17
22	1.9	13	31	8.0	115	41	20	7.5	2.7	3.3	1.8	.12
23	1.5	12	31	16	250	45	18	6.9	1.9	3.1	1.6	.08
24	1.2	11	29	40	50	39	16	6.4	3.8	3.0	5.1	.03
25	.90	23	27	90	32	32	15	6.6	2.5	2.8	3.1	.01
26	.79	51	22	190	34	27	14	6.9	21	2.5	2.0	.00
27	.74	58	18	430	44	26	14	5.9	123	2.8	1.5	.00
28	.69	51	16	800	38	27	13	5.4	56	2.4	1.1	.00
29	.64	31	14	150	---	30	12	5.9	32	2.1	.99	.00
30	.66	24	12	47	---	29	12	5.4	23	1.9	.77	.00
31	.72	---	11	29	---	27	---	4.0	---	1.7	1.0	---
TOTAL	21.98	887.98	918	1941.6	1113	1843	2885	431.9	326.52	391.2	52.82	13.96
MEAN	.71	29.6	29.6	62.6	39.7	59.5	96.2	13.9	10.9	12.6	1.70	.47
MAX	1.9	312	64	800	250	320	578	34	123	58	5.1	1.4
MIN	.36	.88	11	5.0	10	25	12	4.0	.83	1.7	.44	.00
CFSM	.01	.36	.36	.75	.48	.71	1.16	.17	.13	.15	.02	.01
IN.	.01	.40	.41	.87	.50	.82	1.29	.19	.15	.17	.02	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1994, BY WATER YEAR (WY)

MEAN	17.6	63.8	103	64.7	113	94.6	102	75.9	47.4	101	3.92	9.12
MAX	129	195	469	166	226	270	173	263	139	448	16.9	98.5
(WY)	1987	1984	1991	1991	1990	1984	1989	1989	1983	1992	1992	1986
MIN	.000	.000	.26	2.25	7.87	20.4	34.0	9.90	.81	1.27	.002	.000
(WY)	1983	1992	1992	1992	1992	1983	1986	1988	1988	1991	1991	1982

SUMMARY STATISTICS FOR 1993 CALENDAR YEAR FOR 1994 WATER YEAR WATER YEARS 1982 - 1994

ANNUAL TOTAL	19519.66	10826.96	
ANNUAL MEAN	53.5	29.7	67.0
HIGHEST ANNUAL MEAN			96.5
LOWEST ANNUAL MEAN			28.7
HIGHEST DAILY MEAN	1700	800	2190
LOWEST DAILY MEAN	.26 Jul 2	.00 Jan 28	.00 Jul 2 1987
ANNUAL SEVEN-DAY MINIMUM	.30 Sep 19	.01 Sep 24	.00 Jul 30 1982
INSTANTANEOUS PEAK FLOW		1000	4420
INSTANTANEOUS PEAK STAGE		9.59 Jan 28	13.54 Jul 3 1987
INSTANTANEOUS LOW FLOW		.00 Sep 26	
ANNUAL RUNOFF (CFSM)	.64	.36	.80
ANNUAL RUNOFF (INCHES)	8.73	4.84	10.93
10 PERCENT EXCEEDS	120	56	141
50 PERCENT EXCEEDS	24	10	16
90 PERCENT EXCEEDS	.67	.64	.00

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

SCIOTO RIVER BASIN

03220000 MILL CREEK NEAR BELLEPOINT, OH

LOCATION.--Lat 40°14'54", long 83°10'26", Delaware County, Hydrologic Unit 05060001, on left bank at upstream side of county road bridge, 1.2 mi west of Bellepoint, 1.5 mi upstream from mouth, and 2.3 mi downstream from Blues Creek.

DRAINAGE AREA.--178 mi².

PERIOD OF RECORD.--October 1942 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 865.14 ft above sea level (levels by students of Ohio State University, City of Columbus bench mark). Prior to Jan. 1, 1948, nonrecording gage, at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 27 to Jan. 26, Feb. 1-20. Records good, except for periods of estimated record, which are fair. Water-quality data collected at this site 1965 to 1977. 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	10	136	26	150	75	69	59	16	34	8.3	51
2	8.4	12	114	25	84	67	60	89	17	37	6.9	22
3	7.0	14	202	24	60	61	67	59	15	107	6.7	14
4	7.5	13	1460	23	48	65	124	47	17	58	8.0	11
5	5.6	17	2800	23	42	77	111	42	16	40	11	9.5
6	4.5	15	1490	22	39	94	435	39	15	27	14	8.0
7	4.6	13	377	22	37	120	1290	42	14	21	10	6.3
8	6.0	11	219	21	35	177	451	61	16	20	8.0	5.5
9	6.0	9.5	146	21	33	146	221	58	15	180	7.9	6.2
10	8.7	9.6	114	21	33	108	1170	52	14	62	8.3	7.3
11	8.9	8.9	94	20	32	98	1270	41	13	26	7.8	8.5
12	10	9.8	74	20	32	116	1180	37	14	18	8.8	6.9
13	6.9	88	58	20	32	431	711	34	13	15	9.7	6.2
14	6.3	408	55	20	33	994	426	32	13	15	15	5.3
15	6.2	1370	52	20	42	587	231	30	13	14	21	5.5
16	6.1	946	49	20	58	302	155	29	13	13	14	6.0
17	8.6	936	45	21	80	157	115	26	16	11	9.4	6.4
18	30	2160	43	22	130	117	85	26	12	10	12	8.1
19	15	1110	47	24	230	112	70	24	15	9.0	11	10
20	13	288	51	27	420	101	58	23	20	9.5	9.2	7.2
21	26	157	62	33	697	95	50	23	16	11	27	5.5
22	27	103	65	42	391	110	45	22	13	19	23	5.1
23	19	77	60	54	626	100	41	21	12	13	16	5.6
24	19	62	53	80	910	85	37	20	36	11	15	6.2
25	18	53	47	160	315	72	36	21	38	12	12	6.4
26	12	45	41	400	126	60	36	28	48	10	9.2	7.4
27	10	1150	38	1310	95	95	35	34	567	12	8.3	7.0
28	9.0	1410	35	4120	92	113	34	22	250	10	8.9	5.8
29	7.3	374	32	2960	---	105	34	20	94	9.6	13	6.5
30	7.8	195	29	1060	---	92	36	18	51	10	17	6.1
31	8.2	---	27	285	---	80	---	17	---	9.8	33	---
TOTAL	341.7	11074.8	8115	10946	4902	5012	8683	1096	1422	853.9	389.4	272.5
MEAN	11.0	369	262	353	175	162	289	35.4	47.4	27.5	12.6	9.08
MAX	30	2160	2800	4120	910	994	1290	89	567	180	33	51
MIN	4.5	8.9	27	20	32	60	34	17	12	9.0	6.7	5.1
CFSM	.06	2.07	1.47	1.98	.98	.91	1.63	.20	.27	.15	.07	.05
IN.	.07	2.31	1.70	2.29	1.02	1.05	1.81	.23	.30	.18	.08	.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1994, BY WATER YEAR (WY)

	MEAN	26.8	102	175	252	290	339	288	161	131	80.2	35.9	25.0
MAX	449	553	1130	1227	768	963	874	558	684	769	332	303	
(WY)	1987	1973	1991	1950	1975	1978	1972	1990	1947	1992	1979	1979	
MIN	.90	1.99	2.17	3.82	8.09	36.1	29.6	10.5	5.19	1.33	1.75	1.00	
(WY)	1954	1964	1964	1977	1964	1983	1971	1955	1988	1944	1965	1944	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1944 - 1994

ANNUAL TOTAL	91399.3	53108.3		
ANNUAL MEAN	250	146		
HIGHEST ANNUAL MEAN			158	
LOWEST ANNUAL MEAN			257	1951
HIGHEST DAILY MEAN	5860	4120	12600	1959
LOWEST DAILY MEAN	4.3	4.5	.00	1944
ANNUAL SEVEN-DAY MINIMUM	5.6	5.9	.13	1944
INSTANTANEOUS PEAK FLOW		5130	20300	1959
INSTANTANEOUS PEAK STAGE		8.97	13.85	1959
INSTANTANEOUS LOW FLOW		4.5		
ANNUAL RUNOFF (CFSM)	1.41	.82	.89	
ANNUAL RUNOFF (INCHES)	19.10	11.10	12.06	
10 PERCENT EXCEEDS	690	307	350	
50 PERCENT EXCEEDS	54	28	27	
90 PERCENT EXCEEDS	8.5	7.8	3.8	

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

SCIOTO RIVER BASIN

85

03221000 SCIOTO RIVER BELOW O'SHAUGHNESSY DAM, NEAR DUBLIN, OH

LOCATION.--Lat 40°08'36", long 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.

DRAINAGE AREA.--980 mi².

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.--Estimated daily discharges: Dec. 27, 28, Jan. 24-26. Records good, except for periods of estimated record, which are fair. Flow regulated since 1924 by O'Shaughnessy Reservoir 0.8 mi upstream (see station 03220500). Water-quality data collected at this site 1965 to 1977. 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 ft³/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 1993 TO SEPTEMBER 1994 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	21	1370	490	6650	796	21	405	161	1580	219	106
2	28	21	950	490	6650	458	22	323	112	1130	323	104
3	28	22	982	490	6650	789	24	481	112	2260	274	103
4	28	22	3430	490	6640	955	48	206	114	2060	116	101
5	27	22	7930	490	6200	692	759	407	115	2170	94	101
6	26	22	6780	247	270	581	927	263	115	1290	89	67
7	26	23	5090	322	495	853	3480	260	106	500	89	40
8	26	52	4010	435	610	781	3000	260	46	456	89	39
9	27	82	2570	285	397	945	2490	264	121	1220	89	41
10	26	80	1540	428	338	787	4020	487	132	1120	89	43
11	26	59	1200	488	365	681	4970	360	113	1070	78	36
12	27	22	1010	364	252	679	5690	323	111	438	40	36
13	104	33	847	310	41	753	5940	278	87	572	37	34
14	127	401	836	652	415	1580	5860	194	70	326	42	34
15	62	4400	577	134	305	3220	4990	168	138	266	33	34
16	62	4770	810	109	508	2630	3440	232	141	156	30	35
17	67	4910	442	126	934	1780	1970	264	134	156	135	35
18	44	7650	131	589	1770	1180	1120	137	133	155	31	34
19	19	6870	547	1230	2800	1110	1030	235	131	154	35	33
20	14	5130	912	1220	3680	990	421	168	141	152	47	34
21	14	3820	778	1210	4310	1030	613	168	134	152	114	34
22	14	2140	529	974	3520	733	443	167	132	152	207	35
23	14	1030	806	29	3130	520	406	164	143	141	268	34
24	14	854	840	58	3560	594	399	148	198	47	200	34
25	14	739	407	220	2490	754	388	111	698	51	148	34
26	20	435	268	1700	1540	701	297	117	1530	45	104	34
27	55	2270	300	3620	995	704	323	173	2790	44	82	33
28	84	4740	350	12200	326	702	317	290	2090	184	79	33
29	83	3200	413	11700	---	695	323	104	1750	206	356	32
30	52	2250	488	8520	---	687	249	105	1470	150	98	31
31	22	---	490	6690	---	344	---	189	---	150	90	---
TOTAL	1208	56090	47633	56310	65841	29704	53980	7451	13268	18553	3725	1424
MEAN	39.0	1870	1537	1816	2351	958	1799	240	442	598	120	47.5
MAX	127	7650	7930	12200	6650	3220	5940	487	2790	2260	356	106
MIN	14	21	131	29	41	344	21	104	46	44	30	31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1994, BY WATER YEAR (WY)

MEAN	183	436	824	1270	1429	1797	1509	831	657	438	218	155
MAX	2626	3426	4794	6397	4072	5231	4706	2669	3407	3599	1362	2285
(WY)	1927	1973	1991	1937	1975	1963	1957	1933	1947	1992	1958	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 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1921 - 1994
ANNUAL TOTAL	475056	355187	
ANNUAL MEAN	1302	973	810
HIGHEST ANNUAL MEAN			1458
LOWEST ANNUAL MEAN			190
HIGHEST DAILY MEAN	14300	Jul 2	42900
LOWEST DAILY MEAN	14	Oct 20	1.40
ANNUAL SEVEN-DAY MINIMUM	15	Oct 19	1.1
INSTANTANEOUS PEAK FLOW			42900
INSTANTANEOUS PEAK STAGE		12.30	22.04
INSTANTANEOUS LOW FLOW		14	
10 PERCENT EXCEEDS	4200	3210	2210
50 PERCENT EXCEEDS	529	274	199
90 PERCENT EXCEEDS	28	32	41

SCIOTO RIVER BASIN

03223000 OLENTANGY RIVER AT CLARIDON, OH

LOCATION.--Lat 40°34'58", long 82°59'20", in NW 1/4 sec. 26, T.5 S., R.16 E., 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.

DRAINAGE AREA.--157 mi².

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

REVISED RECORDS.--WSP 1235: 1947, 1948(P). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 961.72 ft above sea level. (Levels by U.S. Army Corps of Engineers). Prior to Aug. 18, 1969 water-stage recorder at site 1,000 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Oct. 21 to Nov. 1, 10-13, Dec. 23 to Jan. 27, 30 to Feb. 20, 27 to Mar. 5, Jun. 28. Records fair, except for periods of estimated record, which are poor. Small diversion at gage for irrigation of golf course. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974. Water Year 1986 stream flow records published in 1987 Water Year data report. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	19	92	21	240	74	71	58	25	533	17	10
2	3.5	25	84	20	170	62	68	64	22	390	64	6.9
3	3.1	28	134	18	130	60	70	53	23	1770	37	5.4
4	2.6	23	359	17	105	58	94	45	20	1100	25	4.5
5	1.9	20	1290	16	84	57	106	42	18	302	22	3.6
6	1.8	19	995	16	72	76	267	40	16	156	23	3.0
7	2.0	18	348	15	62	100	833	39	15	169	21	3.0
8	1.9	16	178	15	56	139	597	49	14	1140	15	2.5
9	1.9	16	132	14	50	129	258	56	13	896	11	5.6
10	1.8	15	116	14	46	102	551	49	12	352	10	4.6
11	1.8	15	103	13	42	88	765	40	11	177	10	2.8
12	1.8	15	87	13	39	85	1220	38	11	128	11	1.3
13	1.7	15	74	13	37	154	1760	35	11	100	11	.96
14	3.0	184	67	13	35	482	1300	33	10	79	16	.65
15	3.4	704	63	12	44	550	429	33	13	65	18	.74
16	3.4	263	57	12	60	328	257	34	12	53	21	.63
17	3.4	349	51	12	83	173	186	37	9.8	44	15	1.7
18	6.5	1040	49	12	140	133	148	32	8.1	38	11	3.7
19	9.4	532	53	12	270	113	128	28	6.9	32	8.6	4.8
20	21	184	61	12	580	101	111	26	9.4	26	8.8	7.5
21	27	117	71	12	844	121	95	25	24	25	36	3.7
22	38	87	73	13	492	165	83	24	17	25	57	2.2
23	32	69	60	16	280	147	74	22	14	25	30	1.4
24	23	60	50	20	638	139	68	22	471	23	18	1.3
25	15	51	43	26	340	169	63	41	483	22	13	1.4
26	14	46	37	45	159	127	57	130	285	19	9.5	1.4
27	14	168	33	110	110	109	52	85	862	17	7.5	2.3
28	13	393	30	2310	92	111	50	49	730	20	7.1	3.7
29	13	186	27	3710	---	103	44	35	780	19	15	3.5
30	13	116	24	900	---	86	44	30	1150	23	15	1.7
31	15	---	22	450	---	76	---	26	---	22	15	---
TOTAL	296.7	4793	4863	7902	5300	4417	9849	1320	5096.2	7790	598.5	96.48
MEAN	9.57	160	157	255	189	142	328	42.6	170	251	19.3	3.22
MAX	38	1040	1290	3710	844	550	1760	130	1150	1770	64	10
MIN	1.7	15	22	12	35	57	44	22	6.9	17	7.1	.63
CFSM	.06	1.02	1.00	1.62	1.21	.91	2.09	.27	1.08	1.60	.12	.02
IN.	.07	1.14	1.15	1.87	1.26	1.05	2.33	.31	1.21	1.85	.14	.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1994, BY WATER YEAR (WY)

	MEAN	30.6	108	176	249	285	317	262	157	130	94.6	35.6	30.0
MAX	295	526	741	1145	625	964	745	455	854	1011	271	241	
(WY)	1991	1973	1991	1950	1982	1963	1957	1947	1947	1987	1958	1981	
MIN	.019	2.44	2.29	9.01	8.02	55.7	43.3	17.8	5.80	5.27	1.35	.70	
(WY)	1954	1964	1964	1977	1964	1983	1971	1955	1962	1962	1952	1953	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1947 - 1994
ANNUAL TOTAL	53851.31	52321.88	
ANNUAL MEAN	148	143	156
HIGHEST ANNUAL MEAN			237
LOWEST ANNUAL MEAN			72.7
HIGHEST DAILY MEAN	2130	3710	11900
LOWEST DAILY MEAN	.08	.63	.00
ANNUAL SEVEN-DAY MINIMUM	.15	1.3	.00
INSTANTANEOUS PEAK FLOW		4060	14900
INSTANTANEOUS PEAK STAGE		12.08	16.77
INSTANTANEOUS LOW FLOW		.63	
ANNUAL RUNOFF (CFSM)	.94	.91	.99
ANNUAL RUNOFF (INCHES)	12.76	12.40	13.46
10 PERCENT EXCEEDS	350	371	388
50 PERCENT EXCEEDS	55	37	42
90 PERCENT EXCEEDS	2.0	3.7	4.4

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

SCIOTO RIVER BASIN

87

03225500 OLENTANGY RIVER NEAR DELAWARE, OH

LOCATION.--Lat 40°21'18", long 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, 1.3 ft upstream from Norfolk and Western Railway bridge, and 4.0 mi north of Delaware.

DRAINAGE AREA.--393 mi².

PERIOD OF RECORD.--October 1923 to September 1934, April 1938 to current year. Monthly discharge only for some periods, published in WSP 1305.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 878.00 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Oct. 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.--No estimated daily discharges. Records good, except for periods of estimated record, which are fair. Flow completely regulated by Delaware Lake since 1951. Water-quality data collected at this site 1965 to 1977. Water-temperature data collected 1946 to 1961. U.S. Army Corps of Engineers Satellite Telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,100 ft³/s Mar. 21, 1927, gage-height, 16.9 ft, site and datum then in use; minimum daily, 0.1 ft³/s Sept. 14-29, 1934.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	25	1410	111	2400	274	65	77	47	1760	53	32
2	18	24	535	111	4630	266	23	192	42	802	53	22
3	18	24	454	71	4630	155	25	356	33	2470	53	20
4	19	24	500	39	4630	210	27	195	27	3620	53	20
5	19	24	496	39	4630	154	26	60	26	3290	54	19
6	20	25	2400	39	4620	155	56	60	24	1300	53	19
7	20	25	4430	39	1830	218	777	61	24	361	53	19
8	20	25	2600	39	272	336	1660	61	24	1450	50	19
9	20	41	1040	39	188	374	1730	84	21	2560	43	19
10	20	283	536	176	169	370	1760	112	13	2730	36	19
11	20	138	116	200	101	194	617	120	8.7	1610	37	19
12	20	136	116	74	98	113	452	166	8.8	435	37	19
13	20	143	259	80	96	131	1350	102	8.7	330	37	19
14	20	155	391	88	96	1030	2020	94	9.1	271	41	19
15	20	822	305	86	121	1680	2250	93	93	132	233	19
16	20	2670	180	86	155	1740	2220	58	83	98	131	19
17	21	2010	125	86	273	712	2160	20	54	100	42	19
18	20	42	128	71	569	275	1530	10	34	97	42	19
19	20	644	128	25	653	367	827	10	20	65	38	19
20	29	1050	208	63	680	220	388	12	13	42	35	19
21	41	2090	235	57	705	230	353	9.0	222	42	39	19
22	40	2860	189	40	1760	426	273	301	65	42	43	19
23	40	2780	162	41	2570	578	563	15	29	42	94	17
24	40	1280	162	42	2510	372	521	14	231	42	93	20
25	40	305	162	87	1870	162	56	14	822	42	50	20
26	30	155	162	141	815	427	58	14	1070	41	46	19
27	24	156	82	533	374	295	58	19	1540	41	36	20
28	25	134	53	214	167	116	58	75	2000	33	32	20
29	24	695	109	55	---	116	67	178	1810	27	32	20
30	24	1660	123	29	---	116	76	151	1580	236	32	20
31	24	---	114	17	---	116	---	72	---	236	32	---
TOTAL	754	20445	17910	2818	41612	11928	22046	2805.0	9982.3	24347	1703	592
MEAN	24.3	681	578	90.9	1486	385	735	90.5	333	785	54.9	19.7
MAX	41	2860	4430	533	4630	1740	2250	356	2000	3620	233	32
MIN	18	24	53	17	96	113	23	9.0	8.7	27	32	17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1994, BY WATER YEAR (WY)

	MEAN	79.0	288	449	464	662	771	548	370	283	251	98.2	70.9
MAX	560	1442	1683	1790	2073	2087	1537	1025	1247	1723	570	538	
(WY)	1987	1973	1991	1952	1959	1963	1964	1969	1981	1987	1980	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 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1951 - 1994	
ANNUAL TOTAL	174114		156942.3		360	
ANNUAL MEAN	477		430		609	
HIGHEST ANNUAL MEAN					137	
LOWEST ANNUAL MEAN					1973	
HIGHEST DAILY MEAN	4430		4630		5940	
LOWEST DAILY MEAN	16		8.7		1.0	
ANNUAL SEVEN-DAY MINIMUM	19		13		3.4	
INSTANTANEOUS PEAK FLOW			4700		6000	
INSTANTANEOUS PEAK STAGE			8.72		88.13	
INSTANTANEOUS LOW FLOW			8.7		1000	
10 PERCENT EXCEEDS	1510		1660		90	
50 PERCENT EXCEEDS	118		86		19	
90 PERCENT EXCEEDS	20		19			

SCIOTO RIVER BASIN

03227500 SCIOTO RIVER AT COLUMBUS, OH

LOCATION.--Lat 39°54'34", long 83°00'33", Franklin County, Hydrologic Unit 05060001, on right bank at sewage-treatment plant of city of Columbus, 0.4 mi downstream from bridge on Frank Road, 2.8 mi upstream from Scioto Big Run, and 5 mi downstream from Olentangy River.

DRAINAGE AREA.--1,629 mi².

PERIOD OF RECORD.--October 1920 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 743: 1927(M). WSP 803: 1922-24, 1926-30, 1932-33. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 680.00 ft above sea level. Prior to Oct. 1, 1924, nonrecording gage at site 200 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Dec. 27, 28, Jan. 3-9, Sep. 11-13, 16-19. Records fair. 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 Frank Road 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 collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 25, 1913 reached a stage of 25.9 ft, discharge, 138,000 ft³/s, estimated by Franklin County Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	191	3730	516	5640	1020	484	1040	362	3450	514	554
2	121	165	2270	539	8110	1250	308	559	229	3610	380	359
3	120	158	1930	520	8090	1010	374	746	176	3380	436	325
4	116	157	4140	490	7120	1400	407	1090	166	5210	428	308
5	112	164	10200	420	4770	1400	480	570	155	5870	505	293
6	115	150	8090	370	4640	869	1680	565	159	4030	318	268
7	113	141	8750	340	3800	1040	3720	691	161	1910	285	190
8	110	142	8160	310	1360	1340	4910	671	140	886	275	170
9	118	142	4370	290	1010	1680	4510	503	147	4020	267	189
10	112	141	2870	278	655	1800	7330	583	146	4150	263	335
11	111	351	1840	450	683	1440	7430	766	153	3780	252	290
12	114	239	1230	628	666	1190	6510	531	141	1980	270	250
13	116	1070	1130	443	428	1400	7860	612	155	1160	248	220
14	118	941	1010	412	408	2360	7900	484	144	1390	870	217
15	124	3520	1180	631	1020	5030	7760	509	276	814	558	226
16	310	6220	844	251	814	4660	6340	543	441	520	437	230
17	270	8200	1070	265	1260	3880	4740	451	618	390	375	220
18	242	8430	459	263	2300	2070	3690	414	252	391	321	210
19	188	7160	470	777	3640	1830	2560	258	203	378	249	200
20	247	6320	703	311	4440	1800	1900	300	195	370	254	210
21	686	5320	1380	235	5210	1540	878	259	401	325	604	224
22	218	5280	770	249	4880	1490	1180	253	652	364	366	207
23	186	4270	817	242	6560	1470	926	495	377	316	390	175
24	183	3490	897	354	6770	1400	1140	274	680	278	426	182
25	178	1480	964	1010	5480	1140	1190	243	918	246	422	236
26	163	1120	438	3500	3470	1100	490	387	3020	271	337	234
27	162	2350	400	4910	2090	1600	622	271	4810	227	299	216
28	153	5380	360	15900	1350	1440	479	299	4410	218	319	220
29	141	4040	324	14100	---	1170	551	299	4410	409	802	228
30	142	3940	452	10000	---	1020	569	323	3170	554	559	226
31	201	---	512	6930	---	954	---	315	---	479	599	---
TOTAL	5408	80672	71760	65934	96664	52793	88918	15304	27267	51376	12628	7412
MEAN	174	2689	2315	2127	3452	1703	2964	494	909	1657	407	247
MAX	686	8430	10200	15900	8110	5030	7900	1090	4810	5870	870	554
MIN	110	141	324	235	408	869	308	243	140	218	248	170

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1994, 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
MEAN	366	826	1474	2137	2410	3046	2473	1489	1202	820	445	344												
MAX	4633	5490	6978	10510	5993	8373	6865	4608	5866	5804	2191	3883												
(WY)	1927	1973	1991	1937	1975	1963	1964	1933	1947	1992	1980	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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1921 - 1994

ANNUAL TOTAL	765700	576136	
ANNUAL MEAN	2098	1578	1413
HIGHEST ANNUAL MEAN			2514
LOWEST ANNUAL MEAN			305
HIGHEST DAILY MEAN	17800	15900	48200
LOWEST DAILY MEAN	110	110	47
ANNUAL SEVEN-DAY MINIMUM	113	113	53
INSTANTANEOUS PEAK FLOW		19700	68200
INSTANTANEOUS PEAK STAGE		19.86	27.22
INSTANTANEOUS LOW FLOW		110	
10 PERCENT EXCEEDS	5790	4890	3870
50 PERCENT EXCEEDS	897	512	457
90 PERCENT EXCEEDS	142	163	116

03228300 BIG WALNUT CREEK AT SUNBURY, OH

LOCATION.--Lat 40°14'10", long 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, and 0.9 mi upstream from Prairie Run.

DRAINAGE AREA.--101 mi².

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.--Estimated daily discharges: Dec. 26 to Jan. 25, Feb. 1-11, 16-18. Records good, except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.26	4.6	69	24	140	59	65	91	5.9	45	3.2	27
2	.25	9.2	65	22	90	53	55	65	4.7	25	4.3	8.5
3	.26	7.1	231	21	70	53	73	43	4.0	160	11	5.4
4	.18	7.7	1330	20	60	55	155	37	3.5	90	8.4	3.8
5	.12	7.8	1720	19	50	56	98	36	3.2	39	26	2.8
6	.09	8.5	394	18	44	58	234	33	16	21	9.8	2.0
7	.08	7.3	200	17	38	72	739	37	56	141	5.3	1.0
8	.05	6.7	130	16	34	100	232	72	13	70	3.5	.91
9	.05	7.6	97	15	30	80	132	58	7.3	260	2.4	1.3
10	.07	6.4	84	15	28	67	1040	43	5.0	135	1.0	1.2
11	.07	5.7	76	14	26	63	569	34	3.8	49	.67	.92
12	.05	5.3	57	14	25	94	649	32	3.0	28	1.2	.55
13	.05	79	48	13	25	409	998	30	2.6	19	4.7	.32
14	.05	289	42	13	26	674	428	26	2.2	13	5.9	.12
15	.04	414	42	13	36	408	294	24	1.8	11	24	.04
16	.04	144	39	12	100	204	355	42	1.5	8.7	13	.01
17	.36	640	36	12	150	110	162	30	28	6.4	5.7	.01
18	.47	946	35	12	240	108	109	23	22	4.7	3.4	.03
19	.30	243	71	11	314	151	87	19	12	3.4	2.1	.01
20	1.7	125	81	11	552	105	68	16	7.7	2.6	.87	.00
21	19	79	81	11	576	109	56	14	7.8	2.3	2.2	.00
22	18	56	78	11	286	167	48	12	6.1	4.5	8.0	.00
23	5.7	44	66	10	616	106	42	8.5	6.8	5.8	5.7	.00
24	2.6	38	57	10	604	81	38	7.1	57	3.4	2.6	.00
25	1.7	34	49	100	195	63	36	6.2	168	57	1.1	.23
26	1.3	31	40	601	110	51	33	9.0	79	55	1.4	.23
27	1.1	246	35	551	102	106	31	28	206	15	1.4	.50
28	1.1	290	32	3280	83	197	27	16	96	7.8	1.6	.77
29	1.3	125	30	1340	---	159	26	11	153	5.3	2.5	.49
30	2.7	83	27	425	---	111	28	8.5	124	4.8	2.0	.26
31	4.4	---	25	221	---	80	---	7.2	---	4.4	13	---
TOTAL	63.44	3989.9	5367	6872	4650	4209	6907	918.5	1106.9	1297.1	177.94	58.40
MEAN	2.05	133	173	222	166	136	230	29.6	36.9	41.8	5.74	1.95
MAX	19	946	1720	3280	616	674	1040	91	206	260	26	27
MIN	.04	4.6	25	10	25	51	26	6.2	1.5	2.3	.67	.00
CFSM	.02	1.32	1.71	2.19	1.64	1.34	2.28	.29	.37	.41	.06	.02
IN.	.02	1.47	1.98	2.53	1.71	1.55	2.54	.34	.41	.48	.07	.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1994, BY WATER YEAR (WY)

	1989	1990	1991	1992	1993	1994
MEAN	17.1	103	159	178	180	185
MAX	81.2	256	585	337	424	354
(WY)	1991	1993	1991	1993	1990	1993
MIN	.002	.051	.72	16.4	46.0	46.0
(WY)	1992	1992	1992	1992	1992	1991

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1989 - 1994
ANNUAL TOTAL	50156.22	35617.18	119
ANNUAL MEAN	137	97.6	147
HIGHEST ANNUAL MEAN			67.4
LOWEST ANNUAL MEAN			1989
HIGHEST DAILY MEAN	2160	3280	3340
LOWEST DAILY MEAN	.04	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.05	.01	.00
INSTANTANEOUS PEAK FLOW		4160	5690
INSTANTANEOUS PEAK STAGE		10.75	11.86
INSTANTANEOUS LOW FLOW		.00	.00
ANNUAL RUNOFF (CFSM)	1.36	.97	1.18
ANNUAL RUNOFF (INCHES)	18.47	13.12	16.01
10 PERCENT EXCEEDS	343	231	289
50 PERCENT EXCEEDS	44	25	31
90 PERCENT EXCEEDS	.28	.53	.34

LOCATION.--Lat 40°06'13", long 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.

REMARKS.--Estimated daily discharges: Jan. 14-27. Records good, except for periods of estimated record, which are fair. Flow completely regulated by Hoover Reservoir since September 1954. (See station 03228400). Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	117	136	113	118	254	127	136	99	155	147	134	128
2	117	132	98	112	159	120	131	122	145	124	143	126
3	118	130	107	135	126	113	126	118	166	115	147	116
4	135	127	106	114	132	125	345	99	177	130	136	108
5	122	129	101	117	127	126	184	118	164	144	128	116
6	130	121	99	110	129	125	448	106	172	142	122	124
7	131	129	114	114	129	130	1450	119	160	144	137	132
8	126	132	101	109	123	115	496	101	150	127	142	134
9	120	132	107	123	129	123	279	130	158	137	148	145
10	120	124	112	126	125	118	1710	122	185	123	142	127
11	131	101	107	114	127	128	1490	116	174	133	133	141
12	128	149	114	113	117	217	1230	104	178	142	138	129
13	120	144	98	103	124	778	1950	135	179	128	143	128
14	136	118	125	100	123	1280	666	113	186	129	177	148
15	124	119	108	100	132	765	516	130	149	131	159	140
16	119	119	119	100	124	410	697	134	156	132	138	140
17	122	138	116	100	114	127	317	139	153	142	153	133
18	190	125	108	100	129	277	155	130	162	139	135	131
19	185	127	108	100	179	259	105	127	171	150	148	142
20	138	110	113	100	806	187	104	149	162	161	149	134
21	135	118	108	100	993	201	121	144	149	150	132	141
22	146	115	116	100	529	263	98	150	140	137	140	134
23	130	117	96	100	1160	181	104	183	147	134	139	147
24	128	116	104	100	1370	127	120	162	131	155	141	115
25	135	104	99	100	264	207	116	145	129	140	139	125
26	137	99	104	100	235	113	105	143	119	152	151	129
27	136	95	111	120	138	128	118	147	126	142	149	132
28	125	107	121	1510	129	420	100	150	138	127	152	112
29	126	121	109	3130	---	370	126	154	143	144	139	126
30	136	112	115	1570	---	235	103	150	124	131	137	112
31	124	---	106	415	---	144	---	166	---	124	136	---
TOTAL	4087	3646	3363	9553	8226	8039	13646	4105	4648	4256	4407	3895
MEAN	132	122	108	308	294	259	455	132	155	137	142	130
MAX	190	149	125	3130	1370	1280	1950	183	186	161	177	148
MIN	117	95	96	100	114	113	98	99	119	115	122	108

MEAN	105	122	162	198	248	346	322	247	196	162	136	116
MAX	289	650	926	871	781	957	783	722	704	503	655	626
(WY)	1980	1973	1991	1959	1975	1963	1961	1968	1973	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

WATER YEARS 1955 - 1994

ANNUAL TOTAL	97187		71871				
ANNUAL MEAN	266		197			196	
HIGHEST ANNUAL MEAN						337	1973
LOWEST ANNUAL MEAN						111	1966
HIGHEST DAILY MEAN	3230	Jan 5	3130	Jan 29		10600	Jan 22 1959
LOWEST DAILY MEAN	56	Feb 17	95	Nov 27		.00	May 20 1955
ANNUAL SEVEN-DAY MINIMUM	64	Feb 11	100	Jan 14		.00	May 31 1955
INSTANTANEOUS PEAK FLOW			4340	Jan 28		23800	Jan 21 1959
INSTANTANEOUS PEAK STAGE			10.81	Jan 28		19.75	Jan 21 1959
INSTANTANEOUS LOW FLOW			95	Nov 27			
10 PERCENT EXCEEDS	465		211			306	
50 PERCENT EXCEEDS	132		130			117	
90 PERCENT EXCEEDS	101		105			62	

SCIOTO RIVER BASIN

91

03228805 ALUM CREEK AT AFRICA, OH

LOCATION.--Lat 40°10'56", long 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, 2.8 mi upstream from Westerville Reservoir outlet, and 4.2 mi northwest of Westerville.

DRAINAGE AREA.--122 mi².

PERIOD OF RECORD.--Water year 1962 (occasional low-flow measurements) June 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 822.00 ft above sea level. (Levels by U.S. Army Corps of Engineers). July 9, 1974 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.--No estimated daily discharges. Records good. Flow regulated by Alum Creek Lake since August 1973. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREME FOR PERIOD OF RECORD.--Maximum discharge, 6,160 ft³/s Mar. 10, 1964, gage height 13.95 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 5, 1963 reached a stage of 14.2 ft, from floodmarks, discharge, 6,460 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	139	425	19	828	87	15	20	13	145	16	22
2	13	167	227	19	1560	71	9.1	19	13	145	16	22
3	14	166	228	19	1560	49	9.0	19	13	195	16	21
4	14	164	237	19	1300	49	11	19	13	348	15	21
5	14	164	236	19	1070	49	12	19	13	374	15	20
6	14	164	1000	19	1050	49	14	19	13	376	15	20
7	15	481	1540	19	403	49	13	20	13	303	15	20
8	15	36	972	19	18	50	11	20	14	113	14	19
9	16	11	509	19	18	51	10	21	15	25	14	19
10	16	9.4	237	19	18	91	16	23	15	179	14	19
11	15	8.9	98	24	17	114	16	34	15	336	14	19
12	14	8.3	97	31	17	115	17	75	15	211	14	19
13	14	10	78	31	17	118	210	87	14	30	14	19
14	14	8.9	39	32	16	217	310	87	14	24	14	18
15	14	322	19	34	18	470	310	73	14	25	14	19
16	16	570	19	34	17	576	310	57	13	26	14	19
17	16	571	19	34	16	466	310	57	14	27	14	19
18	15	566	16	34	16	222	261	36	13	26	14	19
19	16	563	14	34	23	165	123	20	13	26	14	19
20	16	561	18	34	40	165	59	15	13	20	14	19
21	15	559	19	34	39	75	15	15	12	15	15	19
22	16	398	19	34	255	26	15	15	12	15	14	19
23	16	149	19	34	383	24	16	13	13	15	14	19
24	13	74	19	34	586	23	17	12	14	14	15	18
25	23	42	19	37	621	24	17	12	13	15	15	18
26	38	41	19	55	539	23	17	12	14	15	15	19
27	104	44	19	138	537	22	17	11	13	15	15	19
28	100	43	19	85	357	22	17	11	100	15	15	19
29	84	211	19	17	---	22	17	11	145	16	19	19
30	86	470	19	14	---	23	18	13	145	16	21	19
31	85	---	19	13	---	23	---	13	---	16	21	---
TOTAL	874	6721.5	6237	1007	11339	3530	2212.1	878	754	3121	469	580
MEAN	28.2	224	201	32.5	405	114	73.7	28.3	25.1	101	15.1	19.3
MAX	104	571	1540	138	1560	576	310	87	145	376	21	22
MIN	13	8.3	14	13	16	22	9.0	11	12	14	14	18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1994, BY WATER YEAR (WY)

MEAN	55.7	126	160	127	188	169	113	91.9	78.8	69.4	39.4	65.0
MAX	309	375	460	437	464	514	358	361	293	364	570	618
(WY)	1987	1980	1991	1993	1990	1979	1979	1983	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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1974 - 1994

ANNUAL TOTAL	59558.1	37722.6	
ANNUAL MEAN	163	103	106
HIGHEST ANNUAL MEAN			243
LOWEST ANNUAL MEAN			8.54
HIGHEST DAILY MEAN	1540	Dec 7	1980
LOWEST DAILY MEAN	4.7	Jul 4	1992
ANNUAL SEVEN-DAY MINIMUM	10	Aug 7	1980
INSTANTANEOUS PEAK FLOW			1980
INSTANTANEOUS PEAK STAGE			1980
INSTANTANEOUS LOW FLOW			1980
10 PERCENT EXCEEDS	516	310	300
50 PERCENT EXCEEDS	32	19	15
90 PERCENT EXCEEDS	12	13	5.3

SCIOTO RIVER BASIN

03229000 ALUM CREEK AT COLUMBUS, OH

LOCATION.--Lat 39°56'42", long 82°56'28", in NW 1/4 sec. 24, T.5 N., R.22 W., Franklin County, Hydrologic Unit 05060001, on left bank 0.2 mi downstream from Livingston Avenue bridge in Columbus, and 6 mi upstream from mouth.
 DRAINAGE AREA.--189 mi².
 PERIOD OF RECORD.--July 1923 to December 1935, January 1938 to current year.
 REVISED RECORDS.--WSP 758: 1933. WSP 1305: 1928(M). WSP 1908: Drainage area.
 GAGE.--Water-stage recorder. Datum of gage is 733.69 ft above sea level.
 REMARKS.--Estimated daily discharges: Jan. 1-12, 18-25. Records fair. Flow regulated by Alum Creek Lake 19 mi upstream, since Aug. 1973. Water-quality data collected at this site 1960 to 1977. Sediment data collected 1960 to 1965. U.S. Army Corps of Engineers satellite telemeter at station.
 EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,400 ft³/s Jan. 22, 1959, gage height, 19.59 ft (from high-water mark in well), from rating curve extended above 17,000 ft³/s on basis of contracted-opening measurement of peak flow; no flow Sept. 21-29, 1959.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	107	614	22	280	148	71	132	34	209	36	65
2	18	172	277	21	1520	128	66	58	38	546	30	43
3	18	186	298	21	1550	82	142	51	34	319	26	38
4	17	170	929	20	1470	79	109	45	30	438	50	33
5	15	184	847	20	1150	74	74	43	28	521	91	29
6	14	163	568	20	1120	74	237	40	27	521	46	26
7	14	472	1590	20	828	76	393	132	26	530	41	24
8	14	169	1370	50	71	84	118	83	24	463	35	21
9	14	37	662	43	62	106	81	58	23	376	28	20
10	15	24	438	35	52	179	764	53	22	61	25	37
11	15	18	126	27	49	221	312	48	21	480	22	40
12	15	15	111	30	42	234	356	61	20	482	21	35
13	15	443	107	47	40	362	552	94	19	161	20	30
14	15	185	66	44	99	431	514	102	18	181	602	25
15	15	269	51	59	123	524	550	179	196	54	83	22
16	95	668	38	67	99	690	520	199	65	47	49	20
17	95	1310	34	53	69	642	420	79	55	40	41	19
18	41	898	42	50	65	410	378	68	44	37	35	27
19	33	686	61	48	67	243	215	62	39	35	31	26
20	79	659	47	47	101	229	115	48	34	33	31	24
21	247	645	63	46	172	231	59	42	78	31	205	21
22	39	580	56	45	209	91	47	38	63	30	49	20
23	31	255	50	46	816	71	43	37	43	29	43	19
24	25	104	45	52	715	70	40	34	166	27	35	21
25	21	65	41	200	782	67	38	31	129	44	30	63
26	20	49	36	465	637	63	37	122	231	49	26	45
27	30	459	33	668	625	158	37	62	149	40	24	38
28	118	173	30	2040	588	171	37	45	68	44	40	34
29	62	148	27	373	---	150	38	37	381	73	233	30
30	73	451	25	143	---	92	76	33	237	77	47	27
31	114	---	23	84	---	75	---	30	---	45	210	---
TOTAL	1356	9764	8705	4906	13401	6255	6439	2146	2342	6023	2285	922
MEAN	43.7	325	281	158	479	202	215	69.2	78.1	194	73.7	30.7
MAX	247	1310	1590	2040	1550	690	764	199	381	546	602	65
MIN	14	15	23	20	40	63	37	30	18	27	20	19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1994, BY WATER YEAR (WY)

MEAN	104	202	254	213	307	293	230	180	167	149	97.6	117
MAX	536	637	780	556	784	662	550	607	602	532	808	738
(WY)	1987	1986	1991	1993	1990	1984	1979	1983	1990	1990	1980	1980
MIN	15.7	25.8	32.8	27.2	24.9	38.5	29.9	28.7	18.8	11.4	11.2	14.8
(WY)	1988	1976	1988	1981	1992	1983	1976	1976	1988	1982	1982	1985

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1974 - 1994

ANNUAL TOTAL	86697.8	64544	192	1980
ANNUAL MEAN	238	177	359	1992
HIGHEST ANNUAL MEAN			66.3	1979
LOWEST ANNUAL MEAN			6840	Sep 14 1979
HIGHEST DAILY MEAN	1710	Jul 2	1.5	Aug 30 1982
LOWEST DAILY MEAN	7.1	Sep 1	2.4	Jul 16 1991
ANNUAL SEVEN-DAY MINIMUM	7.9	Aug 26	8600	Sep 14 1979
INSTANTANEOUS PEAK FLOW			12.50	Sep 14 1979
INSTANTANEOUS PEAK STAGE				
INSTANTANEOUS LOW FLOW				
10 PERCENT EXCEEDS	705	526	530	
50 PERCENT EXCEEDS	75	59	62	
90 PERCENT EXCEEDS	15	21	15	

03229500 BIG WALNUT CREEK AT REES, OH

LOCATION.--Lat 39°51'24", long 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 Rees, 4.2 mi downstream from Alum Creek, and 10.5 mi upstream from mouth.

DRAINAGE AREA.--544 mi².

PERIOD OF RECORD.--August 1921 to December 1935, October 1938 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1053: 1929, 1933(M), 1945. WSP 1305: 1923(M), 1925-26(M).

GAGE.--Water-stage recorder. Datum of gage is 698.20 ft above sea level. Aug. 18, 1921, 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.--Estimated daily discharges: Dec. 27 to Jan. 25, Feb. 9-11. Record fair. 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 collected at this site 1964 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 59,800 ft³/s Jan. 22, 1959, gage height, 22.03 ft (from highwater mark in well), from rating curve extended above 13,000 ft³/s on basis of contracted-opening measurement of peak flow; minimum, 5 ft³/s Sept. 4, 5, 10-12, 1925; minimum daily since 1956, 9.4 ft³/s Sept. 13, 1964.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	234	711	76	553	370	242	463	71	272	104	313
2	40	219	402	72	1620	287	204	204	88	716	87	108
3	45	238	390	70	1640	240	334	148	70	773	111	66
4	37	259	922	68	1630	215	619	140	63	465	98	54
5	31	239	2560	68	1210	230	374	134	59	555	326	47
6	30	222	856	68	1120	206	497	132	57	533	121	44
7	29	324	1700	100	960	205	2180	293	63	558	82	42
8	30	433	1630	180	176	206	1100	382	62	558	71	40
9	30	86	853	130	100	237	546	194	57	724	62	39
10	43	56	635	100	92	555	2870	148	63	264	58	54
11	37	51	292	90	86	576	3320	137	57	420	55	55
12	34	47	223	84	93	585	1810	158	57	497	69	43
13	33	855	205	150	134	1000	2580	173	57	279	79	39
14	33	641	172	110	181	1900	2210	174	52	461	605	36
15	32	656	134	84	350	1430	1250	285	180	144	679	33
16	240	758	109	76	374	1300	1540	371	97	107	192	32
17	334	2080	101	70	244	965	1000	194	91	92	100	43
18	141	2040	119	66	215	658	757	164	66	84	83	69
19	90	987	216	64	246	634	512	129	57	79	77	45
20	270	834	159	60	667	508	322	97	59	77	72	40
21	598	760	234	56	1500	513	241	95	201	80	758	39
22	154	708	213	54	1060	557	187	87	307	161	222	37
23	82	398	168	52	1960	383	162	87	183	92	110	32
24	67	202	157	50	2350	278	152	86	430	72	86	34
25	54	155	137	200	1720	251	144	94	279	94	72	298
26	47	117	113	1590	1070	223	144	273	304	268	65	144
27	64	618	100	1600	818	350	140	155	470	96	61	62
28	135	494	90	6860	781	661	142	91	168	75	62	49
29	129	266	86	4870	---	791	151	73	412	406	792	45
30	118	455	84	2730	---	566	199	70	350	784	145	40
31	211	---	80	722	---	314	---	71	---	183	316	---
TOTAL	3256	15432	13851	20570	22950	17194	25929	5302	4530	9969	5820	2022
MEAN	105	514	447	664	820	555	864	171	151	322	188	67.4
MAX	598	2080	2560	6860	2350	1900	3320	463	470	784	792	313
MIN	29	47	80	50	86	205	140	70	52	72	55	32
(+)	120	110	107	119	115	112	115	127	149	132	134	127

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1994, BY WATER YEAR (WY)

	MEAN	222	432	565	538	747	788	671	471	431	381	255	248
MAX	951	1398	2110	1458	1747	1688	1467	1489	1501	1313	1566	1814	
(WY)	1987	1986	1991	1993	1990	1984	1979	1983	1989	1990	1980	1979	
MIN	58.7	47.8	111	115	110	121	130	63.3	64.0	84.7	52.8	57.3	
(WY)	1989	1992	1988	1977	1992	1983	1976	1976	1988	1991	1993	1985	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1974 - 1994

ANNUAL TOTAL	208513	146825		
ANNUAL MEAN	571	402		531 *
HIGHEST ANNUAL MEAN				740
LOWEST ANNUAL MEAN				221
HIGHEST DAILY MEAN	6890	Apr 26	6860	Jan 28
LOWEST DAILY MEAN	28	Sep 12	29	Oct 7
ANNUAL SEVEN-DAY MINIMUM	31	Sep 8	33	Oct 4
INSTANTANEOUS PEAK FLOW			8310	Jan 28
INSTANTANEOUS PEAK STAGE			12.43	Jan 28
INSTANTANEOUS LOW FLOW			29	Oct 7
10 PERCENT EXCEEDS	1530		974	
50 PERCENT EXCEEDS	222		164	
90 PERCENT EXCEEDS	38		48	

(+) Average diversion by City of Columbus Municipal Water Supply

* Adjusted for Diversion

SCIOTO RIVER BASIN

03230310 LITTLE DARBY CREEK AT WEST JEFFERSON, OH

LOCATION.--Lat 39°57'04", long 83°16'10", Madison County, Hydrologic Unit 05060001, at bridge on Middle Pike, 0.4 mi north of West Jefferson, and 7.2 mi upstream from Big Darby Creek.
DRAINAGE AREA.--162 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 785 ft above sea level. Prior to 1992, low flow partial record site.

REMARKS.--Estimated daily discharges: Oct. 10 to Nov. 13, Dec. 22 to Jan. 27, 30 to Feb. 15, May 27, 28, Aug. 28-30.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	29	300	34	437	152	129	385	39	199	14	11
2	9.2	25	248	33	400	141	117	289	37	148	14	13
3	9.0	23	242	32	300	133	121	195	33	362	13	12
4	9.0	22	533	30	230	134	157	158	32	290	13	10
5	9.4	22	1570	29	200	153	177	137	32	182	16	9.8
6	8.8	24	1390	28	160	162	179	122	31	124	13	9.7
7	8.8	23	727	28	130	174	411	136	31	93	13	8.6
8	11	22	484	27	120	184	352	192	32	74	11	7.4
9	13	22	351	26	100	180	262	170	29	71	11	7.1
10	11	23	284	26	96	172	580	137	28	67	10	8.0
11	10	26	229	25	90	141	1010	113	26	54	10	7.7
12	10	40	177	24	86	137	982	109	24	45	10	7.2
13	10	56	152	23	82	294	981	97	23	46	10	7.5
14	9.6	354	138	23	80	579	635	88	22	45	11	7.2
15	9.6	645	129	22	100	477	469	96	21	40	14	6.6
16	12	586	111	22	323	336	371	109	20	34	14	6.7
17	15	487	95	21	347	241	282	97	20	30	12	7.4
18	20	1240	92	21	346	208	226	83	19	29	10	7.5
19	26	1020	93	20	387	181	198	77	18	26	9.2	6.6
20	35	578	89	20	411	152	167	73	20	23	9.3	6.3
21	45	372	93	20	470	148	143	69	22	21	12	7.0
22	40	270	70	19	397	144	130	65	37	21	12	7.2
23	36	205	66	19	473	133	118	62	39	20	15	6.5
24	31	170	58	19	738	127	110	59	37	19	11	5.4
25	28	139	52	100	454	112	103	57	101	17	9.3	5.3
26	26	118	47	500	284	99	96	64	126	17	8.5	5.7
27	25	533	43	1000	207	129	91	60	560	17	7.7	7.2
28	23	1190	41	2520	184	189	81	51	620	16	10	8.0
29	24	687	37	2450	---	182	80	46	358	18	20	8.2
30	26	410	36	1100	---	156	89	43	318	17	30	7.1
31	29	---	35	600	---	139	---	40	---	15	12	---
TOTAL	589.4	9361	8012	8861	7632	5889	8847	3479	2755	2180	385.0	234.9
MEAN	19.0	312	258	286	273	190	295	112	91.8	70.3	12.4	7.83
MAX	45	1240	1570	2520	738	579	1010	385	620	362	30	13
MIN	8.8	22	35	19	80	99	80	40	18	15	7.7	5.3
CFSM	.12	1.93	1.60	1.76	1.68	1.17	1.82	.69	.57	.43	.08	.05
IN.	.14	2.15	1.84	2.03	1.75	1.35	2.03	.80	.63	.50	.09	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1994, BY WATER YEAR (WY)

	MEAN	17.3	270	169	367	217	346	282	99.3	90.5	386	19.4	12.1
	MAX	19.0	312	258	448	273	503	295	112	91.8	701	26.4	16.5
	(WY)	1994	1994	1994	1993	1994	1993	1994	1994	1994	1993	1993	1993
	MIN	15.6	227	79.0	286	162	190	269	86.4	89.2	70.3	12.4	7.83
	(WY)	1993	1993	1993	1994	1993	1994	1993	1993	1993	1994	1994	1994

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1993 - 1994

ANNUAL TOTAL	88436.7	58225.3	
ANNUAL MEAN	242	160	190
HIGHEST ANNUAL MEAN			220
LOWEST ANNUAL MEAN			160
HIGHEST DAILY MEAN	3290	Jan 28	3290
LOWEST DAILY MEAN	6.2	Sep 21	5.3
ANNUAL SEVEN-DAY MINIMUM	6.4	Sep 18	6.2
INSTANTANEOUS PEAK FLOW			3640
INSTANTANEOUS PEAK STAGE			12.83
INSTANTANEOUS LOW FLOW			5.3
ANNUAL RUNOFF (CFSM)	1.50	.98	1.17
ANNUAL RUNOFF (INCHES)	20.31	13.37	15.91
10 PERCENT EXCEEDS	634	411	470
50 PERCENT EXCEEDS	100	52	79
90 PERCENT EXCEEDS	11	9.6	10

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

03230310 LITTLE DARBY CREEK AT WEST JEFFERSON, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 19, 1992 to current year (Nutrients and Pesticides discontinued).

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: November 12, 1992 to current year.

INSTRUMENTATION.--Refrigerated water-quality pumping sampler since November 12, 1992.

REMARKS.--Water-quality and suspended-sediment samples were collected by pumping samples. Pumping samples were collected every .5 foot rise and 2 foot drop in stage. All pumping samples were analyzed for suspended sediment. Pumping samples from one high flow event per quarter were analyzed for water-quality constituents. Water-quality samples were collected on days when aquatic biota were sampled. Macroinvertebrate and periphyton data were collected but are not included in this report. 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 sub-divided 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, 248 mg/L, Sep. 4, 1993; minimum daily mean, 5 mg/L, Dec. 23, 24, 1992.

SEDIMENT LOADS: Maximum daily, 1480 tons, Jan. 28, 1994; minimum daily, .22 ton, Sep. 25, 1994.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 245 mg/L, Jun. 27; minimum daily mean, 6 mg/L, Jan. 23, 24.

SEDIMENT LOADS: Maximum daily, 1480 tons, Jan. 28; minimum daily, .22 ton, Sep. 25.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

a - Data analysis was done by the City of Columbus Water Quality Assurance Laboratory.
Detection limits are based on daily instrument performance.

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)
OCT								
14...	1500	9.6	688	8.0	11.0	9.2	<0.2	<0.02
DEC								
03...	1600	244	--	--	--	--	4.9	<0.02
04...	1400	425	--	--	--	--	4.9	<0.02
04...	1800	780	--	--	--	--	5.0	0.02
04...	2015	973	--	--	--	--	5.0	0.03
04...	2345	1190	--	--	--	--	5.0	0.05
05...	0345	846	--	--	--	--	5.1	0.02
05...	1145	1570	--	--	--	--	4.4	0.04
JAN								
28...	1300	1750	--	--	--	--	2.4	0.11
MAR								
03...	1500	126	630	8.3	3.0	13.7	4.8	<0.02
APR								
05...	1500	171	626	8.3	9.0	11.5	4.2	<0.02
07...	0845	401	--	--	--	--	4.0	<0.02
11...	1455	1120	--	--	--	--	7.1	0.09
19...	1415	193	626	8.2	14.0	10.7	5.2	<0.02
25...	1400	99	606	8.1	17.5	9.5	3.8	<0.02
MAY								
01...	0145	164	--	--	--	--	8.0	0.04
01...	0330	87	--	--	--	--	--	--
03...	1230	185	--	--	--	--	8.6	0.03
04...	1500	149	615	8.8	11.0	11.3	7.1	<0.02
19...	1445	76	--	--	--	--	4.1	0.05
JUN								
05...	1200	32.1	663	7.9	22.5	8.1	--	--
07...	1515	30	708	8.2	24.0	7.7	1.8	0.15
24	1115	41.6	--	--	--	--	1.6	0.09
25...	0615	315	--	--	--	--	1.7	0.11
29...	1250	333	--	--	--	--	12.1	0.03
29...	1255	333	622	8.0	20.5	7.1	12.2	0.03
29...	1330	333	--	--	--	--	12.4	0.02
JUL								
06...	1500	119	698	7.9	24.5	8.0	--	--
12...	1030	45	723	8.1	22.5	6.6	--	--
19...	1400	26	709	8.1	25.5	7.2	2.0	0.05
AUG								
02...	1330	13	689	8.2	24.5	7.9	0.4	0.02
SEP								
07...	1545	9.3	644	8.2	19.5	8.2	<0.2	<0.20

SCIOTO RIVER BASIN

03230310 LITTLE DARBY CREEK AT WEST JEFFERSON, OH--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

a - Data analysis was done by the City of Columbus Water Quality Assurance Laboratory.
 Detection limits are based on daily instrument performance.

DATE	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS + ORTHO TOTAL (MG/L AS P) (00678)	ALA- CHLOR TOTAL RECOVER (UG/L) (77825)	ATRA- ZINE TOTAL RECOV- ERABLE (UG/L)	CYANA- ZINE TOTAL RECOV- ERABLE (UG/L)	METOLA- CHLOR WATER WHOLE TOT. REC (UG/L) (82612)	SIMA- ZINE TOTAL RECOV- ERABLE (UG/L)
	a	a	a	a	a	a	a
OCT							
14...	0.05	0.02	<0.03	<0.07	<0.19	<0.08	<0.08
DEC							
03...	0.09	--	0.05	0.14	<0.20	0.25	<0.15
04...	0.05	--	<0.05	0.15	<0.20	0.16	<0.15
04...	0.13	--	<0.05	0.15	<0.20	0.18	<0.15
04...	0.23	0.12	<0.05	0.21	<0.20	0.26	<0.15
04...	0.31	0.16	<0.05	0.21	<0.20	0.21	<0.15
05...	--	0.13	<0.05	0.26	<0.20	0.26	<0.15
05...	0.21	0.23	<0.05	0.26	<0.20	0.35	<0.15
JAN							
28...	0.43	0.27	--	--	--	--	--
MAR							
03...	0.03	0.04	<0.09	<0.11	<0.14	<0.33	<0.11
APR							
05...	<0.02	<0.02	<0.08	<0.11	<0.15	<0.16	<0.08
07...	0.04	<0.02	<0.09	<0.08	<0.16	<0.16	<0.09
11...	0.27	0.16	--	--	--	--	--
19...	0.05	0.04	<0.10	<0.22	<0.66	<0.20	<0.47
25...	0.03	<0.02	<0.25	<0.10	<0.72	<0.82	<0.51
MAY							
01...	0.18	0.10	<0.10	1.1	0.87	0.54	<0.62
01...	--	--	<0.10	1.2	2.00	0.47	<0.55
03...	0.04	0.03	0.47	1.9	<0.66	1.00	<0.49
04...	0.03	<0.02	<0.15	0.72	<0.68	0.52	<0.48
19...	0.06	0.05	<0.10	<0.31	--	<0.20	<0.81
JUN							
07...	0.07	0.05	<0.10	<0.31	<0.80	<0.20	<0.80
24...	0.16	0.11	<0.10	<0.27	--	<0.20	<0.53
25...	0.19	0.13	<0.10	<0.35	--	<0.70	<0.69
29...	0.14	0.08	0.15	1.8	--	0.92	<0.65
29...	0.13	0.06	0.26	2.1	--	1.20	<0.52
29...	0.13	0.08	0.73	1.9	2.90	0.47	<0.69
JUL							
06...	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--
19...	0.07	0.03	--	--	--	--	--
AUG							
02...	0.08	0.04	<0.40	<0.16	<0.40	<0.60	<0.35
SEP							
07...	0.07	0.03	<0.40	<0.16	<0.40	<0.60	<0.35

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03230310 LITTLE DARBY CREEK AT WEST JEFFERSON, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	10	15	.43	29	33	2.6	300	21	17
2	9.2	16	.41	25	33	2.2	248	16	11
3	9.0	17	.42	23	32	2.0	242	13	8.6
4	9.0	18	.45	22	31	1.8	533	53	108
5	9.4	19	.49	22	30	1.8	1570	146	612
6	8.8	21	.48	24	28	1.8	1390	61	233
7	8.8	22	.51	23	25	1.6	727	43	86
8	11	23	.69	22	23	1.4	484	32	42
9	13	24	.84	22	21	1.3	351	25	24
10	11	26	.76	23	20	1.2	284	24	19
11	10	27	.74	26	18	1.3	229	24	15
12	10	29	.78	40	16	1.8	177	23	11
13	10	31	.82	56	21	3.2	152	22	9.2
14	9.6	32	.84	354	48	45	138	22	8.1
15	9.6	34	.89	645	52	93	129	21	7.4
16	12	36	1.2	586	39	63	111	21	6.2
17	15	40	1.6	487	45	66	95	20	5.1
18	20	44	2.4	1240	121	407	92	21	5.1
19	26	49	3.5	1020	54	157	93	21	5.3
20	35	54	5.1	578	34	53	89	22	5.2
21	45	59	7.1	372	26	26	93	22	5.6
22	40	54	5.9	270	20	15	70	23	4.3
23	36	49	4.8	205	17	9.6	66	22	3.9
24	31	44	3.7	170	16	7.2	58	21	3.3
25	28	40	3.1	139	14	5.3	52	20	2.9
26	26	39	2.7	118	13	4.1	47	20	2.5
27	25	38	2.6	533	71	125	43	19	2.2
28	23	37	2.3	1190	103	336	41	18	2.0
29	24	36	2.3	687	47	91	37	17	1.7
30	26	35	2.5	410	28	31	36	17	1.6
31	29	34	2.7	---	---	---	35	16	1.5
TOTAL	589.4	---	63.05	9361	---	1558.2	8012	---	1269.7
JANUARY			FEBRUARY			MARCH			
1	34	15	1.4	437	43	50	152	50	21
2	33	15	1.3	400	37	40	141	46	18
3	32	14	1.2	300	35	28	133	43	15
4	30	14	1.1	230	32	20	134	41	15
5	29	13	1.0	200	30	16	153	42	17
6	28	13	.95	160	28	12	162	43	19
7	28	12	.92	130	26	9.1	174	46	21
8	27	12	.85	120	24	7.8	184	49	24
9	26	11	.78	100	22	6.0	180	53	26
10	26	11	.75	96	21	5.4	172	52	24
11	25	10	.70	90	19	4.7	141	46	17
12	24	10	.64	86	18	4.2	137	45	17
13	23	10	.59	82	17	3.7	294	110	95
14	23	9	.57	80	16	3.4	579	153	237
15	22	9	.52	100	27	7.4	477	38	50
16	22	8	.50	323	60	54	336	27	24
17	21	8	.46	347	72	67	241	28	18
18	21	8	.44	346	74	69	208	28	16
19	20	7	.40	387	76	79	181	29	14
20	20	7	.39	411	78	86	152	30	12
21	20	7	.37	470	78	99	148	31	12
22	19	7	.34	397	67	72	144	32	12
23	19	6	.33	473	105	142	133	33	12
24	19	6	.31	738	178	357	127	33	11
25	100	17	4.6	454	117	147	112	30	9.1
26	500	57	77	284	79	61	99	27	7.1
27	1000	113	305	207	59	33	129	30	11
28	2520	206	1480	184	54	27	189	36	19
29	2450	199	1350	---	---	---	182	27	13
30	1100	120	356	---	---	---	156	19	8.1
31	600	70	114	---	---	---	139	14	5.1
TOTAL	8861	---	3703.41	7632	---	1510.7	5889	---	819.4

SCIOTO RIVER BASIN

03230310 LITTLE DARBY CREEK AT WEST JEFFERSON, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	129	10	3.5	385	138	151	39	61	6.4
2	117	9	3.0	289	69	56	37	61	6.0
3	121	10	3.3	195	42	22	33	57	5.1
4	157	15	6.6	158	36	15	32	52	4.5
5	177	17	8.2	137	31	11	32	48	4.1
6	179	16	8.2	122	26	8.7	31	44	3.7
7	411	48	56	136	32	13	31	41	3.4
8	352	27	26	192	50	26	32	38	3.3
9	262	21	15	170	47	22	29	36	2.8
10	580	58	109	137	40	15	28	34	2.5
11	1010	103	284	113	34	11	26	32	2.2
12	982	85	229	109	32	9.5	24	30	2.0
13	981	75	201	97	30	7.9	23	28	1.8
14	635	54	93	88	29	6.8	22	26	1.6
15	469	44	55	96	28	7.1	21	25	1.4
16	371	35	36	109	26	7.8	20	23	1.3
17	282	29	22	97	25	6.6	20	22	1.2
18	226	22	14	83	24	5.4	19	21	1.1
19	198	19	10	77	23	4.8	18	19	.95
20	167	18	8.2	73	22	4.4	20	21	1.2
21	143	17	6.6	69	22	4.1	22	22	1.3
22	130	16	5.6	65	22	3.8	37	35	3.6
23	118	15	4.7	62	22	3.6	39	38	4.1
24	110	14	4.1	59	21	3.4	37	38	3.8
25	103	13	3.6	57	21	3.3	101	82	24
26	96	12	3.1	64	21	3.6	126	85	29
27	91	11	2.8	60	24	3.9	560	245	419
28	81	11	2.3	51	54	7.4	620	158	288
29	80	10	2.1	46	59	7.3	358	81	79
30	89	11	2.8	43	60	6.9	318	122	107
31	---	---	---	40	60	6.6	---	---	---
TOTAL	8847	---	1228.7	3479	---	464.9	2755	---	1015.35
JULY			AUGUST			SEPTEMBER			
1	199	77	42	14	25	.94	11	19	.60
2	148	58	23	14	25	.92	13	19	.70
3	362	138	137	13	24	.85	12	19	.60
4	290	117	94	13	24	.85	10	18	.51
5	182	79	39	16	24	1.0	9.8	18	.48
6	124	57	19	13	23	.81	9.7	18	.47
7	93	47	12	13	22	.76	8.6	18	.41
8	74	41	8.2	11	20	.63	7.4	17	.35
9	71	36	7.0	11	19	.55	7.1	17	.32
10	67	32	5.7	10	18	.51	8.0	17	.36
11	54	28	4.0	10	17	.46	7.7	16	.34
12	45	24	2.9	10	16	.44	7.2	16	.31
13	46	28	3.7	10	15	.42	7.5	16	.32
14	45	27	3.3	11	15	.45	7.2	16	.31
15	40	22	2.4	14	14	.54	6.6	16	.28
16	34	21	2.0	14	13	.51	6.7	16	.28
17	30	20	1.6	12	13	.43	7.4	16	.32
18	29	19	1.5	10	14	.37	7.5	16	.32
19	26	18	1.3	9.2	14	.34	6.6	16	.28
20	23	18	1.1	9.3	14	.35	6.3	16	.26
21	21	17	.95	12	14	.48	7.0	16	.29
22	21	16	.92	12	15	.49	7.2	15	.30
23	20	17	.92	15	15	.61	6.5	15	.27
24	19	19	.95	11	15	.46	5.4	15	.23
25	17	20	.96	9.3	16	.39	5.3	15	.22
26	17	22	.99	8.5	16	.37	5.7	15	.23
27	17	24	1.1	7.7	16	.33	7.2	15	.29
28	16	26	1.1	10	17	.46	8.0	15	.33
29	18	26	1.2	20	28	1.5	8.2	15	.33
30	17	26	1.2	30	28	2.2	7.1	15	.29
31	15	25	1.0	12	20	.64	---	---	---
TOTAL	2180	---	421.99	385.0	---	20.06	234.9	---	10.60
YEAR	58225.3		12086.06						

SCIOTO RIVER BASIN

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03230450 HELLBRANCH RUN NEAR HARRISBURG, OH

LOCATION.--Lat 39°49'50", long 83°09'36", Franklin County, Hydrologic Unit 05060001, on right side of abandoned bridge, 500 ft upstream of Lambert Road, 1.0 mi upstream of mouth, and 1.5 mi north-northeast of Harrisburg..
DRAINAGE AREA.--37.0 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 785 ft above mean sea level (from topographic map).

REMARKS.--Estimated record Oct. 18, 19, Dec. 22 to Jan. 25, Feb. 1-14, 26 to Mar. 12, May 27, 28, Jun. 20-28. Records Good except for periods of estimated record which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.06	21	4.5	80	25	30	32	3.2	19	1.5	4.8
2	.00	.04	18	4.2	40	20	26	23	2.8	14	.93	3.7
3	.00	.12	18	3.8	30	17	35	18	2.5	27	.45	1.5
4	.00	.11	92	3.4	23	15	54	16	2.4	23	.72	.56
5	.00	.12	254	3.0	18	14	42	14	2.6	15	1.2	.24
6	.00	.21	109	2.8	14	13	63	13	2.3	11	2.9	.13
7	.00	.16	65	2.6	11	12	139	26	2.0	8.0	.96	.07
8	.00	.14	46	2.3	10	11	73	45	1.9	8.5	.33	.04
9	.00	.16	35	2.2	8.4	10	54	28	1.6	30	.13	.02
10	.00	.16	31	2.0	7.6	12	470	20	1.4	18	.10	.15
11	.00	.16	24	1.8	6.8	17	239	16	1.1	10	.13	.03
12	.00	.15	20	1.7	6.4	36	177	16	.82	7.7	.16	.01
13	.00	24	17	1.6	6.0	120	189	12	.64	6.8	.13	.00
14	.00	34	17	1.5	15	140	132	11	.55	16	.08	.00
15	.00	48	16	1.4	54	91	106	13	.48	9.8	.51	.00
16	.10	20	13	1.4	63	60	119	18	.41	6.3	2.1	.00
17	.15	118	11	1.3	46	42	69	12	8.5	4.0	.53	.00
18	.18	93	11	1.2	44	42	50	10	4.2	2.9	.14	.00
19	.25	44	14	1.2	56	36	39	8.9	2.1	2.5	.03	.00
20	.32	27	13	1.2	67	32	30	8.1	2.2	1.6	.06	.00
21	7.7	19	16	1.1	107	34	25	7.3	2.5	1.0	.60	.00
22	3.4	14	14	1.1	78	31	22	6.6	3.5	.89	2.2	.00
23	.76	11	13	1.0	223	27	18	6.3	4.5	.84	1.2	.00
24	.22	9.5	11	1.0	168	25	17	5.8	6.0	.81	.32	.00
25	.07	7.7	9.0	100	90	22	15	5.8	9.0	.98	.07	.02
26	.04	7.0	8.0	1200	52	19	13	7.9	20	1.7	.03	.00
27	.03	90	7.4	333	35	36	12	7.0	50	.51	.01	.00
28	.03	73	6.8	1130	28	59	11	6.0	56	.21	.07	.00
29	.04	42	6.0	522	---	54	10	5.0	27	.18	3.9	.00
30	.14	27	5.6	200	---	41	13	4.2	31	3.2	5.0	.00
31	.18	---	5.0	129	---	35	---	3.7	---	4.1	1.9	---
TOTAL	13.61	709.79	946.8	3663.3	1387.2	1148	2292	425.6	253.20	255.52	28.39	11.27
MEAN	.44	23.7	30.5	118	49.5	37.0	76.4	13.7	8.44	8.24	.92	.38
MAX	7.7	118	254	1200	223	140	470	45	56	30	5.0	4.8
MIN	.00	.04	5.0	1.0	6.0	10	10	3.7	.41	.18	.01	.00
CFSM	.01	.64	.83	3.19	1.34	1.00	2.06	.37	.23	.22	.02	.01
IN.	.01	.71	.95	3.68	1.39	1.15	2.30	.43	.25	.26	.03	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1994, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1993	.52	.59	1993	.44	1994
1994	34.9	46.2	1994	23.7	1994
1993	23.7	30.5	1994	16.8	1993
1994	110	118	1994	102	1993
1993	42.0	49.5	1993	34.4	1994
1994	76.2	115	1994	37.0	1994
1993	80.8	85.2	1993	76.4	1994
1994	15.1	16.5	1994	13.7	1994
1993	10.4	12.4	1993	8.44	1994
1994	47.8	87.3	1994	8.24	1993
1993	.84	.92	1994	.76	1993
1994	.34	.38	1994	.30	1993

SUMMARY STATISTICS FOR 1993 CALENDAR YEAR FOR 1994 WATER YEAR WATER YEARS 1993 - 1994

	1993	1994	1993-1994
ANNUAL TOTAL	15557.85	11134.68	
ANNUAL MEAN	42.6	30.5	36.9
HIGHEST ANNUAL MEAN			43.3
LOWEST ANNUAL MEAN			30.5
HIGHEST DAILY MEAN	841	1200	1200
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
INSTANTANEOUS PEAK FLOW		1670	1720
INSTANTANEOUS PEAK STAGE		9.37	9.43
INSTANTANEOUS LOW FLOW		.00	.00
ANNUAL RUNOFF (CFSM)	1.15	.82	1.00
ANNUAL RUNOFF (INCHES)	15.64	11.19	13.56
10 PERCENT EXCEEDS	100	63	85
50 PERCENT EXCEEDS	16	7.0	11
90 PERCENT EXCEEDS	.00	.03	.04

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

SCIOTO RIVER BASIN

03230450 HELLBRANCH RUN NEAR HARRISBURG, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 4, 1992 to current year (Nutrients and Pesticides discontinued).

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 and suspended-sediment samples were collected by pumping samples. Pumping samples were collected every .5 foot rise and 2 foot drop in stage. All pumping samples were analyzed for suspended sediment. Pumping samples from one high flow event per quarter were analyzed for water-quality constituents. Sediment samples also were collected by a local observer on an approximate once daily basis. 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 sub-divided 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, 601 mg/L, Jan. 26, 1994; minimum daily mean, 2 mg/L, Dec. 19, 20, 22, 23, 1992, Sep. 5, 1993, on many days during 1994.

SEDIMENT LOADS: Maximum daily, 2250 tons, Jan. 26, 1994; minimum daily, .00 ton, on many days during 1993 and 1994.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 601 mg/L, Jan. 26; minimum daily mean, 2 mg/L, on many days during the year.

SEDIMENT LOADS: Maximum daily, 2250 tons, Jan. 26; minimum daily, .00 ton, on many days during the year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

a - Data analysis was done by the City of Columbus Water Quality Assurance Laboratory.
Detection limits are based on daily instrument performance.

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)
							a	a
DEC								
04...	1630	76	--	--	--	--	2.9	0.07
04...	1945	176	--	--	--	--	3.0	0.07
04...	2145	318	--	--	--	--	3.2	0.07
JAN								
26...	1730	1110	--	--	--	--	3.5	0.13
27...	0330	240	--	--	--	--	3.4	0.06
27...	1700	427	--	--	--	--	3.5	0.15
28...	0300	919	--	--	--	--	2.6	0.07
28...	0615	1220	--	--	--	--	2.0	0.16
28...	1100	1260	--	--	--	--	1.7	0.11
FEB								
15...	1330	29	588	7.3	3.0	--	2.3	1.6
APR								
04...	1000	55	685	7.7	5.5	12.3	4.4	0.13
06...	1930	120	--	--	--	--	3.9	0.06
10...	1000	572	--	--	--	--	2.8	0.08
10...	1330	859	--	--	--	--	2.5	0.18
15...	1500	88	506	8.2	12.5	10	3.8	<0.02
22...	1345	21	611	8.6	14.0	16.4	2.7	0.02
29...	1500	12	684	9.0	16.5	10.4	2.0	0.02
MAY								
18...	1315	10	710	8.4	15.5	12.4	3.0	0.03
JUN								
06...	1500	2.2	812	8.4	22.5	13.5	0.5	0.04
29...	1305	22	--	--	--	--	7.6	<0.02
29...	1430	24	--	--	--	--	7.5	<0.02
29...	1435	23	612	8.2	22.0	8.4	--	--
30...	1430	31	588	8.2	20.5	8.5	6.4	<0.02
JUL								
04...	1422	22	600	8.3	23.0	8.8	--	--
08...	1015	7.8	715	8.0	24.0	8.8	--	--
15...	1300	9.0	560	8.2	23.5	9.1	--	--
21...	1330	1.0	770	8.3	25.0	11.2	0.9	0.03
AUG								
08...	1430	0.46	820	8.3	22.0	11.7	0.2	0.03
SEP								
06...	1400	<0.02	750	8.3	17.5	985	<0.2	0.02

SCIOTO RIVER BASIN

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03230450 HELLBRANCH RUN NEAR HARRISBURG, OH--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

a - Data analysis was done by the City of Columbus Water Quality Assurance Laboratory.
Detection limits are based on daily instrument performance.

DATE	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS + ORTHO TOTAL (MG/L AS P) (00678)	ALA- CHLOR TOTAL RECOVER (UG/L) (77825)	ATRA- ZINE TOTAL RECOV- ERABLE (UG/L)	CYANA- ZINE TOTAL RECOV- ERABLE (UG/L)	METOLA- CHLOR WATER TOT. REC (UG/L) (82612)	SIMA- ZINE TOTAL RECOV- ERABLE (UG/L)
	a	a	a	a	a	a	a
DEC							
04...	0.14	0.09	<0.05	<0.10	<0.20	<0.06	<0.15
04...	0.31	0.17	<0.05	0.13	<0.20	0.07	<0.15
04...	0.60	0.31	<0.05	0.15	<0.20	0.09	<0.15
JAN							
26...	0.39	0.23	<0.11	0.18	0.33	<0.21	<0.14
27...	0.44	0.24	<0.57	0.13	<0.23	<0.73	<0.14
27...	0.25	0.17	<0.10	0.13	<0.19	<0.19	<0.12
28...	0.50	0.28	<0.22	<0.14	<0.26	<0.26	<0.16
28...	0.51	0.31	<0.10	<0.11	<0.19	<0.26	<0.12
28...	0.49	0.31	<0.11	<0.12	<0.10	<0.28	<0.11
FEB							
15...	0.13	0.15	<0.08	<0.10	0.60	<0.29	<0.10
APR							
04...	0.03	<0.02	<0.08	<0.10	<0.15	<0.06	<0.08
06...	0.28	0.07	--	--	--	--	--
10...	0.78	0.32	--	--	--	--	--
10...	0.89	0.41	--	--	--	--	--
15...	0.14	0.09	<0.10	<0.25	<0.77	<0.22	<0.55
22...	0.03	0.02	<0.10	<0.22	<0.66	<0.20	<0.47
29...	0.03	<0.02	<0.10	<0.25	<0.76	<0.22	<0.54
MAY							
18...	0.06	0.06	<0.10	<0.31	--	<0.79	<0.82
JUN							
06...	0.04	<0.02	<0.10	<0.37	<0.96	<0.22	<0.96
29...	0.12	0.07	0.26	1.7	--	1.5	<0.68
29...	0.11	0.07	<0.10	2.2	3.0	0.23	<0.59
29...	--	--	--	--	--	--	--
30...	0.13	0.09	<0.10	1.1	1.9	<0.19	<0.55
JUL							
04...	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--
21...	0.06	0.04	--	--	--	--	--
AUG							
08...	0.05	0.03	<0.40	0.20	<0.40	<0.60	<0.35
SEP							
06...	0.02	<0.02	<0.40	<0.16	--	<0.60	<0.35

SCIOTO RIVER BASIN

03230450 HELLBRANCH RUN NEAR HARRISBURG, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	.00	2	.00	.06	7	.00	21	15	.88
2	.00	4	.00	.04	7	.00	18	10	.50
3	.00	5	.00	.12	11	.00	18	4	.19
4	.00	5	.00	.11	12	.00	92	62	49
5	.00	8	.00	.12	11	.00	254	172	135
6	.00	10	.00	.21	11	.01	109	59	18
7	.00	10	.00	.16	7	.00	65	29	5.1
8	.00	6	.00	.14	9	.00	46	15	1.9
9	.00	5	.00	.16	18	.01	35	9	.81
10	.00	4	.00	.16	16	.01	31	6	.47
11	.00	5	.00	.16	10	.00	24	5	.31
12	.00	6	.00	.15	6	.00	20	5	.28
13	.00	7	.00	24	37	4.7	17	6	.30
14	.00	7	.00	34	27	2.8	17	8	.38
15	.00	2	.00	48	25	3.5	16	6	.24
16	.10	3	.00	20	14	.75	13	4	.14
17	.15	4	.00	118	123	58	11	5	.15
18	.18	5	.00	93	69	20	11	4	.13
19	.25	4	.00	44	24	3.0	14	4	.14
20	.32	4	.00	27	7	.57	13	3	.11
21	7.7	6	.16	19	4	.20	16	3	.15
22	3.4	8	.07	14	2	.09	14	4	.14
23	.76	5	.01	11	2	.07	13	3	.11
24	.22	5	.00	9.5	2	.05	11	3	.10
25	.07	4	.00	7.7	2	.04	9.0	3	.07
26	.04	5	.00	7.0	2	.03	8.0	3	.06
27	.03	5	.00	90	71	24	7.4	3	.05
28	.03	5	.00	73	26	5.8	6.8	3	.05
29	.04	7	.00	42	11	1.3	6.0	3	.04
30	.14	10	.00	27	16	1.2	5.6	3	.04
31	.18	11	.01	---	---	---	5.0	3	.03
TOTAL	13.61	---	0.25	709.79	---	126.13	946.8	---	214.87
JANUARY			FEBRUARY			MARCH			
1	4.5	3	.03	80	20	4.2	25	11	.74
2	4.2	3	.03	40	15	1.6	20	11	.58
3	3.8	2	.03	30	10	.83	17	11	.49
4	3.4	2	.02	23	8	.51	15	8	.32
5	3.0	2	.02	18	14	.67	14	9	.34
6	2.8	2	.02	14	10	.37	13	8	.28
7	2.6	2	.02	11	20	.59	12	6	.20
8	2.3	2	.01	10	12	.32	11	6	.18
9	2.2	2	.01	8.4	10	.22	10	4	.10
10	2.0	2	.01	7.6	13	.26	12	9	.29
11	1.8	2	.01	6.8	17	.31	17	17	.80
12	1.7	2	.01	6.4	22	.38	36	52	5.1
13	1.6	2	.01	6.0	29	.47	120	39	13
14	1.5	2	.01	15	39	1.6	140	39	15
15	1.4	2	.01	54	25	3.9	91	17	4.2
16	1.4	2	.01	63	26	4.7	60	8	1.3
17	1.3	2	.01	46	14	1.8	42	4	.51
18	1.2	2	.01	44	14	1.6	42	6	.64
19	1.2	2	.01	56	17	2.6	36	5	.50
20	1.2	2	.01	67	15	2.6	32	4	.35
21	1.1	2	.01	107	26	7.6	34	8	.78
22	1.1	2	.01	78	12	2.7	31	7	.59
23	1.0	2	.01	223	98	68	27	6	.41
24	1.0	2	.01	168	52	25	25	6	.37
25	100	192	52	90	18	4.6	22	4	.24
26	1200	601	2250	52	11	1.5	19	2	.12
27	333	89	96	35	9	.87	36	5	.52
28	1130	263	818	28	9	.66	59	10	1.7
29	522	100	158	---	---	---	54	7	1.1
30	200	41	23	---	---	---	41	4	.50
31	129	26	9.2	---	---	---	35	6	.53
TOTAL	3663.3	---	3406.54	1387.2	---	140.46	1148	---	51.78

SCIOTO RIVER BASIN

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03230450 HELLBRANCH RUN NEAR HARRISBURG, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	30	7	.58	32	11	.99	3.2	15	.13
2	26	7	.53	23	6	.40	2.8	23	.17
3	35	11	1.2	18	5	.25	2.5	22	.15
4	54	18	2.8	16	6	.26	2.4	27	.17
5	42	15	1.7	14	6	.22	2.6	44	.30
6	63	67	22	13	5	.17	2.3	43	.26
7	139	114	50	26	18	2.3	2.0	44	.23
8	73	16	3.4	45	24	3.2	1.9	49	.24
9	54	8	1.2	28	8	.60	1.6	43	.18
10	470	454	797	20	10	.56	1.4	39	.14
11	239	131	90	16	8	.36	1.1	35	.10
12	177	70	34	16	8	.33	.82	35	.08
13	189	128	70	12	10	.35	.64	56	.10
14	132	65	24	11	18	.52	.55	56	.08
15	106	54	17	13	13	.45	.48	41	.05
16	119	68	23	18	9	.44	.41	39	.04
17	69	23	4.5	12	10	.33	8.5	15	.30
18	50	10	1.4	10	16	.43	4.2	5	.06
19	39	9	.94	8.9	13	.31	2.1	5	.03
20	30	8	.66	8.1	12	.26	2.2	7	.04
21	25	5	.33	7.3	14	.28	2.5	9	.06
22	22	5	.32	6.6	16	.29	3.5	7	.07
23	18	4	.22	6.3	21	.36	4.5	164	2.0
24	17	4	.17	5.8	27	.42	6.0	94	1.5
25	15	4	.18	5.8	17	.26	9.0	30	.72
26	13	6	.23	7.9	16	.34	20	35	1.9
27	12	10	.33	7.0	29	.55	50	40	5.4
28	11	10	.28	6.0	21	.33	56	26	3.9
29	10	10	.29	5.0	6	.08	27	22	1.5
30	13	9	.29	4.2	13	.14	31	29	2.5
31	---	---	---	3.7	16	.16	---	---	---
TOTAL	2292	---	1148.55	425.6	---	15.94	253.20	---	22.40
JULY			AUGUST			SEPTEMBER			
1	19	19	1.0	1.5	4	.02	4.8	6	.09
2	14	22	.81	.93	7	.02	3.7	6	.06
3	27	38	2.8	.45	8	.01	1.5	3	.01
4	23	27	1.7	.72	19	.05	.56	3	.01
5	15	13	.56	1.2	32	.10	.24	5	.00
6	11	9	.26	2.9	12	.11	.13	14	.00
7	8.0	9	.19	.96	7	.02	.07	20	.00
8	8.5	8	.18	.33	21	.02	.04	23	.00
9	30	92	8.7	.13	25	.01	.02	23	.00
10	18	38	1.9	.10	21	.01	.15	19	.01
11	10	17	.48	.13	18	.01	.03	25	.00
12	7.7	8	.18	.16	20	.01	.01	29	.00
13	6.8	12	.23	.13	27	.01	.00	36	.00
14	16	17	.73	.08	26	.01	.00	23	.00
15	9.8	11	.31	.51	34	.04	.00	15	.00
16	6.3	8	.14	2.1	12	.08	.00	15	.00
17	4.0	6	.06	.53	14	.02	.00	12	.00
18	2.9	5	.04	.14	21	.01	.00	8	.00
19	2.5	7	.05	.03	17	.00	.00	8	.00
20	1.6	7	.03	.06	11	.00	.00	11	.00
21	1.0	10	.03	.60	47	.05	.00	14	.00
22	.89	15	.04	2.2	22	.12	.00	17	.00
23	.84	13	.03	1.2	9	.03	.00	19	.00
24	.81	13	.03	.32	13	.01	.00	14	.00
25	.98	9	.02	.07	19	.00	.02	12	.00
26	1.7	8	.03	.03	14	.00	.00	9	.00
27	.51	8	.01	.01	12	.00	.00	9	.00
28	.21	12	.01	.07	14	.00	.00	7	.00
29	.18	9	.00	3.9	21	.23	.00	12	.00
30	3.2	6	.05	5.0	10	.16	.00	14	.00
31	4.1	4	.05	1.9	4	.02	---	---	---
TOTAL	255.52	---	20.65	28.39	---	1.18	11.27	---	0.18
YEAR	11134.68		5148.93						

SCIOTO RIVER BASIN

03230500 BIG DARBY CREEK AT DARBYVILLE, OH

LOCATION.--Lat 39°42'02", long 83°06'37", Pickaway County, Hydrologic Unit 05060001, on right bank at upstream side of State Highway 316, 0.4 mi northeast of Darbyville, 0.4 mi upstream from Lizzard Run, and 3.0 mi downstream from Greenbrier Creek.

DRAINAGE AREA.--534 mi².

WATER-DISCHARGE RECORDS

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.--Estimated daily discharges: Oct. 1-27, Dec. 20 to Jan. 26, Feb. 1-15. Records fair except for estimated records which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	62	839	110	700	579	507	599	120	545	53	56
2	35	63	696	110	540	532	465	875	115	394	50	59
3	36	62	627	100	450	502	476	615	112	553	55	55
4	36	62	859	98	400	483	597	486	108	675	52	66
5	36	65	3580	92	340	514	673	421	103	453	60	64
6	37	68	4700	88	300	547	638	379	98	306	53	55
7	39	64	1960	84	280	577	1410	400	91	223	44	45
8	40	64	1260	80	260	611	1430	589	89	180	40	40
9	37	63	998	78	240	653	978	543	88	223	36	38
10	32	61	842	76	230	690	2510	453	83	181	34	37
11	27	57	732	74	210	637	3500	367	79	164	35	38
12	35	56	601	72	200	639	2860	337	67	137	35	34
13	34	76	510	70	200	949	3050	307	62	122	34	30
14	33	313	456	70	220	1730	2000	275	70	138	31	29
15	37	1140	426	68	300	1660	1430	304	66	127	31	29
16	46	1520	368	66	755	1220	1340	331	65	109	41	25
17	50	1080	308	64	1020	906	1030	296	73	98	48	28
18	58	2340	282	60	1100	749	828	257	74	89	45	26
19	70	3060	285	58	1220	684	717	233	65	84	40	26
20	90	1400	240	58	1320	597	628	218	62	75	36	22
21	110	994	210	56	1520	571	528	204	92	70	58	21
22	140	759	190	56	1400	564	476	188	111	67	47	22
23	120	589	180	54	1630	534	433	180	104	66	40	20
24	100	479	170	54	2210	500	406	172	277	64	55	21
25	80	401	160	250	1640	462	385	165	254	64	64	24
26	72	331	150	2000	1040	413	360	173	239	58	41	27
27	67	682	140	3480	748	458	337	171	786	52	35	24
28	63	2690	140	5780	645	688	313	159	1510	53	37	23
29	59	1820	130	8560	---	743	294	146	912	50	114	25
30	60	1090	120	5680	---	635	305	135	799	59	78	25
31	61	---	120	2020	---	563	---	126	---	62	59	---
TOTAL	1775	21511	22279	29566	21118	21590	30904	10104	6774	5541	1481	1034
MEAN	57.3	717	719	954	754	696	1030	326	226	179	47.8	34.5
MAX	140	3060	4700	8560	2210	1730	3500	875	1510	675	114	66
MIN	27	56	120	54	200	413	294	126	62	50	31	20
CFSM	.11	1.34	1.35	1.79	1.41	1.30	1.93	.61	.42	.33	.09	.06
IN.	.12	1.50	1.55	2.06	1.47	1.50	2.15	.70	.47	.39	.10	.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1994, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1922	107	1223	1927	3.91	1964
1923	268	1745	1986	13.6	1954
1924	479	2287	1991	18.5	1964
1925	706	2808	1959	23.4	1945
1926	793	2146	1975	37.2	1934
1927	948	2758	1963	84.0	1931
1928	826	2190	1957	133	1925
1929	541	2033	1933	42.6	1934
1930	411	1917	1958	14.9	1934
1931	251	1868	1993	9.08	1934
1932	146	1216	1980	9.82	1930
1933	96.0	1652	1979	6.43	1964

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1922 - 1994
ANNUAL TOTAL	275929	173677	
ANNUAL MEAN	756	476	463
HIGHEST ANNUAL MEAN			812
LOWEST ANNUAL MEAN			79.1
HIGHEST DAILY MEAN	8530	Jan 3	38400
LOWEST DAILY MEAN	25	Sep 22	1.4
ANNUAL SEVEN-DAY MINIMUM	29	Sep 18	2.0
INSTANTANEOUS PEAK FLOW			49000
INSTANTANEOUS PEAK STAGE			17.94
INSTANTANEOUS LOW FLOW			20
ANNUAL RUNOFF (CFSM)	1.42	.89	.87
ANNUAL RUNOFF (INCHES)	19.22	12.10	11.77
10 PERCENT EXCEEDS	2000	1170	1110
50 PERCENT EXCEEDS	331	160	153
90 PERCENT EXCEEDS	40	36	24

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

03230500 BIG DARBY CREEK AT DARBYVILLE, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--1965-1977, 1988, May 6, 1992 to current year (Nutrients and Pesticides discontinued).

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: November 12, 1992 to current year.

REMARKS.--Water-quality and suspended-sediment samples were collected by pumping samples. Pumping samples were collected every .5 foot rise and 2 foot drop in stage. Some pumping samples were analyzed for suspended sediment. Pumping samples from one high flow event per quarter were analyzed for water-quality constituents. Water-quality samples were collected on days when aquatic biota were sampled. Macroinvertebrate and periphyton data were collected but are not included in this report. Sediment samples also were collected by a local observer on an approximate once daily basis. 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 sub-divided into half-hour intervals and the daily load was calculated by summing the loads for these half-hour intervals. This required interpolation between measured and estimated concentrations.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 583 mg/L, Jan. 22, 1993; minimum daily mean, 3 mg/L, Oct. 11, 26-29, 1993.

SEDIMENT LOADS: Maximum daily, 10,000 tons, July 3, 1993; minimum daily, .25 ton, Oct. 11, 1993.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 407 mg/L, Apr. 10; minimum daily mean, 3 mg/L, Oct. 11, 26-29.

SEDIMENT LOADS: Maximum daily, 6,400 tons, Jan. 29; minimum daily, .25 ton, Oct. 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

a - Data analysis was done by the City of Columbus Water Quality Assurance Laboratory.
Detection limits are based on daily instrument performance.

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS NH4) (71845)
							a	a
OCT								
15...	1500	37	742	8.3	13.0	12.0	0.7	<0.02
DEC								
05...	0015	1870	--	--	--	--	4.0	0.05
05...	0915	3520	--	--	--	--	3.8	0.05
07...	0030	3050	--	--	--	--	3.6	<0.03
JAN								
28...	1445	2450	--	--	--	--	2.1	0.14
30...	1215	5650	--	--	--	--	2.7	0.09
30...	1715	3730	--	--	--	--	3.2	0.08
31...	0545	2220	--	--	--	--	3.8	0.07
MAR								
04...	1500	491	--	--	--	--	--	--
28...	1115	782	645	8.1	8.0	12.3	2.7	--
APR								
08...	1345	1330	--	--	--	--	5.1	0.02
10...	1015	2430	--	--	--	--	4.7	0.02
10...	1330	3490	--	--	--	--	4.1	0.05
10...	1815	3770	--	--	--	--	2.9	0.06
21...	1300	520	643	8.6	14.5	10.4	3.9	<0.02
27...	1330	88	647	8.3	19.5	10	2.8	<0.02
MAY								
01...	1445	616	--	--	--	--	2.5	0.04
01...	1615	835	--	--	--	--	2.3	0.03
03...	1400	604	--	--	--	--	7.5	0.04
03...	1415	604	--	--	--	--	7.5	0.04
06...	1300	370	646	8.1	14.0	11.7	5.2	--
17...	1400	289	680	8.2	17.0	11.1	3.1	0.02
JUN								
08...	1445	88	746	8.5	22.5	11.7	0.5	0.04
24...	0245	462	--	--	--	--	1.6	--
27...	1215	661	--	--	--	--	3.9	<0.02
27...	1415	880	--	--	--	--	5.2	0.02
27...	1900	1140	--	--	--	--	5.3	0.02
27...	2145	1300	--	--	--	--	6.1	0.02
28...	0145	1740	--	--	--	--	9.6	0.04
29...	1545	853	595	8.0	21.5	7.3	15.2	0.04
JUL								
04...	1600	645	606	8.1	23.5	6.9	9.1	<0.02
07...	1500	207	703	8.0	26.5	9.1	--	--
13...	1500	111	725	8.5	25.5	13.0	--	--
20...	1500	76	728	8.4	27.5	10.6	0.8	<0.02
AUG								
03...	1430	--	787	8.3	25.5	10.8	0.8	<0.02
SEP								
08...	1445	24	781	8.3	20.0	10.5	0.8	<0.02

SCIOTO RIVER BASIN

03230500 BIG DARBY CREEK AT DARBYVILLE, OH--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

a - Data analysis was done by the City of Columbus Water Quality Assurance Laboratory.
Detection limits are based on daily instrument performance.

DATE	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS HYDRO. + ORTHO TOTAL (MG/L AS P) (00678)	ALA- CHLOR TOTAL RECOVER (UG/L) (77825)	ATRA- ZINE TOTAL RECOVER (UG/L)	CYANA- ZINE TOTAL RECOVER (UG/L)	METOLA- CHLOR WATER TOT. REC (UG/L) (82612)	SIMA- ZINE TOTAL RECOVER (UG/L)
	a	a	a	a	a	a	a
OCT							
15...	0.16	0.15	<0.03	<0.07	<0.19	<0.08	<0.08
DEC							
05...	0.46	0.10	<0.05	0.11	<0.20	0.11	<0.15
05...	0.29	0.15	<0.05	<0.15	<0.20	0.09	<0.15
07...	0.37	0.21	<0.05	0.18	<0.20	0.18	<0.15
JAN							
28...	0.50	0.29	<0.09	<0.10	<0.17	0.22	<0.11
30...	0.49	0.33	<0.10	0.16	<0.18	<0.18	<0.11
30...	0.33	0.22	<0.10	0.18	<0.19	0.19	<0.12
31...	0.25	0.18	<0.10	0.18	<0.20	<0.20	<0.11
MAR							
04...	--	--	<0.11	<0.14	<0.17	<0.41	<0.14
28...	--	--	--	--	--	--	--
APR							
08...	0.16	0.04	<0.10	0.12	<0.17	<0.06	<0.10
10...	0.23	0.12	--	--	--	--	--
10...	0.57	0.28	--	--	--	--	--
10...	0.80	0.41	--	--	--	--	--
21...	0.05	0.03	<0.11	<0.28	<0.87	<0.25	<0.62
27...	0.06	0.03	<0.10	<0.21	<0.63	<0.18	<0.45
MAY							
01...	0.11	0.05	<0.11	<0.28	<0.86	<0.26	<0.62
01...	0.11	0.05	<0.12	<0.31	<0.95	<0.27	<0.67
03...	0.07	0.04	0.32	<0.63	<0.84	0.85	<0.60
03...	0.06	0.03	0.60	2.5	1.3	1.5	<0.47
06...	0.03	0.02	<0.10	<0.30	--	0.29	<0.79
17...	0.06	0.05	<0.10	<0.32	--	<0.19	<0.82
JUN							
08...	0.17	0.06	<0.10	<0.32	<0.79	<0.18	<0.80
24...	--	--	<0.10	0.59	--	<0.30	<0.53
27...	0.35	0.20	<0.10	1.5	--	0.73	<0.55
27...	0.34	0.19	<0.10	2.1	1.8	1.30	<0.54
27...	0.35	0.19	<0.10	1.8	--	0.76	<0.54
27...	0.37	0.19	<0.10	1.9	--	0.81	<0.54
28...	0.38	0.15	<0.10	2.2	--	1.20	<0.53
29...	0.19	0.11	<0.10	2.4	--	1.50	<0.56
JUL							
04...	0.19	0.10	<0.10	1.05	--	0.53	<0.62
07...	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--
20...	0.08	0.04	--	--	--	--	--
AUG							
03...	0.25	0.17	<0.40	<0.16	<0.40	<0.60	<0.35
SEP							
08...	0.21	0.18	<0.40	<0.16	--	<0.60	<0.35

SCIOTO RIVER BASIN

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03230500 BIG DARBY CREEK AT DARBYVILLE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	35	21	2.0	62	8	1.3	839	30	68
2	35	23	2.2	63	8	1.3	696	34	64
3	36	22	2.1	62	7	1.2	627	54	92
4	36	19	1.9	62	7	1.2	859	68	162
5	36	17	1.6	65	8	1.4	3580	203	2090
6	37	15	1.5	68	8	1.5	4700	180	2300
7	39	13	1.4	64	8	1.4	1960	89	489
8	40	11	1.2	64	8	1.5	1260	47	162
9	37	6	.64	63	9	1.5	998	46	124
10	32	5	.43	61	8	1.3	842	75	169
11	27	3	.25	57	6	.85	732	87	173
12	35	4	.36	56	6	.88	601	91	147
13	34	5	.43	76	6	1.2	510	94	129
14	33	5	.45	313	25	49	456	97	119
15	37	5	.50	1140	104	351	426	100	116
16	46	5	.62	1520	135	571	368	108	107
17	50	5	.67	1080	108	333	308	129	107
18	58	5	.75	2340	173	1170	282	125	95
19	70	5	.87	3060	148	1270	285	129	99
20	90	4	1.1	1400	53	205	240	133	86
21	110	4	1.3	994	29	78	210	118	67
22	140	4	1.5	759	18	38	190	104	53
23	120	4	1.3	589	14	23	180	74	36
24	100	4	1.0	479	14	18	170	18	8.4
25	80	4	.77	401	13	14	160	13	5.8
26	72	3	.67	331	12	11	150	12	4.9
27	67	3	.59	682	37	96	140	11	4.1
28	63	3	.53	2690	169	1210	140	10	3.7
29	59	3	.51	1820	77	397	130	9	3.1
30	60	6	.91	1090	43	127	120	10	3.1
31	61	5	.81	---	---	---	120	20	6.5
TOTAL	1775	---	30.86	21511	---	5977.53	22279	---	7093.6
JANUARY			FEBRUARY			MARCH			
1	110	91	27	700	47	89	579	11	17
2	110	110	33	540	29	42	532	14	19
3	100	106	29	450	19	24	502	13	17
4	98	109	29	400	60	65	483	13	17
5	92	112	28	340	65	59	514	16	22
6	88	115	27	300	64	52	547	19	28
7	84	94	21	280	63	47	577	17	26
8	80	112	24	260	58	41	611	22	36
9	78	134	28	240	43	28	653	34	60
10	76	85	18	230	32	20	690	34	63
11	74	49	9.8	210	23	13	637	32	55
12	72	63	12	200	17	9.2	639	31	53
13	70	76	14	200	16	8.8	949	41	109
14	70	64	12	220	47	28	1730	98	467
15	68	52	9.5	300	40	32	1660	68	310
16	66	42	7.5	755	64	135	1220	33	109
17	64	34	5.9	1020	37	100	906	24	57
18	60	28	4.5	1100	47	142	749	36	72
19	58	22	3.5	1220	64	210	684	37	69
20	58	18	2.8	1320	58	208	597	27	44
21	56	15	2.2	1520	54	220	571	37	58
22	56	12	1.8	1400	42	160	564	47	72
23	54	10	1.4	1630	124	578	534	29	43
24	54	8	1.1	2210	103	612	500	52	70
25	250	13	9.1	1640	87	387	462	32	40
26	2000	38	207	1040	86	244	413	18	20
27	3480	99	949	748	39	81	458	16	20
28	5780	252	4050	645	14	25	688	29	56
29	8560	278	6400	---	---	---	743	34	68
30	5680	151	2540	---	---	---	635	31	54
31	2020	76	419	---	---	---	563	30	45
TOTAL	29566	---	14926.1	21118	---	3660.0	21590	---	2196

SCIOTO RIVER BASIN

03230500 BIG DARBY CREEK AT DARBYVILLE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	507	29	39	599	63	122	120	39	13
2	465	20	25	875	76	182	115	61	19
3	476	22	28	615	36	61	112	61	19
4	597	29	47	486	12	16	108	60	18
5	673	38	70	421	22	25	103	59	16
6	638	39	68	379	18	19	98	58	15
7	1410	103	404	400	17	19	91	56	14
8	1430	77	307	589	27	43	89	53	13
9	978	49	131	543	24	36	88	49	12
10	2510	407	3680	453	21	25	83	45	10
11	3500	292	2750	367	13	13	79	41	8.7
12	2860	168	1300	337	18	17	67	38	6.8
13	3050	201	1680	307	20	16	62	35	5.8
14	2000	98	540	275	22	17	70	32	6.1
15	1430	67	259	304	27	23	66	30	5.4
16	1340	80	292	331	32	28	65	28	5.0
17	1030	63	175	296	22	18	73	26	5.2
18	828	28	64	257	25	17	74	20	4.0
19	717	24	47	233	22	14	65	19	3.3
20	628	31	52	218	16	9.4	62	19	3.2
21	528	34	48	204	13	7.0	92	28	7.2
22	476	21	27	188	14	6.9	111	27	8.0
23	433	25	29	180	15	7.4	104	88	25
24	406	19	21	172	13	6.1	277	110	85
25	385	13	14	165	11	5.0	254	53	39
26	360	18	18	173	9	4.4	239	42	28
27	337	12	11	171	7	3.5	786	164	419
28	313	13	11	159	8	3.4	1510	204	850
29	294	16	13	146	11	4.3	912	93	236
30	305	26	22	135	16	5.8	799	80	173
31	---	---	---	126	24	8.0	---	---	---
TOTAL	30904	---	12172	10104	---	782.2	6774	---	2072.7
JULY			AUGUST			SEPTEMBER			
1	545	69	103	53	51	7.3	56	33	5.0
2	394	64	69	50	47	6.4	59	32	5.1
3	553	94	153	55	44	6.6	55	27	4.0
4	675	95	174	52	41	5.8	66	23	4.1
5	453	79	96	60	41	6.5	64	20	3.4
6	306	52	44	53	47	6.8	55	18	2.6
7	223	55	33	44	55	6.5	45	19	2.3
8	180	52	25	40	64	6.9	40	24	2.6
9	223	77	47	36	75	7.4	38	32	3.2
10	181	64	32	34	81	7.5	37	40	4.0
11	164	46	20	35	67	6.4	38	31	3.3
12	137	39	15	35	60	5.7	34	21	2.0
13	122	42	14	34	58	5.4	30	17	1.4
14	138	43	16	31	56	4.7	29	15	1.2
15	127	80	27	31	54	4.5	29	20	1.5
16	109	75	22	41	52	5.7	25	16	1.1
17	98	67	18	48	50	6.5	28	14	1.1
18	89	60	15	45	49	5.9	26	13	.90
19	84	56	13	40	47	5.0	26	12	.82
20	75	61	12	36	45	4.4	22	12	.69
21	70	61	12	58	44	6.8	21	16	.92
22	67	44	8.1	47	41	5.1	22	22	1.3
23	66	56	10	40	29	3.1	20	25	1.4
24	64	48	8.3	55	29	4.3	21	16	.90
25	64	34	6.0	64	32	5.5	24	12	.81
26	58	25	3.9	41	25	2.8	27	11	.78
27	52	29	4.0	35	24	2.3	24	10	.63
28	53	26	3.7	37	27	2.7	23	10	.60
29	50	54	7.3	114	79	26	25	9	.62
30	59	56	8.9	78	45	9.5	25	9	.61
31	62	54	9.1	59	35	5.6	---	---	---
TOTAL	5541	---	1029.3	1481	---	195.6	1034	---	58.88
YEAR	173677		50194.77						

SCIOTO RIVER BASIN

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03230900 DEER CREEK NEAR PANCOASTBURG, OH

LOCATION.--Lat 39°37'14", long 83°12'47", Pickaway County, Hydrologic Unit 05060002, on left bank 200 ft down-stream from bridge on Crownover Mill Road, 1,200 ft downstream from Deer Creek Dam, and 2.8 mi east of Pancoastburg.

DRAINAGE AREA.--277 mi².

PERIOD OF RECORD.--Water years 1964-66 (Occasional low-flow measurements and annual maximums), July 1966 to current year.

REVISED RECORDS.--WRD Ohio 1972: 1971.

GAGE.--Water-stage recorder. Datum of gage is 768.00 ft above sea level, U.S. Army Corps of Engineers bench mark.

Oct. 23, 1963, to June 30, 1966, crest-stage gage at site 200 ft upstream at datum 8.16 ft lower. July 1, 1966 to Sept. 30, 1983 at datum 68.00 ft lower.

REMARKS.--No estimated daily discharges. Records good. Flow completely regulated by Deer Creek Lake (capacity 26,440 acre-ft) since April 1, 1968. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,500 ft³/s (estimated) Mar. 10, 1964, gage height, 12.93 ft, present datum.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	112	505	63	673	296	10	120	63	116	12	52
2	42	112	256	63	1580	241	10	412	63	117	12	25
3	43	124	211	95	1860	211	11	614	63	149	12	11
4	95	153	186	138	1790	197	11	469	62	224	14	11
5	139	165	566	152	1660	168	11	298	60	213	27	11
6	138	165	1100	141	1690	168	11	174	60	172	31	11
7	137	164	972	107	1810	237	11	128	58	102	31	11
8	137	163	535	88	1580	273	12	338	58	68	31	10
9	137	163	359	88	1250	272	14	546	34	69	18	9.5
10	137	162	242	88	540	343	15	429	24	69	12	9.5
11	137	162	189	106	171	327	13	277	23	69	12	9.5
12	137	160	189	137	174	271	507	196	23	46	12	9.5
13	137	161	187	130	172	274	545	160	17	35	12	9.5
14	136	161	186	113	171	455	1300	142	12	48	12	9.5
15	135	232	167	96	308	946	1320	142	12	138	12	9.9
16	135	267	139	97	461	801	1350	249	12	167	12	10
17	135	247	92	104	454	418	1450	300	11	165	12	10
18	135	262	69	126	328	329	1270	219	11	112	12	10
19	135	429	69	148	267	308	910	131	11	48	12	10
20	250	450	124	147	372	306	637	91	11	15	12	10
21	242	446	211	104	447	243	507	92	20	12	12	10
22	168	440	198	75	912	213	320	93	24	12	12	10
23	168	436	147	75	796	211	214	94	30	12	12	10
24	167	398	147	95	1050	210	213	96	79	11	12	10
25	167	342	146	305	878	152	182	97	100	20	12	11
26	166	339	148	954	503	112	150	141	101	37	12	10
27	166	339	99	844	500	112	119	166	101	29	12	10
28	129	699	71	12	389	124	120	124	218	16	13	10
29	113	881	71	8.5	---	9.5	121	99	190	12	40	10
30	114	787	68	9.4	---	9.5	121	78	132	12	52	10
31	112	---	63	9.6	---	9.6	---	63	---	12	52	---
TOTAL	4216	9121	7712	4718.5	22786	8246.6	11485	6578	1683	2327	561	359.9
MEAN	136	304	249	152	814	266	383	212	56.1	75.1	18.1	12.0
MAX	250	881	1100	954	1860	946	1450	614	218	224	52	52
MIN	27	112	63	8.5	171	9.5	10	63	11	11	12	9.5

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1994, BY WATER YEAR (WY)

MEAN	135	288	363	310	425	433	276	278	263	159	101	79.4
MAX	538	1152	1108	903	1133	1262	764	866	1183	713	754	856
(WY)	1980	1973	1974	1991	1982	1979	1973	1983	1968	1990	1980	1979
MIN	12.3	37.7	27.0	20.4	37.4	59.1	9.83	7.75	7.69	9.98	11.8	6.31
(WY)	1969	1978	1988	1977	1992	1983	1971	1976	1976	1988	1988	1968

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1968 - 1994

ANNUAL TOTAL	103663.0	79794.0	258
ANNUAL MEAN	284	219	453
HIGHEST ANNUAL MEAN			102
LOWEST ANNUAL MEAN			1973
HIGHEST DAILY MEAN	2310	1860	2930
LOWEST DAILY MEAN	9.1	8.5	.00
ANNUAL SEVEN-DAY MINIMUM	9.2	9.6	2.4
INSTANTANEOUS PEAK FLOW		2040	3000
INSTANTANEOUS PEAK STAGE		5.90	7.06
INSTANTANEOUS LOW FLOW		8.0	
10 PERCENT EXCEEDS	767	507	690
50 PERCENT EXCEEDS	150	124	111
90 PERCENT EXCEEDS	15	11	13

SCIOTO RIVER BASIN

03231500 SCIOTO RIVER AT CHILLICOTHE, OH

LOCATION.--Lat 39°20'29", long 82°58'16", Ross County, Hydrologic Unit 05060002, on right bank at north end of Chillicothe, 1,400 ft downstream from Bridge Street bridge, 7.4 mi upstream from Paint Creek, and 15.4 mi downstream from Deer Creek.

DRAINAGE AREA.--3,849 mi².

PERIOD OF RECORD.--December 1913 to September 1914 (gage heights and discharge measurements only). October 1920 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected in this vicinity since 1907 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 803: 1929(M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 594.05 ft above sea level. Prior to Sept. 30, 1914, nonrecording gage at site 1,300 ft upstream of 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.--Estimated daily discharges: Dec. 24 to Jan. 7, 14-28. Records good, except for periods of estimated record, which are fair. Flow regulated by 6 reservoirs 36 mi to 91 mi upstream from station. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913 reached a stage of 39.8 ft, discharge, 260,000 ft³/s (estimated by Franklin County Conservancy District).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	588	853	6530	840	14900	3890	2880	2780	1060	5360	1320	1310
2	544	931	5780	800	11100	3360	2240	3510	1060	5040	1170	1360
3	572	840	4150	760	13700	3260	1980	3110	958	7390	934	916
4	563	867	3920	730	12300	3100	2420	3080	828	6840	961	729
5	595	918	9120	710	10800	3370	2780	2900	810	7620	993	664
6	634	891	16400	1100	9740	3250	2650	2300	761	7900	1320	622
7	620	878	15800	1600	9160	2800	5300	2520	768	5630	949	587
8	609	851	13300	2010	7690	3040	9860	4100	764	3420	756	541
9	627	1100	11400	1850	5470	3300	8460	3550	729	2650	695	484
10	646	773	7030	1560	3830	5020	13100	2970	707	5700	660	456
11	638	720	5100	1440	2570	6340	22900	2520	702	5110	650	569
12	602	820	3760	1700	2390	5970	23300	2430	670	4640	628	596
13	596	872	3090	2110	2280	5790	20500	2130	630	3030	633	463
14	593	2950	2850	1700	2050	7090	20700	2070	602	2430	622	423
15	588	5090	2710	1500	2950	9830	18800	2080	603	2580	1430	415
16	619	7540	4570	1400	3640	10900	15500	2780	766	2010	1560	426
17	871	9600	3900	1200	3690	8990	13500	3000	1070	1540	915	448
18	1180	14900	2250	1100	4020	6710	10200	2260	1220	1300	794	482
19	983	15800	1730	1050	5070	4660	7720	1900	911	1170	679	528
20	1150	12500	1820	1000	6870	4350	5750	1530	734	1030	599	453
21	1500	9310	2200	940	9450	4070	4320	1450	898	964	641	402
22	2090	7860	2880	880	11300	4510	3420	1330	1230	1050	1670	388
23	1190	7270	2310	860	12600	4340	3130	1240	1740	1080	971	388
24	922	5940	1900	1600	15500	3610	2870	1440	2360	909	767	369
25	851	4810	1600	2200	15500	3330	2870	1230	2510	1110	744	437
26	813	3160	1300	3500	10800	2910	2710	1210	2420	1470	759	620
27	769	3050	1200	6400	6930	2970	2120	1590	5300	1170	664	713
28	726	6860	1100	12000	4910	4230	2110	1400	7520	842	611	502
29	704	9840	1000	27800	---	4620	2000	1190	6920	729	762	430
30	751	7240	940	35200	---	4060	2230	1140	7060	2670	2150	426
31	735	---	880	30500	---	3390	---	1070	---	2210	1330	---
TOTAL	24869	145034	142520	148040	221210	147060	238320	67810	54311	96594	29337	17147
MEAN	802	4834	4597	4775	7900	4744	7944	2187	1810	3116	946	572
MAX	2090	15800	16400	35200	15500	10900	23300	4100	7520	7900	2150	1360
MIN	544	720	880	710	2050	2800	1980	1070	602	729	599	369

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1994, BY WATER YEAR (WY)

	MEAN	961	2055	3547	5230	5857	7179	6074	3945	3044	2099	1346	989
MAX	8068	12130	14120	30110	13700	19450	14640	12650	10750	9507	8263	10180	
(WY)	1927	1973	1991	1937	1951	1963	1957	1933	1947	1992	1980	1979	
MIN	192	210	222	312	386	1041	1136	440	378	303	214	207	
(WY)	1954	1935	1935	1931	1934	1931	1941	1934	1925	1930	1930	1953	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1921 - 1994

ANNUAL TOTAL	1685914	1332252	
ANNUAL MEAN	4619	3650	3515
HIGHEST ANNUAL MEAN			6217
LOWEST ANNUAL MEAN			883
HIGHEST DAILY MEAN	24900	Jul 5	127000
LOWEST DAILY MEAN	544	Oct 2	166
ANNUAL SEVEN-DAY MINIMUM	580	Sep 19	174
INSTANTANEOUS PEAK FLOW			144000
INSTANTANEOUS PEAK STAGE		15.04	32.50
INSTANTANEOUS LOW FLOW		357	
10 PERCENT EXCEEDS	11600	9510	9060
50 PERCENT EXCEEDS	2650	1900	1460
90 PERCENT EXCEEDS	643	616	362

SCIOTO RIVER BASIN

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03231500 SCIOTO RIVER AT CHILLICOTHE, OH--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 one-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, 1,210 micromhos Jan. 13, 1976; minimum, 150 micromhos June 29, 1972.

pH: Maximum, 9.3 units Aug. 24-26, 1981, May 1, 1988; 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 1993; minimum, 0.0 mg/L April 27, Aug. 12, Sept. 22, 1966.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,040 microsiemens Jan. 17; minimum, 275 micromhos Jan. 30,31.

pH: Maximum recorded, 8.8 units Jul. 19,20; minimum recorded, 7.4 units Jun. 13.

WATER TEMPERATURES: Maximum, 28.5°C Jun. 18,20; minimum, 0.0°C on several days during winter.

DISSOLVED OXYGEN: Maximum, 18.4 mg/L Jun. 14; minimum, 4.4 mg/L Jun. 22.

SCIOTO RIVER BASIN

03231500 SCIOTO RIVER AT CHILLICOTHE, OH--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	813	779	795	---	---	---	---	---	---	836	794	816
2	---	---	---	---	---	---	---	---	---	839	803	823
3	---	---	---	---	---	---	---	---	---	807	787	797
4	---	---	---	---	---	---	---	---	---	796	777	783
5	770	764	767	---	---	---	---	---	---	789	780	785
6	771	748	761	---	---	---	---	---	---	797	775	780
7	---	---	---	---	---	---	---	---	---	803	793	796
8	---	---	---	---	---	---	---	---	---	804	768	784
9	---	---	---	---	---	---	---	---	---	862	783	807
10	---	---	---	---	---	---	---	---	---	995	862	932
11	---	---	---	---	---	---	---	---	---	998	945	973
12	---	---	---	---	---	---	---	---	---	945	919	927
13	---	---	---	---	---	---	---	---	---	920	861	894
14	---	---	---	---	---	---	---	---	---	861	835	843
15	---	---	---	---	---	---	---	---	---	945	838	881
16	---	---	---	---	---	---	617	612	613	1020	945	986
17	---	---	---	---	---	---	643	610	623	1040	1020	1030
18	---	---	---	---	---	---	653	643	647	1020	942	966
19	---	---	---	---	---	---	651	626	634	963	934	948
20	---	---	---	---	---	---	683	638	661	981	963	975
21	---	---	---	---	---	---	714	683	702	976	954	971
22	---	---	---	---	---	---	691	642	662	954	861	898
23	---	---	---	---	---	---	652	620	634	901	860	873
24	---	---	---	---	---	---	686	652	673	896	855	878
25	---	---	---	---	---	---	714	686	696	855	686	783
26	---	---	---	---	---	---	728	714	721	749	550	647
27	---	---	---	---	---	---	723	692	702	757	520	662
28	---	---	---	---	---	---	775	700	726	520	353	393
29	---	---	---	---	---	---	818	775	806	364	340	356
30	---	---	---	---	---	---	792	755	765	340	275	301
31	---	---	---	---	---	---	794	761	778	316	275	291
MONTH	813	748	774	---	---	---	818	610	690	1040	275	793

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	356	316	338	588	565	577	678	659	672	684	657	672
2	374	340	364	619	588	606	692	678	687	682	659	672
3	406	366	380	654	619	642	701	679	687	659	613	634
4	373	366	370	678	654	664	717	694	706	642	611	622
5	376	371	373	702	677	690	729	688	713	665	642	659
6	379	370	376	677	665	667	688	662	671	665	655	659
7	382	367	374	---	---	---	675	640	658	673	620	662
8	394	381	385	---	---	---	640	575	595	641	551	585
9	458	365	408	---	---	---	623	594	608	652	626	634
10	511	458	485	---	---	---	627	334	508	626	618	621
11	665	511	587	---	---	---	415	332	382	663	626	647
12	712	665	692	---	---	---	448	402	415	693	663	678
13	752	712	724	---	---	---	483	399	444	693	681	687
14	767	744	755	---	---	---	424	401	419	722	693	706
15	768	655	713	---	---	---	468	424	449	726	659	709
16	778	741	764	---	---	---	471	465	469	724	674	705
17	785	747	758	---	---	---	469	460	463	709	621	640
18	790	727	760	---	---	---	489	469	480	641	618	627
19	749	635	692	---	---	---	507	489	497	678	641	661
20	637	593	617	---	---	---	538	507	525	689	678	685
21	603	577	587	---	---	---	566	538	552	701	689	695
22	581	508	545	---	---	---	617	566	593	723	699	713
23	508	435	460	---	---	---	649	615	633	738	723	732
24	473	440	464	---	---	---	642	614	630	741	726	732
25	463	449	454	---	---	---	649	629	643	757	740	751
26	482	444	460	---	---	---	646	624	634	754	710	733
27	535	482	511	---	---	---	643	617	627	740	715	727
28	565	535	546	645	611	633	680	643	661	754	740	747
29	---	---	---	630	612	624	694	674	683	754	707	734
30	---	---	---	647	630	640	675	634	670	724	707	715
31	---	---	---	659	639	647	---	---	---	735	707	724
MONTH	790	316	534	702	565	639	729	332	579	757	551	683

03231500 SCIOTO RIVER AT CHILLICOTHE, OH--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	759	715	738	587	556	573	---	---	---	576	527	540
2	737	718	730	581	503	561	---	---	---	678	576	632
3	736	700	723	558	486	523	655	615	629	700	614	663
4	729	713	720	535	467	495	672	624	656	636	615	626
5	726	700	715	542	476	515	697	648	678	693	630	664
6	715	691	705	476	429	447	716	671	698	744	693	721
7	745	705	720	462	441	452	715	678	696	790	744	769
8	760	745	754	482	451	471	696	651	676	818	772	793
9	765	756	762	538	482	516	666	650	658	815	774	793
10	769	744	759	543	384	459	694	664	680	813	783	798
11	755	731	744	447	391	430	721	687	710	811	768	792
12	745	719	733	448	412	432	740	700	722	816	763	789
13	741	722	730	501	420	464	722	680	705	816	771	794
14	755	724	740	545	501	522	740	681	710	818	772	797
15	782	740	756	596	522	556	780	740	768	789	727	760
16	800	782	792	542	503	524	798	630	745	751	712	732
17	822	786	806	568	519	552	630	506	550	756	700	728
18	826	799	816	596	555	578	583	524	564	779	756	767
19	811	735	775	615	574	595	638	583	608	831	774	809
20	735	706	719	631	593	615	662	613	648	855	818	839
21	---	---	---	659	613	641	681	656	670	894	846	873
22	---	---	---	684	653	674	739	677	714	907	873	887
23	---	---	---	683	643	653	737	626	697	899	857	881
24	---	---	---	687	662	677	626	549	595	857	821	844
25	---	---	---	718	657	692	581	552	567	839	817	829
26	---	---	---	743	564	675	636	569	610	846	821	834
27	---	---	---	640	556	602	680	636	664	856	834	850
28	---	---	---	666	640	657	690	661	678	864	830	850
29	616	---	---	694	659	678	708	661	686	835	773	811
30	---	564	596	---	---	---	731	677	710	802	766	783
31	---	---	---	---	---	---	677	529	580	---	---	---
MONTH	826	564	740	743	384	560	798	506	665	907	527	775
YEAR	1040	275	667									

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.2	8.0	8.1	---	---	---	---	---	---	8.1	8.1	8.1
2	---	---	---	---	---	---	---	---	---	8.1	8.1	8.1
3	---	---	---	---	---	---	---	---	---	8.1	8.1	8.1
4	---	---	---	---	---	---	---	---	---	8.1	8.1	8.1
5	8.3	8.1	8.2	---	---	---	---	---	---	8.1	8.1	8.1
6	8.3	8.2	8.2	---	---	---	---	---	---	8.2	8.1	8.2
7	---	---	---	---	---	---	---	---	---	8.1	8.1	8.1
8	---	---	---	---	---	---	---	---	---	8.2	8.1	8.2
9	---	---	---	---	---	---	---	---	---	8.2	8.1	8.2
10	---	---	---	---	---	---	---	---	---	8.1	8.1	8.1
11	---	---	---	---	---	---	---	---	---	8.1	8.1	8.1
12	---	---	---	---	---	---	---	---	---	8.1	8.1	8.1
13	---	---	---	---	---	---	---	---	---	8.1	8.0	8.1
14	---	---	---	---	---	---	---	---	---	8.1	8.0	8.1
15	---	---	---	---	---	---	---	---	---	8.2	8.1	8.2
16	---	---	---	---	---	---	8.0	8.0	8.0	8.2	8.1	8.2
17	---	---	---	---	---	---	8.0	8.0	8.0	8.1	8.1	8.1
18	---	---	---	---	---	---	8.0	8.0	8.0	8.1	8.1	8.1
19	---	---	---	---	---	---	8.0	8.0	8.0	8.1	8.1	8.1
20	---	---	---	---	---	---	8.0	8.0	8.0	8.1	8.0	8.0
21	---	---	---	---	---	---	8.1	8.0	8.1	8.0	8.0	8.0
22	---	---	---	---	---	---	8.1	8.1	8.1	8.0	7.9	8.0
23	---	---	---	---	---	---	8.1	8.1	8.1	7.9	7.9	7.9
24	---	---	---	---	---	---	8.1	8.1	8.1	7.9	7.9	7.9
25	---	---	---	---	---	---	8.1	8.1	8.1	8.0	7.9	8.0
26	---	---	---	---	---	---	8.2	8.1	8.2	8.0	7.8	7.9
27	---	---	---	---	---	---	8.1	8.1	8.1	8.0	7.9	7.9
28	---	---	---	---	---	---	8.2	8.1	8.1	7.9	7.9	7.9
29	---	---	---	---	---	---	8.2	8.1	8.1	7.9	7.8	7.8
30	---	---	---	---	---	---	8.2	8.1	8.1	7.8	7.8	7.8
31	---	---	---	---	---	---	8.1	8.1	8.1	7.9	7.8	7.8
MONTH	8.3	8.0	8.2	---	---	---	8.2	8.0	8.1	8.2	7.8	8.0

SCIOTO RIVER BASIN

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03231500 SCIOTO RIVER AT CHILLICOTHE, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	16.0	14.0	15.0	---	---	---	---	---	---	1.5	.5	1.0
2	---	---	---	---	---	---	---	---	---	2.5	1.5	2.0
3	---	---	---	---	---	---	---	---	---	3.0	2.5	2.5
4	---	---	---	---	---	---	---	---	---	2.5	1.5	2.0
5	16.5	15.0	15.5	---	---	---	---	---	---	2.0	1.5	1.5
6	16.5	14.5	15.5	---	---	---	---	---	---	2.5	1.5	2.0
7	---	---	---	---	---	---	---	---	---	2.5	2.5	2.5
8	---	---	---	---	---	---	---	---	---	2.5	1.0	1.5
9	---	---	---	---	---	---	---	---	---	1.0	.0	.5
10	---	---	---	---	---	---	---	---	---	.5	.0	.5
11	---	---	---	---	---	---	---	---	---	2.0	.5	1.0
12	---	---	---	---	---	---	---	---	---	3.0	2.0	2.5
13	---	---	---	---	---	---	---	---	---	3.5	3.0	3.0
14	---	---	---	---	---	---	---	---	---	3.5	1.0	2.5
15	---	---	---	---	---	---	---	---	---	1.0	.0	.0
16	---	---	---	---	---	---	6.0	6.0	6.0	.0	.0	.0
17	---	---	---	---	---	---	6.0	5.5	5.5	.0	.0	.0
18	---	---	---	---	---	---	6.5	6.0	6.0	.0	.0	.0
19	---	---	---	---	---	---	6.0	6.0	6.0	.0	.0	.0
20	---	---	---	---	---	---	6.0	5.5	6.0	.0	.0	.0
21	---	---	---	---	---	---	5.5	5.0	5.5	.0	.0	.0
22	---	---	---	---	---	---	5.0	4.5	5.0	.0	.0	.0
23	---	---	---	---	---	---	4.5	4.0	4.5	.5	.0	.0
24	---	---	---	---	---	---	4.5	3.5	4.0	.5	.5	.5
25	---	---	---	---	---	---	3.5	2.5	3.5	.5	.5	.5
26	---	---	---	---	---	---	2.5	1.5	1.5	2.0	.5	1.0
27	---	---	---	---	---	---	1.5	1.0	1.5	2.0	1.0	1.5
28	---	---	---	---	---	---	1.0	.5	1.0	2.0	1.5	2.0
29	---	---	---	---	---	---	1.0	.0	.5	2.0	1.0	1.5
30	---	---	---	---	---	---	.5	.0	.0	1.0	.5	1.0
31	---	---	---	---	---	---	.5	.0	.5	1.0	1.0	1.0
MONTH	16.5	14.0	15.5	---	---	---	6.5	.0	3.5	3.5	.0	1.0

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	1.0	.5	.5	3.5	3.0	3.5	11.0	9.0	10.0	17.0	14.5	15.5
2	.5	.0	.5	4.0	3.5	4.0	12.5	10.0	11.5	15.0	13.5	14.5
3	1.0	.5	.5	5.0	3.5	4.0	12.0	11.0	11.5	14.5	13.5	14.0
4	1.5	.5	1.0	6.5	5.0	6.0	12.0	10.0	11.0	13.5	13.0	13.5
5	2.0	1.5	1.5	7.0	6.0	6.5	12.0	10.5	11.5	15.5	13.0	14.0
6	2.0	1.5	2.0	7.5	6.5	7.0	11.5	10.5	11.0	15.0	14.5	15.0
7	2.0	1.5	2.0	---	---	---	10.5	9.5	10.0	15.0	14.5	14.5
8	2.0	1.5	1.5	---	---	---	9.5	8.5	9.0	15.0	13.5	14.0
9	1.5	1.0	1.5	---	---	---	10.0	9.0	9.5	16.0	14.5	15.0
10	1.0	.5	1.0	---	---	---	11.0	10.0	10.5	16.5	15.0	15.5
11	2.0	1.0	1.5	---	---	---	11.0	9.0	10.0	17.0	15.0	16.0
12	3.0	2.0	2.5	---	---	---	10.0	8.5	9.0	18.0	16.0	17.0
13	3.0	3.0	3.0	---	---	---	11.5	10.0	11.0	18.0	16.0	17.0
14	4.0	2.5	3.5	---	---	---	12.5	11.0	11.5	18.0	16.0	17.0
15	4.5	3.5	4.0	---	---	---	12.0	12.0	12.0	18.5	17.5	18.0
16	5.0	4.0	4.5	---	---	---	12.0	12.0	12.0	19.0	17.5	18.5
17	4.5	3.5	4.0	---	---	---	12.5	11.5	12.0	18.5	17.0	17.5
18	5.5	4.0	4.5	---	---	---	13.0	12.0	12.5	17.5	16.5	17.0
19	6.0	5.0	5.5	---	---	---	14.5	13.0	13.5	17.0	16.0	16.5
20	6.0	5.5	6.0	---	---	---	15.0	13.5	14.0	18.5	15.5	17.0
21	5.5	5.5	5.5	---	---	---	14.5	14.0	14.5	19.5	16.5	18.0
22	5.5	4.5	5.0	---	---	---	15.0	13.0	14.0	20.5	17.5	19.0
23	5.0	4.0	4.5	---	---	---	15.5	13.0	14.0	22.0	19.5	20.5
24	5.0	3.5	4.0	---	---	---	16.0	13.5	15.0	23.0	20.5	22.0
25	3.5	2.5	3.0	---	---	---	18.0	15.0	16.5	23.0	21.0	22.0
26	2.5	1.5	2.0	---	---	---	19.5	17.0	18.0	22.0	20.5	21.0
27	2.5	1.0	2.0	---	---	---	20.0	18.5	19.0	21.0	19.0	20.0
28	3.0	2.0	2.5	9.5	9.0	9.0	20.0	18.5	19.5	21.0	18.5	19.5
29	---	---	---	9.0	8.5	9.0	19.5	18.0	18.5	21.0	18.5	20.0
30	---	---	---	9.5	8.0	9.0	18.0	17.0	17.0	22.0	19.5	20.5
31	---	---	---	10.0	8.5	9.5	---	---	---	23.0	20.5	22.0
MONTH	6.0	.0	3.0	10.0	3.0	6.5	20.0	8.5	13.0	23.0	13.0	17.5

SCIOTO RIVER BASIN

03231500 SCIOTO RIVER AT CHILlicothe, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	24.0	22.0	23.0	23.5	21.5	22.5	---	---	---	22.5	21.5	21.5
2	23.0	21.5	22.5	23.5	22.0	23.0	---	---	---	21.5	20.5	21.0
3	22.5	20.0	21.5	23.0	22.0	22.5	25.0	23.5	24.0	21.5	20.0	20.5
4	23.0	20.5	22.0	24.0	22.0	23.0	25.5	24.0	24.5	20.5	20.0	20.0
5	23.7	21.1	22.4	25.0	23.0	24.0	25.0	23.0	24.0	20.5	19.5	20.0
6	24.6	22.1	23.2	24.5	24.0	24.5	23.5	21.5	22.5	20.0	19.5	19.5
7	24.5	23.3	23.6	25.5	24.0	24.5	23.5	22.0	22.5	21.0	18.5	19.5
8	23.5	22.0	22.5	26.0	25.0	25.5	24.0	22.0	23.0	21.5	19.0	20.0
9	23.5	21.0	22.0	26.5	25.0	25.5	24.0	22.5	23.5	22.0	19.5	20.5
10	24.0	21.5	22.5	25.5	24.5	25.0	23.5	22.0	22.5	22.0	20.5	21.0
11	24.5	22.0	23.0	25.0	23.5	24.0	23.0	22.5	22.5	22.5	20.5	21.0
12	25.0	22.5	23.5	25.5	23.5	24.5	24.5	22.5	23.5	22.0	20.5	21.0
13	26.0	23.5	24.5	25.0	24.0	24.5	26.0	23.5	24.5	22.5	20.0	21.0
14	27.0	24.5	26.0	25.5	24.0	24.5	25.0	23.5	24.5	23.5	21.0	22.0
15	26.5	25.5	26.0	25.5	24.5	25.0	24.0	22.0	23.0	24.5	22.0	23.0
16	26.5	25.5	26.0	25.5	23.5	24.5	24.0	22.5	23.5	24.0	22.5	23.0
17	27.5	25.5	26.5	25.5	24.0	24.5	24.0	23.0	23.5	23.0	22.0	23.0
18	28.5	26.5	27.5	26.0	24.5	25.0	24.1	22.9	23.5	22.5	21.0	21.5
19	28.0	26.5	27.5	26.5	24.5	25.5	25.2	23.3	24.1	22.0	20.5	21.0
20	28.5	26.5	27.5	27.0	25.5	26.5	25.1	23.8	24.3	22.0	20.5	21.0
21	28.0	26.5	27.0	26.5	25.5	26.0	24.0	23.5	23.5	22.0	20.0	21.0
22	28.0	26.0	27.0	25.5	24.5	25.0	24.5	23.0	23.5	21.5	19.5	20.5
23	27.5	26.5	27.0	26.0	24.0	25.0	24.0	22.5	23.5	21.5	20.0	20.5
24	---	---	---	26.5	24.5	25.5	24.0	22.5	23.0	21.5	20.5	21.0
25	---	---	---	26.5	25.0	25.5	25.0	23.0	24.0	21.5	20.0	20.5
26	---	---	---	25.5	24.0	24.5	25.0	24.0	24.5	20.0	19.0	19.5
27	21.5	21.0	21.5	24.5	23.0	23.5	26.0	24.0	25.0	19.5	19.0	19.5
28	22.0	21.0	21.5	23.5	22.0	23.0	26.0	24.5	25.0	19.0	18.0	18.5
29	23.0	21.5	22.0	23.0	22.5	23.0	25.5	24.0	24.5	18.5	17.0	18.0
30	23.0	22.0	22.5	---	---	---	24.5	23.5	24.0	18.5	17.0	17.5
31	---	---	---	---	---	---	24.0	22.5	23.0	---	---	---
MONTH	28.5	20.0	24.0	27.0	21.5	24.5	26.0	21.5	23.5	24.5	17.0	20.5
YEAR	28.5	.0	14.5									

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	10.5	8.6	9.4	---	---	---	---	---	---	12.5	12.2	12.4
2	---	---	---	---	---	---	---	---	---	12.2	12.0	12.2
3	---	---	---	---	---	---	---	---	---	12.1	11.8	12.0
4	9.6	7.8	9.0	---	---	---	---	---	---	12.1	11.8	11.9
5	11.0	8.1	9.6	---	---	---	---	---	---	12.4	12.1	12.3
6	10.9	9.4	10.2	---	---	---	---	---	---	12.4	12.2	12.4
7	---	---	---	---	---	---	---	---	---	12.2	12.1	12.2
8	---	---	---	---	---	---	---	---	---	12.4	12.2	12.3
9	---	---	---	---	---	---	---	---	---	12.7	12.4	12.5
10	---	---	---	---	---	---	---	---	---	12.7	12.4	12.5
11	---	---	---	---	---	---	---	---	---	12.7	12.3	12.5
12	---	---	---	---	---	---	---	---	---	12.4	12.0	12.3
13	---	---	---	---	---	---	---	---	---	12.0	11.4	11.7
14	---	---	---	---	---	---	---	---	---	12.1	11.4	11.8
15	---	---	---	---	---	---	---	---	---	12.6	12.0	12.3
16	---	---	---	---	---	---	12.4	11.2	11.8	13.1	12.5	12.8
17	---	---	---	---	---	---	11.7	11.3	11.4	12.5	12.1	12.3
18	---	---	---	---	---	---	11.3	11.1	11.3	12.6	12.3	12.5
19	---	---	---	---	---	---	11.2	11.1	11.2	12.6	12.3	12.5
20	---	---	---	---	---	---	11.2	11.1	11.1	12.3	11.6	12.0
21	---	---	---	---	---	---	11.4	11.1	11.2	11.6	11.5	11.5
22	---	---	---	---	---	---	11.6	11.4	11.6	11.8	11.6	11.6
23	---	---	---	---	---	---	11.8	11.6	11.8	11.6	11.2	11.4
24	---	---	---	---	---	---	11.9	11.8	11.8	11.3	10.9	11.1
25	---	---	---	---	---	---	12.0	11.9	11.9	11.2	10.9	11.1
26	---	---	---	---	---	---	12.4	12.0	12.3	11.7	11.2	11.4
27	---	---	---	---	---	---	12.5	12.3	12.4	12.3	11.6	12.0
28	---	---	---	---	---	---	12.6	12.4	12.5	12.2	11.8	12.0
29	---	---	---	---	---	---	12.5	12.3	12.4	12.1	11.8	12.0
30	---	---	---	---	---	---	12.7	12.0	12.5	12.4	12.1	12.3
31	---	---	---	---	---	---	12.6	12.5	12.6	12.5	12.2	12.5
MONTH	11.0	7.8	9.5	---	---	---	12.7	11.1	11.9	13.1	10.9	12.1

SCIOTO RIVER BASIN

03232500 ROCKY FORK NEAR BARRETTS MILLS, OH

LOCATION.--Lat 39°13'06", long 83°23'08", Highland County, Hydrologic Unit 05060003, on left bank at downstream side of highway bridge, 1.1 mi north of Barretts Mills, 2 mi east of Rainsboro, 2.8 mi upstream from mouth, and 6 mi downstream from Rocky Fork Lake.

DRAINAGE AREA.--140 mi².

PERIOD OF RECORD.--October 1939 to current year.

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 770.8 ft above sea level, (levels by U.S. Army Corps of Engineers).

Prior to Feb. 15, 1940, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Oct. 25 to Dec. 8, 24 to Jan. 6, 10, 14-26, Feb. 1, 2, 27, 28, Apr. 11 to Jul. 28, Aug. 6-9, Sep. 28-30. 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 collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 15.56 ft Mar. 6, 1945.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	26	54	27	450	145	153	680	48	33	62	26
2	6.5	26	70	27	300	149	150	480	45	28	63	25
3	6.5	22	92	26	180	153	177	600	42	120	102	25
4	6.1	22	110	25	128	151	196	500	39	90	111	24
5	5.3	23	62	25	59	143	389	350	37	70	41	23
6	5.1	22	40	90	68	137	149	260	45	56	42	24
7	4.8	22	34	309	97	146	316	400	54	50	35	25
8	4.5	20	48	306	287	184	281	760	68	45	26	25
9	5.5	20	58	130	655	200	294	540	84	35	23	26
10	6.5	19	88	80	237	491	3710	370	110	31	24	25
11	5.7	20	140	82	134	634	1000	270	76	25	24	24
12	5.4	20	117	111	131	529	760	190	45	18	28	25
13	5.5	25	76	214	138	612	1200	140	31	25	28	25
14	5.9	36	24	140	139	607	1000	160	27	42	26	25
15	6.2	105	33	100	215	381	800	180	24	35	23	27
16	7.5	66	39	60	231	170	1100	210	27	32	25	25
17	12	159	48	40	118	146	1000	140	35	28	25	26
18	11	919	61	34	79	182	900	110	40	80	28	25
19	11	434	63	27	207	174	600	105	50	70	28	25
20	16	215	61	25	167	165	450	100	74	50	28	25
21	19	169	70	24	228	209	300	90	100	40	31	25
22	15	124	101	22	435	280	200	80	70	32	25	25
23	14	64	55	21	1030	224	160	70	56	28	25	24
24	16	60	43	20	375	139	140	60	32	25	26	25
25	16	57	40	60	151	135	130	61	26	22	27	30
26	18	53	37	260	117	130	160	71	22	140	27	27
27	17	48	35	946	130	289	200	98	35	100	28	25
28	19	45	32	3300	140	606	250	87	70	80	28	24
29	19	42	31	1830	---	517	350	70	50	45	33	23
30	20	45	30	589	---	289	450	60	40	70	26	22
31	27	---	29	113	---	154	---	52	---	69	28	---
TOTAL	343.1	2928	1821	9063	6626	8471	16965	7344	1502	1614	1096	750
MEAN	11.1	97.6	58.7	292	237	273	565	237	50.1	52.1	35.4	25.0
MAX	27	919	140	3300	1030	634	3710	760	110	140	111	30
MIN	4.5	19	24	20	59	130	130	52	22	18	23	22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1994, BY WATER YEAR (WY)

	MEAN	57.7	109	175	182	250	291	261	191	96.9	79.5	60.5	65.0
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	33.2	6.22	3.69	4.95	1.88	
(WY)	1965	1964	1954	1977	1954	1983	1971	1976	1988	1964	1986	1964	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1952 - 1994

ANNUAL TOTAL	41024.5	58523.1		
ANNUAL MEAN	112	160		
HIGHEST ANNUAL MEAN			152	
LOWEST ANNUAL MEAN			259	1979
HIGHEST DAILY MEAN	1590	Feb 22	3710	Apr 10
LOWEST DAILY MEAN	4.5	Oct 8	4.5	Oct 8
ANNUAL SEVEN-DAY MINIMUM	5.3	Oct 5	5.3	Oct 5
INSTANTANEOUS PEAK FLOW			7550	Apr 10
INSTANTANEOUS PEAK STAGE			10.84	Apr 10
INSTANTANEOUS LOW FLOW			4.5	Oct 8
10 PERCENT EXCEEDS	262		393	
50 PERCENT EXCEEDS	50		58	
90 PERCENT EXCEEDS	11		20	

SCIOTO RIVER BASIN

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03234000 PAINT CREEK NEAR BOURNEVILLE, OH

LOCATION.--Lat 39°15'49", long 83°10'01", Ross County, Hydrologic Unit 05060003, on upstream side of left abutment of highway bridge, 0.2 mi downstream from Sulfur Lick, 1.2 mi southwest of Bourneville, and 1.2 mi upstream from Upper Twin Creek.

DRAINAGE AREA.--807 mi².

PERIOD OF RECORD.--October 1921 to January 1937, January 1938 to current year. Monthly discharge only for some periods, published in WSP 1305. Published as "at Bainbridge" October 1921 to September 1923 and as "near Bainbridge" January 1938 to May 1939.

REVISED RECORDS.--WRD Ohio 1972: 1971.

GAGE.--Water-stage recorder. Datum of gage is 665.56 ft above sea level. See WSP 1725 for history of changes prior to May 3, 1939.

REMARKS.--Estimated daily discharges: Nov. 16, Dec. 1, 2, 7, 8, 24 to Jan. 6, 15-27, 31 to Feb. 8, Apr. 14-20. Records fair, except for periods of estimated record, which are poor. Flow regulated by Paint Creek Lake 17 mi upstream since 1971, capacity 145,000 acre-ft and Rocky Fork Lake 23 mi upstream since 1952, capacity, 34,100 acre-ft. Water-quality data collected at this site 1965 to 1977. Sediment data 1956 to 1962. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 56,900 ft³/s Mar. 10, 1964, gage height, 20.50 ft, from rating curve extended above 30,000 ft³/s on basis of contracted-opening measurement at gage height 20.08 ft; minimum daily, 5 ft³/s Oct. 29, 1965.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	115	1600	140	2000	1620	462	3350	298	179	189	619
2	49	77	2100	135	2800	1190	438	2560	284	178	179	639
3	50	68	2020	130	3800	890	475	3110	274	892	198	448
4	49	87	1030	125	3900	901	566	2810	268	675	265	313
5	46	101	2500	120	3500	925	628	1820	264	354	305	169
6	32	124	2380	350	3300	897	963	1090	257	349	220	104
7	27	124	2800	952	3200	889	1520	1720	287	353	343	90
8	24	124	3400	1240	2800	957	1650	3720	413	298	339	82
9	207	124	1230	1020	2510	987	1740	3660	437	277	300	79
10	371	124	932	954	2140	1550	9870	2570	530	218	163	76
11	159	125	881	750	1530	2090	5380	1460	485	190	155	72
12	46	126	799	579	1040	2280	4770	1120	208	121	146	71
13	43	155	618	837	1040	2430	7770	899	172	107	75	70
14	51	256	381	1040	1030	3100	6000	973	160	215	122	68
15	49	1010	510	580	1550	3980	4900	1140	152	196	114	61
16	53	1800	560	400	2560	3030	5800	1180	150	202	65	57
17	57	2720	443	300	2120	1510	5600	784	205	177	53	61
18	55	3630	412	210	1190	1270	5400	671	233	387	49	66
19	53	2200	416	190	1320	1160	5300	694	283	349	49	58
20	56	1760	411	180	1330	1010	5100	680	421	367	50	55
21	60	1640	424	165	1720	915	2220	670	492	358	76	53
22	54	1550	452	155	2230	877	1160	602	461	373	67	54
23	51	1430	483	150	4570	893	815	418	322	377	53	53
24	50	1400	350	400	4020	857	695	424	174	259	51	53
25	52	1370	250	940	3130	826	692	483	150	174	50	65
26	123	1240	210	1800	1850	808	751	544	136	654	48	71
27	126	1040	200	5400	1760	1050	708	536	275	536	48	59
28	200	1160	180	8290	1720	1740	759	466	356	532	49	56
29	215	1270	170	3480	---	1100	1210	381	258	294	77	55
30	221	1520	160	1670	---	821	2720	317	233	244	133	51
31	208	---	150	1200	---	503	---	307	---	243	303	---
TOTAL	2884	28470	28452	33882	65660	43056	86062	41159	8638	10128	4334	3828
MEAN	93.0	949	918	1093	2345	1389	2869	1328	288	327	140	128
MAX	371	3630	3400	8290	4570	3980	9870	3720	530	892	343	639
MIN	24	68	150	120	1030	503	438	307	136	107	48	51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1994, BY WATER YEAR (WY)

MEAN	334	742	1155	1131	1482	1709	1477	1142	667	428	296	273
MAX	1446	2628	3159	2744	2982	4070	3087	3808	1836	1490	1827	2838
(WY)	1991	1986	1991	1991	1990	1975	1989	1983	1981	1980	1980	1979
MIN	40.0	75.0	41.9	37.8	211	213	151	95.7	59.9	55.0	40.7	34.6
(WY)	1988	1992	1988	1977	1987	1983	1976	1976	1988	1988	1991	1983

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1971 - 1994
ANNUAL TOTAL	397284	356553	
ANNUAL MEAN	1088	977	900
HIGHEST ANNUAL MEAN			1373
LOWEST ANNUAL MEAN			325
HIGHEST DAILY MEAN	10100	9870	10100
LOWEST DAILY MEAN	24	24	24
ANNUAL SEVEN-DAY MINIMUM	40	40	25
INSTANTANEOUS PEAK FLOW		20300	20300
INSTANTANEOUS PEAK STAGE		13.69	16.08
INSTANTANEOUS LOW FLOW		24	
10 PERCENT EXCEEDS	2910	2720	2500
50 PERCENT EXCEEDS	448	416	390
90 PERCENT EXCEEDS	47	56	61

SCIOTO RIVER BASIN

03234300 PAINT CREEK AT CHILLICOTHE, OH

LOCATION.--Lat 39°19'14", long 82°58'42", Ross County, Hydrologic Unit 05060003, on left bank at downstream side of bridge on State Highway 772, 4.3 mi downstream from North Fork Paint Creek and 3.8 mi upstream from mouth.

DRAINAGE AREA.--1,136 mi².

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.--Estimated daily discharges: Dec. 24-Jan. 6, 15-27. Records good, except for estimated records 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	184	1810	250	1660	2310	960	5170	532	332	328	601
2	65	136	2400	240	4900	1880	864	3350	490	308	292	777
3	65	108	2190	230	6790	1500	892	3720	467	1110	295	537
4	65	103	1380	225	6830	1560	1200	3560	430	1330	333	427
5	65	110	3390	220	6700	1520	1040	2690	420	725	577	258
6	62	120	2460	400	6390	1410	1540	1760	421	544	371	161
7	53	135	3270	1250	6240	1360	2680	2860	413	582	408	120
8	49	137	3720	1780	6260	1420	2480	5670	564	493	437	126
9	47	137	1800	1350	4340	1490	2450	4600	561	463	425	102
10	263	137	1290	1160	2970	2970	13500	3670	680	421	271	92
11	327	135	1150	1110	2410	3330	15700	2290	686	371	212	102
12	91	134	1090	828	1610	3670	6920	1830	438	274	197	104
13	65	149	891	1200	1600	4270	10600	1490	297	213	169	100
14	63	308	519	1420	1570	4460	7720	1440	267	428	140	95
15	65	1310	530	900	2410	5010	6340	1850	257	414	167	91
16	70	2040	688	600	3320	4140	8130	2300	293	516	135	84
17	81	3030	537	450	3130	2450	7900	1460	292	356	105	74
18	78	4830	450	400	1950	2040	7610	1220	329	1410	98	75
19	76	2750	448	360	2050	1810	7530	1170	362	679	93	70
20	77	2050	448	340	2260	1590	7260	1120	473	591	93	68
21	99	1820	463	310	3080	1550	3560	1090	626	567	122	68
22	103	1690	470	300	3080	1450	1930	1060	661	589	129	68
23	98	1550	565	290	6630	1390	1470	801	557	639	99	67
24	89	1490	500	600	5650	1340	1290	745	599	465	88	65
25	84	1450	450	1400	4350	1240	1160	782	395	338	85	74
26	99	1410	400	3000	2820	1180	1240	853	324	1840	86	76
27	128	1670	360	5000	2480	1710	1200	858	507	827	86	96
28	156	2070	330	17200	2380	3210	1170	762	575	880	81	99
29	206	1610	300	8480	---	2320	1560	674	451	551	97	125
30	216	1700	280	3910	---	1670	3340	572	385	435	128	87
31	228	---	270	2200	---	1150	---	551	---	383	218	---
TOTAL	3298	34503	34849	57403	105860	68400	131236	61968	13752	19074	6365	4889
MEAN	106	1150	1124	1852	3781	2206	4375	1999	458	615	205	163
MAX	327	4830	3720	17200	6830	5010	15700	5670	686	1840	577	777
MIN	47	103	270	220	1570	1150	864	551	257	213	81	65

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1994, BY WATER YEAR (WY)

	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	393	946	1381	1505	2305	2096	2174	1725	777
MAX	2106	3368	5202	3514	3781	3346	4375	5293	2511
(WY)	1991	1986	1991	1991	1994	1991	1994	1990	1990
MIN	48.2	90.7	62.8	298	310	458	376	239	94.4
(WY)	1988	1988	1988	1988	1987	1987	1986	1988	1988

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1986 - 1994

ANNUAL TOTAL	453069	541597	1195
ANNUAL MEAN	1241	1484	1910
HIGHEST ANNUAL MEAN			483
LOWEST ANNUAL MEAN			1988
HIGHEST DAILY MEAN	10100	Mar 5	25300
LOWEST DAILY MEAN	47	Oct 9	43
ANNUAL SEVEN-DAY MINIMUM	58	Oct 3	44
INSTANTANEOUS PEAK FLOW			30100
INSTANTANEOUS PEAK STAGE		28200	May 29 1990
INSTANTANEOUS LOW FLOW		24.03	24.67
10 PERCENT EXCEEDS	3290	Apr 11	3350
50 PERCENT EXCEEDS	630	Oct 9	490
90 PERCENT EXCEEDS	67		72

SCIOTO RIVER BASIN

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03234300 PAINT CREEK AT CHILLCOTHE, OH--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 replaced digital recorder since March 19, 1991. Set for one-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, 31.5°C July 17, Aug. 18, 1988; minimum 0.0°C on many days during winters.

DISSOLVED OXYGEN: Maximum, 19.2 mg/L Feb. 11, 13, 1987; minimum recorded, 3.8 mg/L Aug. 16, 1986.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 672 microsiemens Aug. 25; minimum, 207 microsiemens Apr. 10.

pH: Maximum, 8.9 units May 24, 25; minimum 7.7 units Feb. 24 and Apr. 10-15.

WATER TEMPERATURE: Maximum, 30°C Jun. 20; minimum, 0.0°C on several days during winter.

DISSOLVED OXYGEN: Maximum, 14.5 mg/L Sep. 30; minimum, 4.5 mg/L Aug. 14.

SCIOTO RIVER BASIN

03234300 PAINT CREEK AT CHILLICOTHE, OH--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	544	534	539	463	447	455	482	434	447	602	593	597
2	546	536	543	473	463	470	467	455	462	594	585	589
3	551	541	547	488	473	481	471	466	468	598	585	591
4	548	534	542	495	488	493	478	426	471	592	576	583
5	547	536	541	497	488	494	452	341	381	591	579	587
6	547	534	541	492	482	488	441	359	402	596	581	589
7	547	532	540	483	475	480	461	441	457	582	480	529
8	547	535	541	478	466	473	462	453	459	500	465	483
9	544	498	538	474	458	468	476	462	469	532	498	515
10	557	495	530	473	459	466	488	476	482	578	532	563
11	496	467	478	469	458	465	500	488	496	588	576	583
12	486	470	478	467	455	461	502	494	496	585	555	576
13	502	486	494	466	439	457	517	499	511	555	512	533
14	521	502	513	503	456	478	543	516	532	526	490	501
15	537	521	530	503	417	444	543	533	538	551	509	525
16	544	505	531	458	418	444	570	541	562	620	551	603
17	530	510	527	484	322	430	569	564	567	621	603	615
18	540	528	535	379	305	329	566	557	562	630	606	620
19	538	531	536	420	379	403	557	554	556	665	630	656
20	537	524	530	431	412	422	557	545	554	658	614	634
21	578	529	547	420	409	416	577	539	556	614	595	606
22	579	547	560	409	399	405	577	567	572	629	594	609
23	551	543	547	416	403	408	573	565	567	618	580	608
24	551	537	546	432	416	426	569	545	559	580	528	569
25	541	523	534	455	432	438	589	562	580	528	313	439
26	525	498	518	475	455	466	584	567	576	424	293	315
27	512	488	503	469	404	451	595	577	583	477	359	435
28	488	470	482	430	406	415	594	585	588	393	217	265
29	472	456	464	435	405	421	634	594	607	337	232	282
30	466	453	458	434	418	427	623	604	610	388	337	364
31	454	444	448	---	---	---	621	602	612	394	370	382
MONTH	579	444	521	503	305	446	634	341	525	665	217	527

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	436	394	406	477	458	467	486	446	462	427	386	420
2	419	369	387	503	477	493	492	484	488	447	431	436
3	369	343	358	518	492	506	497	455	482	464	437	458
4	344	336	342	492	484	487	458	425	438	476	457	467
5	348	333	340	495	484	489	453	440	448	476	465	470
6	338	334	335	504	495	500	454	406	423	484	476	480
7	343	334	339	516	503	508	420	384	405	491	482	488
8	385	343	360	511	501	505	476	420	451	---	---	---
9	355	338	345	508	431	497	489	476	485	---	---	---
10	396	355	379	431	386	408	489	207	371	488	459	479
11	395	385	389	450	420	442	367	274	331	498	462	480
12	403	395	399	459	438	450	380	349	366	531	475	485
13	425	402	417	449	441	444	387	359	374	---	---	---
14	545	424	474	455	426	441	375	362	371	---	---	---
15	545	410	441	461	455	457	388	368	374	---	---	---
16	461	433	449	473	461	467	369	331	359	---	---	---
17	436	423	428	480	473	478	354	332	348	488	479	482
18	475	428	449	485	479	481	356	348	353	532	488	515
19	472	462	468	487	483	485	355	351	353	543	532	538
20	464	452	459	498	487	492	---	---	---	545	533	540
21	465	435	448	497	491	494	402	374	386	545	533	538
22	488	446	454	495	490	492	426	402	416	545	510	531
23	455	414	433	491	485	487	444	424	434	532	514	524
24	450	435	442	487	473	482	455	441	447	545	525	534
25	451	437	445	---	---	---	460	451	455	551	526	542
26	453	443	448	---	---	---	457	449	453	542	529	534
27	456	453	455	---	---	---	463	452	459	---	---	---
28	459	451	455	---	---	---	474	459	467	---	---	---
29	---	---	---	391	372	381	484	458	469	---	---	---
30	---	---	---	399	376	386	458	413	441	---	---	---
31	---	---	---	446	399	425	---	---	---	---	---	---
MONTH	545	333	412	518	372	468	497	207	418	551	386	497

03234300 PAINT CREEK AT CHILLICOTHE, OH--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	594	583	590	505	490	498	518	455	474
2	---	---	---	---	---	---	508	486	498	469	443	456
3	---	---	---	---	---	---	529	479	499	481	469	478
4	---	---	---	---	---	---	507	453	488	484	480	482
5	---	---	---	---	---	---	481	416	449	505	484	494
6	591	560	578	538	529	533	452	416	442	532	505	519
7	566	560	563	539	499	522	460	434	451	552	532	540
8	571	554	562	506	480	494	450	432	442	558	547	554
9	558	495	537	524	504	515	450	443	447	566	558	561
10	550	483	516	535	524	531	475	448	465	570	562	566
11	570	550	563	545	535	541	499	473	491	571	561	567
12	591	570	582	545	531	539	493	477	486	574	563	569
13	610	591	605	550	519	539	499	474	488	571	559	566
14	623	610	619	---	---	---	527	496	509	568	558	564
15	625	613	621	---	---	---	550	513	535	567	558	563
16	634	571	613	---	---	---	536	493	514	569	560	565
17	593	568	583	---	---	---	571	493	548	570	530	560
18	599	574	585	404	283	315	574	532	565	566	557	561
19	580	565	575	455	404	424	589	573	582	571	561	566
20	577	534	561	517	455	498	590	570	586	572	561	567
21	549	536	542	532	514	525	590	556	571	572	560	567
22	555	539	548	539	522	528	594	582	588	573	558	567
23	571	510	550	539	510	519	582	571	577	575	561	569
24	562	464	519	530	517	526	576	569	573	576	558	569
25	571	515	550	540	528	533	672	571	579	567	542	554
26	589	569	578	405	249	323	587	578	583	564	552	560
27	589	534	568	451	268	349	592	586	589	568	560	564
28	551	531	544	490	451	481	596	561	590	568	557	564
29	---	---	---	512	440	496	581	555	574	565	550	559
30	---	---	---	540	492	511	593	575	584	569	554	562
31	---	---	---	509	494	500	575	518	547	---	---	---
MONTH	634	464	568	594	249	493	672	416	527	576	443	547
YEAR	672	207	496									

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.6	8.4	8.5	8.7	8.3	8.5	8.4	8.0	8.2	8.2	8.2	8.2
2	8.5	8.3	8.4	8.7	8.4	8.6	8.0	8.0	8.0	8.2	8.2	8.2
3	8.5	8.3	8.4	8.6	8.4	8.5	8.0	8.0	8.0	8.3	8.2	8.2
4	8.5	8.4	8.4	8.6	8.4	8.5	8.0	8.0	8.0	8.3	8.2	8.3
5	8.5	8.3	8.4	8.6	8.3	8.5	8.0	7.9	8.0	8.3	8.2	8.3
6	8.5	8.4	8.4	8.6	8.4	8.5	8.2	7.9	8.0	8.3	8.2	8.3
7	8.5	8.3	8.4	8.6	8.4	8.5	8.1	8.0	8.1	8.3	8.2	8.2
8	8.4	8.3	8.3	8.7	8.4	8.6	8.0	8.0	8.0	8.2	8.1	8.2
9	8.3	8.2	8.3	8.7	8.4	8.6	8.0	8.0	8.0	8.3	8.2	8.2
10	8.5	8.2	8.3	8.7	8.4	8.6	8.0	8.0	8.0	8.3	8.2	8.2
11	8.5	8.3	8.4	8.7	8.4	8.6	8.1	8.0	8.1	8.3	8.2	8.3
12	8.6	8.3	8.5	8.7	8.4	8.5	8.2	8.1	8.2	8.3	8.2	8.2
13	8.6	8.3	8.5	8.6	8.3	8.4	8.1	8.1	8.1	8.2	8.2	8.2
14	8.6	8.3	8.5	8.4	8.0	8.2	8.1	8.1	8.1	8.3	8.0	8.2
15	8.6	8.3	8.5	8.1	8.0	8.0	8.1	8.1	8.1	8.3	8.0	8.2
16	8.5	8.3	8.4	8.3	8.1	8.2	8.2	8.1	8.2	8.3	8.1	8.2
17	8.5	8.2	8.3	8.2	8.0	8.2	8.2	8.2	8.2	8.2	8.1	8.2
18	8.5	8.2	8.3	8.1	7.9	8.0	8.2	8.1	8.2	8.1	8.1	8.1
19	8.5	8.2	8.3	8.2	8.1	8.1	8.2	8.2	8.2	8.1	8.1	8.1
20	8.4	8.1	8.3	8.2	8.2	8.2	8.2	8.2	8.2	8.1	8.1	8.1
21	8.4	8.1	8.3	8.2	8.2	8.2	8.2	8.2	8.2	8.1	8.0	8.1
22	8.5	8.2	8.4	8.2	8.1	8.2	8.2	8.2	8.2	8.1	8.1	8.1
23	8.5	8.3	8.4	8.1	8.1	8.1	8.3	8.2	8.2	8.1	8.1	8.1
24	8.6	8.3	8.4	8.2	8.1	8.2	8.3	8.2	8.3	8.2	8.0	8.1
25	8.6	8.3	8.5	8.2	8.2	8.2	8.3	8.3	8.3	8.1	7.9	8.0
26	8.6	8.3	8.4	8.2	8.2	8.2	8.3	8.2	8.3	8.0	7.9	7.9
27	8.5	8.3	8.4	8.2	8.1	8.2	8.3	8.2	8.3	8.1	7.8	8.0
28	8.6	8.3	8.5	8.2	8.2	8.2	8.3	8.1	8.2	7.9	7.8	7.8
29	8.6	8.3	8.5	8.2	8.2	8.2	8.3	8.2	8.2	7.9	7.9	7.9
30	8.5	8.3	8.4	8.4	8.2	8.3	8.2	8.2	8.2	7.9	7.9	7.9
31	8.6	8.3	8.4	---	---	---	8.2	8.1	8.2	7.9	7.8	7.8
MONTH	8.6	8.1	8.4	8.7	7.9	8.3	8.4	7.9	8.1	8.3	7.8	8.1

SCIOTO RIVER BASIN

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03234300 PAINT CREEK AT CHILLICOTHE, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

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

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	3.5	2.5	3.0	4.0	3.5	4.0	11.5	8.0	9.5	13.5	12.0	12.0
2	2.5	2.0	2.0	4.0	3.0	3.5	13.0	9.5	11.0	13.5	12.5	13.0
3	2.0	2.0	2.0	5.0	3.0	4.0	12.5	9.5	11.5	13.5	12.0	12.0
4	2.5	2.0	2.0	7.0	4.5	5.5	11.0	8.0	9.5	13.0	12.0	12.5
5	2.5	2.0	2.5	7.0	5.5	6.0	11.5	9.5	10.5	13.5	11.5	12.5
6	2.5	2.5	2.5	7.5	5.5	6.5	11.5	9.0	10.5	13.0	12.0	12.5
7	2.5	2.5	2.5	8.0	6.5	7.5	9.5	7.5	8.5	12.0	11.5	11.5
8	2.5	.5	2.0	8.0	6.0	7.0	10.5	8.0	9.5	---	---	---
9	2.0	1.5	2.0	6.0	3.0	4.5	11.0	10.0	10.5	---	---	---
10	2.0	1.5	2.0	4.5	2.5	3.5	11.0	9.5	10.5	15.5	14.5	15.0
11	2.5	2.0	2.0	5.0	4.0	4.5	10.0	9.0	9.5	15.5	13.5	14.5
12	3.0	2.5	2.5	5.5	4.5	5.0	10.0	9.0	9.5	19.0	15.0	16.5
13	3.5	2.5	3.0	5.5	5.0	5.0	10.5	10.0	10.0	---	---	---
14	3.5	2.5	3.0	5.5	5.0	5.0	11.0	10.0	10.5	---	---	---
15	4.0	2.0	3.0	6.0	5.0	5.5	11.0	10.5	10.5	---	---	---
16	3.5	2.0	2.5	6.0	5.5	5.5	11.0	10.5	10.5	---	---	---
17	3.0	2.5	3.0	6.0	5.0	5.5	11.0	10.5	10.5	---	---	---
18	5.0	3.0	4.0	6.5	5.5	6.0	11.5	10.5	11.0	16.5	14.5	16.0
19	6.5	4.5	5.5	6.5	6.0	6.5	12.0	11.5	11.5	16.0	14.5	15.5
20	6.0	5.5	5.5	7.5	6.5	7.0	---	---	---	18.0	14.5	16.0
21	5.5	5.0	5.5	8.0	7.5	7.5	12.5	11.5	12.0	19.0	16.0	17.5
22	5.0	4.5	5.0	9.0	7.0	8.0	11.5	10.5	11.0	20.0	17.0	18.5
23	5.5	4.5	5.0	10.0	8.0	9.0	11.5	10.5	11.0	21.5	18.5	20.0
24	5.5	4.5	5.0	13.5	9.5	12.0	12.5	10.5	11.5	22.5	19.5	21.0
25	5.0	4.0	4.5	---	---	---	13.5	11.5	12.5	22.5	20.0	21.5
26	4.5	4.0	4.0	---	---	---	15.0	13.0	14.0	---	---	---
27	4.0	3.5	4.0	---	---	---	15.0	14.0	14.5	---	---	---
28	4.0	3.5	4.0	---	---	---	16.0	14.5	15.0	---	---	---
29	---	---	---	8.5	8.0	8.0	15.5	13.5	14.5	---	---	---
30	---	---	---	8.5	6.5	7.5	13.5	12.0	12.5	---	---	---
31	---	---	---	10.0	7.5	8.5	---	---	---	---	---	---
MONTH	6.5	.5	3.5	13.5	2.5	6.0	16.0	7.5	11.0	22.5	11.5	15.5

SCIOTO RIVER BASIN

03234300 PAINT CREEK AT CHILLICOTHE, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	26.5	22.5	25.0	26.5	23.0	24.5	22.5	21.5	22.0
2	---	---	---	28.5	23.5	26.0	26.0	23.5	25.0	22.0	20.0	21.0
3	---	---	---	29.0	24.5	26.5	27.0	23.5	25.0	22.0	20.0	21.0
4	---	---	---	---	---	---	27.0	24.0	25.0	21.0	19.5	20.0
5	---	---	---	---	---	---	25.0	22.5	24.0	20.0	19.0	19.5
6	25.5	21.0	23.0	---	---	---	23.5	20.0	22.0	20.0	19.0	19.5
7	25.0	22.5	23.5	28.0	24.5	26.0	23.5	20.5	22.0	21.0	18.0	19.5
8	23.0	21.5	22.0	27.5	25.5	26.5	25.0	21.5	23.5	22.0	18.0	20.0
9	23.0	20.0	21.5	27.5	25.5	26.5	24.5	23.0	24.0	23.0	19.0	21.0
10	23.5	20.5	22.0	26.5	24.0	25.5	25.0	21.5	23.5	22.5	20.0	21.0
11	24.0	21.5	22.5	26.5	23.0	24.5	24.0	22.0	23.0	24.0	20.0	21.5
12	25.5	21.5	23.5	27.5	23.0	25.0	26.0	22.0	24.0	23.0	19.0	21.0
13	27.0	22.5	24.5	26.5	24.0	25.5	27.5	23.5	25.5	23.0	19.5	21.0
14	28.0	24.0	26.0	---	---	---	26.5	24.0	25.5	24.5	20.5	22.5
15	27.0	25.0	26.0	---	---	---	25.0	21.5	23.0	25.5	22.0	23.5
16	28.0	24.5	26.0	---	---	---	26.0	20.5	23.0	25.5	22.0	23.5
17	28.5	24.5	26.5	---	---	---	28.5	25.0	26.5	24.0	22.0	23.0
18	29.0	25.5	27.0	25.5	22.5	24.0	26.0	24.0	24.5	23.0	20.0	21.5
19	29.0	25.5	27.5	27.0	23.5	25.0	27.0	23.0	25.0	22.5	18.5	20.5
20	30.0	26.0	28.0	28.0	25.5	26.5	26.5	23.5	25.0	23.0	18.5	20.5
21	29.5	26.5	28.0	27.5	25.5	26.5	25.0	23.5	24.0	22.5	18.5	20.0
22	28.0	26.0	27.0	25.5	24.5	25.0	24.5	22.0	23.0	22.5	18.0	20.0
23	27.5	25.5	26.0	26.5	23.5	25.0	25.5	21.5	23.5	21.5	18.5	20.0
24	25.5	24.0	25.0	28.0	24.5	26.0	25.5	21.5	23.5	22.5	19.5	21.0
25	25.0	22.5	24.0	27.5	25.0	26.5	27.0	23.0	24.5	21.5	19.5	20.5
26	24.0	21.0	22.0	24.5	21.5	23.0	27.0	23.5	25.0	20.5	18.0	19.0
27	21.0	20.5	21.0	23.5	22.5	22.5	28.0	24.0	26.0	19.5	18.0	19.0
28	23.5	20.5	22.0	23.5	22.0	23.0	28.0	24.5	26.0	19.0	17.0	18.0
29	27.5	22.5	25.0	24.0	22.0	23.0	27.0	24.0	25.5	19.5	15.5	17.5
30	28.0	24.0	26.0	24.5	21.0	22.5	24.5	22.0	23.5	19.0	15.0	17.0
31	---	---	---	25.5	22.0	24.0	23.5	22.0	23.0	---	---	---
MONTH	30.0	20.0	24.5	29.0	21.0	25.0	28.5	20.0	24.0	25.5	15.0	20.5
YEAR	30.0	.0	13.0									

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	9.1	7.2	7.9	9.4	7.7	8.5	11.8	10.1	11.3	12.4	11.8	12.3
2	7.6	6.6	7.0	9.9	7.9	8.7	11.9	11.5	11.7	12.2	11.9	12.1
3	8.7	6.7	7.5	8.7	7.6	8.2	11.5	11.1	11.3	12.0	11.8	11.9
4	8.5	6.9	7.5	9.1	7.5	8.2	11.1	10.3	10.6	12.4	11.6	12.0
5	8.2	6.3	7.1	8.6	6.9	7.7	10.8	10.3	10.5	12.6	11.6	12.2
6	8.3	6.5	7.3	7.6	6.3	7.1	11.3	10.8	10.9	12.4	12.1	12.2
7	8.8	6.4	7.1	8.4	6.8	7.6	11.5	11.3	11.4	12.2	11.9	12.0
8	8.0	5.7	6.5	8.9	7.5	8.1	11.3	10.9	11.2	12.5	10.3	12.1
9	6.2	5.4	5.7	8.9	7.6	8.2	11.0	10.5	10.9	12.8	11.5	12.3
10	7.5	5.5	6.1	8.8	7.5	8.1	10.5	10.0	10.2	13.0	11.5	12.4
11	6.6	6.0	6.3	8.5	7.3	7.8	11.2	10.0	10.7	12.6	11.9	12.4
12	7.4	5.9	6.6	7.8	6.8	7.2	11.8	11.2	11.6	12.2	11.8	12.0
13	7.7	5.9	6.7	6.8	5.7	6.2	11.8	11.4	11.6	12.0	11.7	11.8
14	8.0	6.0	6.9	---	---	---	11.4	10.8	11.1	12.3	9.1	11.8
15	8.2	6.2	7.0	---	---	---	10.8	10.7	10.7	12.8	9.7	11.9
16	6.8	5.9	6.3	9.5	9.1	9.3	11.1	10.7	10.9	13.0	11.1	12.3
17	7.1	5.6	6.2	9.1	8.1	8.7	11.2	11.1	11.1	12.4	10.5	12.1
18	7.4	5.4	6.3	9.5	8.3	9.1	11.1	11.0	11.0	12.2	10.5	11.4
19	7.3	5.8	6.3	9.5	8.8	9.2	11.3	11.0	11.1	12.8	12.0	12.4
20	7.3	5.7	6.4	9.5	8.8	9.2	11.3	11.1	11.2	13.2	12.3	12.6
21	7.3	5.5	6.3	9.8	9.4	9.7	11.5	11.1	11.3	13.3	12.1	12.5
22	10.2	6.4	8.2	9.7	9.3	9.5	11.7	11.3	11.5	12.8	12.2	12.5
23	10.6	8.1	9.1	9.5	9.2	9.4	11.8	11.4	11.6	12.5	12.0	12.2
24	11.0	8.1	9.3	9.3	9.1	9.2	11.9	11.5	11.7	13.0	11.6	12.3
25	10.8	8.0	9.2	9.6	9.2	9.5	11.9	11.6	11.8	13.0	12.5	12.7
26	10.1	7.7	8.6	9.6	9.1	9.4	12.5	10.1	12.1	12.8	12.5	12.6
27	9.0	7.3	8.1	10.1	8.8	9.4	12.7	10.0	12.3	12.6	8.8	11.9
28	9.5	7.2	8.2	10.5	10.1	10.4	12.6	10.0	12.1	11.4	8.8	10.7
29	9.0	7.3	8.0	10.7	10.5	10.6	12.6	11.6	12.3	11.3	10.3	10.9
30	7.9	7.2	7.6	11.6	10.7	11.2	12.6	11.4	12.2	10.3	9.7	9.9
31	9.0	7.6	8.2	---	---	---	12.5	11.3	12.2	---	---	---
MONTH	11.0	5.4	7.3	11.6	5.7	8.8	12.7	10.0	11.4	13.3	8.8	12.0

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OH

LOCATION.--Lat 39°12'44", long 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, 3 mi northwest of Richmondale and 5.0 mi upstream from Salt Creek.

DRAINAGE AREA.--5,131 mi².

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.--Estimated daily discharges: Dec. 25 to Jan. 5, 18-27, Jun. 30 to Sep. 30. Records fair, except for periods of estimated record, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--A stage of 31.6 ft occurred Mar. 26, 1913, and has not been exceeded since.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	723	1130	7880	1150	17900	6090	4110	7980	2030	5960	2050	2300
2	690	1170	7860	1100	14400	5170	3400	6930	1980	5630	1860	2520
3	702	1080	6110	1050	18700	4910	2900	6730	1920	8680	1640	1850
4	704	1060	5110	1000	17900	4740	3560	6530	1760	8360	1700	1570
5	692	1130	11600	1400	16200	4860	3970	5840	1710	8520	1970	1340
6	736	1120	18700	1950	14800	4650	4070	4410	1660	8620	2090	1210
7	733	1130	19400	2730	14100	4140	6990	5380	1650	6460	1770	1130
8	727	1090	17300	3560	13400	4360	10900	10300	1720	4230	1600	1100
9	727	1330	13700	2960	10700	4820	10400	8110	1710	3460	1530	1020
10	890	1080	8460	2570	6850	8150	21200	6790	1750	6370	1350	980
11	951	998	6240	2310	4990	9280	38600	5080	1790	5750	1280	1100
12	785	1030	4760	2290	4090	9200	30100	4550	1630	5200	1250	1130
13	727	1140	3800	3030	3880	9650	29000	3980	1410	3590	1230	995
14	713	2860	3320	3310	3660	10600	27700	3810	1330	3220	1190	951
15	712	5930	3070	2680	5100	13200	24900	4150	1300	3340	2000	940
16	738	8620	3170	2340	6370	13700	23200	5530	1400	2900	2090	944
17	858	11700	2650	1900	6410	11000	20900	4910	1790	2290	1440	955
18	1250	19100	2660	1700	5650	8530	17400	3900	2060	3070	1310	989
19	1120	18400	2140	1500	6550	6440	15000	3480	1790	2240	1200	1030
20	1140	14900	2110	1350	8220	5870	13000	3070	1650	2020	1120	954
21	1500	11300	2360	1250	11100	5650	8800	2900	1870	1930	1190	905
22	2160	9540	3140	1150	13100	5830	5870	2770	2180	2040	2190	891
23	1500	8820	2700	1050	17600	5820	5170	2510	2630	2110	1490	890
24	1150	7390	2500	1000	20100	5050	4570	2550	3410	1780	1280	870
25	1070	6180	2300	2000	19000	4590	4460	2450	3360	1850	1250	945
26	1030	4360	2100	5000	13600	4120	4430	2440	3170	3650	1270	1120
27	1040	4340	1900	10000	9150	4750	3780	2690	5600	2390	1180	1230
28	1010	8350	1700	33200	7130	7510	3640	2660	7770	2110	1120	1030
29	1040	11400	1500	35300	---	7120	3820	2310	7400	1690	1280	987
30	1070	8780	1300	33600	---	5880	5510	2200	6200	3450	2660	947
31	1110	---	1200	32400	---	4760	---	2040	---	2960	1950	---
TOTAL	29998	176458	172740	197830	310650	210440	361350	138980	77630	125870	48530	34823
MEAN	968	5882	5572	6382	11090	6788	12040	4483	2588	4060	1565	1161
MAX	2160	19100	19400	35300	20100	13700	38600	10300	7770	8680	2660	2520
MIN	690	998	1200	1000	3660	4120	2900	2040	1300	1690	1120	870

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1994, BY WATER YEAR (WY)

	MEAN	1182	2431	4310	6631	7848	9679	8426	5629	3887	2823	1878	1363
MAX	6524	15460	17190	39500	18620	28220	19600	19680	12670	11430	10070	13230	
(WY)	1991	1973	1991	1937	1951	1963	1957	1933	1981	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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1931 - 1994

ANNUAL TOTAL	2140958	1885299	
ANNUAL MEAN	5866	5165	4657
HIGHEST ANNUAL MEAN			8173
LOWEST ANNUAL MEAN			1364
HIGHEST DAILY MEAN	28900	Mar 5	127000
LOWEST DAILY MEAN	658	Sep 13	244
ANNUAL SEVEN-DAY MINIMUM	688	Sep 10	255
INSTANTANEOUS PEAK FLOW			177000
INSTANTANEOUS PEAK STAGE		18.32	26.40
INSTANTANEOUS LOW FLOW		690	
10 PERCENT EXCEEDS	16800	13000	11900
50 PERCENT EXCEEDS	3210	2730	2030
90 PERCENT EXCEEDS	738	1020	520

SCIOTO RIVER BASIN

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03234500 SCIOTO RIVER AT HIGBY, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954 to 1993.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1967 to September 1993.

pH: March 1967 to September 1993.

WATER TEMPERATURES: March 1967 to September 1993.

DISSOLVED OXYGEN: March 1967 to September 1993.

INSTRUMENTATION.--Water-quality monitor since March 1967. Digital recorder set for one-hour-interval punch since May 1972. Electronic data logger since April 30, 1991. Set for one-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, 1,070 microsiemens Sept. 29, 1984; 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, 34.0°C June 29, 1966; minimum, 0.0°C on many days during winter.

DISSOLVED OXYGEN: Maximum, >20.0 mg/L on several days from 1982 to 1989; minimum, 0.0 mg/L on many days during 1968, Sept. 13, 1969.

NOTE.--Because of bridge construction monitor was inoperable for the water year. The monitor was not discontinued and will be re-installed when the station is rebuilt.

SCIOTO RIVER BASIN

RESERVOIRS IN SCIOTO RIVER BASIN

03220500 O'SHAUGHNESSY RESERVOIR NEAR DUBLIN.--Lat 40°09'14", long 83°07'33", Delaware County, Hydrologic

Unit 0506001, in gate house of dam on Scioto River, 4.0 mi north of Dublin.

DRAINAGE AREA.--979 mi².

PERIOD OF RECORD.--October 1924 to current year.

GAGE.--water-stage recorder. Monthend contents only for some periods published in WSP 1305. Datum of gage is sea level (levels by city of Columbus). Prior to Dec. 2, 1940, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by concrete dam; dam completed and storage began 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. 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.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 19,360 acre-ft Dec. 5, elevation, 850.24 ft; minimum, 14,410 acre-ft Mar. 31, elevation, 844.89 ft.

03221500 GRIGGS RESERVOIR NEAR COLUMBUS.--Lat 40°00'54", long 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, and 6.5 mi upstream from Olentangy River.

DRAINAGE AREA.--1,044 mi².

PERIOD OF RECORD.--January 1921 to current year.

GAGE.--Water-stage recorder. Monthend contents only for some periods, published in WSP 1305. Daily readings have been obtained by city of Columbus, Division of Water, since 1908. Datum of gage is 680.38 ft above sea level (levels by city of Columbus). Prior to Oct. 4, 1940 nonrecording gage at same site and datum.

REMARKS.--Reservoir formed by concrete dam; dam completed and storage began 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, 5,390 acre-ft Dec. 5, elevation, 758.23 ft; minimum, 3,920 acre-ft Oct. 13, elevation, 754.06 ft.

03228400 HOOVER RESERVOIR AT CENTRAL COLLEGE.--Lat 40°06'30", long 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.

DRAINAGE AREA.--190 mi².

PERIOD OF RECORD.--March 1955 to current year.

REVISED RECORDS.--WRD OH-78-1: 1975 (M).

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to Sept. 10, 1956, nonrecording gage at same site and datum.

REMARKS.--Reservoir formed by earthfill dam with concrete spillway; dam completed in 1954 and storage began 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, 83,260 acre-ft, Feb. 24, 1975, elevation, 897.26 ft; minimum, 19,010 acre-ft Mar. 1, 1964, elevation, 868.58 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 76,410 acre-ft Dec. 28, elevation, 895.32 ft; minimum, 39,740 acre-ft Sept. 30, elevation, 881.79 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

Date	03220500 O'SHAUGHNESSY RESERVOIR			03221500 GRIGGS RESERVOIR			03228400 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	846.86	16,020		754.99	4,240		886.30	50,390	
Oct. 31	847.22	16,350	+330	755.21	4,310	+70	883.39	43,270	-7,120
Nov. 30	849.02	18,070	+1,720	756.36	4,700	+390	886.35	50,520	+7,250
Dec. 31	848.00	17,060	-1,010	755.80	4,510	-190	890.85	62,450	+11,930
Calendar year 1993			-120			+30			-9,140
Jan. 31	849.80	18,890	+1,830	757.45	5,100	+590	894.06	72,090	+9,640
Feb. 28	848.70	17,760	-1,130	755.46	4,400	-700	894.01	71,920	-170
Mar. 31	845.39	14,800	-2,960	755.56	4,430	+30	894.05	72,060	+140
Apr. 30	848.20	17,260	+2,460	755.86	4,530	+100	893.57	70,500	-1,560
May. 31	848.30	17,360	+100	755.68	4,470	-60	892.04	65,790	-4,710
June 30	848.86	17,920	+560	756.11	4,620	+150	889.94	59,970	-5,820
July 31	848.34	17,400	-520	755.57	4,440	-180	888.27	55,510	-4,460
Aug. 31	848.21	17,270	-130	755.58	4,440	0	885.52	48,410	-7,100
Sept. 30	847.55	16,650	-620	754.86	4,190	-250	881.79	39,740	-8,670
Water year 1994			+630			-50			-10,650

**03237280 UPPER TWIN CREEK AT MCGAW, OH
(HYDROLOGIC BENCH-MARK STATION)**

LOCATION.--Lat 38°38'37", long 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, 2.7 mi northeast of Buena Vista, and 3.2 mi upstream from mouth.
DRAINAGE AREA.--12.2 mi².

WATER-DISCHARGE RECORDS

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 bench mark. 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.--Estimated daily discharges: Dec. 25 to Jan. 3, 15-24, Feb. 1-7, Jul. 14 to Sep. 30. Records poor. Periods of no flow occur most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 3, 1960 reached a stage of 11.62 ft, discharge, 7,230 ft³/s, on basis of contracted-opening and flow over road measurement of peak flow.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	.18	2.7	1.4	23	23	27	38	.62	.27	.72	2.8
2	.07	.17	2.5	1.4	20	29	24	37	.52	.26	.46	2.4
3	.07	.20	2.4	1.4	18	39	23	32	.45	.55	.23	2.0
4	.07	.22	12	8.6	17	38	22	28	.36	.63	.29	.30
5	.05	.31	19	7.5	16	34	21	29	.27	.46	.56	.14
6	.03	.27	8.6	7.1	15	29	28	27	.27	.33	.24	.09
7	.03	.27	5.5	66	14	26	40	25	.23	.30	.20	.07
8	.03	.30	4.2	45	67	26	34	178	.20	.26	.17	.06
9	.12	.34	3.5	36	82	52	29	43	.20	.21	.15	.05
10	.17	.27	3.3	33	40	71	64	33	.20	.20	.13	.04
11	.15	.27	3.1	31	34	44	44	25	.20	.19	.12	.04
12	.10	.27	2.7	34	28	40	38	18	.19	.17	.11	.05
13	.10	1.8	2.5	39	35	39	37	14	.17	.17	.10	.05
14	.10	6.7	2.4	38	33	39	33	11	.17	.20	.12	.06
15	.06	11	2.6	33	33	35	45	7.5	.15	3.1	.18	.07
16	.22	6.0	2.7	29	30	29	53	18	.13	3.5	.13	.07
17	.56	11	2.6	26	26	25	36	25	.12	2.9	.10	.06
18	.58	7.7	2.6	23	26	27	32	17	.12	1.8	.08	.06
19	.51	4.4	2.6	21	30	25	26	13	.11	1.1	.07	.07
20	5.5	3.2	2.6	19	32	24	23	11	.09	.66	.06	.07
21	4.5	2.6	2.9	17	33	36	21	7.4	.09	.90	1.6	.08
22	3.1	2.3	2.8	16	28	41	20	5.1	.09	1.7	1.2	.09
23	1.9	2.1	2.7	16	87	35	18	3.5	.09	5.0	.80	.10
24	1.1	1.9	2.6	25	42	29	17	2.8	.09	4.3	.50	.12
25	.70	1.8	2.4	57	37	25	16	1.9	.09	3.4	.20	.15
26	.42	1.7	2.2	71	31	23	16	3.0	.11	2.2	.09	.45
27	.33	5.8	2.0	66	26	58	26	2.8	.13	1.4	.06	1.5
28	.27	6.8	1.9	148	24	68	25	1.2	.21	.94	.04	1.1
29	.25	4.3	1.8	44	---	40	31	.91	.37	.64	.03	.80
30	.23	3.3	1.7	35	---	33	38	.77	.35	.36	.03	.54
31	.23	---	1.5	32	---	30	---	.71	---	.23	.06	---
TOTAL	21.58	87.47	114.6	1027.4	927	1112	907	659.59	6.39	38.33	8.83	13.48
MEAN	.70	2.92	3.70	33.1	33.1	35.9	30.2	21.3	.21	1.24	.28	.45
MAX	5.5	11	19	148	87	71	64	178	.62	5.0	1.6	2.8
MIN	.03	.17	1.5	1.4	14	23	16	.71	.09	.17	.03	.04
CFSM	.06	.24	.30	2.72	2.71	2.94	2.48	1.74	.02	.10	.02	.04
IN.	.07	.27	.35	3.13	2.83	3.39	2.77	2.01	.02	.12	.03	.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1994, BY WATER YEAR (WY)

	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
MEAN	2.64	6.60	17.3	16.8	24.0	30.0	29.7	18.7	6.50	3.95	3.16	3.31
MAX	16.8	29.0	81.6	44.0	60.9	90.7	66.7	74.6	35.3	30.8	38.0	32.5
(WY)	1990	1986	1979	1979	1975	1964	1965	1983	1979	1986	1979	1979
MIN	.080	.000	.000	.44	4.42	4.39	4.41	1.63	.043	.071	.009	.010
(WY)	1964	1964	1964	1981	1978	1969	1971	1991	1988	1964	1993	1983

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1963 - 1994
ANNUAL TOTAL	2557.41	4923.67	
ANNUAL MEAN	7.01	13.5	13.5
HIGHEST ANNUAL MEAN			31.9
LOWEST ANNUAL MEAN			5.15
HIGHEST DAILY MEAN	78	178	750
LOWEST DAILY MEAN	.00	.03	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.05	.00
INSTANTANEOUS PEAK FLOW		1980	3500
INSTANTANEOUS PEAK STAGE		10.20	10.20
INSTANTANEOUS LOW FLOW		.03	
ANNUAL RUNOFF (CFSM)	.57	1.11	1.11
ANNUAL RUNOFF (INCHES)	7.80	15.01	15.05
10 PERCENT EXCEEDS	20	37	31
50 PERCENT EXCEEDS	2.7	2.6	3.2
90 PERCENT EXCEEDS	.01	.09	.08

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

UPPER TWIN CREEK BASIN

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964 to current year.

PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: March 1985 to current year.

pH: March 1985 to current year.

WATER TEMPERATURES: Water years 1963-66, 1967-70, 1972-1982, 1984 to current year.

SUSPENDED SEDIMENT DISCHARGE: Water years 1964-69 (periodic), 1969 to 1973 (daily), 1974 to current year (periodic).

INSTRUMENTATION.--Water temperature recorder since July 1972.

REMARKS.--Interruptions in the water-quality record were due to malfunctions of the instrument or no flow.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 279 microsiemens Nov. 5, 1988; minimum, 40 microsiemens July 1, 1986, May 7, 1994.

pH: Maximum recorded, 9.4, units Aug. 24, 1992; minimum recorded, 4.6 units Oct. 17, 1993.

WATER TEMPERATURES: Maximum, 38.5°C July 22, 1986; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 215 microsiemens Oct. 17; minimum recorded, 40 microsiemens May 7.

pH: Maximum recorded, 8.7 units May 5, 10; minimum recorded, 4.6 units Oct. 17.

WATER TEMPERATURE: Maximum recorded, 29.5°C Jun. 17; minimum recorded 0.0°C many days during winter period.

UPPER TWIN CREEK BASIN

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03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS. / 100 ML) (31625)	STREP-TOCOCOCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	
NOV 16...	1100	5.9	111	6.6	10.0	11.5	0.8	11.2	102	95	490	
JAN 25...	1100	38	67	6.9	0.0	1.0	1.4	14.7	105	60	920	
MAR 08...	1040	24	69	6.9	6.0	6.5	0.9	11.9	97	K13	25	
MAY 24...	1030	2.6	98	6.9	17.5	17.5	0.9	10.4	112	K14	35	
JUL 27...	1200	1.3	114	6.6	20.0	21.0	0.3	7.2	83	88	160	
SEP 23...	1015	0.1	145	6.6	18.5	17.5	0.2	7.1	80	K2	--	
DATE		HARD-NESS TOTAL (MG/L AS CaCO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKA-LINITY WAT WH TOT FET FIELD (MG/L AS CaCO3) (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
NOV 16...	44	7.4	6.2	3.5	2.3	20	0	16	30	2.7	0.1	
JAN 25...	27	4.1	4.0	2.1	1.4	9	0	7	23	1.7	<0.1	
MAR 08...	27	4.3	4.0	2.1	1.4	9	0	7	22	1.6	<0.1	
MAY 24...	32	5.4	4.6	2.3	2.0	17	0	15	25	1.5	<0.1	
JUL 27...	43	7.4	6.0	3.1	2.2	24	0	19	29	3.1	0.1	
SEP 23...	57	9.6	7.9	4.4	2.5	29	0	25	35	3.4	<0.1	
DATE		SILICA, DIS-SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)
NOV 16...	10	77	--	--	--	--	--	--	--	<10	23	<3
JAN 25...	8.8	64	--	--	--	--	--	--	--	--	--	--
MAR 08...	10	57	0.39	0.01	<0.2	<0.01	<0.01	<0.01	<0.01	--	--	--
MAY 24...	9.7	67	0.15	0.05	--	--	<0.01	<0.01	20	17	<3	
JUL 27...	11	78	0.32	0.01	<0.2	<0.01	<0.01	0.02	<10	22	<3	
SEP 23...	11	86	<0.05	<0.01	<0.2	0.01	0.01	0.01	--	--	--	
DATE		IRON, DIS-SOLVED (UG/L AS FE) (01046)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	SEDI-MENT, SUS-PENDEDED (MG/L) (80154)	
NOV 16...	9	<4	2	<10	2	<1	<1.0	55	<6	1.15		
JAN 25...	--	--	--	--	--	--	--	--	--	2.6		
MAR 08...	--	--	--	--	--	--	--	--	--	0.35		
MAY 24...	17	<4	2	<10	1	<1	<1.0	39	<6	1.5		
JUL 27...	4	<4	<1	<10	<1	<1	<1.0	50	<6	--		
SEP 23...	--	--	--	--	--	--	--	--	--	7.1		

K Non-idea colony count

UPPER TWIN CREEK BASIN

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	173	169	172	128	123	125	104	101	102	98	95	97
2	179	169	173	127	122	124	105	102	103	98	95	97
3	182	177	180	126	123	124	106	100	104	98	93	95
4	181	176	178	126	123	125	103	71	93	94	85	87
5	182	179	181	127	121	124	83	71	76	90	87	89
6	180	178	179	126	124	125	90	83	87	89	84	87
7	182	180	181	125	122	123	93	90	92	84	56	64
8	182	179	181	124	120	122	95	92	93	70	65	68
9	182	169	178	123	120	122	95	91	94	75	70	72
10	184	179	181	123	119	122	94	92	93	78	73	75
11	181	177	179	123	120	122	93	91	91	77	74	76
12	182	180	182	125	122	123	93	89	91	76	71	73
13	182	180	182	132	114	122	93	91	92	72	69	70
14	185	181	183	125	98	118	95	93	94	69	66	68
15	183	181	182	108	98	102	95	93	93	74	67	70
16	183	173	179	112	108	110	94	93	93	78	72	75
17	215	180	189	112	81	98	95	93	94	76	71	74
18	190	186	189	102	85	95	95	93	95	74	70	70
19	190	185	188	106	102	104	95	93	94	75	72	73
20	188	117	147	106	103	104	95	91	93	74	72	73
21	148	126	131	106	104	105	92	91	91	76	72	74
22	132	129	131	106	104	105	95	91	92	76	74	75
23	129	127	128	107	105	106	95	93	94	76	74	75
24	128	126	127	108	106	107	96	94	95	75	71	73
25	128	124	126	109	108	108	95	93	94	71	52	64
26	128	126	127	110	107	108	95	92	94	64	53	60
27	128	125	127	108	92	101	97	94	96	65	55	62
28	127	123	125	98	92	96	97	91	93	76	52	65
29	126	123	125	102	98	100	95	93	94	85	76	81
30	127	121	124	103	101	102	97	93	94	90	84	88
31	125	122	123	---	---	---	97	93	96	91	88	90
MONTH	215	117	161	132	81	112	106	71	94	98	52	76
FEBRUARY			MARCH			APRIL			MAY			
1	91	86	88	67	64	65	71	66	68	66	63	64
2	89	85	87	67	62	65	72	66	69	67	64	66
3	87	83	85	65	61	62	71	68	70	67	66	66
4	87	83	85	66	61	63	74	68	71	69	66	67
5	86	82	84	68	61	64	74	72	74	71	67	69
6	86	81	83	69	63	66	77	61	71	71	69	70
7	87	80	83	72	66	68	66	61	63	72	40	60
8	83	73	79	70	67	69	67	64	65	67	56	63
9	74	69	72	69	48	61	71	66	68	80	67	74
10	75	71	73	58	47	55	71	51	60	87	79	82
11	76	73	75	63	56	60	63	56	60	101	87	91
12	79	75	77	62	56	60	67	62	64	106	98	103
13	79	76	78	62	60	61	67	65	66	98	87	93
14	78	74	76	62	60	61	---	---	---	87	81	82
15	78	74	76	66	62	63	---	---	---	84	81	83
16	76	71	73	66	63	64	63	58	61	86	84	85
17	75	70	72	66	64	65	66	63	64	90	86	87
18	75	70	73	67	65	66	---	---	---	94	90	92
19	76	71	73	71	66	68	---	---	---	94	81	88
20	75	72	73	73	67	70	73	70	72	81	77	79
21	77	73	75	71	54	66	74	71	73	82	77	79
22	76	72	74	63	56	60	76	72	74	88	81	85
23	72	65	68	66	62	65	76	73	74	99	88	93
24	69	66	67	69	66	67	77	74	76	102	88	94
25	68	66	67	69	66	68	79	77	78	110	88	91
26	67	65	66	71	66	68	81	77	79	101	88	89
27	66	62	64	69	53	58	81	67	75	88	87	87
28	66	61	64	59	53	56	71	67	69	92	87	90
29	---	---	---	64	59	62	69	65	67	96	92	93
30	---	---	---	66	64	65	67	64	66	100	96	97
31	---	---	---	68	65	66	---	---	---	102	98	100
MONTH	91	61	75	73	47	64	---	---	---	110	40	83

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	105	98	102	123	115	119	123	118	121	140	138	138
2	107	105	106	127	120	124	123	122	123	161	138	140
3	106	99	104	132	124	128	125	117	122	142	138	140
4	107	102	105	134	131	133	126	123	125	144	138	142
5	109	104	106	135	131	133	129	116	125	139	133	136
6	111	107	109	136	127	131	130	127	129	135	133	135
7	111	107	109	131	123	128	129	127	128	135	133	135
8	111	108	109	132	128	130	128	127	128	135	133	134
9	113	108	110	132	127	129	128	126	128	135	133	135
10	114	108	111	129	117	123	128	127	128	136	134	135
11	115	110	112	127	109	118	128	127	128	136	135	136
12	114	109	111	117	112	114	130	128	129	137	135	136
13	116	111	113	125	113	117	131	128	130	138	136	137
14	117	111	114	128	114	122	131	129	130	139	137	138
15	117	113	115	144	126	133	132	128	130	140	138	139
16	117	109	114	142	116	124	134	129	132	142	138	140
17	126	111	117	123	116	118	136	132	134	144	130	139
18	---	---	---	120	117	118	136	134	135	143	138	139
19	---	---	---	123	119	121	138	135	136	144	141	143
20	---	---	---	123	120	123	138	133	137	147	144	145
21	124	117	120	124	118	122	157	106	139	148	146	147
22	125	117	120	125	96	121	156	136	146	150	146	147
23	125	119	122	123	116	119	137	130	133	147	144	145
24	126	121	124	124	123	123	138	130	134	147	137	144
25	123	119	121	125	109	121	138	136	136	173	124	141
26	128	120	122	119	113	116	138	135	136	158	122	127
27	131	128	129	116	113	115	138	136	137	123	121	123
28	140	131	135	116	113	115	138	136	137	125	123	123
29	140	117	130	117	111	115	138	136	137	125	123	124
30	127	117	122	117	115	116	139	137	138	126	123	125
31	---	---	---	118	117	117	140	137	138	---	---	---
MONTH	---	---	---	144	96	122	157	106	132	173	121	137

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	6.9	5.7	6.2	6.5	6.1	6.4	7.1	6.8	6.9	7.5	7.2	7.3
2	7.0	6.0	6.3	6.4	6.0	6.2	7.4	6.8	7.0	7.7	7.2	7.4
3	6.3	5.8	6.0	6.1	5.9	6.1	7.5	6.8	7.0	7.9	7.3	7.4
4	6.4	5.8	6.1	6.3	5.9	6.1	7.4	6.9	7.1	7.5	7.1	7.3
5	6.5	5.9	6.2	6.6	6.1	6.3	7.0	6.8	6.9	7.4	7.1	7.2
6	6.4	5.8	6.1	6.3	6.0	6.2	6.9	6.8	6.9	7.3	7.1	7.2
7	7.0	5.9	6.3	6.4	6.1	6.3	6.9	6.8	6.9	7.1	6.9	7.0
8	6.8	6.0	6.4	6.4	6.1	6.2	7.0	6.8	6.9	7.0	7.0	7.0
9	7.0	5.9	6.4	6.5	6.1	6.3	7.0	6.8	6.9	7.1	7.0	7.0
10	6.4	5.7	6.0	6.4	6.1	6.2	7.0	6.8	6.9	7.2	7.0	7.1
11	7.4	5.5	6.1	6.5	6.1	6.2	7.1	6.9	6.9	7.1	7.1	7.1
12	6.8	5.7	6.1	6.5	6.1	6.3	7.0	6.9	6.9	7.1	7.0	7.1
13	7.0	5.7	6.1	6.6	6.2	6.4	7.1	6.9	6.9	7.0	6.9	7.0
14	7.0	5.8	6.2	7.2	6.6	6.8	7.1	6.8	6.9	6.9	6.8	6.9
15	6.8	5.6	6.0	6.9	6.5	6.7	7.1	6.8	6.9	6.9	6.8	6.9
16	7.0	5.9	6.2	6.9	6.3	6.6	7.2	6.9	7.0	7.0	6.7	6.8
17	6.1	4.6	5.5	6.4	6.1	6.3	7.1	6.9	6.9	7.0	6.9	6.9
18	6.6	5.5	6.2	6.1	5.8	6.0	7.1	6.9	6.9	7.0	6.9	6.9
19	6.6	5.9	6.2	6.1	5.8	5.9	7.2	6.9	7.0	6.9	6.8	6.9
20	6.9	6.2	6.5	6.1	5.8	5.9	7.5	6.9	7.1	7.0	6.9	6.9
21	7.1	6.4	6.7	6.1	5.7	5.8	7.8	7.1	7.3	7.0	6.9	6.9
22	7.1	6.2	6.5	6.0	5.7	5.8	7.9	7.1	7.3	7.1	6.9	7.0
23	7.0	6.1	6.4	6.2	5.6	5.8	7.7	7.1	7.3	7.1	7.0	7.1
24	7.2	5.9	6.4	6.4	5.7	6.2	7.7	7.1	7.3	7.1	6.9	7.0
25	7.5	5.9	6.3	6.2	5.8	6.0	7.7	7.1	7.3	7.0	6.7	6.8
26	7.3	6.0	6.5	6.1	5.6	5.8	7.5	7.1	7.2	6.8	6.7	6.7
27	7.2	6.0	6.5	7.1	5.8	6.4	7.7	7.1	7.3	6.8	6.7	6.7
28	7.2	6.1	6.8	7.1	6.3	6.8	7.4	7.1	7.2	6.9	6.7	6.8
29	6.9	6.5	6.7	6.9	6.2	6.5	7.6	7.1	7.3	7.0	6.9	7.0
30	6.7	6.5	6.5	7.1	6.2	6.8	7.6	7.2	7.3	7.1	6.9	7.0
31	6.7	6.4	6.5	---	---	---	7.5	7.2	7.3	7.1	6.8	6.9
MONTH	7.5	4.6	6.3	7.2	5.6	6.2	7.9	6.8	7.1	7.9	6.7	7.0

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	7.0	6.7	6.9	6.8	6.7	6.8	7.1	6.4	6.6	7.7	6.6	7.0
2	7.0	6.7	6.9	6.8	6.7	6.8	7.4	6.4	6.7	8.5	6.6	7.4
3	7.0	6.7	6.9	6.9	6.7	6.8	6.9	6.4	6.6	8.3	6.6	7.3
4	7.0	6.7	6.9	6.9	6.7	6.8	7.2	6.5	6.7	8.4	6.6	7.2
5	7.1	6.8	6.9	6.9	6.7	6.8	7.2	6.6	6.8	8.7	6.6	7.6
6	7.0	6.8	6.9	7.0	6.7	6.8	7.1	6.5	6.7	8.4	6.7	7.2
7	7.1	6.8	6.9	7.0	6.8	6.9	6.9	6.4	6.6	7.5	6.4	6.8
8	6.9	6.7	6.8	6.9	6.6	6.8	6.9	6.4	6.6	6.6	6.5	6.5
9	6.9	6.7	6.8	6.7	6.4	6.6	7.0	6.4	6.6	6.6	6.5	6.5
10	6.9	6.7	6.8	6.6	6.4	6.5	6.5	6.4	6.4	6.5	6.4	6.5
11	6.8	6.7	6.8	6.6	6.4	6.5	6.6	6.4	6.5	6.5	6.4	6.5
12	6.8	6.7	6.8	6.6	6.4	6.5	6.9	6.4	6.6	6.6	6.5	6.6
13	6.8	6.7	6.7	6.6	6.4	6.5	6.9	6.4	6.6	6.5	6.4	6.4
14	6.8	6.7	6.7	6.7	6.4	6.5	7.1	6.4	6.7	6.5	6.4	6.5
15	7.0	6.7	6.8	6.9	6.4	6.6	6.9	6.5	6.6	6.6	6.5	6.5
16	7.0	6.8	6.9	6.8	6.3	6.5	6.9	6.5	6.7	6.5	6.4	6.5
17	7.0	6.8	6.9	6.9	6.3	6.5	7.2	6.5	6.8	6.6	6.5	6.6
18	7.0	6.9	6.9	6.9	6.4	6.5	7.6	6.5	6.9	6.7	6.6	6.6
19	7.1	6.9	7.0	7.0	6.4	6.6	7.0	6.6	6.8	6.6	6.4	6.5
20	7.0	6.9	6.9	7.1	6.4	6.7	7.0	6.6	6.8	6.4	6.4	6.4
21	7.0	6.9	6.9	6.8	6.4	6.5	7.0	6.6	6.8	6.4	6.4	6.4
22	7.0	6.8	6.9	6.8	6.4	6.6	7.2	6.6	6.9	6.6	6.4	6.5
23	6.8	6.6	6.8	7.0	6.4	6.6	7.2	6.6	6.9	6.7	6.6	6.7
24	6.8	6.6	6.7	7.1	6.4	6.6	7.4	6.7	7.0	6.7	6.7	6.7
25	6.8	6.6	6.7	7.2	6.4	6.7	7.7	6.7	7.2	6.7	6.7	6.7
26	6.8	6.7	6.8	7.2	6.4	6.7	7.9	6.8	7.3	6.7	6.6	6.7
27	6.8	6.6	6.7	6.5	6.3	6.4	7.6	6.8	7.1	6.7	6.6	6.6
28	6.8	6.6	6.7	6.5	6.3	6.4	7.9	6.8	7.2	6.8	6.6	6.7
29	---	---	---	6.6	6.3	6.4	7.6	6.7	7.0	6.6	6.5	6.6
30	---	---	---	6.8	6.3	6.5	7.9	6.7	7.1	6.6	6.6	6.6
31	---	---	---	6.9	6.4	6.5	---	---	---	6.7	6.6	6.6
MONTH	7.1	6.6	6.8	7.2	6.3	6.6	7.9	6.4	6.8	8.7	6.4	6.7
JUNE			JULY			AUGUST			SEPTEMBER			
1	6.7	6.6	6.6	6.5	6.3	6.4	7.1	6.7	6.8	6.9	6.6	6.7
2	6.7	6.6	6.7	6.6	6.4	6.5	7.0	6.6	6.8	6.8	6.5	6.6
3	6.6	6.6	6.6	6.7	6.5	6.6	7.0	6.7	6.8	6.8	6.4	6.6
4	6.7	6.5	6.6	6.7	6.5	6.6	7.1	6.7	6.8	7.0	6.5	6.7
5	6.7	6.6	6.7	6.7	6.6	6.7	6.9	6.7	6.8	6.7	6.6	6.7
6	6.7	6.5	6.7	6.8	6.6	6.7	7.0	6.5	6.7	7.0	6.6	6.8
7	6.8	6.6	6.7	6.7	6.6	6.7	6.7	6.4	6.5	7.1	6.7	6.8
8	6.6	6.5	6.6	6.7	6.5	6.6	6.7	6.4	6.5	7.1	6.6	6.8
9	6.7	6.5	6.6	6.6	6.5	6.6	6.8	6.5	6.6	7.0	6.7	6.8
10	6.8	6.5	6.7	6.6	6.4	6.5	6.9	6.5	6.6	7.2	6.7	6.9
11	6.6	6.4	6.5	6.6	6.4	6.5	6.9	6.5	6.6	7.0	6.7	6.8
12	6.7	6.5	6.6	6.6	6.3	6.4	6.9	6.5	6.7	7.2	6.7	6.9
13	6.7	6.6	6.7	6.5	6.4	6.4	7.0	6.6	6.8	7.2	6.7	6.9
14	6.6	6.4	6.5	6.6	6.2	6.4	7.0	6.7	6.8	7.2	6.8	7.0
15	6.5	6.4	6.5	6.5	6.2	6.4	7.2	6.8	6.9	7.3	6.9	7.1
16	6.5	6.4	6.5	6.6	6.3	6.4	7.1	6.7	6.8	7.2	6.8	7.0
17	7.1	6.4	6.5	6.7	6.4	6.6	7.0	6.6	6.8	7.0	6.8	6.9
18	7.4	6.5	6.8	6.8	6.4	6.5	7.1	6.7	6.8	7.1	6.8	6.9
19	7.1	6.5	6.6	6.8	6.4	6.5	7.1	6.8	6.9	7.0	6.7	6.8
20	7.4	6.5	6.7	6.9	6.4	6.6	7.1	6.8	7.0	6.9	6.7	6.8
21	6.8	6.7	6.8	7.0	6.5	6.7	7.2	6.9	7.0	7.0	6.7	6.9
22	6.8	6.6	6.7	7.0	6.6	6.7	7.2	6.7	6.9	6.9	6.7	6.8
23	6.7	6.4	6.6	6.8	6.3	6.6	6.7	6.5	6.6	6.8	6.5	6.7
24	6.7	6.6	6.6	6.5	6.2	6.3	6.6	6.4	6.5	6.7	6.5	6.5
25	6.7	6.5	6.6	6.5	6.2	6.3	6.6	6.3	6.5	6.7	6.5	6.6
26	6.6	6.4	6.5	6.7	6.3	6.5	6.7	6.4	6.5	6.7	6.5	6.6
27	6.6	6.3	6.5	6.7	6.5	6.6	6.8	6.4	6.6	6.6	6.5	6.5
28	6.6	6.3	6.4	6.8	6.5	6.6	6.8	6.5	6.6	6.7	6.5	6.5
29	6.5	6.3	6.5	6.8	6.5	6.6	6.8	6.5	6.6	6.6	6.4	6.5
30	6.5	6.4	6.5	6.9	6.5	6.6	6.8	6.4	6.6	6.9	6.3	6.5
31	---	---	---	7.0	6.5	6.8	6.9	6.5	6.6	---	---	---
MONTH	7.4	6.3	6.6	7.0	6.2	6.5	7.2	6.3	6.7	7.3	6.3	6.8
YEAR	8.7	4.6	6.7									

UPPER TWIN CREEK BASIN

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03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	13.0	7.0	10.0	9.0	5.5	7.5	8.5	5.0	6.5	2.0	.0	1.0
2	15.0	12.5	13.5	9.5	4.5	7.0	9.0	5.5	7.5	3.5	2.0	3.0
3	13.0	9.5	11.0	8.0	6.5	7.5	9.5	8.5	9.0	3.5	2.0	3.0
4	12.0	7.5	9.5	10.0	6.0	8.5	9.5	9.0	9.0	2.0	1.0	1.5
5	12.5	10.0	11.5	13.0	9.0	11.0	9.5	8.5	9.0	3.0	1.5	2.5
6	12.0	8.0	10.0	9.0	7.0	8.0	8.5	8.0	8.5	3.0	2.5	2.5
7	14.0	11.0	12.5	7.5	4.0	6.0	9.0	7.5	8.0	4.5	2.0	3.5
8	15.5	12.0	13.5	7.5	3.0	5.0	8.5	6.0	7.0	4.0	1.0	2.5
9	17.5	13.0	14.5	8.5	4.0	5.5	8.5	5.5	7.0	1.5	.5	1.0
10	13.0	9.0	10.5	8.0	3.5	5.5	9.5	7.5	8.5	2.0	.5	1.0
11	10.5	6.5	8.5	9.0	3.5	6.0	7.5	4.0	6.0	2.5	1.0	2.0
12	13.0	9.0	11.0	10.0	5.5	7.5	5.5	2.5	4.0	3.0	2.5	2.5
13	13.0	9.0	11.0	10.0	8.5	9.0	5.5	2.5	4.0	3.5	3.0	3.5
14	14.5	11.0	12.5	14.0	10.0	12.0	6.5	4.5	5.5	3.5	.0	2.5
15	12.0	8.5	10.5	13.0	11.5	12.0	7.5	6.0	6.5	.5	.0	.0
16	15.0	11.5	13.0	12.5	10.5	11.0	7.5	6.5	7.0	.5	.0	.0
17	16.5	14.0	15.0	12.0	11.0	11.5	7.0	6.5	6.5	.5	.0	.0
18	16.0	12.0	14.0	11.5	10.5	10.5	7.0	6.0	6.5	.0	.0	.0
19	15.0	12.0	13.5	11.0	10.0	10.5	7.0	5.5	6.0	.0	.0	.0
20	16.5	14.5	15.5	10.0	7.0	8.5	6.0	5.0	5.5	.0	.0	.0
21	16.5	13.0	15.5	9.5	6.0	7.5	5.0	4.0	4.5	.0	.0	.0
22	15.0	11.0	12.5	9.0	5.5	7.0	5.0	3.5	4.0	.5	.0	.0
23	15.0	10.0	12.0	9.5	5.5	7.5	5.0	3.5	4.0	1.5	.5	1.0
24	15.0	9.5	11.5	10.0	7.0	8.5	4.0	3.0	3.5	1.0	.5	.5
25	15.0	9.5	12.0	11.0	8.0	9.5	3.5	1.0	3.0	2.0	.0	.5
26	15.5	11.0	13.0	12.0	9.0	10.5	2.0	.5	1.5	4.0	2.0	3.5
27	13.5	11.0	12.0	10.5	7.0	9.0	3.5	1.0	2.0	4.5	3.5	4.0
28	12.5	9.0	10.5	7.5	7.0	7.0	2.0	.5	1.0	5.5	4.0	4.5
29	13.0	8.5	10.5	7.5	6.0	6.5	2.0	.0	1.0	4.0	3.5	4.0
30	10.0	8.0	8.5	8.0	6.5	7.0	1.0	.0	.5	4.0	3.0	3.5
31	9.0	7.5	8.0	---	---	---	1.0	.0	.5	3.5	2.0	2.5
MONTH	17.5	6.5	12.0	14.0	3.0	8.5	9.5	.0	5.5	5.5	.0	2.0
FEBRUARY			MARCH			APRIL			MAY			
1	2.0	.0	1.0	3.5	2.5	3.0	10.0	4.5	7.0	13.5	10.5	11.5
2	1.5	.0	.5	3.0	2.5	3.0	10.5	5.5	8.0	13.5	9.0	11.0
3	2.0	.0	1.0	5.5	2.5	3.5	9.0	7.0	8.0	11.0	10.5	10.5
4	3.0	.0	1.5	7.0	3.0	5.0	11.5	5.5	8.0	11.0	10.0	10.5
5	3.5	1.0	2.0	7.0	3.5	5.0	10.0	6.5	8.0	13.5	10.5	12.0
6	4.0	.0	1.5	8.0	3.5	5.5	9.5	7.5	8.5	12.0	11.0	11.5
7	3.0	.0	1.5	8.0	4.5	6.5	10.0	6.5	8.0	12.5	11.0	11.5
8	3.5	1.5	2.0	7.0	5.0	6.0	10.5	5.0	7.5	12.0	11.5	11.5
9	4.0	1.5	3.0	5.0	1.5	3.0	10.0	6.5	8.5	12.0	11.5	11.5
10	2.0	1.0	1.5	5.5	4.0	4.5	9.5	9.0	9.0	12.5	12.0	12.5
11	2.5	1.5	2.0	6.0	3.0	4.5	9.0	8.0	8.5	12.5	12.0	12.5
12	3.0	2.0	2.5	6.5	3.0	4.5	11.5	8.0	9.5	13.5	12.5	13.0
13	3.0	1.5	2.5	5.5	3.5	5.0	12.0	10.0	10.5	13.5	12.5	13.0
14	4.0	1.0	2.5	7.0	5.0	5.5	---	---	---	13.5	12.0	13.0
15	5.0	2.0	3.0	9.0	5.0	6.5	---	---	---	13.5	13.0	13.5
16	4.5	1.5	3.0	6.5	3.5	5.5	12.0	9.0	10.5	13.5	13.0	13.5
17	5.0	2.0	3.0	6.5	2.0	4.0	13.0	8.5	10.5	13.5	13.0	13.5
18	6.0	2.0	4.0	7.5	4.5	5.5	---	---	---	13.5	12.5	13.0
19	7.0	3.0	5.0	8.0	3.5	5.5	---	---	---	13.0	12.0	12.5
20	6.0	4.5	5.5	9.0	4.5	6.5	15.5	10.5	12.5	14.0	11.5	12.5
21	7.5	5.5	6.5	9.0	7.0	7.5	14.0	10.5	11.5	14.5	12.5	13.5
22	6.0	5.0	5.5	9.0	5.5	7.0	15.5	10.0	12.0	14.5	13.5	14.0
23	8.0	5.0	6.5	10.5	5.5	8.0	15.0	8.5	11.5	15.0	14.0	14.5
24	6.5	3.5	5.0	11.5	8.0	10.0	16.5	8.5	12.5	20.0	15.0	17.0
25	5.5	2.5	4.0	10.0	6.0	8.5	18.0	11.0	14.0	19.5	16.5	17.5
26	3.5	1.5	2.5	7.0	5.0	6.0	19.0	12.5	15.0	18.0	15.5	17.0
27	3.5	.0	1.5	8.0	6.0	7.0	16.5	13.5	15.0	17.0	14.0	15.0
28	4.0	.5	2.0	8.0	7.0	7.0	17.5	13.0	15.0	18.0	12.5	15.0
29	---	---	---	8.0	6.0	7.0	15.0	13.0	14.0	19.0	13.5	16.5
30	---	---	---	9.0	4.5	6.5	14.0	12.5	13.5	19.5	15.5	17.5
31	---	---	---	8.5	6.0	7.0	---	---	---	20.5	16.5	18.5
MONTH	8.0	.0	3.0	11.5	1.5	6.0	19.0	4.5	10.6	20.5	9.0	13.5

03237500 OHIO BRUSH CREEK NEAR WEST UNION, OH

LOCATION.--Lat 38°48'13", long 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, and 7.1 mi upstream from Beasley Fork.

DRAINAGE AREA.--387 mi².

PERIOD OF RECORD.--August 1926 to November 1935, September 1940 to current year.

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 510.6 ft above sea level. Prior to Nov. 22, 1940, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Oct. 1-7, Dec. 26 to Jan. 6, 10-25, Feb. 1-7, Jul. 26 to Aug. 20. Records poor. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	21	139	26	450	289	364	3320	43	37	20	74
2	8.4	23	106	25	340	322	268	1130	37	26	13	63
3	7.0	25	91	150	270	1060	225	611	32	68	8.8	7.9
4	6.2	34	1310	240	230	1370	368	576	28	790	12	3.0
5	5.0	32	4640	210	210	711	267	453	24	273	17	2.1
6	4.0	29	1320	190	180	361	331	345	22	105	9.6	1.8
7	3.2	26	512	3440	170	265	1950	2920	30	111	9.0	1.6
8	2.8	23	267	1950	613	785	669	3770	102	119	8.2	1.5
9	2.8	21	206	638	4790	1330	373	1120	95	67	7.2	1.4
10	4.0	19	239	400	1160	4720	11500	616	63	47	5.6	1.5
11	5.3	14	214	340	682	2600	7990	415	38	27	4.2	1.4
12	5.0	8.8	171	290	501	2250	2350	310	27	27	3.9	1.7
13	4.7	28	128	240	582	1940	2270	248	22	19	4.0	1.9
14	4.6	494	113	210	497	2370	1400	204	18	21	4.5	2.5
15	4.4	2620	115	180	497	1260	1530	246	16	86	5.0	3.4
16	4.9	572	126	160	465	692	2510	246	15	103	4.6	2.7
17	11	1840	119	140	408	409	1030	246	14	33	4.4	2.5
18	13	2850	98	130	401	381	631	246	13	21	4.5	2.8
19	15	714	94	110	444	386	456	232	12	15	3.2	3.0
20	38	304	115	100	503	254	343	194	11	14	2.2	3.7
21	53	173	140	94	1620	422	272	166	12	21	40	4.0
22	56	114	182	86	1210	706	241	142	24	50	15	4.2
23	23	88	166	76	4600	367	207	126	179	139	3.2	4.6
24	12	69	159	200	1900	261	182	113	131	91	2.3	5.6
25	22	57	135	1100	1060	208	168	97	106	24	1.6	12
26	28	44	94	5400	731	166	155	116	104	17	1.4	22
27	19	948	72	4040	459	2210	500	102	617	13	1.2	41
28	16	1400	54	17600	391	3900	495	81	170	9.4	1.2	28
29	15	510	44	3220	---	1620	819	65	92	7.2	1.2	19
30	14	251	37	1380	---	870	2290	56	61	6.8	1.1	12
31	16	---	30	859	---	528	---	49	---	9.0	2.2	---
TOTAL	436.3	13351.8	11236	43224	25364	35013	42154	18561	2158	2396.4	221.3	335.8
MEAN	14.1	445	362	1394	906	1129	1405	599	71.9	77.3	7.14	11.2
MAX	56	2850	4640	17600	4790	4720	11500	3770	617	790	40	74
MIN	2.8	8.8	30	25	170	166	155	49	11	6.8	1.1	1.4
CFSM	.04	1.15	.94	3.60	2.34	2.92	3.63	1.55	.19	.20	.02	.03
IN.	.04	1.28	1.08	4.15	2.44	3.37	4.05	1.78	.21	.23	.02	.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 1994, BY WATER YEAR (WY)

	MEAN	94.6	267	543	737	831	994	746	508	239	191	153	134
MAX	651	1447	2252	2637	1989	3909	2030	2038	936	1222	1000	2053	
(WY)	1976	1986	1991	1950	1951	1964	1948	1968	1928	1932	1935	1979	
MIN	.13	.28	2.28	12.1	24.9	96.5	106	27.5	3.18	1.46	1.04	.43	
(WY)	1954	1954	1954	1977	1954	1941	1971	1930	1988	1988	1988	1953	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1927 - 1994

ANNUAL TOTAL	138271.50	194451.6	451
ANNUAL MEAN	379	533	951
HIGHEST ANNUAL MEAN			158
LOWEST ANNUAL MEAN			1979
HIGHEST DAILY MEAN	5790	17600	40500
LOWEST DAILY MEAN	.70	1.1	.00
ANNUAL SEVEN-DAY MINIMUM	1.2	1.4	.00
INSTANTANEOUS PEAK FLOW		26600	59200
INSTANTANEOUS PEAK STAGE		20.30	27.91
INSTANTANEOUS LOW FLOW		1.1	
ANNUAL RUNOFF (CFSM)	.98	1.38	1.17
ANNUAL RUNOFF (INCHES)	13.29	18.69	15.85
10 PERCENT EXCEEDS	865	1370	984
50 PERCENT EXCEEDS	113	106	109
90 PERCENT EXCEEDS	3.2	4.1	5.2

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

WHITEOAK CREEK BASIN

03238500 WHITEOAK CREEK NEAR GEORGETOWN, OH

LOCATION.--Lat 38°51'29", long 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, and 7.2 mi upstream from mouth.

DRAINAGE AREA.--218 mi².

PERIOD OF RECORD.--October 1923 to November 1935, October 1939 to current year.

REVISED RECORDS.--WSP 728: 1924-31. WSP 758: 1933. WSP 1908: Drainage area. WRD OH-74-1: 1973 (P)

GAGE.--Water-stage recorder. 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.--Estimated daily discharges: Dec. 22 to Jan. 7, 11-25, Feb. 2-8. Records good, except for periods of estimated record and those below 30 ft³/s, which are poor. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1970 to 1974. Satellite telemeter at this station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	13	67	18	149	80	126	3280	18	12	15	11
2	2.2	13	51	18	90	90	105	481	16	8.5	8.8	9.5
3	2.2	13	63	50	74	139	103	209	14	13	6.2	9.1
4	1.7	13	1240	100	62	135	314	159	14	249	9.8	7.1
5	1.7	13	3430	96	52	117	179	138	13	64	13	5.2
6	1.3	13	478	94	45	95	170	113	13	27	7.1	5.1
7	1.2	13	195	1350	38	111	993	2330	14	17	7.0	5.0
8	.85	21	117	1070	32	277	290	4300	142	17	6.3	3.9
9	.85	16	86	231	2700	275	157	419	43	12	5.2	2.3
10	1.2	13	72	194	357	1960	5440	192	24	7.8	4.1	2.5
11	.62	9.7	65	140	174	1790	5730	124	17	11	3.1	2.9
12	.62	9.5	61	110	132	1290	1250	96	16	13	2.9	2.9
13	.62	23	45	96	120	1270	4250	81	14	8.4	2.9	2.9
14	.62	167	40	84	145	1310	793	129	13	8.1	3.4	2.5
15	.62	1870	40	72	202	524	398	1180	11	13	3.9	2.1
16	.97	251	45	66	190	244	1230	633	9.5	25	3.3	1.3
17	4.2	1730	45	60	180	150	328	208	22	15	3.2	1.8
18	7.2	2650	43	56	195	126	175	112	30	13	3.9	2.6
19	5.2	266	47	52	283	141	127	76	18	14	3.0	2.0
20	13	116	75	50	294	117	101	58	13	15	1.5	1.4
21	14	68	82	48	1330	179	79	48	9.2	9.7	1.6	.79
22	15	44	72	46	554	378	70	40	7.1	7.7	1.8	.11
23	20	33	64	45	2700	185	60	35	6.9	97	2.2	.00
24	17	29	48	43	716	125	51	31	6.0	50	6.0	.81
25	16	27	40	700	274	96	48	28	4.4	23	6.9	2.1
26	16	25	25	3410	176	75	45	26	5.7	14	5.3	2.7
27	15	919	23	2960	119	790	68	24	50	8.4	4.0	2.9
28	13	704	22	10100	92	2270	91	24	89	6.4	3.0	2.9
29	10	193	20	2660	---	621	919	25	30	5.3	3.9	2.9
30	9.5	108	19	433	---	271	2930	23	17	5.0	3.9	2.5
31	9.6	---	18	243	---	168	---	21	---	5.1	5.2	---
TOTAL	205.77	9383.2	6738	24695	11475	15399	26620	14643	699.8	794.4	157.4	100.81
MEAN	6.64	313	217	797	410	497	887	472	23.3	25.6	5.08	3.36
MAX	20	2650	3430	10100	2700	2270	5730	4300	142	249	15	11
MIN	.62	9.5	18	18	32	75	45	21	4.4	5.0	1.5	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1994, BY WATER YEAR (WY)

	MEAN	64.2	168	298	434	491	553	432	261	137	99.2	89.0	81.5
MAX	580	1103	1427	1487	1281	1822	1133	1127	599	598	531	1220	
(WY)	1984	1986	1991	1950	1955	1963	1973	1933	1946	1980	1926	1979	
MIN	.071	.17	1.64	1.67	12.2	41.5	31.6	10.9	4.55	1.02	1.28	.17	
(WY)	1941	1931	1964	1977	1934	1941	1971	1934	1988	1930	1993	1985	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1925 - 1994
ANNUAL TOTAL	92406.65	110911.38	
ANNUAL MEAN	253	304	258
HIGHEST ANNUAL MEAN			583
LOWEST ANNUAL MEAN			82.4
HIGHEST DAILY MEAN	6010	10100	19400
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.05	.74	.00
INSTANTANEOUS PEAK FLOW		11000	22400
INSTANTANEOUS PEAK STAGE		7.75	20.87
INSTANTANEOUS LOW FLOW		.00	
10 PERCENT EXCEEDS	596	709	529
50 PERCENT EXCEEDS	49	40	43
90 PERCENT EXCEEDS	.81	2.9	2.5

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

LITTLE MIAMI RIVER BASIN

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03240000 LITTLE MIAMI RIVER NEAR OLDTOWN, OH

LOCATION.--Lat 39°44'54", LONG 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, and at mile 82.25.

DRAINAGE AREA.--129 mi².

PERIOD OF RECORD.--July 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 816.56 ft above sea level.

REMARKS.--Estimated daily discharges: Dec. 5-7, 26-30, Jan. 1-10, 12-28, and Feb. 1-5. Records good except for periods of estimated daily discharges, which are poor. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1952 to 1958.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	29	110	34	190	115	97	514	62	64	35	26
2	21	29	106	32	150	110	91	324	58	57	35	23
3	21	29	138	30	140	103	98	223	57	206	33	21
4	19	29	155	27	130	102	116	183	56	147	34	20
5	19	31	270	26	120	104	112	156	54	96	56	20
6	18	29	540	25	117	106	120	142	53	74	44	20
7	19	28	260	40	109	110	198	164	74	64	35	19
8	19	26	197	120	104	109	159	259	58	59	32	19
9	21	27	160	92	99	108	136	196	54	63	30	18
10	21	26	140	78	104	108	800	156	50	52	29	18
11	22	26	122	70	92	98	861	133	48	47	28	17
12	22	26	103	57	77	106	657	131	46	44	28	17
13	23	62	95	54	77	216	499	117	46	47	26	17
14	23	126	90	50	92	286	376	109	44	62	25	16
15	23	202	87	46	160	231	294	127	42	55	23	14
16	23	124	79	43	214	176	271	141	41	46	22	15
17	34	229	73	40	141	141	218	116	42	41	22	16
18	34	323	73	38	137	136	184	103	41	57	21	16
19	31	193	74	36	161	121	165	95	39	46	21	15
20	42	136	72	34	186	109	145	90	38	40	23	15
21	46	101	76	33	241	110	132	85	40	37	32	15
22	38	84	72	32	212	106	124	81	43	38	25	14
23	34	73	70	31	287	98	115	78	42	39	21	14
24	30	67	67	100	386	96	111	75	49	34	20	14
25	30	61	68	250	239	88	105	74	46	47	19	15
26	29	57	58	1160	173	83	100	92	68	41	19	18
27	27	247	52	600	144	113	96	87	119	35	20	19
28	27	302	48	1700	123	132	91	76	89	40	22	17
29	27	183	43	1350	---	129	98	71	68	40	60	16
30	28	132	40	439	---	112	112	67	84	46	33	16
31	29	---	37	296	---	103	---	65	---	41	27	---
TOTAL	819	3037	3575	6963	4405	3865	6681	4330	1651	1805	900	520
MEAN	26.4	101	115	225	157	125	223	140	55.0	58.2	29.0	17.3
MAX	46	323	540	1700	386	286	861	514	119	206	60	26
MIN	18	26	37	25	77	83	91	65	38	34	19	14
CFSM	.20	.78	.89	1.74	1.22	.97	1.73	1.08	.43	.45	.23	.13
IN.	.24	.88	1.03	2.01	1.27	1.11	1.93	1.25	.48	.52	.26	.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1994, BY WATER YEAR (WY)

	MEAN	35.5	72.7	113	140	185	216	197	160	120	86.8	62.3	38.5
MAX	163	315	513	497	485	655	422	598	469	406	413	378	
(WY)	1991	1986	1991	1959	1975	1963	1957	1968	1981	1990	1980	1979	
MIN	9.46	11.0	11.3	10.4	20.9	35.1	54.9	35.2	22.1	10.6	11.3	9.09	
(WY)	1954	1954	1954	1977	1954	1954	1971	1954	1988	1954	1955	1964	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR			FOR 1994 WATER YEAR			WATER YEARS 1952 - 1994		
ANNUAL TOTAL	48849			38551					
ANNUAL MEAN	134			106			119		
HIGHEST ANNUAL MEAN							228		
LOWEST ANNUAL MEAN							28.6		
HIGHEST DAILY MEAN	1410			1700			6140		
LOWEST DAILY MEAN	18			14			3.5		
ANNUAL SEVEN-DAY MINIMUM	18			15			7.4		
INSTANTANEOUS PEAK FLOW				2720			14800		
INSTANTANEOUS PEAK STAGE				8.14			12.20		
INSTANTANEOUS LOW FLOW				14					
ANNUAL RUNOFF (CFSM)	1.04			.82			.92		
ANNUAL RUNOFF (INCHES)	14.09			11.12			12.49		
10 PERCENT EXCEEDS	291			204			251		
50 PERCENT EXCEEDS	90			64			61		
90 PERCENT EXCEEDS	23			20			17		

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

LITTLE MIAMI RIVER BASIN

03241500 MASSIES CREEK AT WILBERFORCE, OH

LOCATION.--Lat 39°43'22", long 83°52'58", Greene County, Hydrologic Unit 05090202, on left bank at bridge on Wilberforce-Clifton Road, 0.5 mi northwest of Wilberforce, 0.6 mi downstream from unnamed right bank tributary and 1.7 mi upstream from Clark Run.

DRAINAGE AREA.--63.2 mi².

PERIOD OF RECORD.--September 1952 to current year. Prior to October 1962, published as Massie Creek at Wilberforce. REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. 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.--Estimated daily discharges: Dec. 26-Jan. 7, 11-28, Feb. 2-14, and May 16-18. Records good except for estimated daily discharges, which are poor. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1952 to 1958. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	5.9	43	10	120	55	37	163	21	25	27	11
2	4.5	5.2	40	9.2	90	50	33	93	20	22	19	7.8
3	4.2	5.7	46	8.6	68	47	35	67	18	28	15	6.5
4	4.1	5.9	88	7.8	58	44	47	74	19	23	16	5.7
5	3.9	6.4	209	7.4	52	44	50	55	17	18	25	5.4
6	3.8	5.5	125	7.0	47	44	51	53	17	15	19	5.5
7	3.4	5.2	80	12	43	44	94	60	30	14	13	5.4
8	3.9	4.9	66	34	39	45	76	89	23	15	11	5.2
9	5.2	5.0	56	31	36	44	65	75	19	14	8.5	4.8
10	5.5	5.0	53	24	35	48	590	55	17	12	7.7	4.9
11	5.3	5.1	44	23	33	41	747	45	17	11	6.9	4.6
12	5.7	5.2	36	21	31	47	526	51	15	10	7.3	4.4
13	6.1	27	33	20	30	115	398	32	15	10	7.1	4.1
14	5.7	34	32	19	37	140	294	32	14	15	6.2	4.1
15	5.8	48	30	18	107	110	206	48	14	12	5.2	3.9
16	6.0	32	26	17	107	81	195	52	14	11	4.7	3.9
17	12	56	22	16	76	61	139	45	15	10	4.3	4.7
18	5.7	85	21	15	75	54	107	40	13	12	4.1	4.7
19	5.2	59	22	14	91	44	88	39	13	9.0	3.9	4.3
20	9.6	42	22	14	104	38	70	37	21	7.8	6.2	4.3
21	7.9	29	23	13	145	38	60	35	28	7.5	35	4.1
22	6.1	23	23	13	124	34	52	35	19	7.9	23	3.9
23	5.4	20	23	12	184	34	47	33	16	8.3	11	3.7
24	5.2	18	21	35	222	37	45	33	22	6.8	8.2	3.8
25	5.1	16	20	100	127	33	43	32	24	16	6.9	5.4
26	4.1	15	18	900	88	29	40	31	30	18	5.9	7.5
27	4.1	77	16	500	73	40	37	28	60	13	5.6	5.8
28	4.4	121	14	1050	59	49	33	25	42	11	8.4	4.8
29	4.5	72	13	820	---	54	36	24	33	10	30	4.6
30	5.0	52	12	277	---	45	66	23	30	79	25	4.3
31	5.9	---	11	163	---	39	---	23	---	44	14	---
TOTAL	167.4	891.0	1288	4211.0	2301	1628	4307	1527	656	515.3	390.1	153.1
MEAN	5.40	29.7	41.5	136	82.2	52.5	144	49.3	21.9	16.6	12.6	5.10
MAX	12	121	209	1050	222	140	747	163	60	79	35	11
MIN	3.4	4.9	11	7.0	30	29	33	23	13	6.8	3.9	3.7
CFSM	.09	.47	.66	2.15	1.30	.83	2.27	.78	.35	.26	.20	.08
IN.	.10	.52	.76	2.48	1.35	.96	2.54	.90	.39	.30	.23	.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1994, BY WATER YEAR (WY)

	MEAN	15.6	43.0	65.5	77.7	103	121	107	87.5	58.3	41.3	26.6	15.1
	MAX	99.7	248	290	273	236	372	236	335	253	199	196	186
	(WY)	1991	1986	1991	1959	1975	1963	1957	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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1952 - 1994

ANNUAL TOTAL	22145.0	18034.9	
ANNUAL MEAN	60.7	49.4	63.3
HIGHEST ANNUAL MEAN			113
LOWEST ANNUAL MEAN			8.68
HIGHEST DAILY MEAN	791	1050	3620
LOWEST DAILY MEAN	2.7	3.4	.30
ANNUAL SEVEN-DAY MINIMUM	3.0	4.0	.33
INSTANTANEOUS PEAK FLOW		1340	7300
INSTANTANEOUS PEAK STAGE		7.64	11.25
INSTANTANEOUS LOW FLOW		3.4	
ANNUAL RUNOFF (CFSM)	.96	.78	1.00
ANNUAL RUNOFF (INCHES)	13.03	10.62	13.60
10 PERCENT EXCEEDS	140	89	144
50 PERCENT EXCEEDS	37	23	27
90 PERCENT EXCEEDS	4.1	5.0	4.6

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

b ice jam

e estimated

03245500 LITTLE MIAMI RIVER AT MILFORD, OH
National Stream-Quality Accounting Network Station

LOCATION.--Lat 39°10'17", long 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, 1.2 mi upstream from East Fork, 6.4 mi downstream from North Branch Creek, and at mile 12.9.

DRAINAGE AREA.--1,203 mi².

WATER-DISCHARGE RECORDS

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.--Estimated daily discharges: Dec. 25-Jan. 6, 9-10, and 15-24. Records fair. 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.

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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	138	242	1130	240	2010	1000	737	6900	387	494	292	841
2	134	256	1070	220	3470	912	652	3790	364	443	378	547
3	133	251	1140	210	3330	875	796	3270	345	756	339	378
4	132	330	2670	200	3140	833	1420	2730	333	623	340	312
5	125	366	6370	190	3100	758	946	1580	320	488	407	287
6	110	320	3170	180	3030	716	863	1250	371	391	429	263
7	110	276	2590	1140	2950	708	1950	3320	400	339	353	235
8	107	276	2140	1320	2550	702	1690	4530	371	371	290	236
9	232	282	1860	600	4190	699	1300	2840	350	376	227	213
10	205	256	2020	430	1670	842	21700	2140	320	345	202	210
11	187	224	1530	568	1290	1350	12800	1710	306	301	196	200
12	174	214	1440	797	882	1860	8240	1560	319	266	187	178
13	155	481	644	1170	832	2460	5720	1120	349	258	189	167
14	150	1750	630	1060	793	3070	5720	857	288	302	209	163
15	146	3500	608	500	1740	2480	5250	1070	288	325	185	162
16	209	1710	539	280	1610	1880	4820	1130	644	295	173	154
17	267	2920	509	260	2230	1150	4060	857	330	331	163	152
18	233	4560	493	240	1730	1000	4210	727	292	311	163	151
19	242	2080	602	230	1420	954	4020	667	321	273	157	169
20	573	1440	653	220	2240	804	3520	580	315	265	175	172
21	831	1190	591	210	3050	764	1660	546	397	242	302	170
22	912	1060	572	210	2610	929	1000	519	331	251	335	165
23	557	989	545	300	5420	869	836	500	334	280	237	156
24	350	957	524	500	4370	708	754	486	597	327	203	156
25	239	923	460	3110	3210	721	682	471	461	250	180	166
26	215	906	410	6730	2750	668	645	555	890	279	170	153
27	201	1870	360	5800	1500	856	704	500	1300	239	163	167
28	190	2110	330	18800	1250	1790	655	468	744	240	167	167
29	188	1590	300	8280	---	1590	2110	439	582	351	3860	163
30	198	1280	270	5510	---	1270	4840	405	527	368	1650	155
31	242	---	250	2770	---	1080	---	393	---	302	1340	---
TOTAL	7885	34609	36420	62275	68367	36298	104300	47910	13176	10682	13661	6808
MEAN	254	1154	1175	2009	2442	1171	3477	1545	439	345	441	227
MAX	912	4560	6370	18800	5420	3070	21700	6900	1300	756	3860	841
MIN	107	214	250	180	793	668	645	393	288	239	157	151
CFSM	.21	.96	.98	1.67	2.03	.97	2.89	1.28	.37	.29	.37	.19
IN.	.24	1.07	1.13	1.93	2.11	1.12	3.23	1.48	.41	.33	.42	.21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 1994, BY WATER YEAR (WY)

	MEAN	351	813	1306	1893	2135	2446	2114	1540	934	702	471	363
MAX	2775	4189	5494	7131	4951	8212	5396	6906	4686	3542	3014	3711	
(WY)	1927	1986	1991	1949	1950	1945	1940	1968	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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1916 - 1994

ANNUAL TOTAL	454794		442391									
ANNUAL MEAN	1246		1212							1257		
HIGHEST ANNUAL MEAN										2358		1973
LOWEST ANNUAL MEAN										301		1954
HIGHEST DAILY MEAN	10800	Jan 5	21700	Apr 10	72400	Jan 22	1959					
LOWEST DAILY MEAN	107	Oct 8	107	Oct 8	27	Sep 18	1954					
ANNUAL SEVEN-DAY MINIMUM	122	Oct 2	122	Oct 2	37	Sep 12	1964					
INSTANTANEOUS PEAK FLOW			40500	Apr 10 a	84100	Jan 22	1959					
INSTANTANEOUS PEAK STAGE			19.51	Apr 10	27.30	Jan 22	1959					
INSTANTANEOUS LOW FLOW			107	Oct 8								
ANNUAL RUNOFF (CFSM)	1.04		1.01							1.04		
ANNUAL RUNOFF (INCHES)	14.06		13.68							14.19		
10 PERCENT EXCEEDS	3170		3080		2940							
50 PERCENT EXCEEDS	681		519		487							
90 PERCENT EXCEEDS	166		174		110							

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

LITTLE MIAMI RIVER BASIN

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

		DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV 18...	1000	4890	322	7.9	15.0	13.5	120	10.5	101	2800	>10000
JAN 26...	1000	7400	409	7.4	2.5	0.0	55	14.5	100	3100	>10000
MAR 09...	1100	660	683	8.5	3.5	5.0	1.5	11.9	0	970	190
JUN 16...	1200	880	550	8.3	23.5	25.0	63	7.0	87	>6000	>10000
SEP 23...	1415	150	915	8.5	25.0	21.0	0.5	10.1	115	790	>10000
DATE	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	ALKA-LINITY WAT WH TOT FET FIELD (MG/L AS CaCO3) (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
NOV 18...	150	39	13	10	5.7	134	0	111	30	20	0.2
JAN 26...	140	37	11	26	3.8	124	0	101	27	50	0.2
MAR 09...	300	74	27	30	3.1	264	6	225	51	57	0.2
JUN 16...	260	65	23	36	3.5	229	7	196	44	58	0.3
SEP 23...	280	69	25	58	4.9	271	10	234	57	110	0.5
DATE	SILICA, DIS-SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)
NOV 18...	6.6	213	--	--	--	--	--	--	10	38	<3
JAN 26...	4.3	268	--	--	--	--	--	--	240	31	4
MAR 09...	2.3	397	3.3	0.04	0.5	0.14	0.13	0.11	--	--	--
JUN 16...	4.0	383	1.8	0.07	2.1	1.1	0.21	0.22	40	52	<3
SEP 23...	2.2	521	3.1	<0.01	0.6	0.45	0.42	0.42	10	62	<3
DATE	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	
NOV 18...	49	<4	3	<10	<1	<1	<1.0	170	<6	380	
JAN 26...	220	<4	24	<10	1	<1	<1.0	160	<6	370	
MAR 09...	--	--	--	--	--	--	--	--	--	3.7	
JUN 16...	30	<4	16	<10	1	<1	<1.0	330	<6	415	
SEP 23...	9	5	3	10	2	<1	<1.0	330	<6	34.1	

LITTLE MIAMI RIVER BASIN

145

03247050 EAST FORK LITTLE MIAMI RIVER NEAR BATAVIA, OH

LOCATION.--Lat 39°03'36", long 84°10'32", Clermont County, Hydrologic Unit 05090202, on right bank on Elk Lick Road, 230 ft upstream from unnamed right bank tributary, 1,400 ft upstream from Lucy Run, 1.3 mi south of Batavia, and at mile 15.7.

DRAINAGE AREA.--352 mi², includes that of unnamed tributary.

PERIOD OF RECORD.--July 1965 to September 1994 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 571.68 ft above sea level. Prior to July 17, 1968, nonrecording gage 1,100 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Oct. 9 to Nov. 13, Dec. 28 to Jan. 3, 27. Records fair. Flow regulated by William H. Harsha reservoir, formerly East Fork Lake, since 1977. Water-quality data collected at this site 1965 to 1977. Satellite telemeter at station operated for U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 28,700 ft³/s Apr. 2, 1970, gage height 20.31 ft; minimum daily, 0.14 ft³/s Sept. 23, 27, 1967. Maximum discharge since start of construction of East Fork Dam 31,000 ft³/s Aug. 30, 1974, gage height, 20.80 ft in gage well, 21.8 ft from floodmarks, result of failure of cofferdam.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1964 reached a stage of 21.46 ft at site 1,100 ft downstream from information by local resident, discharge, about 32,000 ft³/s, from flood study.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	105	418	66	966	276	289	393	42	44	68	28
2	44	105	283	72	2950	279	190	1660	41	44	67	43
3	44	105	219	120	3190	236	178	3380	41	42	57	80
4	44	105	264	242	3150	209	220	3340	41	41	41	79
5	44	102	311	242	3100	204	342	3050	39	37	42	76
6	45	102	968	244	3060	124	327	1850	40	29	38	57
7	46	102	1670	371	3020	162	345	1200	66	28	27	63
8	47	96	1670	469	2740	204	606	1350	45	28	26	76
9	50	70	1350	542	2170	265	501	2440	44	29	26	75
10	62	64	671	638	1910	336	519	2800	49	27	26	69
11	62	58	287	638	1380	830	343	960	48	26	27	53
12	63	60	238	473	1070	873	538	123	47	26	28	53
13	64	100	137	390	762	156	1850	137	41	28	28	44
14	64	283	95	548	465	808	3720	138	40	32	34	47
15	64	399	158	461	463	1630	2850	238	39	34	32	47
16	66	1050	186	211	486	1630	2070	336	43	36	30	46
17	90	1500	104	209	509	1630	2550	351	41	42	63	34
18	94	1290	115	208	509	1400	3430	303	42	42	22	32
19	90	1100	137	208	509	744	3380	182	40	42	22	32
20	88	1100	154	208	509	361	2920	82	38	43	21	33
21	100	1090	178	178	527	293	1400	81	37	51	25	33
22	96	1080	180	134	613	192	442	81	36	59	24	33
23	90	1070	180	131	932	208	264	79	40	79	23	35
24	98	1070	180	136	1320	209	91	70	36	76	24	37
25	102	911	180	336	1630	187	90	57	36	66	23	37
26	100	478	138	504	1630	154	90	53	40	44	24	37
27	100	585	62	500	1240	261	107	42	51	40	26	35
28	100	824	68	453	400	536	156	42	40	29	28	26
29	100	993	80	178	---	773	275	41	46	50	39	27
30	100	764	74	167	---	1040	299	41	45	54	32	28
31	105	---	68	163	---	724	---	41	---	72	29	---
TOTAL	2303	16761	10823	9440	41210	16934	30382	24941	1274	1320	1022	1395
MEAN	74.3	559	349	305	1472	546	1013	805	42.5	42.6	33.0	46.5
MAX	105	1500	1670	638	3190	1630	3720	3380	66	79	68	80
MIN	41	58	62	66	400	124	90	41	36	26	21	26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1994, BY WATER YEAR (WY)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	220	302	507	534	743	722	639	563	229	194	149	194						
MAX	727	948	1288	1342	1581	1714	1201	2099	822	657	1117	1468						
(WY)	1984	1986	1978	1991	1982	1979	1989	1983	1982	1980	1979	1979						
MIN	14.8	50.3	35.9	5.53	137	99.8	49.8	33.5	32.8	19.0	20.8	18.5						
(WY)	1983	1988	1977	1977	1987	1983	1986	1988	1988	1984	1983	1983						

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1977 - 1994

ANNUAL TOTAL	147706	157805	
ANNUAL MEAN	405	432	415
HIGHEST ANNUAL MEAN			760
LOWEST ANNUAL MEAN			211
HIGHEST DAILY MEAN	2800	Feb 24	4700
LOWEST DAILY MEAN	28	Jul 22	3.4
ANNUAL SEVEN-DAY MINIMUM	28	Jul 24	4.6
INSTANTANEOUS PEAK FLOW			11900
INSTANTANEOUS PEAK STAGE			15.40
10 PERCENT EXCEEDS	1290	1350	1310
50 PERCENT EXCEEDS	131	102	106
90 PERCENT EXCEEDS	32	32	29

LITTLE MIAMI RIVER BASIN

03247500 EAST FORK LITTLE MIAMI RIVER AT PERINTOWN, OH

LOCATION.--Lat 39°08'14", long 84°14'17", Clermont County, Hydrologic Unit 05090202, on right bank at upstream wingwall of highway bridge at Perintown, 0.2 mi downstream from Sugarcamp Run, 5 mi upstream from mouth, and at mile 6.4.

DRAINAGE AREA.--476 mi².

PERIOD OF RECORD.--May 1915 to September 1917, October 1917 to May 1920 (gage heights only), January 1925 to current year.

GAGE.--Water-stage recorder. Datum of gage is 507.03 ft above sea level. Prior to Feb. 6, 1940, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 28 to Jan. 3, 17-25. Records good except estimated discharges and for those records above 5000 ft³/s which are fair. 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 collected at this site 1964 to 1977. U.S. Army Corps of Engineers Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,400 ft³/s Mar. 10, 1964, gage height, 23.84 ft; minimum daily, 0.4 ft³/s July 24, 1930, Sept 11, 12, 23, 1939; minimum gage height, -0.18 ft Oct. 3-7, 1917. Maximum discharge since start of construction of East Fork Dam 23,200 ft³/s Aug. 30, 1974, gage height, 19.52 ft, result of failure of cofferdam.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	114	500	68	1180	319	369	2450	56	56	72	143
2	45	114	335	80	2930	317	236	1800	54	55	69	68
3	44	113	241	150	3200	296	324	3630	52	69	68	93
4	44	113	1050	311	3150	230	402	3570	52	65	59	93
5	44	112	1350	304	3110	278	462	3460	51	54	62	95
6	45	112	1030	304	3070	145	504	2420	54	48	53	77
7	46	111	1720	919	3020	198	890	3350	139	50	45	72
8	44	109	1670	774	2980	218	858	2400	103	48	42	89
9	44	80	1460	643	3110	308	659	2740	54	52	41	90
10	69	63	875	748	2010	631	6100	3240	59	45	40	91
11	55	63	335	750	1440	1240	1530	1520	57	43	42	72
12	66	65	298	672	1100	1380	1250	216	59	43	42	70
13	65	106	179	612	905	520	2100	218	55	48	41	68
14	65	509	114	730	521	1100	4050	205	50	94	45	65
15	65	1390	169	644	551	1820	3640	400	48	79	46	69
16	65	975	263	247	573	1680	2770	620	120	80	42	69
17	96	2640	127	230	600	1630	2830	626	72	59	77	55
18	104	1990	127	220	613	1500	3700	430	54	57	55	51
19	98	1240	194	220	657	924	3650	289	50	54	42	50
20	95	1170	191	200	667	404	3300	121	48	53	42	50
21	112	1140	226	180	833	379	1930	112	47	89	60	50
22	102	1130	225	160	753	258	611	107	75	91	45	50
23	96	1120	221	140	2040	271	434	104	49	114	42	51
24	105	1120	212	160	1520	262	142	100	46	78	41	51
25	113	1100	207	700	1720	239	132	76	45	78	41	52
26	110	535	182	1610	1660	183	125	84	94	121	40	51
27	110	950	80	1920	1400	423	160	85	352	62	40	51
28	110	1040	91	4460	467	1010	203	67	73	48	42	44
29	109	1160	83	711	---	943	2410	62	64	125	149	42
30	111	957	75	354	---	1170	2620	59	59	104	58	42
31	117	---	70	282	---	892	---	57	---	76	49	---
TOTAL	2437	21441	13900	19503	45780	21168	48391	34618	2191	2138	1632	2014
MEAN	78.6	715	448	629	1635	683	1613	1117	73.0	69.0	52.6	67.1
MAX	117	2640	1720	4460	3200	1820	6100	3630	352	125	149	143
MIN	43	63	70	68	467	145	125	57	45	43	40	42

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1994, BY WATER YEAR (WY)

	MEAN	272	460	730	749	1015	1048	939	785	321	268	198	237
	MAX	980	1446	2108	1637	2162	1623	1738	2792	1218	947	1220	1869
	(WY)	1984	1986	1991	1991	1990	1979	1989	1990	1982	1980	1979	1979
	MIN	18.5	49.3	54.1	15.3	168	138	73.5	48.4	35.6	32.4	38.6	30.1
	(WY)	1983	1988	1977	1977	1987	1983	1986	1988	1988	1984	1987	1983

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1977 - 1994

ANNUAL TOTAL	222359	215213	
ANNUAL MEAN	609	590	583
HIGHEST ANNUAL MEAN			963
LOWEST ANNUAL MEAN			266
HIGHEST DAILY MEAN	3530	Feb 21	6100
LOWEST DAILY MEAN	33	Sep 1	40
ANNUAL SEVEN-DAY MINIMUM	35	Aug 4	42
INSTANTANEOUS PEAK FLOW			15400
INSTANTANEOUS PEAK STAGE			16.07
INSTANTANEOUS LOW FLOW			40
10 PERCENT EXCEEDS	2000		1810
50 PERCENT EXCEEDS	191		125
90 PERCENT EXCEEDS	43		47

MILL CREEK BASIN

147

03259000 MILL CREEK AT CARTHAGE, OH

LOCATION.--Lat 39°12'07", long 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, 1.0 mi downstream from West Fork Mill Creek, and 11.0 mi upstream from mouth.

DRAINAGE AREA.--115 mi².

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

REVISED RECORDS.--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.--Estimated daily discharges: Dec. 25 to Jan. 6, 15-24, 28 to Feb. 2, Apr. 10-20. Records fair, except for periods of estimated record, which are poor. Some inter-basin 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 collected at this site 1965 to 1977. Because of water-basin transfers and regulations, statistics are not published.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,030 ft³/s Sept. 14, 1979, gage height, 21.82 ft present datum, from rating curve extended above 4,000 ft³/s on basis of slope-area measurement of peak flow; no flow many days in 1947-48.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,000 ft³/s Apr. 10, gage height unknown; minimum daily, 12.0 ft³/s Oct. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	46	49	31	58	66	42	511	26	23	20	134
2	25	31	58	30	56	69	58	319	24	19	39	67
3	16	34	95	29	52	55	309	112	23	151	20	46
4	13	30	609	28	46	57	151	95	23	65	96	19
5	14	39	643	27	45	55	108	74	21	36	87	37
6	14	28	205	60	43	45	169	85	206	133	49	30
7	14	22	124	210	67	33	164	719	169	41	19	21
8	15	21	110	115	214	32	105	368	57	34	18	19
9	129	20	96	89	317	71	77	152	29	57	17	19
10	55	20	88	69	66	142	2500	120	25	40	17	18
11	52	20	58	57	68	209	1700	93	44	19	16	17
12	38	22	48	184	142	155	1100	117	119	19	17	17
13	16	331	46	132	113	246	800	84	136	38	16	17
14	13	707	108	106	112	194	500	73	55	167	42	18
15	13	560	164	45	89	135	300	202	31	226	21	18
16	81	267	83	37	68	110	200	99	201	206	19	17
17	106	784	50	34	54	92	130	62	95	129	21	22
18	51	427	71	32	54	93	98	55	83	54	20	19
19	76	122	85	31	68	51	78	44	49	31	17	17
20	357	79	67	30	194	44	66	40	48	31	48	16
21	164	62	83	29	150	86	57	40	84	37	118	17
22	39	57	57	28	120	63	56	39	37	29	58	16
23	27	53	51	27	579	46	58	40	38	26	20	17
24	25	51	47	200	243	45	55	40	58	17	16	146
25	23	44	45	591	126	38	52	41	55	36	17	53
26	20	46	41	499	94	133	46	96	455	31	19	22
27	27	428	38	905	69	282	123	65	281	20	16	29
28	158	138	37	1300	63	191	96	49	190	102	110	23
29	38	69	35	500	---	124	489	28	35	28	1060	18
30	42	55	33	140	---	88	503	25	31	37	214	17
31	54	---	32	82	---	51	---	26	---	47	231	---
TOTAL	1727	4613	3356	5677	3370	3101	10190	3913	2728	1929	2498	946
MEAN	55.7	154	108	183	120	100	340	126	90.9	62.2	80.6	31.5
MAX	357	784	643	1300	579	282	2500	719	455	226	1060	146
MIN	12	20	32	27	43	32	42	25	21	17	16	16

03260706 BOKENGHALAS CREEK AT DE GRAFF, OH

LOCATION.--Lat 40°18'40", long 83°54'45", sec. 6, R.13, T.3, Logan County, Hydrologic Unit 05080001, at De Gaff on right bank 100 ft downstream of bridge on Co. Rd. 11 and 1.1 mi upstream of mouth.

DRAINAGE AREA.--40.4 mi².

PERIOD OF RECORD.--June 1, 1992 to current year. October 1957 to May 31, 1992 at site 2.9 miles upstream published as "near De Gaff," (Station 03260700) are not equivalent because of difference in drainage areas.

GAGE.--Water-stage recorder. Datum of gage is 977.382 ft above sea level.

REMARKS.--Estimated daily discharges shown in table. Records good, except for periods of estimated record, which are poor. Diurnal fluctuation caused by municipal plants in Bellefontaine, 12.7 mi upstream and De Graff, 0.25 mi upstream. Since storage capacity is small, daily flows are not affected appreciably.

COOPERATION.--Discharge measurements furnished by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	15	46	e26	72	39	30	49	15	13	e7.0	9.8
2	20	15	46	e25	60	38	30	36	14	11	e6.4	7.3
3	15	16	53	e23	52	36	33	33	15	12	e6.2	6.6
4	13	16	175	e21	47	38	34	32	15	11	e7.0	6.3
5	13	15	333	e20	44	38	35	31	14	10	11	6.3
6	12	14	139	e19	41	39	79	30	14	10	9.2	6.6
7	12	13	97	e18	40	41	110	37	14	10	7.8	6.7
8	12	13	77	e17	37	41	74	38	14	9.8	7.5	6.1
9	14	13	65	e16	35	39	59	32	15	9.4	7.8	6.1
10	13	13	59	e15	41	38	165	29	14	8.8	7.8	6.2
11	12	13	52	e14	e35	37	120	28	13	8.8	8.2	5.8
12	12	13	47	e13	32	39	172	30	12	9.1	9.2	5.6
13	12	54	45	e13	31	62	170	27	13	8.8	8.2	5.7
14	12	327	44	e12	31	75	113	25	12	8.9	30	5.6
15	12	337	43	e12	44	61	85	26	12	8.7	12	5.6
16	12	135	41	e11	67	50	68	25	e12	8.2	8.9	5.6
17	14	299	38	e11	75	43	56	23	12	8.0	8.2	11
18	14	285	39	e10	84	43	50	22	11	8.7	7.8	7.8
19	14	133	43	e10	99	40	46	22	10	8.2	7.8	6.2
20	19	96	40	e10	108	37	42	21	10	8.1	7.5	5.9
21	24	75	e35	e9.8	92	39	39	20	18	7.9	14	5.7
22	17	61	e32	e9.6	67	39	38	19	11	7.9	7.8	5.6
23	15	52	e30	e9.4	71	37	36	19	14	7.6	7.2	5.4
24	14	47	e29	e9.0	84	36	34	19	23	7.1	6.8	5.4
25	13	42	e28	e9.0	56	33	33	19	21	10	6.6	6.1
26	13	40	e28	e9.0	48	32	32	18	18	7.9	6.6	6.3
27	13	113	e28	e180	45	37	31	17	22	7.5	6.5	6.4
28	13	77	30	e350	41	35	30	16	16	8.7	6.8	6.2
29	13	58	33	226	---	35	31	16	14	e8.0	11	5.7
30	13	49	39	133	---	33	42	15	13	e15	7.3	5.6
31	14	---	28	97	---	32	---	15	---	e20	16	---
TOTAL	432	2449	1862	1357.8	1579	1262	1917	789	431	298.1	282.1	191.2
MEAN	13.9	81.6	60.1	43.8	56.4	40.7	63.9	25.5	14.4	9.62	9.10	6.37
MAX	24	337	333	350	108	75	172	49	23	20	30	11
MIN	12	13	28	9.0	31	32	30	15	10	7.1	6.2	5.4
MED	13	48	43	14	47	38	42	25	14	8.8	7.8	6.1
CFSM	.34	2.02	1.49	1.08	1.40	1.01	1.58	.63	.36	.24	.23	.16
IN.	.40	2.26	1.71	1.25	1.45	1.16	1.77	.73	.40	.27	.26	.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1994, BY WATER YEAR (WY)

	1993	1994	1993	1994	1993	1994	1993	1994	1993	1994	1993	1994
MEAN	15.4	83.5	47.5	66.7	47.0	65.1	70.9	30.1	26.8	60.4	16.9	11.0
MAX	16.8	85.5	60.1	89.5	56.4	89.6	78.0	34.7	39.3	111	24.8	15.7
(WY)	1993	1993	1994	1993	1994	1993	1993	1993	1993	1993	1993	1993
MIN	13.9	81.6	34.9	43.8	37.7	40.7	63.9	25.5	14.4	9.62	9.10	6.37
(WY)	1994	1994	1993	1994	1993	1994	1994	1994	1994	1994	1994	1994

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1993 - 1994

ANNUAL TOTAL	20628	12850.2	45.1
ANNUAL MEAN	56.5	35.2	54.9
HIGHEST ANNUAL MEAN			1993
LOWEST ANNUAL MEAN			1994
HIGHEST DAILY MEAN	550	350	550
LOWEST DAILY MEAN	12	5.4	5.4
ANNUAL SEVEN-DAY MINIMUM	12	5.7	5.7
INSTANTANEOUS PEAK FLOW		648	668
INSTANTANEOUS PEAK STAGE		5.49	5.58
INSTANTANEOUS LOW FLOW		5.4	5.4
ANNUAL RUNOFF (CFSM)	1.40	.87	1.12
ANNUAL RUNOFF (INCHES)	18.99	11.83	15.16
10 PERCENT EXCEEDS	112	73	96
50 PERCENT EXCEEDS	40	18	31
90 PERCENT EXCEEDS	13	7.2	9.1

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

03261500 GREAT MIAMI RIVER AT SIDNEY, OH

LOCATION.--Lat 40°17'13", long 84°09'00", Shelby County, Hydrologic Unit 05080001, on right bank 50 ft upstream from North Street Bridge in Sidney, and 0.5 mi downstream from Tawawa Creek.

DRAINAGE AREA.--541 mi².

PERIOD OF RECORD.--February 1914 to current year. Prior to October 1962, published as Miami River at Sidney.

REVISED RECORDS.--WSP 1305: 1914(M), 1922(M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 924.70 ft 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.--Estimated daily discharges: Oct. 6, 7, Dec. 23 to Jan. 27, Feb. 2-15. Records fair. 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 4.37 ft³/s in 1994 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 collected at this site 1967 to 1975.

COOPERATION.--Gage-height tapes, 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 ft³/s, computed by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	154	545	160	1620	341	214	344	84	231	62	90
2	118	127	478	150	1000	313	201	314	83	175	57	85
3	129	104	576	140	600	294	209	229	86	266	51	64
4	111	103	2050	140	420	298	283	213	56	365	63	52
5	92	105	4710	130	340	338	235	202	70	223	92	49
6	83	104	3350	130	310	380	570	208	69	162	115	45
7	79	105	2330	130	290	453	1550	217	69	135	71	43
8	73	97	1660	120	270	514	1360	308	69	131	56	39
9	77	90	1180	120	260	481	1070	262	78	165	50	37
10	86	87	820	120	250	439	2070	219	72	201	49	38
11	105	86	745	120	240	395	2580	203	65	158	57	36
12	84	84	586	120	220	371	3120	190	64	109	58	35
13	77	296	378	110	220	767	3270	230	68	90	64	34
14	75	4770	347	110	210	1320	2860	173	66	82	114	32
15	74	6220	353	110	240	1120	2130	172	65	76	164	32
16	74	4400	395	110	718	909	1560	179	78	74	108	31
17	119	5180	315	110	958	694	1110	218	61	81	69	40
18	160	6180	272	110	1150	464	737	179	57	78	57	43
19	157	4650	318	105	1400	480	494	162	55	71	55	49
20	144	3280	345	105	1480	354	460	147	79	63	59	42
21	280	2250	380	105	1460	340	386	131	93	57	74	36
22	346	1580	403	105	1130	402	324	124	86	58	105	33
23	208	1120	330	105	886	332	308	121	91	56	86	32
24	150	765	280	100	1240	305	257	115	371	57	62	37
25	124	580	240	100	847	325	244	114	898	62	53	37
26	110	460	220	450	557	301	228	125	761	55	49	35
27	102	980	200	1800	448	252	213	139	959	60	46	38
28	98	1340	180	6140	381	275	225	123	635	57	52	39
29	95	950	170	5000	---	255	224	97	328	65	58	37
30	93	691	160	3540	---	257	226	92	262	88	66	36
31	110	---	160	2370	---	220	---	88	---	70	83	---
TOTAL	3718	46938	24476	22265	19145	13989	28718	5638	5878	3621	2205	1276
MEAN	120	1565	790	718	684	451	957	182	196	117	71.1	42.5
MAX	346	6220	4710	6140	1620	1320	3270	344	959	365	164	90
MIN	73	84	160	100	210	220	201	88	55	55	46	31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 1994, BY WATER YEAR (WY)

	MEAN	154	320	504	730	779	969	875	516	410	306	164	133
MAX	1717	1876	2373	3846	2186	2507	2500	2009	2073	2181	1173	2365	
(WY)	1927	1973	1991	1930	1950	1927	1957	1933	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 1993 CALENDAR YEAR			FOR 1994 WATER YEAR			WATER YEARS 1926 - 1994		
ANNUAL TOTAL	301084			177867					
ANNUAL MEAN	825			487			487		
HIGHEST ANNUAL MEAN							963		
LOWEST ANNUAL MEAN							141		
HIGHEST DAILY MEAN	6750			Jul 3			17400		
LOWEST DAILY MEAN	66			Sep 20			8.0		
ANNUAL SEVEN-DAY MINIMUM	69			Sep 18			15		
INSTANTANEOUS PEAK FLOW				7690			Nov 14		
INSTANTANEOUS PEAK STAGE				10.43			Nov 14		
INSTANTANEOUS LOW FLOW				31			Sep 16		
10 PERCENT EXCEEDS	2350			1160			1230		
50 PERCENT EXCEEDS	343			160			180		
90 PERCENT EXCEEDS	88			55			44		

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

GREAT MIAMI RIVER BASIN

03261950 LORAMIE CREEK NEAR NEWPORT, OH

LOCATION.--Lat 40°18'25", long 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, 3 mi south of Fort Loramie, 3 mi downstream from Mile Creek, and at mile 16.5.

DRAINAGE AREA.--152 mi².

PERIOD OF RECORD.--October 1964 to current year.

REVISED RECORDS.--WRD Ohio 1971: 1966(M). WDR Ohio 1985-1: 1984 (M).

GAGE.--Water-stage recorder. Datum of gage is 926.57 ft above sea level. October 1, 1964 to September 30, 1980 water-stage recorder at same site at datum 0.43 ft higher.

REMARKS.--Estimated daily discharges: Dec. 25 to Jan. 25, 31 to Feb. 15. Records fair, except for periods of estimated record, which are poor. Some regulation by Lake Loramie 5 mi upstream, capacity, 13,000 acre-ft. Sediment data collected at this site 1967 to 1975.

COOPERATION.--Gage-height tapes and 7 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	9.7	71	16	120	48	13	26	4.6	49	4.7	29
2	11	7.9	60	15	78	45	13	14	3.5	33	3.0	16
3	12	7.6	72	14	54	43	18	11	2.8	43	2.6	7.5
4	4.8	8.7	494	13	41	55	21	11	2.7	46	3.3	4.0
5	3.7	11	1640	12	34	77	20	11	2.8	29	7.9	2.7
6	3.0	11	1070	11	29	111	84	11	3.0	26	4.5	1.9
7	2.5	7.3	427	11	26	170	307	15	3.3	99	2.9	1.7
8	2.4	5.0	234	10	22	200	480	26	3.6	47	2.3	1.8
9	5.4	4.7	154	9.4	26	152	358	16	6.0	31	2.0	1.8
10	7.8	4.6	120	9.0	21	121	941	13	4.6	19	1.8	2.5
11	4.5	4.4	96	8.4	18	101	1140	9.1	3.3	10	2.7	3.4
12	3.2	4.9	66	8.0	16	118	1760	14	2.9	6.2	4.6	2.4
13	3.2	81	57	7.6	14	251	1550	12	2.9	4.9	18	2.1
14	3.0	1570	55	7.2	13	350	775	8.9	3.9	4.3	224	2.2
15	2.9	4040	55	6.9	20	310	439	12	11	4.5	188	2.3
16	2.8	2490	51	6.6	393	247	316	13	5.7	3.6	70	2.2
17	21	1990	40	6.4	363	223	171	9.1	4.0	3.3	33	4.2
18	47	2680	41	6.0	320	212	52	7.5	4.0	25	16	4.5
19	66	1430	59	5.8	345	88	85	7.0	3.6	13	8.1	2.6
20	241	583	74	5.6	384	30	60	6.7	2.7	5.6	7.4	3.3
21	287	295	131	5.4	398	32	23	6.7	3.4	4.0	71	2.8
22	137	187	112	5.2	249	29	20	6.5	4.5	13	49	1.9
23	107	129	90	5.0	240	25	17	5.7	27	17	19	1.3
24	84	100	68	10	447	26	16	5.5	321	7.3	8.7	1.3
25	10	78	45	200	199	21	15	11	589	4.4	4.8	2.1
26	4.8	58	38	1390	109	17	18	8.1	380	3.9	3.8	3.2
27	5.0	395	31	759	71	23	20	5.9	423	3.3	3.2	14
28	4.4	290	27	2260	53	22	15	4.6	223	2.8	6.0	13
29	5.2	159	23	1740	---	18	14	3.7	118	7.9	38	5.1
30	6.3	100	20	650	---	14	16	3.5	78	66	19	2.5
31	8.1	---	18	170	---	13	---	3.8	---	14	20	---
TOTAL	1108.2	16741.8	5539	7383.5	4103	3192	8777	318.3	2247.8	646.0	849.3	145.3
MEAN	35.7	558	179	238	147	103	293	10.3	74.9	20.8	27.4	4.84
MAX	287	4040	1640	2260	447	350	1760	26	589	99	224	29
MIN	2.2	4.4	18	5.0	13	13	13	3.5	2.7	2.8	1.8	1.3

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1994, BY WATER YEAR (WY)

	MEAN	36.6	118	191	156	224	282	237	121	97.6	112	37.3	26.3
MAX	360	656	802	551	613	826	700	403	561	830	288	186	
(WY)	1987	1973	1991	1974	1975	1978	1972	1967	1981	1992	1979	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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1965 - 1994

ANNUAL TOTAL	91537.7	51051.2	
ANNUAL MEAN	251	140	
HIGHEST ANNUAL MEAN			136
LOWEST ANNUAL MEAN			249
HIGHEST DAILY MEAN	4720	Jul 3	39.6
LOWEST DAILY MEAN	1.7	Sep 8	1973
ANNUAL SEVEN-DAY MINIMUM	2.0	Sep 6	1988
INSTANTANEOUS PEAK FLOW			5100
INSTANTANEOUS PEAK STAGE			Jul 14 1992
INSTANTANEOUS LOW FLOW			.10
10 PERCENT EXCEEDS	622		Aug 15 1965
50 PERCENT EXCEEDS	65		.13
90 PERCENT EXCEEDS	3.2		Sep 9 1966
			6500
			Dec 31 1990
			14.31
			Dec 31 1990
			1.3
			351
			22
			1.5

GREAT MIAMI RIVER BASIN

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03262000 LORAMIE CREEK AT LOCKINGTON, OH

LOCATION.--Lat 40°12'35", long 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, and at mile 1.9.

DRAINAGE AREA.--257 mi².

PERIOD OF RECORD.--October 1915 to current year.

REVISED RECORDS.--WSP 923: 1916. WSP 1908: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 800.03 ft 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.--Estimated daily discharges: Dec. 25 to Jan. 25, 31 to Feb. 15. 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 tapes and 7 discharge measurements furnished by Miami Conservancy District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft³/s May 7, 1916, gage height, 86.4 ft, present datum, from rating curve extended above 5,400 ft³/s.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 25, 1913 reached a stage of 91.6 ft, present datum, discharge, 25,600 ft³/s, at site upstream from Turtle Creek, drainage area, 211 mi², computed by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	25	148	37	230	90	47	79	22	83	24	45
2	42	24	133	34	180	88	46	60	22	55	22	29
3	47	24	172	32	130	91	49	53	16	61	19	20
4	30	24	1190	30	100	103	59	59	10	65	20	16
5	21	25	2750	28	78	131	58	57	9.4	52	42	15
6	19	25	1690	26	62	166	299	56	8.9	46	26	20
7	17	24	782	24	50	222	610	58	17	427	17	18
8	16	22	411	23	44	283	633	65	17	134	16	17
9	16	21	255	21	50	209	488	55	17	78	20	17
10	17	20	194	20	44	171	1790	45	11	46	18	13
11	20	20	158	18	39	152	1730	38	11	34	14	8.1
12	18	19	121	18	36	175	2260	40	17	36	16	7.9
13	16	332	106	17	32	490	2260	40	13	28	15	7.0
14	16	2820	99	16	28	527	1080	31	10	26	191	11
15	15	5000	97	15	40	449	612	31	15	24	313	18
16	15	4470	94	15	539	330	426	37	40	23	103	17
17	138	3730	80	14	637	272	300	37	77	19	55	14
18	149	4150	76	14	591	271	124	33	23	29	40	8.3
19	73	2660	100	13	620	166	135	28	23	36	30	10
20	199	920	115	13	672	95	128	20	153	27	24	10
21	654	478	176	13	693	81	83	20	212	25	82	7.2
22	232	310	169	12	431	82	70	18	52	23	80	10
23	132	221	141	12	431	72	67	19	88	25	39	15
24	113	174	114	25	769	70	63	27	1140	21	24	14
25	65	146	80	200	320	64	58	29	1250	16	16	5.2
26	38	121	66	1840	178	57	50	35	962	16	17	6.4
27	31	673	58	1700	167	61	45	27	974	19	20	11
28	28	548	52	3540	149	65	45	14	418	20	19	18
29	25	301	47	3070	---	58	49	12	194	18	32	21
30	25	194	44	1030	---	53	51	13	120	183	32	17
31	25	---	40	300	---	48	---	23	---	49	30	---
TOTAL	2271	27521	9758	12170	7340	5192	13715	1159	5942.3	1744	1416	446.1
MEAN	73.3	917	315	393	262	167	457	37.4	198	56.3	45.7	14.9
MAX	654	5000	2750	3540	769	527	2260	79	1250	427	313	45
MIN	15	19	40	12	28	48	45	12	8.9	16	14	5.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1994, BY WATER YEAR (WY)

	MEAN	48.7	128	227	330	352	459	388	200	173	127	56.2	49.5
MAX	540	1025	1203	1728	1119	1235	1301	1017	1754	1088	557	1092	
(WY)	1987	1973	1991	1937	1950	1978	1922	1933	1958	1992	1979	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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1921 - 1994

ANNUAL TOTAL	141080	88674.4	211
ANNUAL MEAN	387	243	413
HIGHEST ANNUAL MEAN			53.0
LOWEST ANNUAL MEAN			1973
HIGHEST DAILY MEAN	5590	5000	6400
LOWEST DAILY MEAN	15	5.2	.85
ANNUAL SEVEN-DAY MINIMUM	17	9.7	1.6
INSTANTANEOUS PEAK FLOW		5130	6590
INSTANTANEOUS PEAK STAGE		83.87	85.00
INSTANTANEOUS LOW FLOW		4.4	
10 PERCENT EXCEEDS	892	565	535
50 PERCENT EXCEEDS	115	46	42
90 PERCENT EXCEEDS	20	15	7.0

03262700 GREAT MIAMI RIVER AT TROY, OH

LOCATION.--Lat 40°02'25", long 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, 1.2 mi upstream from small left bank tributary, 2.3 mi downstream from Spring Creek, and at mile 105.

DRAINAGE AREA.--926 mi².

PERIOD OF RECORD.--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.--Estimated daily discharges: Dec. 23 to Jan. 27, Feb. 4-15. Records good except those for estimated days which are fair. Flood flow regulated by retarding basin on Loramie Creek, 18 mi upstream. Low and medium flow slightly regulated by Indian Lake; capacity, 45,900 acre-ft, 54 mi upstream. Water supply for city of Troy is pumped from wells adjacent to the Great Miami River upstream from the station. The pumpage averaged 7.0 ft³/s in 1994 and is returned as sewage 1 mi downstream from the station. Water quality data collected at this site 1965 to 1974. Sediment data collected 1970 to 1974.

COOPERATION.--Gage-height tapes and 9 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 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	144	829	220	2110	573	334	503	198	413	128	160
2	165	173	749	210	1540	529	330	525	190	326	114	152
3	182	152	812	200	1110	500	338	418	190	340	107	137
4	173	136	2770	200	700	488	397	370	181	502	112	110
5	148	134	8280	190	560	548	394	347	147	381	143	95
6	129	135	5750	180	450	623	689	346	159	273	155	92
7	120	133	3480	180	380	755	2360	396	161	461	149	92
8	116	130	2320	170	350	901	2270	436	163	334	105	89
9	120	120	1660	170	320	871	1880	493	163	299	96	92
10	116	110	1230	170	300	768	3800	397	164	242	96	91
11	120	106	986	160	290	698	4910	380	151	246	92	87
12	129	106	917	160	280	633	5680	397	144	210	111	77
13	115	393	640	160	270	1210	5650	376	147	161	102	68
14	110	6160	582	150	260	2000	4420	363	120	147	160	63
15	109	12200	551	150	350	1870	3060	335	121	138	472	63
16	109	9540	569	150	1260	1460	2230	330	120	130	293	69
17	123	9190	541	150	1760	1180	1640	345	277	135	172	90
18	398	11300	465	150	1980	942	1100	381	155	167	128	93
19	251	8330	478	150	2190	803	797	317	128	151	110	77
20	295	4730	544	140	2340	633	721	307	136	130	106	80
21	863	3070	601	140	2440	536	604	292	541	136	135	80
22	675	2150	691	140	1890	563	523	273	245	148	185	71
23	408	1560	600	140	1410	546	497	257	256	151	169	69
24	295	1160	500	140	2340	489	459	249	1110	121	128	73
25	227	879	420	140	1530	451	427	249	2320	130	99	77
26	172	748	350	1000	971	470	394	259	1820	114	86	75
27	141	1390	320	3000	727	419	376	259	2330	109	88	77
28	139	2130	280	10400	636	413	343	264	1390	114	94	84
29	134	1450	260	9020	---	411	383	221	769	117	116	90
30	129	1050	240	5150	---	387	394	201	497	221	118	93
31	129	---	230	3200	---	363	---	200	---	198	150	---
TOTAL	6469	79009	38645	35880	30744	23033	47400	10486	14493	6745	4319	2666
MEAN	209	2634	1247	1157	1098	743	1580	338	483	218	139	88.9
MAX	863	12200	8280	10400	2440	2000	5680	525	2330	502	472	160
MIN	109	106	230	140	260	363	330	200	120	109	86	63

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1994, BY WATER YEAR (WY)

MEAN	250	678	1047	871	1260	1681	1531	878	680	642	283	180
MAX	2268	3824	3949	3069	3403	4005	4032	2295	2858	3458	1951	671
(WY)	1987	1973	1991	1974	1975	1963	1964	1967	1981	1993	1973	1972
MIN	24.9	49.4	49.2	34.6	58.7	308	269	140	65.9	65.2	41.0	24.1
(WY)	1964	1964	1977	1977	1964	1981	1971	1988	1988	1965	1965	1963

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1963 - 1994

ANNUAL TOTAL	506207		299889			
ANNUAL MEAN	1387		822		829	
HIGHEST ANNUAL MEAN					1662	1973
LOWEST ANNUAL MEAN					300	1988
HIGHEST DAILY MEAN	13100	Jul 3	12200	Nov 15	18500	Dec 31 1990
LOWEST DAILY MEAN	101	Sep 21	63	Sep 14	4.3	Jul 17 1977
ANNUAL SEVEN-DAY MINIMUM	107	Sep 18	74	Sep 11	19	Oct 6 1963
INSTANTANEOUS PEAK FLOW			13200	Nov 15	20000	Dec 30 1990
INSTANTANEOUS PEAK STAGE			12.69	Nov 15	15.49	Dec 30 1990
INSTANTANEOUS LOW FLOW			63	Sep 14		
10 PERCENT EXCEEDS	3760		2040		2150	
50 PERCENT EXCEEDS	602		280		299	
90 PERCENT EXCEEDS	131		106		69	

03263000 GREAT MIAMI RIVER AT TAYLORSVILLE, OH

LOCATION.--Lat 39°52'27", long 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, 2.1 mi east of Vandalia, 9.5 mi upstream from Stillwater River, and at mile 90.9.

DRAINAGE AREA.--1,149 mi².

PERIOD OF RECORD.--January 1914 to September 1917 (published as Miami River at Tadmor), October 1921 to current year (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.--Estimated daily discharges: Dec. 23-Jan. 27, Feb. 3-14. Records good except those for periods of estimated record, which are fair. 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 ft³/s computed by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	174	174	1150	270	2560	776	498	790	219	564	189	195
2	202	211	1040	260	1900	719	486	766	205	473	153	191
3	231	205	1080	250	1200	677	504	640	195	558	147	168
4	223	182	2610	240	800	660	553	559	191	622	157	142
5	195	174	9650	230	600	703	589	515	166	562	181	117
6	166	173	8160	230	520	787	736	506	158	404	198	109
7	155	170	4680	220	460	915	2510	579	170	490	201	117
8	145	168	3020	210	410	1050	2510	657	174	488	162	108
9	152	159	2160	210	390	1050	2130	694	176	391	132	102
10	151	144	1690	200	370	965	4120	575	171	332	136	100
11	143	138	1340	200	350	875	6630	515	163	337	127	102
12	166	138	1240	200	340	805	7320	580	145	288	145	89
13	149	367	951	190	330	1300	7070	502	155	252	143	88
14	138	3600	833	190	320	2230	5880	515	153	206	157	76
15	132	12100	796	190	629	2190	3950	494	139	199	435	74
16	133	12100	785	190	1460	1720	2850	480	145	179	404	77
17	151	10200	757	180	1910	1410	2100	449	271	190	247	89
18	397	13600	676	180	2190	1190	1540	478	210	295	184	103
19	344	11800	673	180	2380	1010	1160	424	151	207	149	85
20	339	6770	734	180	2590	860	1020	392	158	196	137	78
21	799	3930	785	180	2790	737	898	360	492	203	152	84
22	861	2720	883	170	2230	719	772	336	344	177	215	81
23	535	2010	760	170	1710	733	705	295	279	245	220	76
24	376	1580	660	170	2560	663	671	286	842	164	174	84
25	304	1220	540	170	1900	611	613	286	2320	209	140	87
26	229	1060	460	1000	1260	619	593	304	1900	167	116	88
27	189	1530	410	4500	955	616	561	300	2680	152	116	93
28	176	2630	360	11200	853	591	504	289	1730	149	126	90
29	170	1910	330	12900	---	601	567	263	1030	148	149	93
30	165	1420	310	7680	---	556	625	219	706	217	149	95
31	173	---	290	4110	---	537	---	217	---	289	165	---
TOTAL	7863	92583	49813	46450	35967	28875	60665	14265	15838	9353	5506	3081
MEAN	254	3086	1607	1498	1285	931	2022	460	528	302	178	103
MAX	861	13600	9650	12900	2790	2230	7320	790	2680	622	435	195
MIN	132	138	290	170	320	537	486	217	139	148	116	74
CFSM	.22	2.69	1.40	1.30	1.12	.81	1.76	.40	.46	.26	.15	.09
IN.	.25	3.00	1.61	1.50	1.16	.93	1.96	.46	.51	.30	.18	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1994, BY WATER YEAR (WY)

	MEAN	301	621	1022	1507	1597	1972	1823	1093	924	638	343	259
MAX	3089	4228	4587	8024	4473	5158	5525	4092	5567	4591	2287	3608	
(WY)	1927	1973	1991	1937	1950	1963	1922	1933	1958	1993	1973	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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1922 - 1994

ANNUAL TOTAL	628763						370259						
ANNUAL MEAN	1723						1014						
HIGHEST ANNUAL MEAN										1005			
LOWEST ANNUAL MEAN										292			1931
HIGHEST DAILY MEAN	14900	Jul 3					13600	Nov 18		30200	Jan 22	1959	
LOWEST DAILY MEAN	126	Sep 22					74	Sep 15		25	Jul 18	1977	
ANNUAL SEVEN-DAY MINIMUM	134	Sep 18					82	Sep 19		31	Feb 4	1977	
INSTANTANEOUS PEAK FLOW							14200	Nov 18		31400	Jan 22	1959	
INSTANTANEOUS PEAK STAGE							18.21	Nov 18		75.44	Jan 22	1959	
INSTANTANEOUS LOW FLOW							74	Sep 15					
ANNUAL RUNOFF (CFSM)	1.50						.88			.87			
ANNUAL RUNOFF (INCHES)	20.36						11.99			11.88			
10 PERCENT EXCEEDS	4650						2270			2400			
50 PERCENT EXCEEDS	810						350			388			
90 PERCENT EXCEEDS	173						138			93			

03264000 GREENVILLE CREEK NEAR BRADFORD, OH

LOCATION.--Lat 40°06'08", LONG 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, and 6 mi upstream from mouth.

DRAINAGE AREA.--193 mi².

PERIOD OF RECORD.--October 1930 to current year. 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.--Estimated daily discharges: Dec.26 to Jan. 25, Feb. 1-15, Jun. 9. Records good, except for periods of estimated record, which are poor. Some diurnal fluctuation caused by mill 8 mi up-stream from station; daily flows are not affected appreciably. Sediment data collected at this site 1970 to 1974.

COOPERATION.--Gage-height tapes and 8 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 ft³/s, at site with drainage area of 213 mi², computed by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	48	209	80	300	153	93	181	68	106	38	46
2	44	48	196	74	200	151	92	169	63	86	38	34
3	55	59	196	70	170	143	95	144	59	105	35	30
4	41	58	629	66	150	144	103	137	59	110	32	26
5	34	53	2040	62	130	174	104	127	58	95	34	25
6	32	47	1450	60	120	199	195	118	58	74	34	23
7	31	47	660	56	110	216	405	125	58	245	34	21
8	31	46	454	54	100	214	343	174	56	296	34	20
9	31	44	354	52	90	196	272	170	54	182	32	20
10	33	41	313	50	86	184	940	144	54	129	27	20
11	33	41	260	48	80	163	1400	125	53	102	24	19
12	34	45	220	46	76	164	1580	137	50	83	42	18
13	34	130	200	45	72	281	1020	144	54	73	67	17
14	34	1890	187	43	70	322	604	121	57	61	49	17
15	34	3830	184	42	100	280	435	128	53	65	39	16
16	38	3360	168	41	301	214	344	130	48	64	33	15
17	68	2260	154	40	478	174	281	103	45	64	33	16
18	104	2960	148	38	635	164	242	101	41	70	38	16
19	87	2140	152	37	622	152	214	98	40	59	31	17
20	75	940	157	36	534	139	187	95	40	39	30	17
21	244	603	166	35	520	143	167	90	92	30	30	17
22	333	451	170	35	371	142	151	85	153	33	29	17
23	156	361	165	35	334	132	149	82	107	42	30	17
24	104	305	148	100	565	125	143	81	230	41	28	17
25	83	253	143	700	326	118	141	88	304	41	25	20
26	71	226	130	1930	223	108	133	108	219	38	22	20
27	68	421	120	1410	186	114	129	102	415	38	22	29
28	55	448	110	2420	168	118	121	85	248	38	20	36
29	52	317	100	2130	---	107	132	81	157	38	21	28
30	48	246	90	771	---	99	131	76	122	37	23	25
31	48	---	86	442	---	95	---	71	---	38	32	---
TOTAL	2167	21718	9759	11048	7117	5128	10346	3620	3115	2522	1006	659
MEAN	69.9	724	315	356	254	165	345	117	104	81.4	32.5	22.0
MAX	333	3830	2040	2420	635	322	1580	181	415	296	67	46
MIN	31	41	86	35	70	95	92	71	40	30	20	15
CFSM	.36	3.75	1.63	1.85	1.32	.86	1.79	.61	.54	.42	.17	.11
IN.	.42	4.19	1.88	2.13	1.37	.99	1.99	.70	.60	.49	.19	.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1994, BY WATER YEAR (WY)

	MEAN	56.9	113	177	245	279	330	319	206	174	108	70.1	49.3
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	10.7	
(WY)	1964	1935	1964	1945	1935	1941	1935	1941	1934	1934	1988	1941	

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1931 - 1994
ANNUAL TOTAL	101661	78205	
ANNUAL MEAN	279	214	177
HIGHEST ANNUAL MEAN			302
LOWEST ANNUAL MEAN			52.8
HIGHEST DAILY MEAN	3830	Nov 15	7920
LOWEST DAILY MEAN	23	Sep 16	5.3
ANNUAL SEVEN-DAY MINIMUM	27	Sep 13	6.4
INSTANTANEOUS PEAK FLOW		4140	9320
INSTANTANEOUS PEAK STAGE		8.28	10.31
INSTANTANEOUS LOW FLOW		15	
ANNUAL RUNOFF (CFSM)	1.44	1.11	.92
ANNUAL RUNOFF (INCHES)	19.59	15.07	12.43
10 PERCENT EXCEEDS	570	409	389
50 PERCENT EXCEEDS	148	92	73
90 PERCENT EXCEEDS	34	30	21

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

LOCATION.--Lat 40°03'28", long 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, 2 mi downstream from Painter Creek, 2 mi upstream from Canyon Run, and at mile 28.35.

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.--Estimated daily discharges: Dec. 25 to Jan. 25, Feb. 2-15. Records good except for estimated daily discharges, which are fair. Sediment data collected at this site 1963 to 1975.

COOPERATION.--Gage-height tapes and 8 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 ft³/s, computed by Miami Conservancy District. This stage is not comparable with present gage heights because of failure of levee in 1913.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	78	427	130	613	292	160	304	109	176	64	73
2	65	74	401	120	450	278	160	282	100	146	56	66
3	121	69	430	110	360	264	169	231	94	219	51	55
4	89	68	2090	100	300	277	182	215	91	227	51	48
5	62	69	6180	100	250	363	184	205	88	157	55	43
6	54	69	3110	96	220	446	411	197	87	129	55	42
7	48	68	1440	90	200	517	1120	211	85	410	55	40
8	45	65	955	86	190	512	954	308	82	525	53	38
9	46	60	715	84	180	436	639	278	79	336	49	36
10	50	58	610	80	170	378	3110	220	74	210	44	38
11	63	57	498	78	160	319	3710	190	72	154	44	38
12	61	57	408	74	160	331	4640	214	67	122	52	34
13	56	252	372	70	150	823	2700	224	75	105	101	32
14	51	5720	353	68	140	904	1430	202	82	100	87	29
15	50	12500	339	66	200	693	957	231	68	94	84	28
16	50	7630	308	64	808	493	708	221	60	84	68	26
17	69	6700	276	62	1320	372	532	187	62	80	59	29
18	260	8880	272	60	1820	348	435	165	58	136	52	32
19	151	4650	296	58	1700	307	386	160	63	88	48	37
20	112	2080	318	56	1490	260	332	155	55	69	45	36
21	753	1250	372	54	1460	259	294	146	76	56	49	33
22	722	908	392	52	916	251	272	139	188	64	55	32
23	298	701	333	50	747	226	255	134	187	105	58	27
24	181	581	294	150	1710	220	243	134	647	84	47	27
25	137	476	250	1000	738	207	235	154	854	71	42	38
26	111	418	220	3720	443	188	224	199	648	60	38	35
27	96	1290	200	2700	377	204	216	176	1160	59	39	53
28	89	1200	180	8190	346	207	203	146	591	56	38	68
29	82	722	160	5130	---	188	210	130	327	55	41	59
30	80	516	150	1700	---	172	220	121	226	135	44	46
31	81	---	140	930	---	163	---	115	---	96	57	---
TOTAL	4185	57266	22489	25328	17618	10898	25291	5994	6455	4408	1681	1218
MEAN	135	1909	725	817	629	352	843	193	215	142	54.2	40.6
MAX	753	12500	6180	8190	1820	904	4640	308	1160	525	101	73
MIN	45	57	140	50	140	163	160	115	55	55	38	26
CFSM	.27	3.79	1.44	1.62	1.25	.70	1.68	.38	.43	.28	.11	.08
IN.	.31	4.24	1.66	1.87	1.30	.81	1.87	.44	.48	.33	.12	.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 1994, BY WATER YEAR (WY)

MEAN	133	297	451	611	730	934	842	451	446	271	140	121
MAX	1313	1909	2437	3961	2177	2433	2513	1583	3334	1295	1823	2127
(WY)	1927	1994	1991	1937	1950	1963	1922	1989	1958	1993	1979	1926
MIN	11.7	19.3	16.0	21.5	44.0	79.8	131	44.6	33.7	22.2	14.1	14.9
(WY)	1964	1964	1964	1977	1964	1941	1971	1941	1988	1977	1988	1954

SUMMARY STATISTICS FOR 1993 CALENDAR YEAR FOR 1994 WATER YEAR WATER YEARS 1917 - 1994

ANNUAL TOTAL	267365		182831			
ANNUAL MEAN	733		501		450	
HIGHEST ANNUAL MEAN					775	1973
LOWEST ANNUAL MEAN					99.3	1941
HIGHEST DAILY MEAN	12500	Nov 15	12500	Nov 15	17400	Jan 15 1937
LOWEST DAILY MEAN	38	Sep 22	26	Sep 16	4.0	Oct 17 1920
ANNUAL SEVEN-DAY MINIMUM	40	Sep 18	30	Sep 12	8.1	Oct 11 1920
INSTANTANEOUS PEAK FLOW			14100	Nov 15 a	26400	Jan 14 1937
INSTANTANEOUS PEAK STAGE			15.30	Nov 15	18.46	Jun 29 1980
INSTANTANEOUS LOW FLOW			26	Sep 16		
ANNUAL RUNOFF (CFSM)	1.46		1.00		.90	
ANNUAL RUNOFF (INCHES)	19.77		13.52		12.16	
10 PERCENT EXCEEDS	1840		940		1020	
50 PERCENT EXCEEDS	289		160		143	
90 PERCENT EXCEEDS	55		48		32	

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

GREAT MIAMI RIVER BASIN

03266000 STILLWATER RIVER AT ENGLEWOOD, OH

LOCATION.--Lat 39°52'10", long 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, and at mile 8.9.
 DRAINAGE AREA.--650 mi².
 PERIOD OF RECORD.--October 1925 to current year (monthly discharge only, October 1925, published in WSP 1305).
 REVISED RECORDS.--WSP 1908: Drainage area.
 GAGE.--Water-stage recorder and concrete control. Datum of gage is 699.82 ft above sea level.
 REMARKS.--Estimated daily discharges: Dec. 27-Jan. 24, Feb. 2-13. Records good, except for periods of estimated record, which are fair. Flood flow regulated by Englewood retarding basin.
 COOPERATION.--Gage-height tapes and 9 discharge measurements furnished by Miami Conservancy District.
 EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a discharge of 85,400 ft³/s at site 1 mi downstream, computed by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	110	548	170	1330	388	221	445	147	286	114	63
2	91	106	492	160	600	353	216	452	135	239	85	74
3	92	106	497	150	500	339	231	367	129	246	73	72
4	133	99	1200	140	400	330	249	325	126	308	75	61
5	106	98	4580	140	330	383	250	301	123	252	80	57
6	83	97	5410	130	290	482	317	290	125	202	75	54
7	74	94	4150	130	260	601	1330	305	130	221	70	52
8	67	93	1570	120	240	639	1340	455	124	563	69	48
9	72	90	982	120	230	588	966	456	114	429	66	46
10	67	85	809	110	220	520	2140	369	108	296	61	46
11	64	82	688	110	210	428	4630	309	102	228	58	44
12	75	82	549	100	200	381	5060	321	99	186	59	43
13	76	154	478	100	200	749	5150	332	97	171	67	41
14	71	1970	441	98	232	1220	3810	310	102	159	110	38
15	66	5990	419	96	300	1010	1710	317	103	148	100	35
16	65	7210	387	90	802	751	1160	341	89	131	97	33
17	72	7320	345	88	1340	543	843	286	82	119	82	35
18	139	7630	331	86	2130	461	665	248	80	157	71	36
19	232	7730	338	86	2160	424	580	237	79	158	63	34
20	180	7170	359	84	1870	352	508	226	102	122	60	36
21	276	6200	387	82	2000	331	440	217	91	104	62	38
22	899	4520	444	80	1350	325	403	207	122	93	58	36
23	421	1240	399	80	910	299	374	198	198	113	58	35
24	250	782	352	100	1990	286	347	194	545	132	64	35
25	189	656	333	785	1170	271	333	195	1530	129	56	35
26	161	548	296	3170	658	251	320	218	964	102	49	40
27	140	975	260	3650	448	263	309	222	2210	85	48	45
28	125	1840	230	4800	405	277	290	197	1270	78	61	55
29	118	996	210	6160	---	268	290	175	598	76	86	70
30	113	702	190	5890	---	243	329	161	389	75	52	65
31	117	---	180	4580	---	227	---	153	---	164	55	---
TOTAL	4714	64775	27854	31685	22775	13983	34811	8829	10113	5772	2184	1402
MEAN	152	2159	899	1022	813	451	1160	285	337	186	70.5	46.7
MAX	899	7730	5410	6160	2160	1220	5150	456	2210	563	114	74
MIN	64	82	180	80	200	227	216	153	79	75	48	33
CFSM	.23	3.32	1.38	1.57	1.25	.69	1.79	.44	.52	.29	.11	.07
IN.	.27	3.71	1.59	1.81	1.30	.80	1.99	.51	.58	.33	.12	.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 1994, BY WATER YEAR (WY)

	MEAN	171	357	569	884	955	1155	1082	641	545	361	195	146
MAX	1781	2215	2495	5129	2840	3147	3015	2931	4244	1582	2438	1993	
(WY)	1987	1973	1991	1937	1950	1963	1964	1933	1958	1993	1979	1926	
MIN	15.6	27.3	27.9	28.6	63.0	111	180	61.1	52.2	30.0	19.7	17.9	
(WY)	1964	1945	1945	1945	1964	1941	1941	1941	1934	1988	1988	1963	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1926 - 1994

ANNUAL TOTAL	330147		228897										
ANNUAL MEAN	905		627										
HIGHEST ANNUAL MEAN										586			
LOWEST ANNUAL MEAN										1027			1958
HIGHEST DAILY MEAN	7730	Nov 19								130			1941
LOWEST DAILY MEAN	51	Sep 23								9980			1958
ANNUAL SEVEN-DAY MINIMUM	52	Sep 18								4.8			Sep 30 1944
INSTANTANEOUS PEAK FLOW										9.7			Sep 24 1941
INSTANTANEOUS PEAK STAGE										9980			Jun 15 1958
INSTANTANEOUS LOW FLOW										80.88			Jun 15 1958
ANNUAL RUNOFF (CFSM)	1.39									.96			
ANNUAL RUNOFF (INCHES)	18.89									13.10			
10 PERCENT EXCEEDS	2610									1400			
50 PERCENT EXCEEDS	362									197			
90 PERCENT EXCEEDS	77									42			

GREAT MIAMI RIVER BASIN

157

032665600 MAD RIVER AT WEST LIBERTY, OH

LOCATION---Lat 40°15'08", long 83°44'59", Logan County, on left bank upstream from the SR 245 bridge, on east side of West Liberty, 0.4 mi east of intersection of SR 245 and SR 68.

DRAINAGE AREA---36.6 mi².

PERIOD OF RECORD---December 1993 to September 1994.

GAGE---Water-stage recorder. Datum of gage is 1078.00 ft above sea level.

REMARKS---Estimated daily discharges: Dec. 1-6, Jan. 16-24, Apr. 20 to May 3. Records good, except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	46	33	56	48	40	54	27	25	18	18
2	---	---	45	34	53	46	39	50	27	24	18	16
3	---	---	100	33	52	46	41	46	26	24	17	16
4	---	---	150	33	49	47	41	44	26	23	18	16
5	---	---	220	32	48	48	41	42	26	23	19	16
6	---	---	110	32	46	48	65	42	26	22	17	15
7	---	---	77	33	44	50	85	44	25	22	16	15
8	---	---	64	31	44	49	60	45	26	22	16	15
9	---	---	58	30	42	47	53	42	25	22	16	15
10	---	---	55	29	39	46	126	40	24	21	16	14
11	---	---	49	31	40	45	94	39	24	21	16	14
12	---	---	46	32	40	46	122	40	25	21	17	14
13	---	---	45	34	40	63	103	38	26	20	16	14
14	---	---	44	32	40	75	81	37	25	21	18	14
15	---	---	43	29	43	67	70	38	25	21	16	14
16	---	---	42	28	49	56	62	37	25	20	16	13
17	---	---	41	27	59	49	58	35	24	20	16	15
18	---	---	41	27	80	51	56	34	22	20	15	15
19	---	---	44	27	112	48	54	34	21	20	15	14
20	---	---	42	27	130	46	50	33	22	19	17	14
21	---	---	43	26	103	47	49	32	24	18	21	14
22	---	---	40	26	72	47	48	32	22	18	17	14
23	---	---	40	26	72	45	47	31	24	18	16	14
24	---	---	38	30	83	45	46	30	28	18	15	14
25	---	---	37	52	58	43	46	30	27	18	15	14
26	---	---	34	90	52	42	45	30	29	17	15	15
27	---	---	33	120	49	45	45	29	33	18	15	15
28	---	---	33	507	48	43	45	28	27	21	16	14
29	---	---	32	145	---	44	45	28	27	21	16	14
30	---	---	32	87	---	42	48	28	26	22	15	13
31	---	---	32	67	---	41	---	28	---	19	22	---
TOTAL	---	---	1756	1790	1643	1505	1805	1140	764	639	516	438
MEAN	---	---	56.6	57.7	58.7	48.5	60.2	36.8	25.5	20.6	16.6	14.6
MAX	---	---	220	507	130	75	126	54	33	25	22	18
MIN	---	---	32	26	39	41	39	28	21	17	15	13
CF5M	---	---	1.55	1.58	1.60	1.33	1.64	1.00	.70	.56	.45	.40
IN.	---	---	1.78	1.82	1.67	1.53	1.83	1.16	.78	.65	.52	.45

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1994, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1994	56.6	56.6	1994	56.6	1994
1994	57.7	57.7	1994	57.7	1994
1994	58.7	58.7	1994	58.7	1994
1994	48.5	48.5	1994	48.5	1994
1994	60.2	60.2	1994	60.2	1994
1994	36.8	36.8	1994	36.8	1994
1994	25.5	25.5	1994	25.5	1994
1994	20.6	20.6	1994	20.6	1994
1994	16.6	16.6	1994	16.6	1994
1994	14.6	14.6	1994	14.6	1994

GREAT MIAMI RIVER BASIN

03267000 MAD RIVER NEAR URBANA, OH

LOCATION.--Lat 40°06'27", long 83°47'57", on west line of sec. 35, T.5 E., R. 11 N., Champaign County, Hydrologic Unit 05080001, on left bank at downstream side of bridge on U.S. Highway 36, 1.8 mi upstream from Dugan Run, 1.8 mi downstream from Muddy Creek, 2.5 mi west of Urbana, and at mile 39.7.

DRAINAGE AREA.--162 mi².

PERIOD OF RECORD.--September 1925 to September 1931, August 1939 to current year.

REVISED RECORDS.--WSP 1305: 1930(M), WSP 1505: 1956. WSP 1625: 1929. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 985.22 ft above sea level. Prior to May 18, 1930, nonrecording gage at same site and datum. May 18, 1930 to Sept. 30, 1931, nonrecording gage at site 600 ft downstream at datum 0.36 ft lower. Aug. 1 to Sept. 25, 1939, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges noted in table. Records fair. Sediment data collected at this site 1970 to 1974. COOPERATION.--Gage-height tapes, and 6 discharge measurements furnished by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e110	99	196	138	276	169	e140	219	123	129	86	79
2	106	99	194	139	249	165	154	192	120	129	84	74
3	102	100	215	138	234	158	158	183	119	129	83	72
4	99	101	634	137	214	157	159	181	119	124	83	e72
5	99	101	981	133	206	163	158	177	118	122	85	e72
6	97	96	429	132	196	164	201	173	117	117	81	e70
7	96	96	342	132	187	164	263	177	116	116	81	e70
8	96	96	298	125	183	163	214	185	114	111	80	70
9	96	96	276	123	175	157	199	177	115	114	79	69
10	96	95	266	121	161	155	343	167	111	111	79	68
11	96	94	235	120	156	150	316	164	109	110	e80	68
12	96	94	219	120	153	147	367	166	110	108	e86	66
13	94	148	214	120	152	190	320	159	113	106	e80	66
14	94	555	204	119	148	262	287	157	108	105	e90	65
15	94	514	201	115	157	227	252	158	106	105	81	64
16	94	286	192	e110	209	199	227	157	104	105	79	63
17	97	804	185	e110	257	178	217	152	104	105	77	66
18	99	680	182	e110	283	175	210	150	103	107	77	64
19	99	371	181	e110	314	167	211	148	101	102	76	63
20	100	295	179	e100	340	164	199	147	101	102	78	63
21	106	266	179	e100	307	164	194	143	103	100	91	62
22	105	240	171	e100	242	159	192	138	100	100	80	62
23	100	219	169	e100	230	153	188	135	112	103	77	62
24	99	208	162	e110	276	152	186	134	126	e96	76	62
25	99	194	158	222	211	145	180	133	127	e90	75	64
26	100	186	149	399	190	144	181	133	141	87	74	65
27	100	322	147	505	180	146	180	129	199	86	74	64
28	99	282	144	1870	174	147	175	128	152	89	73	64
29	99	232	141	620	---	143	175	126	142	94	76	62
30	99	209	137	389	---	139	186	125	134	91	72	62
31	99	---	138	316	---	138	---	124	---	88	82	---
TOTAL	3065	7178	7518	7183	6060	5104	6432	4837	3567	3281	2475	1993
MEAN	98.9	239	243	232	216	165	214	156	119	106	79.8	66.4
MAX	110	804	981	1870	340	262	367	219	199	129	91	79
MIN	94	94	137	100	148	138	140	124	100	86	72	62
CFSM	.61	1.48	1.50	1.43	1.34	1.02	1.32	.96	.73	.65	.49	.41
IN.	.70	1.65	1.73	1.65	1.39	1.17	1.48	1.11	.82	.75	.57	.46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 1994, BY WATER YEAR (WY)

	MEAN	84.4	102	131	174	203	225	221	180	157	133	98.3	84.8
MAX	355	315	473	730	523	567	486	385	507	454	267	250	
(WY)	1987	1973	1991	1950	1950	1963	1948	1990	1947	1993	1973	1926	
MIN	29.3	29.7	27.8	36.7	33.8	65.3	90.7	61.7	59.3	41.8	35.8	30.3	
(WY)	1964	1964	1964	1964	1964	1992	1953	1941	1962	1954	1963	1963	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1926 - 1994

ANNUAL TOTAL	84983	58693	
ANNUAL MEAN	233	161	149
HIGHEST ANNUAL MEAN			240
LOWEST ANNUAL MEAN			58.1
HIGHEST DAILY MEAN	1840	Jul 2	5740
LOWEST DAILY MEAN	94	Oct 13	24
ANNUAL SEVEN-DAY MINIMUM	95	Oct 10	63
INSTANTANEOUS PEAK FLOW			2440
INSTANTANEOUS PEAK STAGE			7.24
INSTANTANEOUS LOW FLOW			62
ANNUAL RUNOFF (CFSM)	1.44	.99	.92
ANNUAL RUNOFF (INCHES)	19.51	13.48	12.50
10 PERCENT EXCEEDS	404	259	266
50 PERCENT EXCEEDS	181	132	108
90 PERCENT EXCEEDS	100	76	50

e Estimated

03267900 MAD RIVER AT ST. PARIS PIKE AT EAGLE CITY, OH

LOCATION.--Lat 39°57'51", long 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, 1.1 mi downstream from Moore Run, 3.1 mi upstream from Buck Creek, 3.3 mi south of Tremont City, and at mile 29.5.

DRAINAGE AREA.--310 mi².

PERIOD OF RECORD.--October 1965 to current year.

REVISED RECORDS.--WRD-OH-88-1: 1987(P).

GAGE.--Water-stage recorder. Datum of gage is 904.66 ft above sea level.

REMARKS.--Estimated daily discharges: Dec. 27 to Jan. 27. Records fair. 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 21.4 ft³/s in 1994, is returned as sewage 1.4 mi upstream from gaging station near Springfield (station 03269500). Water-quality data collected at this site 1966 to 1977. Satellite telemeter at station operated for U.S. Army Corps of Engineers.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 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 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	178	155	331	205	565	354	293	440	210	200	140	184
2	190	153	327	200	511	347	285	364	203	189	147	169
3	183	157	369	190	473	337	300	341	200	208	150	164
4	178	156	1680	185	435	337	305	332	198	187	167	163
5	172	157	1990	180	415	340	301	319	196	178	164	158
6	169	154	864	175	395	340	414	310	196	172	155	160
7	166	153	645	170	381	345	578	333	194	167	155	158
8	164	152	543	160	371	346	435	353	191	163	155	156
9	166	152	483	160	356	338	389	324	190	170	152	154
10	163	151	446	155	331	335	1150	307	185	158	154	154
11	162	151	406	150	325	319	976	295	179	156	154	151
12	161	149	374	150	317	317	1200	306	176	153	158	148
13	159	346	361	145	312	449	844	287	183	150	152	143
14	158	1010	350	140	305	610	662	278	177	149	166	140
15	156	1170	339	140	400	511	567	288	174	149	141	138
16	154	561	323	135	484	430	517	281	172	145	135	129
17	172	1940	311	135	512	378	469	271	172	143	130	134
18	162	1400	311	130	553	377	435	262	167	150	128	124
19	163	738	312	130	591	354	415	258	165	141	127	119
20	176	558	307	130	635	339	391	250	169	141	154	117
21	185	454	309	125	607	345	374	245	176	140	232	116
22	176	398	294	125	498	336	363	240	165	145	190	113
23	169	363	287	120	512	323	350	237	196	145	184	111
24	167	341	278	120	582	315	342	232	269	140	182	109
25	163	315	276	120	455	305	335	234	217	162	182	122
26	161	303	261	350	402	298	327	249	328	140	175	110
27	158	621	250	900	371	326	321	230	466	137	172	107
28	156	519	240	4060	361	316	313	225	287	140	178	106
29	154	405	230	1440	---	316	324	225	243	165	178	106
30	155	353	220	865	---	305	358	217	221	152	167	105
31	158	---	210	671	---	298	---	214	---	139	194	---
TOTAL	5154	13635	13927	12061	12455	10986	14333	8747	6265	4874	5018	4068
MEAN	166	454	449	389	445	354	478	282	209	157	162	136
MAX	190	1940	1990	4060	635	610	1200	440	466	208	232	184
MIN	154	149	210	120	305	298	285	214	165	137	127	105

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1994, BY WATER YEAR (WY)

	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
MEAN	181	245	338	339	414	450	452	382	324	290	203	167																	
MAX	765	689	1020	781	946	778	717	781	788	863	451	375																	
(WY)	1987	1973	1991	1974	1975	1978	1973	1990	1980	1993	1973	1979																	
MIN	82.3	115	106	89.8	133	157	196	146	132	93.3	88.1	88.8																	
(WY)	1989	1992	1977	1977	1992	1983	1971	1988	1988	1988	1988	1988																	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1966 - 1994

ANNUAL TOTAL	156490		111523																										
ANNUAL MEAN	429		306																										
HIGHEST ANNUAL MEAN																													
LOWEST ANNUAL MEAN																													
HIGHEST DAILY MEAN	3390	Jul 2	4060	Jan 28																									
LOWEST DAILY MEAN	149	Nov 12	105	Sep 30																									
ANNUAL SEVEN-DAY MINIMUM	152	Nov 6	109	Sep 24																									
INSTANTANEOUS PEAK FLOW			5070	Jan 28	a																								
INSTANTANEOUS PEAK STAGE			12.88	Jan 28																									
INSTANTANEOUS LOW FLOW			105	Sep 30																									
10 PERCENT EXCEEDS	746		511																										
50 PERCENT EXCEEDS	323		210																										
90 PERCENT EXCEEDS	173		140																										

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

GREAT MIAMI RIVER BASIN

03269500 MAD RIVER NEAR SPRINGFIELD, OH

LOCATION.--Lat 39°55'23", long 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, and at mile 24.1.

DRAINAGE AREA.--490 mi².

PERIOD OF RECORD.--January 1904 to March 1906 (fragmentary), February 1914 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 603: 1924. WSP 823: 1929(M). WSP 1305: 1914(M), 1916-17(M), 1922-23(M), 1925(M). WSP 1625: 1924(M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 881.42 ft 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.--Estimated daily discharges: Dec. 29 to Jan. 27, 30 to Feb. 5. Records good, except those for estimated periods which are fair. 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 collected at this site 1965 to 1973.

COOPERATION.--Gage height charts, tapes, and 9 discharge measurements furnished by Miami Conservancy District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,500 ft³/s Jan. 21, 1959, gage height, 15.76 ft, from rating curve extended above 14,000 ft³/s on basis of slope-area and contracted opening measurements of peak flow; minimum daily discharge, 30 ft³/s Sept. 15, 1904.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 25, 1913 reached a stage of 16.9 ft, present datum, discharge, 55,400 ft³/s computed by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	325	356	638	340	920	567	384	899	343	435	262	212
2	359	352	553	340	800	553	374	686	330	588	257	199
3	327	366	603	330	720	529	427	657	327	703	258	187
4	324	358	2080	320	660	497	421	631	323	493	285	185
5	316	365	2840	310	600	498	410	588	316	430	273	187
6	313	349	1370	300	553	495	580	541	318	333	252	190
7	309	345	1330	290	528	504	796	629	314	305	244	187
8	306	345	1080	280	517	502	592	643	309	316	221	189
9	333	340	788	280	501	497	528	569	303	319	219	188
10	307	299	743	270	464	511	1790	528	284	283	215	194
11	306	296	675	270	453	479	1500	504	277	275	214	185
12	307	289	630	270	444	485	1770	557	272	268	217	186
13	301	659	601	260	449	691	1250	497	278	265	209	211
14	298	1260	546	260	463	956	975	494	270	264	224	239
15	298	1750	530	250	655	766	823	556	265	257	213	238
16	308	932	505	250	797	641	737	551	262	251	206	239
17	367	2400	488	240	802	564	662	494	262	308	201	267
18	318	2220	494	240	850	563	615	472	262	304	197	245
19	339	1460	495	240	904	521	593	456	273	279	195	229
20	432	996	491	230	971	499	556	440	275	276	259	192
21	412	836	501	230	957	515	532	422	293	272	258	209
22	388	718	476	230	942	496	516	412	278	286	213	237
23	374	571	465	230	1120	473	500	409	330	262	204	236
24	368	536	451	220	1010	432	493	400	462	253	201	240
25	350	498	437	220	745	413	513	422	348	329	198	301
26	362	483	393	500	655	402	541	418	774	272	195	263
27	358	1140	390	1400	598	491	539	384	815	261	192	251
28	354	917	381	5860	577	463	530	368	562	268	220	248
29	351	783	370	2230	---	451	616	366	499	342	233	248
30	360	773	360	1400	---	423	668	354	472	277	198	248
31	364	---	350	1100	---	395	---	349	---	263	221	---
TOTAL	10534	22992	22054	19190	19655	16272	21231	15696	10696	10037	6954	6630
MEAN	340	766	711	619	702	525	708	506	357	324	224	221
MAX	432	2400	2840	5860	1120	956	1790	899	815	703	285	301
MIN	298	289	350	220	444	395	374	349	262	251	192	185
CFSM	.69	1.56	1.45	1.26	1.43	1.07	1.44	1.03	.73	.66	.46	.45
IN.	.80	1.75	1.67	1.46	1.49	1.24	1.61	1.19	.81	.76	.53	.50

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1994, BY WATER YEAR (WY)

	MEAN	363	452	576	586	714	737	720	607	546	501	344	332
MAX	1081	904	1583	1177	1409	1279	1096	1248	1371	1284	947	1279	
(WY)	1987	1986	1991	1991	1975	1978	1974	1981	1980	1993	1979	1979	
MIN	176	204	188	189	235	251	312	240	174	189	162	177	
(WY)	1989	1978	1977	1977	1992	1983	1976	1988	1988	1988	1988	1977	

SUMMARY STATISTICS

	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1974 - 1994
ANNUAL TOTAL	253714	181941	
ANNUAL MEAN	695	498	539
HIGHEST ANNUAL MEAN			736
LOWEST ANNUAL MEAN			279
HIGHEST DAILY MEAN	4370	5860	8200
LOWEST DAILY MEAN	268	185	100
ANNUAL SEVEN-DAY MINIMUM	277	188	103
INSTANTANEOUS PEAK FLOW		6990	12200
INSTANTANEOUS PEAK STAGE		9.70	11.88
INSTANTANEOUS LOW FLOW		185	
ANNUAL RUNOFF (CFSM)	1.42	1.02	1.10
ANNUAL RUNOFF (INCHES)	19.26	13.81	14.94
10 PERCENT EXCEEDS	1280	818	998
50 PERCENT EXCEEDS	540	374	391
90 PERCENT EXCEEDS	341	221	218

03270000 MAD RIVER NEAR DAYTON, OH

LOCATION.--Lat 39°47'50", long 84°05'19", in SW 1/4 sec. 7, R. 8, T.2, Green 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 and at mile 6.1. Water-quality sampling site was on left bank 900 ft downstream.

DRAINAGE AREA.--635 mi².

PERIOD OF RECORD.--October 1914 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 453: 1915. WSP 743: 1929-32. WSP 1305: 1916(M), 1925(M) 1930-32(M). 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.--Estimated daily discharges: Dec. 29 to Jan. 25 and Jan. 29 to Feb. 5. Records fair. 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. Also see REMARKS for station 03269500.

COOPERATION.--Gage-height tapes and 8 discharge measurements furnished by Miami Conservancy District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,200 ft³/s Jan. 22, 1959 (based on Huffman retarding basin outflow records); maximum gage height, 87.9 ft Feb. 26, 1929 at site and datum then in use; minimum daily discharge, 94 ft³/s Aug. 6, 1934, but may have been less during period 1921-24.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 25, 1913 reached a stage of 14.0 ft, original site and datum, discharge 75,700 ft³/s, computed by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	375	414	822	420	1200	721	512	1220	432	553	312	247
2	419	407	685	410	1000	701	497	910	420	517	303	230
3	390	413	744	400	900	679	551	831	410	1040	295	215
4	376	411	1710	400	800	638	587	794	403	662	345	217
5	368	410	4010	390	720	633	555	757	394	546	357	216
6	365	417	1860	380	682	622	685	692	384	447	294	220
7	365	403	1560	370	643	632	1110	821	404	378	287	217
8	365	403	1330	360	620	633	843	893	377	361	268	222
9	398	400	934	360	606	629	736	760	372	418	251	242
10	382	371	863	350	552	656	2490	697	346	347	257	250
11	370	353	788	340	540	624	2450	656	333	328	251	247
12	370	348	730	340	528	610	2760	722	324	322	267	233
13	370	670	700	330	559	823	1870	656	322	329	274	232
14	366	1060	647	320	577	1280	1440	633	322	320	278	276
15	365	2330	623	310	705	1060	1160	702	341	310	297	266
16	367	1230	596	310	1110	877	991	737	315	298	291	255
17	444	2030	571	300	965	760	856	644	319	326	302	275
18	400	3330	574	300	1040	736	785	609	313	463	300	276
19	394	1880	579	300	1100	696	752	581	312	344	295	257
20	498	1280	568	290	1180	643	707	568	317	329	309	216
21	523	1030	586	290	1240	647	674	544	369	314	455	225
22	460	917	563	290	1110	644	648	533	347	367	342	253
23	442	749	550	290	1450	613	624	527	365	371	320	251
24	433	686	534	290	1430	572	608	524	511	319	313	247
25	424	635	532	900	1030	537	598	513	490	411	309	248
26	406	609	483	2400	866	521	636	568	939	367	296	327
27	411	1110	484	2100	772	639	640	509	1570	322	280	257
28	406	1220	472	6130	738	624	637	481	854	326	323	257
29	402	924	450	3200	---	599	743	468	687	309	361	250
30	406	911	440	1700	---	570	837	453	634	457	253	254
31	424	---	430	1400	---	530	---	444	---	323	251	---
TOTAL	12484	27351	26418	25970	24663	21149	28982	20447	13926	12524	9336	7378
MEAN	403	912	852	838	881	682	966	660	464	404	301	246
MAX	523	3330	4010	6130	1450	1280	2760	1220	1570	1040	455	327
MIN	365	348	430	290	528	521	497	444	312	298	251	215
CFSM	.63	1.44	1.34	1.32	1.39	1.07	1.52	1.04	.73	.64	.47	.39
IN.	.73	1.60	1.55	1.52	1.44	1.24	1.70	1.20	.82	.73	.55	.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1994, BY WATER YEAR (WY)

	MEAN	446	569	744	760	933	971	941	785	684	623	428	408
MAX	1425	1175	2027	1559	1839	1637	1428	1675	1745	1525	1235	1528	
(WY)	1987	1986	1991	1991	1975	1978	1974	1990	1981	1993	1979	1979	
MIN	216	236	236	239	287	344	444	268	192	211	172	217	
(WY)	1989	1988	1977	1977	1992	1983	1976	1988	1988	1988	1988	1987	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1974 - 1994

ANNUAL TOTAL	311249	230628	
ANNUAL MEAN	853	632	690
HIGHEST ANNUAL MEAN			945
LOWEST ANNUAL MEAN			336
HIGHEST DAILY MEAN	5080	Jul 2	10300
LOWEST DAILY MEAN	320	Sep 24	112
ANNUAL SEVEN-DAY MINIMUM	345	Aug 27	124
INSTANTANEOUS PEAK FLOW			11400
INSTANTANEOUS PEAK STAGE			14.11
INSTANTANEOUS LOW FLOW			215
ANNUAL RUNOFF (CFSM)	1.34	1.00	1.09
ANNUAL RUNOFF (INCHES)	18.23	13.51	14.75
10 PERCENT EXCEEDS	1550	1100	1280
50 PERCENT EXCEEDS	666	481	497
90 PERCENT EXCEEDS	376	276	257

GREAT MIAMI RIVER BASIN

03270500 GREAT MIAMI RIVER AT DAYTON, OH

LOCATION.--Lat 39°45'55", long 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, 0.7 mi upstream from Wolf Creek, 0.8 mi downstream from Mad River, and at mile 80.0.

DRAINAGE AREA.--2,511 mi².

PERIOD OF RECORD.--April to September 1905, January to September 1906, January 1907 to December 1909 (gage heights only), April 1913 to current year. Monthly discharge only for October 1919 to September 1921, published in WSP 1305. Gage-height records collected at Main Street Bridge since January 1892 are contained in reports of National Weather Service. Prior to October 1962, published as Miami River at Dayton.

REVISED RECORDS.--WSP 1385: 1917. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft above sea level as requested by cooperators (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.--Estimated daily discharges: Dec. 28 to Jan. 27. Records good except estimated discharges 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 Loramie 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 collected at this site 1951 to 1953. U.S. Army Corps of Engineers satellite telemeter at station.

COOPERATION.--Gage-height charts, tapes, and 7 discharge measurements furnished by Miami Conservancy District.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913 reached a stage of 29.0 ft, site and datum then in use, discharge, 250,000 ft³/s, computed by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	564	684	2750	1050	5910	2010	1250	2490	743	1500	549	414
2	734	715	2430	980	4260	1860	1220	2190	707	1230	449	404
3	654	730	2490	940	3750	1780	1350	1870	679	1730	422	382
4	674	698	5360	900	2880	1720	1400	1700	666	1600	494	350
5	635	679	18100	860	2650	1780	1430	1590	651	1450	500	322
6	565	669	16600	820	2130	1970	1800	1530	627	1060	464	322
7	543	651	11600	780	1990	2220	4860	1900	691	987	446	331
8	524	644	6770	760	1800	2400	4930	2080	618	1440	415	322
9	604	640	4770	740	1520	2390	4210	1960	609	1310	365	309
10	588	600	3900	700	1500	2290	9500	1690	599	1030	351	302
11	486	565	3250	680	1570	2060	14600	1530	579	882	367	284
12	497	557	2920	660	1440	1910	15600	1740	537	793	372	291
13	519	1370	2470	640	1440	2870	14800	1520	524	851	389	257
14	518	5580	2210	620	1430	4860	11900	1520	531	718	402	268
15	499	18700	2110	620	1680	4580	7230	1660	526	651	638	328
16	488	20400	2010	600	3420	3620	5330	1630	511	523	746	311
17	622	19900	1920	600	4410	2940	4190	1420	550	498	536	359
18	704	23600	1810	580	5460	2540	3270	1330	539	812	436	342
19	973	21800	1810	560	5770	2270	2630	1260	414	637	396	319
20	1150	16300	1840	560	5860	1990	2300	1210	548	592	362	256
21	1350	12100	1950	540	6200	1830	2070	1140	753	549	461	225
22	2340	8910	2100	540	5080	1760	1840	1080	710	645	439	260
23	1560	4670	2050	520	4440	1720	1720	1020	735	653	459	269
24	1120	3390	1860	520	6010	1610	1660	980	1570	517	439	276
25	931	2750	1750	1000	4700	1470	1570	953	4250	584	397	277
26	796	2430	1550	3500	3090	1430	1550	1060	4400	530	345	338
27	737	3510	1450	9800	2340	1620	1510	1020	6300	484	326	304
28	674	6100	1300	21900	2140	1540	1430	909	4210	473	565	308
29	644	4330	1200	23900	---	1500	1660	866	2630	432	766	342
30	646	3330	1150	17000	---	1410	2050	805	1910	559	350	354
31	681	---	1100	11200	---	1330	---	760	---	653	363	---
TOTAL	24020	187002	114580	105070	94870	67280	130860	44413	39317	26373	14009	9426
MEAN	775	6233	3696	3389	3388	2170	4362	1433	1311	851	452	314
MAX	2340	23600	18100	23900	6200	4860	15600	2490	6300	1730	766	414
MIN	486	557	1100	520	1430	1330	1220	760	414	432	326	225

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1994, BY WATER YEAR (WY)

	MEAN	702	1356	2154	3273	3477	4148	3915	2551	2071	1468	881	604
MAX	5792	8047	9210	17060	9842	11060	9727	9936	12150	7510	5727	2862	
(WY)	1987	1973	1991	1937	1950	1963	1964	1933	1958	1993	1979	1979	
MIN	148	195	239	263	314	557	852	373	259	216	196	164	
(WY)	1964	1964	1964	1945	1964	1941	1971	1941	1988	1954	1988	1963	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1930 - 1994

ANNUAL TOTAL	1342015	857220	
ANNUAL MEAN	3677	2349	2210
HIGHEST ANNUAL MEAN			4156
LOWEST ANNUAL MEAN			634
HIGHEST DAILY MEAN	24000	23900	57100
LOWEST DAILY MEAN	420	225	109
ANNUAL SEVEN-DAY MINIMUM	461	269	118
INSTANTANEOUS PEAK FLOW		26100	60900
INSTANTANEOUS PEAK STAGE		30.96	36.00
INSTANTANEOUS LOW FLOW		225	
10 PERCENT EXCEEDS	9630	4890	5050
50 PERCENT EXCEEDS	2130	1120	1000
90 PERCENT EXCEEDS	602	378	310

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LOCATION.--Lat 39°46'00", long 84°14'10", Montgomery County, Hydrologic Unit 05080002, on right bank, at West Riverview Avenue Bridge, in Dayton, 1.8 mi upstream from mouth.

DRAINAGE AREA.--68.7 mi².

PERIOD OF RECORD.--September 1938 to September 1950, October 1953 to September 1973 (low flow partial records site), October 1986 to current year.

REVISED RECORDS.--WRD Ohio 1990: 1989 (p).

GAGE.--Water-stage recorder. Datum of gage is 739.83 ft above sea level. Prior to 1950, recording gage at same location at datum 39.83 ft lower.

REMARKS.--Estimated daily discharges: Dec. 24 to Jan. 27, Feb. 2-14. Records good, except for periods of estimated record, which are fair.

COOPERATION.--Gage-height tapes and 7 discharge measurements furnished by Miami Conservancy District.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge during flood in January 1959, about 12,800 ft³/s gage height, 13.1 ft, computed by Miami Conservancy District.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	16	46	18	69	48	43	153	18	27	10	11
2	41	14	51	17	56	46	41	72	16	43	10	7.9
3	15	15	63	16	47	44	84	55	16	122	9.0	8.0
4	11	14	934	15	41	48	76	49	16	38	19	7.6
5	10	15	523	14	37	52	60	43	16	26	18	8.1
6	9.2	16	181	13	34	54	142	51	17	21	12	9.3
7	9.4	15	109	13	31	56	151	181	22	19	11	8.6
8	9.0	14	84	12	28	54	90	119	18	23	10	7.3
9	24	14	70	12	26	51	74	70	16	26	9.6	6.8
10	17	13	68	12	24	62	1340	52	14	17	8.4	7.4
11	11	13	57	11	22	60	725	44	14	15	8.3	7.6
12	11	13	49	11	20	71	500	59	13	14	9.4	6.9
13	10	163	46	11	19	111	211	40	15	62	8.8	6.4
14	9.3	365	45	10	26	113	131	43	14	44	8.2	6.4
15	9.1	302	43	10	135	86	99	80	12	23	8.5	5.9
16	10	89	40	9.8	93	65	78	59	12	18	9.0	6.3
17	23	1060	35	9.8	64	54	63	41	12	17	9.0	15
18	16	376	43	9.6	74	56	55	36	12	17	8.8	7.3
19	25	156	46	9.6	90	47	50	32	12	13	8.0	6.5
20	66	94	43	9.5	110	44	43	29	313	20	8.0	5.7
21	37	71	52	9.5	114	58	41	27	52	22	8.8	5.0
22	20	56	42	9.4	85	49	39	26	21	70	9.0	5.3
23	15	48	39	9.4	154	44	35	24	62	24	8.6	5.9
24	14	45	34	9.4	130	52	35	24	47	15	8.1	10
25	13	39	31	35	79	43	33	23	40	13	7.5	7.8
26	13	42	29	180	61	39	31	24	628	12	7.8	6.4
27	12	169	27	600	48	82	36	23	181	12	7.9	6.9
28	12	93	25	1260	45	64	35	20	62	12	52	6.9
29	12	65	22	252	---	59	75	20	44	13	62	6.3
30	15	50	21	131	---	48	226	20	38	13	13	6.0
31	16	---	19	92	---	45	---	19	---	10	15	---
TOTAL	525.0	3455	2917	2831.0	1762	1805	4642	1558	1773	821	402.7	222.5
MEAN	16.9	115	94.1	91.3	62.9	58.2	155	50.3	59.1	26.5	13.0	7.42
MAX	66	1060	934	1260	154	113	1340	181	628	122	62	15
MIN	9.0	13	19	9.4	19	39	31	19	12	10	7.5	5.0

MEAN	16.6	32.8	58.7	92.9	108	112	122	77.5	63.0	37.3	16.9	15.4
MAX	116	115	367	365	251	280	230	332	299	152	39.1	98.1
(WY)	1987	1994	1991	1950	1990	1945	1989	1989	1945	1990	1945	1950
MIN	2.42	2.23	1.98	3.03	14.7	12.6	15.3	5.95	8.18	3.35	3.56	2.04
(WY)	1945	1945	1945	1945	1944	1941	1941	1941	1988	1944	1948	1944

WATER YEARS 1939 - 1994

ANNUAL TOTAL	31113.5		22714.2				
ANNUAL MEAN	85.2		62.2			62.5	
HIGHEST ANNUAL MEAN						102	1989
LOWEST ANNUAL MEAN						16.1	1941
HIGHEST DAILY MEAN	1220	Mar 4	1340	Apr 10		3260	Dec 30 1990
LOWEST DAILY MEAN	7.6	Sep 11	5.0	Sep 21		1.1	Sep 18 1944
ANNUAL SEVEN-DAY MINIMUM	9.4	Sep 6	6.5	Sep 18		1.4	Aug 31 1948
INSTANTANEOUS PEAK FLOW			2800	Apr 10	a	9950	Mar 19 1943
INSTANTANEOUS PEAK STAGE			6.50	Apr 10		53.50	Mar 19 1943
INSTANTANEOUS LOW FLOW			4.7	Sep 21			
10 PERCENT EXCEEDS	180		110			123	
50 PERCENT EXCEEDS	43		26			20	
90 PERCENT EXCEEDS	12		8.6			4.9	

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

LOCATION.--Lat 39°38'40", long 84°17'23", in sec. 31, R.6, T.1, Montgomery County, Hydrologic Unit 05080002, on left bank 600 ft downstream from bridge on State Highway 725 at Miamisburg, 0.3 mi downstream from Bear Creek, 3.2 mi upstream from Crains Run, and at mile 66.4.

PERIOD OF RECORD.--March 1916 to September 1920 (published as Miami River at Franklin 1916-17), August 1924 to September 1935 (published as Miami River near Miamisburg), October 1952 to current year (published as Miami River at Miamisburg 1952-62). Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 743: 1929(M). WSP 1385: 1926. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 678.60 ft above sea level. Mar. 16, 1916 to Sept. 30, 1920, nonrecording gage at site 6.7 mi downstream at different datum. Aug. 29 to Sept. 16, 1924, nonrecording gage, and Sept. 17, 1924 to Sept. 30, 1935, water-stage recorder, at site 2.2 mi downstream at datum 677.06 ft above National Geodetic Vertical Datum.

REMARKS.--Estimated daily discharges: Oct. 8, 17-19, Nov. 9-11, Dec. 27 to Jan. 27, and Jun. 13 to Aug. 31. Records fair except for periods of estimated records which are poor. Diurnal fluctuation caused by powerplant 2.9 mi downstream from station. Flood flow regulated by retarding dams beginning in 1920 on Mad River 19 mi upstream, on Stillwater River 23 mi upstream, on Great Miami River 23 mi upstream and on Loramie Creek 52 mi upstream. Also see REMARKS for stations 03261500 and 03269500.

COOPERATION.--Gage-height charts, tapes, and 9 discharge measurements furnished by Miami Conservancy District.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 26, 1913 reached a discharge of 257,000 ft³/s, computed by Miami.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	733	812	2850	1150	6470	2260	1570	3340	947	1570	750	515
2	928	828	2530	1100	4560	2140	1520	2590	923	1330	640	511
3	809	852	2550	1050	3880	2080	1700	2190	851	1860	580	488
4	822	847	5330	1000	3120	2030	1770	2020	879	1660	620	462
5	781	771	17800	980	2910	2050	1730	1870	865	1520	790	444
6	700	811	17400	960	2390	2200	2090	1900	869	1170	630	439
7	686	803	11900	920	2190	2410	4500	2370	982	988	600	442
8	670	799	7020	880	2070	2610	5040	2550	841	1420	590	439
9	758	780	4840	860	1800	2650	4360	2210	793	1510	540	435
10	752	740	3910	840	1680	2620	11900	1920	782	1170	520	428
11	628	710	3280	820	1770	2410	16000	1750	765	998	520	420
12	633	695	2960	780	1730	2260	16700	1920	711	881	520	415
13	647	1780	2590	760	1740	2850	15100	1740	670	1030	530	412
14	656	4410	2300	740	1830	4770	12500	1730	670	1010	520	422
15	645	17800	2240	720	1980	4750	7780	1950	650	830	610	431
16	636	21100	2150	700	3260	3790	5730	1880	630	700	935	430
17	800	21900	2090	680	4190	3140	4470	1630	610	678	680	485
18	760	25100	2020	680	5290	2750	3590	1530	660	896	569	452
19	1100	23600	2000	660	5650	2490	2930	1500	670	834	500	442
20	1610	17600	2010	640	5870	2200	2550	1390	840	818	500	415
21	1570	12300	2120	640	6250	2120	2330	1350	1210	751	610	383
22	2180	9000	2180	640	5390	2050	2110	1270	1040	877	560	399
23	1800	5090	2180	620	4970	1990	2000	1190	1000	949	570	411
24	1340	3530	2030	600	5810	1910	1960	1240	1510	695	640	428
25	1130	2930	1910	600	5140	1740	1880	1210	3910	700	600	432
26	946	2600	1700	3000	3420	1680	1850	1250	5710	739	500	470
27	916	3510	1540	10000	2620	2000	1810	1240	6770	654	450	463
28	879	6100	1400	24000	2370	1900	1730	1160	4700	805	595	470
29	804	4550	1300	26100	---	1830	1970	1100	2820	826	1360	481
30	783	3470	1250	18800	---	1720	2590	1030	2030	746	540	504
31	838	---	1200	11800	---	1640	---	1040	---	764	480	---
TOTAL	28940	195818	118580	113720	100350	75040	143760	53060	46308	31379	19049	13368
MEAN	934	6527	3825	3668	3584	2421	4792	1712	1544	1012	614	446
MAX	2180	25100	17800	26100	6470	4770	16700	3340	6770	1860	1360	515
MIN	628	695	1200	600	1680	1640	1520	1030	610	654	450	383
CFSM	.3											

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1994, BY WATER YEAR (WY)

MEAN	992	1767	2571	3179	3638	4441	4155	2960	2344	1837	1121	920
MAX	7140	8228	9817	15930	9349	12340	10510	10650	13320	7456	6697	7384
(WY)	1927	1973	1991	1930	1975	1963	1964	1933	1958	1993	1979	1926
MIN	253	243	290	331	420	1116	1038	516	390	288	346	253
(WY)	1964	1935	1935	1977	1935	1992	1971	1934	1988	1934	1988	1954

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1925 - 1994

ANNUAL TOTAL	1410370		939372				
ANNUAL MEAN	3864		2574			2487	
HIGHEST ANNUAL MEAN						4420	1973
LOWEST ANNUAL MEAN						768	1954
HIGHEST DAILY MEAN	25100	Nov 18	26100	Jan 29		55600	Jan 23 1959
LOWEST DAILY MEAN	570	Sep 18	383	Sep 21		148	Sep 7 1925
ANNUAL SEVEN-DAY MINIMUM	607	Sep 18	416	Sep 19		183	Aug 2 1934
INSTANTANEOUS PEAK FLOW			27500	Jan 29		61800	Jan 21 1959
INSTANTANEOUS PEAK STAGE			13.56	Jan 29		21.30	Jan 21 1959
INSTANTANEOUS LOW FLOW			383	Sep 21			
ANNUAL RUNOFF (CFSM)	1.43		.95			.92	
ANNUAL RUNOFF (INCHES)	19.35		12.89			12.47	
10 PERCENT EXCEEDS	9580		5110			5540	
50 PERCENT EXCEEDS	2290		1300			1240	
90 PERCENT EXCEEDS	759		520			437	

GREAT MIAMI RIVER BASIN

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03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH

WATER QUALITY RECORDS

LOCATION.--Lat 39°38'14", long 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 at Miamisburg, and at mile 65.75.

DRAINAGE AREA.--2,713 mi².

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 one-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 at Miamisburg (station 03271500).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,620 microsiemens June 13, 1992; 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 year 1978-1994; minimum, 0.4 mg/L Aug. 27, 1981, Aug. 2, 1982.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,390 microsiemens Jan. 24; minimum, 275 microsiemens Jan. 29.

pH: Maximum, 9.3 units Sept. 10; minimum, 7.4 units Jun. 27, 28 and Jul. 16, 17, 24.

WATER TEMPERATURES: Maximum, 30.5°C Jun. 20; minimum, 0.0°C Jan. 19, 20 and Feb. 1, 2.

DISSOLVED OXYGEN: Maximum, 20.0 mg/L Jun. 15 and Sep. 9; minimum, 4.3 mg/L Jul. 22.

GREAT MIAMI RIVER BASIN

03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	923	880	899	855	829	844	700	659	679	855	845	849
2	911	849	865	878	838	855	723	693	706	854	839	845
3	853	800	821	887	851	873	737	720	726	849	839	845
4	886	842	861	880	855	871	737	553	666	902	841	875
5	907	866	880	894	849	875	553	364	449	955	882	912
6	919	899	906	896	871	883	417	362	382	1020	899	940
7	921	885	908	906	872	889	502	417	457	1100	1010	1050
8	920	890	905	906	865	883	574	502	540	1010	935	975
9	931	853	897	912	872	891	617	574	594	951	928	944
10	903	847	862	927	901	911	654	617	636	928	898	913
11	899	837	861	935	894	915	681	653	668	902	873	889
12	919	886	900	940	911	926	705	681	693	967	873	931
13	934	885	910	926	535	744	742	705	718	946	913	935
14	935	894	914	670	514	620	745	740	742	970	887	924
15	939	901	918	591	309	385	763	745	753	960	887	921
16	947	892	927	346	309	322	779	762	767	959	940	948
17	947	872	894	371	345	354	793	779	785	957	926	940
18	892	850	870	372	325	341	797	787	792	961	937	947
19	879	656	832	360	345	353	798	785	790	955	924	940
20	809	543	713	389	360	372	798	779	789	947	918	929
21	743	695	711	449	389	414	789	782	785	934	908	921
22	737	700	721	543	449	496	808	788	799	968	929	940
23	731	650	694	602	543	574	817	808	813	1130	909	972
24	712	648	679	646	602	627	815	791	800	1390	1110	1230
25	762	712	742	678	646	658	824	789	799	1370	834	1110
26	800	747	778	700	642	685	876	787	806	834	388	554
27	834	784	813	671	632	649	869	800	832	742	382	461
28	849	822	839	671	586	634	848	827	839	439	290	352
29	849	822	839	618	585	599	847	827	839	308	275	287
30	862	833	843	661	618	639	865	837	854	368	308	338
31	858	822	843	---	---	---	863	855	860	464	368	410
MONTH	947	543	840	940	309	669	876	362	721	1390	275	840

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	563	464	519	874	737	780	800	776	792	699	612	647
2	610	563	589	857	798	823	814	777	794	747	699	724
3	645	610	627	810	791	800	815	765	784	775	747	763
4	687	645	664	805	786	795	782	753	765	798	773	783
5	713	687	696	804	786	794	803	775	788	802	784	796
6	732	711	718	801	776	787	805	749	782	802	766	784
7	757	732	748	783	768	775	770	706	745	783	687	752
8	1080	757	833	774	738	755	706	661	678	729	682	705
9	956	837	883	882	726	786	666	651	658	756	729	742
10	1050	826	879	902	777	830	666	418	491	780	756	761
11	1010	866	902	991	853	913	538	440	492	796	780	786
12	973	868	906	863	814	831	504	481	495	800	759	780
13	976	911	932	830	774	809	497	487	492	785	764	776
14	1030	915	942	774	686	734	532	488	506	786	750	772
15	1010	914	970	686	653	667	592	532	560	793	747	768
16	931	758	863	674	653	661	623	592	604	782	700	737
17	758	627	677	697	669	678	645	623	634	794	759	775
18	627	497	558	702	687	692	691	645	669	790	770	782
19	497	470	479	712	695	702	719	691	704	807	785	797
20	564	488	522	722	703	712	731	710	718	808	787	801
21	574	547	559	753	722	732	758	730	739	818	800	810
22	607	564	574	776	753	762	762	747	756	847	804	820
23	669	607	647	784	729	758	762	748	754	844	818	832
24	675	636	658	772	737	749	780	743	758	851	823	837
25	684	596	620	772	753	761	779	743	760	852	825	840
26	669	626	650	776	752	765	781	739	761	863	831	848
27	699	668	679	769	726	746	779	746	763	855	819	842
28	737	699	717	782	735	770	768	666	749	833	808	823
29	---	---	---	791	766	780	772	712	744	858	818	834
30	---	---	---	792	763	778	751	635	707	858	828	839
31	---	---	---	787	766	776	---	---	---	859	815	839
MONTH	1080	464	715	991	653	765	815	418	688	863	612	787

GREAT MIAMI RIVER BASIN

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03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	869	824	847	756	731	748	666	567	635	914	878	900
2	887	838	866	776	755	772	818	575	681	885	845	862
3	883	853	870	798	710	761	869	813	841	935	885	901
4	886	859	871	713	668	691	900	824	867	945	924	932
5	859	828	838	739	698	728	882	835	857	1000	926	959
6	856	767	832	779	734	766	856	807	826	1000	972	979
7	863	825	843	801	758	788	870	803	842	1010	972	996
8	848	819	828	789	660	762	886	841	869	1020	1000	1010
9	856	845	850	742	696	721	887	845	868	1040	967	1000
10	869	839	850	741	701	721	953	862	915	1000	968	984
11	878	854	866	755	717	736	950	926	937	994	969	979
12	906	832	861	789	732	760	947	904	924	1010	969	989
13	914	847	878	818	747	790	952	914	935	1030	988	1010
14	929	875	898	785	685	737	957	902	937	1060	1020	1040
15	930	891	909	821	693	762	960	897	936	1060	1030	1050
16	927	891	907	857	794	813	942	852	890	1070	1030	1050
17	928	867	900	852	816	840	887	856	871	1050	964	1020
18	934	885	912	855	788	817	915	880	887	1030	988	1020
19	897	833	865	825	779	801	941	911	919	996	942	978
20	891	831	869	796	728	786	978	929	960	1010	931	972
21	834	550	706	804	627	767	986	936	956	1070	1010	1040
22	771	575	716	795	682	776	---	---	---	1090	1060	1070
23	800	761	780	784	678	730	930	909	922	1080	1050	1070
24	799	700	750	741	675	700	935	899	916	1080	1030	1070
25	705	593	653	791	741	768	944	896	918	1030	982	995
26	593	434	527	791	730	749	960	918	938	1040	978	1020
27	552	457	514	738	715	727	974	944	958	1020	976	999
28	647	552	597	726	687	707	1010	718	944	1030	998	1010
29	716	647	682	692	656	678	813	564	634	1010	987	998
30	731	711	718	684	625	660	757	564	671	1020	978	1000
31	---	---	---	672	652	661	905	757	804	---	---	---
MONTH	934	434	800	857	625	749	1010	564	869	1090	845	997
YEAR	1390	275	787									

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

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

03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

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

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1.0	.0	.5	4.0	3.0	3.5	12.5	9.5	10.5	15.0	12.5	13.5
2	.5	.0	.5	4.0	3.5	3.5	13.5	10.5	12.0	14.0	12.0	13.0
3	1.5	.5	1.0	5.0	3.0	4.0	12.5	11.5	12.0	13.5	13.0	13.5
4	2.5	1.0	1.5	7.0	4.5	5.5	12.5	10.0	11.0	13.5	12.5	13.0
5	3.0	2.5	2.5	8.5	6.0	7.0	12.0	11.0	11.5	15.5	13.0	14.0
6	3.5	2.0	2.5	9.5	7.0	8.5	11.5	9.5	10.5	16.0	15.0	15.0
7	3.5	2.5	3.0	9.5	8.5	9.0	9.5	8.0	8.5	15.0	14.0	15.0
8	3.0	2.0	2.5	8.5	7.5	8.5	9.0	7.0	8.0	15.5	13.0	14.0
9	2.0	.5	1.5	7.5	5.0	6.5	10.0	9.0	9.5	16.5	14.5	15.5
10	1.5	.5	1.0	5.5	4.5	5.0	10.5	10.0	10.5	17.5	15.5	16.0
11	2.0	1.0	1.5	7.0	5.0	5.5	10.5	8.5	9.0	17.5	15.5	16.5
12	2.5	1.5	2.0	7.5	5.5	6.5	10.0	8.0	9.0	18.5	16.0	17.0
13	3.5	2.0	2.5	7.0	6.5	7.0	10.5	10.0	10.0	19.0	16.5	17.5
14	4.0	2.5	3.0	7.0	6.5	6.5	12.0	10.0	10.5	18.5	17.0	17.5
15	5.0	3.0	4.0	7.5	6.0	7.0	13.0	12.0	12.5	19.0	17.0	18.0
16	4.5	3.5	4.0	7.5	6.5	7.0	13.0	12.0	12.5	20.0	17.5	18.5
17	3.5	2.5	3.0	6.5	5.5	6.0	13.5	12.0	12.5	20.0	17.5	18.5
18	4.0	2.5	3.0	7.0	6.0	6.5	14.5	13.0	13.5	20.0	17.5	18.5
19	6.0	3.5	4.5	7.5	5.5	6.5	16.0	14.5	15.0	19.5	17.0	18.0
20	7.5	6.0	6.5	8.5	7.0	7.5	17.0	15.0	16.0	20.5	17.0	18.5
21	7.5	7.0	7.5	10.0	8.5	9.5	16.0	15.0	15.5	21.5	18.0	19.5
22	7.0	5.0	5.5	11.0	9.0	10.0	16.0	14.0	15.0	23.0	19.0	20.5
23	6.0	4.5	5.0	12.5	10.0	11.0	16.5	14.0	15.0	23.5	20.5	22.0
24	6.0	4.0	4.5	14.0	11.5	13.0	17.0	14.5	15.5	24.0	21.5	22.5
25	4.0	2.5	3.0	13.0	11.0	12.0	19.0	15.5	17.0	23.5	21.5	22.5
26	2.5	1.5	2.0	11.5	10.0	11.0	20.5	18.0	19.0	23.0	20.5	22.0
27	3.0	1.5	2.0	10.0	9.5	9.5	22.0	19.5	20.5	22.0	19.0	20.5
28	3.0	2.5	2.5	10.5	9.0	9.5	20.5	19.0	20.0	22.0	18.5	20.0
29	---	---	---	10.5	9.5	10.0	19.0	17.5	18.5	22.5	19.0	20.5
30	---	---	---	10.5	8.5	9.5	17.5	15.0	16.0	23.5	19.5	21.5
31	---	---	---	11.5	9.0	10.0	---	---	---	24.0	21.0	22.5
MONTH	7.5	.0	3.0	14.0	3.0	8.0	22.0	7.0	13.0	24.0	12.0	18.0

GREAT MIAMI RIVER BASIN

03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	25.0	22.0	23.5	25.5	23.0	24.0	27.0	24.0	25.5	23.0	21.5	22.0
2	23.0	21.0	22.0	26.0	24.0	25.0	27.0	24.5	26.0	22.5	20.0	21.5
3	23.5	19.5	21.5	25.5	24.0	24.5	27.5	25.0	26.5	22.0	19.5	21.0
4	24.0	20.0	22.0	26.5	24.0	25.0	27.0	25.5	26.0	22.0	19.0	21.0
5	25.0	21.0	23.0	28.0	25.5	26.5	26.0	24.0	25.0	21.5	20.0	20.5
6	24.5	22.5	23.5	29.0	27.0	27.5	25.0	22.0	23.5	22.5	20.0	20.5
7	24.5	22.5	23.5	29.5	27.0	28.0	24.5	21.5	23.0	23.0	19.5	21.0
8	23.5	22.0	22.5	28.5	27.0	27.5	24.5	21.5	23.5	23.5	20.0	21.5
9	24.0	20.5	22.0	28.0	26.5	27.0	25.5	22.5	24.5	24.0	20.5	22.5
10	25.0	21.0	23.0	27.0	25.5	26.5	25.5	23.0	24.0	24.5	21.5	23.0
11	26.0	22.5	24.0	27.5	24.0	25.5	24.0	23.0	23.5	24.5	22.0	23.0
12	26.0	23.0	24.0	28.0	24.0	26.0	25.0	23.0	24.0	25.0	22.0	23.5
13	27.0	23.5	25.0	27.0	25.0	26.0	26.0	24.0	25.0	25.0	22.5	24.0
14	27.5	24.0	26.0	27.0	25.0	26.0	26.0	24.5	25.5	26.0	22.5	24.0
15	29.5	25.5	27.0	27.0	25.0	26.0	25.5	23.0	24.5	26.0	23.5	24.5
16	29.5	27.0	28.0	28.0	24.5	26.0	25.5	23.0	24.5	25.5	23.5	24.5
17	29.5	26.5	28.0	27.5	25.0	26.5	26.0	23.0	24.5	25.5	24.0	24.5
18	29.5	26.5	28.0	28.0	25.5	27.0	26.0	24.0	25.0	24.5	22.0	23.5
19	30.0	27.5	28.5	28.0	25.0	26.5	26.5	24.5	25.5	24.5	21.0	22.5
20	30.5	28.0	29.0	29.0	26.0	27.5	26.0	24.5	25.5	24.0	21.5	22.5
21	28.5	26.0	27.5	28.0	25.5	27.0	25.0	24.0	24.5	23.5	21.5	22.5
22	29.5	25.5	27.5	27.0	25.5	26.5	---	---	---	23.5	21.5	22.5
23	28.5	26.5	27.0	27.5	24.5	26.0	25.5	23.0	24.0	22.5	21.5	22.0
24	27.0	24.5	25.5	27.5	25.0	26.5	25.5	23.5	24.5	23.0	21.5	22.0
25	24.5	22.5	23.5	28.0	26.0	27.0	26.5	23.5	25.0	21.5	20.5	21.0
26	22.5	21.0	21.5	27.5	25.5	26.5	26.5	24.0	25.5	20.5	19.5	20.0
27	21.0	20.0	20.5	26.5	24.5	25.5	27.5	24.0	26.0	19.5	17.5	18.5
28	22.0	20.5	21.0	26.0	24.0	25.0	27.0	24.5	25.5	19.0	16.5	18.0
29	23.5	22.0	22.5	25.0	23.0	23.5	26.0	23.5	24.5	19.5	16.5	18.0
30	24.0	22.5	23.0	24.5	21.5	23.0	24.0	22.5	23.5	19.0	16.5	18.0
31	---	---	---	26.0	23.0	24.5	23.5	22.5	23.0	---	---	---
MONTH	30.5	19.5	24.5	29.5	21.5	26.0	27.5	21.5	24.5	26.0	16.5	22.0
YEAR	30.5	.0	14.0									

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	12.1	8.6	10.3	14.3	10.9	12.0	13.1	11.7	12.5	---	---	---
2	13.0	8.2	10.0	12.6	9.9	11.3	13.1	12.8	13.0	---	---	---
3	12.5	8.3	10.2	11.4	9.9	10.4	13.0	12.4	12.9	---	---	---
4	12.9	8.6	10.6	11.1	10.2	10.6	12.8	12.2	12.5	---	---	---
5	13.9	8.3	10.8	11.5	9.9	10.5	13.2	12.2	12.8	---	---	---
6	14.4	8.0	11.0	11.0	9.4	10.1	13.8	13.2	13.5	---	---	---
7	15.0	7.8	11.2	11.9	9.8	10.9	14.0	13.8	13.9	---	---	---
8	14.5	7.4	11.0	12.5	10.4	11.5	14.3	13.8	14.1	---	---	---
9	11.2	7.1	8.4	13.3	10.9	11.9	14.2	11.1	12.9	---	---	---
10	12.7	7.9	9.8	13.2	10.4	11.8	12.6	10.8	11.3	---	---	---
11	13.7	8.2	10.6	14.6	10.0	12.2	12.5	10.7	11.3	---	---	---
12	13.5	8.2	10.8	12.8	9.6	11.3	11.8	11.1	11.5	19.5	16.1	17.7
13	14.4	8.3	11.0	11.1	9.6	10.0	14.7	11.7	12.1	17.8	15.9	16.6
14	14.8	8.4	11.4	9.6	9.0	9.4	15.6	10.1	13.6	18.4	15.7	16.8
15	14.9	8.2	11.5	9.3	8.8	9.0	11.9	10.0	10.4	19.0	16.0	17.1
16	12.0	7.7	9.3	9.8	9.3	9.5	10.9	10.4	10.7	19.2	16.6	17.7
17	10.8	7.5	8.9	10.1	9.7	9.8	11.6	10.1	10.9	18.6	16.1	17.1
18	11.0	7.6	8.9	10.7	9.9	10.4	11.8	10.1	10.6	16.1	15.1	15.5
19	9.1	7.8	8.4	11.0	10.4	10.6	12.4	10.4	11.0	17.2	15.2	16.1
20	10.1	8.0	8.4	11.6	10.9	11.1	16.3	10.4	11.4	17.8	15.6	16.4
21	9.2	8.1	8.6	12.2	11.0	11.6	15.8	11.6	13.6	16.2	13.8	15.2
22	10.1	8.5	9.4	12.3	11.2	11.5	---	---	---	17.6	13.8	15.6
23	10.2	9.4	9.8	11.9	11.4	11.8	---	---	---	15.6	14.4	14.8
24	10.4	9.4	9.8	11.7	11.0	11.4	---	---	---	15.3	14.4	14.9
25	11.3	9.0	9.9	12.0	10.9	11.4	---	---	---	15.3	15.0	15.1
26	11.0	9.0	9.9	11.3	10.5	10.9	---	---	---	15.2	8.1	12.5
27	10.6	9.2	9.7	12.3	10.7	11.1	---	---	---	8.9	8.0	8.4
28	11.7	8.9	9.9	12.4	11.5	11.7	---	---	---	9.2	8.2	8.7
29	9.8	8.8	9.3	12.5	11.8	12.0	---	---	---	10.0	8.3	9.2
30	11.2	9.6	10.2	12.8	11.6	12.1	---	---	---	11.6	9.9	10.8
31	11.6	10.3	10.9	---	---	---	---	---	---	11.1	10.4	10.7
MONTH	15.0	7.1	10.0	14.6	8.8	11.0	16.3	10.0	12.2	19.5	8.0	14.3

GREAT MIAMI RIVER BASIN

03271601 GREAT MIAMI RIVER BELOW MIAMISBURG, OH

LOCATION.--Lat 39°38'24", long 84°17'23", 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 corporate boundary and at mile point 63.4.

DRAINAGE AREA.--2715 mi².

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 670.00 ft above sea level.

REMARKS.--Estimated daily discharges: Dec. 28 to Jan. 27 and Jun. 12-16. Records good except for periods of estimated records 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 upstream and on Loramie Creek 55 mi upstream.

COOPERATION.--9 discharge measurements by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	720	856	2970	1150	6970	2210	1470	3500	936	1570	749	549
2	948	871	2580	1100	4720	2080	1420	2610	885	1330	640	525
3	827	885	2610	1050	4170	1970	1640	2180	858	1860	583	496
4	819	864	5560	1000	3190	1900	1700	1960	834	1660	626	458
5	822	843	17600	980	2920	1940	1650	1830	805	1520	786	432
6	739	826	17300	960	2320	2070	2050	1820	813	1170	631	432
7	713	803	12200	920	2160	2300	4720	2400	931	988	604	431
8	680	793	7520	880	2050	2510	5370	2590	814	1420	592	421
9	793	784	5210	860	1780	2580	4580	2210	763	1510	542	416
10	790	742	4190	840	1630	2520	12400	1910	750	1170	520	408
11	667	714	3450	820	1740	2290	16200	1710	731	998	516	400
12	655	707	3080	780	1630	2140	16600	1920	692	881	520	388
13	691	1750	2660	760	1630	2890	15000	1720	660	1030	529	380
14	691	4520	2300	740	1750	5130	12700	1700	660	1010	523	391
15	671	17700	2190	720	1880	5050	8280	1930	650	830	609	402
16	656	21000	2080	700	3370	4050	6080	1910	630	700	848	390
17	812	21900	2000	680	4460	3240	4770	1640	619	678	679	479
18	785	25100	1920	680	5580	2790	3780	1550	664	896	575	451
19	1160	23400	1890	660	5950	2460	2990	1460	667	834	499	432
20	1620	17600	1910	640	6200	2130	2530	1390	837	818	499	403
21	1600	12500	2040	640	6620	2050	2280	1310	1210	751	611	372
22	2240	9560	2120	640	5710	1950	2050	1260	1040	877	560	385
23	1780	5480	2120	620	5280	1890	1920	1200	1000	949	568	400
24	1300	3720	1930	600	6140	1810	1870	1170	1510	695	636	413
25	1120	2980	1810	600	5490	1660	1800	1150	3910	700	597	417
26	984	2560	1690	3000	3600	1590	1790	1200	5710	739	470	453
27	923	3620	1540	10000	2620	1930	1750	1190	6770	654	461	445
28	853	6460	1400	24100	2330	1830	1690	1090	4700	805	572	454
29	817	4850	1300	26500	---	1760	1980	1030	2820	826	1500	478
30	814	3700	1250	18600	---	1640	2660	966	2030	746	541	497
31	866	---	1200	12100	---	1560	---	979	---	764	485	---
TOTAL	29556	198088	119620	114320	103890	73920	145720	52485	45899	31379	19071	12998
MEAN	953	6603	3859	3688	3710	2385	4857	1693	1530	1012	615	433
MAX	2240	25100	17600	26500	6970	5130	16600	3500	6770	1860	1500	549
MIN	655	707	1200	600	1630	1560	1420	966	619	654	461	372
CFSM	.35	2.43	1.42	1.36	1.37	.88	1.79	.62	.56	.37	.23	.16
IN.	.40	2.71	1.64	1.57	1.42	1.01	2.00	.72	.63	.43	.26	.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1994, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
MEAN	752	4089	2009	3451	2400	3474	4780	1693	2234	5013	1205	773
MAX	953	6603	3859	5799	3710	6894	5605	2148	2692	7539	2008	1039
(WY)	1994	1994	1994	1993	1994	1993	1993	1993	1993	1993	1992	1992
MIN	434	475	613	867	842	1143	3877	1239	1530	1012	615	433
(WY)	1992	1992	1992	1992	1992	1992	1992	1992	1994	1994	1994	1994

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1992 - 1994

ANNUAL TOTAL	1421837	946946	2655
ANNUAL MEAN	3895	2594	3577
HIGHEST ANNUAL MEAN			1795
LOWEST ANNUAL MEAN			1992
HIGHEST DAILY MEAN	25100	Nov 18	26500
LOWEST DAILY MEAN	580	Sep 18	369
ANNUAL SEVEN-DAY MINIMUM	608	Sep 18	394
INSTANTANEOUS PEAK FLOW			28200
INSTANTANEOUS PEAK STAGE			16.06
INSTANTANEOUS LOW FLOW			372
ANNUAL RUNOFF (CFSM)	1.43	.96	.98
ANNUAL RUNOFF (INCHES)	19.48	12.97	13.29
10 PERCENT EXCEEDS	9880	5480	5920
50 PERCENT EXCEEDS	2200	1300	1330
90 PERCENT EXCEEDS	760	522	520

GREAT MIAMI RIVER BASIN

173

03271800 TWIN CREEK NEAR INGOMAR, OH

LOCATION.--Lat 39°42'28", long 84°31'30", in sec. 15, T.5 N., R.3 E., Preble County, Hydrologic Unit 05080002, on left bank at downstream side of bridge on Halderman Road, 0.5 mi downstream from Bantas Fork, 1.4 mi west of Ingomar, and 4.8 mi upstream from Aukerman Creek.

DRAINAGE AREA.--197 mi².

PERIOD OF RECORD.--October 1962 to current year. Occasional low-flow measurements water years 1959, 1961-62.

GAGE.--Water-stage recorder. Datum of gage is 815.42 ft above sea level.

REMARKS.--Estimated daily discharges: Dec. 24 to Jan. 27, Feb. 1-14.. Records fair, except for periods of estimated record, which are poor. Sediment data collected at this site 1970 to 1974.

COOPERATION.--Gage-height tapes and 7 discharge measurements furnished by Miami Conservancy District.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959 reached a stage of 18.8 ft, discharge, 30,300 ft³/s, computed by Miami Conservancy District. Flood of Mar. 25, 1913 reached a stage of 28.0 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	17	135	47	160	98	80	303	42	163	19	15
2	13	16	131	46	130	93	77	177	39	111	17	12
3	16	16	157	44	110	89	95	135	37	179	16	10
4	13	17	1860	42	95	100	123	119	36	157	15	9.2
5	11	18	2680	40	85	134	114	107	34	98	24	9.0
6	11	17	790	37	76	157	209	106	35	74	27	10
7	10	17	417	36	70	170	458	258	39	63	19	9.8
8	9.3	16	286	34	64	165	272	372	39	55	16	8.9
9	9.9	16	220	32	60	146	211	219	34	51	14	8.2
10	11	16	196	31	56	136	3270	160	31	43	13	7.7
11	13	16	158	30	52	122	2150	126	28	38	13	7.0
12	15	15	127	29	51	141	2400	132	26	35	13	6.3
13	13	163	119	28	49	313	887	118	26	69	13	6.2
14	12	999	115	28	64	399	520	108	25	140	14	6.1
15	13	1980	111	27	274	280	365	164	24	66	12	5.7
16	12	634	96	27	416	193	279	209	22	45	11	5.4
17	14	2800	83	26	237	144	214	138	20	37	10	6.1
18	17	2520	87	26	248	139	176	113	18	62	9.9	5.7
19	19	814	110	26	306	117	160	99	18	45	9.3	5.8
20	30	450	121	25	336	99	133	90	18	34	9.1	5.7
21	71	288	138	25	370	106	118	82	24	29	9.6	5.7
22	55	212	125	25	257	100	110	77	40	44	9.6	5.4
23	35	167	112	25	265	88	99	73	93	39	9.1	5.3
24	27	144	94	25	382	91	94	69	555	29	9.1	5.9
25	22	118	80	120	207	82	89	69	583	24	8.6	6.1
26	20	106	72	500	145	73	82	66	1140	24	7.9	6.3
27	18	474	66	1500	111	97	82	59	2310	23	7.6	8.9
28	17	375	62	4690	101	105	76	52	514	21	8.8	13
29	16	231	58	1060	---	99	83	48	269	22	19	10
30	16	163	54	450	---	88	166	46	292	22	16	8.8
31	17	---	52	275	---	81	---	44	---	21	13	---
TOTAL	586.2	12835	8912	9356	4777	4245	13192	3938	6411	1863	412.6	235.2
MEAN	18.9	428	287	302	171	137	440	127	214	60.1	13.3	7.84
MAX	71	2800	2680	4690	416	399	3270	372	2310	179	27	15
MIN	9.3	15	52	25	49	73	76	44	18	21	7.6	5.3
CFSM	.10	2.17	1.46	1.53	.87	.70	2.23	.64	1.08	.31	.07	.04
IN.	.11	2.42	1.68	1.77	.90	.80	2.49	.74	1.21	.35	.08	.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1994, BY WATER YEAR (WY)

	MEAN	53.7	154	270	224	307	404	355	267	145	106	55.7	23.6
MAX	758	699	1170	664	886	990	759	874	471	499	531	137	
(WY)	1987	1986	1991	1982	1975	1963	1964	1968	1980	1979	1979	1989	
MIN	4.00	6.35	6.14	6.45	18.5	70.3	59.4	34.0	10.9	5.20	4.13	3.57	
(WY)	1964	1964	1964	1977	1964	1992	1971	1976	1988	1988	1988	1964	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1963 - 1994

ANNUAL TOTAL	86777.4	66763.0	197	
ANNUAL MEAN	238	183	305	1973
HIGHEST ANNUAL MEAN			78.4	1988
LOWEST ANNUAL MEAN				
HIGHEST DAILY MEAN	2980	Apr 16	11000	Dec 30 1990
LOWEST DAILY MEAN	8.6	Sep 19	2.5	Sep 12 1964
ANNUAL SEVEN-DAY MINIMUM	9.0	Sep 17	2.8	Sep 9 1964
INSTANTANEOUS PEAK FLOW			19300	Mar 4 1963
INSTANTANEOUS PEAK STAGE			14.40	Mar 4 1963
INSTANTANEOUS LOW FLOW				
ANNUAL RUNOFF (CFSM)	1.21	.93	1.00	
ANNUAL RUNOFF (INCHES)	16.39	12.61	13.56	
10 PERCENT EXCEEDS	593	322	429	
50 PERCENT EXCEEDS	108	62	62	
90 PERCENT EXCEEDS	13	9.9	9.6	

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

GREAT MIAMI RIVER BASIN

03272000 TWIN CREEK NEAR GERMANTOWN, OH

LOCATION.--Lat 39°38'10", long 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, and 3 mi upstream from Little Twin Creek.

DRAINAGE AREA.--275 mi².

PERIOD OF RECORD.--April 1914 to December 1923, December 1926 to current year.

REVISED RECORDS.--WSP 403: 1914(M). WSP 1385: 1915(M).

GAGE.--Water-stage recorder. Datum of gage is 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.--Estimated daily discharge: Dec. 24 to Jan. 27, 31 to Feb. 14. Records fair except for estimated periods which are poor. Flood flow regulated by Germantown retarding basin, 0.3 mi upstream beginning in 1920.

COOPERATION.--Gage-height tapes, and 8 discharge measurements furnished by Miami Conservancy District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,390 ft³/s July 8, 1915, gage height 11.7 ft, from graph based on gage readings, site and datum then in use.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 25, 1913 reached a stage of 18.3 ft, original site and datum, discharge, 66,000 ft³/s, computed by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	29	178	70	260	155	116	623	59	232	29	20
2	19	27	168	68	180	142	110	315	56	150	27	19
3	20	28	198	64	150	134	129	227	53	150	25	16
4	21	27	1220	62	130	137	191	195	52	216	25	14
5	19	28	4430	58	120	173	172	169	51	127	25	14
6	17	28	1420	56	110	200	235	161	51	96	32	15
7	15	27	747	52	100	229	689	302	53	81	30	13
8	15	26	501	50	92	226	421	598	55	72	26	13
9	17	25	373	47	85	205	313	342	51	67	23	12
10	18	25	321	46	80	195	3860	246	47	59	21	11
11	18	24	274	44	75	181	4270	191	44	53	20	11
12	20	24	226	43	72	206	4120	181	40	49	20	9.8
13	22	56	207	42	70	377	1580	164	40	45	19	9.0
14	21	735	197	41	110	547	906	146	39	153	18	9.0
15	20	2600	194	40	338	419	618	182	38	97	18	8.3
16	21	933	174	39	700	289	471	292	36	65	17	8.6
17	25	2370	155	38	337	214	351	195	34	52	15	11
18	26	3870	154	38	342	195	284	152	34	57	14	10
19	31	1260	175	37	412	174	251	131	33	63	13	9.5
20	46	635	197	37	484	142	213	118	32	48	12	9.0
21	74	383	211	37	578	146	184	108	34	41	13	9.0
22	93	278	207	36	419	147	167	100	46	42	13	9.0
23	60	221	186	36	490	129	151	93	60	59	13	8.7
24	45	190	150	35	635	130	140	89	356	43	12	8.6
25	38	162	120	130	353	122	131	88	881	36	12	9.9
26	34	142	110	450	241	107	123	85	876	33	11	10
27	32	492	98	1600	181	135	118	80	2980	33	11	11
28	29	533	90	5650	159	161	112	73	861	31	13	12
29	28	309	85	3310	---	150	131	68	404	31	25	15
30	28	221	80	818	---	135	319	65	351	33	24	13
31	29	---	75	400	---	122	---	62	---	30	22	---
TOTAL	917	15708	12921	13474	7303	6024	20876	5841	7747	2344	598	348.4
MEAN	29.6	524	417	435	261	194	696	188	258	75.6	19.3	11.6
MAX	93	3870	4430	5650	700	547	4270	623	2980	232	32	20
MIN	15	24	75	35	70	107	110	62	32	30	11	8.3
CFSM	.11	1.90	1.52	1.58	.95	.71	2.53	.69	.94	.27	.07	.04
IN.	.12	2.12	1.75	1.82	.99	.81	2.82	.79	1.05	.32	.08	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1994, BY WATER YEAR (WY)

	MEAN	57.3	161	298	449	462	527	478	316	217	132	69.3	42.7
MAX	718	978	1398	2669	1214	1304	1421	1296	1237	882	636	509	
(WY)	1987	1986	1991	1937	1950	1978	1922	1990	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 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1921 - 1994

ANNUAL TOTAL	121697.8	94101.4	
ANNUAL MEAN	333	258	
HIGHEST ANNUAL MEAN			264
LOWEST ANNUAL MEAN			460
HIGHEST DAILY MEAN	4720	5650	43.3
LOWEST DAILY MEAN	9.8	8.3	2.0
ANNUAL SEVEN-DAY MINIMUM	11	9.1	2.7
INSTANTANEOUS PEAK FLOW		5990	8790
INSTANTANEOUS PEAK STAGE		26.42	29.19
INSTANTANEOUS LOW FLOW		8.6	
ANNUAL RUNOFF (CFSM)	1.21	.94	.96
ANNUAL RUNOFF (INCHES)	16.46	12.73	13.06
10 PERCENT EXCEEDS	814	486	598
50 PERCENT EXCEEDS	150	80	80
90 PERCENT EXCEEDS	17	15	12

GREAT MIAMI RIVER BASIN

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03272700 SEVENMILE CREEK AT CAMDEN, OH

LOCATION.--Lat 39°37'45", long 84°38'40", Preble County, Hydrologic Unit 05080002, on right bank at downstream side of bridge on State Highway 725 in Camden, 0.3 mi downstream from Beasley Run and at mile 16.2.
DRAINAGE AREA.--69.0 mi².

PERIOD OF RECORD.--December 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 818.57 ft above sea level. (Levels by Miami Conservancy District). Prior to Oct. 1, 1975, at same site at datum 3.02 ft higher.

REMARKS.--Estimated daily discharges: Dec. 22 to Jan. 26, 31 to Feb. 15. Records good, except for periods of estimated record, which are poor. Water-quality data collected at this site 1972 to 1974.

COOPERATION.--Gage-height tapes, and 8 discharge measurements furnished by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	8.7	43	18	60	39	36	132	15	34	4.8	4.2
2	10	7.9	44	17	45	37	28	79	14	25	4.8	3.8
3	7.4	8.0	58	16	37	34	39	62	13	27	4.5	3.4
4	6.1	7.8	866	15	32	38	45	54	13	24	4.3	2.9
5	5.2	8.3	939	14	28	44	41	47	13	19	7.0	3.2
6	4.9	8.3	316	14	25	50	69	46	12	16	6.0	4.3
7	4.9	7.3	168	13	23	60	118	93	15	15	4.8	4.1
8	4.9	7.0	116	12	20	64	86	130	12	14	4.2	3.4
9	5.5	6.7	89	12	18	60	64	87	11	13	3.9	2.9
10	7.4	6.7	80	11	17	57	1300	66	10	11	3.8	2.9
11	7.4	6.7	61	11	16	53	883	53	9.4	9.3	3.8	2.6
12	12	6.4	51	10	15	61	715	59	8.7	8.8	4.0	2.4
13	12	56	47	10	15	99	332	46	9.4	9.0	4.1	2.2
14	9.0	246	49	10	25	112	194	45	8.5	31	3.2	2.1
15	5.3	395	52	9.6	50	90	146	72	7.4	21	2.9	2.0
16	5.4	181	44	9.4	146	65	117	73	6.7	14	2.8	1.8
17	12	849	40	9.2	92	50	91	50	6.3	11	2.7	2.5
18	9.3	534	44	9.0	89	51	76	41	6.0	9.0	2.6	3.0
19	7.2	241	56	9.0	111	41	67	37	5.9	8.7	2.6	2.5
20	25	132	59	9.0	129	37	55	33	5.4	7.7	2.5	1.9
21	35	86	66	9.0	128	39	49	30	7.5	7.0	2.6	2.1
22	23	64	56	8.8	88	35	45	28	8.8	11	2.7	2.1
23	15	52	45	8.8	134	33	40	26	7.5	17	2.4	1.8
24	12	46	37	8.6	156	34	38	26	27	9.4	2.5	2.7
25	10	37	32	50	83	30	36	25	31	7.2	2.3	4.9
26	9.7	34	28	250	54	26	34	25	104	6.3	2.0	4.6
27	8.7	140	25	914	42	39	34	23	187	5.3	2.0	13
28	8.4	107	23	1500	40	36	31	20	87	5.1	2.9	7.3
29	8.1	70	21	350	---	35	41	19	51	10	18	4.8
30	8.1	50	20	169	---	38	96	17	44	8.3	5.6	3.8
31	8.6	---	19	70	---	44	---	16	---	6.3	4.6	---
TOTAL	312.3	3409.8	3594	3576.4	1718	1531	4946	1560	756.5	420.4	126.9	105.2
MEAN	10.1	114	116	115	61.4	49.4	165	50.3	25.2	13.6	4.09	3.51
MAX	35	849	939	1500	156	112	1300	132	187	34	18	13
MIN	4.8	6.4	19	8.6	15	26	28	16	5.4	5.1	2.0	1.8
CFSM	.15	1.65	1.68	1.67	.89	.72	2.39	.73	.37	.20	.06	.05
IN.	.17	1.84	1.94	1.93	.93	.83	2.67	.84	.41	.23	.07	.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1994, BY WATER YEAR (WY)

	MEAN	20.7	63.7	93.5	84.8	118	141	125	97.0	46.1	35.2	17.6	9.94
MAX	126	266	281	265	276	344	243	421	155	138	91.6	40.9	
(WY)	1987	1986	1991	1982	1975	1978	1972	1989	1973	1992	1979	1979	
MIN	3.31	3.90	4.58	3.46	19.2	24.9	25.2	11.3	3.84	4.27	2.95	1.68	
(WY)	1972	1972	1977	1977	1978	1992	1976	1976	1988	1975	1975	1991	

SUMMARY STATISTICS

FOR 1993 CALENDAR YEAR

FOR 1994 WATER YEAR

WATER YEARS 1971 - 1994

ANNUAL TOTAL	29458.1	22056.5	
ANNUAL MEAN	80.7	60.4	
HIGHEST ANNUAL MEAN			71.5
LOWEST ANNUAL MEAN			107
HIGHEST DAILY MEAN	1050	1500	28.0
LOWEST DAILY MEAN	4.5	1.8	5520
ANNUAL SEVEN-DAY MINIMUM	4.7	2.2	.81
INSTANTANEOUS PEAK FLOW		2490	1.1
INSTANTANEOUS PEAK STAGE		8.84	20200
INSTANTANEOUS LOW FLOW		1.8	18.67
ANNUAL RUNOFF (CFSM)	1.17	.88	1.04
ANNUAL RUNOFF (INCHES)	15.88	11.89	14.08
10 PERCENT EXCEEDS	187	109	158
50 PERCENT EXCEEDS	39	20	26
90 PERCENT EXCEEDS	5.4	3.8	3.9

LOCATION.--Lat 39°23'28", long 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, 3 mi downstream from Four Mile Creek, 4.3 mi upstream from Pleasant Run, and at mile 34.8.

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.

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.

COOPERATION.--Gage-height charts, tapes and 8 discharge measurements furnished by Miami Conservancy District.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 1994, BY WATER YEAR (WY)

SUMMARY STATISTICS

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1927 - 1994	
ANNUAL TOTAL	1751484		1212528			
ANNUAL MEAN	4799		3322		3317	
HIGHEST ANNUAL MEAN					5778	1973
LOWEST ANNUAL MEAN					931	1954
HIGHEST DAILY MEAN	29900	Nov 18	34900	Jan 28	73900	Jan 22 1959
LOWEST DAILY MEAN	634	Sep 23	373	Sep 15	155	Sep 27 1941
ANNUAL SEVEN-DAY MINIMUM	678	Sep 19	416	Sep 10	201	Sep 26 1941
INSTANTANEOUS PEAK FLOW			45300	Apr 10	108000	Jan 21 1959
INSTANTANEOUS PEAK STAGE			71.86	Apr 10	79.47	Jan 21 1959
INSTANTANEOUS LOW FLOW			373	Sep 15		
ANNUAL RUNOFF (CFSM)	1.32		.92		.91	
ANNUAL RUNOFF (INCHES)	17.95		12.43		12.41	
10 PERCENT EXCEEDS	11800		6790		7610	
50 PERCENT EXCEEDS	3020		1600		1590	
90 PERCENT EXCEEDS	868		687		501	

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at crest-stage partial-record stations are presented in the following table. Discharge measurements made at low-flow partial-record sites and at miscellaneous sites and for special studies are given in separate tables.

CREST-STAGE PARTIAL-RECORD STATIONS

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

Station name and number	Location and drainage area	Period of record	Water year 1994 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ s)	Date	Gage height (ft)	Dis- charge (ft ³ s)
MAHONING RIVER BASIN								
Mahoning River at Alliance, Oh. (03086500)	Lat 40°55'58", long 81°05'41", in E 1/2 sec. 36, T.13 N., R.6 W., 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. Drainage area is 89.2 mi ² .	1941-93 * 1994	1-29-94	5.83	3,370	1-21-59	9.11	9,740
West Branch Mahoning River nr Ravenna, Oh. , (03092090)	Lat 41°09'41", long 81°11'50", in T.9 N.,R.2 W., Portage County, Hydrologic Unit 05030103, on left bank at downstream side of bridge on Newton Falls Road, 2.5 mi east of Ravenna. Drainage area is 21.8 mi ² .	1965-93 * 1994	4-12-94	6.40	1,080	9-14-79	8.63	2,810
MUSKINGUM RIVER BASIN								
McGuire Creek below Leesville dam near Leesville, Oh. (03120500)	Lat 40°28'13", long 81°11'48", in E 1/2 sec. 36, T.13 N., R.6 W., 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. Drainage area is 48.3 mi ² .	1938-91 * 1992-94	1-29-94	5.27	383	3-4-40	7.88	740
Tuscarawas River below Dover dam, near Dover, Oh. (03122500)	Lat 40°31'47", long 81°25'48", in T.9 N.,R.2 W., 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. Drainage area is 1,405 mi ² .	1923-91 * 1992-94	4-19-94	7.27	5,780	1-26-37	15.51	26,400
Sugar Creek below Beach City dam, near Beach City, Oh. (03124000)	Lat 40°38'08", long 81°33'11", in T.10, N., R.3 W., 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. Drainage area is 300 mi ² .	1938-91 * 1992-94	12-6-93	6.15	1,940	7-6-69	11.26	7,520
Stillwater Creek at Piedmont, Oh. (03126000)	Lat 40°11'41", long 81°12'56", in sec. 35, T.10 N., R.6 W., 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. Drainage area is 122 mi ² .	1938-91 * 1992-94	1-28-94	11.09	1,360	12-4-50	11.44	1,470

* Operated as a continuous-record gaging station

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Maximum discharge at crest-stage partial-record stations (Continued)

Station name and number	Location and drainage area	Period of record	Water year 1994 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
MUSKINGUM RIVER BASIN (cont'd)								
Stillwater Creek at Tippecanoe, Oh. (03127000)	Lat 40°16'13", long 81°17'26" in NW 1/4 sec. 22, T.12 N., R.7 W. 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. Drainage area is 282 mi ² .	1938-91 * 1992-94	1-29-94	16.78	3,170	3-5-63	17.29	4,410
Stillwater Creek at Uhrichsville, Oh. (03127500)	Lat 40°23'10", long 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. Drainage area is 367 mi ²	1922-91 * 1992-94	1-30-94	8.25	4,700	8-8-35	12.80	7,650
Little Stillwater Creek below Tappan Dam at Tappan, Oh. (03128500)	Lat 40°21'25", long 81°13'49", in NW 1/4 sec. 4, T.13 N., R.7 W., 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. Drainage area is 71.1 mi ² .	1938-91 * 1992-94	2-11-94	6.78	470	3-13-39	10.00	1,050
Black Fork Below Charles Mill Dam, near Mifflin, Oh. (03130000)	Lat 40°44'16", long 82°21'48", in NE 1/4 sec. 35, T.23 N., R.17 W., 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. Drainage area is 217 mi ² .	1938-91 * 1992-94	2-1-94	5.75	1,300	3-13-64	8.45	2,800
Black Fork at Loudonville, Oh. (03131500)	Lat 40°38'09", long 82°14'22", in NW 1/4 sec. 1, T.19 N., R.16 W., 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. Drainage area is 349 mi ² .	1931-91 * 1992-94	1-29-94	10.70	3,400	7-5-69	14.11	8,460
Clear Fork below Pleasant Hill Dam near Perrysville, Oh. (03133500)	Lat 40°37'13", long 82°19'28", in NE 1/4 sec. 7, T.19 N., R.16 W., Ashland County, Hydrologic Unit 05040002, on right 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. Drainage area is 198 mi ² .	1938-91 * 1992-94	1-31-94	3.85	1,360	1-23-59	4.89	2,340
Lake Fork below Mohicanville Dam near Mohicanville, Oh. (03135000)	Lat 40°43'24", long 82°09'18", in NE 1/4 sec. 7, T.19 N., R.16 W., 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. Drainage area is 271 mi ² .	1938-93 * 1994	4-7-94	8.35	1,120	7-5-69	14.32	5,490

* Operated as a continuous-record gaging station

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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Maximum discharge at crest-stage partial-record stations (Continued)

Station name and number	Location and drainage area	Period of record	Water year 1994 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ s)	Date	Gage height (ft)	Dis- charge (ft ³ s)
MUSKINGUM RIVER BASIN (cont'd)								
Walhonding River below Mohawk, dam at Nellie, Oh. (03138500)	Lat 40°20'29", long 82°03'56", in T.6 N., R.8 W., 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. Drainage area is 1,505 mi ² .	1910-13 1921-91 ≠ 1992-94	1-28-94	11.76	8,100	1-25-37	18.8	43,800
Seneca Fork below Senecaville Dam, near Senecaville, Oh. (03141500)	Lat 39°55'28", long 81°26'17", Guernsey County, Hydrologic Unit 05040005, on left bank 650 ft downstream from Senecaville Dam and 1.5 mi southeast of Senecaville. Drainage area is 118 mi ² .	1938-91 ≠ 1992-94	2-7-94	8.50	800	8-24-80	9.69	985
Wills Creek below Wills Creek Dam at Wills Creek, Oh. (03143500)	Lat 40°09'34", long 81°50'51", in sec. 22, T.4 N., R.6 W., 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. Drainage area is 842 mi ² .	1938-91 ≠ 1992-94	4-22-94	15.25	5,890	3-7-40	17.40	6,930
Licking River below Dillon Dam, near Dillon Falls, Oh. (03147500)	Lat 39°59'18", long 82°04'50", in T.1 N., R.8 W., 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. Drainage area is 742 mi ² .	1939-91 ≠ 1992-94	4-18-94	9.68	5,260	1-22-59	32.46	47,000
SCIOTO RIVER BASIN								
Deer Creek at Williamsport, Oh. (03231000)	Lat 39°35'09", long 83°07'22", Pickaway County, Hydrologic Unit 05060002, on left bank at downstream side of bridge on U.S. Highway 22 at west edge of Williamsport, 2.0 mi downstream from Dry Run, and 7.6 mi upstream from Hay Run. Drainage area is 333 mi ² .	1926-35 ≠ 1938-56 ≠ 1959-61 1962-91 ≠ 1992-94	4-10-94	10.23	4,140	1-22-59	17.6	39,600
Paint Creek below Paint Creek Dam, near Bainbridge, Oh. (03232470)	Lat 39°15'08", long 83°20'58", Highland County, Hydrologic Unit 05060003, on right bank, 400 ft downstream from Paint Creek dam, 700 ft upstream from Cliff Creek, and 4.5 mi northwest of Bainbridge. Drainage area is 570 mi ² .	1962-63 1963-67 1967-91 ≠ 1992-94	2-2-94	9.07	8,450	3-10-64	27.3	45,000

* Operated as a continuous-record gaging station

180 PEAK DISCHARGES AND STAGES 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 man. 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. The maximum peak discharge and gage height for the water year are flagged with an asterisk (*). Note - b = Ice Jam, c = Observed, e = Estimated.

Peak discharges equal to or greater than base discharges, water year October 1993 to September 1994

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
OHIO RIVER BASIN							
BEAVER RIVER BASIN							
03093000 EAGLE CREEK AT PHALANX STATION, OH (Base discharge: 1,300 ft ³ /s)							
Nov. 18	1300	1,830	10.81	Apr. 11	0200	1,800	10.76
Jan. 30	0400	*4,390	12.71	Apr. 12	2400	3,400	12.23
Feb. 21	1430	1,770	10.71	Aug. 14	1730	1,780	10.73
Mar. 22	1330	1,390	10.01				
03102950 PYMATUNING CREEK AT KINSMAN, OH (Base discharge: 700 ft ³ /s)							
Jan. 29	1300	1,050	11.15	Apr. 13	1800	1,100	11.20
Feb. 21	2400	812	10.79	Aug. 14	0100	*1,140	*11.25
LITTLE BEAVER CREEK BASIN							
03109500 LITTLE BEAVER CREEK NEAR EAST LIVERPOOL, OH (Base discharge: 5,000 ft ³ /s)							
Jan. 29	0900	*7,180	*10.10				
YELLOW CREEK BASIN							
03110000 YELLOW CREEK NEAR HAMMONDSVILLE, OH (Base discharge: 2,000 ft ³ /s)							
Jan. 28	2400	*5,530	*9.49	Mar. 22	0630	2,740	6.87
SHORT CREEK BASIN							
03111500 SHORT CREEK NEAR DILLONVALE, OH (Base discharge: 1,200 ft ³ /s)							
Jan. 28	1400	*4,230	*9.78	Mar. 21	2000	1,760	6.64
Mar. 10	0600	1,410	5.98	Apr. 10	1700	1,700	6.52
WHEELING CREEK BASIN							
03111548 WHEELING CREEK BELOW BLAINE, OH (Base discharge: 1,500 ft ³ /s)							
Jan. 28	1430	*5,110	*7.93	Mar. 21	2030	1,640	4.66
Mar. 10	0600	1,670	4.70	Apr. 10	1500	2,480	5.62
CAPTINA CREEK BASIN							
03114000 CAPTINA CREEK AT ARMSTRONGS MILLS, OH (Base discharge: 3,000 ft ³ /s)							
Jan. 28	1000	*11,600	*13.42	Apr. 10	1530	5,290	9.44
Mar. 21	1700	3,100	7.29				
MUSKINGUM RIVER BASIN							
03115969 MONTROSE RUN AT MONTROSE, OH (Base discharge: 20 ft ³ /s)							
Nov. 14	0945	32	12.01	Jun. 29	0215	*57	*12.56
Nov. 17	0835	26	11.87	Jul. 2	1430	23	11.79
Apr. 12	0325	41	12.22				
03115970 SCHOCALOG RUN AT MONTROSE, OH (Base discharge: 30 ft ³ /s)							
Nov. 14	1330	46	13.91	Apr. 12	0725	73	*14.30
Nov. 17	1320	36	13.73	Apr. 12	1505	*101	13.89
Jan. 28	1355	67	14.22	Jun. 29	0510	66	13.39

PEAK DISCHARGES AND STAGES AT CONTINUOUS-RECORD SURFACE DISCHARGE STATIONS 181

Peak discharges equal to or greater than base discharges, water year October 1993 to September 1994

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
03115971 SCHOCALOG RUN AT FAIRLAWN, OH (Base discharge: 40 ft³/s)							
Nov. 14	1150	81	12.37	Apr. 12	0705	*104	*12.70
Nov. 17	1150	47	11.85	Jun. 29	0400	76	12.30
Jan. 28	0825	88	12.48				
03115973 SCHOCALOG RUN AT COPLEY JUNCTION, OH (Base discharge: 60 ft³/s)							
Nov. 14	1350	98	12.34	Apr. 12	1005	*150	*12.79
Nov. 17	1520	60	11.94	Jun. 29	0850	68	12.03
Jan. 28	1345	127	12.61				
03117500 SANDY CREEK AT WAYNESBURG, OH (Base discharge: 1,800 ft³/s)							
Jan. 24	1100	*5,070	*8.07	Apr. 13	1945	3,070	6.48
Mar. 22	0230	2,110	5.16				
03118000 MIDDLE BRANCH NIMISHILLEN CREEK AT CANTON, OH (Base discharge: 400 ft³/s)							
Jan. 29	0600	885	5.97	Apr. 7	1200	401	4.41
Feb. 24	0800	495	4.87	Apr. 13	Unknown	*1,810	*6.62
Mar. 22	0700	586	5.22				
03118500 NIMISHILLEN CREEK AT NORTH INDUSTRY, OH (Base discharge: 2,000 ft³/s)							
Nov. 17	1600	2,200	6.63	Apr. 13	Unknown	3,800	Unknown
Jan. 28	2130	*4,540	*9.87	Jul. 7	2200	2,070	6.41
03139000 KILLBUCK CREEK AT KILLBUCK, OH (Base discharge: 2,000 ft³/s)							
Jan. 29	0030	*4,620	*17.02	Apr. 14	1630	2,660	15.95
03140000 MILL CREEK NEAR COSHOCTON, OH (Base discharge: 700 ft³/s)							
Dec. 4	1815	717	8.48	Apr. 13	0830	*961	*9.55
Jan. 28	Unknown	740	Ice Jam				
03144000 WAKATOMIKA CREEK NEAR FRAZEYSBURG, OH (Base discharge: 1,600 ft³/s)							
Nov. 18	0500	2,240	5.67	Apr. 10	2030	2,020	5.38
Dec. 5	0730	2,020	5.38	Apr. 13	1800	3,120	6.71
Jan. 28	1105	*5,760e	*9.18c				
03146500 LICKING RIVER NEAR NEWARK, OH (Base discharge: 6,500 ft³/s)							
Nov. 18	0130	7,680	9.72	Apr. 10	1930	8,640	10.21
Dec. 5	0500	7,850	9.81	Apr. 13	0830	7,330	9.53
Jan. 28	1800	*18,800	*14.23				
HOCKING RIVER BASIN							
03157000 CLEAR CREEK NEAR ROCKBRIDGE, OH (Base discharge: 1,900 ft³/s)							
Nov. 17	2345	2,800	9.26	Apr. 10	1700	*4,100	*10.87
Jan. 28	1130	2,930	9.48				
03157500 HOCKING RIVER AT ENTERPRISE, OH (Base discharge: 3,500 ft³/s)							
Nov. 15	0530	4,030	9.88	Jan. 28	2200	*10,300	*15.93
Nov. 18	1030	6,350	12.88	Apr. 11	0100	8,560	14.78
SHADE RIVER BASIN							
03159540 SHADE RIVER NEAR CHESTER, OH (Base discharge: 2,400 ft³/s)							
Jan. 29	0630	*5,660	*24.28	Apr. 11	1100	5,220	23.63
Feb. 11	Unknown	5,300e	Unknown				

182 PEAK DISCHARGES AND STAGES AT CONTINUOUS-RECORD SURFACE DISCHARGE STATIONS

Peak discharges equal to or greater than base discharges, water year October 1993 to September 1994

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
RACoon CREEK BASIN							
03202000 RACoon CREEK NEAR ADAMSVILLE, OH (Base discharge: 3,000 ft ³ /s)							
Jan. 31	Unknown	7,200e	Ice Jam	Mar. 30	1500	3,430	12.83
Feb. 11	Unknown	6,300e	Unknown	Apr. 13	1730	*8,110	*20.19
Feb. 25	2000	4,030	14.05	May 7	2100	3,890	13.77
Mar. 13	0100	4,340	14.64				
SCIOTO RIVER BASIN							
03219500 SCIOTO RIVER NEAR PROSPECT, OH (Base discharge: 3,600 ft ³ /s)							
Nov. 19	2300	4,380	9.70	Jan. 30	1900	*5,520	*11.11
Dec. 7	0900	3,920	9.09	Apr. 14	1000	4,910	10.38
03219590 BOKES CREEK NEAR WARRENSBURG, OH (Base discharge: 800 ft ³ /s)							
Nov. 15	1030	819	9.25	Jan. 28	Unknown	*1,000e	Unknown
03220000 MILL CREEK NEAR BELLEPOINT, OH (Base discharge: 2,500 ft ³ /s)							
Dec. 4	2300	3,030	7.31	Jan. 28	1430	*5,130	*8.97
03223000 OLENTANGY RIVER AT CLARIDON, OH (Base discharge: 1,500 ft ³ /s)							
Jan. 28	2300	*4,060	*12.08	Jul. 3	1400	1,960	9.44
Apr. 13	0030	1,930	9.38				
03228300 BIG WALNUT CREEK AT SUNBURY, OH (Base discharge: 2,200 ft ³ /s)							
Dec. 4	2300	3,030	9.83	Jan. 28	1630	*4,160	*10.75
03230310 LITTLE DARBY CREEK AT WEST JEFFERSON, OH (Base discharge: 1000 ft ³ /s)							
Nov. 18	1900	1,420	9.71	Jan. 28	2130	*3,570	*12.77
Nov. 28	1045	*1,320	9.47	Apr. 13	0200	1,170	9.09
Dec. 5	1945	1,810	10.51				
03230450 HELLBRANCH RUN NEAR HARRISBURG, OH (Base discharge: 300 ft ³ /s)							
Dec. 4	2230	409	6.97	Jan. 28	1430	1,320	8.87
Jan. 26	0100	*1,670	*9.37	Apr. 10	1246	899	8.12
03230500 BIG DARBY CREEK AT DARBYVILLE, OH (Base discharge: 4,500 ft ³ /s)							
Dec. 6	1045	5,010	9.33	Jan. 29	2000	*9,460	*12.25
UPPER TWIN CREEK BASIN							
03237280 UPPER TWIN CREEK AT MCGAW, OH (Base discharge: 450 ft ³ /s)							
May 8	1815	*1,980	*10.20				
OHIO BRUSH CREEK BASIN							
03237500 OHIO BRUSH CREEK NEAR WEST UNION, OH (Base discharge: 11,000 ft ³ /s)							
Jan. 26	0030	11,800	14.11	Apr. 10	2230	*26,600	*20.30
Jan. 28	1515	20,600	18.22				
WHITEOAK CREEK BASIN							
03238500 WHITEOAK CREEK NEAR GEORGETOWN, OH (Base discharge: 5,500 ft ³ /s)							
Nov. 18	0200	5,620	6.14	Apr. 13	1600	6,840	6.57
Jan. 28	0700	10,900	7.74	May 8	0430	7,390	6.75
Apr. 11	0300	*11,000	*7.75				

Peak discharges equal to or greater than base discharges, water year October 1993 to September 1994

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
LITTLE MIAMI RIVER BASIN							
03240000 LITTLE MIAMI RIVER NEAR OLDTOWN, OH (Base discharge: 800 ft³/s)							
Jan. 26	0745	1,360	5.89	Apr. 10	1315	1,210	5.48
Jan. 28	2300	*2,720	*8.14				
03241500 MASSIES CREEK AT WILBERFORCE, OH (Base discharge: 600 ft³/s)							
Jan. 26	0230	1,080	Ice Jam	Apr. 10	1230	901	6.28
Jan. 28	0630	*1,340	*7.64b				
03245500 LITTLE MIAMI RIVER AT MILFORD, OH (Base discharge: 15,000 ft³/s)							
Jan. 28	1200	25,800	16.10	Apr. 10	1600	*40,500	*19.51
GREAT MIAMI RIVER BASIN							
03260706 BOKENGEHALAS CREEK AT DE GRAFF, OH (Base discharge: 350 ft³/s)							
Nov. 14	2115	*648	*5.49	Dec. 5	0430	512	4.85
Nov. 17	2215	567	5.12	Jan. 28	0945	380e	4.48b
03261500 GREAT MIAMI RIVER AT SIDNEY, OH (Base discharge: 4,000 ft³/s)							
Nov. 14	1800	*7,690	*10.43	Dec. 5	0230	5,110	8.41
Nov. 17	2130	6,790	9.77	Jan. 28	0900	7,040	9.96
03261950 LORAMIE CREEK NEAR NEWPORT, OH (Base discharge: 1,500 ft³/s)							
Nov. 15	0830	*4,250	*13.31	Jan. 26	0730	1,620	10.42
Nov. 18	0400	2,970	12.14	Jan. 28	1830	2,690	11.84
Dec. 5	1130	1,760	10.69	Apr. 12	1530	2,090	11.13
03264000 GREENVILLE CREEK NEAR BRADFORD, OH (Base discharge: 1,500 ft³/s)							
Nov. 15	2000	*4,140	*8.28	Jan. 26	1500	2,340	6.15
Nov. 18	1630	3,050	7.06	Jan. 28	1800	2,740	6.67
Dec. 5	2200	2,110	5.83	Apr. 12	1430	1,690	5.20
03265000 STILLWATER RIVER AT PLEASANT HILL, OH (Base discharge: 5,000 ft³/s)							
Nov. 15	0530	*14,100	*15.30	Jan. 28	1400	9,600	12.56
Nov. 18	0330	9,910	12.79	Apr. 10	2000	5,100	8.65
Dec. 5	0730	6,880	10.35				
03267000 MAD RIVER NEAR URBANA, OH (Base discharge: 1,400 ft³/s)							
Nov. 17	1930	1,730	6.25	Jan. 28	1400	*2,440	*7.24
Dec. 5	0130	1,860	6.45				
03267900 MAD RIVER AT ST. PARIS PIKE AT EAGLE CITY, OH (Base discharge: 2,500 ft³/s)							
Nov. 17	1800	3,770	11.36	Jan. 28	0830	*5,070	*12.88
Dec. 4	2330	3,720	11.30				
03271000 WOLF CREEK AT DAYTON, OH (Base discharge: 1,400 ft³/s)							
Nov. 17	1345	2,660	6.38	Apr. 10	1045	*2,800	*6.50
Dec. 4	2130	2,180	5.93	Jun. 20	1815	2,290	6.04
Jan. 27	1715	2,430	6.17	Jun. 26	1900	2,390	6.13
03271800 TWIN CREEK NEAR INGOMAR, OH (Base discharge: 4,700 ft³/s)							
Nov. 17	1545	4,990	7.25	Jan. 28	0815	*6,050	*8.07
Dec. 4	2300	5,470	7.63	Apr. 10	1300	5,920	7.97
03272700 SEVENMILE CREEK AT CAMDEN, OH (Base discharge: 1,500 ft³/s)							
Nov. 17	1245	1,660	7.57	Apr. 10	1030	*2,490	*8.84
Dec. 4	2100	*2,490	*8.84	Apr. 11	1715	1,810	7.79
Jan. 28	0715	2,180	8.37				

GROUND-WATER RECORDS

ASHLAND COUNTY

405303082170700. Local number, AS-2.

LOCATION.--Lat 40°53'03", long 82°17'07", Hydrologic Unit 05040002, Jerome Fork well field 2 mi northeast of Ashland.

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.

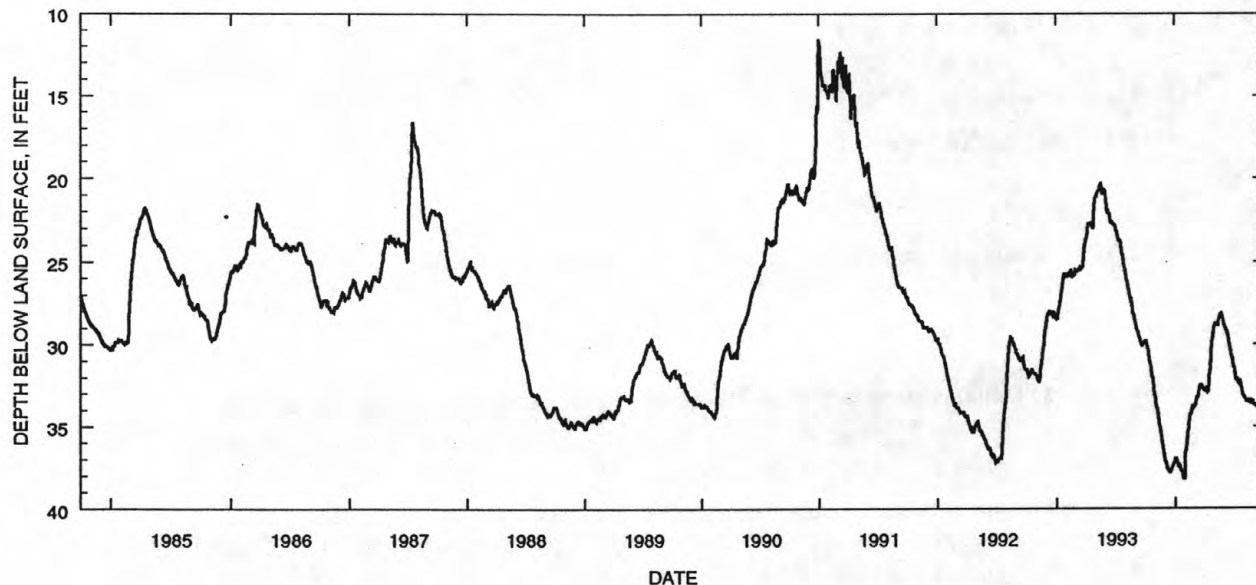
Measuring point: Floor of instrument shelter 2.00 ft above land-surface datum.

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, 38.22 ft below land-surface datum, Jan. 26, 27, 1994;
minimum daily low, 11.56 ft below land-surface datum, Jan. 1, 1991.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29.81	33.35	37.14	36.97	36.54	33.73	32.88	28.76	29.05	31.94	33.37	33.74
2	29.78	33.46	37.20	36.95	36.39	33.69	32.82	28.77	29.12	32.06	33.41	33.80
3	29.79	33.60	37.23	37.00	36.24	33.65	32.66	28.78	29.17	32.17	33.48	33.81
4	29.85	33.71	37.30	37.09	36.10	33.62	32.62	28.76	29.14	32.22	33.51	33.77
5	30.00	33.83	37.43	37.14	35.88	33.51	32.71	28.76	29.21	32.13	33.50	33.70
6	30.07	33.91	37.52	37.18	35.68	33.38	32.79	28.75	29.29	32.06	33.44	33.77
7	30.14	33.97	37.55	37.26	35.59	33.26	32.91	28.77	29.35	32.17	33.40	33.84
8	30.19	34.16	37.61	37.34	35.41	33.23	32.92	28.85	29.44	32.23	33.38	33.86
9	30.35	34.32	37.64	37.39	35.27	33.22	32.85	28.85	29.50	32.29	33.38	33.92
10	30.46	34.47	37.73	37.34	35.08	33.21	32.91	28.83	29.57	32.36	33.49	33.93
11	30.52	34.61	37.75	37.28	34.79	33.22	32.91	28.64	29.75	32.40	33.54	33.98
12	30.64	34.72	37.75	37.35	34.63	33.07	32.77	28.49	29.88	32.30	33.53	34.01
13	30.76	34.85	37.78	37.42	34.42	32.91	32.39	28.45	30.01	32.22	33.48	34.01
14	30.95	34.97	37.81	37.48	34.33	32.81	31.98	28.38	30.12	32.19	33.40	34.02
15	31.04	35.13	37.80	37.56	34.29	32.68	31.72	28.29	30.22	32.29	33.38	34.03
16	31.13	35.23	37.76	37.58	34.29	32.66	31.44	28.26	30.32	32.37	33.43	34.00
17	31.27	35.39	37.73	37.66	34.22	32.58	31.20	28.21	30.45	32.44	33.50	33.88
18	31.40	35.47	37.68	37.71	34.18	32.44	30.95	28.15	30.60	32.52	33.52	33.83
19	31.53	35.66	37.64	37.73	34.09	32.47	30.62	28.10	30.66	32.59	33.51	33.71
20	31.64	35.82	37.61	37.78	33.99	32.51	30.38	28.22	30.74	32.73	33.53	33.65
21	31.79	35.94	37.54	37.82	33.93	32.58	30.11	28.28	30.81	32.82	33.56	33.60
22	31.92	36.06	37.52	37.87	33.92	32.58	29.92	28.33	30.98	32.92	33.56	33.59
23	31.99	36.19	37.47	38.01	33.85	32.54	29.70	28.41	31.06	33.01	33.53	33.55
24	32.15	36.33	37.42	38.12	33.86	32.63	29.47	28.46	31.15	33.07	33.57	33.51
25	32.32	36.45	37.35	38.18	33.86	32.68	29.31	28.55	31.29	33.11	33.60	33.40
26	32.50	36.57	37.30	38.22	33.85	32.68	29.31	28.70	31.37	33.15	33.63	33.32
27	32.66	36.69	37.25	38.22	33.81	32.70	29.17	28.79	31.40	33.18	33.66	33.27
28	32.80	36.84	37.22	38.20	33.78	32.75	29.06	28.87	31.52	33.22	33.69	33.26
29	32.94	36.96	37.13	38.06	---	32.82	28.89	28.95	31.68	33.25	33.68	33.28
30	33.04	37.05	37.10	37.32	---	32.85	28.80	28.99	31.83	33.31	33.65	33.34
31	33.19	---	37.03	36.72	---	32.87	---	28.97	---	33.32	33.65	---
MAX	33.19	37.05	37.81	38.22	36.54	33.73	32.92	28.99	31.83	33.32	33.69	34.03
CAL YR 1993	LOW 37.81											
WTR YR 1994	LOW 38.22											



GROUND-WATER RECORDS

185

ASHLAND COUNTY--Continued

405425082173000. Local number. AS-3.

LOCATION.--Lat 40°54'25", long 82°17'30", Hydrologic Unit 05040002, Ashland Bates well field along Jerome Fork near Ashland.

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.

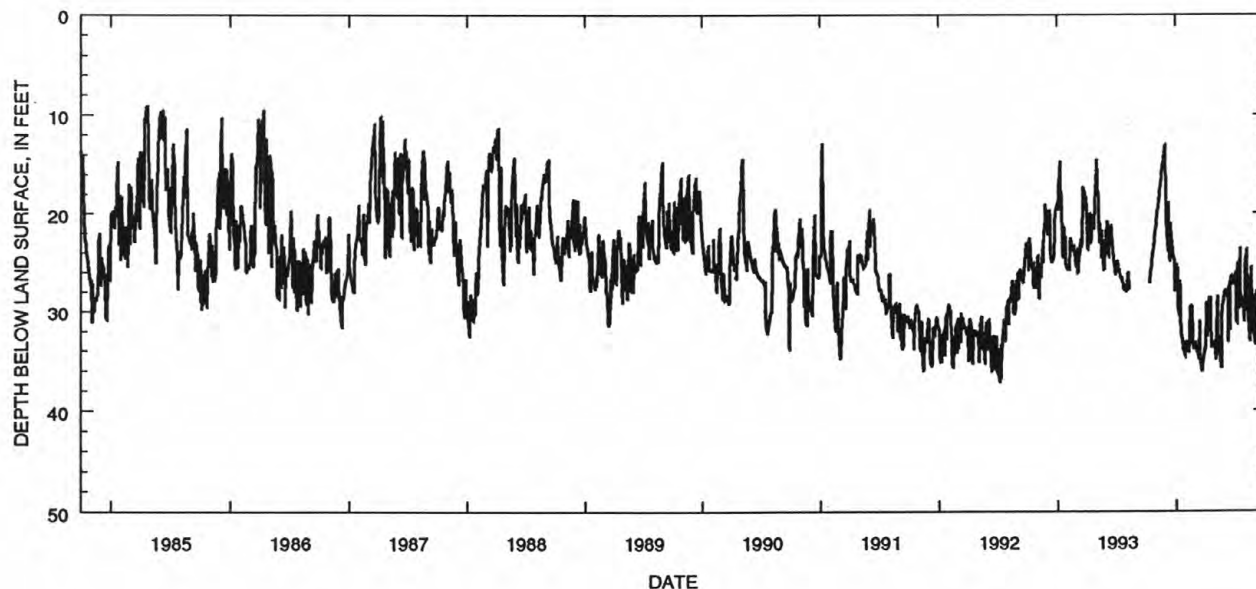
Measuring point: Floor of instrument shelter 5.00 ft above land-surface datum.

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, 39.97 ft below land-surface datum, Sept. 26-27, 1994;
minimum daily low, 3.10 ft, above land-surface, Feb. 23, 1978.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	21.34	18.94	25.44	33.20	33.45	33.69	34.37	27.98	26.33	24.94	28.58
2	---	21.12	20.86	25.40	33.31	33.60	29.94	34.62	28.08	26.18	24.56	28.31
3	---	20.73	21.80	25.60	33.56	33.75	29.44	34.91	28.18	26.07	24.29	28.52
4	---	20.38	22.26	25.70	33.71	33.98	29.26	30.83	28.27	30.77	27.95	28.55
5	---	19.90	22.88	25.69	33.86	34.12	29.26	34.38	28.35	31.17	23.82	28.07
6	---	19.71	23.42	29.04	33.93	34.21	29.35	34.56	28.45	31.28	23.65	28.08
7	---	19.49	23.71	29.63	34.02	34.31	29.42	29.53	28.56	26.45	28.89	28.42
8	---	19.25	24.01	29.94	34.09	34.41	32.71	28.54	28.65	25.75	29.77	28.76
9	---	18.95	19.65	30.14	34.27	34.51	29.47	32.07	28.74	25.32	30.41	29.06
10	---	18.64	18.86	30.45	32.95	34.64	29.56	32.97	33.22	25.00	30.90	34.62
11	---	18.31	24.10	30.54	32.22	34.79	29.55	33.41	28.66	29.29	31.42	35.18
12	27.25	18.05	24.58	26.95	29.79	34.89	29.40	33.85	27.93	29.79	31.86	35.94
13	27.10	17.74	24.84	30.32	29.67	34.72	28.65	34.04	27.31	25.05	32.40	36.67
14	26.74	17.50	25.03	27.34	29.66	31.05	28.81	34.06	31.52	29.73	32.89	37.30
15	26.40	17.03	20.99	31.20	31.69	34.56	28.77	34.31	32.05	25.06	33.00	37.72
16	26.04	16.91	21.67	31.73	29.68	35.01	28.66	34.69	27.24	24.24	33.11	38.16
17	25.69	16.46	22.09	32.31	29.63	35.11	32.02	35.07	26.82	23.56	28.12	38.60
18	25.39	16.00	22.53	32.68	29.66	35.53	32.45	35.40	26.61	28.13	26.93	38.95
19	25.10	15.33	22.99	32.96	29.57	35.69	33.76	35.73	26.49	28.59	26.11	39.40
20	24.79	15.19	23.30	33.25	32.98	35.81	33.66	35.73	26.64	28.83	25.48	39.20
21	24.44	15.13	23.73	33.46	33.34	36.10	33.76	30.53	26.83	29.01	30.29	39.22
22	24.21	14.86	24.09	33.68	33.67	35.85	33.67	29.84	27.01	29.18	31.18	39.41
23	23.95	14.69	24.44	33.96	33.95	35.47	33.60	29.49	27.16	29.46	31.60	39.57
24	23.63	14.28	24.59	34.09	33.83	35.21	33.44	29.38	27.34	29.55	31.89	39.72
25	23.35	14.28	24.64	33.56	33.73	34.99	33.33	29.25	27.40	29.65	32.00	39.88
26	23.07	13.96	24.68	34.39	33.59	34.76	33.12	28.95	27.32	29.96	32.26	39.97
27	22.78	13.69	24.94	34.52	33.37	34.48	33.12	28.74	27.09	30.38	32.32	39.97
28	22.48	13.21	28.05	34.48	33.33	34.34	33.13	28.47	26.77	30.84	32.62	39.93
29	22.16	13.17	25.45	33.58	---	34.14	33.63	28.21	26.61	31.08	32.80	39.87
30	21.94	13.27	25.57	33.31	---	34.02	33.88	27.98	26.45	26.15	33.27	39.82
31	21.59	---	25.51	33.07	---	33.82	---	27.88	---	25.41	33.53	---
MAX	27.25	21.34	28.05	34.52	34.27	36.10	33.88	35.73	33.22	31.28	33.53	39.97

CAL YR 1993 LOW 28.14
WTR YR 1994 LOW 39.97

GROUND-WATER RECORDS

ATHENS COUNTY

32004082071600. Local number, AT-2A.

LOCATION.--Lat 39°20'04", long 82°07'16", Hydrologic Unit 05030204, 1.1 mi west of city hall in Athens.

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 ODNR 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 OBSERVATIONS

DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 15, 1993	21.52	Apr. 20 1994	15.73

GROUND-WATER RECORDS

187

ATHENS COUNTY--Continued

392009082072200. Local number, AT-5

LOCATION.--Lat 39°20'09", long 82°07'22", Hydrologic Unit 05030204, in Athens well field along Hocking River.

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;

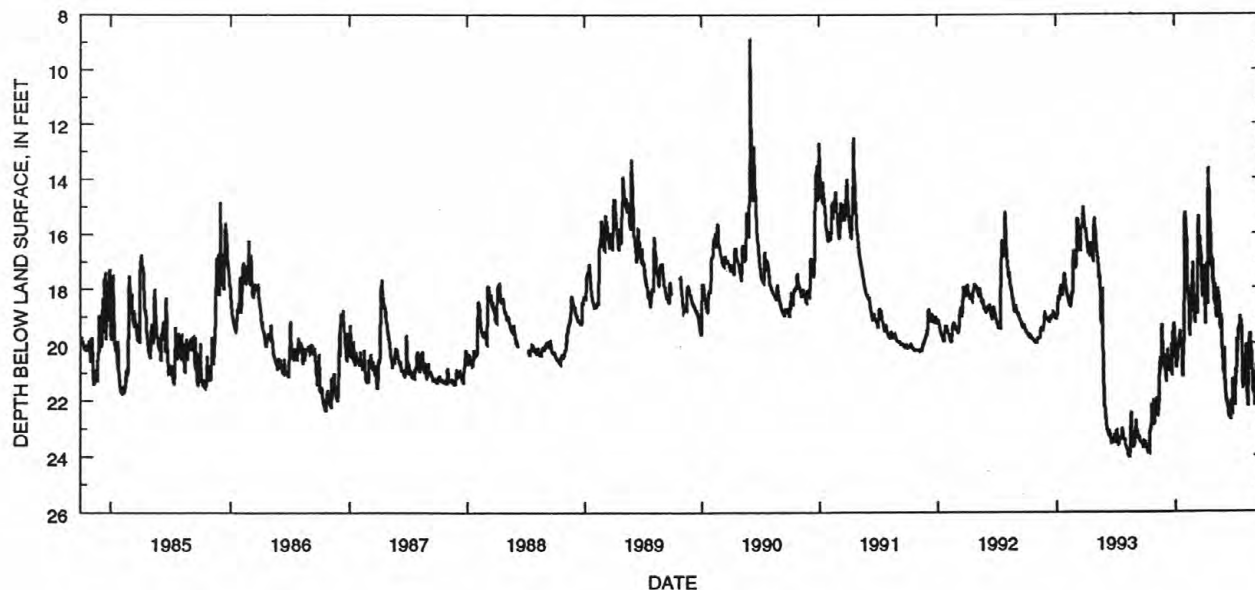
minimum daily low 8.87 ft below land-surface datum, May 31, 1990.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.67	22.35	20.93	19.96	15.25	19.06	18.45	17.94	21.49	22.10	21.50	21.29
2	23.68	22.45	21.09	20.00	15.56	19.27	18.91	17.93	21.69	21.40	21.08	21.33
3	23.57	21.94	21.35	20.80	15.77	19.28	19.20	18.47	21.88	21.41	20.97	21.00
4	23.66	22.05	20.96	20.86	15.94	18.50	19.29	18.58	22.06	20.97	20.03	21.04
5	23.76	22.13	20.93	20.47	16.02	18.33	17.96	18.85	22.12	20.99	21.28	20.71
6	23.83	22.49	20.87	20.59	16.35	18.27	17.44	18.95	22.01	20.72	21.70	21.33
7	23.85	22.47	20.53	20.61	17.28	18.69	17.10	19.08	22.12	20.15	21.76	21.67
8	23.88	22.61	20.18	20.50	17.74	18.91	17.71	18.63	22.23	19.81	21.94	21.68
9	23.91	22.23	20.65	20.49	18.07	18.94	18.47	18.40	22.36	20.21	22.15	21.33
10	23.91	22.04	20.91	20.04	18.04	18.91	18.59	18.25	22.45	20.31	22.23	21.37
11	23.90	21.86	20.61	20.04	18.34	17.53	17.09	18.01	22.53	19.51	20.80	21.52
12	23.87	22.10	20.80	20.03	18.89	16.38	14.39	18.49	22.60	19.44	20.35	21.41
13	23.89	21.40	20.94	19.67	19.43	15.92	14.88	18.14	22.61	19.44	20.09	21.43
14	23.21	20.80	20.99	19.83	19.61	15.38	13.64	18.41	22.61	19.40	19.89	21.47
15	23.07	20.49	20.57	19.79	19.71	16.01	14.98	18.56	22.50	19.38	19.79	22.17
16	23.13	20.82	20.91	19.52	18.87	16.40	14.45	18.51	22.64	19.30	19.70	22.34
17	22.98	20.94	20.63	19.85	18.87	17.16	16.04	19.28	22.72	19.00	19.63	22.42
18	22.88	20.79	20.99	20.05	18.84	16.13	15.74	19.46	22.28	19.61	20.21	22.08
19	22.14	20.21	21.03	19.99	18.82	16.14	15.49	19.40	22.02	19.13	20.87	21.99
20	22.39	19.58	19.99	19.91	18.39	16.87	15.81	18.94	22.11	19.20	19.95	22.17
21	22.21	19.31	20.83	19.86	17.90	17.22	16.20	19.08	22.47	19.50	20.60	22.30
22	22.33	19.82	21.14	20.69	17.79	16.74	17.21	19.19	22.49	19.32	20.65	22.41
23	22.42	20.06	19.96	21.11	17.67	17.38	16.88	20.05	21.67	20.44	21.21	22.42
24	22.00	20.28	19.55	21.17	17.08	18.11	17.70	20.37	21.24	21.35	21.60	21.84
25	22.24	20.79	19.89	20.60	17.53	18.35	17.41	20.29	21.60	21.61	21.76	21.75
26	22.48	20.69	20.06	20.26	18.10	17.89	17.22	20.80	22.06	20.88	21.80	21.83
27	22.77	20.37	19.43	19.59	18.28	17.88	17.88	21.00	22.15	20.39	21.43	21.93
28	22.87	20.67	19.28	19.13	18.65	17.70	16.98	21.02	22.13	20.57	21.47	22.22
29	22.85	21.01	19.47	17.88	---	17.19	18.36	20.31	22.17	20.66	22.11	22.38
30	22.86	20.93	19.75	15.52	---	17.45	18.61	20.15	22.20	20.98	22.15	22.49
31	22.05	---	19.85	15.49	---	17.87	---	21.13	---	21.32	22.12	---
MAX	23.91	22.61	21.35	21.17	19.71	19.28	19.29	21.13	22.72	22.10	22.23	22.49

CAL YR 1993 LOW 24.06

WTR YR 1994 LOW 23.91



GROUND-WATER RECORDS

AUGLAIZE COUNTY

403233083574500. Local number, AU-3.

LOCATION.--Lat 40°32'33", long 83°57'45", Hydrologic Unit 05080001, 1.0 mi Southwest of New Hampshire.

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 ODNR 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, 4.31 ft below land-surface datum, Apr. 30, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

DATE	WATER LEVEL
Oct. 29, 1993	6.66

GROUND-WATER RECORDS

189

BELMONT COUNTY

400118081082200. Local number, B-3.

LOCATION.--Lat 40°01'18", long 81°08'22", Hydrologic Unit 05040001, Mt. Olivett Public Square, Mt. Olivett, Oh.

Owner: Village of Mt. Olivett.

AQUIFER.--Shale of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 119 ft.

INSTRUMENTATION.--Type F continuous recorder.

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;

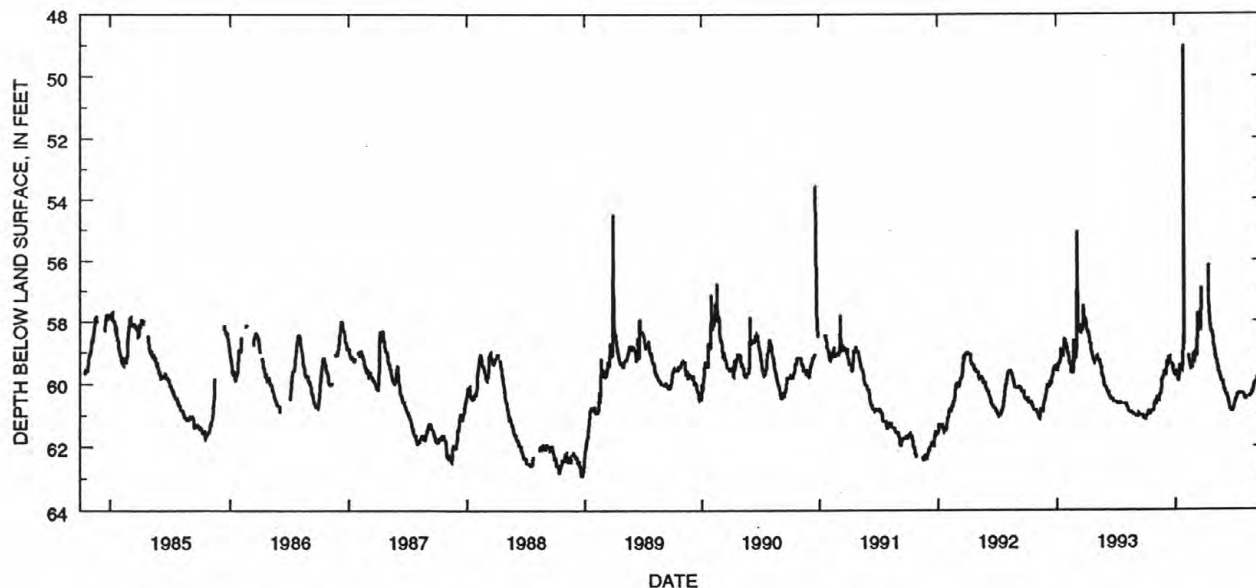
minimum daily low, 49.00 ft below land-surface datum, Jan. 28, 1994.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61.14	60.63	59.77	59.74	---	59.29	---	58.92	60.24	60.60	60.51	59.98
2	61.13	60.70	59.77	59.73	---	59.21	---	59.05	60.28	60.60	60.50	59.98
3	61.05	60.70	59.72	59.73	---	59.02	---	59.13	60.34	60.57	60.50	59.98
4	61.05	60.65	59.68	59.66	---	58.95	---	59.15	60.37	60.53	60.49	59.98
5	60.99	60.53	59.41	59.72	---	59.03	---	59.18	60.37	60.50	60.44	59.97
6	61.03	60.42	59.41	59.72	---	59.05	---	59.24	60.37	60.46	60.44	59.91
7	61.03	60.50	59.45	59.70	---	59.05	---	59.25	60.37	60.41	60.45	59.83
8	61.02	60.53	59.45	59.76	---	59.07	---	59.31	60.43	60.38	60.44	59.83
9	60.90	60.58	59.42	59.89	---	59.08	---	59.36	60.48	60.38	60.44	59.83
10	60.89	60.58	59.35	59.94	59.07	58.10	---	59.48	60.53	60.37	60.45	59.83
11	60.89	60.57	59.16	59.93	59.18	57.72	---	59.50	60.54	60.36	60.45	59.84
12	60.88	60.49	59.19	59.84	59.24	58.20	---	59.53	60.59	60.35	60.45	59.87
13	60.89	60.46	59.21	59.64	59.33	58.30	56.15	59.63	60.67	60.33	60.45	59.83
14	60.93	60.37	59.21	59.40	59.38	58.31	57.17	59.66	60.72	60.32	60.43	59.84
15	60.97	60.33	59.17	59.49	59.41	58.28	57.80	59.66	60.78	60.32	60.39	59.84
16	60.97	60.35	59.30	59.55	59.49	58.27	57.82	59.69	60.82	60.33	60.40	59.85
17	60.95	60.35	59.36	59.54	59.50	58.28	58.07	59.77	60.83	60.33	60.40	59.85
18	60.88	60.25	59.36	59.52	59.50	58.27	58.19	59.81	60.85	60.33	60.39	59.88
19	60.90	60.17	59.37	59.56	59.51	58.26	58.20	59.85	60.87	60.33	60.39	59.97
20	60.90	59.90	59.38	59.58	59.50	58.31	58.28	59.86	60.88	60.34	60.38	60.01
21	60.86	59.88	59.35	59.59	59.50	58.31	58.32	59.93	60.88	60.35	60.33	60.04
22	60.89	59.87	59.37	59.58	59.49	56.93	58.36	59.95	60.88	60.35	60.28	60.04
23	60.89	59.87	59.50	59.51	59.46	57.67	58.38	59.95	60.87	60.33	60.28	60.04
24	60.89	59.82	59.51	59.46	59.17	---	58.38	59.96	60.86	60.34	60.27	60.06
25	60.88	59.75	59.50	59.46	59.03	---	58.43	59.96	60.85	60.35	60.25	60.07
26	60.80	59.75	59.55	58.49	59.22	---	58.51	59.95	60.83	60.36	60.21	60.07
27	60.67	59.74	59.67	58.77	59.29	---	58.62	60.05	60.80	60.36	60.14	60.08
28	60.66	59.63	59.72	49.00	59.30	---	58.75	60.13	60.72	60.40	60.09	60.11
29	60.63	59.63	59.72	---	---	---	58.81	60.17	60.70	60.44	60.01	60.21
30	60.63	59.76	59.70	---	---	---	58.86	60.22	60.63	60.48	60.00	60.28
31	60.55	---	59.73	---	---	---	---	60.24	---	60.51	60.00	---
MAX	61.14	60.70	59.77	59.94	59.51	59.29	58.86	60.24	60.88	60.60	60.51	60.28

CAL YR 1993 LOW 61.14

WTR YR 1994 LOW 61.14



GROUND-WATER RECORDS

BROWN COUNTY

385932083412400. Local number, BR-20.

LOCATION.--Lat 38°59'32", long 83°41'24", Hydrologic Unit 05090201, near Fincastle.

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.

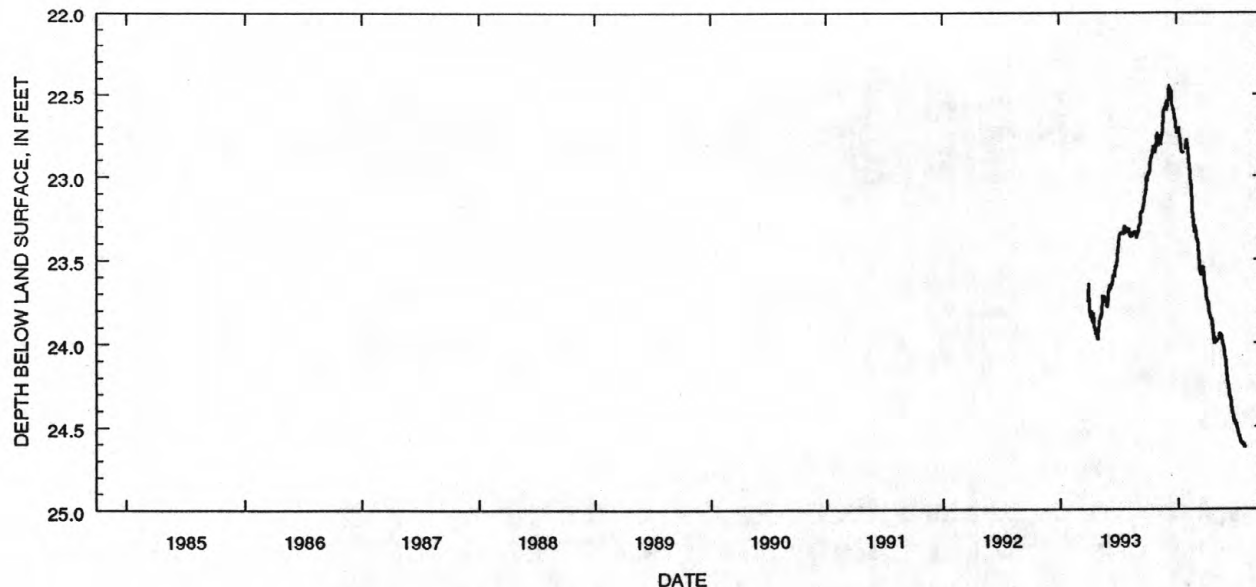
Measuring point: Floor of instrument shelter, 3.00 ft. above land-surface datum.

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, 24.62 ft below land-surface datum, July 24-28, 1994;
minimum daily low, 22.46 ft below land-surface datum, Dec. 7-8, 10-11, 1993.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.01	22.78	22.59	22.74	22.81	23.38	23.74	23.98	24.18	24.50	---	---
2	23.00	22.82	22.59	22.74	22.82	23.38	23.75	23.98	24.20	24.51	---	---
3	22.99	22.82	22.59	22.74	22.84	23.38	23.75	23.98	24.22	24.52	---	---
4	22.99	22.82	22.58	22.71	22.87	23.39	23.76	23.98	24.24	24.53	---	---
5	22.97	22.78	22.50	22.71	22.88	23.41	23.77	23.98	24.26	24.54	---	---
6	22.98	22.75	22.47	22.71	22.91	23.43	23.77	23.98	24.27	24.55	---	---
7	22.98	22.77	22.46	22.70	22.94	23.47	23.79	23.98	24.28	24.55	---	---
8	22.97	22.79	22.46	22.73	22.96	23.50	23.81	23.97	24.29	24.56	---	---
9	22.93	22.81	22.47	22.76	22.97	23.51	23.83	23.95	24.31	24.56	---	---
10	22.90	22.81	22.46	22.79	23.00	23.53	23.84	23.94	24.32	24.57	---	---
11	22.90	22.81	22.46	22.80	23.01	23.55	23.85	23.95	24.33	24.58	---	---
12	22.89	22.80	22.48	22.81	23.04	23.58	23.85	23.95	24.34	24.58	---	---
13	22.87	22.79	22.49	22.81	23.07	23.59	23.85	23.95	24.35	24.59	---	---
14	22.88	22.77	22.49	22.84	23.11	23.59	23.85	23.96	24.37	24.59	---	---
15	22.88	22.74	22.48	22.85	23.14	23.59	23.86	23.96	24.38	24.60	---	---
16	22.88	22.74	22.52	22.86	23.18	23.57	23.87	23.96	24.39	24.60	---	---
17	22.86	22.73	22.56	22.86	23.21	23.57	23.88	23.97	24.41	24.60	---	---
18	22.82	22.69	22.58	22.86	23.24	23.57	23.91	23.98	24.42	24.60	---	---
19	22.82	22.67	22.60	22.86	23.27	23.54	23.93	23.99	24.44	24.60	---	---
20	22.82	22.61	22.60	22.85	23.30	23.55	23.95	24.00	24.45	24.61	---	---
21	22.83	22.60	22.60	22.85	23.32	23.55	23.96	24.02	24.45	24.61	---	---
22	22.85	22.60	22.61	---	23.34	23.57	23.98	24.03	24.46	24.61	---	---
23	22.86	22.61	22.63	---	23.34	23.58	24.00	24.04	24.47	24.61	---	---
24	22.86	22.60	22.65	---	23.31	23.60	24.00	24.05	24.47	24.62	---	---
25	22.85	22.59	22.65	---	23.30	23.62	23.99	24.06	24.47	24.62	---	---
26	22.84	22.59	22.65	22.84	23.32	23.65	23.98	24.07	24.48	24.62	---	---
27	22.81	22.58	22.68	22.84	23.34	23.66	23.98	24.09	24.48	24.62	---	---
28	22.80	22.57	22.71	22.83	23.37	23.66	23.98	24.11	24.49	24.62	---	---
29	22.77	22.54	22.71	22.79	---	23.68	23.99	24.13	24.49	---	---	---
30	22.76	22.58	22.73	22.78	---	23.70	23.99	24.15	24.49	---	---	---
31	22.75	---	22.74	22.79	---	23.72	---	24.17	---	---	---	---
MAX	23.01	22.82	22.74	22.86	23.37	23.72	24.00	24.17	24.49	24.62	---	---
CAL YR 1993	LOW 23.97											
WTR YR 1994	LOW 24.62											



GROUND-WATER RECORDS

191

BUTLER COUNTY

391805084261800. Local number, BU-9.

LOCATION.--Lat 39°18'05", long 84°26'18", Hydrologic Unit 05090203, 2.5 mi northwest of Sharonville.

Owner: Olinkraft, Inc.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., depth 85 ft.

INSTRUMENTATION.--Biyearly measurement with chalked tape by ODNR 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 OBSERVATIONS

DATE	WATER LEVEL	DATE	WATER LEVEL
Dec. 30, 1993	9.33	Apr. 27, 1994	9.18

GROUND-WATER RECORDS

BUTLER COUNTY--Continued

391904084371800. Local number, BU-12.

LOCATION.--Lat 39°19'04", long 84°37'18", Hydrologic Unit 05080002, Cincinnati well field 1.5 mi east of Ross.

Owner: City of Cincinnati.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 6 in., depth 157 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 547.73 ft above sea level.

Measuring point: Floor of instrument shelter 7.80 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

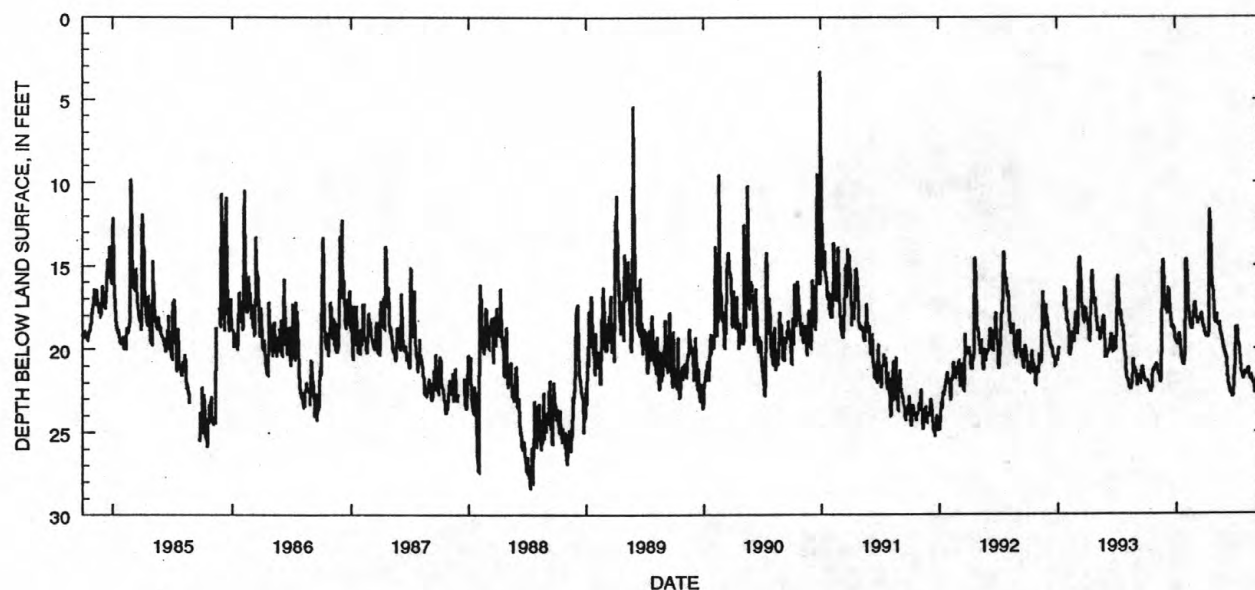
PERIOD OF RECORD.--April 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 28.40 ft below land-surface datum, July 11, 1988;

minimum daily low, 2.00 ft above land surface, May 24, 25, 1968.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.90	21.00	17.65	19.60	14.60	17.50	19.20	18.45	20.40	19.10	21.45	21.85
2	21.90	20.95	17.70	19.65	14.95	17.75	19.20	18.05	20.45	18.80	21.55	21.75
3	21.90	20.95	17.85	19.65	15.20	18.00	19.15	17.95	20.60	18.80	21.55	21.85
4	21.90	21.00	17.95	19.70	15.40	18.20	19.30	17.95	20.90	18.75	21.50	21.95
5	21.95	21.25	17.90	19.80	15.85	18.20	19.30	18.15	21.25	18.75	21.35	21.95
6	21.95	21.45	17.15	19.80	16.30	18.20	19.30	18.40	21.55	19.00	21.30	22.10
7	22.05	21.55	16.70	19.75	16.85	18.50	19.30	18.50	21.80	19.25	21.15	22.20
8	22.25	21.55	16.45	19.55	17.35	18.50	19.30	18.55	22.00	19.45	21.10	22.30
9	22.35	21.35	16.50	19.25	17.65	18.45	19.25	18.60	22.20	19.75	21.25	22.45
10	22.45	21.45	16.50	19.10	18.00	18.35	18.90	18.60	22.20	19.75	21.45	22.45
11	22.45	21.60	16.65	19.10	18.35	18.20	16.95	18.60	22.30	19.80	21.70	22.20
12	22.25	21.90	17.15	19.35	18.55	18.30	13.95	18.55	22.45	20.05	21.70	21.85
13	22.40	21.95	17.50	19.55	18.60	18.30	12.00	18.60	22.55	20.30	21.75	21.65
14	22.55	21.95	17.75	19.75	18.70	18.30	11.65	18.80	22.60	20.50	21.80	21.70
15	22.55	21.75	18.00	20.00	18.75	18.30	12.00	18.95	22.60	20.80	21.80	21.70
16	22.45	20.95	18.20	20.20	18.80	18.30	12.65	19.10	22.65	21.05	21.75	21.70
17	22.45	19.70	18.45	20.45	18.85	18.10	13.40	19.10	22.70	21.20	21.65	21.70
18	22.20	18.45	18.70	20.60	18.80	17.90	14.10	19.25	22.70	21.40	21.65	21.75
19	21.85	16.90	18.75	20.75	18.70	17.85	14.75	19.25	22.80	21.50	21.80	21.80
20	21.60	15.55	18.70	20.80	18.60	18.05	15.50	19.35	22.90	21.55	21.90	22.00
21	21.45	14.75	18.60	20.85	18.30	18.20	16.00	19.45	22.85	21.65	22.00	22.25
22	21.30	14.65	18.70	20.90	18.10	18.35	16.25	19.60	22.75	21.75	22.05	22.40
23	21.25	14.95	18.75	20.90	17.90	18.50	16.40	19.70	22.70	21.80	22.05	22.45
24	21.35	15.40	18.85	20.90	17.60	18.65	16.60	19.85	22.50	21.80	22.10	22.50
25	21.25	15.95	18.75	20.90	17.40	18.70	16.95	19.95	22.10	21.75	22.20	22.50
26	21.10	16.55	18.90	20.70	17.35	18.70	17.40	20.00	21.85	21.60	22.30	22.45
27	21.15	17.05	19.15	20.20	17.30	18.75	17.75	20.10	21.40	21.50	22.45	22.45
28	21.15	17.35	19.35	19.30	17.25	18.90	18.10	20.15	20.70	21.30	22.55	22.15
29	21.05	17.60	19.50	17.40	---	19.00	18.35	20.25	19.95	21.35	22.50	21.95
30	21.00	17.65	19.50	15.80	---	19.05	18.50	20.30	19.55	21.45	22.25	22.10
31	21.00	---	19.55	14.85	---	19.15	---	20.35	---	21.45	22.05	---
MAX	22.55	21.95	19.55	20.90	18.85	19.15	19.30	20.35	22.90	21.80	22.55	22.50

CAL YR 1993 LOW 22.55
WTR YR 1994 LOW 22.90

GROUND-WATER RECORDS

193

BUTLER COUNTY--Continued

392017084345200. Local number, BU-7.

LOCATION.--Lat 39°20'17", long 84°34'52", Hydrologic Unit 05080002, 5584 East River Road in Fairfield.

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.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 572.54 ft above sea level.

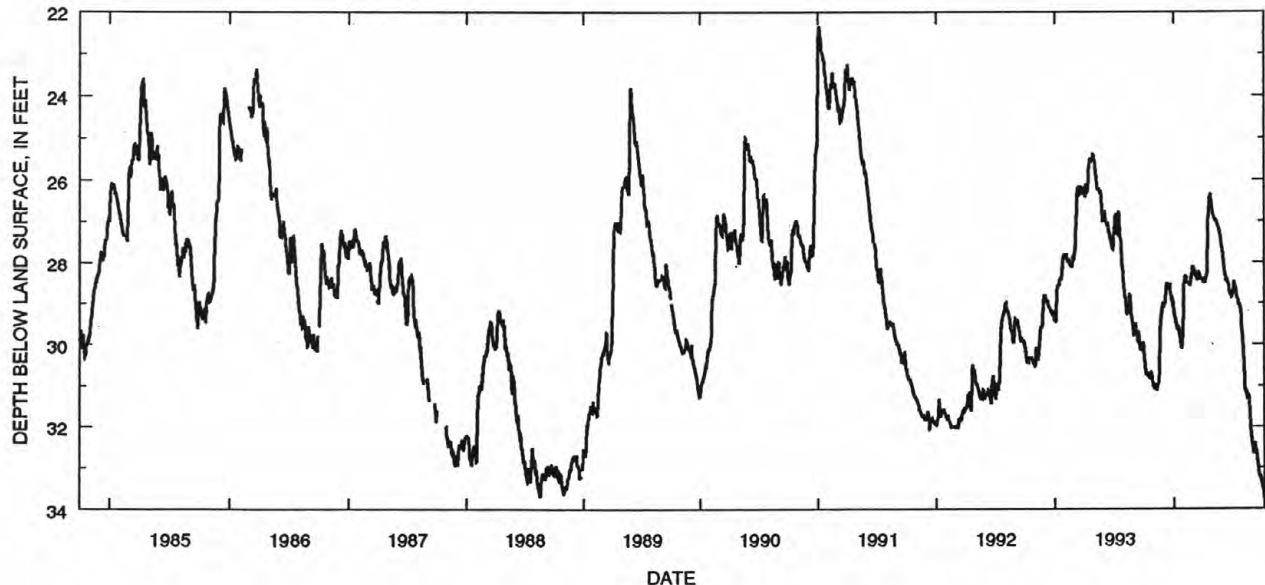
Measuring point: Floor of instrument shelter 1.93 ft above land-surface datum.

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, 33.77 ft below land-surface datum, Sept. 30, 1994;
minimum daily low, 11.45 ft below land-surface datum, June 6, 1947.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.08	31.08	29.10	29.20	28.48	28.21	28.47	26.93	28.16	28.54	30.75	32.48
2	30.19	31.10	28.98	29.28	28.43	28.21	28.42	26.94	28.22	28.59	31.05	32.40
3	30.30	31.10	29.03	29.31	28.40	28.23	28.44	26.94	28.27	28.60	31.17	32.48
4	30.39	31.07	29.02	29.38	28.33	28.19	28.48	26.96	28.31	28.61	31.18	32.57
5	30.48	31.07	29.01	29.40	28.37	28.30	28.48	26.99	28.37	28.62	31.15	32.55
6	30.56	30.97	28.88	29.43	28.39	28.30	28.40	26.99	28.44	28.73	31.14	32.59
7	30.64	31.03	28.74	29.47	28.47	28.34	28.39	27.00	28.48	28.75	31.15	32.64
8	30.72	31.09	28.63	29.50	28.48	28.37	28.40	27.00	28.47	28.79	31.25	32.72
9	30.73	31.13	28.57	29.56	28.50	28.37	28.35	27.01	28.40	28.83	31.34	32.81
10	30.73	31.13	28.53	29.61	28.51	28.43	28.24	27.08	28.41	28.86	31.36	32.85
11	30.71	30.99	28.54	29.64	28.52	28.44	28.18	27.09	28.49	28.89	31.29	32.92
12	30.75	31.01	28.55	29.64	28.52	28.44	27.89	27.10	28.51	28.94	31.23	32.99
13	30.73	31.02	28.64	29.55	28.49	28.35	27.48	27.13	28.53	29.02	31.25	33.06
14	30.77	30.96	28.66	29.58	28.54	28.34	27.12	27.16	28.52	29.04	31.26	33.15
15	30.70	30.93	28.60	29.57	28.54	28.34	26.75	27.17	28.60	29.03	31.32	33.20
16	30.74	30.93	28.62	29.64	28.56	28.29	26.52	27.20	28.67	29.00	31.38	33.22
17	30.80	30.60	28.62	29.72	28.56	28.27	26.44	27.25	28.74	29.02	31.68	33.26
18	30.85	30.35	28.59	29.82	28.56	28.28	26.43	27.26	28.76	29.02	31.70	33.26
19	30.84	30.04	28.58	29.88	28.55	28.33	26.47	27.29	28.77	29.09	31.92	33.19
20	30.80	29.69	28.69	29.95	28.45	28.33	26.47	27.37	28.80	29.16	32.07	33.29
21	30.75	29.46	28.77	29.98	28.39	28.36	26.34	27.42	28.81	29.21	32.13	33.34
22	30.73	29.37	28.77	30.01	28.39	28.42	26.44	27.45	28.80	29.30	32.25	33.37
23	30.70	29.36	28.88	30.05	28.33	28.44	26.51	27.56	28.84	29.30	32.30	33.44
24	30.72	29.22	28.94	30.10	28.20	28.42	26.59	27.63	28.84	29.50	32.40	33.48
25	30.76	29.22	28.94	30.10	28.17	28.43	26.68	27.64	28.83	29.70	32.47	33.48
26	30.79	29.18	28.84	29.96	28.12	28.43	26.76	27.68	28.83	29.84	32.53	33.50
27	30.79	29.02	28.96	29.71	28.11	28.39	26.81	27.74	28.74	29.98	32.50	33.51
28	30.84	28.99	29.02	29.56	28.17	28.46	26.81	27.80	28.62	30.05	32.66	33.58
29	31.00	29.03	29.00	29.22	---	28.51	26.86	27.90	28.52	30.26	32.66	33.65
30	31.00	29.10	29.09	28.82	---	28.51	26.93	27.97	28.47	30.41	32.63	33.77
31	31.02	---	29.14	28.59	---	28.46	---	28.06	---	30.59	32.54	---
MAX	31.02	31.13	29.14	30.10	28.56	28.51	28.48	28.06	28.84	30.59	32.66	33.77
CAL YR 1993	LOW 31.13											
WTR YR 1994	LOW 33.77											



GROUND-WATER RECORDS

BUTLER COUNTY--Continued

392048084311400. Local number, BU-8.

LOCATION.--Lat 39°20'48", long 84°31'14", Hydrologic Unit 05080002, Symmes and Gilmore Road, east of Hamilton.

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.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 630 ft above sea level, from topographic map.

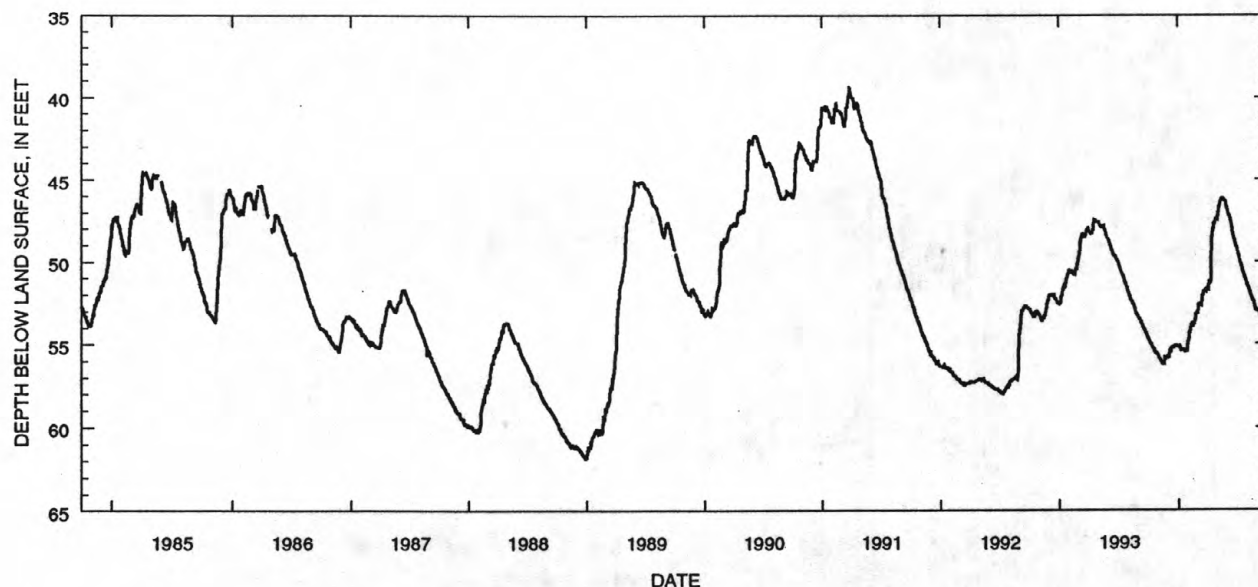
Measuring point: Floor of instrument shelter 4.13 ft above land-surface datum.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54.67	55.76	55.79	55.24	54.77	53.03	51.69	47.25	46.90	49.32	51.45	52.95
2	54.70	55.83	55.79	55.18	54.67	52.93	51.79	47.25	47.00	49.37	51.49	52.99
3	54.75	55.84	55.75	55.19	54.34	52.66	51.47	47.10	47.09	49.46	51.54	53.00
4	54.77	55.85	55.70	55.16	54.33	52.65	51.45	46.93	47.16	49.53	51.57	53.00
5	54.85	55.85	55.45	55.23	54.25	52.61	51.38	46.79	47.20	49.60	51.64	53.01
6	54.92	55.90	55.47	55.24	54.13	52.63	51.27	46.72	47.23	49.66	51.70	53.02
7	54.96	55.97	55.50	55.27	54.12	52.63	51.34	46.69	47.25	49.74	51.74	53.08
8	54.98	56.04	55.50	55.34	54.10	52.66	51.36	46.47	47.34	49.81	51.80	53.12
9	54.99	56.08	55.50	55.42	53.90	52.66	51.27	46.43	47.42	49.91	51.89	53.17
10	55.05	56.13	55.30	55.44	53.95	52.55	51.11	46.38	47.48	50.02	51.97	53.23
11	55.09	56.16	55.25	55.44	53.95	52.63	50.88	46.38	47.55	50.10	52.03	53.31
12	55.11	56.17	55.27	55.43	53.92	52.65	49.85	46.23	47.65	50.17	52.09	53.38
13	55.17	56.18	55.27	55.33	53.84	52.64	48.97	46.24	47.75	50.23	52.14	53.44
14	55.22	56.19	55.23	55.26	53.86	52.36	48.65	46.24	47.88	50.29	52.19	53.46
15	55.26	56.22	55.14	55.35	53.83	52.12	48.33	46.15	48.04	50.35	52.25	53.49
16	55.27	56.25	55.20	55.38	53.83	52.09	48.08	46.15	48.18	50.44	52.30	53.52
17	55.28	56.22	55.23	55.33	53.83	52.11	48.04	46.23	48.28	50.50	52.34	53.55
18	55.33	56.08	55.23	55.36	53.77	51.95	47.98	46.25	48.37	50.59	52.39	53.62
19	55.38	56.01	55.20	55.43	53.70	51.82	47.72	46.27	48.48	50.68	52.44	53.69
20	55.40	55.86	55.20	55.48	53.61	51.85	47.70	46.29	48.57	50.76	52.45	53.75
21	55.46	55.89	55.08	55.50	53.56	51.84	47.70	46.31	48.65	50.80	52.50	53.78
22	55.51	55.90	55.09	55.50	53.55	51.79	47.67	46.33	48.74	50.85	52.58	53.81
23	55.55	55.90	55.15	55.49	53.25	51.80	47.65	46.34	48.79	50.93	52.68	53.84
24	55.55	55.85	55.16	55.44	53.14	51.77	47.51	46.34	48.83	50.99	52.76	53.84
25	55.56	55.83	55.11	55.45	53.15	51.80	47.43	46.34	48.97	51.03	52.84	53.93
26	55.56	55.83	55.08	55.45	53.13	51.83	47.37	46.39	49.04	51.09	52.91	53.95
27	55.58	55.79	55.17	55.44	53.15	51.70	47.41	46.54	49.11	51.13	52.95	54.03
28	55.59	55.76	55.21	55.10	53.15	51.59	47.51	46.63	49.16	51.20	52.99	54.10
29	55.60	55.70	55.21	54.99	---	51.68	47.53	46.70	49.19	51.28	53.00	54.19
30	55.63	55.77	55.23	55.00	---	51.73	47.53	46.76	49.26	51.35	53.00	54.23
31	55.67	---	55.24	54.96	---	51.73	---	46.82	---	51.42	52.97	---
MAX	55.67	56.25	55.79	55.50	54.77	53.03	51.79	47.25	49.26	51.42	53.00	54.23

CAL YR 1993 LOW 56.25
WTR YR 1994 LOW 56.25

GROUND-WATER RECORDS

195

BUTLER COUNTY--Continued

392445084333000. Local number, BU-36.

LOCATION.--Lat 39°24'45", long 84°33'30", Hydrologic Unit 05080002, on right bank of Great Miami River 300 ft downstream from Two mile Creek in Hamilton.

Owner: Champion Paper Company.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled industrial supply water-table well, diameter 30 in., depth 168 ft, cased.

PERIOD OF RECORD.--December 1965 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	PH				OXYGEN			BICAR-			ALKA-
		SPE-	WATER			DEMAND,		MAGNE-		POTAS-	BONATE	LINITY
		CIFIC	WHOLE			CHEM-	CALCIUM	SIMUM,		SIMUM,	WATER	WAT WH
		CON-	FIELD	TEMPER-	TEMPER-	ICAL	DIS-	DIS-	DIS-	DIS-	DIS IT	TOT FET
		DUCT-	(STAND-	ATURE	ATURE	(HIGH	SOLVED	SOLVED	SOLVED	SOLVED	FIELD	FIELD
ANCE	ARD	AIR	WATER	LEVEL)	(MG/L	(MG/L	(MG/L	(MG/L	MG/L AS	MG/L AS		
(US/CM)		(DEG C)	(DEG C)	(MG/L)	AS CA)	AS MG)	AS NA)	AS K)	HCO3	CACO3		
(00095)	(00400)	(00020)	(00010)	(00340)	(00915)	(00925)	(00930)	(00935)	(00453)	(00410)		

NOV	17...	1245	860	7.4	21.5	16.5	--	110	31	31	3.7	366	297
APR	13...	0930	883	7.3	13.5	16.0	10	100	31	32	3.5	366	293
SEP	08...	1015	883	7.4	--	16.5	<10	100	32	31	4.2	369	302

DATE	SULFATE	CHLO- RIDE,	FLUO- RIDE,	SILICA, DIS-	SOLIDS, RESIDUE AT 180	NITRO- GEN, NITRITE	NITRO- GEN, NO2+NO3	NITRO- GEN, AMMONIA	PHOS- PHORUS, ORTHO,	ARSENIC	ARSENIC
	DIS-	DIS-	DIS-	SOLVED	DEG. C	DIS-	DIS-	DIS-	DIS-	ARSENIC	DIS-
	SOLVED	SOLVED	SOLVED	(MG/L	DIS-	SOLVED	SOLVED	SOLVED	SOLVED	TOTAL	SOLVED
	(MG/L	(MG/L	(MG/L	AS	SOLVED	(MG/L	(MG/L	(MG/L	(MG/L	(UG/L	(UG/L
	AS S04)	AS CL)	AS F)	SIO2)	(MG/L)	AS N)	AS N)	AS N)	AS P)	AS AS)	AS AS)
	(00945)	(00940)	(00950)	(00955)	(70300)	(00613)	(00631)	(00608)	(00671)	(01002)	(01000)

NOV	17...	90	54	0.20	12	525	<0.010	1.90	0.030	0.030	<1	<1
APR	13...	89	55	0.20	11	529	<0.010	2.10	0.050	0.020	--	<1
SEP	08...	87	57	0.20	11	542	<0.010	1.90	0.030	<0.010	<1	<1

DATE	CHRO-	CHRO-	COPPER,			LEAD,		MANGA-	ZINC,		
	MIUM,	MIUM,	TOTAL	COPPER,	IRON,	TOTAL	LEAD,	NESE,	TOTAL	ZINC,	CARBON,
	DIS-	DIS-	RECOV-	RECOV-	DIS-	DIS-	RECOV-	DIS-	RECOV-	DIS-	ORGANIC
	SOLVED	SOLVED	ERABLE	ERABLE	SOLVED	SOLVED	ERABLE	SOLVED	SOLVED	ERABLE	SOLVED
	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(MG/L
(AS CR)	(AS CR)	(AS CU)	(AS CU)	(AS FE)	(AS FE)	(AS PB)	(AS PB)	(AS MN)	(AS ZN)	(AS ZN)	(AS C)
(01030)	(01034)	(01042)	(01040)	(01046)	(01051)	(01049)	(01056)	(01092)	(01090)	(00680)	

NOV	17...	5	4	4	3	5	<1	<1	1	<10	<3	1.4
APR	13...	7	--	--	2	8	--	<1	5	--	6	1.0
SEP	08...	6	6	6	3	<3	<1	<1	1	20	<3	1.0

GROUND-WATER RECORDS

BUTLER COUNTY--Continued

393202084241500. Local number, BU-15.

LOCATION.--Lat 39°32'02", long 84°24'15", Hydrologic Unit 05080002, at Hook Field (municipal airport) at Middletown.

Owner: City of Middletown.

AQUIFER.--Sand and gravel of Pleistocene Age.

INSTRUMENTATION.--Periodic measurement with chalked tape by ODNR 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 daily low, 14.60 ft below land-surface datum, Jan. 26, 1981;
minimum daily low, 0.06 ft below land-surface datum, Feb. 25, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 28, 1993	13.48	Apr. 7, 1994	11.40

GROUND-WATER RECORDS

197

BUTLER COUNTY--Continued

392737084291300. Local number, BU-16.

LOCATION.--Lat 39°27'37", long 84°29'13", Hydrologic Unit 05080002, Wayne - Madison Rd. 2 mi southwest of Trenton.

Owner: Miller Brewing Co.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 4 in., depth 218 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

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.

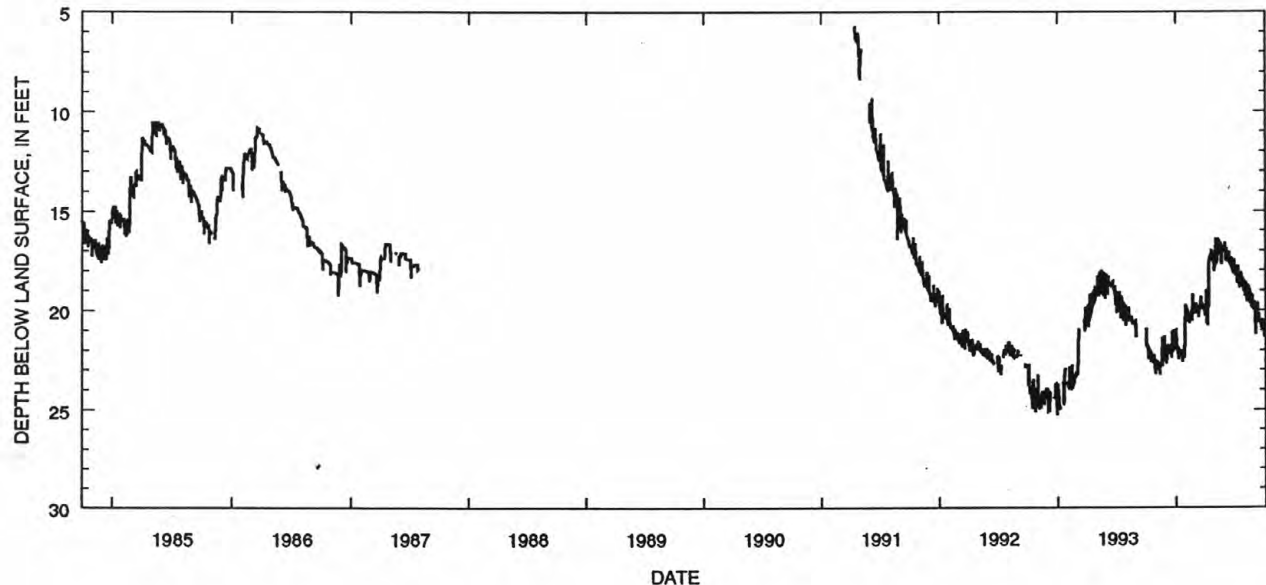
PERIOD OF RECORD.--May 1982 to July 1987. Reactivated April 17, 1991.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 25.27 ft below land-surface datum, Dec. 31, 1992;
minimum daily low, 5.71 ft below land-surface datum, April. 17, 1991.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.89	22.56	22.22	20.93	19.90	19.69	20.00	17.15	17.45	18.25	18.70	20.24
2	21.74	22.57	22.68	21.79	19.97	19.69	19.98	16.42	17.50	17.91	19.22	20.28
3	21.75	22.55	22.32	21.82	20.05	19.72	18.95	16.69	17.50	---	19.40	20.14
4	21.78	22.58	22.27	21.85	20.11	20.16	19.75	17.57	16.90	---	19.55	20.13
5	21.83	23.03	22.18	21.90	20.56	---	19.73	17.65	17.42	18.65	19.36	19.63
6	21.87	22.70	21.93	21.95	20.22	19.85	20.62	17.67	17.49	17.78	18.96	19.69
7	21.90	22.68	21.73	21.99	20.21	---	20.66	17.42	17.55	18.19	18.75	20.36
8	22.45	22.68	21.76	22.43	20.22	19.80	20.00	17.05	17.56	18.32	18.80	20.62
9	22.02	22.69	21.80	22.08	20.28	19.90	19.78	16.63	17.06	17.94	18.84	20.49
10	22.01	22.72	22.22	21.94	20.29	19.87	19.73	17.16	17.08	17.79	19.11	20.18
11	22.02	22.76	21.85	22.00	20.67	20.33	18.15	16.50	17.10	18.53	19.53	20.47
12	22.05	23.21	21.85	22.05	20.34	19.95	17.56	16.53	17.18	18.57	19.59	20.50
13	22.07	22.84	21.85	22.05	20.29	19.82	17.45	17.01	17.61	18.88	19.60	20.48
14	22.11	22.82	21.87	22.29	20.29	19.81	17.38	16.75	17.65	18.65	18.97	20.54
15	22.15	22.71	22.08	22.15	20.23	19.98	17.28	16.62	17.78	18.72	19.54	20.55
16	22.58	---	21.95	22.15	20.13	19.68	17.34	16.64	17.40	18.74	19.60	20.77
17	22.25	22.81	22.35	22.15	20.02	19.70	17.21	16.85	17.32	18.07	19.15	20.75
18	22.25	22.40	22.37	22.12	20.53	19.32	17.27	16.68	17.50	18.17	19.80	20.44
19	22.24	21.35	21.08	22.57	20.46	19.92	17.09	17.63	17.35	18.21	19.85	20.64
20	22.28	22.82	22.14	22.20	19.20	19.78	17.06	17.64	17.80	18.75	19.85	21.04
21	22.66	22.07	21.90	22.20	19.90	19.67	17.09	16.86	18.01	18.79	19.23	20.92
22	22.28	22.04	22.12	22.17	19.90	19.72	17.55	16.85	18.06	18.37	19.28	21.01
23	22.29	22.09	21.98	22.18	19.88	19.74	17.18	16.84	18.15	18.79	19.92	21.02
24	22.30	22.56	21.53	22.17	19.83	19.77	17.16	16.85	18.05	18.40	19.75	20.48
25	22.32	22.14	21.08	22.17	20.15	19.80	17.15	16.86	18.06	19.00	19.96	20.65
26	22.85	21.30	20.96	22.38	19.75	20.01	18.01	16.94	18.07	19.08	20.01	20.94
27	22.42	22.10	21.86	21.20	19.73	19.85	18.04	16.98	17.45	18.50	19.55	21.32
28	22.94	22.11	21.90	20.95	19.73	19.73	17.23	17.01	18.10	19.16	19.76	21.19
29	22.72	22.16	21.91	19.75	---	19.78	17.89	17.01	18.19	19.26	20.06	21.27
30	23.19	22.19	21.91	19.79	---	19.80	17.69	16.61	18.25	18.75	20.10	21.31
31	22.58	---	20.98	19.85	---	20.27	---	16.73	---	18.73	21.19	---
MAX	23.19	23.21	22.68	22.57	20.67	20.33	20.66	17.67	18.25	19.26	21.19	21.32

CAL YR 1993 LOW 25.00

WTR YR 1994 LOW 23.21



GROUND-WATER RECORDS

BUTLER COUNTY--Continued

392743084295500. Local number, BU-17.

LOCATION.--Lat 39°27'43", long 84°29'55", Hydrologic Unit 05080002, southwest of Trenton.

Owner: Southwest Regional Water District.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 8 in., depth 212 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 635.28 ft above sea level.

Measuring point: Floor of instrument shelter, 2.2ft 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, 28.71 ft below land-surface datum, Nov. 11, 1993;

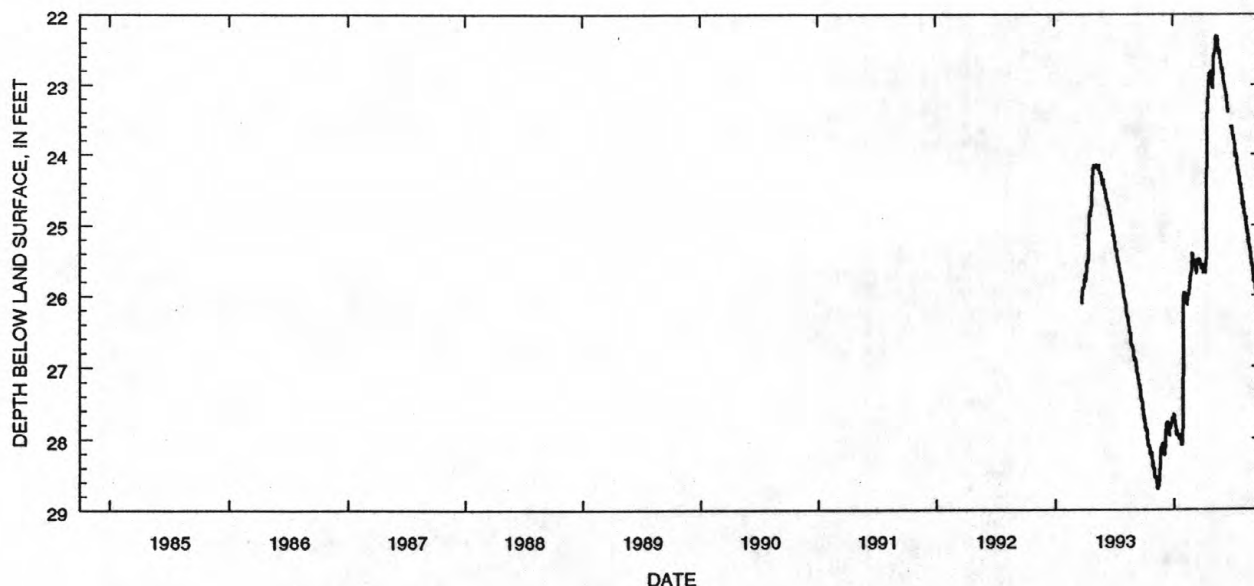
minimum daily low, 22.30 ft below land-surface datum, May 10-11, 1994.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.68	28.43	28.24	27.68	25.98	25.50	25.67	22.94	22.89	23.76	24.69	25.79
2	27.72	28.48	28.24	27.69	25.98	25.52	25.63	22.81	22.94	23.76	24.75	25.80
3	27.72	28.52	28.20	27.69	26.02	25.55	25.58	22.60	22.96	23.75	24.79	25.81
4	27.75	28.55	28.17	27.81	26.07	25.55	25.56	22.55	22.96	23.77	24.82	25.82
5	27.80	28.56	28.10	27.86	26.00	25.51	25.58	22.60	23.03	23.83	24.86	25.79
6	27.84	28.53	27.91	27.89	25.98	25.51	25.61	22.61	23.03	23.86	24.87	25.85
7	27.87	28.54	27.85	27.93	26.04	25.58	25.69	22.53	23.07	23.90	24.89	25.92
8	27.89	28.60	27.80	27.95	26.08	25.63	25.67	22.53	23.09	24.03	24.92	25.95
9	27.87	28.64	27.80	27.89	26.12	25.64	25.52	22.35	23.12	23.96	24.91	25.98
10	27.89	28.68	27.80	27.90	26.13	25.69	25.45	22.30	23.14	23.99	24.98	25.98
11	27.90	28.71	27.76	27.94	26.12	25.70	25.20	22.30	23.16	24.00	25.04	26.02
12	27.99	28.70	27.76	27.96	26.05	25.65	24.50	22.34	23.23	24.07	25.08	26.04
13	28.03	28.67	27.83	27.98	26.01	25.60	23.90	22.35	23.27	24.13	25.09	26.12
14	28.07	28.67	27.85	28.00	26.01	25.55	23.53	22.34	23.33	24.17	25.08	26.18
15	28.10	28.65	27.82	27.95	26.01	25.50	23.30	22.31	23.35	24.20	25.18	26.21
16	28.12	28.62	27.88	27.95	25.99	25.50	23.10	22.39	23.40	24.24	25.22	26.24
17	28.09	28.57	27.95	27.93	25.95	25.53	22.98	22.45	---	24.23	25.21	26.25
18	28.15	28.50	27.96	28.01	25.90	25.48	22.88	22.49	---	24.25	25.26	26.27
19	28.19	28.32	27.79	28.02	25.84	25.50	22.83	22.56	---	24.29	25.31	26.34
20	28.21	28.18	27.82	27.98	25.79	25.48	22.86	22.57	---	24.34	25.34	26.37
21	28.22	28.12	27.86	28.05	25.75	25.49	22.85	22.52	---	24.42	25.32	26.41
22	28.18	28.14	27.83	28.07	25.71	25.55	22.86	22.53	---	24.43	25.37	26.46
23	28.19	28.16	27.83	28.08	25.70	25.57	22.83	22.62	---	24.44	25.41	26.49
24	28.20	28.18	27.83	28.08	25.67	25.60	22.80	22.64	23.59	24.40	25.44	26.49
25	28.27	28.19	27.73	28.09	25.59	25.64	22.84	22.67	23.61	24.44	25.54	26.50
26	28.31	28.08	27.70	28.04	25.46	25.61	22.92	22.74	23.60	24.55	25.55	26.59
27	28.35	28.05	27.73	27.69	25.43	25.56	22.96	22.77	23.60	24.56	25.56	26.64
28	28.36	28.11	27.75	27.47	25.44	25.57	22.96	22.80	23.65	24.58	25.56	26.67
29	28.35	28.16	27.75	26.82	---	25.63	23.04	22.80	23.72	24.69	25.61	26.73
30	28.42	28.19	27.76	26.30	---	25.65	23.04	22.75	23.74	24.73	25.65	26.76
31	28.39	---	27.70	26.06	---	25.69	---	22.80	---	24.66	25.72	---
MAX	28.42	28.71	28.24	28.09	26.13	25.70	25.69	22.94	23.74	24.73	25.72	26.76

CAL YR 1993 LOW 28.71

WTR YR 1994 LOW 28.71



GROUND-WATER RECORDS

199

BUTLER COUNTY--Continued

392939084231700. Local number, BU-3.

LOCATION.--Lat 39°29'39", long 84°23'17", Hydrologic Unit 05080002, Armco Steel Corp. Rt. 122 in Middletown.

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.

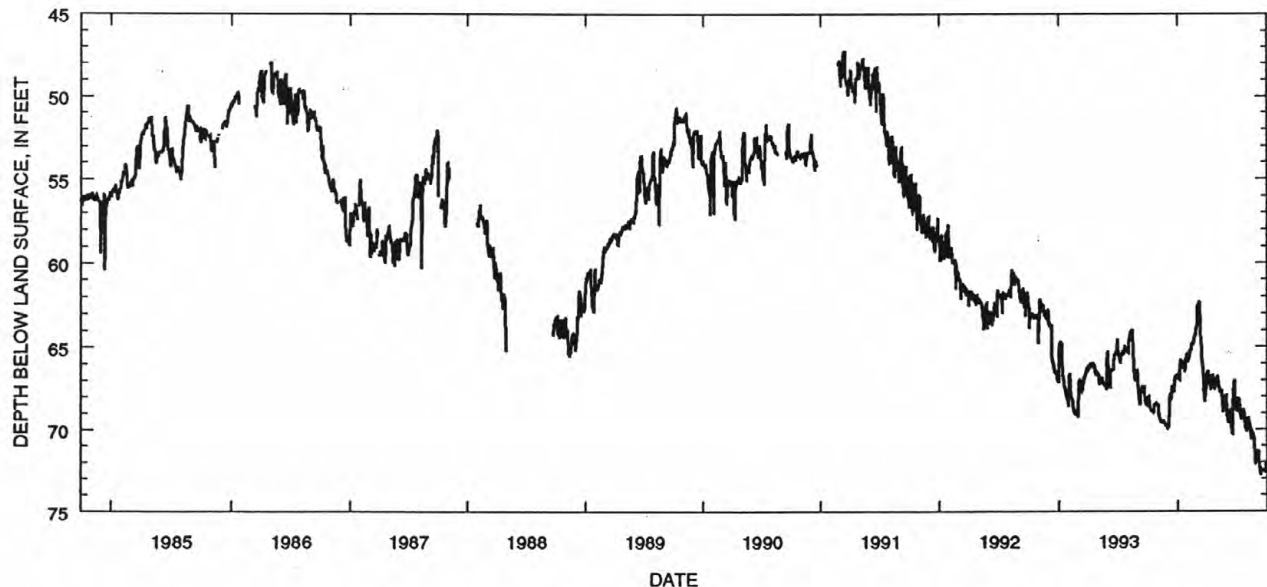
PERIOD OF RECORD.--July 1938 to current year.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67.98	68.61	69.88	66.78	65.84	62.76	66.53	66.75	69.37	68.81	69.96	71.32
2	68.02	69.05	69.79	66.99	65.74	62.51	66.44	66.88	69.41	68.72	69.29	71.34
3	67.97	69.08	69.89	66.91	65.73	62.60	66.53	67.04	69.48	68.71	69.35	71.35
4	67.93	69.09	69.66	66.94	65.50	62.53	66.83	67.14	69.53	68.62	69.42	71.36
5	68.52	69.23	68.76	66.99	65.40	62.52	66.80	67.21	69.57	68.20	69.56	71.93
6	68.59	69.40	68.20	66.87	65.38	62.40	67.07	67.41	69.63	68.24	69.61	72.17
7	68.68	69.45	67.82	66.12	65.43	62.39	67.29	67.40	69.09	68.37	69.68	72.22
8	68.70	69.49	67.97	65.98	65.16	62.42	67.27	67.59	68.90	68.47	69.76	72.38
9	68.82	69.62	67.96	65.89	65.24	62.99	67.32	67.75	68.90	68.57	69.94	72.43
10	68.86	69.55	68.13	65.78	65.21	63.33	67.43	67.69	68.89	68.69	70.08	72.79
11	68.81	69.43	68.09	65.96	64.94	64.31	67.58	67.65	68.75	69.29	70.61	72.61
12	68.81	69.56	67.81	65.98	64.83	64.54	67.02	67.70	68.75	69.38	70.06	72.61
13	68.89	69.46	67.72	65.85	64.84	64.74	66.86	67.72	69.69	69.41	70.07	72.65
14	68.89	69.45	67.33	66.07	64.76	64.98	66.81	67.69	69.87	69.30	70.65	72.43
15	68.94	69.64	67.47	66.26	64.83	65.66	66.88	67.60	70.14	69.33	70.25	72.44
16	68.88	69.65	67.70	66.26	64.85	65.91	66.76	68.36	70.19	69.29	70.25	72.53
17	68.97	69.54	67.69	66.32	64.70	65.82	66.68	68.51	70.25	69.25	70.29	72.48
18	68.93	69.56	67.57	66.21	64.74	66.40	66.98	68.66	68.38	69.22	70.41	72.41
19	68.51	69.62	67.60	66.11	64.52	66.60	67.16	68.85	67.87	68.78	70.47	72.49
20	68.41	69.62	67.55	66.16	64.41	66.73	67.31	68.80	67.76	69.06	70.49	72.50
21	68.57	69.71	67.21	66.17	64.37	67.69	67.34	68.83	67.32	68.97	70.62	72.48
22	68.56	69.74	66.95	66.08	64.31	67.80	67.49	68.81	67.00	69.05	70.71	72.49
23	68.55	69.65	66.94	66.50	64.29	67.97	67.51	68.81	67.57	69.15	71.68	72.56
24	68.51	69.77	66.80	66.14	64.29	68.20	67.45	68.27	67.92	69.25	71.98	72.62
25	68.55	69.77	66.77	65.67	63.97	68.32	67.49	67.94	68.13	69.89	72.14	72.62
26	68.45	69.78	66.79	65.79	63.94	67.54	67.16	67.94	68.19	70.03	71.92	72.64
27	68.50	69.74	66.89	65.46	63.84	67.41	67.03	68.04	68.89	70.01	71.29	72.14
28	68.44	69.80	66.87	65.42	63.65	67.45	67.03	68.00	68.89	69.95	71.29	72.07
29	68.48	69.95	66.72	65.43	---	66.88	66.92	67.97	68.85	70.16	71.62	72.11
30	68.47	69.92	66.75	65.37	---	66.79	66.80	68.89	68.88	69.98	71.65	72.15
31	68.50	---	66.80	65.91	---	66.66	---	69.06	---	70.00	71.52	---
MAX	68.97	69.95	69.89	66.99	65.84	68.32	67.58	69.06	70.25	70.16	72.14	72.79

CAL YR 1993 LOW 69.95

WTR YR 1994 LOW 72.79



GROUND-WATER RECORDS

BUTLER COUNTY--Continued

393103084240900. Local number, BU-2

LOCATION.--Lat 39°31'03", long 84°24'09", Hydrologic Unit 05080002, in basement of YMCA in Middletown.

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.

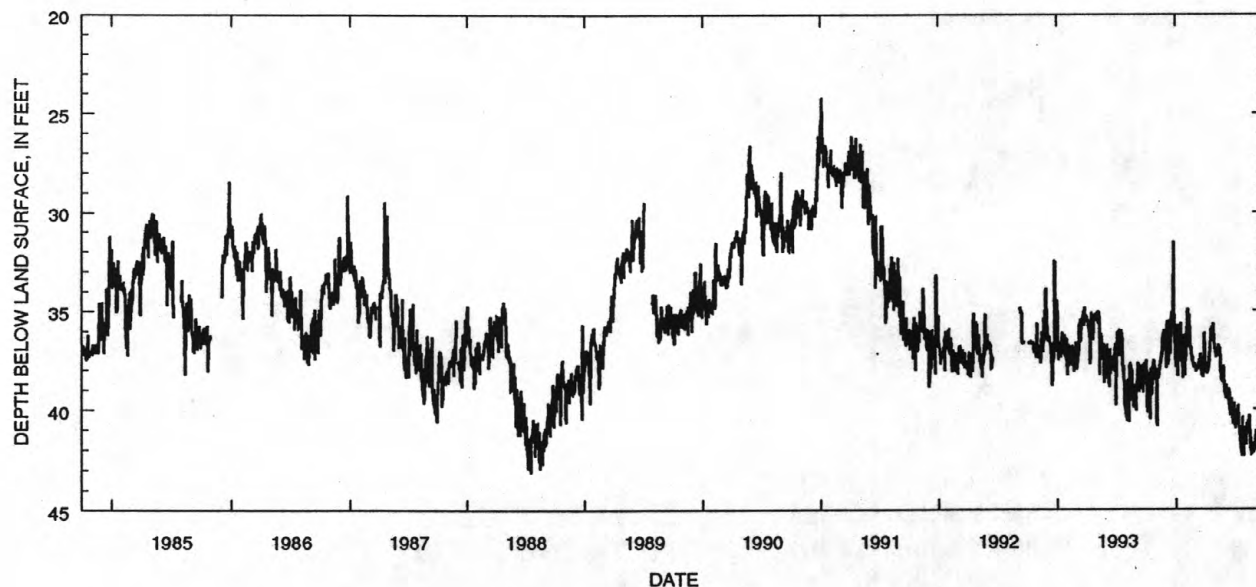
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 52.15 ft below land-surface datum, Sept. 28, Nov. 5, 1953 and Jan. 22, 1954; minimum daily low, 24.21 ft below land-surface datum, Jan. 6, 1991.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37.53	38.21	37.91	36.14	37.32	37.84	37.80	36.99	39.33	40.98	41.52	41.92
2	37.67	38.10	36.10	36.07	35.88	38.01	37.73	37.41	39.43	40.69	41.44	41.08
3	38.43	40.54	36.71	36.58	36.73	38.11	37.64	37.26	38.77	40.04	41.33	41.54
4	39.81	40.84	35.86	35.73	35.06	38.02	38.07	36.94	39.05	40.12	41.82	41.38
5	39.98	38.16	35.54	36.82	35.22	38.04	38.20	36.88	39.06	40.21	40.70	41.19
6	40.16	37.98	35.95	38.32	34.93	37.81	37.90	37.02	39.18	40.34	40.70	41.33
7	39.26	38.44	35.76	36.70	36.69	37.90	37.90	37.16	39.51	40.52	41.14	41.19
8	39.80	38.22	37.76	36.92	36.88	37.91	38.15	37.25	38.98	40.57	40.89	41.43
9	38.17	38.31	37.46	37.52	36.63	37.88	37.95	37.06	39.06	40.58	40.57	41.57
10	38.80	38.25	35.83	37.45	36.67	37.77	37.75	36.76	38.96	39.79	40.67	41.12
11	38.26	37.84	35.76	36.05	35.22	37.62	37.89	37.35	39.10	40.63	40.75	41.05
12	39.33	37.76	35.50	36.29	36.46	37.83	37.34	36.88	39.81	41.08	40.88	40.94
13	39.81	37.99	36.90	37.58	36.67	37.47	37.61	37.19	39.14	41.07	40.33	41.21
14	40.48	37.69	35.85	36.55	36.97	37.62	37.47	36.89	40.01	41.54	40.66	41.95
15	38.21	37.51	35.72	35.84	36.96	37.89	36.79	37.04	40.22	41.65	41.49	41.66
16	37.93	37.66	37.21	35.67	36.85	37.66	36.38	37.48	40.23	41.55	41.98	41.98
17	38.78	37.15	35.56	36.25	37.14	37.20	35.94	38.13	40.19	41.85	41.43	41.42
18	39.32	37.20	35.42	36.36	37.43	37.56	36.57	38.23	39.59	41.96	42.08	41.18
19	39.06	37.26	35.10	36.27	37.58	37.86	36.44	38.52	39.46	42.05	42.08	41.22
20	39.00	36.48	35.19	37.70	37.36	38.30	36.07	38.25	39.68	42.32	42.21	41.77
21	38.64	36.34	35.37	38.08	37.47	37.98	35.85	38.38	40.17	41.53	42.17	42.27
22	37.91	36.18	35.50	38.32	37.82	38.07	36.10	38.20	40.73	41.42	41.81	42.25
23	37.80	36.42	35.45	38.42	37.76	37.97	36.09	38.62	40.46	40.69	42.10	42.07
24	37.52	36.22	34.84	37.83	37.87	38.13	35.70	38.37	39.69	40.37	41.81	42.06
25	37.73	36.00	31.54	38.01	37.93	38.38	36.09	37.81	40.05	41.67	42.15	41.64
26	37.84	36.41	34.42	37.99	37.85	38.04	36.39	38.01	39.75	41.56	41.67	42.14
27	37.97	36.27	36.02	38.27	37.70	37.66	36.76	38.08	39.68	42.31	42.00	41.79
28	37.85	35.97	36.65	36.20	37.86	38.04	36.55	39.13	40.46	40.91	42.03	41.41
29	37.98	36.44	36.74	37.25	---	36.15	36.89	39.15	40.71	41.81	42.01	41.30
30	38.50	36.21	37.21	37.59	---	37.11	37.03	39.02	40.97	41.05	42.07	41.39
31	38.43	---	37.85	37.37	---	37.72	---	39.21	---	41.53	41.32	---
MAX	40.48	40.84	37.91	38.42	37.93	38.38	38.20	39.21	40.97	42.32	42.21	42.27

CAL YR 1993 LOW 40.84

WTR YR 1994 LOW 42.32



GROUND-WATER RECORDS

201

CARROLL COUNTY

403709081052800. Local number, C-1.

LOCATION.--Lat 40°37'09", long 81°05'28". Hydrologic Unit 05040001, Carrollton well field, State Route 171, 3 mi north of Carrollton.

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 1050 ft above sea level, from topographic map.

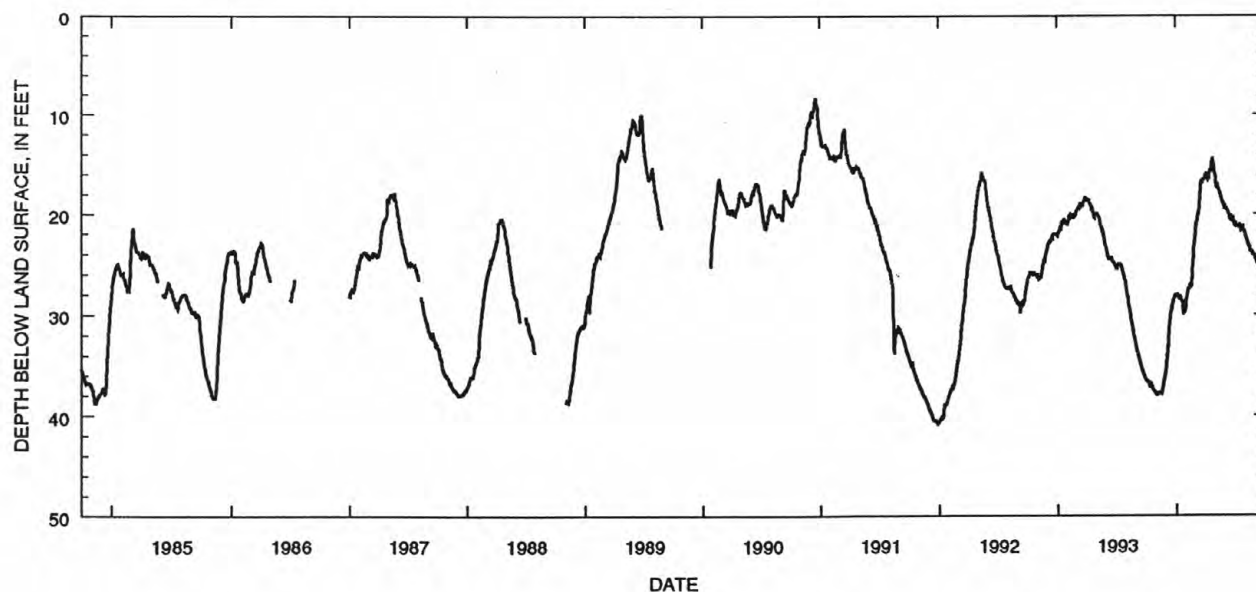
Measuring point: Top of platform 3.0 ft above land-surface datum.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36.54	38.00	35.04	27.95	28.31	21.56	16.04	16.92	19.36	20.78	22.36	24.53
2	36.58	38.02	34.67	28.08	28.15	21.17	16.08	17.08	19.51	20.91	22.43	24.60
3	36.57	37.90	34.41	27.96	28.01	20.98	16.43	17.44	19.59	21.10	22.51	24.73
4	36.64	37.89	34.00	28.09	27.83	20.75	16.33	17.08	19.51	21.16	22.50	24.83
5	36.64	37.95	33.64	28.14	27.55	20.93	16.14	17.03	19.62	21.12	22.72	24.90
6	36.64	37.90	33.31	28.01	27.51	20.59	16.26	17.17	19.57	21.12	22.83	24.91
7	36.71	37.91	32.94	28.09	27.52	20.39	16.55	17.13	19.76	21.13	22.94	24.94
8	36.79	37.87	32.22	28.21	27.26	20.18	16.54	17.41	19.90	21.14	23.05	24.94
9	36.93	37.83	31.77	28.30	27.39	19.99	16.32	17.42	20.01	21.13	23.07	25.05
10	37.01	37.81	31.16	28.26	27.33	19.99	16.60	17.56	20.06	21.24	23.20	25.15
11	37.08	37.81	31.01	28.27	27.09	19.84	16.54	17.56	20.16	21.30	23.28	25.29
12	37.18	37.82	30.65	28.21	27.00	19.46	16.02	17.74	20.38	21.13	23.30	25.32
13	37.24	37.82	30.37	28.30	27.25	18.71	15.69	17.88	20.46	21.12	23.34	25.32
14	37.14	37.75	30.01	28.40	27.22	18.57	15.69	17.91	20.55	21.21	23.64	25.37
15	36.67	37.77	29.81	28.58	27.21	18.01	15.64	18.02	20.59	21.31	23.73	25.43
16	36.90	37.69	29.77	28.60	27.15	17.56	15.72	18.23	20.56	21.47	23.73	25.47
17	37.07	37.72	29.58	28.57	26.85	17.14	15.66	18.35	20.36	21.53	23.73	25.67
18	37.16	37.70	29.30	28.75	26.09	16.64	14.80	18.41	20.33	21.62	23.81	25.86
19	37.26	37.37	29.27	28.75	25.54	16.91	15.10	18.56	20.56	21.60	23.77	25.94
20	37.29	37.34	29.06	29.27	24.95	16.92	14.95	18.70	20.51	21.50	23.79	25.92
21	37.44	37.13	28.87	29.98	24.65	16.74	14.58	18.81	20.33	21.39	23.85	25.93
22	37.46	36.89	28.77	29.98	24.27	16.93	14.40	18.88	20.33	21.33	24.03	25.96
23	37.53	36.71	28.68	29.74	23.61	16.62	14.75	18.91	20.50	21.53	24.05	26.03
24	37.54	36.51	28.49	29.71	22.96	16.44	15.05	18.94	20.59	21.61	24.04	26.13
25	37.57	36.41	28.32	29.66	22.87	16.66	15.28	19.02	20.89	21.71	24.04	26.24
26	37.63	36.17	28.31	29.78	22.72	16.55	15.57	19.17	21.04	21.73	24.03	26.34
27	37.66	36.01	28.24	29.61	22.43	16.53	15.73	19.32	21.12	21.79	24.14	26.46
28	37.75	35.79	28.14	29.34	21.98	16.52	15.80	19.27	21.21	21.92	24.20	26.53
29	37.83	35.71	28.01	29.32	---	16.52	16.05	19.35	20.93	21.99	24.31	26.58
30	37.84	35.49	28.13	29.11	---	16.37	16.24	19.44	20.79	22.12	24.39	26.65
31	37.93	---	28.06	28.69	---	16.14	---	19.38	---	22.27	24.44	---
MAX	37.93	38.02	35.04	29.98	28.31	21.56	16.60	19.44	21.21	22.27	24.44	26.65

CAL YR 1993 LOW 38.02
WTR YR 1994 LOW 38.02

GROUND-WATER RECORDS

CHAMPAIGN COUNTY

400638083453900. Local number, CH-3.

LOCATION.--Lat 40°06'38", long 83°45'39", Hydrologic Unit 05080001, in Urbana.

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 1030 ft above sea level, from topographic map.

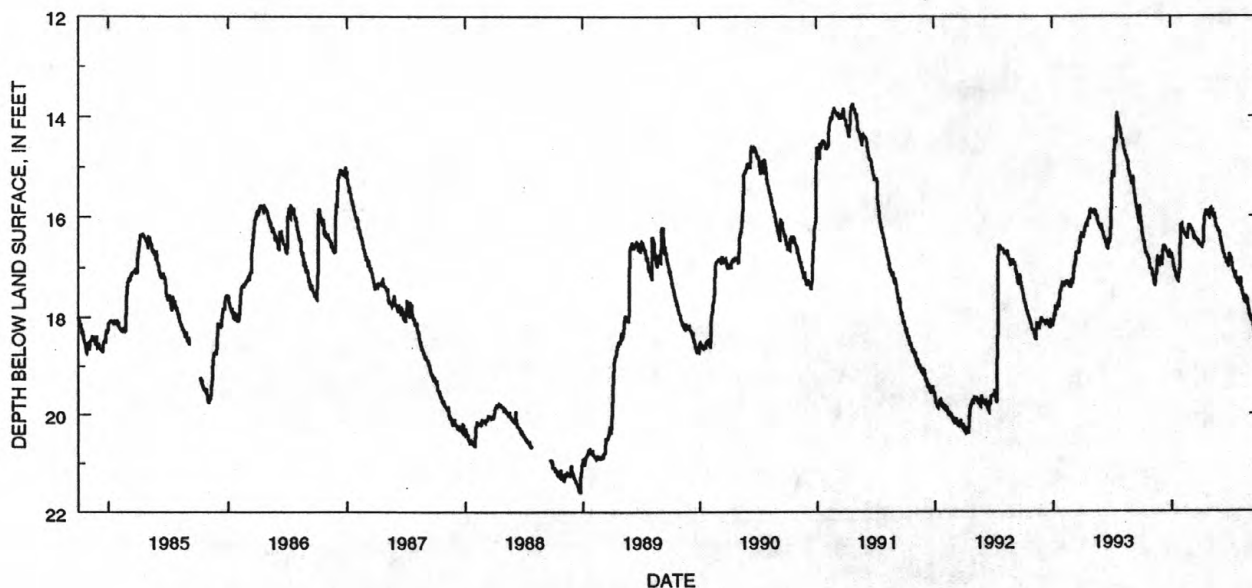
Measuring point: Floor of instrument shelter 4.50 ft above land-surface datum.

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, 12.45 ft below land-surface datum, Mar. 24, 1975.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.12	17.05	16.95	16.80	16.18	16.21	16.58	15.86	16.43	16.90	17.28	18.09
2	16.19	17.04	16.96	16.74	16.16	16.23	16.60	15.85	16.47	16.84	17.40	18.10
3	16.22	17.05	16.97	16.78	16.21	16.24	16.53	15.86	16.50	16.81	17.45	18.12
4	16.31	17.12	16.97	16.83	16.25	16.24	16.59	15.90	16.54	16.82	17.48	18.07
5	16.38	17.17	16.76	16.88	16.24	16.24	16.61	15.91	16.57	16.86	17.52	18.07
6	16.40	17.20	16.69	16.90	16.27	16.27	16.59	15.92	16.60	16.98	17.55	18.17
7	16.43	17.24	16.63	16.94	16.28	16.29	16.57	15.92	16.63	17.03	17.57	18.20
8	16.47	17.28	16.60	16.97	16.32	16.30	16.56	15.91	16.67	17.05	17.60	18.23
9	16.50	17.31	16.59	17.01	16.32	16.31	16.54	15.92	16.70	17.07	17.63	18.28
10	16.53	17.36	16.58	17.03	16.33	16.33	16.52	15.99	16.73	17.10	17.66	18.30
11	16.59	17.36	16.62	17.07	16.36	16.39	16.38	16.00	16.77	17.13	17.68	18.33
12	16.60	17.38	16.62	17.09	16.37	16.46	16.25	15.97	16.75	17.15	17.70	18.35
13	16.65	17.39	16.63	17.12	16.39	16.45	16.11	15.99	16.79	17.18	17.72	18.41
14	16.69	17.26	16.63	17.15	16.40	16.41	16.03	15.98	16.84	17.21	17.64	18.43
15	16.72	17.10	16.66	17.17	16.40	16.41	15.98	16.00	16.85	17.24	17.59	18.46
16	16.74	17.13	16.68	17.22	16.39	16.43	15.93	16.08	16.85	17.26	17.62	18.48
17	16.74	17.13	16.71	17.23	16.41	16.45	15.91	16.13	16.88	17.10	17.63	18.50
18	16.77	16.91	16.72	17.24	16.41	16.47	15.88	16.17	16.90	17.17	17.65	18.46
19	16.78	16.84	16.73	17.26	16.44	16.46	15.87	16.20	16.89	17.26	17.67	18.54
20	16.78	16.83	16.75	17.28	16.43	16.47	15.91	16.21	16.91	17.29	17.68	18.55
21	16.78	16.87	16.77	17.29	16.34	16.46	15.93	16.22	16.91	17.31	17.68	18.59
22	16.80	16.90	16.80	17.25	16.31	16.48	15.95	16.23	16.99	17.30	17.78	18.60
23	16.84	16.93	16.81	17.23	16.27	16.48	15.94	16.23	17.01	17.30	17.82	18.63
24	16.86	16.98	16.83	17.22	16.19	16.48	15.90	16.25	16.96	17.33	17.86	18.64
25	16.92	17.01	16.74	17.23	16.17	16.51	15.88	16.28	17.00	17.29	17.91	18.65
26	16.97	16.94	16.67	17.06	16.17	16.52	15.93	16.29	17.02	17.33	17.94	18.66
27	17.00	16.88	16.75	17.04	16.17	16.54	16.00	16.31	16.75	17.36	17.99	18.69
28	17.03	16.80	16.79	16.77	16.20	16.57	16.02	16.33	16.79	17.40	18.00	18.71
29	17.04	16.89	16.82	16.35	---	16.56	16.03	16.31	16.83	17.42	18.02	18.74
30	17.04	16.92	16.85	16.21	---	16.56	15.97	16.32	16.88	17.35	18.04	18.77
31	17.04	---	---	16.18	---	16.56	---	16.40	---	17.22	18.07	---
MAX	17.04	17.39	16.97	17.29	16.44	16.57	16.61	16.40	17.02	17.42	18.07	18.77
CAL YR 1993	LOW 18.16											
WTR YR 1994	LOW 18.77											



GROUND-WATER RECORDS

203

CLARK COUNTY

395639084012200. Local number, CL-9.

LOCATION.--Lat 39°56'39", long 84°01'22", Hydrologic Unit 05080001, at north edge of New Carlisle.

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, 31.25 ft below land-surface datum, July 13, 1977;

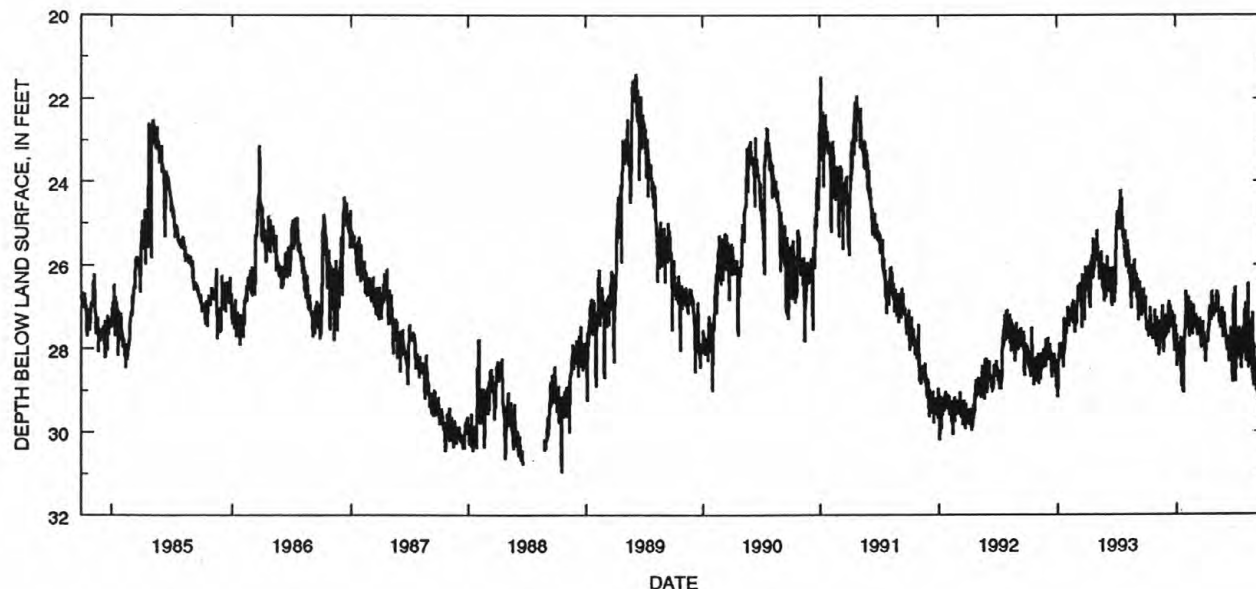
minimum daily low, 18.20 ft below land-surface datum, July 4, 1980.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.41	27.70	27.64	27.76	27.18	27.20	27.80	27.16	27.76	27.54	28.08	29.04
2	27.57	27.25	27.63	28.43	27.01	27.32	27.79	26.72	27.83	28.07	28.09	28.93
3	27.40	27.74	27.53	27.68	27.31	27.39	27.78	27.03	28.06	28.05	27.36	28.24
4	27.42	27.91	27.54	28.06	27.18	27.70	27.86	26.64	28.05	27.89	28.29	29.14
5	27.39	27.50	27.47	28.00	26.94	27.29	27.80	26.69	28.06	28.27	28.24	29.14
6	27.45	27.71	27.60	28.10	26.76	27.44	27.87	27.16	28.05	27.93	28.20	28.86
7	27.74	28.12	26.98	28.17	27.28	27.46	27.81	26.73	27.71	27.72	28.48	29.13
8	27.39	28.17	27.65	28.29	27.29	27.32	27.77	26.76	28.02	27.83	26.46	29.24
9	27.45	27.93	26.87	28.20	27.73	27.34	27.43	27.09	28.14	27.59	28.19	29.27
10	27.60	27.34	26.97	28.33	27.05	27.64	27.47	27.12	28.32	28.12	28.08	28.38
11	27.51	27.57	27.11	28.26	27.35	27.36	27.20	27.39	28.23	27.52	28.13	29.28
12	27.46	27.88	27.00	28.05	26.89	27.35	27.17	27.32	28.19	28.11	28.06	28.89
13	27.02	27.50	27.24	27.75	27.15	27.47	26.99	27.13	28.33	27.95	28.25	29.39
14	27.65	27.66	26.99	28.15	26.96	27.35	27.10	27.15	28.31	27.68	27.33	29.36
15	27.20	27.87	27.26	28.30	27.03	27.55	27.03	27.51	27.52	28.29	28.37	28.62
16	27.72	27.66	27.53	28.80	27.29	27.95	27.11	27.10	27.53	27.68	27.74	29.23
17	27.55	27.13	27.39	28.91	27.33	27.73	27.35	27.49	28.17	28.38	28.41	29.43
18	27.80	27.30	27.12	28.59	27.68	27.99	27.00	27.37	28.18	28.48	27.72	28.27
19	27.62	26.98	27.19	28.87	26.98	27.77	26.91	27.26	28.01	28.05	28.61	29.62
20	27.43	27.23	27.43	29.03	26.95	27.88	26.65	27.03	28.53	27.57	28.16	28.99
21	27.56	27.26	27.43	29.07	27.53	27.73	26.99	27.23	28.82	28.15	27.16	27.66
22	27.66	28.10	27.50	28.31	27.41	27.57	26.77	27.71	28.67	27.92	28.78	29.21
23	27.62	27.93	27.41	28.38	27.00	27.38	27.09	27.75	28.39	27.92	28.14	28.83
24	27.76	27.67	27.83	27.99	27.47	27.93	27.26	27.23	26.98	27.49	28.91	27.74
25	27.58	27.66	27.22	27.76	27.34	27.92	27.13	27.40	26.90	27.93	27.91	29.23
26	27.63	27.44	28.08	27.77	27.30	27.68	27.13	27.15	26.70	27.10	28.34	28.88
27	27.08	27.35	27.56	27.41	27.22	27.64	27.02	27.29	28.31	28.01	28.40	29.64
28	27.70	27.64	28.02	27.35	27.42	27.95	27.08	27.56	28.80	27.72	28.74	29.43
29	27.67	27.21	27.92	27.13	---	28.06	27.16	27.44	26.55	28.03	28.27	29.43
30	27.76	27.77	27.46	26.63	---	28.10	27.14	27.72	28.49	26.93	28.74	29.04
31	27.96	---	27.98	27.34	---	28.32	---	27.64	---	28.33	28.44	---
MAX	27.96	28.17	28.08	29.07	27.73	28.32	27.87	27.75	28.82	28.48	28.91	29.64

CAL YR 1993 LOW 29.17

WTR YR 1994 LOW 29.64



GROUND-WATER RECORDS

CLARK COUNTY--Continued

395840083495200. Local number, CL-7.

LOCATION.--Lat 39°58'40", long 83°49'52", Hydrologic Unit 05080001. Eagle City Road northwest of Springfield.

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.

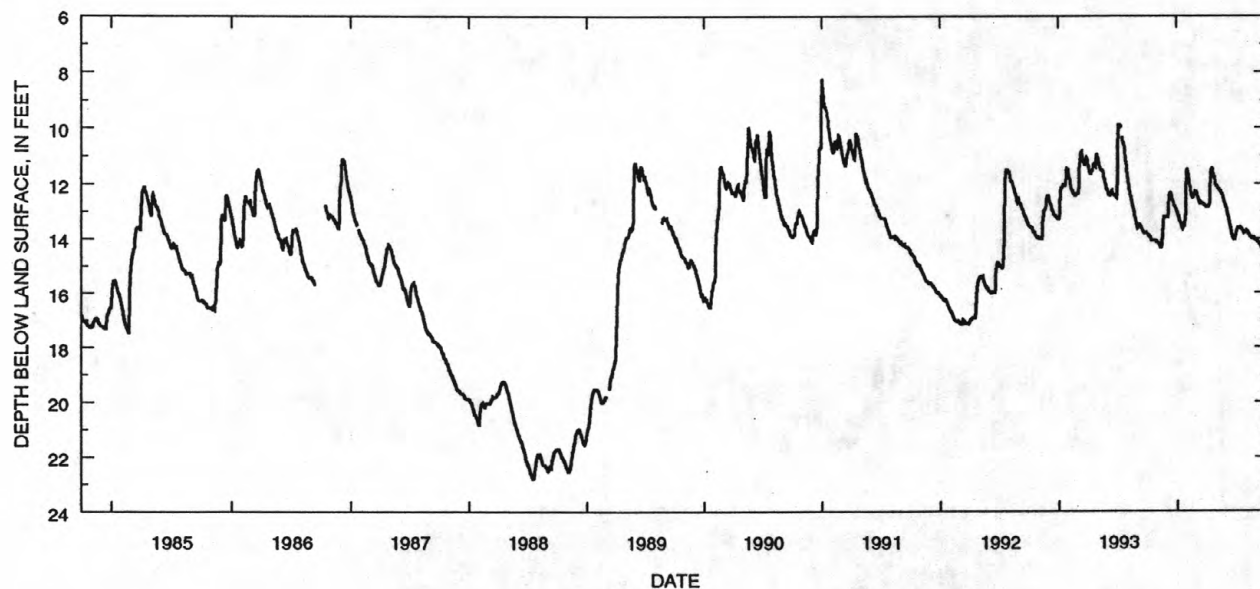
Measuring point: Floor of instrument shelter 2.00 ft above land-surface datum.

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, 8.24 ft below land-surface datum, Jan. 2, 1991.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.84	14.16	13.25	13.04	11.52	12.31	12.86	12.06	12.95	13.74	13.77	14.12
2	13.85	14.18	13.26	13.08	11.59	12.38	12.86	12.08	13.02	13.71	13.75	14.14
3	13.85	14.18	13.27	13.09	11.64	12.41	12.85	12.09	13.07	13.68	13.78	14.15
4	13.85	14.18	13.22	13.18	11.70	12.49	12.84	12.13	13.14	13.65	13.80	14.15
5	13.88	14.20	13.12	13.20	11.78	12.51	12.82	12.15	13.17	13.60	13.82	14.13
6	13.91	14.22	12.79	13.23	11.87	12.54	12.85	12.19	13.22	13.60	13.83	14.15
7	13.92	14.24	12.56	13.29	11.88	12.58	12.85	12.19	13.29	13.63	13.85	14.17
8	13.93	14.26	12.43	13.33	12.00	12.60	12.83	12.19	13.36	13.65	13.87	14.19
9	13.96	14.28	12.36	13.37	12.06	12.64	12.76	12.22	13.42	13.65	13.91	14.22
10	13.96	14.31	12.31	13.40	12.17	12.71	12.70	12.25	13.47	13.63	13.92	14.24
11	13.96	14.33	12.35	13.43	12.23	12.75	12.50	12.25	13.55	13.62	13.94	14.24
12	13.98	14.36	12.35	13.45	12.34	12.75	12.16	12.27	13.59	13.63	13.96	14.26
13	14.02	14.37	12.39	13.48	12.41	12.75	11.80	12.29	13.63	13.64	13.96	14.29
14	14.06	14.34	12.39	13.52	12.47	12.71	11.60	12.30	13.69	13.66	13.97	14.31
15	14.10	14.23	12.48	13.58	12.50	12.67	11.50	12.33	13.77	13.67	13.98	14.35
16	14.10	14.10	12.56	13.59	12.51	12.69	11.46	12.36	13.83	13.68	14.00	14.38
17	14.10	13.97	12.59	13.61	12.51	12.69	11.46	12.37	13.87	13.71	14.00	14.41
18	14.10	13.83	12.61	13.65	12.50	12.73	11.48	12.38	13.93	13.71	14.02	14.41
19	14.10	13.52	12.65	13.62	12.50	12.73	11.55	12.41	13.96	13.71	14.03	14.41
20	14.10	13.36	12.66	13.59	12.47	12.73	11.61	12.47	14.00	13.75	14.04	14.44
21	14.07	13.29	12.73	13.51	12.44	12.75	11.65	12.53	14.02	13.76	14.00	14.47
22	14.08	13.22	12.76	13.53	12.40	12.75	11.70	12.56	14.04	13.78	13.97	14.49
23	14.08	13.21	12.81	13.56	12.36	12.76	11.74	12.61	14.06	13.79	13.97	14.51
24	14.08	13.23	12.81	13.56	12.36	12.79	11.77	12.65	14.06	13.79	13.97	14.53
25	14.09	13.25	12.83	13.44	12.31	12.81	11.84	12.67	14.05	13.77	14.00	14.54
26	14.11	13.26	12.86	13.33	12.32	12.81	11.91	12.73	14.03	13.75	14.05	14.52
27	14.13	13.26	12.90	13.00	12.32	12.79	11.99	12.77	13.92	13.79	14.08	14.55
28	14.13	13.22	12.92	12.14	12.31	12.82	12.03	12.80	13.86	13.82	14.08	14.56
29	14.15	13.21	12.95	11.77	---	12.85	12.07	12.84	13.79	13.82	14.08	14.59
30	14.15	13.23	12.99	11.61	---	12.86	12.08	12.86	13.75	13.79	14.08	14.63
31	14.12	---	13.03	11.54	---	12.86	---	12.89	---	13.77	14.10	---
MAX	14.15	14.37	13.27	13.65	12.51	12.86	12.86	12.89	14.06	13.82	14.10	14.63
CAL YR 1993	LOW 14.37											
WTR YR 1994	LOW 14.63											



GROUND-WATER RECORDS

205

COSHOCTON COUNTY

401256081525100. Local number, CS-3.

LOCATION.--Lat 40°12'56", long 81°52'51", Hydrologic Unit 05040004, 1.5 mi north of Conesville.

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.

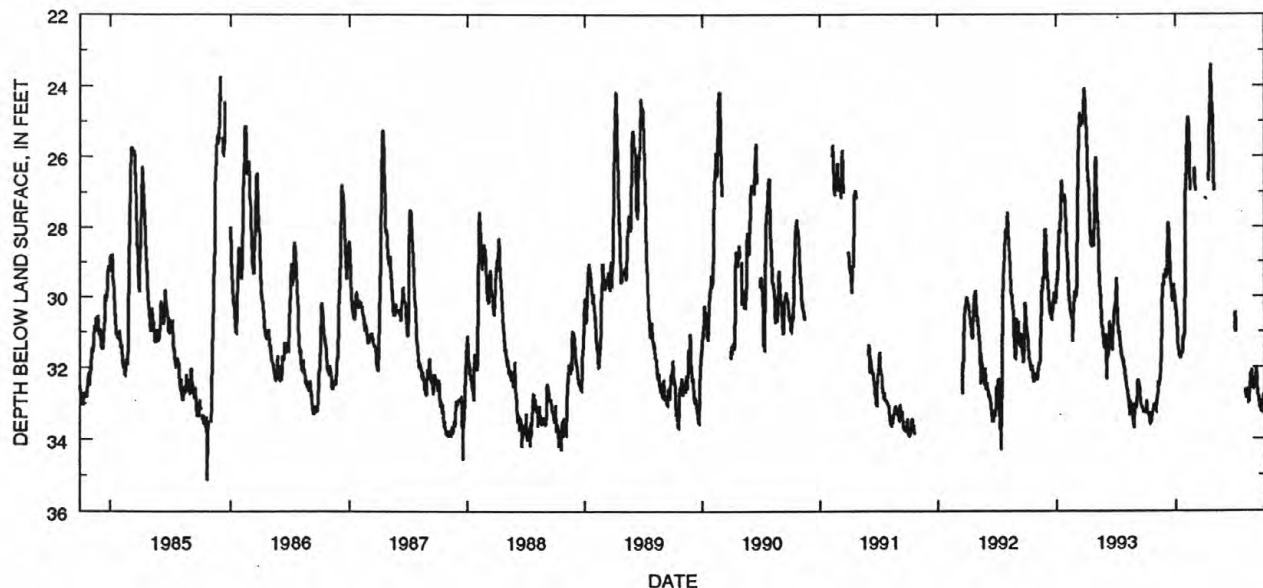
Measuring point: Floor of instrument shelter 2.80 ft above land-surface datum.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33.30	33.23	29.23	30.34	26.68	26.73	27.21	---	---	30.68	32.60	32.55
2	33.29	33.22	29.36	30.43	26.32	26.96	27.20	---	---	30.46	32.75	32.47
3	33.17	33.11	29.48	30.46	25.82	26.98	---	---	---	30.79	32.82	32.24
4	32.93	32.97	29.48	30.75	25.54	---	---	---	---	31.01	32.86	32.15
5	33.13	32.90	29.39	31.02	25.31	---	---	---	---	---	32.85	32.00
6	33.22	32.83	28.81	31.21	24.94	---	---	---	---	---	32.82	32.30
7	33.28	32.67	28.39	31.34	24.87	---	---	---	---	---	32.60	32.50
8	33.33	32.39	27.98	31.45	24.89	---	---	---	---	---	32.61	32.67
9	33.33	32.41	27.88	31.45	25.03	---	---	---	---	---	32.75	32.77
10	33.31	32.49	27.97	31.58	25.12	---	---	---	---	---	32.83	32.81
11	33.38	32.49	28.11	31.66	25.41	---	---	---	---	---	32.92	32.80
12	33.41	32.49	28.28	31.69	25.82	---	26.71	---	---	---	32.96	32.83
13	33.47	32.46	28.59	31.73	26.35	---	26.22	---	---	---	32.95	32.94
14	33.52	32.29	28.82	31.74	26.97	---	25.46	---	---	---	32.77	33.03
15	33.56	32.09	29.21	31.74	---	---	24.76	---	---	---	32.66	33.08
16	33.57	31.92	29.54	31.71	---	---	24.27	---	---	---	32.52	33.14
17	33.52	31.77	29.71	31.67	---	---	23.74	---	---	---	32.31	33.14
18	33.46	31.52	29.73	31.62	---	---	23.39	---	---	---	32.17	33.12
19	33.44	30.86	29.69	31.60	---	---	23.49	---	---	---	32.19	33.22
20	33.39	30.26	29.97	31.59	---	---	23.77	---	---	---	32.19	33.24
21	33.34	29.80	30.15	31.51	---	---	24.11	---	---	---	32.08	33.16
22	33.30	29.62	30.15	31.36	---	---	24.39	---	---	---	32.25	32.95
23	33.21	29.68	29.89	31.20	---	---	24.61	---	---	---	32.32	32.94
24	33.10	29.74	29.73	31.22	---	---	25.02	---	---	---	32.44	32.94
25	33.02	29.67	29.71	31.22	---	---	25.45	---	---	---	32.53	32.90
26	33.07	29.37	29.79	31.16	26.73	---	25.81	---	---	---	32.61	32.82
27	33.13	29.45	29.87	31.01	26.32	---	26.23	---	---	---	32.61	32.79
28	33.15	29.44	29.92	30.67	26.50	---	26.59	---	---	---	32.41	32.78
29	33.21	29.33	30.00	29.42	---	---	26.97	---	---	---	32.57	32.78
30	33.22	29.31	30.15	28.03	---	---	---	---	30.99	---	32.57	32.77
31	33.22	---	30.27	27.27	---	---	---	---	---	---	32.53	---
MAX	33.57	33.23	30.27	31.74	26.97	26.98	27.21	---	30.99	31.01	32.96	33.24
CAL YR 1993 LOW 33.69												
WTR YR 1994 LOW 33.57												



GROUND-WATER RECORDS

COSHOCTON COUNTY--Continued

401735081523800. Local number, CS-2.

LOCATION.--Lat 40°17'35", long 81°52'38", Hydrologic Unit 05040003, 1.7 mi northwest of courthouse in Coshocton.

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.

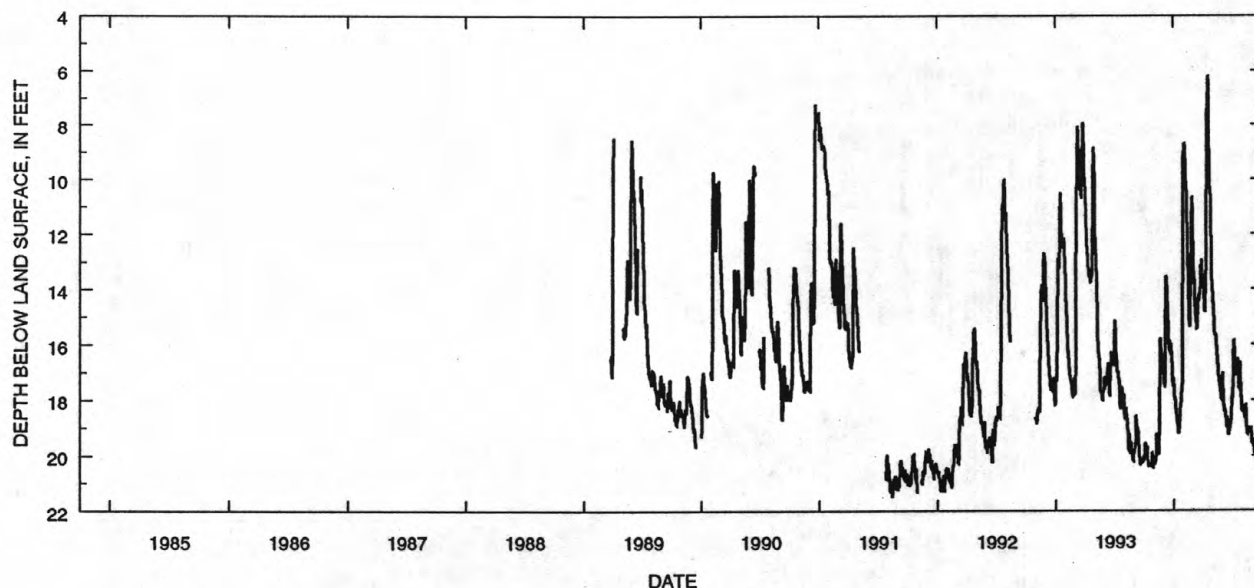
Measuring point: Floor of instrument shelter 8.50 ft above land-surface datum.

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, 21.47 ft below land-surface datum, Aug. 15, 1991;
minimum daily low, 0.43 ft, Feb. 21, 1951.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.13	20.04	17.18	17.29	9.06	11.96	13.92	14.44	17.86	16.91	18.37	19.64
2	20.13	20.10	17.36	17.64	8.89	12.59	13.94	14.58	18.11	16.54	18.41	19.80
3	19.96	20.23	17.55	17.84	8.67	13.15	13.96	14.85	18.27	15.89	18.22	19.85
4	19.54	20.34	17.57	17.96	8.86	13.62	14.15	15.11	18.39	15.83	18.51	19.81
5	19.58	20.34	17.35	18.06	9.15	13.75	14.53	15.33	18.40	16.39	18.63	19.40
6	19.63	20.10	15.46	18.14	9.38	13.74	14.79	15.52	18.32	16.68	18.64	19.75
7	19.81	19.96	14.04	18.23	9.48	14.45	14.83	15.65	18.48	16.87	18.62	19.94
8	19.97	19.22	13.51	18.42	9.93	14.87	14.49	15.65	18.54	17.03	18.16	20.06
9	20.02	19.51	13.62	18.52	10.30	14.97	13.79	15.63	18.72	17.13	18.49	20.14
10	19.90	19.90	13.77	18.59	10.56	15.05	12.84	15.75	18.95	17.13	18.85	20.16
11	19.65	19.87	14.02	18.74	11.10	15.14	12.27	15.95	18.98	16.81	19.15	20.13
12	20.07	19.49	14.30	18.89	12.13	15.30	11.02	16.15	18.94	16.93	19.21	20.16
13	20.28	19.87	14.64	19.02	13.00	15.40	9.76	16.33	18.61	16.97	19.24	20.32
14	20.36	19.94	14.95	19.12	13.48	15.39	7.78	16.47	18.88	16.51	19.24	20.23
15	20.42	19.93	15.34	19.19	14.13	15.14	7.05	16.59	19.11	16.74	18.98	19.98
16	20.42	19.60	15.81	19.20	14.62	14.73	6.61	16.86	19.25	17.13	19.12	20.19
17	20.27	19.00	16.21	19.16	14.99	14.40	6.20	17.07	19.24	17.35	19.19	20.31
18	20.37	18.43	16.27	18.96	15.27	14.21	6.52	17.20	19.19	17.55	19.11	20.28
19	20.38	16.65	15.85	18.62	15.36	14.40	7.33	17.30	19.12	17.59	19.00	20.05
20	20.37	15.82	15.90	18.32	15.31	14.40	8.34	17.40	19.09	17.14	19.06	19.88
21	20.36	15.79	16.38	18.26	14.78	14.21	9.44	17.48	18.97	16.67	19.10	19.96
22	20.32	16.14	16.29	18.22	13.76	14.20	10.27	17.55	18.84	16.64	19.10	20.12
23	20.35	16.19	15.97	18.17	13.02	14.10	10.35	17.62	18.78	16.69	19.07	20.14
24	20.25	16.26	16.30	18.03	12.44	13.83	10.79	17.81	18.76	17.08	19.07	20.01
25	19.87	16.41	16.30	17.82	11.57	13.12	11.78	17.95	18.71	17.68	19.25	19.97
26	20.06	16.57	16.37	17.62	10.83	13.31	12.40	17.97	18.60	18.15	19.51	20.09
27	20.30	16.72	16.92	17.29	10.66	13.34	12.96	17.96	17.90	18.31	19.56	20.13
28	20.40	16.72	17.23	17.01	11.19	12.95	13.48	17.95	17.90	18.41	19.57	20.19
29	20.40	16.69	17.42	10.60	---	13.36	13.91	17.34	17.69	18.41	19.57	20.26
30	20.47	16.97	17.50	9.27	---	13.60	14.27	17.03	17.48	18.38	19.57	20.30
31	20.13	---	17.20	9.18	---	13.81	---	17.38	---	18.26	19.60	---
MAX	20.47	20.34	17.57	19.20	15.36	15.40	14.83	17.97	19.25	18.41	19.60	20.32

CAL YR 1993 LOW 20.47
WTR YR 1994 LOW 20.47

GROUND-WATER RECORDS

207

DARKE COUNTY

400514084345700. Local number, D-2.

LOCATION.--Lat 40°05'14", long 84°34'57", Hydrologic Unit 05080001, State Route 571, 3 mi east of Greenville.

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 1038 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.

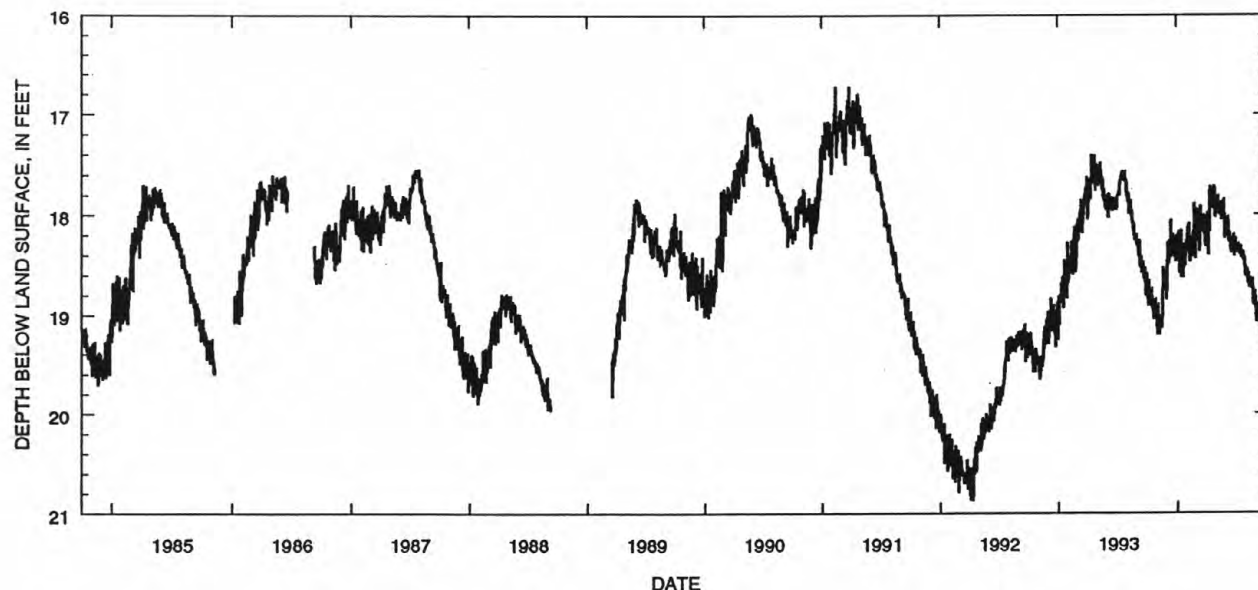
PERIOD OF RECORD.--August 1977 to current year.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.58	19.20	18.67	18.20	18.25	18.09	18.02	17.98	18.10	18.35	18.54	19.08
2	18.76	19.17	18.46	18.32	18.13	17.94	18.02	17.99	18.20	18.36	18.54	19.03
3	18.76	18.92	18.51	18.23	18.32	18.02	18.15	17.90	18.21	18.37	18.58	18.98
4	18.79	18.91	18.27	18.33	18.22	18.12	18.15	17.82	18.09	18.34	18.55	18.95
5	18.91	19.02	18.41	18.44	18.11	18.22	17.98	17.84	18.09	18.33	18.69	18.89
6	18.84	19.13	18.45	18.16	18.20	18.15	18.22	17.88	18.02	18.30	18.69	18.94
7	18.72	19.20	18.48	18.34	18.38	18.15	18.40	17.81	18.10	18.28	18.58	19.03
8	18.65	19.17	18.31	18.48	18.08	18.24	18.31	17.95	18.27	18.28	18.65	18.99
9	18.87	19.15	18.25	18.58	18.47	18.18	17.97	17.90	18.24	18.34	18.73	18.98
10	18.91	19.08	18.26	18.53	18.46	18.22	18.14	18.01	18.20	18.39	18.71	19.08
11	18.82	19.01	18.43	18.35	18.24	18.37	18.16	17.96	18.17	18.35	18.67	19.09
12	18.79	19.11	18.36	18.27	18.22	18.27	17.81	17.98	18.21	18.32	18.66	19.08
13	18.91	19.05	18.21	18.15	18.37	17.98	17.72	17.96	18.23	18.34	18.65	19.02
14	18.86	19.05	18.05	18.34	18.32	17.91	17.73	17.88	18.30	18.31	18.71	19.02
15	18.88	19.14	18.33	18.62	18.38	18.02	17.76	17.87	18.38	18.40	18.74	19.06
16	18.73	19.14	18.42	18.62	18.42	18.10	17.84	18.02	18.35	18.43	18.72	19.04
17	18.91	18.91	18.41	18.38	18.25	18.09	17.89	18.05	18.27	18.35	18.71	19.09
18	18.95	18.94	18.22	18.62	18.24	18.11	17.86	17.99	18.26	18.37	18.74	19.18
19	18.90	18.53	18.26	18.62	18.19	18.17	17.85	18.00	18.31	18.40	18.71	19.19
20	18.88	18.72	18.19	18.54	18.16	18.05	17.94	17.99	18.29	18.40	18.64	19.16
21	19.05	18.74	18.23	18.53	18.25	18.15	17.86	17.99	18.27	18.37	18.82	19.11
22	19.05	18.75	18.22	18.37	18.25	18.17	17.87	17.99	18.30	18.39	18.89	19.08
23	18.95	18.68	18.37	18.29	17.89	18.00	17.86	17.95	18.23	18.46	18.91	19.11
24	18.86	18.70	18.33	18.42	18.24	18.15	17.71	17.88	18.19	18.44	18.86	19.15
25	18.89	18.71	18.32	18.39	18.25	18.19	17.72	17.84	18.41	18.42	18.86	19.14
26	18.85	18.56	18.39	18.51	18.44	18.14	17.76	18.14	18.36	18.45	18.83	19.10
27	18.89	18.60	18.47	18.32	18.35	18.02	18.01	18.23	18.37	18.47	18.85	19.21
28	18.84	18.57	18.46	18.32	18.17	18.09	18.02	18.12	18.34	18.56	18.76	19.27
29	19.01	18.76	18.46	18.35	---	18.31	18.02	18.07	18.23	18.60	18.89	19.30
30	19.01	18.85	18.43	18.34	---	18.31	17.93	18.07	18.36	18.62	18.90	19.29
31	19.05	---	18.29	18.26	---	18.12	---	18.08	---	18.62	18.98	---
MAX	19.05	19.20	18.67	18.62	18.47	18.37	18.40	18.23	18.41	18.62	18.98	19.30
CAL YR 1993	LOW 19.25											
WTR YR 1994	LOW 19.30											



GROUND-WATER RECORDS

DELAWARE COUNTY

402126083040400. Local number, DL-3.

LOCATION.--Lat 40°21'26", long 83°04'04", Hydrologic Unit 05060001, east bank of Olen tangy 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.

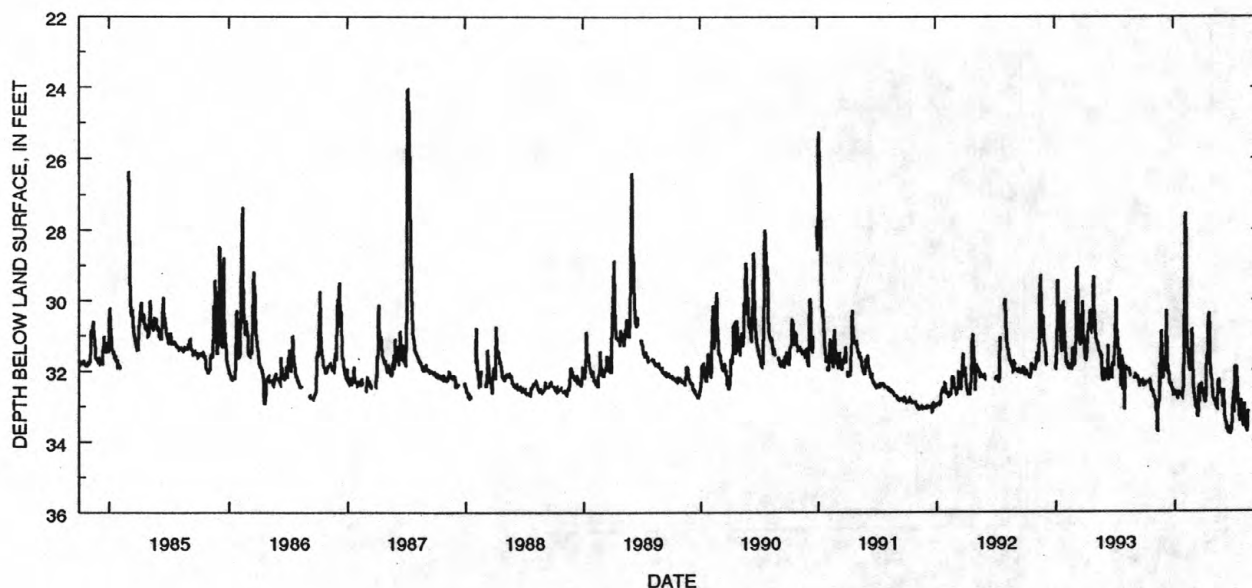
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32.32	32.84	31.81	32.58	30.21	32.66	32.85	32.88	32.99	32.47	32.97	32.96
2	32.36	32.84	32.02	32.58	28.53	32.67	32.87	32.90	33.29	33.21	33.03	33.01
3	32.36	32.83	32.06	32.59	27.75	32.78	32.93	32.82	33.37	32.70	33.34	33.01
4	32.35	32.85	32.03	32.67	27.56	32.90	32.93	32.88	33.42	31.93	33.48	33.01
5	32.38	33.13	31.57	32.73	27.70	33.03	32.86	32.95	33.45	31.90	33.61	32.99
6	32.38	33.17	31.50	32.73	28.25	33.07	32.85	33.01	33.47	32.50	33.63	32.98
7	32.35	33.18	30.32	32.69	29.60	33.10	32.67	33.02	33.51	32.87	33.64	32.99
8	32.32	33.67	30.95	32.73	30.58	33.09	32.03	33.08	33.63	32.87	33.66	33.00
9	32.32	33.75	31.18	32.78	31.25	33.09	31.66	33.07	33.61	32.20	33.72	32.99
10	32.37	33.07	31.70	32.81	31.55	33.10	31.52	33.09	33.66	31.91	33.75	33.01
11	32.35	33.05	31.98	32.59	31.55	33.29	31.84	33.02	33.70	32.50	33.55	33.03
12	32.30	33.05	32.09	32.60	31.61	33.33	31.76	32.44	33.75	32.82	33.21	33.03
13	32.36	32.97	32.10	32.59	31.82	33.25	31.32	32.35	33.75	32.91	33.14	33.02
14	32.36	32.91	32.02	32.58	31.87	33.16	30.79	32.32	33.79	33.15	---	33.01
15	32.36	32.80	32.18	32.67	31.98	32.50	30.54	32.25	33.75	33.27	---	33.01
16	32.33	31.80	32.36	32.68	32.03	32.41	30.38	32.34	33.60	33.34	---	33.05
17	32.28	32.45	32.37	32.68	31.98	32.90	30.44	32.49	33.64	33.39	---	33.21
18	32.33	32.44	32.38	32.67	31.97	32.88	30.90	32.54	33.67	33.46	---	33.50
19	32.34	31.82	32.43	32.69	31.72	32.60	31.53	32.56	33.77	33.18	---	33.68
20	32.38	31.67	32.43	32.70	31.59	32.49	31.81	32.57	33.81	32.91	---	33.73
21	32.53	31.10	32.41	32.70	31.43	32.47	31.97	32.66	33.73	32.88	---	33.75
22	32.56	30.90	32.45	32.71	31.34	32.42	32.11	32.66	33.64	32.84	---	33.76
23	32.58	31.60	32.52	32.71	30.85	32.37	32.16	32.66	33.70	33.02	---	33.80
24	32.57	31.96	32.50	32.75	31.13	32.42	32.32	32.67	33.66	33.10	---	33.81
25	32.57	32.23	32.50	32.75	31.73	32.65	32.47	32.66	33.36	33.22	---	33.82
26	32.58	32.25	32.55	32.54	32.27	32.65	32.57	32.83	33.05	33.47	---	33.81
27	32.63	32.25	32.66	32.48	32.42	32.58	32.72	33.02	32.95	33.54	---	33.84
28	32.63	32.20	32.73	32.03	32.63	32.56	32.76	33.00	32.62	33.60	---	33.85
29	32.73	31.80	32.60	31.66	---	32.64	32.82	32.74	32.60	33.49	---	33.88
30	32.73	31.61	32.60	31.23	---	32.64	32.82	32.55	32.65	33.16	32.93	33.90
31	32.75	---	32.59	30.70	---	32.74	---	32.77	---	32.96	32.93	---
MAX	32.75	33.75	32.73	32.81	32.63	33.33	32.93	33.09	33.81	33.60	33.75	33.90

CAL YR 1993 LOW 33.75
WTR YR 1994 LOW 33.90

GROUND-WATER RECORDS

209

FAIRFIELD COUNTY

393450082403600. Local number, F-7.

LOCATION.--Lat 39°34'50", long 82°40'36", Hydrologic Unit 05030204, southeast of Amanda.

Owner: Pine Grove Springs Water Co. Inc.

AQUIFER.--Sandstone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 5 in., depth 120 ft, cased to 31 ft.

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 0.60 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

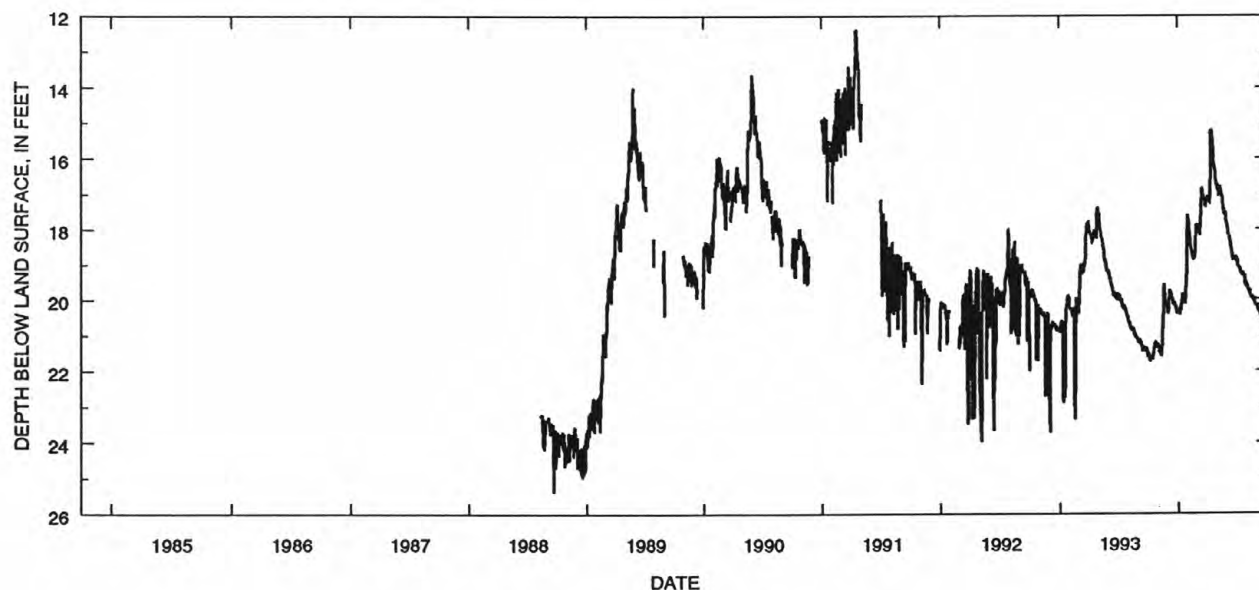
PERIOD OF RECORD.--August 1988 to current year.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.54	21.45	20.42	20.40	17.79	18.02	17.10	16.87	18.00	19.04	19.71	20.32
2	21.54	21.50	20.35	20.37	17.82	17.91	17.10	16.91	18.14	19.06	19.74	20.34
3	21.52	21.42	20.32	20.37	18.04	17.90	17.21	16.93	18.18	19.10	19.75	20.35
4	21.53	21.40	20.17	20.36	18.09	17.93	17.21	16.93	---	19.10	19.75	20.35
5	21.68	21.32	19.75	20.45	18.17	18.02	17.15	16.97	---	19.10	19.84	20.35
6	21.72	21.40	19.75	20.41	18.30	18.03	17.22	17.03	18.23	19.13	19.83	20.33
7	21.75	21.48	19.83	20.28	18.47	18.08	17.24	17.02	18.25	19.15	19.80	20.38
8	21.72	21.54	19.85	20.26	18.47	18.20	17.20	16.79	18.34	19.16	19.87	20.49
9	21.63	21.56	19.85	20.31	18.54	18.15	17.08	16.80	18.39	19.17	19.93	20.49
10	21.63	21.57	19.80	20.30	18.63	17.77	16.16	16.91	18.47	19.22	19.96	20.49
11	21.63	21.50	19.95	20.20	18.64	17.70	15.63	16.93	18.47	19.26	19.96	20.45
12	21.61	21.48	19.98	20.10	18.66	17.60	15.29	16.99	18.51	19.27	19.97	20.48
13	21.65	21.44	20.03	19.95	18.75	17.29	15.21	17.05	18.64	19.30	19.97	20.47
14	21.65	21.20	20.01	19.84	18.84	17.06	15.22	17.06	18.68	19.31	19.92	20.48
15	21.69	20.46	20.02	20.03	18.83	16.85	15.36	17.04	18.74	19.35	19.98	20.48
16	21.68	20.50	20.14	20.04	18.86	16.99	15.56	17.15	18.84	19.28	19.99	20.49
17	21.50	20.41	20.15	19.85	18.86	17.00	15.59	17.28	18.84	19.25	19.99	20.47
18	21.49	19.75	20.15	20.05	18.84	17.06	15.82	17.34	18.86	19.29	20.04	20.49
19	21.49	19.59	20.12	20.10	18.84	17.14	15.96	17.42	18.84	19.34	20.04	20.52
20	21.49	19.80	20.12	20.11	18.81	17.19	16.08	17.48	18.88	19.35	20.04	20.53
21	21.25	19.92	20.14	20.11	18.72	17.19	16.22	17.55	18.84	19.36	20.02	20.61
22	21.27	20.03	20.14	20.05	18.67	17.19	16.23	17.55	18.88	19.36	20.10	20.59
23	21.27	20.07	20.25	19.99	18.52	17.14	16.30	17.60	18.90	19.44	20.17	20.61
24	21.26	20.12	20.25	19.98	17.95	17.22	16.41	17.60	18.85	19.57	20.19	20.60
25	21.25	20.19	20.18	19.90	17.89	17.36	16.53	17.55	18.88	19.60	---	20.59
26	21.26	20.19	20.25	19.43	17.97	17.39	16.73	17.58	18.88	19.55	---	20.58
27	21.23	20.18	20.36	19.22	18.04	17.21	16.75	17.77	18.84	19.55	---	20.61
28	21.27	20.16	20.39	18.40	18.03	17.18	16.75	17.83	18.88	19.61	---	20.70
29	21.25	20.30	20.39	17.70	---	17.16	16.75	17.85	18.89	19.64	20.17	20.76
30	21.33	20.38	20.40	17.61	---	17.23	16.75	17.90	18.92	19.67	20.22	20.87
31	21.31	---	20.40	17.69	---	17.13	---	17.96	---	19.67	20.21	---
MAX	21.75	21.57	20.42	20.45	18.86	18.20	17.24	17.96	18.92	19.67	20.22	20.87
CAL YR 1993 LOW 23.35												
WTR YR 1994 LOW 21.75												



GROUND-WATER RECORDS

FAIRFIELD COUNTY--Continued

394257082362900. Local number, F-6.

LOCATION.--Lat 39°42'57", long 82°36'29", Hydrologic Unit 05030204, near Hocking River in well field at Lancaster.

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.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 820 ft above sea level, from topographic map.

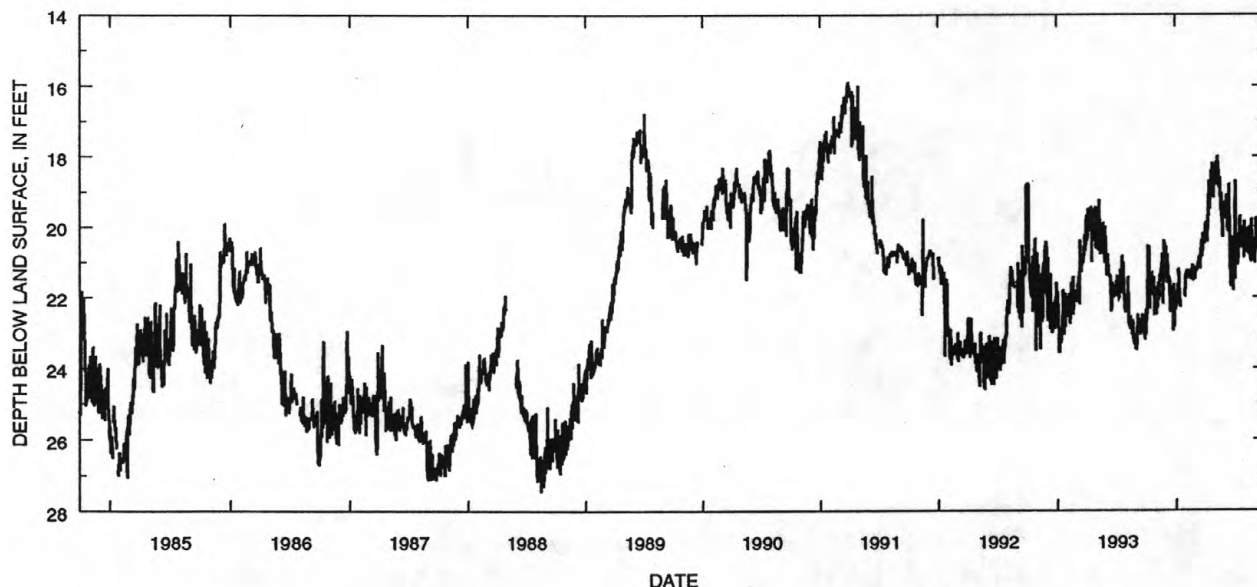
Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

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, 15.90 ft below land-surface datum, Mar. 30, 1991.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.00	22.45	20.90	22.10	21.35	21.25	20.00	18.70	19.40	21.50	20.65	21.05
2	22.35	22.20	20.60	22.15	21.40	21.25	19.90	18.75	19.50	19.80	20.75	20.45
3	22.70	22.50	21.60	22.30	21.25	21.30	19.90	18.60	19.75	18.70	20.55	20.40
4	22.35	22.20	21.65	22.05	21.45	21.20	19.90	18.15	19.80	20.85	20.75	20.25
5	22.50	21.70	21.00	21.65	21.40	21.25	19.95	18.85	19.10	20.50	20.50	19.75
6	22.45	22.30	20.80	22.00	21.35	21.25	19.90	18.35	19.55	20.30	20.25	20.65
7	20.55	21.60	21.35	21.65	21.45	21.25	19.90	18.60	19.45	20.70	20.20	20.20
8	21.90	21.70	21.20	---	21.40	21.15	20.45	18.75	20.00	21.00	20.05	---
9	21.90	21.60	21.65	21.20	21.50	21.10	19.75	18.00	20.10	20.90	20.30	---
10	22.15	22.10	21.55	21.55	21.40	21.00	19.65	18.30	20.15	21.10	20.60	---
11	21.65	22.00	21.60	21.30	21.25	21.10	19.55	18.25	19.85	20.75	20.55	---
12	20.60	21.70	21.50	22.25	21.30	20.90	19.45	18.55	20.15	20.55	20.80	---
13	22.35	21.40	22.45	22.10	21.30	21.00	18.70	18.90	20.00	20.30	20.60	---
14	22.15	21.35	21.55	22.30	21.50	20.85	19.20	18.60	18.80	20.10	20.40	---
15	21.60	21.55	21.85	---	21.50	21.10	19.50	18.65	20.60	19.80	20.00	---
16	21.45	21.30	22.00	---	21.50	21.20	19.00	18.60	20.75	20.00	20.75	---
17	21.70	21.15	22.10	---	21.45	21.00	19.10	18.80	21.70	19.95	20.75	---
18	21.95	21.20	22.10	---	21.30	20.80	18.75	19.55	21.20	19.70	20.95	---
19	21.45	20.90	21.90	---	21.30	20.85	18.40	19.20	20.30	20.30	20.85	---
20	21.30	20.80	22.05	---	21.10	20.40	18.50	19.05	20.45	20.65	21.00	---
21	21.70	20.80	21.90	---	21.10	20.70	18.85	19.60	21.60	20.50	20.90	---
22	21.80	22.20	21.90	---	21.55	20.85	19.15	19.85	20.70	20.45	19.80	---
23	21.50	21.40	22.05	---	21.30	20.65	18.20	19.50	20.80	20.05	20.45	---
24	21.45	21.85	22.95	---	21.40	20.70	18.25	20.30	21.40	20.00	20.95	---
25	21.75	20.40	21.65	---	21.25	20.20	18.35	19.85	21.80	20.20	20.60	---
26	22.35	20.65	21.75	---	21.15	20.40	19.20	19.45	20.40	20.30	20.80	---
27	22.40	20.70	22.85	---	21.15	20.30	19.20	19.55	20.30	20.30	20.75	---
28	22.50	20.50	22.70	22.00	21.50	20.30	18.35	19.65	20.65	20.90	20.80	---
29	22.50	20.90	22.00	21.55	---	20.35	18.60	19.30	21.20	---	20.65	---
30	22.10	21.10	22.25	21.45	---	20.50	18.50	19.40	20.75	19.85	20.95	19.30
31	22.00	---	22.35	21.40	---	20.50	---	19.45	---	20.30	21.00	---
MAX	23.00	22.50	22.95	22.30	21.55	21.30	20.45	20.30	21.80	21.50	21.00	21.05
CAL YR 1993	LOW 23.55											
WTR YR 1994	LOW 23.00											



GROUND-WATER RECORDS

211

FAIRFIELD COUNTY--Continued

394544082271000. Local number, F-1.

LOCATION.--Lat 39°45'44", long 82°27'10", Hydrologic Unit 05030204, near the west edge of West Rushville.

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.

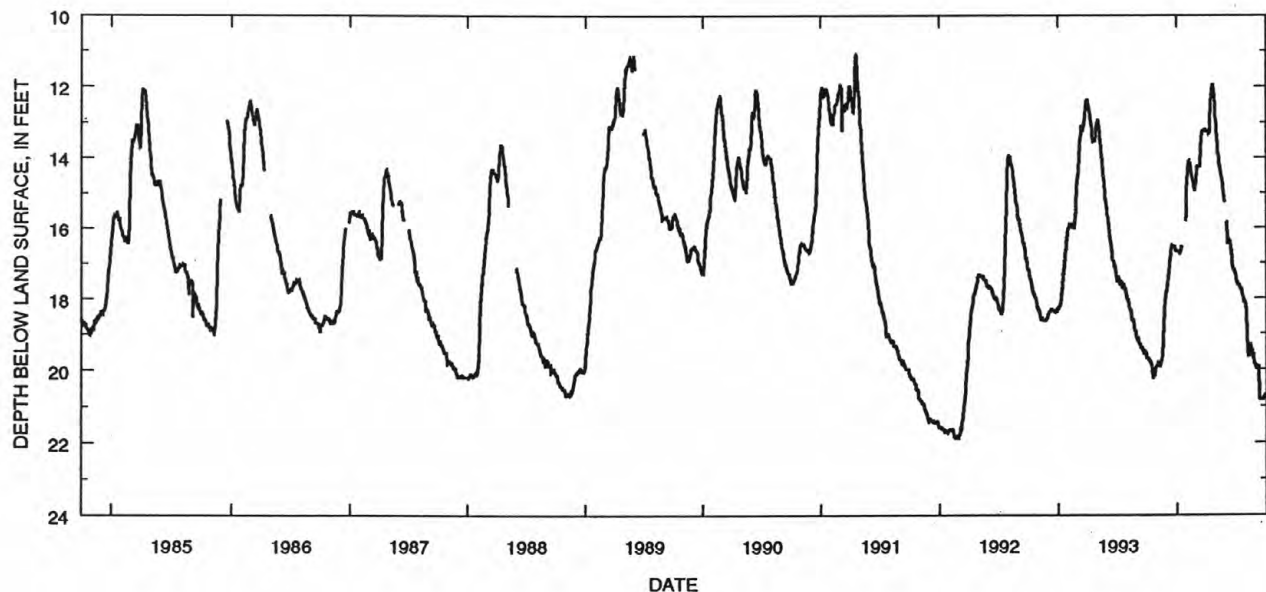
Measuring point: Floor of instrument shelter 8.02 ft above land-surface datum.

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, 21.88 ft below land-surface datum, Feb. 22-23, 1992;
minimum daily low, 7.27 ft below land-surface datum, May 5-6, 1962.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.68	19.93	17.78	16.67	14.66	14.55	13.26	13.20	15.86	17.53	18.88	19.93
2	19.67	19.93	17.70	16.67	14.44	14.44	13.26	13.50	16.03	17.55	19.10	19.94
3	19.69	19.93	17.60	16.67	14.31	14.29	13.24	13.52	16.15	17.57	19.38	19.94
4	19.69	19.87	17.54	16.67	14.25	14.25	13.25	13.63	16.42	17.62	19.46	19.93
5	19.71	19.79	17.46	16.67	14.13	14.26	13.25	13.69	16.40	17.62	19.61	19.93
6	19.71	19.79	17.40	16.67	14.11	14.30	13.25	13.82	16.28	17.62	19.63	19.93
7	19.73	19.92	17.28	16.66	14.21	14.30	13.34	13.93	16.38	17.63	19.63	19.94
8	19.74	19.93	17.22	16.69	14.21	14.30	13.34	14.02	16.38	17.62	19.49	20.73
9	19.74	19.93	17.15	16.75	14.20	14.30	13.31	14.16	16.39	17.65	19.43	20.81
10	19.77	19.86	17.00	16.75	14.20	14.26	13.30	14.23	16.39	17.68	19.39	20.82
11	19.81	19.86	16.89	16.75	14.23	14.26	13.22	14.28	16.39	17.71	19.38	20.83
12	19.81	19.86	16.85	16.70	14.27	14.26	12.97	14.28	16.41	17.71	19.29	20.83
13	19.81	19.82	16.78	16.64	14.38	14.12	12.56	14.35	16.56	17.71	19.44	20.83
14	19.81	19.78	16.70	16.58	14.52	13.85	12.46	14.42	16.62	17.75	19.45	20.83
15	19.88	19.71	16.58	16.55	14.54	13.68	12.23	14.50	16.65	17.76	19.50	20.83
16	19.90	19.71	16.55	16.55	14.59	13.54	12.14	14.55	16.73	17.81	19.52	20.82
17	20.00	19.65	16.55	16.54	14.61	13.45	12.08	14.61	16.84	17.86	19.51	20.82
18	20.25	19.43	16.54	---	14.67	13.32	12.00	14.63	17.00	17.87	19.60	20.81
19	20.25	19.38	16.55	---	14.70	13.24	11.98	14.67	17.15	17.93	19.62	20.82
20	20.25	19.02	16.55	---	14.75	13.28	11.95	14.74	17.17	17.98	19.63	20.82
21	20.20	18.88	16.54	---	14.84	13.28	11.95	14.87	17.18	18.02	19.62	20.81
22	20.17	18.63	16.54	---	14.90	13.25	11.96	15.02	17.20	18.05	19.64	20.78
23	20.17	18.48	16.54	---	14.93	13.25	12.15	15.07	17.22	18.08	19.84	20.78
24	20.16	18.27	16.55	---	14.93	13.25	12.24	15.12	17.24	18.13	19.85	20.74
25	20.09	18.14	16.55	---	14.89	13.22	12.39	15.21	17.25	18.13	19.85	20.74
26	20.04	18.05	16.55	---	14.78	13.22	12.46	15.28	17.27	18.13	19.85	20.73
27	20.01	17.95	16.64	---	14.75	13.20	12.65	---	17.31	18.13	19.86	20.71
28	19.97	17.87	16.65	15.83	14.72	13.23	12.81	---	17.40	18.18	19.93	20.71
29	19.94	17.83	16.65	15.61	---	13.24	12.97	---	17.50	18.29	19.92	20.71
30	19.92	17.80	16.70	15.29	---	13.29	13.04	---	17.53	18.31	19.91	20.71
31	19.90	---	16.70	14.94	---	13.30	---	15.84	---	18.55	19.91	---
MAX	20.25	19.93	17.78	16.75	14.93	14.55	13.34	15.84	17.53	18.55	19.93	20.83

CAL YR 1993 LOW 20.25
WTR YR 1994 LOW 20.83

GROUND-WATER RECORDS

FAIRFIELD COUNTY--Continued

395053082361900. Local number, F-5.

LOCATION.--Lat 39°50'53", long 82°36'19", Hydrologic Unit 05060001, Gaylord Paper Co., Baltimore.

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.--Type F continuous recorder.

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.

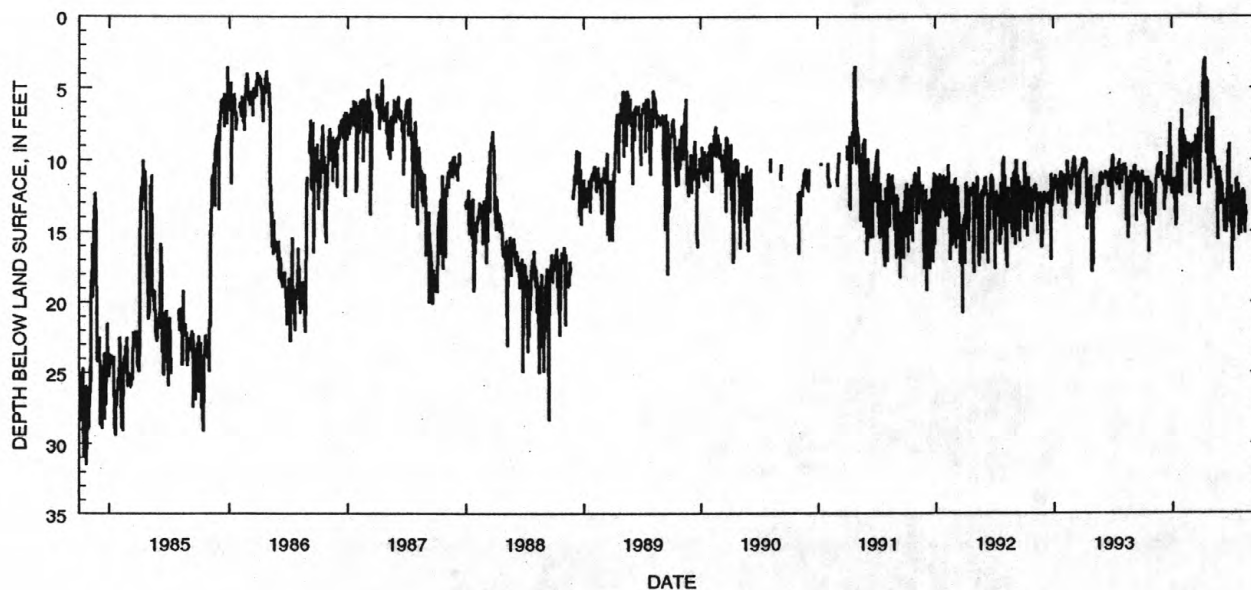
PERIOD OF RECORD.--June 1971 to current year.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.80	14.45	10.75	11.40	8.65	9.50	5.85	7.05	11.65	13.95	12.75	---
2	11.05	14.30	11.50	11.85	7.90	9.20	6.00	7.30	12.15	13.90	12.05	---
3	11.25	14.45	11.60	11.70	8.00	9.00	5.45	7.30	12.65	14.30	12.70	---
4	11.60	14.60	11.20	11.45	10.50	8.85	5.35	7.05	13.00	14.25	14.25	---
5	11.35	14.05	11.50	11.50	8.35	9.25	3.80	7.20	13.45	15.75	12.45	---
6	11.30	13.50	11.85	12.10	8.50	9.25	3.55	10.10	13.80	14.00	12.20	---
7	11.60	13.80	11.20	12.60	8.40	9.00	4.35	10.05	15.05	12.85	12.40	---
8	11.40	13.75	13.55	12.85	8.35	9.80	3.20	9.80	12.85	12.70	14.65	---
9	11.20	13.80	12.05	11.25	8.70	8.80	3.15	10.05	13.80	12.40	13.90	---
10	11.70	12.65	11.30	12.85	9.70	11.75	2.90	10.65	13.85	12.40	15.15	---
11	11.70	12.10	11.15	13.00	10.65	8.80	3.75	10.75	12.90	14.00	13.75	---
12	13.90	11.60	11.15	14.60	9.30	8.70	3.25	10.80	14.35	13.35	13.25	---
13	11.90	11.55	11.60	13.95	8.80	8.45	9.60	10.90	14.35	11.50	14.00	---
14	11.55	11.05	12.40	13.80	9.00	8.50	6.80	11.10	15.10	11.45	---	---
15	11.25	11.20	11.20	12.00	9.00	9.15	4.30	11.70	14.50	12.30	---	---
16	14.10	10.75	11.00	11.05	9.40	9.05	4.85	11.80	13.75	13.15	---	---
17	11.45	10.40	10.75	10.20	9.80	11.00	4.75	11.70	10.40	12.50	---	---
18	11.20	11.15	9.80	---	9.10	10.05	4.50	15.60	11.60	12.55	---	---
19	12.10	11.20	9.70	---	8.85	11.10	8.35	11.00	9.65	14.00	---	---
20	12.50	10.35	10.10	---	9.00	7.85	9.20	10.55	9.35	11.70	---	---
21	16.45	10.35	9.80	12.40	10.00	11.80	12.00	10.75	9.55	15.35	---	---
22	12.60	10.80	11.65	12.15	9.50	13.15	9.90	10.60	9.60	14.40	---	---
23	11.80	10.85	11.90	11.55	12.20	12.55	10.20	10.55	8.85	12.40	---	---
24	11.55	10.70	10.10	10.90	12.35	12.55	10.60	13.20	10.50	12.65	---	---
25	13.30	9.60	7.50	8.10	9.70	8.35	10.45	11.45	14.50	12.35	---	---
26	12.65	9.60	9.05	7.95	9.75	7.70	10.40	10.85	12.50	13.05	---	---
27	12.40	9.60	9.20	7.85	9.55	11.55	10.25	13.05	13.00	14.70	---	---
28	12.30	10.65	10.40	11.15	9.40	7.55	11.35	13.05	12.75	12.30	---	---
29	11.95	11.15	12.45	6.55	---	6.50	8.15	11.45	11.85	15.20	---	---
30	11.80	11.20	12.20	9.20	---	8.80	7.45	11.75	17.85	12.45	---	13.90
31	11.70	---	11.50	12.50	---	5.75	---	11.80	---	13.40	13.35	---
MAX	16.45	14.60	13.55	14.60	12.35	13.15	12.00	15.60	17.85	15.75	15.15	13.90

CAL YR 1993 LOW 17.90
WTR YR 1994 LOW 17.85

GROUND-WATER RECORDS

213

FAYETTE COUNTY

393153083322000. Local number, FA-1.

LOCATION.--Lat 39°31'53", long 83°32'20", Hydrologic Unit 05060003, Burnett-Perill Road about 6 mi west of Washington Court House.

Owner: Martha Slagle.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 5 in., depth 78 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 1010 ft above sea level, from topographic map.

Measuring point: Floor of instrument shelter 3.30 ft above land-surface datum.

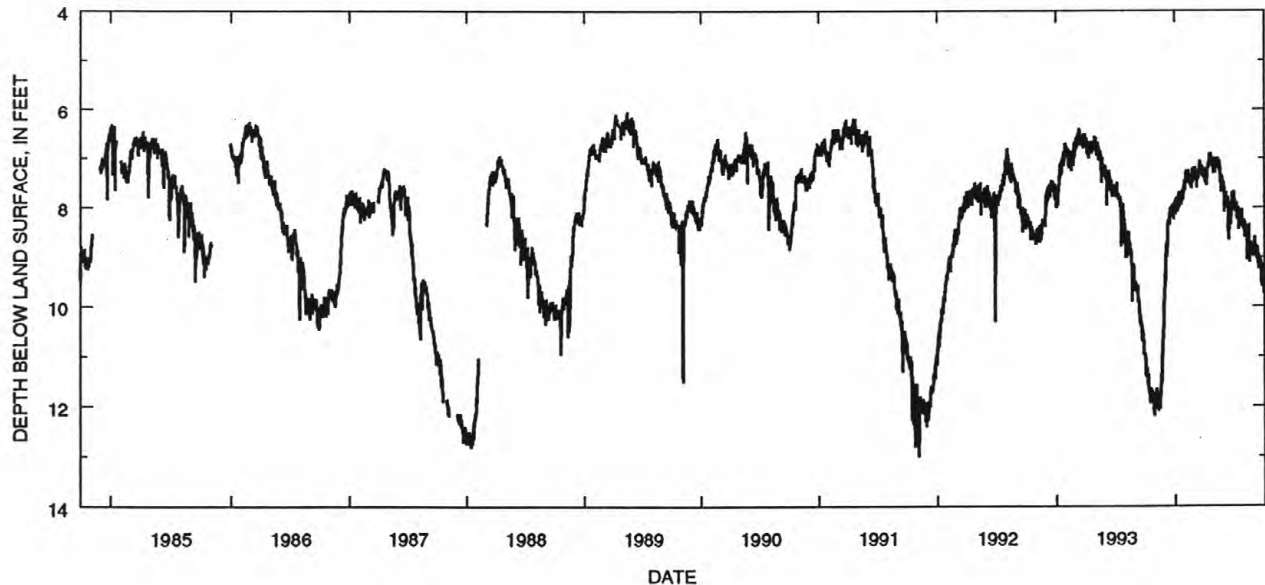
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 13.45 ft below land-surface datum, Sep. 30 1982; minimum daily low, 3.26 ft below land-surface datum, Apr. 28, 1964.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.00	12.00	9.55	7.90	7.65	7.20	7.40	7.15	7.95	8.10	8.30	8.75
2	11.05	12.00	9.35	8.15	7.30	7.20	7.50	7.30	7.70	8.00	8.40	8.80
3	11.05	12.05	9.50	7.90	7.35	7.35	7.20	7.10	7.80	7.90	8.50	8.80
4	11.40	11.70	9.05	7.85	7.25	7.25	7.25	7.10	7.90	7.90	8.40	8.80
5	11.40	11.65	8.85	7.85	7.30	7.25	7.20	7.15	7.80	7.95	8.40	8.95
6	11.25	11.70	8.75	7.80	7.50	7.25	7.20	7.05	7.70	7.90	8.50	9.05
7	11.25	11.75	9.00	7.80	7.50	7.30	7.40	7.00	7.90	8.10	8.65	8.85
8	11.30	11.90	8.70	8.10	7.25	7.60	7.55	7.20	7.95	8.25	9.05	8.80
9	11.50	12.10	8.80	8.10	7.30	7.50	7.25	7.15	7.80	8.00	8.95	8.90
10	11.65	12.00	8.35	8.05	7.35	7.40	7.15	7.00	7.90	8.05	8.85	8.95
11	11.35	12.00	8.35	7.90	7.25	7.35	7.20	7.00	7.80	8.00	8.60	9.15
12	11.50	11.95	8.30	7.80	7.55	7.30	7.10	7.20	8.50	8.45	8.75	8.95
13	11.75	11.85	8.25	7.70	7.50	7.40	7.20	7.05	8.30	8.30	8.55	9.25
14	11.65	11.80	8.25	8.00	7.35	7.40	7.20	7.25	8.65	8.05	8.35	9.15
15	11.65	12.05	8.35	7.85	7.35	7.40	6.95	7.20	8.25	8.15	9.10	9.25
16	11.90	11.85	8.15	7.80	7.35	7.15	6.95	7.05	8.30	8.05	8.85	9.00
17	11.95	11.75	8.10	7.80	7.50	7.20	6.90	7.10	7.90	8.15	8.75	9.15
18	11.65	11.65	8.05	7.80	7.60	7.05	6.90	7.25	7.90	8.15	8.90	9.25
19	11.65	11.50	8.00	7.75	7.60	7.25	7.10	7.50	8.05	8.40	8.85	9.25
20	11.75	11.35	8.15	7.95	7.60	7.25	7.10	7.45	8.35	8.20	8.70	9.15
21	11.70	11.50	8.20	7.80	7.40	7.30	6.95	7.70	8.00	8.10	8.80	9.45
22	11.95	11.10	8.05	7.75	7.35	7.20	7.15	7.35	8.05	8.05	8.75	9.60
23	11.70	10.90	8.05	7.70	7.20	7.15	7.00	7.40	7.90	8.10	8.85	9.55
24	11.80	10.75	8.00	7.65	7.50	7.20	7.10	7.50	7.70	8.25	8.95	9.30
25	11.85	10.60	7.95	7.65	7.50	7.40	7.10	7.40	8.00	8.40	8.90	9.15
26	11.85	10.50	8.00	7.85	7.40	7.30	7.30	7.55	7.85	8.45	8.95	9.15
27	11.90	10.40	8.25	7.60	7.30	7.40	7.15	7.55	7.70	8.30	9.00	9.40
28	12.05	9.95	8.05	7.60	7.30	7.20	7.10	7.60	7.70	8.25	8.90	9.35
29	12.20	9.85	7.95	7.55	---	7.30	7.10	7.50	7.70	8.35	8.75	9.75
30	12.00	9.75	8.00	7.45	---	7.30	7.00	7.65	8.00	8.40	8.95	9.50
31	12.00	---	7.90	7.50	---	7.20	---	8.10	---	8.60	8.60	---
MAX	12.20	12.10	9.55	8.15	7.65	7.60	7.55	8.10	8.65	8.60	9.10	9.75

CAL YR 1993 LOW 12.20
WTR YR 1994 LOW 12.20

GROUND-WATER RECORDS

FRANKLIN COUNTY

394956083002700. Local number, FR-18.

LOCATION.--Lat 39°49'56", long 83°00'27", Hydrologic Unit 05060001, south of State Rt. 665 at Shadeville.

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.--Type F continuous recorder.

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.

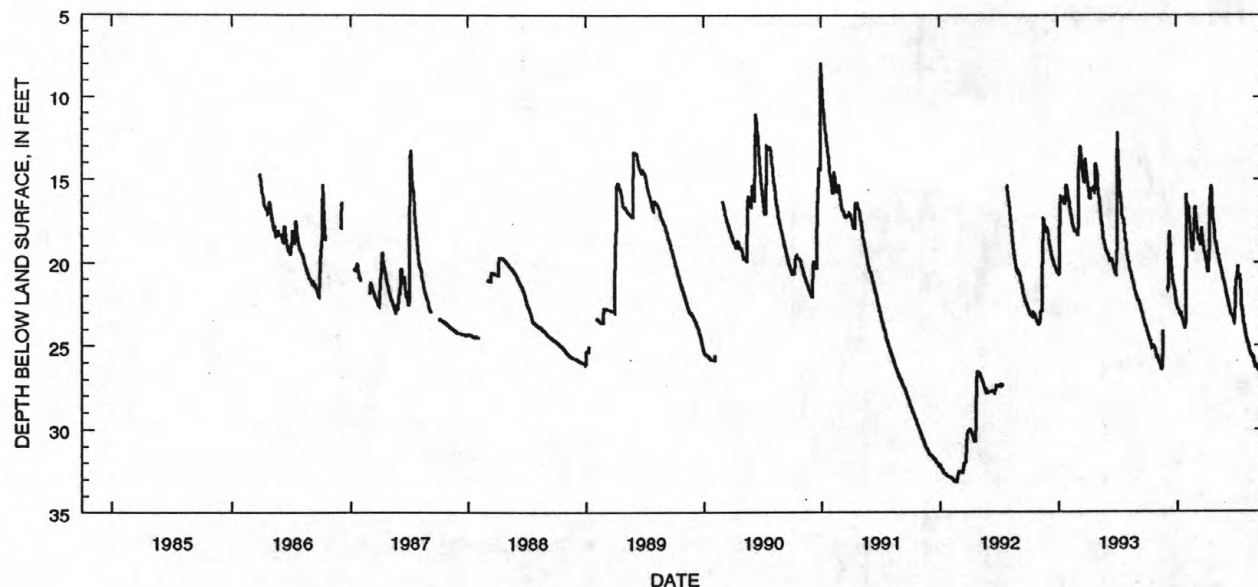
PERIOD OF RECORD.--November 22, 1985 to March 26, 1986 periodic, continuous thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 33.15 ft below land-surface datum, Feb. 19-22, 1992;
minimum daily low, 7.91 ft below land-surface datum, Jan. 1, 1991.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.17	25.64	21.52	22.64	16.58	17.47	19.97	18.92	21.86	21.21	24.54	26.22
2	24.21	25.74	21.45	22.71	16.67	17.61	20.16	19.07	21.94	21.19	24.64	26.27
3	24.29	25.78	21.60	22.76	16.61	17.83	20.24	19.20	22.04	20.90	24.73	26.33
4	24.37	25.85	21.61	22.80	16.54	18.00	20.40	19.25	22.13	20.91	24.80	26.38
5	24.44	25.91	21.48	22.87	16.60	18.22	20.53	19.35	22.23	20.81	24.80	26.42
6	24.52	25.98	19.60	22.88	16.68	18.40	20.58	19.44	22.31	20.39	24.82	26.45
7	24.58	26.04	18.88	22.88	16.78	18.55	20.50	19.52	22.34	20.15	24.92	26.47
8	24.65	26.11	18.51	22.98	17.00	18.64	20.35	19.59	22.48	20.56	25.02	26.48
9	24.71	26.17	18.14	23.08	17.40	18.70	19.50	19.73	22.58	20.90	25.12	26.50
10	24.73	26.24	18.55	23.15	17.87	18.70	19.03	19.87	22.67	20.92	25.21	26.53
11	24.81	26.31	19.00	23.15	18.17	18.69	18.45	19.96	22.75	20.87	25.30	26.50
12	24.88	26.35	19.50	23.16	18.45	18.84	16.85	20.01	22.84	20.73	25.36	26.53
13	24.94	26.39	19.87	23.11	18.70	18.94	16.53	20.12	22.92	20.89	25.43	26.56
14	25.01	26.38	20.12	23.16	18.97	18.95	16.20	20.21	23.00	21.14	25.50	26.60
15	25.07	26.26	20.31	23.23	19.11	18.92	15.70	20.25	23.10	21.45	25.51	26.65
16	25.11	26.05	20.58	23.32	19.23	18.50	15.40	20.36	23.14	21.80	25.51	26.69
17	25.08	25.28	20.81	23.38	19.26	18.04	15.44	20.48	23.14	22.15	25.54	26.73
18	25.06	24.10	20.97	23.50	19.26	17.90	15.71	20.56	23.10	22.46	25.59	26.70
19	25.12	---	21.20	23.59	19.15	18.20	16.09	20.61	23.19	22.71	25.65	26.77
20	25.13	---	21.34	23.65	18.83	18.45	16.46	20.74	23.29	22.95	25.73	26.83
21	24.96	---	21.35	23.73	18.40	18.60	16.90	20.84	23.29	23.15	25.73	26.89
22	25.04	---	21.40	23.80	17.95	18.80	17.25	20.95	23.39	23.32	25.62	26.95
23	25.13	---	21.55	23.83	17.62	18.96	17.55	21.03	23.49	23.47	25.81	27.03
24	25.22	---	21.65	23.89	17.11	19.10	17.76	21.10	23.51	23.61	25.92	27.11
25	25.30	---	21.73	23.96	16.73	19.26	17.94	21.17	23.58	23.70	26.01	27.14
26	25.37	---	21.90	23.80	16.64	19.38	18.12	21.24	23.61	23.83	26.08	27.23
27	25.45	---	22.08	23.59	16.93	19.42	18.38	21.34	23.35	23.97	26.16	27.30
28	25.51	---	22.19	22.73	17.22	19.42	18.59	21.45	22.25	24.11	26.22	27.41
29	25.58	---	22.34	18.00	---	19.53	18.75	21.54	21.64	24.26	26.18	27.51
30	25.64	---	22.49	15.83	---	19.71	18.82	21.63	21.28	24.30	26.16	27.63
31	25.62	---	22.58	16.20	---	19.82	---	21.80	---	24.44	26.19	---
MAX	25.64	26.39	22.58	23.96	19.26	19.82	20.58	21.80	23.61	24.44	26.22	27.63

CAL YR 1993 LOW 26.39

WTR YR 1994 LOW 27.63



GROUND-WATER RECORDS

215

FRANKLIN COUNTY--Continued

395118082573300. Local number, FR-3.

LOCATION.--Lat 39°51'14", long 82°57'32", Hydrologic Unit 05060001, 0.7 mi southwest of Rees.

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.--Type F continuous recorder.

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.

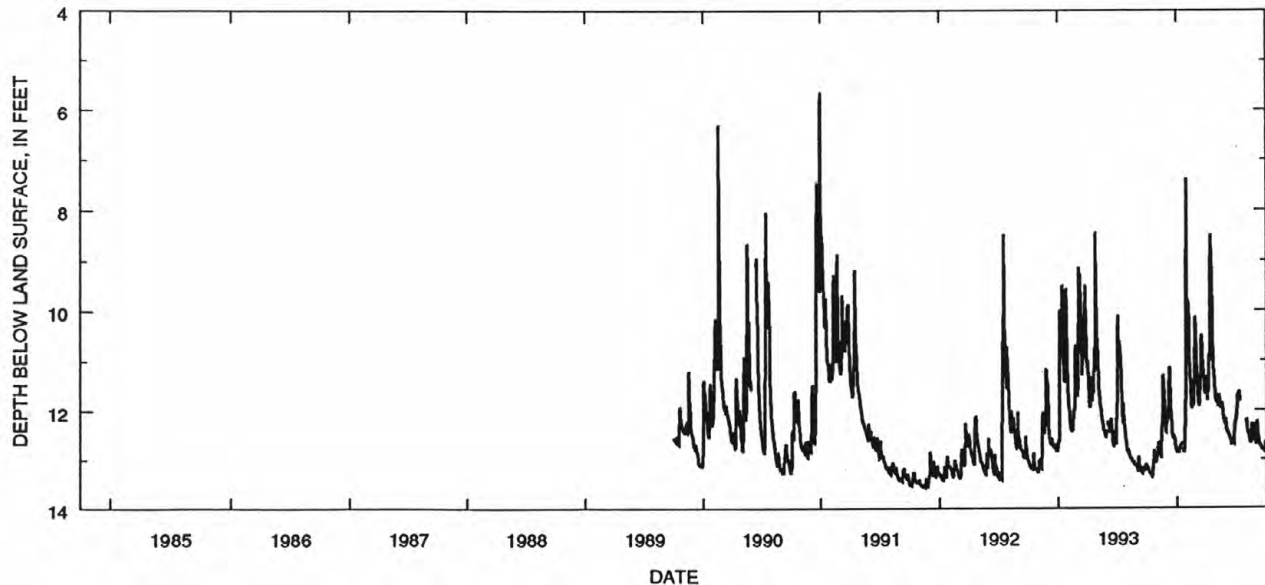
PERIOD OF RECORD.--April 1946 to September 1982 continuous, periodic October 1982 to September 1989, continuous thereafter.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.16	12.87	12.19	12.85	10.05	11.00	11.64	11.70	12.40	12.09	12.30	12.22
2	13.18	12.82	12.16	12.85	9.95	11.22	11.73	11.68	12.42	12.13	12.39	12.32
3	13.18	12.76	12.17	12.84	9.83	11.43	11.79	11.76	12.44	11.81	12.43	12.43
4	13.20	12.72	12.16	12.84	9.89	11.58	11.72	11.81	12.45	11.72	12.48	12.49
5	13.24	12.67	11.75	12.86	10.06	11.69	11.54	11.86	12.47	11.70	12.41	12.54
6	13.26	12.66	11.43	12.86	10.17	11.78	11.64	11.90	12.48	11.65	12.41	12.59
7	13.27	12.68	11.43	12.83	10.31	11.84	11.56	11.91	12.49	11.63	12.49	12.64
8	13.28	12.68	11.13	12.78	10.88	11.90	10.92	11.91	12.51	11.61	12.54	12.67
9	13.28	12.82	11.20	12.74	11.25	11.90	10.90	11.69	12.52	11.66	12.59	12.70
10	13.29	12.88	11.39	12.76	11.48	11.84	11.01	11.81	12.56	11.64	12.63	12.71
11	13.29	12.94	11.74	12.75	11.64	11.65	10.25	11.90	12.58	11.82	12.66	12.70
12	13.29	12.97	11.95	12.70	11.78	11.54	8.94	11.93	12.59	---	12.66	12.72
13	13.31	12.87	12.07	12.68	11.90	11.40	8.94	11.95	12.60	---	12.66	12.74
14	13.32	12.39	12.17	12.70	11.96	11.13	8.49	11.95	12.62	---	12.66	12.76
15	13.34	12.27	12.30	---	11.90	10.64	9.07	11.95	12.65	---	12.28	12.78
16	13.34	12.19	12.44	---	11.72	10.50	9.22	11.94	12.67	---	12.27	12.80
17	13.32	12.01	12.52	---	11.77	10.57	9.59	11.84	12.66	---	12.40	12.80
18	13.03	11.28	12.56	12.76	11.86	10.73	9.90	11.88	12.55	---	12.49	12.80
19	13.08	11.45	12.56	12.81	11.90	10.92	10.25	11.95	12.58	---	12.54	12.78
20	13.07	11.55	12.52	12.84	11.86	11.06	10.60	12.00	12.64	---	12.59	12.80
21	12.95	11.61	12.53	12.84	11.64	11.15	10.88	12.08	12.67	---	12.58	12.80
22	12.80	11.70	12.51	12.82	11.14	11.19	11.11	12.14	12.69	---	12.28	12.81
23	12.91	11.89	12.58	12.82	11.00	11.30	11.27	12.18	12.55	---	12.41	12.83
24	12.96	12.13	12.59	12.77	10.48	11.45	11.40	12.22	12.47	---	12.49	12.85
25	13.02	12.29	12.62	12.62	10.13	11.61	11.52	12.24	12.40	---	12.56	12.85
26	13.05	12.43	12.70	12.05	10.39	11.65	11.61	12.25	12.25	---	12.61	12.63
27	13.07	12.44	12.74	11.55	10.58	11.68	11.69	12.25	12.30	---	12.65	12.63
28	13.07	12.17	12.77	10.20	10.68	11.60	11.75	12.16	12.11	---	12.68	12.69
29	12.99	12.30	12.80	7.38	---	11.42	11.80	12.17	12.20	---	12.68	12.75
30	12.95	12.30	12.83	8.30	---	11.31	11.77	12.34	12.05	12.25	12.68	12.78
31	12.93	---	12.85	9.50	---	11.52	---	12.39	---	12.18	12.36	---
MAX	13.34	12.97	12.85	12.86	11.96	11.90	11.80	12.39	12.69	12.25	12.68	12.85

CAL YR 1993 LOW 13.34

WTR YR 1994 LOW 13.34



GROUND-WATER RECORDS

FRANKLIN COUNTY--Continued

400101083021800. Local number, FR-10.

LOCATION.--Lat 40°01'01", long 83°02'18", Hydrologic Unit 05060001, Kenny and Ackerman Roads, Columbus.

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;

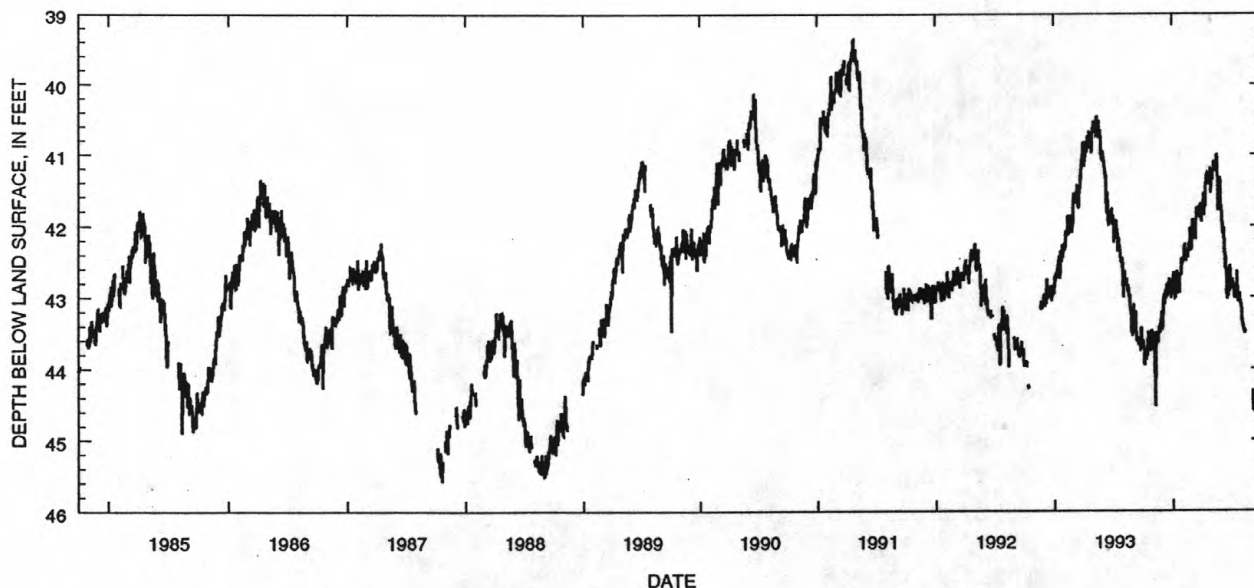
minimum daily low, 37.76 ft below land-surface datum, Apr. 13, 1951.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43.60	43.71	43.40	42.83	42.51	42.17	41.78	41.25	42.01	42.87	43.43	44.58
2	43.62	43.76	43.27	42.75	42.48	41.96	41.73	41.36	42.10	42.89	43.40	44.59
3	43.67	43.64	43.23	42.75	42.48	41.91	41.73	41.36	42.10	42.78	43.46	44.59
4	43.64	43.58	43.05	42.66	42.45	41.94	41.74	41.13	42.12	42.80	43.46	44.53
5	43.80	43.50	42.97	42.79	42.30	42.01	41.55	41.10	42.03	42.99	43.46	44.57
6	43.95	43.70	43.07	42.68	42.35	42.00	41.63	41.15	42.18	43.02	43.51	44.51
7	43.95	44.45	43.10	42.69	42.44	42.02	41.86	41.10	42.21	42.97	43.46	44.60
8	43.80	44.53	43.05	42.87	42.26	42.11	41.86	41.13	42.35	42.98	---	44.65
9	43.84	43.78	43.00	43.01	42.46	42.03	41.64	41.19	42.42	42.87	---	44.65
10	43.89	43.70	42.90	43.00	42.50	42.14	41.72	41.24	42.60	42.94	---	44.65
11	43.85	43.65	43.03	42.85	42.37	42.19	41.73	41.23	42.42	42.95	---	44.71
12	43.75	43.62	43.01	42.80	42.33	42.19	41.50	41.10	42.58	42.98	---	44.75
13	43.79	43.62	42.99	42.64	42.36	41.97	41.31	41.17	42.63	43.02	---	44.70
14	43.78	43.49	42.82	42.65	42.36	41.89	41.31	41.21	42.90	42.64	---	44.67
15	43.83	43.60	42.85	42.92	42.40	41.75	41.28	41.00	43.03	42.86	---	44.60
16	43.68	43.64	42.99	42.93	42.45	41.88	41.31	41.08	42.88	42.87	---	44.68
17	43.49	43.64	42.99	42.68	42.38	41.88	41.37	41.20	42.72	42.90	---	44.56
18	43.69	43.58	42.92	42.86	42.35	41.74	41.38	41.45	42.83	43.07	---	44.63
19	43.66	43.46	42.86	42.94	42.30	41.82	41.30	41.80	42.75	43.00	---	44.84
20	43.59	43.41	42.85	42.94	42.24	41.82	41.43	41.52	42.99	43.00	---	44.90
21	43.62	43.47	42.75	42.94	42.30	41.76	41.38	41.50	42.85	43.01	---	44.80
22	43.71	43.49	42.75	42.83	42.30	41.83	41.36	41.39	42.67	42.95	---	44.68
23	43.75	43.49	42.89	42.76	42.03	41.75	41.37	41.43	42.93	42.99	---	44.68
24	43.77	43.38	42.88	42.68	42.15	41.72	41.19	41.34	42.56	43.01	---	44.67
25	43.75	43.44	42.77	42.68	42.13	41.88	41.27	41.33	42.65	43.08	---	44.62
26	43.60	43.39	42.89	42.70	42.29	41.90	41.55	41.42	42.73	43.10	---	44.60
27	43.54	43.26	43.02	42.68	42.33	41.69	41.35	41.66	42.78	43.13	---	44.68
28	43.46	43.20	43.02	42.46	42.32	41.72	41.48	41.80	42.85	43.17	---	44.72
29	43.50	43.30	42.94	42.54	---	41.88	41.47	41.72	42.80	43.33	---	44.80
30	43.49	43.46	42.93	42.55	---	41.95	41.27	41.89	42.75	43.33	---	44.87
31	43.52	---	42.85	42.53	---	41.89	---	41.90	---	43.33	44.30	---
MAX	43.95	44.53	43.40	43.01	42.51	42.19	41.86	41.90	43.03	43.33	44.30	44.90

CAL YR 1993 LOW 44.53

WTR YR 1994 LOW 44.90



GROUND-WATER RECORDS

217

GALLIA COUNTY

383638082103300. Local number, G-2.

LOCATION.--Lat 38°36'38", long 82°10'33", Hydrologic Unit 05090101, 5.9 mi east of Crown City.

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 ODNR 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 OBSERVATIONS

DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 20, 1993	33.23	Apr. 28, 1994	24.80

GROUND-WATER RECORDS

GREENE COUNTY

394330083531400. Local number, GR-11.

LOCATION.--Lat 39°43'30", long 83°53'14", Hydrologic Unit 05090202, near Wilberforce.

Owner: Central State University.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., depth 85 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 870 ft above sea level, from topographic map.

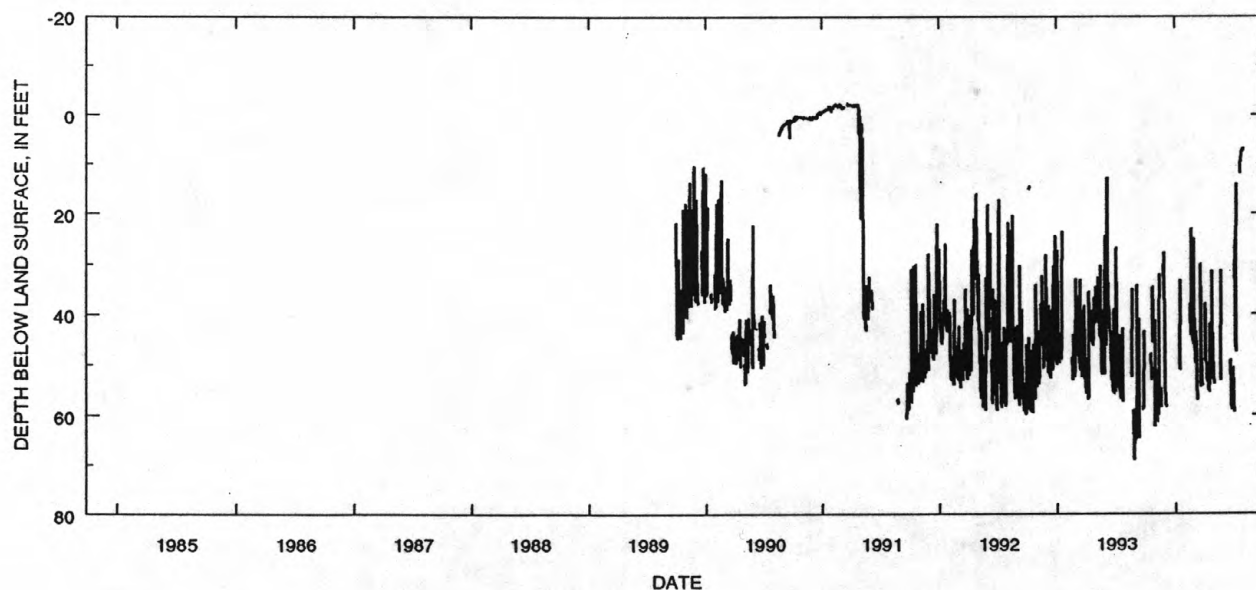
Measuring point: Floor of instrument shelter 4.00 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--March 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 68.90 ft below land-surface datum, Aug. 27, 1993;
minimum daily low, 2.10 ft above land-surface datum, Mar. 23, 27-29, and Apr. 15-22.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	53.00	55.20	---	---	42.60	---	53.50	---	---	---	---
2	---	58.20	56.20	---	---	45.20	49.40	---	---	---	---	---
3	---	59.00	57.60	---	---	49.10	38.00	---	---	33.20	---	---
4	---	59.70	58.40	---	---	49.80	40.10	---	---	25.50	---	---
5	---	60.90	---	---	---	---	47.80	---	---	46.00	---	---
6	---	61.00	---	---	---	43.50	51.60	---	---	47.40	---	---
7	---	51.20	---	---	---	47.40	53.00	---	---	26.80	---	---
8	---	54.80	---	---	---	53.60	53.40	---	---	18.40	---	---
9	---	58.20	---	---	---	57.00	53.00	---	---	14.00	---	---
10	---	59.10	---	---	---	---	---	---	---	---	---	---
11	---	60.00	---	---	---	---	53.00	---	---	---	---	---
12	---	51.50	---	---	---	---	54.10	---	---	---	---	---
13	---	42.00	---	---	---	---	54.90	---	---	---	---	---
14	---	32.10	---	51.10	---	---	55.00	---	---	---	---	---
15	---	---	---	51.10	38.00	---	53.80	---	---	---	---	---
16	---	---	---	33.30	41.70	---	54.00	---	---	---	---	---
17	---	---	---	---	42.00	---	41.80	---	---	---	---	---
18	47.80	54.60	---	---	44.20	---	47.70	---	---	---	---	---
19	52.00	58.40	---	---	41.00	54.40	51.00	52.20	49.30	---	49.35	---
20	53.20	---	---	---	23.00	30.00	52.50	53.10	55.10	11.90	---	---
21	52.00	---	---	---	32.00	39.30	53.00	53.10	57.80	10.40	---	---
22	---	---	---	---	39.80	47.20	53.00	31.40	59.00	9.10	---	55.60
23	45.70	62.40	---	---	43.30	50.80	52.00	---	---	9.00	---	---
24	34.60	---	---	---	44.80	54.00	31.50	---	60.70	8.20	---	---
25	39.70	---	---	---	46.00	54.00	39.70	---	---	7.70	---	---
26	42.50	---	---	---	45.00	53.80	48.10	---	---	7.50	---	49.30
27	---	32.60	---	---	25.00	---	51.40	---	50.70	7.40	---	51.50
28	62.00	27.90	---	---	39.20	---	52.40	---	55.40	7.30	---	55.00
29	62.20	46.80	---	---	---	---	53.80	---	57.80	7.20	---	---
30	60.00	52.70	---	---	---	---	53.80	---	59.50	7.10	---	57.00
31	41.20	---	---	---	---	---	---	---	---	6.70	---	---
MAX	62.20	62.40	58.40	51.10	46.00	57.00	55.00	53.50	60.70	47.40	49.35	57.00
CAL YR 1993	LOW 68.90											
WTR YR 1994	LOW 62.40											



GROUND-WATER RECORDS

219

GREENE COUNTY--Continued

394411083561300. Local number, GR-1.

LOCATION.--Lat 39°44'11", long 83°56'13", Hydrologic Unit 05090202, along Massies Creek near U.S. 68 north of Xenia.
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.

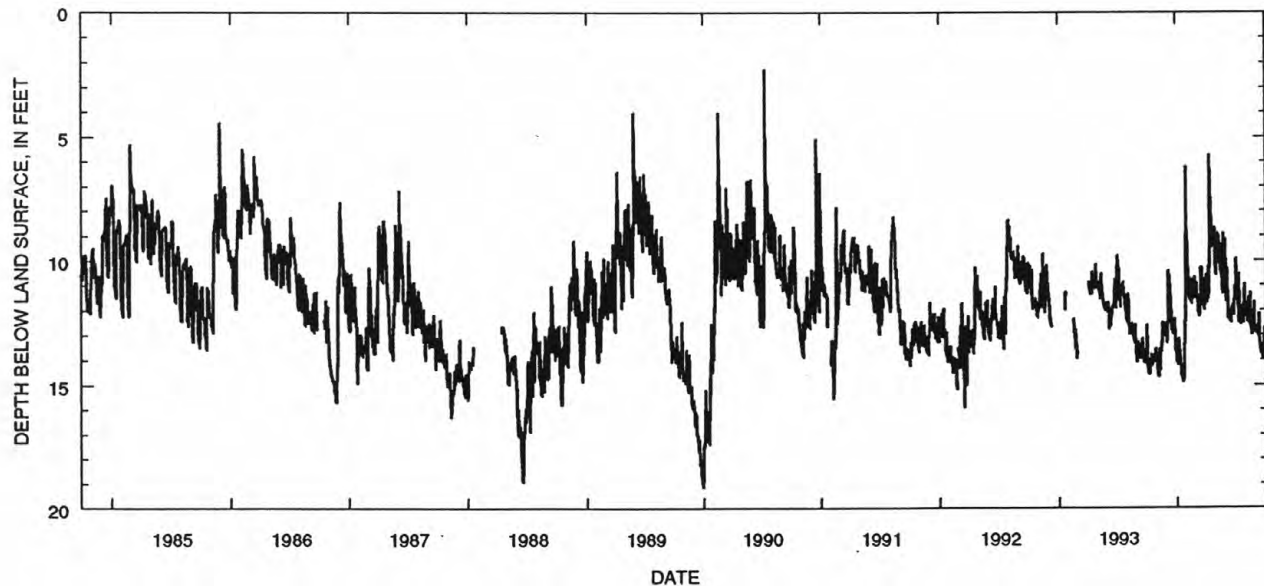
PERIOD OF RECORD.--August 1944 to current year.

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, above land surface Aug. 3, 1958.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.64	14.18	13.26	14.02	9.06	11.18	10.55	9.82	11.46	11.20	11.99	12.97
2	12.59	14.33	13.32	14.06	9.46	10.89	10.70	10.01	11.53	10.26	12.27	12.88
3	13.56	14.36	13.07	14.03	10.21	11.52	11.64	10.14	11.59	11.55	12.27	12.97
4	14.28	14.31	12.62	14.17	10.37	11.45	11.73	9.41	10.33	11.50	12.49	12.69
5	14.31	14.49	12.44	14.17	10.58	11.50	10.66	9.38	12.14	11.68	12.42	12.82
6	14.46	14.66	10.41	13.87	10.76	11.89	11.55	9.22	12.35	12.17	12.27	12.91
7	14.57	14.66	11.09	13.13	11.13	12.01	10.24	9.00	12.14	12.49	11.50	13.06
8	14.45	14.10	11.17	13.30	11.37	12.14	11.57	9.05	12.14	11.74	12.11	12.14
9	14.50	14.41	11.26	13.50	11.58	12.03	11.24	9.29	12.13	11.89	12.52	12.90
10	14.36	13.50	10.59	13.69	11.59	12.25	9.41	9.28	12.12	10.53	11.87	12.14
11	14.30	14.32	11.42	14.07	11.01	12.24	5.71	9.33	12.30	11.93	12.57	13.21
12	14.55	14.40	12.26	14.03	11.49	12.07	6.05	9.36	12.45	11.81	11.95	13.52
13	13.99	13.65	12.28	14.33	11.66	12.17	6.61	10.39	12.03	12.52	11.31	13.58
14	13.90	13.57	11.48	14.45	11.69	10.65	7.25	10.45	12.40	12.59	12.55	13.51
15	14.02	13.59	12.57	14.56	11.63	10.27	7.67	10.31	12.30	12.19	12.82	13.66
16	13.81	13.28	12.80	14.67	10.74	11.25	8.79	10.71	12.51	11.94	12.77	13.63
17	13.86	13.29	12.90	14.25	11.61	11.13	9.49	10.49	11.94	11.95	12.78	13.63
18	14.10	12.54	12.50	14.67	11.57	10.29	8.69	9.64	12.10	12.03	12.97	13.32
19	14.23	12.47	12.85	14.87	11.29	11.63	8.66	11.08	12.06	12.21	12.96	13.69
20	14.22	12.93	12.98	14.87	11.39	11.73	8.72	11.37	11.86	12.30	12.79	13.90
21	13.76	13.00	12.44	14.74	11.42	11.52	8.96	10.29	11.79	12.40	12.86	13.97
22	13.95	12.64	12.52	14.24	11.54	11.74	9.07	8.91	12.21	12.52	12.59	13.70
23	13.86	13.02	12.78	14.44	11.57	11.74	9.06	10.97	11.54	12.25	12.79	13.78
24	13.96	13.01	12.54	14.74	10.67	11.93	8.91	11.26	12.06	12.17	12.33	13.44
25	13.93	12.98	12.32	14.07	11.04	11.75	8.67	11.06	11.18	11.30	11.66	12.72
26	14.11	12.66	12.66	12.57	11.19	12.00	8.73	10.59	11.01	10.96	12.74	13.39
27	13.85	12.63	12.93	12.33	11.39	11.96	8.78	11.10	11.40	12.07	12.71	13.56
28	13.63	12.51	13.52	11.72	11.51	11.67	10.00	9.98	11.13	11.97	12.77	13.65
29	13.67	12.69	13.73	6.19	---	10.69	10.52	9.13	9.93	12.01	12.77	13.73
30	13.50	12.66	13.62	7.49	---	11.58	10.60	10.76	11.36	11.69	12.91	13.91
31	13.99	---	13.77	8.59	---	11.26	---	11.67	---	11.85	12.64	---
MAX	14.57	14.66	13.77	14.87	11.69	12.25	11.73	11.67	12.51	12.59	12.97	13.97
CAL YR 1993	LOW 14.66											
WTR YR 1994	LOW 14.87											



GROUND-WATER RECORDS

GREENE COUNTY--Continued

394425083551100. Local number, GR-10.

LOCATION.--Lat 39°44'25", long 83°55'11", Hydrologic Unit 05090202, in well field along Massies Creek north of Xenia.

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.

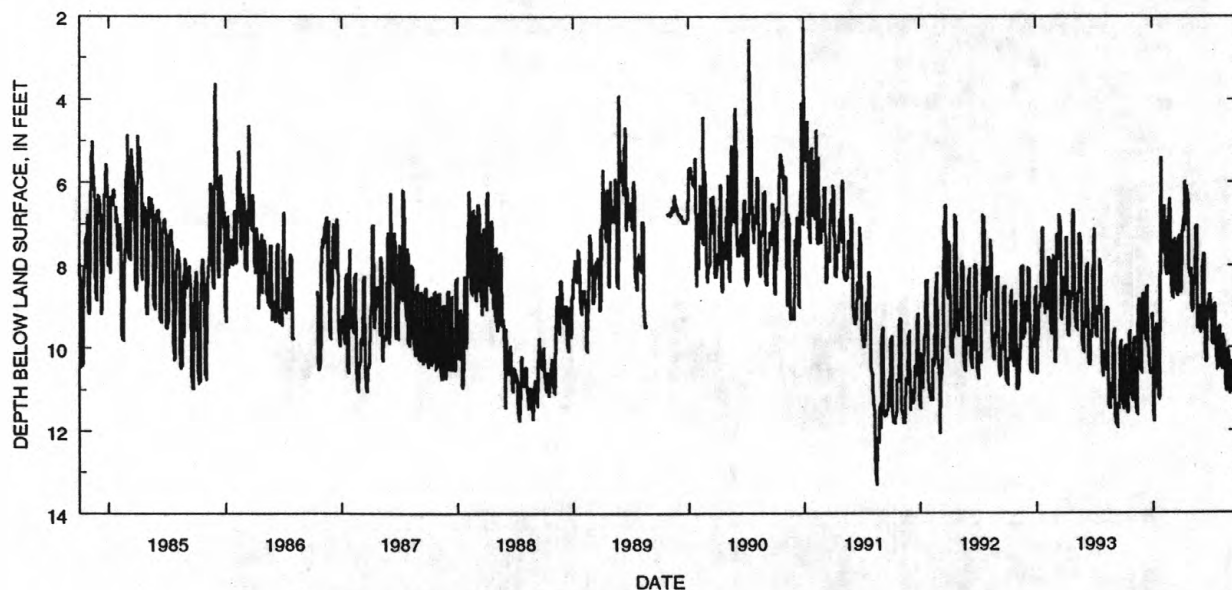
Measuring point: Floor of instrument shelter at land-surface datum.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.48	9.94	8.79	9.21	7.18	8.47	8.57	8.07	9.58	8.87	10.30	11.04
2	11.49	9.92	8.72	10.54	7.32	8.57	8.57	8.82	9.44	8.91	10.45	11.06
3	11.51	9.86	8.72	11.51	7.53	8.67	7.46	8.96	9.48	9.81	10.50	11.07
4	10.15	9.80	8.68	11.79	7.62	8.72	7.20	9.05	9.50	9.84	10.52	11.08
5	10.07	9.76	9.41	11.61	7.72	8.75	7.18	9.07	9.48	9.94	10.53	10.33
6	10.02	9.74	9.51	10.90	7.73	8.77	7.13	9.09	8.10	9.95	10.53	10.33
7	10.01	11.07	9.56	10.98	6.59	7.50	6.98	9.07	7.94	9.78	9.68	10.43
8	9.95	11.29	9.62	11.01	6.59	7.42	6.95	8.24	7.77	9.90	9.77	10.46
9	9.94	11.39	9.68	10.96	6.69	7.42	6.96	8.75	7.71	9.95	9.77	10.49
10	11.28	11.47	9.75	9.72	7.93	7.40	7.18	8.27	7.72	9.04	9.86	10.50
11	11.42	11.52	9.81	9.57	8.07	7.45	6.50	8.34	7.78	9.05	9.87	11.33
12	11.47	11.57	9.83	9.54	8.08	7.45	5.98	8.36	9.09	9.08	9.89	11.37
13	11.50	11.58	8.62	9.46	8.18	8.51	6.28	8.41	10.11	9.15	9.92	11.41
14	11.53	11.34	8.57	9.44	8.25	8.51	6.55	8.40	10.28	8.93	10.85	11.46
15	11.58	9.80	8.55	9.44	6.92	8.50	6.78	8.42	10.31	9.06	10.90	11.46
16	11.52	9.47	8.58	10.69	7.99	8.58	6.97	7.10	10.35	9.12	10.92	11.48
17	11.53	9.34	8.66	10.89	8.16	8.60	6.09	7.05	10.30	10.14	11.02	11.46
18	10.05	9.06	9.92	11.04	8.18	8.70	7.04	7.06	10.30	10.21	11.04	11.47
19	9.96	8.86	10.06	11.19	8.16	8.73	6.15	7.06	9.43	10.29	11.06	10.66
20	9.88	8.81	10.18	11.20	8.17	8.75	6.23	7.13	9.41	10.33	11.05	10.70
21	9.72	10.16	10.31	11.23	6.91	7.42	6.33	9.52	9.33	10.40	11.05	10.73
22	9.63	10.32	10.32	11.18	6.74	7.53	6.39	9.55	9.04	10.50	10.03	10.75
23	9.59	10.46	10.40	9.99	6.69	7.40	6.49	9.03	9.05	10.48	10.08	10.76
24	10.88	10.48	10.59	9.78	6.41	7.31	7.84	9.04	8.88	9.54	10.12	10.76
25	11.06	10.49	10.65	9.44	6.55	7.33	8.05	9.02	8.94	9.52	10.14	11.61
26	11.12	10.57	---	8.56	6.74	7.28	8.18	9.03	8.95	9.53	10.20	11.61
27	11.16	10.58	---	7.90	8.08	8.54	8.26	9.04	8.72	9.56	10.25	11.54
28	11.21	10.48	---	7.25	8.35	8.59	8.26	9.35	8.73	9.57	11.13	11.55
29	11.26	8.93	9.30	5.41	---	8.66	8.24	9.58	8.75	9.47	11.08	11.55
30	11.28	8.87	9.26	6.68	---	8.66	8.22	9.60	8.86	9.48	11.02	11.57
31	11.30	---	9.17	6.97	---	8.63	---	9.58	---	10.22	10.97	---
MAX	11.58	11.58	10.65	11.79	8.35	8.77	8.57	9.60	10.35	10.50	11.13	11.61
CAL YR 1993	LOW 11.89											
WTR YR 1994	LOW 11.79											



GROUND-WATER RECORDS

221

HAMILTON COUNTY

391039084291500. Local number, H-11.

LOCATION.--Lat 39°10'39", long 84°29'15", Hydrologic Unit 05090203, 5.6 mi north of Riverfront Stadium in Cincinnati.

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 ODNR 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, 55.37 ft below land-surface datum, Apr. 7, 1994.WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 28, 1993	55.67	Apr. 7, 1994	55.37

GROUND-WATER RECORDS

HAMILTON COUNTY-Continued

391101084172100. Local number, H-3.

LOCATION.--Lat 39°11'01", long 84°17'21", Hydrologic Unit 05090202, southeast of Miamiville.

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.

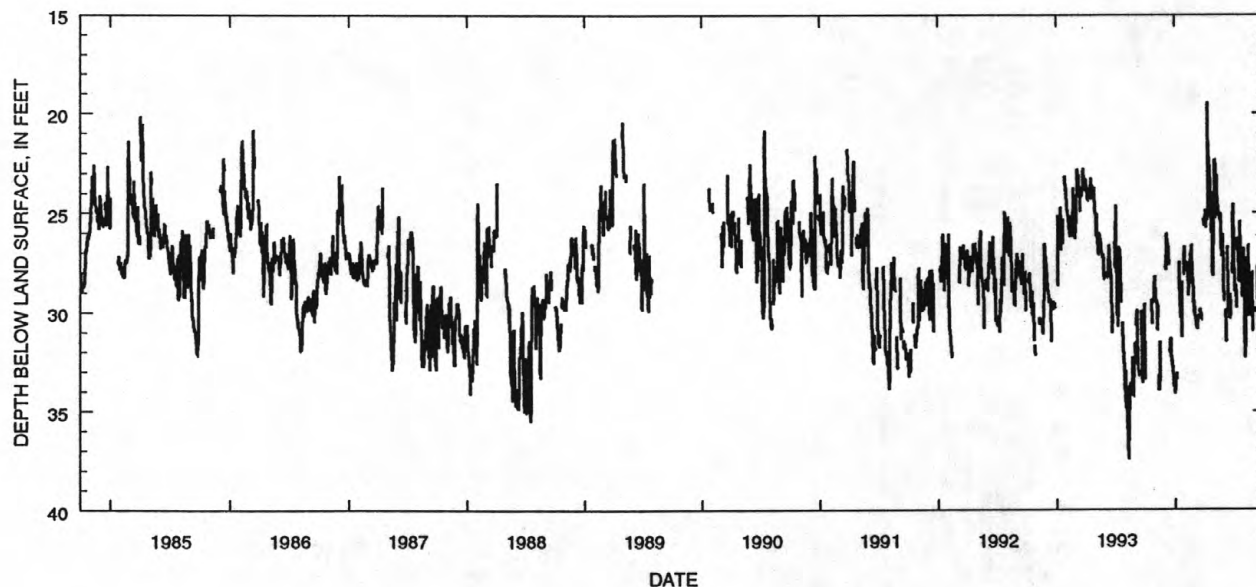
Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

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, 37.43 ft below land-surface datum, Aug. 11, 1993;
minimum daily low, 15.60 ft below land-surface datum, Feb. 28, 1962.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33.36	29.41	---	34.10	27.48	30.00	25.58	22.38	---	28.68	32.07	29.78
2	33.38	---	27.67	33.78	27.47	29.72	24.85	22.40	---	28.96	32.27	30.04
3	---	29.23	27.70	33.17	27.48	30.07	25.56	22.34	---	28.70	31.29	---
4	---	29.48	27.87	33.16	27.71	30.29	25.48	22.74	29.89	28.69	27.94	---
5	---	29.44	26.47	33.36	27.79	30.37	25.39	25.29	30.68	28.69	27.26	---
6	---	29.49	26.02	33.25	27.50	30.35	25.73	24.03	31.42	29.79	27.93	---
7	---	29.71	26.63	33.07	27.80	30.60	24.85	24.05	31.48	28.90	28.49	---
8	---	30.92	26.75	---	27.66	30.68	---	23.10	---	---	28.38	29.40
9	---	29.66	26.86	---	28.25	30.76	25.38	24.00	26.69	26.37	30.23	27.68
10	---	---	26.53	---	28.69	30.84	25.09	24.31	26.93	26.21	29.89	29.52
11	---	33.16	26.85	---	29.17	30.60	19.46	24.52	28.93	27.50	26.87	29.56
12	---	33.82	27.13	---	28.49	30.40	20.06	24.72	30.09	26.72	26.61	31.74
13	---	33.94	27.64	27.56	27.46	30.35	22.86	24.92	29.53	28.46	28.58	31.91
14	---	33.85	---	27.46	27.59	30.13	22.07	25.03	29.99	28.52	28.07	31.29
15	---	33.07	31.86	28.70	27.59	---	22.45	25.16	29.71	28.15	28.09	31.01
16	---	31.47	31.97	29.13	27.41	---	22.85	25.21	30.24	28.35	29.56	30.05
17	---	---	32.03	29.16	27.17	---	23.25	25.31	30.35	26.77	30.11	28.80
18	---	---	31.41	30.30	26.98	29.82	23.37	25.41	29.09	25.42	30.24	28.72
19	---	---	31.30	29.65	26.99	29.92	23.60	25.02	30.16	26.93	---	29.02
20	---	---	32.05	29.17	26.89	30.11	23.78	25.14	29.40	---	---	29.08
21	29.68	---	32.36	28.80	26.61	30.31	25.99	26.56	---	---	---	29.11
22	29.36	---	32.36	28.45	28.38	30.32	23.97	27.18	---	28.22	---	28.64
23	30.58	---	32.58	31.24	28.58	30.09	24.99	26.13	28.05	29.21	28.01	28.00
24	---	---	32.67	---	28.51	---	26.56	26.45	28.04	29.25	27.97	29.16
25	---	---	32.75	29.82	28.29	---	27.91	26.05	27.05	26.98	30.97	29.26
26	29.38	---	32.78	---	29.18	---	28.17	26.11	25.38	28.61	---	30.66
27	29.54	---	33.40	28.11	29.49	---	28.17	26.28	24.57	28.60	---	30.91
28	29.39	---	33.74	27.31	29.50	---	25.63	27.71	27.00	26.76	---	---
29	29.28	---	33.65	26.71	---	25.27	26.60	28.54	27.35	27.44	---	---
30	28.75	---	33.33	27.53	---	25.52	23.92	29.45	28.23	30.10	---	---
31	28.19	---	33.98	27.77	---	25.65	---	---	---	31.05	---	---
MAX	33.38	33.94	33.98	34.10	29.50	30.84	28.17	29.45	31.48	31.05	32.27	31.91

CAL YR 1993 LOW 37.43
WTR YR 1994 LOW 34.10

GROUND-WATER RECORDS

223

HAMILTON COUNTY-Continued

391201084281600. Local number, H-10.

LOCATION.--Lat 39°12'01", long 84°28'16", Hydrologic Unit 05090203, Section Road, Cincinnati.

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.

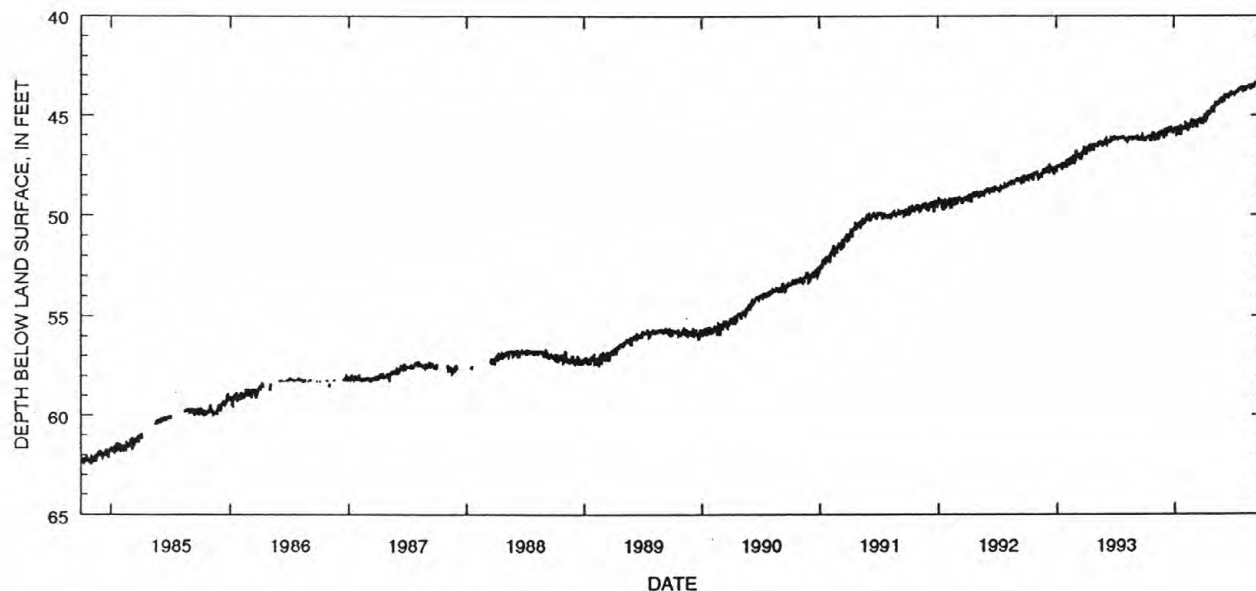
PERIOD OF RECORD.--January 1944 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 121.58 ft below land-surface datum, Nov. 3, 10, 1950;
minimum daily low, 43.13 ft below land-surface datum, Sept. 26, 1994.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46.12	46.24	46.08	45.68	45.68	45.40	45.22	44.74	44.12	43.94	43.67	43.60
2	46.18	46.29	45.93	45.66	45.58	45.23	45.15	44.76	44.20	43.91	43.64	43.61
3	46.24	46.06	45.90	45.58	45.64	45.25	45.18	44.67	44.22	43.97	43.66	43.57
4	46.09	45.98	45.66	45.69	45.57	45.28	45.20	44.55	44.13	43.93	43.61	43.52
5	46.28	45.94	45.80	45.79	45.43	45.36	44.95	44.54	44.07	43.88	43.71	43.43
6	46.29	46.09	45.92	45.58	45.46	45.34	45.17	44.55	44.00	43.85	43.71	43.36
7	46.19	46.19	45.95	45.71	45.63	45.38	45.35	44.44	44.00	43.81	43.63	43.42
8	46.06	46.24	45.86	45.88	45.38	45.48	45.34	44.55	44.12	43.84	43.63	43.39
9	46.13	46.22	45.84	45.97	45.68	45.41	45.12	44.42	44.12	43.87	43.71	43.37
10	46.23	46.16	45.71	45.94	45.70	45.43	45.18	44.49	44.08	43.89	43.71	43.42
11	46.16	46.07	45.90	45.81	45.54	45.58	45.19	44.49	44.04	43.88	43.63	43.44
12	46.02	46.04	45.88	45.66	45.52	45.58	44.96	44.44	44.06	43.80	43.59	43.43
13	46.13	45.94	45.76	45.53	45.61	45.34	44.85	44.43	44.03	43.78	43.59	43.36
14	46.16	45.91	45.56	45.65	45.58	45.18	44.86	44.35	44.06	43.77	43.58	43.34
15	46.20	46.13	45.70	45.94	45.60	45.18	44.85	44.28	44.14	43.83	43.62	43.32
16	46.04	46.14	45.88	45.94	45.68	45.31	44.91	44.37	44.18	43.83	43.58	43.29
17	46.02	46.06	45.88	45.69	45.57	45.32	44.96	44.41	44.06	43.76	43.52	43.27
18	46.12	46.09	45.78	45.95	45.55	45.26	44.93	44.39	44.03	43.74	43.55	43.34
19	46.10	45.82	45.76	45.96	45.48	45.32	44.86	44.36	44.01	43.74	43.52	43.40
20	46.07	45.97	45.69	45.94	45.39	45.26	44.94	44.33	43.98	43.74	43.45	43.39
21	46.27	46.03	45.65	45.93	45.50	45.28	44.89	44.31	43.93	43.70	43.50	43.31
22	46.30	46.06	45.65	45.72	45.49	45.32	44.86	44.29	43.94	43.65	43.58	43.23
23	46.28	45.99	45.81	45.58	45.18	45.21	44.86	44.21	43.87	43.69	43.66	43.21
24	46.14	45.93	45.78	45.62	45.45	45.25	44.71	44.13	43.79	43.67	43.67	43.22
25	46.08	45.98	45.72	45.60	45.44	45.35	44.67	44.08	43.94	43.62	43.64	43.22
26	45.97	45.85	45.78	45.69	45.63	45.32	44.65	44.22	43.91	43.60	43.58	43.13
27	45.99	45.89	45.91	45.58	45.66	45.11	44.79	44.34	43.94	43.58	43.56	43.24
28	45.91	45.88	45.92	45.58	45.53	45.20	44.82	44.33	43.94	43.66	43.48	43.24
29	45.83	46.06	45.77	45.64	---	45.41	44.83	44.26	43.82	43.71	43.49	43.31
30	45.97	46.17	45.89	45.68	---	45.43	44.75	44.21	43.93	43.75	43.51	43.35
31	45.97	---	45.76	45.65	---	45.31	---	44.17	---	43.75	43.51	---
MAX	46.30	46.29	46.08	45.97	45.70	45.58	45.35	44.76	44.22	43.97	43.71	43.61

CAL YR 1993 LOW 47.84

WTR YR 1994 LOW 46.30



GROUND-WATER RECORDS

HAMILTON COUNTY-Continued

391214084470100. Local number, H-1.

LOCATION.--Lat 39°12'14", long 84°47'01", Hydrologic Unit 05080003, Kilby Road 4 mi southeast of Harrison.

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.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 500 ft above sea level, from topographic map.

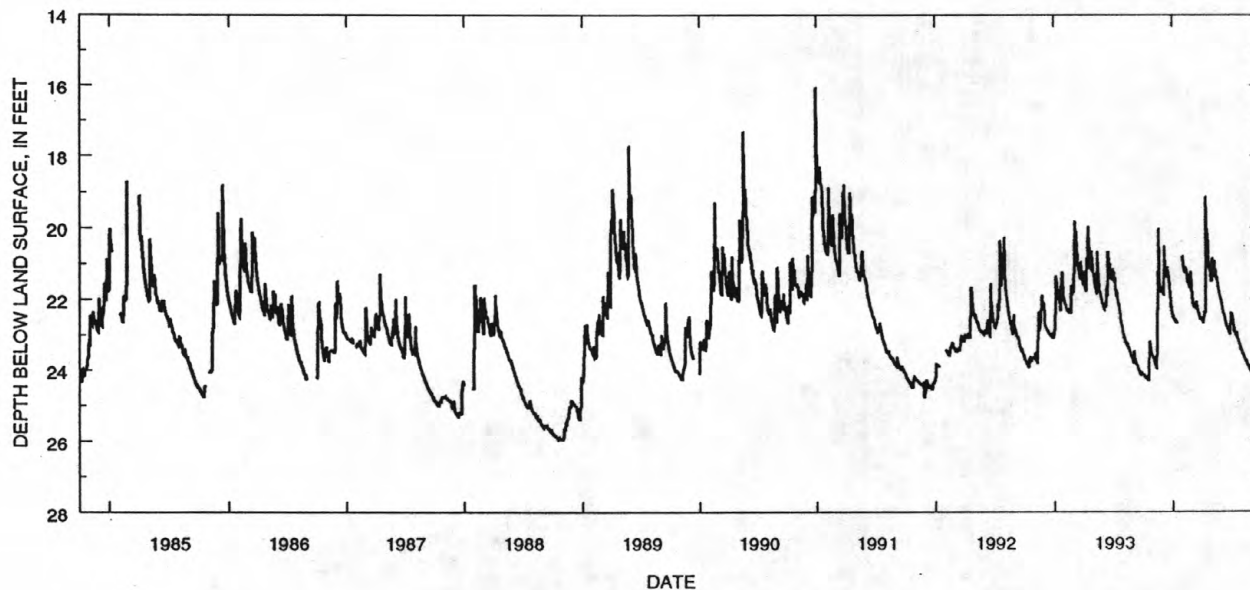
Measuring point: Floor of instrument shelter 2.70 ft above land-surface datum.

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. 26-27, 1988;
minimum daily low, 14.00 ft below land-surface datum, Jan. 22, 1959.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.16	23.65	21.86	22.50	21.05	21.98	22.63	20.87	22.26	22.48	23.50	23.91
2	24.17	23.65	21.90	22.50	21.22	22.03	22.67	21.05	22.29	22.50	23.54	23.94
3	24.17	23.67	21.90	22.53	21.22	22.10	22.69	21.10	22.34	22.51	23.56	23.96
4	24.12	23.68	21.85	22.57	21.25	22.16	22.61	21.18	22.40	22.50	23.59	23.99
5	24.16	23.77	20.52	22.60	21.10	22.20	22.60	21.25	22.43	22.67	23.59	24.00
6	24.19	23.83	20.80	22.61	21.16	22.23	22.62	21.39	22.48	22.80	23.61	24.03
7	24.22	23.87	21.06	22.61	21.19	22.25	22.40	21.39	22.48	22.87	23.63	24.05
8	24.23	23.90	21.16	22.56	21.20	22.23	22.34	20.93	22.50	22.89	23.66	24.07
9	24.25	23.92	21.19	22.58	21.14	22.24	22.38	21.13	22.56	22.88	23.69	24.09
10	24.23	23.95	21.26	22.65	21.23	22.26	22.38	21.25	22.60	22.93	23.71	24.11
11	24.18	23.97	21.32	22.67	21.26	22.27	19.39	21.23	22.64	22.99	23.73	24.13
12	24.18	24.00	21.37	22.67	21.29	22.27	19.13	21.27	22.69	23.03	23.74	24.16
13	24.24	24.00	21.41	22.66	21.50	22.18	19.76	21.40	22.73	23.05	23.74	24.18
14	24.26	23.25	21.42	22.66	21.52	22.08	19.98	21.47	22.76	23.00	23.76	24.20
15	24.29	21.43	21.12	---	21.40	22.17	20.13	21.47	22.80	22.92	23.79	24.23
16	24.30	21.23	21.23	---	21.39	22.24	20.24	21.39	22.83	22.99	23.83	24.25
17	24.31	21.45	21.29	---	21.52	22.30	20.32	21.50	22.85	23.04	23.86	24.27
18	24.31	20.03	21.33	---	21.66	22.33	20.40	21.60	22.85	23.09	23.87	24.29
19	24.20	21.12	21.40	---	21.69	22.37	20.48	21.65	22.89	23.14	23.90	24.31
20	24.13	21.47	21.45	---	21.66	22.41	20.89	21.71	22.92	23.17	23.91	24.34
21	23.22	21.69	21.67	---	21.55	22.42	21.03	21.77	22.93	23.20	23.91	24.36
22	23.19	21.78	21.74	---	21.63	22.45	21.13	21.81	22.92	23.24	23.94	24.38
23	23.33	21.68	21.85	---	21.60	22.50	21.19	21.86	22.98	23.25	23.96	24.40
24	23.40	21.74	21.91	---	21.24	22.53	21.28	21.91	23.00	23.28	23.99	24.41
25	23.45	21.79	22.05	---	21.40	22.58	21.35	21.94	23.01	23.30	24.01	24.43
26	23.50	21.82	22.19	---	21.50	22.59	21.43	21.98	23.00	23.35	24.05	24.44
27	23.53	21.82	22.26	---	21.69	22.59	21.48	22.01	22.38	23.39	24.07	24.45
28	23.56	21.67	22.31	---	21.89	22.56	21.51	22.05	22.43	23.41	24.09	24.45
29	23.60	21.77	22.40	---	---	22.54	21.52	22.10	22.44	23.44	24.03	24.47
30	23.60	21.82	22.45	---	---	22.56	21.50	22.13	22.45	23.45	23.85	24.51
31	23.62	---	22.48	20.80	---	22.59	---	22.16	---	23.45	23.89	---
MAX	24.31	24.00	22.48	22.67	21.89	22.59	22.69	22.16	23.01	23.45	24.09	24.51

CAL YR 1993 LOW 24.31
WTR YR 1994 LOW 24.51

GROUND-WATER RECORDS

225

HAMILTON COUNTY--Continued

391324084272500. Local number, H-9.

LOCATION.--Lat 39°13'24", long 84°27'25", Hydrologic Unit 05090203, 9.1 mi north of Riverfront Stadium in Cincinnati.

Owner: Diamond National Corporation.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in., depth drilled 168 ft, present depth 163 ft cased.

INSTRUMENTATION.--Periodic measurement with chalked tape by ODNR personnel.

DATUM.--Elevation of land-surface datum is 555.30 ft above sea level.

Measuring point: Floor of instrument shelter, 2.76 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--July 1938 to September 1982 continuous, periodic thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low 136.80 ft below land-surface datum, Nov. 9, 1947, Feb. 15, 1948;
minimum water level measured, 37.74 ft below land-surface datum, Apr. 7, 1994.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM INSTANTANEOUS OBSERVATIONS

DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 28, 1993	38.72	Apr. 7, 1994	37.74

GROUND-WATER RECORDS

HAMILTON COUNTY-Continued

391341084275300. Local number, H-8.

LOCATION.--Lat 39°13'41", long 84°27'53", Hydrologic Unit 05090203. Vine and Water Streets, Wyoming.

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.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 576.2 ft above sea level.

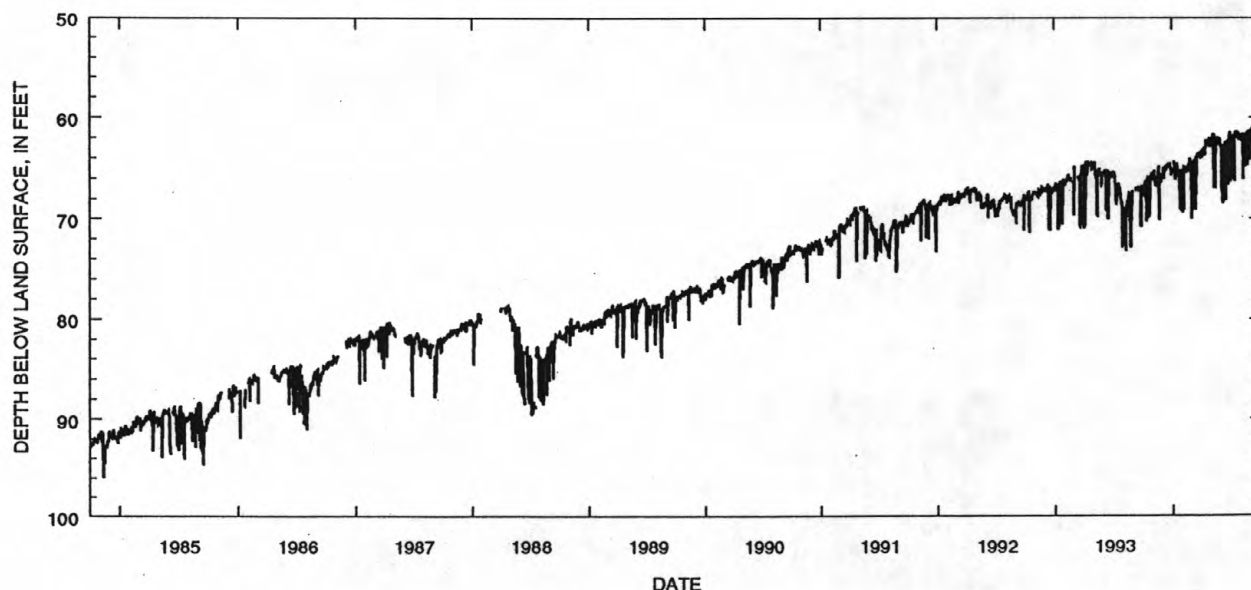
Measuring point: Top of platform 3.30 ft above land-surface datum.

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, 60.65 ft below land-surface datum, Sept. 26, 1994.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67.20	66.05	65.80	65.10	69.40	69.95	64.00	62.35	67.15	66.35	62.30	61.25
2	66.95	66.20	65.40	65.10	65.25	68.45	63.45	62.55	64.55	62.25	62.10	61.20
3	66.95	65.90	65.40	65.10	65.15	64.90	63.45	62.40	66.80	62.00	62.00	62.75
4	67.85	65.65	64.90	---	69.10	64.70	63.30	62.45	68.15	61.95	61.75	61.05
5	66.90	65.25	66.05	64.65	64.95	65.00	63.20	62.25	68.50	62.00	61.65	62.80
6	66.55	66.10	65.55	64.50	65.05	65.90	63.15	61.85	68.20	62.15	61.55	61.00
7	66.90	66.80	65.25	64.60	65.20	64.60	63.80	61.60	63.10	63.05	66.05	60.90
8	66.50	66.65	65.15	65.60	65.10	64.55	63.40	65.15	62.85	61.80	61.85	61.20
9	66.30	66.90	65.45	66.05	65.10	64.20	62.95	61.65	62.65	65.90	61.95	61.20
10	66.50	66.30	64.80	66.10	65.10	64.30	63.65	67.00	65.75	66.15	61.90	61.40
11	66.30	66.15	65.20	65.20	65.50	64.50	63.30	66.80	62.90	62.10	61.85	61.70
12	70.30	66.10	65.15	64.80	65.50	69.10	63.70	64.65	62.85	66.30	62.00	61.55
13	69.65	65.85	65.10	64.55	65.25	64.45	62.40	67.00	62.40	62.10	62.00	61.50
14	66.30	65.80	65.25	64.55	65.05	63.85	62.35	62.25	67.35	61.85	61.80	66.20
15	66.30	66.35	64.70	65.15	65.10	67.65	62.35	62.05	68.15	61.55	61.60	61.75
16	65.85	66.30	65.00	65.15	65.15	63.90	62.45	63.55	64.05	61.45	64.85	61.45
17	65.90	65.35	65.00	65.40	64.95	64.15	62.60	62.10	63.00	61.40	61.55	61.30
18	69.95	65.20	64.75	65.70	65.40	63.60	62.50	62.05	63.85	61.45	61.65	61.45
19	65.95	64.80	64.75	65.65	64.70	63.70	62.45	62.00	62.45	61.55	61.70	61.55
20	66.10	65.05	64.60	65.70	64.65	63.55	62.45	61.95	62.30	61.65	64.75	61.45
21	66.20	70.10	64.60	66.10	64.80	63.70	62.35	62.65	62.20	61.55	61.30	61.40
22	66.20	65.50	64.60	65.55	64.90	64.00	62.30	62.75	66.65	61.40	61.35	61.30
23	69.75	66.35	64.90	65.20	64.10	63.55	62.90	62.70	62.45	62.00	61.40	61.20
24	66.40	66.25	64.80	69.15	64.25	64.00	63.00	62.50	64.70	62.30	61.50	61.00
25	66.05	66.50	64.80	67.10	64.25	63.80	62.70	62.10	61.95	62.10	61.70	60.90
26	65.75	66.05	64.90	65.65	65.50	63.45	62.65	62.10	61.60	61.80	61.75	60.65
27	65.70	66.15	65.40	69.25	64.85	63.90	62.65	62.35	61.55	61.70	61.80	61.45
28	65.45	66.35	65.75	65.40	69.55	63.70	62.95	62.65	61.40	61.75	61.85	61.80
29	65.70	65.85	65.45	65.15	---	63.95	62.55	62.75	61.70	61.75	61.65	61.15
30	65.65	65.85	65.35	65.25	---	63.85	62.00	62.95	61.85	62.15	64.20	61.00
31	65.90	---	65.30	65.25	---	63.60	---	62.70	---	62.30	61.20	---
MAX	70.30	70.10	66.05	69.25	69.55	69.95	64.00	67.00	68.50	66.35	66.05	66.20

CAL YR 1993 LOW 73.20
WTR YR 1994 LOW 70.30

GROUND-WATER RECORDS

227

HAMILTON COUNTY-Continued

391442084262900. Local number, H-7.

LOCATION.--Lat 39°14'42", long 84°26'29", Hydrologic Unit 05090203, at Evendale.

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.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 555.40 ft above sea level.

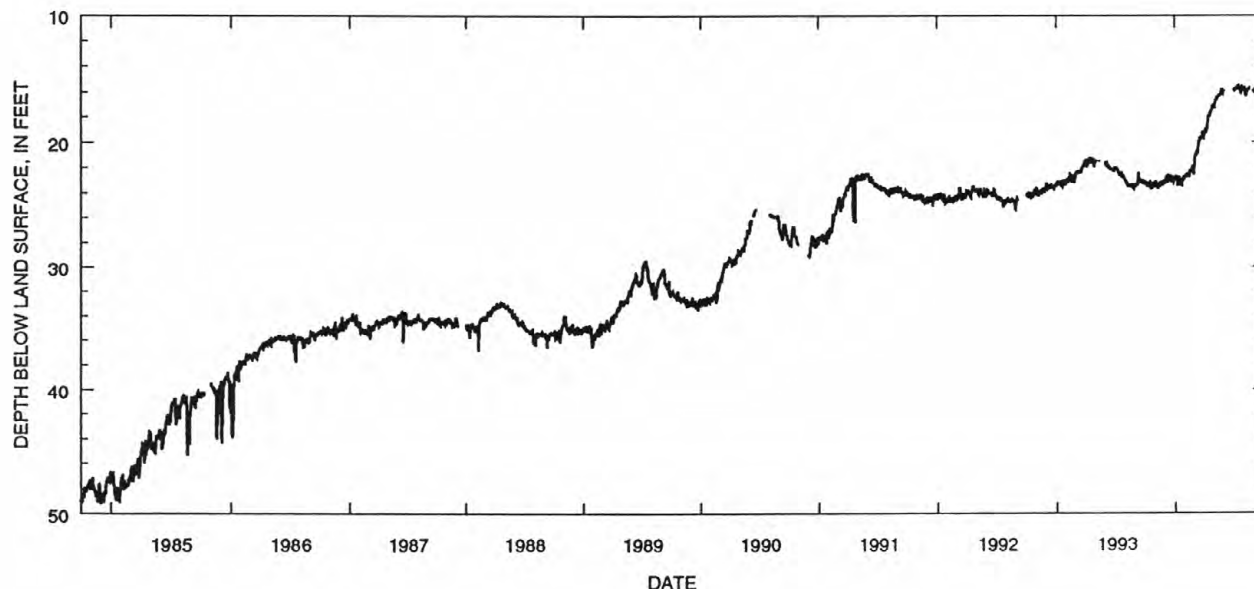
Measuring point: Floor of instrument shelter 7.78 ft above land-surface datum.

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, 15.53 ft below land-surface datum, Sept. 26, 1994.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.25	23.61	23.29	22.82	22.74	22.25	19.43	17.16	15.94	15.90	15.85	16.02
2	23.15	23.68	23.12	22.70	22.70	21.80	19.28	17.23	---	15.84	15.72	16.08
3	23.25	23.51	23.01	22.69	22.75	21.26	19.16	17.13	---	15.91	15.73	16.06
4	23.14	23.35	22.80	22.70	22.74	21.06	19.19	16.95	---	15.93	15.75	16.03
5	23.53	23.14	22.76	22.92	22.54	21.06	18.90	16.84	---	15.84	16.25	15.93
6	23.57	23.40	22.99	22.86	22.54	21.05	18.87	16.77	---	15.77	16.36	15.74
7	23.50	23.62	23.09	22.85	22.70	20.92	19.28	16.76	---	15.68	16.34	15.74
8	23.40	23.69	22.98	23.18	22.55	20.95	19.30	16.64	---	15.71	16.41	15.76
9	23.20	23.70	22.98	23.43	22.70	20.91	19.01	16.59	---	15.80	16.24	15.73
10	23.50	23.64	22.71	23.44	22.80	20.70	18.94	16.63	---	15.86	16.16	15.79
11	23.50	23.55	23.07	23.17	22.63	20.88	18.98	16.63	---	15.85	16.06	15.88
12	23.30	23.48	23.08	23.02	22.53	20.88	18.75	16.51	---	15.74	15.94	15.89
13	23.47	23.44	22.99	22.70	22.70	20.60	18.15	16.53	---	15.68	15.93	15.76
14	23.58	23.33	22.70	22.81	22.69	20.23	18.02	16.45	---	15.63	15.83	15.65
15	23.63	23.55	22.74	23.30	22.30	19.90	17.94	16.21	---	15.78	15.91	15.64
16	23.51	23.61	23.04	23.35	22.28	20.08	17.93	16.34	---	15.85	15.88	15.63
17	23.23	23.44	23.06	22.90	22.29	20.10	17.98	16.40	---	15.79	15.83	15.58
18	23.35	23.54	22.98	23.25	22.29	19.68	17.97	16.39	---	15.72	15.86	15.74
19	23.34	23.30	22.89	23.38	22.25	19.88	17.65	16.34	---	15.71	15.85	15.84
20	23.25	23.30	22.85	23.35	22.16	19.85	17.77	16.29	---	15.82	---	15.84
21	23.60	23.38	22.68	23.37	22.33	19.65	17.71	16.28	---	16.05	---	15.76
22	23.72	23.44	22.74	23.13	22.33	19.80	17.63	16.25	---	16.13	---	15.66
23	23.70	23.42	23.05	23.03	21.85	19.66	17.59	16.13	---	16.00	---	15.58
24	23.58	23.16	23.15	22.99	22.13	19.58	17.40	16.00	---	15.90	---	15.63
25	23.40	23.29	22.85	22.98	22.15	19.73	17.20	15.85	---	15.87	---	15.64
26	23.30	23.23	22.95	23.02	22.53	19.73	17.11	15.87	---	15.69	---	15.53
27	23.28	23.11	23.16	22.98	22.59	19.33	17.27	16.17	---	15.68	---	15.59
28	23.26	22.97	23.18	22.68	22.49	19.39	17.30	16.23	---	15.70	---	15.61
29	23.24	23.07	23.03	22.82	---	19.65	17.28	16.16	---	15.82	---	15.75
30	23.26	23.30	23.00	22.87	---	19.72	17.27	16.10	---	15.89	---	15.87
31	23.24	---	22.89	22.84	---	19.63	---	16.07	---	15.90	15.84	---
MAX	23.72	23.70	23.29	23.44	22.80	22.25	19.43	17.23	15.94	16.13	16.41	16.08

CAL YR 1993 LOW 23.75
WTR YR 1994 LOW 23.72

GROUND-WATER RECORDS

HAMILTON COUNTY--Continued

391608084254400. Local number, H-6.

LOCATION.--Lat 39°16'08", long 84°25'44", Hydrologic Unit 05090203, Water Treatment Plant in Glendale.

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.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 570.65 ft above sea level.

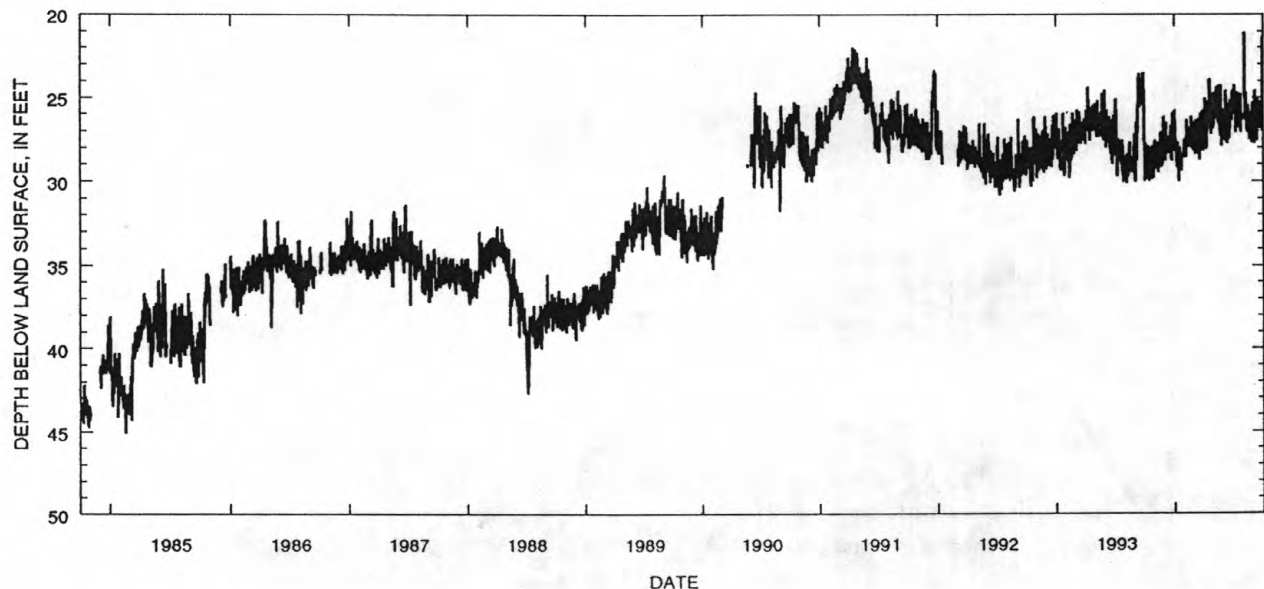
Measuring point: Floor of instrument shelter 4.05 ft above land-surface datum.

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, 21.10 ft below land-surface datum, Aug. 2, 1994.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.00	27.60	27.20	25.80	27.80	27.00	27.40	24.70	25.80	25.70	---	27.70
2	30.00	28.20	28.20	27.00	27.60	27.20	26.50	25.10	26.10	26.00	21.10	27.70
3	27.90	28.30	28.80	27.10	28.20	27.50	25.00	25.70	26.60	24.30	21.30	27.30
4	27.80	28.90	28.40	28.00	28.60	28.10	25.80	26.10	27.60	24.60	23.95	24.90
5	28.80	28.80	26.50	28.50	28.40	28.40	26.50	26.30	27.20	25.10	26.10	24.60
6	29.10	29.30	27.20	28.40	26.40	26.40	27.00	26.20	24.60	26.40	26.40	25.60
7	29.40	28.40	28.00	28.60	27.40	26.60	27.80	26.30	25.20	27.00	24.70	26.40
8	29.90	27.70	28.20	29.20	27.30	27.40	28.10	24.40	26.40	27.10	25.40	26.90
9	29.80	28.60	28.40	28.60	27.80	27.30	27.90	24.90	26.50	26.40	26.40	27.50
10	27.90	28.80	28.00	27.70	27.90	27.40	26.20	25.70	27.70	24.80	26.70	27.60
11	28.00	28.70	28.30	28.20	27.60	27.80	25.20	26.10	27.70	24.70	27.10	25.40
12	29.10	29.20	27.40	28.60	28.00	28.40	25.60	26.40	25.40	26.10	27.00	25.00
13	29.70	29.50	27.40	29.90	27.40	26.90	25.90	26.40	25.40	26.50	26.80	25.50
14	29.30	28.00	27.80	30.00	26.80	26.30	26.00	26.60	26.60	26.80	25.50	25.60
15	30.00	27.80	28.00	29.20	27.30	27.10	25.80	24.30	26.80	26.40	25.90	26.70
16	29.90	28.60	28.30	28.20	27.40	27.30	26.10	24.90	27.50	26.00	26.60	26.80
17	28.00	28.40	28.40	28.00	27.80	27.70	23.90	25.90	27.40	25.00	27.00	26.80
18	28.10	27.10	28.40	28.50	28.00	28.20	24.00	26.60	27.40	24.80	27.50	25.20
19	28.30	29.10	26.70	28.60	28.05	28.70	26.50	26.80	26.40	26.00	27.30	25.70
20	28.90	29.20	27.40	28.80	26.20	26.00	26.40	27.30	25.20	26.10	27.10	26.50
21	29.20	28.30	28.50	29.40	26.50	26.20	26.40	25.60	25.20	26.30	25.90	26.50
22	29.80	28.50	28.60	29.40	27.30	27.10	26.60	24.30	25.40	26.70	26.20	26.80
23	29.90	29.00	28.80	28.40	27.10	27.20	27.20	25.50	26.00	27.10	27.00	26.80
24	28.90	29.10	27.40	28.60	27.70	27.80	24.80	26.10	26.10	24.80	27.30	26.90
25	27.90	28.80	26.00	28.60	27.60	28.10	25.50	27.90	26.40	---	27.60	25.60
26	28.50	27.10	27.40	28.60	28.20	28.20	26.30	26.00	24.90	---	27.70	25.60
27	28.60	27.50	27.80	28.50	26.80	25.80	26.50	25.90	24.60	---	27.40	26.60
28	29.00	26.20	28.20	28.60	26.50	26.50	26.90	25.70	25.60	26.00	25.30	25.70
29	29.80	26.90	27.60	28.60	---	28.00	26.80	---	26.00	26.40	25.60	21.40
30	29.80	27.00	27.70	28.10	---	28.20	26.50	---	26.00	26.30	26.60	21.40
31	27.80	---	26.10	27.50	---	28.20	---	---	---	---	26.90	---
MAX	30.00	29.50	28.80	30.00	28.60	28.70	28.10	27.90	27.70	27.10	27.70	27.70
CAL YR 1993	LOW 30.10											
WTR YR 1994	LOW 30.00											



GROUND-WATER RECORDS

229

HAMILTON COUNTY-Continued

391733084392400. Local number, H-2.

LOCATION.--Lat 39°17'33", long 84°39'24", Hydrologic Unit 05080002, East Miami River Road 1.5 mi south of Ross.

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.--Type F continuous recorder.

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.

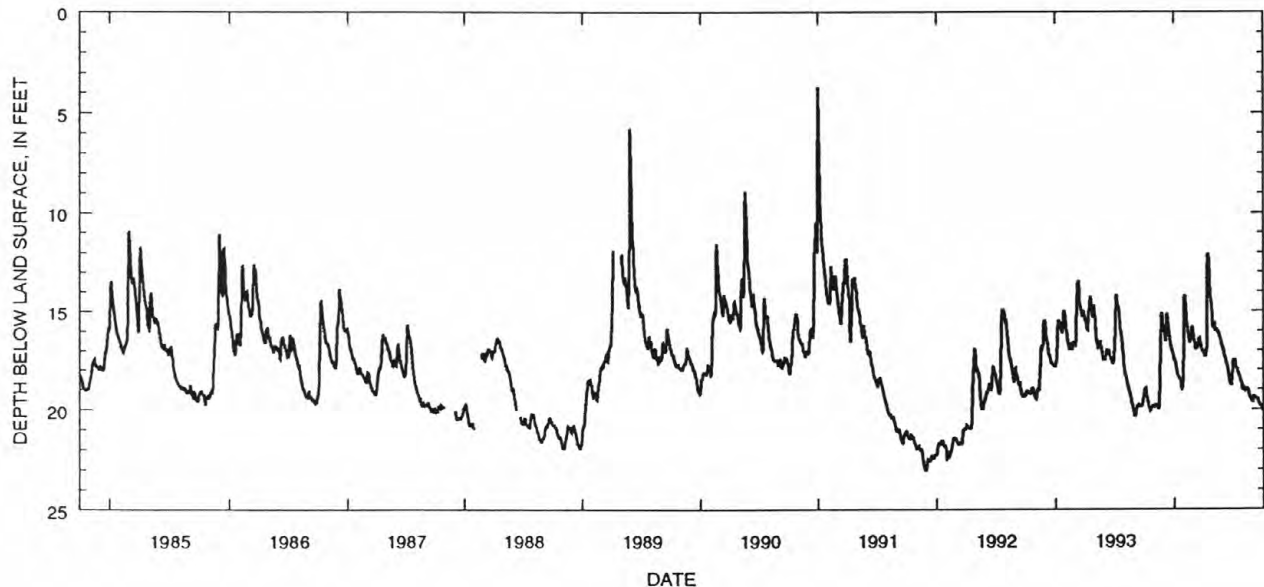
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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, 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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.15	19.90	16.13	17.50	14.18	16.42	17.14	15.84	17.08	17.47	18.95	19.42
2	19.07	19.85	16.28	17.53	14.28	16.49	17.20	15.62	17.18	17.49	18.93	19.43
3	19.04	19.78	16.43	17.55	14.52	16.57	17.31	15.56	17.26	17.50	18.96	19.43
4	19.00	19.75	16.54	17.62	14.75	16.70	17.31	15.64	17.30	17.50	19.04	19.43
5	18.96	19.79	16.54	17.71	14.98	16.85	17.31	15.78	17.36	17.53	19.09	19.42
6	18.99	19.81	16.18	17.78	15.19	16.94	17.28	15.96	17.41	17.64	19.09	19.44
7	19.08	19.81	15.63	17.88	15.41	16.95	17.28	16.00	17.48	17.74	19.07	19.45
8	19.24	19.78	15.23	17.97	15.55	16.95	17.21	16.00	17.58	17.85	19.03	19.46
9	19.40	19.78	15.13	18.05	15.73	16.93	17.01	15.96	17.66	17.89	18.99	19.48
10	19.48	19.82	15.27	18.12	15.89	16.89	16.83	15.94	17.70	17.92	18.96	19.49
11	19.52	19.87	15.44	18.23	16.07	16.90	15.40	15.94	17.73	17.92	18.97	19.49
12	19.60	19.93	15.57	18.32	16.19	16.89	13.00	16.04	17.78	17.97	19.00	19.49
13	19.68	19.95	15.72	18.36	16.39	16.85	12.22	16.04	17.85	18.05	19.01	19.50
14	19.77	19.95	15.88	18.38	16.50	16.77	12.05	16.04	17.95	18.14	19.03	19.53
15	19.86	19.83	16.06	18.41	16.57	16.69	12.14	16.11	18.09	18.19	19.06	19.59
16	19.93	19.50	16.23	18.43	16.60	16.55	12.41	16.14	18.21	18.19	19.09	19.66
17	19.99	18.85	16.37	18.45	16.60	16.46	12.71	16.17	18.35	18.19	19.15	19.74
18	20.02	18.17	16.50	18.51	16.55	16.43	13.04	16.24	18.47	18.24	19.23	19.76
19	20.07	17.23	16.61	18.55	16.43	16.47	13.40	16.30	18.56	18.32	19.33	19.77
20	20.07	16.33	16.69	18.63	16.29	16.50	13.67	16.37	18.61	18.40	19.38	19.77
21	20.04	15.63	16.81	18.70	16.18	16.62	13.96	16.43	18.69	18.48	19.48	19.77
22	20.00	15.23	16.88	18.79	16.05	16.66	14.20	16.46	18.73	18.56	19.49	19.82
23	19.92	15.09	16.96	18.90	15.88	16.70	14.44	16.50	18.74	18.58	19.49	19.84
24	19.86	15.18	16.99	18.95	15.78	16.83	14.65	16.60	18.77	18.60	19.49	19.85
25	19.88	15.42	17.03	18.95	15.83	16.91	14.89	16.69	18.77	18.65	19.54	19.85
26	19.92	15.62	17.09	18.86	16.00	16.97	15.13	16.75	18.67	18.75	19.58	19.85
27	19.92	15.78	17.17	18.47	16.15	17.00	15.49	16.79	18.35	18.89	19.63	19.88
28	19.92	15.90	17.22	17.95	16.33	17.03	15.71	16.84	17.95	19.01	19.65	19.96
29	19.91	15.93	17.30	17.08	---	17.05	15.84	16.88	17.64	19.03	19.65	20.05
30	19.93	16.01	17.38	15.63	---	17.08	15.84	16.91	17.48	19.03	19.57	20.11
31	19.93	---	17.47	14.63	---	17.10	---	16.95	---	19.00	19.44	---
MAX	20.07	19.95	17.47	18.95	16.60	17.10	17.31	16.95	18.77	19.03	19.65	20.11

CAL YR 1993 LOW 20.32
WTR YR 1994 LOW 20.11

GROUND-WATER RECORDS

HAMILTON COUNTY--Continued

391748084393800. Local number, H-19.

LOCATION.--Lat 39°17'48", long 84°39'38", Hydrologic Unit 05080002, on left bank of Great Miami River 1.3 mi southwest of Venice.

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 horizontal intakes at 95-100 ft.

PERIOD OF RECORD.--1964 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER FIELD (STANDARD ARD UNITS) (00400)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	CALCIUM DIS-SOLVED (MG/L) (AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L) (AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L) (AS NA) (00930)	POTASSIUM, DIS-SOLVED (MG/L) (AS K) (00935)	BICARBONATE, DIS-SOLVED (MG/L) (HCO3) (00453)	ALKALINITY, TOTAL FIELD (MG/L) (CACO3) (00410)

NOV

17... 1100 761 7.8 18.0 18.0 12 79 29 39 4.4 281 231

APR

13... 1100 724 7.5 15.0 14.5 <10 74 27 30 3.5 273 217

SEP

08... 0800 755 7.7 -- 15.5 <10 78 27 35 3.7 309 254

DATE	SULFATE DIS-SOLVED (MG/L) (AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L) (AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L) (AS F) (00950)	SILICA, DIS-SOLVED (MG/L) (AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITROGEN, NITRITE DIS-SOLVED (MG/L) (AS N) (00613)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L) (AS N) (00631)	NITROGEN, AMMONIA DIS-SOLVED (MG/L) (AS N) (00608)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L) (AS P) (00671)	ARSENIC, TOTAL (UG/L) (AS AS) (01002)	ARSENIC, DIS-SOLVED (UG/L) (AS AS) (01000)

NOV

17... 78 61 0.30 9.0 448 0.020 1.50 0.060 <0.010 <1 <1

APR

13... 66 52 0.30 8.1 423 0.030 2.10 0.040 0.020 -- <1

SEP

08... 71 63 0.20 8.3 416 0.010 1.20 0.040 0.010 <1 <1

DATE	CHROMIUM, DIS-SOLVED (UG/L) (AS CR) (01030)	CHROMIUM, TOTAL RECOVERABLE (UG/L) (AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L) (AS CU) (01042)	COPPER, DIS-SOLVED (UG/L) (AS CU) (01040)	IRON, DIS-SOLVED (UG/L) (AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L) (AS PB) (01051)	LEAD, DIS-SOLVED (UG/L) (AS PB) (01049)	MANGANESE, DIS-SOLVED (UG/L) (AS MN) (01056)	ZINC, TOTAL RECOVERABLE (UG/L) (AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L) (AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L) (AS C) (00680)

NOV

17... <1 <1 2 2 28 <1 <1 220 20 14 1.3

APR

13... <1 -- -- 1 25 -- <1 200 -- 18 1.2

SEP

08... <1 <1 1 1 27 <1 <1 200 20 14 1.2

GROUND-WATER RECORDS

231

HAMILTON COUNTY-Continued

391817084393300. Local number, H-4.

LOCATION.--Lat 39°18'17", long 84°39'33", Hydrologic Unit 05080002, 0.7 mi southwest of Ross.

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.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 541.57 ft above sea level. (Levels Miami Conservancy District.)

Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

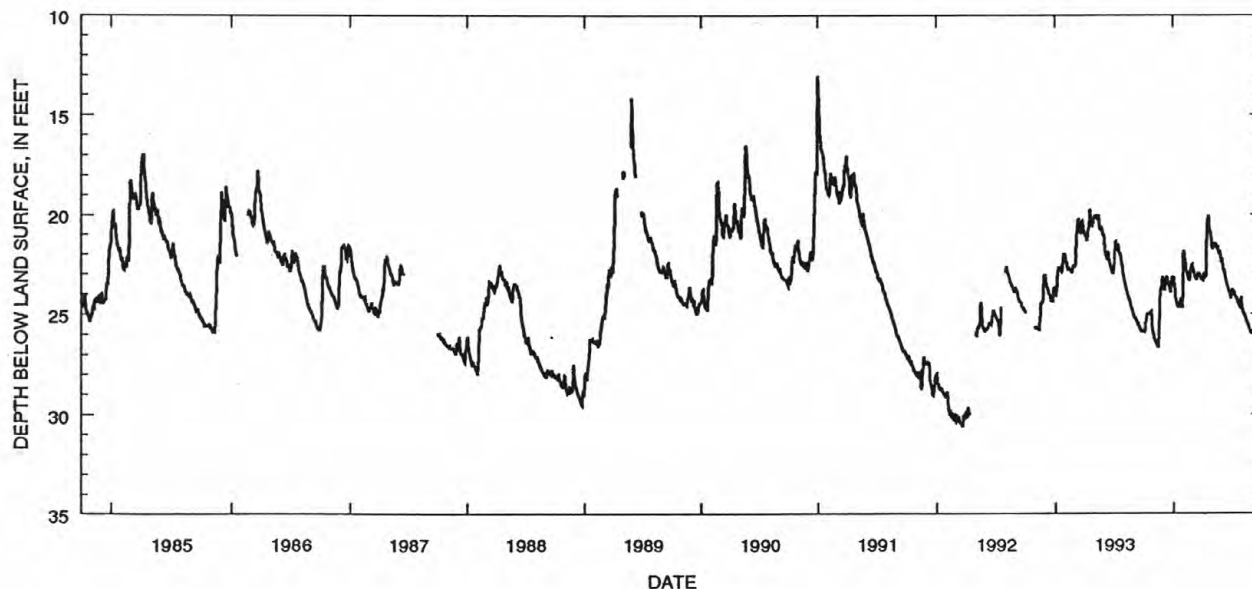
PERIOD OF RECORD.--December 1954 to current year.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.89	26.10	23.72	23.18	21.86	22.79	23.34	21.77	22.60	23.83	24.80	25.94
2	25.89	26.15	23.84	23.24	22.00	22.85	23.22	21.60	22.72	23.86	24.89	25.97
3	25.86	26.19	23.85	23.35	22.22	22.93	22.95	21.57	22.84	23.89	24.94	25.99
4	25.87	26.24	23.75	23.63	22.35	22.97	22.97	21.55	22.85	23.92	24.99	25.93
5	25.90	26.30	23.77	23.88	22.40	23.03	23.08	21.55	22.85	23.92	25.07	25.79
6	25.90	26.37	23.69	24.06	22.50	23.11	23.15	21.64	22.94	23.95	25.09	25.85
7	25.82	26.40	23.48	24.20	22.64	23.19	23.19	21.67	23.01	23.99	24.98	25.96
8	25.57	26.45	23.31	24.28	22.75	23.24	23.19	21.67	23.11	24.06	25.08	26.01
9	25.34	26.48	23.23	24.39	22.88	23.25	23.15	21.54	23.23	24.12	25.14	26.07
10	25.24	26.53	23.24	24.49	22.94	23.29	23.09	21.52	23.30	24.14	25.20	26.07
11	25.17	26.58	23.24	24.53	23.03	23.33	22.70	21.55	23.38	24.18	25.26	25.86
12	25.09	26.62	23.23	24.63	23.12	23.33	21.67	21.63	23.44	24.23	25.32	25.94
13	25.04	26.66	23.27	24.68	23.20	23.28	20.95	21.69	23.50	24.26	25.39	26.04
14	25.02	26.66	23.36	24.71	23.28	23.18	20.55	21.75	23.56	24.29	25.43	26.11
15	25.02	26.66	23.46	24.72	23.31	23.11	20.33	21.75	23.63	24.34	25.46	26.18
16	25.02	26.46	23.53	24.60	23.34	23.05	20.17	21.72	23.69	24.39	25.50	26.24
17	25.04	26.10	23.59	24.55	23.35	22.99	20.08	21.78	23.79	24.41	25.53	26.30
18	25.05	25.65	23.68	24.59	23.35	22.99	20.24	21.86	23.87	24.45	25.53	26.36
19	25.05	24.98	23.75	24.60	23.34	23.00	20.44	21.95	23.91	24.50	25.59	26.40
20	25.04	24.35	23.81	24.51	23.10	23.02	20.60	22.04	23.92	24.53	25.65	26.44
21	25.00	23.99	23.87	24.38	22.94	23.09	20.75	22.04	24.00	24.58	25.72	26.46
22	24.97	23.83	23.92	24.26	22.83	23.11	20.76	21.84	24.07	24.64	25.78	26.50
23	24.93	23.74	23.93	24.23	22.75	23.12	20.92	21.90	24.12	24.68	25.83	26.55
24	24.90	23.72	23.79	24.46	22.70	23.16	20.96	22.04	24.19	24.70	25.86	26.57
25	24.90	23.63	23.53	24.67	22.62	23.22	21.12	22.17	24.22	24.71	25.90	26.50
26	25.20	23.41	23.40	24.70	22.56	23.28	21.28	22.31	24.22	24.59	25.94	26.33
27	25.47	23.26	23.35	24.69	22.62	23.33	21.44	22.41	24.18	24.34	25.98	26.27
28	25.66	23.14	23.27	24.53	22.71	23.33	21.61	22.42	24.00	24.19	26.01	26.07
29	25.77	23.39	23.20	23.95	---	23.32	21.76	22.26	23.87	24.43	26.00	25.92
30	25.87	23.56	23.18	22.90	---	23.32	21.77	22.32	23.81	24.60	25.93	25.84
31	25.98	---	23.18	22.25	---	23.33	---	22.47	---	24.71	25.90	---
MAX	25.98	26.66	23.93	24.72	23.35	23.33	23.34	22.47	24.22	24.71	26.01	26.57
CAL YR 1993	LOW 26.66											
WTR YR 1994	LOW 26.66											



GROUND-WATER RECORDS

HARDIN COUNTY

404218083503700. Local number, HN-1.

LOCATION.--Lat 40°42'18", long 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.--Type F continuous recorder.

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.

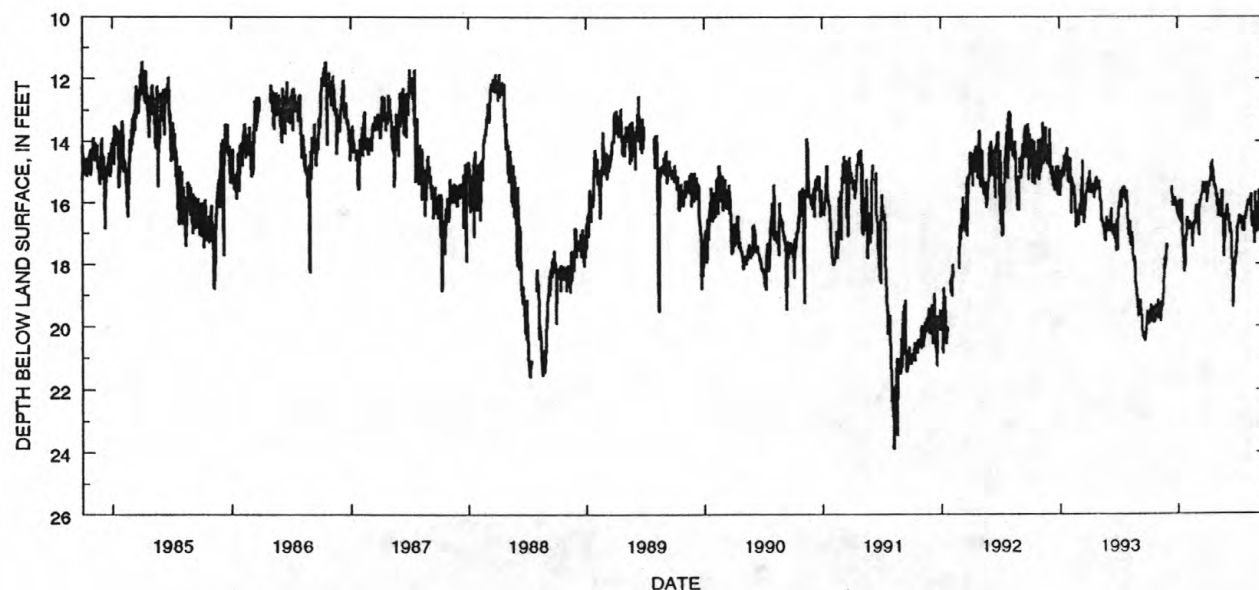
PERIOD OF RECORD.--April 1946 to current year.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.65	19.50	---	16.00	16.85	16.45	15.70	15.80	16.30	17.05	16.05	16.50
2	19.80	19.75	---	16.40	16.70	16.20	15.70	16.45	16.35	16.90	16.00	16.60
3	19.95	19.50	---	16.50	16.90	16.05	15.50	16.20	16.40	16.70	16.10	16.80
4	19.95	19.25	---	15.95	16.70	16.20	15.60	16.20	16.40	16.70	15.90	16.95
5	19.90	19.30	---	16.20	16.60	16.75	15.40	16.05	16.40	16.65	16.00	16.40
6	19.85	19.60	---	16.55	16.65	17.10	15.35	16.00	16.45	16.50	16.05	15.60
7	19.65	19.85	---	15.90	16.65	16.35	15.50	16.00	17.00	16.50	15.90	15.55
8	19.60	19.85	---	16.35	16.70	16.00	15.35	15.90	16.80	16.50	16.00	15.95
9	19.30	19.65	---	16.50	16.80	15.90	15.25	15.95	16.65	16.40	16.10	15.95
10	19.70	19.55	---	16.65	16.85	15.95	15.30	16.50	16.80	16.60	15.95	16.10
11	19.90	19.50	---	16.45	16.80	16.00	15.25	16.25	16.95	16.55	16.05	16.40
12	19.80	19.25	---	16.20	16.70	15.90	14.95	16.10	16.95	16.55	15.90	16.45
13	19.90	19.20	---	16.15	16.90	15.80	14.70	16.05	17.00	16.70	15.70	16.85
14	19.90	19.40	15.45	15.90	17.45	15.70	14.75	16.00	17.40	16.70	16.50	16.55
15	19.90	19.30	16.00	17.00	17.00	15.75	14.70	15.60	18.25	16.65	16.80	16.70
16	19.55	19.15	16.10	17.25	17.05	15.70	14.95	15.60	18.20	16.45	16.40	16.85
17	19.35	18.80	16.10	17.50	17.05	15.60	15.10	16.30	18.35	16.55	16.30	16.70
18	19.75	18.70	16.00	17.50	16.65	15.30	14.90	16.40	19.40	16.90	16.35	17.05
19	19.90	18.25	16.00	18.15	16.65	15.60	14.90	16.75	19.10	16.90	16.40	17.10
20	19.75	18.20	16.00	18.25	16.60	15.70	15.10	17.45	18.75	16.85	16.30	17.10
21	19.75	17.80	15.85	17.95	16.70	15.65	15.20	17.75	18.40	16.95	16.70	16.95
22	19.90	18.15	15.80	18.05	16.70	15.55	15.40	16.85	18.40	16.90	16.90	16.85
23	19.80	18.00	15.90	18.10	16.30	15.70	15.50	17.00	18.45	16.55	17.10	16.80
24	19.30	17.95	15.95	18.05	16.20	15.40	15.40	17.15	18.10	16.50	17.35	16.90
25	19.60	17.90	15.90	17.50	16.05	15.65	15.55	16.45	17.95	16.50	15.65	17.05
26	19.80	17.75	16.05	17.05	16.40	15.35	15.50	16.50	18.00	16.55	16.50	16.85
27	19.65	17.35	16.10	17.10	16.50	15.30	15.70	16.50	17.60	16.40	16.30	16.85
28	19.60	17.55	16.25	16.65	16.55	15.45	15.50	16.25	17.70	16.35	16.85	17.00
29	19.40	17.40	16.20	16.50	---	15.30	16.10	16.30	17.30	16.45	17.00	17.10
30	19.50	17.40	16.35	16.45	---	15.95	15.70	16.30	17.30	16.15	16.80	16.95
31	19.15	---	16.35	16.85	---	16.00	---	16.05	---	16.20	16.15	---
MAX	19.95	19.85	16.35	18.25	17.45	17.10	16.10	17.75	19.40	17.05	17.35	17.10
CAL YR 1993	LOW 20.45											
WTR YR 1994	LOW 19.95											



GROUND-WATER RECORDS

233

HOCKING COUNTY

393200082235300. Local number, HK-1.

LOCATION.--Lat 39°32'00", long 82°23'53", Hydrologic Unit 05060002, at railroad yards southeast edge of Logan.

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 ODNR 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, 22, 1967;
minimum daily low, 9.11 ft below land-surface datum, Apr. 22, 1964.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM INSTANTANEOUS OBSERVATIONS

DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 15, 1993	19.58	Apr. 28, 1994	15.39

GROUND-WATER RECORDS

KNOX COUNTY

402344082300700. Local number, K-1.

LOCATION.--Lat 40°23'44", long 82°30'07", Hydrologic Unit 05040003, in city park, Mt. Vernon.

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.

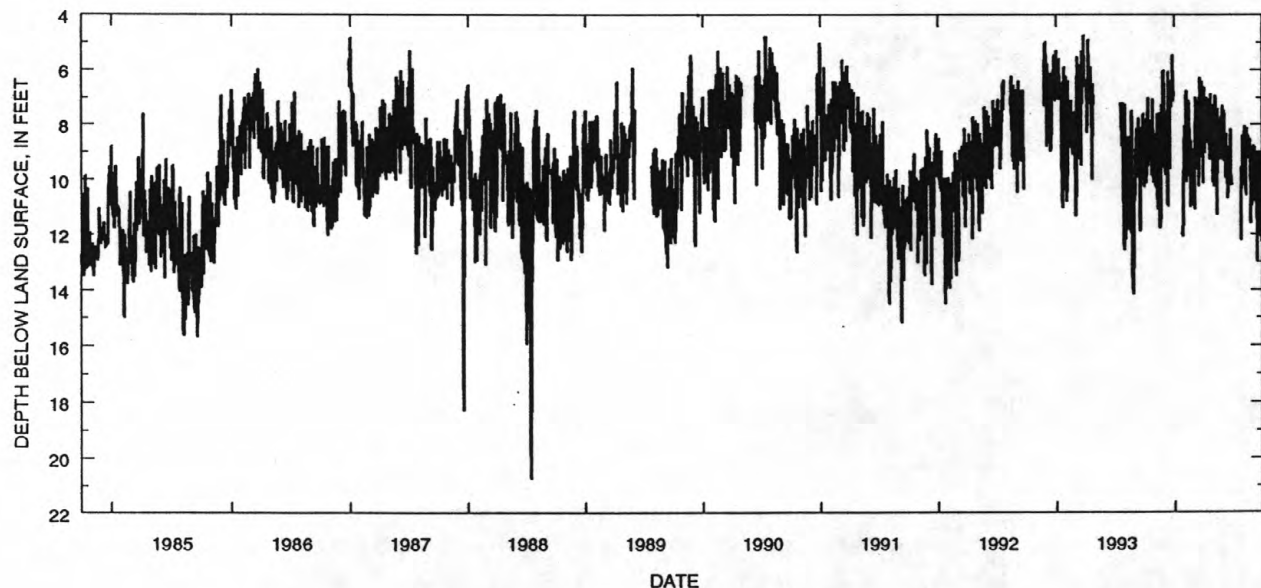
Measuring point: Floor of instrument shelter 3.50 ft above land-surface datum.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.51	9.16	9.37	---	8.05	10.96	8.71	7.27	7.83	---	9.30	10.61
2	8.51	10.10	9.70	---	9.02	9.51	6.65	8.31	9.34	---	9.97	10.81
3	7.81	10.23	9.85	---	8.52	10.59	6.85	10.26	8.81	---	8.72	9.40
4	8.43	8.84	7.88	---	8.89	11.09	7.20	8.90	7.51	---	10.19	8.98
5	10.14	10.28	7.58	---	7.07	8.80	7.04	9.05	7.72	---	8.72	8.83
6	9.80	9.49	7.52	---	6.78	7.01	9.05	9.21	8.58	---	8.44	8.86
7	9.07	7.62	9.23	---	7.66	8.60	8.05	6.95	9.71	---	8.06	9.96
8	9.86	10.36	9.55	---	10.11	7.21	8.69	7.09	9.95	---	8.41	10.46
9	8.04	11.10	9.71	---	9.16	8.51	7.31	10.07	9.37	---	9.67	9.14
10	7.03	10.00	10.85	---	9.68	7.51	7.00	9.38	9.51	---	10.32	9.07
11	7.79	10.04	10.98	---	8.26	7.32	8.31	9.21	9.68	---	10.58	9.02
12	9.52	10.54	6.08	---	7.30	7.27	8.66	11.29	8.34	---	9.65	9.08
13	8.68	8.03	8.08	---	7.13	7.15	7.37	11.26	9.25	---	8.77	10.80
14	8.29	7.59	7.59	---	7.84	9.66	8.45	8.37	9.98	---	8.12	12.10
15	8.48	9.52	7.55	---	7.21	8.99	8.34	7.43	10.38	---	9.24	12.96
16	8.41	11.76	9.27	---	9.11	10.25	7.11	8.92	10.67	---	8.66	11.20
17	7.86	11.62	9.62	---	9.37	8.71	8.22	9.07	10.34	---	8.39	9.65
18	8.49	11.46	7.98	---	10.45	9.94	9.29	8.08	9.83	---	8.89	9.25
19	8.58	11.45	6.41	---	11.00	7.70	8.24	9.09	9.22	---	8.69	8.99
20	7.89	9.47	7.28	---	8.59	6.28	8.87	7.94	9.46	---	8.70	9.10
21	9.73	7.30	7.02	---	9.09	8.49	9.01	7.75	10.02	---	8.75	11.07
22	9.89	9.48	7.37	---	9.20	8.82	9.05	8.61	9.79	---	8.57	10.58
23	8.61	9.50	6.95	---	8.89	8.82	6.89	9.29	10.23	---	8.53	10.55
24	7.07	7.60	7.02	---	10.74	7.28	8.38	8.65	8.60	---	8.61	10.75
25	8.09	7.77	6.01	11.93	10.79	7.21	8.80	9.29	8.17	---	11.61	9.47
26	8.32	6.06	5.47	12.07	9.50	7.21	8.70	8.10	9.59	12.22	9.11	8.98
27	9.24	6.13	6.69	11.35	9.51	6.43	9.18	7.72	10.16	9.56	8.82	11.96
28	10.10	6.02	7.16	9.72	10.29	8.48	7.87	7.62	10.20	10.34	8.81	12.25
29	9.36	6.97	6.77	9.64	---	8.29	10.10	7.60	---	10.22	10.71	10.77
30	8.82	9.14	6.90	8.48	---	10.13	8.07	7.31	---	9.14	10.96	11.74
31	8.35	---	---	9.48	---	8.69	---	8.86	---	8.38	9.87	---
MAX	10.14	11.76	10.98	12.07	11.00	11.09	10.10	11.29	10.67	12.22	11.61	12.96
CAL YR 1993	LOW 14.14											
WTR YR 1994	LOW 12.96											



GROUND-WATER RECORDS

235

LICKING COUNTY

400848082251100. Local number, LI-4

LOCATION.--Lat 40°08'48", long 82°25'11", Hydrologic Unit 05040006, near St. Louisville.

Owner: City of Newark

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 79 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 885 ft above sea level, from topographic map.

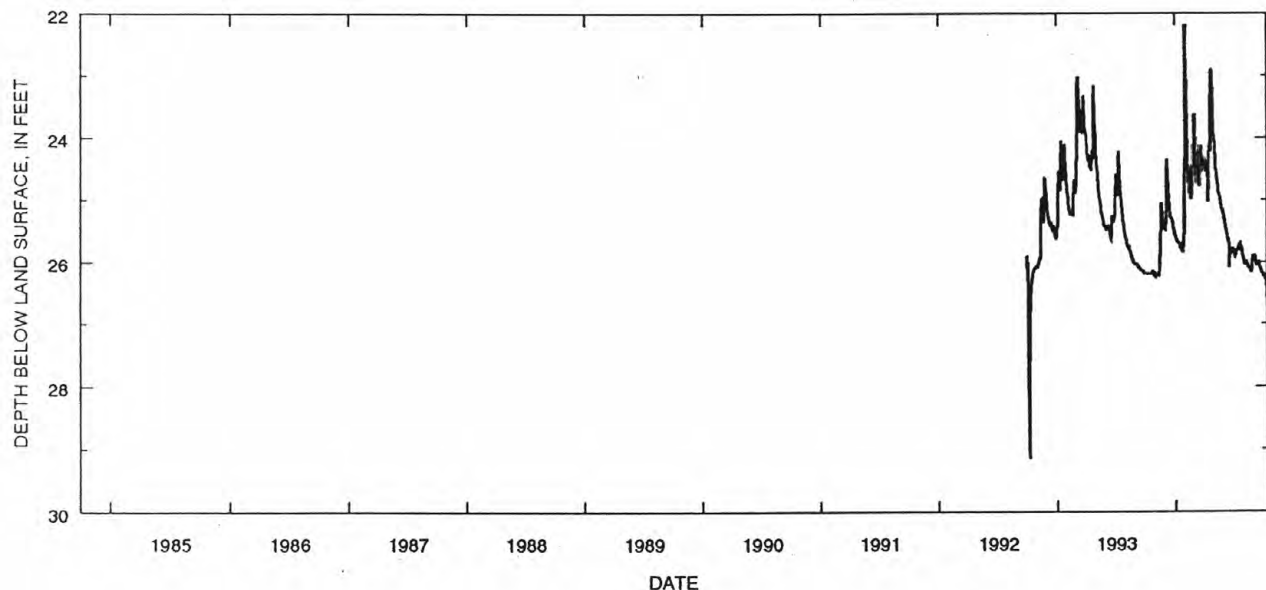
Measuring point: Floor of instrument shelter 4.00 ft above land-surface datum.

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, 22.18 ft above land-surface, Jan. 30, 1994.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.19	26.24	25.48	25.58	22.91	24.19	24.50	24.66	25.57	25.80	26.04	26.04
2	26.19	26.24	25.50	25.59	23.23	24.29	24.56	24.69	25.60	25.81	26.05	26.01
3	26.19	26.21	25.52	25.61	23.51	24.39	24.61	24.73	25.62	25.83	26.06	25.98
4	26.19	26.21	25.50	25.64	23.74	24.50	24.61	24.78	25.64	25.82	26.08	26.00
5	26.19	26.20	25.29	25.64	23.95	24.57	24.54	24.82	25.65	25.77	26.09	26.01
6	26.19	26.21	24.57	25.66	24.12	24.64	25.03	24.86	25.68	25.81	26.09	26.04
7	26.19	26.22	24.36	25.68	24.25	24.69	24.63	24.89	25.70	25.83	26.10	26.06
8	26.19	26.22	24.46	25.68	24.37	24.73	24.29	24.93	26.08	25.83	26.11	26.08
9	26.19	26.22	24.55	25.68	24.51	24.73	24.17	24.93	25.80	25.75	26.12	26.10
10	26.19	26.22	24.68	25.69	24.60	24.76	24.18	24.96	25.77	25.73	26.13	26.11
11	26.20	26.23	24.78	25.69	24.69	24.77	23.86	24.99	25.79	25.71	26.15	26.13
12	26.20	26.24	24.87	25.69	24.77	24.77	23.45	25.02	25.80	25.77	26.16	26.14
13	26.20	26.24	24.94	25.71	24.86	24.68	23.17	25.06	25.82	25.81	26.16	26.16
14	26.20	26.22	25.01	25.73	24.92	24.50	22.92	25.09	25.84	25.82	26.17	26.17
15	26.20	26.08	25.10	25.74	24.97	24.24	22.91	25.13	25.85	25.77	26.10	26.18
16	26.20	25.96	25.17	25.74	24.97	24.13	22.94	25.15	25.87	25.79	25.98	26.19
17	26.20	25.84	25.22	25.77	24.94	24.18	23.10	25.15	25.87	25.84	25.94	26.20
18	26.20	25.76	25.27	25.78	24.89	24.31	23.27	25.16	25.82	25.87	25.93	26.21
19	26.20	25.30	25.30	25.79	24.82	24.32	23.46	25.19	25.77	25.91	25.94	26.22
20	26.20	25.05	25.30	25.80	24.72	24.35	23.64	25.21	25.82	25.94	25.96	26.24
21	26.20	25.08	25.31	25.81	24.57	24.40	23.78	25.24	25.84	25.96	25.98	26.24
22	26.20	25.15	25.31	25.81	24.37	24.40	23.91	25.26	25.87	25.99	25.95	26.24
23	26.18	25.22	25.34	25.84	24.21	24.31	24.00	25.30	25.88	26.00	25.89	26.25
24	26.16	25.31	25.34	25.84	24.04	24.40	24.12	25.34	25.90	26.02	25.90	26.27
25	26.16	25.37	25.38	25.83	23.62	24.45	24.21	25.36	25.92	26.03	25.94	26.27
26	26.17	25.43	25.42	25.69	23.76	24.50	24.30	25.41	25.92	26.03	25.98	26.26
27	26.19	25.48	25.45	25.43	23.92	24.54	24.40	25.43	25.90	25.99	26.00	26.21
28	26.20	25.48	25.46	24.93	24.07	24.54	24.48	25.46	25.88	25.99	26.04	26.21
29	26.22	25.44	25.52	23.70	---	24.46	24.54	25.48	25.82	26.00	26.05	26.23
30	26.22	25.46	25.54	22.18	---	24.39	24.59	25.49	25.81	26.02	26.05	26.57
31	26.23	---	25.55	22.55	---	24.43	---	25.53	---	26.03	26.04	---
MAX	26.23	26.24	25.55	25.84	24.97	24.77	25.03	25.53	26.08	26.03	26.17	26.57

CAL YR 1993 LOW 26.24
WTR YR 1994 LOW 26.57

GROUND-WATER RECORDS

LOGAN COUNTY

401510083444400. Local number, LO-3

LOCATION.--Lat 40°15'10", long 83°44'44", Hydrologic Unit 05080001, at West Liberty.

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.--Type F graphic recorder.

DATUM.--Elevation of land-surface datum is 1090 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.

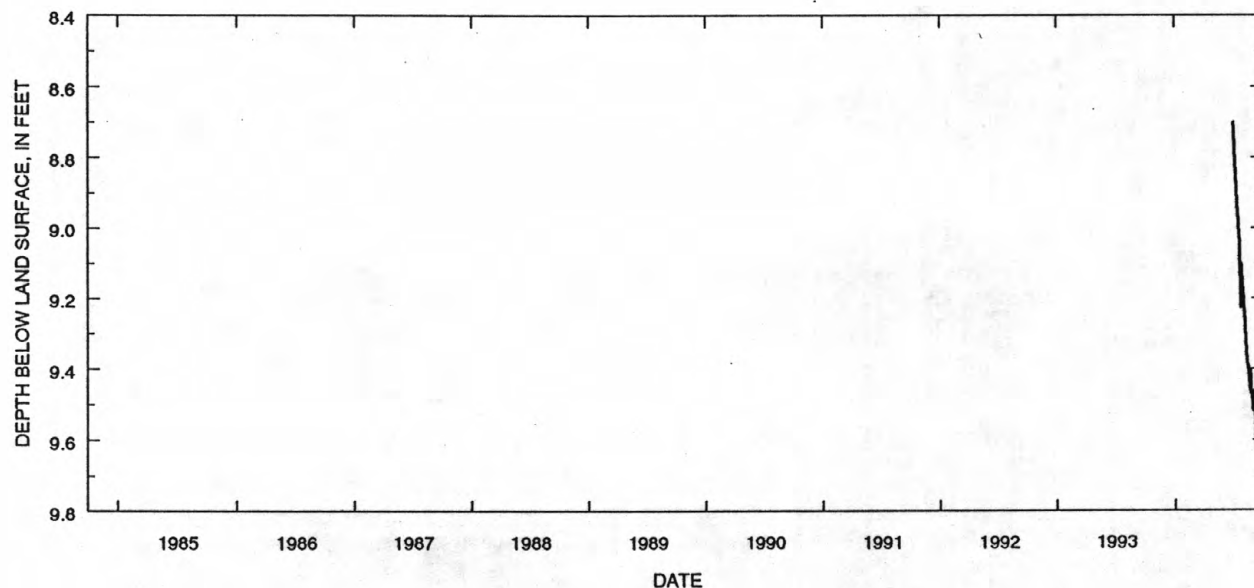
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 9.64 ft below land-surface datum, Sept. 13, 1994;

minimum daily low, 8.70 ft above land-surface, July 1, 1994.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	8.70	9.20	9.46
2	---	---	---	---	---	---	---	---	---	8.72	9.22	9.48
3	---	---	---	---	---	---	---	---	---	8.74	9.24	9.50
4	---	---	---	---	---	---	---	---	---	8.76	9.25	9.52
5	---	---	---	---	---	---	---	---	---	8.79	9.26	9.53
6	---	---	---	---	---	---	---	---	---	8.80	9.29	9.54
7	---	---	---	---	---	---	---	---	---	8.82	9.31	9.63
8	---	---	---	---	---	---	---	---	---	8.84	9.33	9.58
9	---	---	---	---	---	---	---	---	---	8.86	9.34	9.59
10	---	---	---	---	---	---	---	---	---	8.88	9.36	9.60
11	---	---	---	---	---	---	---	---	---	8.90	9.37	9.61
12	---	---	---	---	---	---	---	---	---	8.92	9.38	9.63
13	---	---	---	---	---	---	---	---	---	8.94	9.39	9.64
14	---	---	---	---	---	---	---	---	---	8.95	9.40	---
15	---	---	---	---	---	---	---	---	---	8.96	9.39	---
16	---	---	---	---	---	---	---	---	---	8.98	9.41	---
17	---	---	---	---	---	---	---	---	---	9.00	9.42	---
18	---	---	---	---	---	---	---	---	---	9.01	9.43	---
19	---	---	---	---	---	---	---	---	---	9.02	9.44	---
20	---	---	---	---	---	---	---	---	---	9.04	9.45	---
21	---	---	---	---	---	---	---	---	---	9.05	9.47	---
22	---	---	---	---	---	---	---	---	---	9.23	9.40	---
23	---	---	---	---	---	---	---	---	---	9.20	9.43	---
24	---	---	---	---	---	---	---	---	---	9.10	9.45	---
25	---	---	---	---	---	---	---	---	---	9.10	9.47	---
26	---	---	---	---	---	---	---	---	---	9.11	9.48	---
27	---	---	---	---	---	---	---	---	---	9.13	9.49	---
28	---	---	---	---	---	---	---	---	---	9.15	9.51	---
29	---	---	---	---	---	---	---	---	---	9.18	9.52	---
30	---	---	---	---	---	---	---	---	---	9.17	9.51	---
31	---	---	---	---	---	---	---	---	---	9.19	9.50	---
MAX	---	---	---	---	---	---	---	---	---	9.23	9.52	9.64

WTR YR 1994 LOW 9.64



GROUND-WATER RECORDS

237

MADISON COUNTY

395301083272200. Local number, M-2.

LOCATION.--Lat 39°53'01", long 83°27'22", Hydrologic Unit 05060002, U.S. 42 and Westmore Dr., London.

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 1035 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.

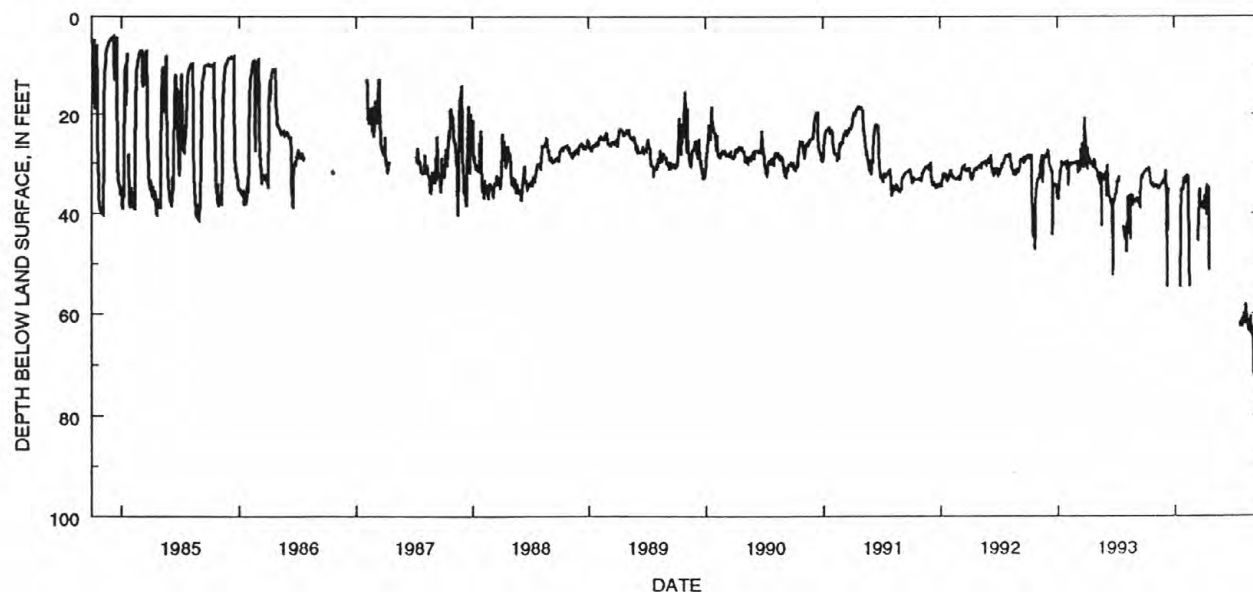
PERIOD OF RECORD.--August 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 78.64 ft below land-surface datum, Sept. 11, 1994;
minimum daily low, 0.55 ft above land-surface, Apr. 13, 1980.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31.80	34.67	33.80	---	32.99	---	38.20	---	---	---	59.92	66.10
2	31.62	34.73	33.12	---	34.23	---	39.41	---	---	---	61.27	64.85
3	31.60	34.61	32.34	---	33.10	---	36.39	---	---	---	61.81	64.40
4	31.43	34.54	31.78	---	32.90	---	38.58	---	---	---	61.85	63.93
5	31.43	34.42	31.31	---	32.79	---	38.89	---	---	---	61.92	62.68
6	31.52	34.52	35.39	---	32.60	---	37.58	---	---	---	61.06	69.68
7	31.80	34.55	34.33	---	32.76	---	38.41	---	---	---	58.36	76.62
8	31.79	34.37	54.81	---	32.76	---	38.08	---	---	---	58.11	76.21
9	31.51	35.05	---	---	32.82	---	40.40	---	---	---	58.92	73.55
10	31.55	35.05	43.59	---	32.84	---	35.91	---	---	---	59.03	75.32
11	31.35	34.67	38.19	---	32.64	---	34.34	---	---	---	61.02	78.64
12	31.00	35.28	36.47	---	32.85	---	37.88	---	---	---	61.47	---
13	31.10	35.25	35.61	---	33.17	---	35.49	---	---	---	63.33	---
14	31.21	34.46	35.04	---	33.27	---	36.87	---	---	---	62.84	---
15	31.44	34.43	---	---	49.77	45.69	37.35	---	---	---	61.53	---
16	32.32	34.97	---	---	54.74	39.83	37.39	---	---	---	63.61	---
17	32.62	34.92	---	---	---	39.26	34.74	---	---	---	63.31	---
18	33.07	34.67	---	54.78	---	38.98	51.41	---	---	---	61.98	---
19	34.10	34.57	---	42.39	---	36.60	---	---	---	---	62.51	---
20	34.12	34.74	---	39.34	---	35.10	---	---	74.84	62.69	64.11	---
21	34.37	34.66	---	37.50	---	37.95	---	---	---	61.58	63.63	---
22	34.46	34.19	---	36.26	---	38.59	---	---	---	61.86	62.04	---
23	34.49	33.99	---	35.27	---	38.13	---	---	---	62.01	60.54	---
24	34.41	34.46	---	35.01	---	37.89	---	---	---	62.30	61.60	---
25	33.87	34.47	---	35.16	---	38.28	---	---	---	61.64	63.11	---
26	34.73	34.11	---	35.43	---	38.85	---	---	---	61.70	63.89	---
27	35.08	33.36	---	35.32	---	38.82	---	---	---	60.97	64.85	---
28	34.95	33.34	---	33.89	---	39.29	---	---	---	61.40	64.01	---
29	34.38	33.32	---	33.27	---	37.74	---	---	---	62.79	63.60	---
30	34.38	33.80	---	33.16	---	38.32	---	---	---	61.47	72.02	---
31	34.51	---	---	33.17	---	37.59	---	---	---	61.47	71.19	---
MAX	35.08	35.28	54.81	54.78	54.74	45.69	51.41	---	74.84	62.79	72.02	78.64

CAL YR 1993 LOW 54.81

WTR YR 1994 LOW 78.64



GROUND-WATER RECORDS

MADISON COUNTY--Continued

395352083292100. Local number, M-5.

LOCATION.--Lat 39°53'52", long 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.--Type F continuous recorder.

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;

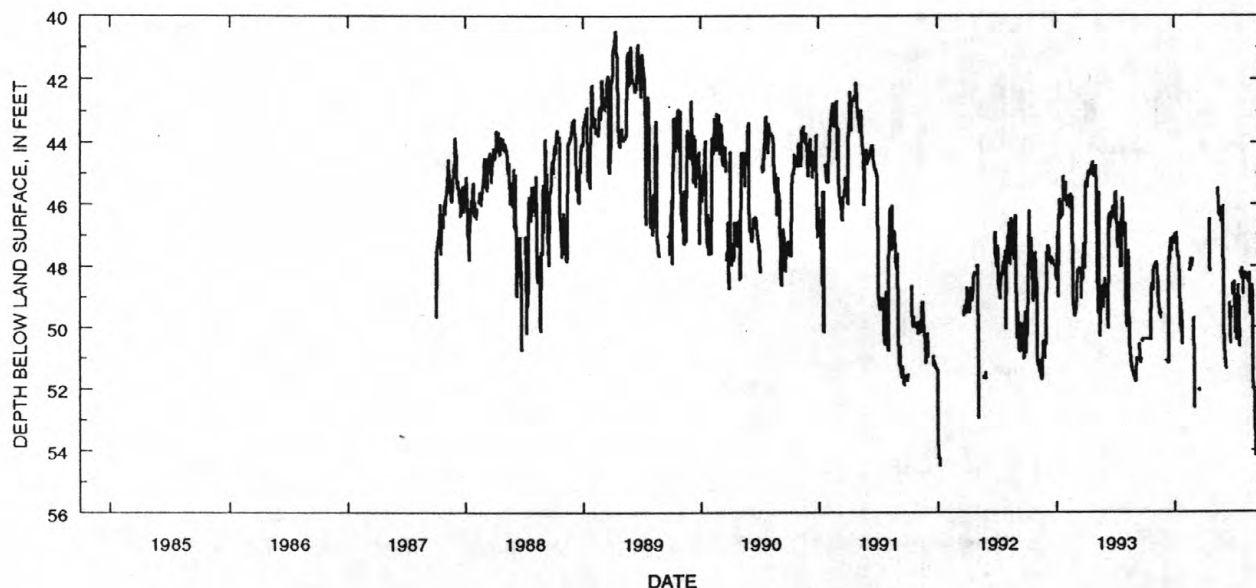
minimum daily low, 40.47 ft below land-surface datum, Apr. 11, 1989.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50.40	48.07	51.00	47.27	---	49.69	---	---	49.43	48.58	48.95	51.72
2	50.40	48.05	---	46.95	---	51.44	---	---	50.00	48.73	48.45	51.93
3	50.40	48.00	---	---	---	52.63	---	---	50.50	48.75	48.43	51.98
4	50.40	47.93	51.12	---	---	---	---	---	50.68	48.61	48.28	52.01
5	50.40	47.85	51.10	---	---	---	---	---	50.90	48.51	48.20	51.99
6	50.40	47.92	51.10	---	---	---	---	---	51.02	50.23	48.23	52.22
7	50.40	48.01	51.10	46.90	---	---	---	---	51.14	49.93	48.28	52.60
8	50.40	48.13	51.09	47.21	---	---	---	---	51.25	49.63	48.45	54.18
9	50.40	48.48	51.09	47.50	---	---	---	46.17	51.36	49.44	48.21	---
10	50.39	49.02	51.11	47.57	---	---	---	---	---	49.50	48.29	---
11	50.39	48.48	51.16	47.68	---	---	---	---	---	50.43	48.33	---
12	50.39	48.95	51.16	47.69	---	---	---	---	---	50.00	48.36	---
13	50.39	49.15	51.14	47.69	---	---	---	---	---	49.58	48.37	---
14	50.40	49.33	48.21	47.86	---	---	---	---	---	49.20	48.42	---
15	50.40	49.48	47.70	48.15	48.10	---	---	45.45	---	49.01	48.48	---
16	50.39	49.61	47.80	48.19	48.15	---	---	46.00	---	48.81	48.50	---
17	50.38	49.64	47.80	48.14	48.13	52.01	---	46.25	---	48.67	48.50	---
18	50.38	49.64	47.62	49.98	48.08	52.08	46.45	46.39	---	48.61	48.54	---
19	50.37	49.50	47.12	49.20	48.03	---	46.49	46.35	---	49.50	48.39	54.45
20	50.06	---	47.09	49.48	47.76	---	48.04	46.08	49.19	48.97	48.28	---
21	48.77	---	47.35	49.48	47.97	---	48.17	46.06	50.35	50.64	48.21	---
22	48.79	---	47.43	49.59	48.00	---	---	---	49.96	50.06	48.84	---
23	48.55	---	47.51	49.78	47.87	---	---	46.25	50.53	---	49.62	---
24	48.65	---	47.20	50.55	47.85	---	---	46.48	50.07	48.16	49.20	---
25	48.73	---	---	49.74	47.73	52.39	---	46.56	49.34	48.27	48.86	---
26	48.75	---	---	---	---	---	---	46.20	---	48.34	48.76	---
27	48.44	---	---	---	---	---	---	46.17	---	48.37	48.77	---
28	48.20	---	47.04	---	---	---	---	46.16	48.95	48.40	48.76	---
29	48.05	---	47.12	---	---	---	---	46.12	48.54	48.05	48.61	---
30	48.05	---	47.23	---	---	---	---	46.10	---	---	48.71	---
31	48.00	---	47.26	---	---	---	---	46.10	---	---	48.88	---
MAX	50.40	49.64	51.16	50.55	48.15	52.63	48.17	46.56	51.36	50.64	49.62	54.45

CAL YR 1993 LOW 51.77

WTR YR 1994 LOW 54.45



GROUND-WATER RECORDS

239

MADISON COUNTY--Continued.

395357083304400. Local number, M-4.

LOCATION.--Lat 39°53'57", long 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.--Type F continuous recorder.

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.

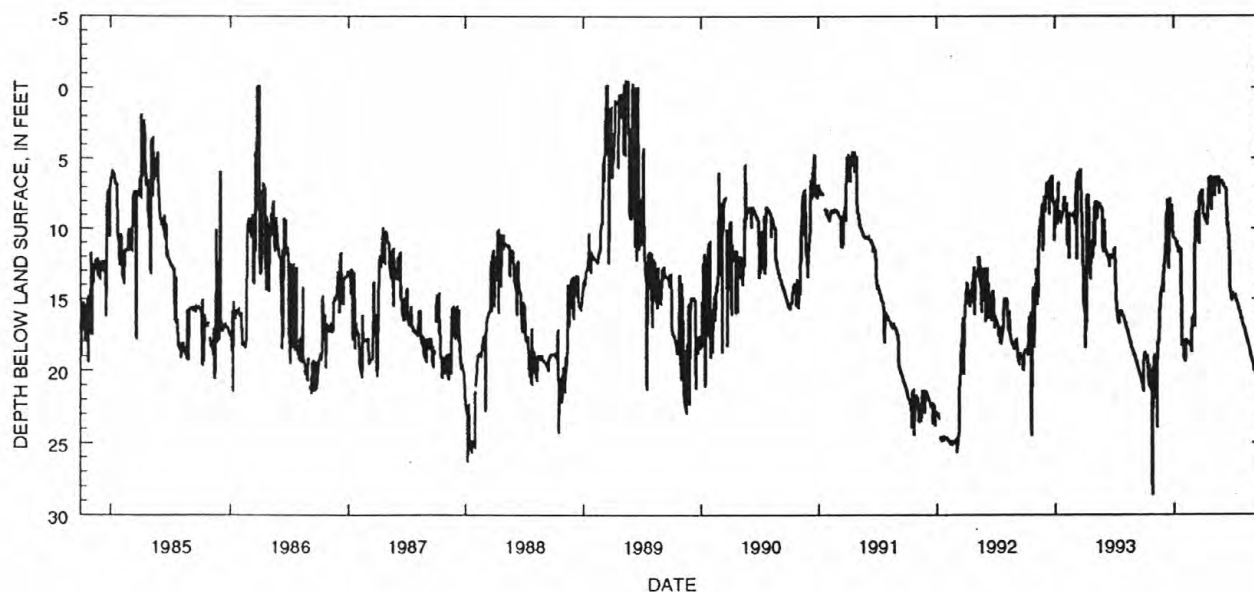
PERIOD OF RECORD.--June 1983 to current year.

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, 16, 1989.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.10	18.90	12.90	10.70	19.20	16.20	9.00	6.40	6.90	14.95	17.00	19.85
2	19.10	20.00	12.65	10.75	19.20	16.15	9.05	6.40	6.95	14.90	17.10	19.90
3	18.80	21.10	12.45	10.75	19.40	16.10	9.10	6.40	7.05	14.95	17.15	20.00
4	18.75	21.30	12.30	10.80	19.00	16.95	9.15	6.35	7.05	14.75	17.20	20.10
5	19.00	21.95	11.75	10.90	17.90	11.90	9.10	6.35	7.05	14.75	17.40	20.15
6	19.00	19.65	11.25	10.85	17.80	10.30	9.05	7.70	7.10	14.85	17.45	20.25
7	19.00	19.80	11.00	10.85	17.95	9.50	9.25	6.45	7.10	14.95	17.55	20.35
8	19.30	19.95	9.30	11.00	17.90	9.15	9.50	6.35	7.20	15.00	17.60	20.45
9	19.30	23.95	8.90	11.10	18.00	9.05	9.55	6.30	7.25	15.10	17.75	20.55
10	19.00	19.90	9.95	11.05	18.05	8.85	9.60	6.40	7.35	15.15	17.80	20.65
11	19.00	18.70	8.00	11.30	18.00	10.50	9.60	6.40	9.75	15.25	17.85	20.75
12	18.95	18.25	7.95	11.30	18.00	10.35	9.50	6.40	9.75	15.30	17.95	20.80
13	20.70	18.20	10.05	11.35	18.10	10.25	9.25	6.45	9.55	15.40	18.00	20.95
14	19.25	17.90	10.40	11.50	18.10	8.80	9.15	6.40	9.95	15.50	18.15	21.00
15	21.10	18.10	12.85	11.70	18.11	10.65	7.60	6.30	10.15	15.60	18.20	21.10
16	19.75	17.70	11.85	11.70	17.95	10.00	6.75	6.40	10.40	15.65	18.25	21.15
17	19.65	16.70	11.75	11.45	18.10	10.75	6.45	6.50	10.50	15.70	18.40	21.20
18	21.15	15.75	8.30	11.55	18.35	11.10	6.45	7.50	10.50	15.80	18.45	21.35
19	21.25	15.70	7.85	11.55	18.10	7.75	6.40	6.50	12.60	15.90	18.60	21.60
20	21.00	15.10	9.60	11.50	18.00	7.65	6.45	6.55	14.20	15.90	18.65	21.75
21	21.40	14.75	8.70	11.55	17.95	8.35	6.40	6.60	14.40	16.00	18.85	21.85
22	20.65	14.60	8.55	11.45	18.75	7.60	6.40	6.60	14.65	16.15	18.95	21.95
23	19.95	14.50	8.50	11.45	17.50	7.45	7.60	6.60	14.70	16.25	19.05	22.05
24	21.50	14.30	8.50	18.10	16.70	7.45	8.30	6.60	14.95	16.35	19.10	22.15
25	27.35	14.25	8.30	18.15	16.40	8.05	8.70	6.60	15.10	16.35	19.20	22.25
26	28.60	14.20	8.40	18.10	16.40	7.50	6.80	6.60	15.15	16.50	19.30	22.30
27	23.60	14.10	9.40	18.00	16.35	7.30	6.70	6.75	14.90	16.60	19.35	22.45
28	23.80	13.70	10.30	17.85	16.25	7.30	6.70	6.80	14.75	16.80	19.40	22.55
29	21.60	14.55	10.35	18.80	---	7.35	6.65	6.80	14.75	16.85	19.55	22.65
30	20.15	13.40	10.65	19.00	---	8.90	6.65	6.80	14.90	16.90	19.60	22.70
31	19.35	---	10.70	19.10	---	8.95	---	6.90	---	16.95	19.70	---
MAX	28.60	23.95	12.90	19.10	19.40	16.95	9.60	7.70	15.15	16.95	19.70	22.70
CAL YR 1993 LOW 28.60												
WTR YR 1994 LOW 28.60												



GROUND-WATER RECORDS

MADISON COUNTY--Continued

395740083255700. Local number, M-3.

LOCATION.--Lat 39°57'40", long 83°25'57", Hydrologic Unit 05060002, 5.2 mi north of London.

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 ODNR 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 OBSERVATIONS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 18, 1993	8.88	Nov. 18, 1993	8.32	Apr. 18, 1994	5.11

GROUND-WATER RECORDS

241

MAHONING COUNTY

410042080453800. Local number, MA-1.

LOCATION.--Lat 41°00'42", long 80°45'38", Hydrologic Unit, 05030103, in county fairgrounds at south edge of Canfield.

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 ODNR 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 OBSERVATIONS

DATE	WATER LEVEL	DATE	WATER LEVEL
Nov. 2, 1993	33.02	May 2, 1994	32.78

GROUND-WATER RECORDS

MARION COUNTY

403413083170500. Local number, MN-4.

LOCATION.--Lat 40°34'13", long 83°17'05", Hydrologic Unit 05060001, 1.9 mi southeast of New Bloomington.

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.--Digital recorder -- 60-minute punch.

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.

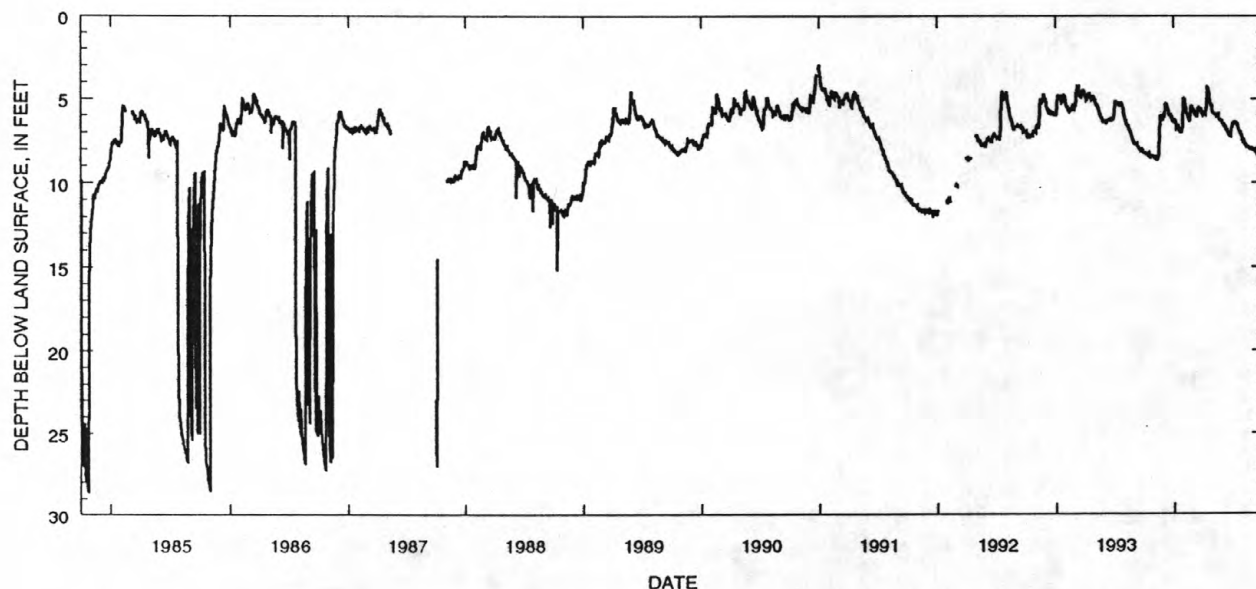
REMARKS.--Influenced by seasonal water demand for nearby wildlife refuge.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.20	8.65	6.15	6.40	5.05	5.75	5.90	5.85	6.55	6.50	7.50	8.10
2	8.20	8.65	6.05	6.40	5.05	5.65	5.90	5.90	6.60	6.45	7.55	8.10
3	8.20	8.55	6.00	6.40	5.30	5.70	6.00	5.90	6.70	6.45	7.60	8.10
4	8.15	8.50	5.90	6.35	5.35	5.80	6.00	5.90	6.65	6.35	7.60	8.15
5	8.30	8.40	5.65	6.40	5.45	5.95	5.90	5.90	6.70	6.40	7.70	8.10
6	8.35	8.50	5.40	6.40	5.60	5.95	5.90	5.95	6.65	6.40	7.75	8.05
7	8.30	8.60	5.25	6.45	5.75	6.00	5.95	5.95	6.70	6.40	7.75	8.15
8	8.25	8.65	5.35	6.65	5.70	6.05	5.90	5.95	6.85	6.40	7.75	8.15
9	8.25	8.70	5.30	6.80	5.90	6.05	5.60	5.95	6.85	6.40	7.80	8.15
10	8.40	8.65	5.40	6.75	5.95	5.95	5.55	5.95	6.85	6.50	7.90	8.25
11	8.35	8.60	5.55	6.70	5.95	6.05	5.40	6.05	6.85	6.50	7.90	8.30
12	8.25	8.60	5.60	6.65	6.00	6.10	5.20	6.00	6.90	6.50	7.90	8.35
13	8.40	8.60	5.65	6.55	6.10	6.00	4.70	6.05	6.90	6.60	7.85	8.35
14	8.40	8.50	5.65	6.60	6.15	5.85	4.35	6.05	6.95	6.60	7.85	8.35
15	8.45	8.20	5.80	6.85	6.20	5.60	4.40	6.05	7.05	6.65	7.85	8.40
16	8.40	7.95	5.95	6.90	6.30	5.60	4.60	6.00	7.10	6.80	7.90	8.40
17	8.30	7.35	6.00	6.70	6.30	5.60	4.75	6.10	7.15	6.80	7.90	8.40
18	8.40	7.00	5.95	6.90	6.25	5.50	4.75	6.20	7.15	6.85	7.90	8.50
19	8.50	6.35	5.95	6.95	6.15	5.60	4.85	6.20	7.20	6.90	7.95	8.55
20	8.45	6.00	5.95	7.00	5.95	5.60	5.00	6.20	7.20	6.95	8.00	8.55
21	8.50	6.10	5.95	7.00	5.65	5.60	5.10	6.25	7.15	7.00	8.00	8.55
22	8.55	6.20	6.00	6.95	5.65	5.65	5.25	6.30	7.20	7.00	7.90	8.50
23	8.55	6.20	6.10	6.95	5.50	5.65	5.35	6.30	7.15	7.10	8.00	8.50
24	8.45	6.30	6.10	6.95	5.40	5.65	5.30	6.30	7.05	7.10	8.05	8.55
25	8.45	6.30	6.05	6.95	5.45	5.80	5.35	6.30	6.90	7.10	8.05	8.55
26	8.40	6.30	6.20	6.80	5.65	5.85	5.45	6.35	6.85	7.15	8.00	8.50
27	8.40	6.25	6.35	6.70	5.75	5.70	5.65	6.30	6.70	7.20	7.95	8.55
28	8.35	6.05	6.35	6.15	5.72	5.80	5.75	6.50	6.65	7.35	7.95	8.60
29	8.45	6.00	6.30	5.65	---	5.90	5.85	6.45	6.50	7.42	7.90	8.70
30	8.45	6.15	6.35	5.15	---	6.00	5.85	6.50	6.50	7.50	8.00	8.75
31	8.45	---	6.40	4.95	---	6.00	---	6.50	---	7.55	8.00	---
MAX	8.55	8.70	6.40	7.00	6.30	6.10	6.00	6.50	7.20	7.55	8.05	8.75

CAL YR 1993 LOW 8.70
WTR YR 1994 LOW 8.75

GROUND-WATER RECORDS

243

MARION COUNTY--Continued

403443083230400. Local number, MN-1.

LOCATION.--Lat 40°34'43, long 83°23'04", Hydrologic Unit 05060001, SR 37 at Baptist Church in LaRue.

Owner: Village of LaRue.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 4 in., depth 100 ft., cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 930 ft above sea level, from topographic map.

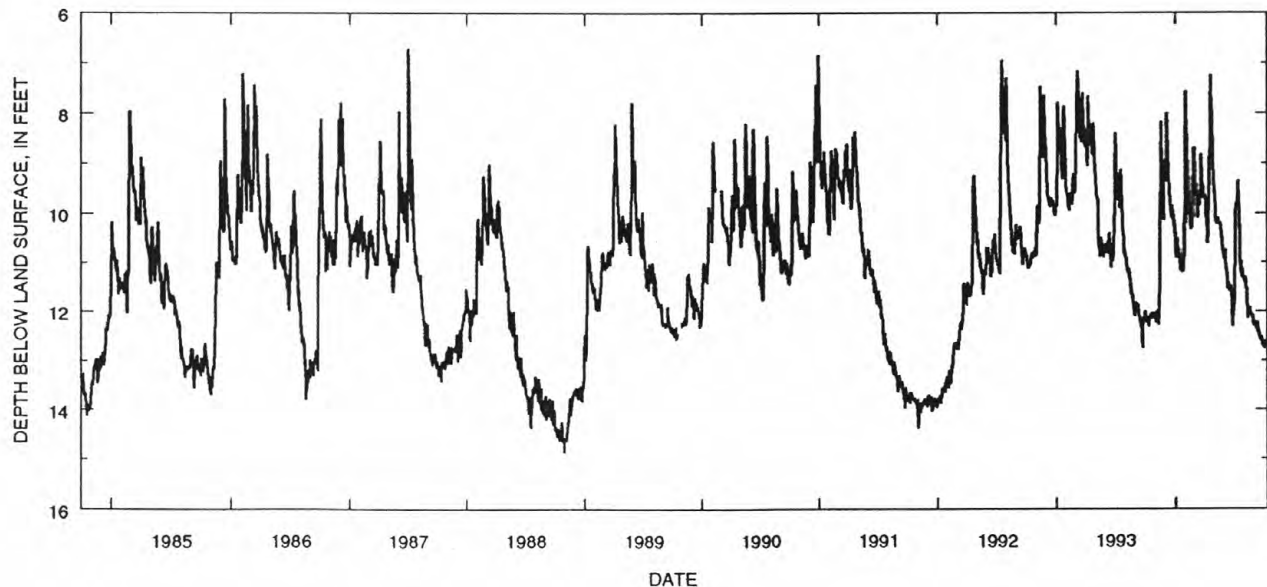
Measuring point: Floor of instrument shelter 3.30 ft above land-surface datum.

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, 14.87 ft below land-surface datum, Oct. 29, 1988;
minimum daily low, 5.67 ft below land-surface datum, Jan. 23, 1959.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.06	12.23	9.27	10.80	8.33	9.64	10.19	10.15	11.22	9.80	12.14	12.39
2	12.04	12.24	9.37	10.91	8.50	9.65	10.34	10.11	11.55	9.80	12.02	12.38
3	12.00	12.21	9.34	10.92	8.58	9.81	10.48	10.15	11.47	9.62	12.05	12.35
4	12.05	12.13	9.27	10.58	9.33	9.87	10.61	10.14	11.40	9.35	12.07	12.44
5	12.12	12.00	8.75	10.62	9.74	10.09	10.35	10.17	11.44	9.75	11.94	12.46
6	12.23	12.03	8.00	10.51	9.73	10.02	10.20	10.23	11.54	9.95	11.94	12.49
7	12.19	12.02	8.33	10.68	9.58	9.87	9.71	10.19	11.60	10.33	11.93	12.46
8	12.17	12.12	8.55	10.70	9.61	9.82	9.02	10.20	11.60	10.33	11.96	12.58
9	12.19	12.12	8.58	10.88	10.00	9.67	8.73	10.20	11.51	10.24	12.03	12.55
10	12.27	12.25	8.83	10.81	10.00	9.79	8.72	10.24	11.49	10.87	12.07	12.52
11	12.25	12.22	9.16	10.75	10.05	9.86	8.20	10.20	11.50	11.18	12.08	12.51
12	12.20	12.26	9.33	10.93	10.08	9.82	7.93	10.29	11.55	10.97	12.07	12.56
13	12.21	12.28	9.50	11.13	10.25	9.78	7.24	10.31	11.59	11.23	12.10	12.58
14	12.31	12.05	9.58	11.16	10.25	9.30	7.58	10.42	11.64	11.32	12.08	12.59
15	12.23	11.24	9.76	11.17	10.30	8.82	7.80	10.47	11.74	11.25	12.13	12.66
16	12.15	9.65	9.84	10.97	10.29	8.98	8.09	10.50	11.88	11.24	12.09	12.69
17	12.10	9.53	9.90	10.95	10.22	9.03	8.35	10.64	12.30	11.14	12.10	12.63
18	12.15	8.97	9.90	11.15	10.00	9.17	8.59	10.70	12.11	11.27	12.21	12.64
19	12.18	8.18	10.02	11.21	9.62	9.18	8.82	10.74	12.05	11.32	12.29	12.71
20	12.12	8.65	10.09	11.17	8.90	9.70	9.07	10.83	12.10	11.31	12.30	12.73
21	12.10	8.77	9.85	11.15	8.74	9.58	9.22	10.84	11.91	11.35	12.19	12.69
22	12.17	9.11	9.85	11.12	8.75	9.46	9.41	10.85	11.80	11.38	12.21	12.69
23	12.08	9.29	10.03	11.10	8.75	9.59	9.48	10.91	11.82	11.40	12.23	12.67
24	12.03	9.53	10.08	11.18	8.69	9.65	9.66	10.94	11.60	11.35	12.29	12.64
25	12.13	9.72	10.03	11.15	8.77	9.68	9.72	10.92	10.60	11.32	12.30	12.60
26	12.07	9.90	10.10	10.64	9.18	9.68	9.88	10.75	10.02	11.39	12.29	12.59
27	12.06	10.15	10.21	9.78	9.31	9.72	10.00	10.98	9.80	11.52	12.31	12.61
28	12.10	9.40	10.20	8.95	9.52	9.74	10.15	11.09	9.85	11.54	12.34	12.62
29	12.10	8.95	10.32	7.57	---	9.99	10.20	11.12	9.93	11.54	12.36	12.63
30	12.14	9.26	10.33	7.68	---	9.98	10.22	11.15	9.66	11.56	12.34	12.60
31	12.15	---	10.50	7.98	---	9.98	---	11.27	---	11.64	12.22	---
MAX	12.31	12.28	10.50	11.21	10.30	10.09	10.61	11.27	12.30	11.64	12.36	12.73

CAL YR 1993 LOW 12.74
WTR YR 1994 LOW 12.73

GROUND-WATER RECORDS

MARION COUNTY--Continued

403601083110400. Local number, MN-2.

LOCATION.--Lat 40°36'01", long 83°11'04", Hydrologic Unit 05060001, water treatment plant 2 mi west of Marion.

Owner: Marion Water Department.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in., depth 67 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 910 ft above sea level, from topographic map.

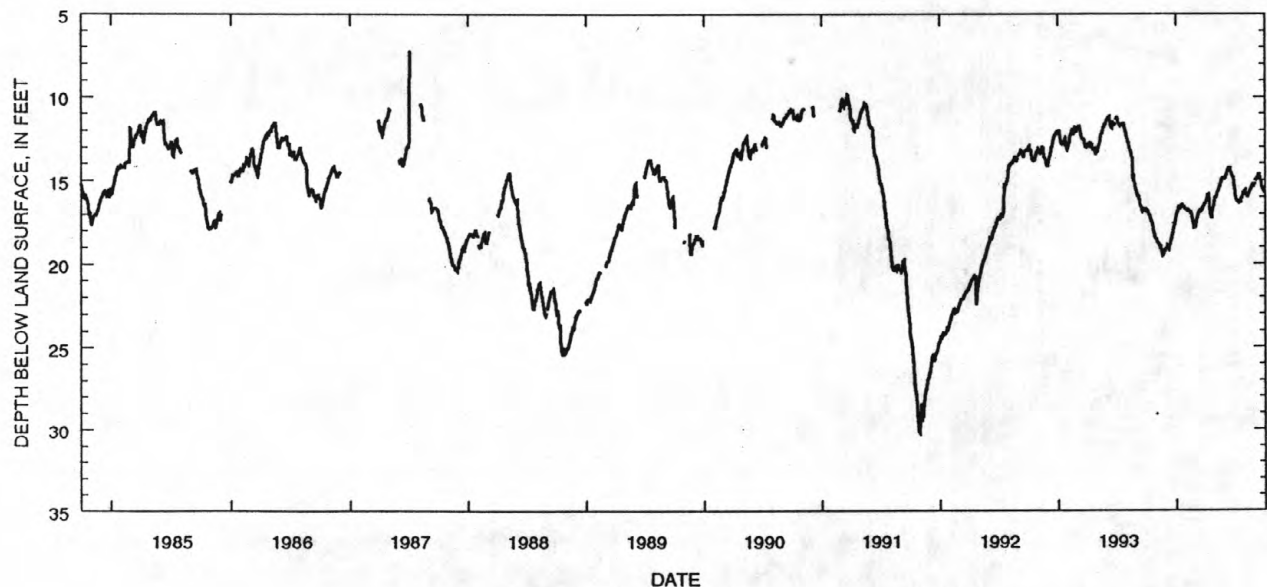
Measuring point: Floor of instrument shelter 2.00 ft above land-surface datum.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.77	18.63	19.17	17.09	16.79	17.66	16.26	16.00	14.70	16.18	15.91	15.02
2	16.80	18.66	19.08	17.01	16.78	17.55	16.21	15.98	14.67	16.09	15.91	15.00
3	16.81	18.69	19.01	17.00	16.85	17.42	16.14	15.94	14.64	16.18	15.92	14.96
4	16.82	18.71	18.91	16.86	16.85	17.33	16.10	15.87	14.57	16.22	15.92	14.90
5	16.92	18.75	18.96	16.81	16.83	17.28	16.01	15.82	14.50	16.26	15.99	14.85
6	16.95	18.78	19.14	16.73	16.88	17.23	15.95	15.75	14.43	16.17	16.04	14.78
7	17.03	18.85	19.15	16.63	16.91	17.15	16.01	15.70	14.37	16.20	15.97	14.78
8	17.06	18.92	19.14	16.58	16.82	17.06	16.01	15.65	14.33	16.27	15.89	14.73
9	17.10	18.96	19.13	16.56	16.87	17.00	15.94	15.59	14.31	16.33	15.84	14.65
10	17.14	18.98	18.96	16.55	16.90	16.89	16.20	15.54	14.27	16.33	15.82	14.63
11	17.16	18.99	18.89	16.66	16.91	16.91	16.63	15.50	14.24	16.35	15.78	14.64
12	17.24	19.05	18.88	16.71	16.92	16.89	16.71	15.40	14.25	16.32	15.72	14.63
13	17.29	19.03	18.81	16.63	16.98	16.83	16.85	15.38	14.26	16.30	15.68	14.71
14	17.38	18.99	18.70	16.48	17.00	16.74	16.96	15.33	14.36	16.30	15.62	14.85
15	17.42	19.19	18.60	16.50	16.95	16.70	17.09	15.24	14.48	16.30	15.57	14.94
16	17.45	19.28	18.53	16.50	17.14	16.84	17.23	15.15	14.54	16.30	15.56	15.03
17	17.52	19.39	18.49	16.40	17.19	16.87	17.25	15.11	14.59	16.23	15.53	15.13
18	17.60	19.42	18.40	16.49	17.30	16.80	17.24	15.07	14.65	16.13	15.48	15.21
19	17.65	19.45	18.28	16.53	17.43	16.81	16.97	15.01	14.72	16.09	15.42	15.33
20	17.67	19.49	18.21	16.53	17.48	16.78	16.91	14.94	14.76	16.04	15.38	15.42
21	17.77	19.46	18.07	16.53	17.60	16.67	16.82	14.90	14.80	15.99	15.30	15.51
22	17.98	19.41	18.00	16.53	17.72	16.67	16.69	14.89	14.85	15.90	15.32	15.53
23	18.12	19.37	17.92	16.53	17.78	16.60	16.59	14.90	14.87	15.84	15.36	15.58
24	18.28	19.30	17.85	16.60	17.74	16.54	16.44	14.90	14.87	15.78	15.39	15.62
25	18.34	19.25	17.72	16.61	17.75	16.54	16.33	14.90	15.09	15.72	15.39	15.64
26	18.35	19.18	17.62	16.70	17.80	16.52	16.23	14.90	15.24	15.64	15.35	15.66
27	18.40	19.08	17.58	16.72	17.78	16.43	16.16	14.95	15.48	15.69	15.29	15.69
28	18.41	19.06	17.52	16.71	17.76	16.41	16.10	14.95	15.64	15.67	15.25	15.70
29	18.49	19.14	17.43	16.71	---	16.38	16.06	14.95	15.83	15.65	15.20	15.73
30	18.52	19.21	17.28	16.68	---	16.38	16.05	14.88	16.09	15.62	15.14	15.73
31	18.54	---	17.18	16.78	---	16.34	---	14.84	---	15.87	---	---
MAX	18.54	19.49	19.17	17.09	17.80	17.66	17.25	16.00	16.09	16.35	16.04	15.73

CAL YR 1993 LOW 19.49
WTR YR 1994 LOW 19.49

GROUND-WATER RECORDS

245

MEDINA COUNTY

410120081431800. Local number, MD-3.

LOCATION.--Lat 41°01'20", long 81°43'18", Hydrologic Unit 05040001, Auble Street at water treatment plant in Wadsworth.

Owner: Wadsworth Water Department.

AQUIFER.--Sandstone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in., depth 275 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 1180 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.

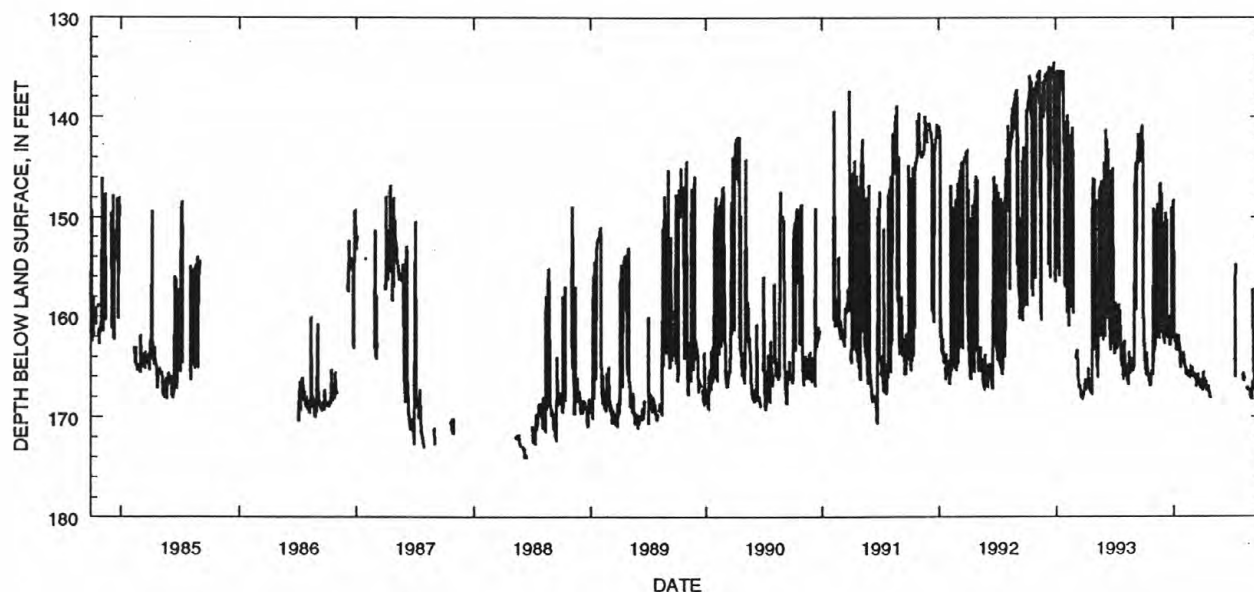
PERIOD OF RECORD.--December 1973 to current year.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	163.00	---	162.20	148.30	164.00	166.10	166.50	---	---	---	165.60	157.30
2	162.60	163.60	161.80	158.70	164.70	165.80	165.50	---	---	---	166.20	165.40
3	164.20	163.20	162.70	161.30	164.90	165.60	166.60	---	---	---	166.50	165.90
4	164.90	161.60	150.40	162.50	165.00	166.00	166.60	---	---	---	166.50	166.50
5	165.00	162.90	161.30	162.60	165.00	165.80	166.10	---	---	---	166.00	166.50
6	165.70	149.40	161.60	162.00	165.10	165.80	166.50	---	---	---	---	166.80
7	165.80	161.80	149.60	163.00	165.80	165.80	166.60	---	---	---	---	167.20
8	165.90	149.80	161.80	161.70	165.40	166.10	167.10	---	---	166.10	---	167.20
9	163.60	162.20	161.60	163.30	165.40	166.20	167.00	---	---	156.80	---	167.40
10	164.80	149.80	161.00	162.40	165.60	166.50	166.40	---	---	154.80	---	167.40
11	164.80	148.60	150.20	163.40	165.90	167.00	167.20	---	---	---	167.00	167.20
12	165.60	161.60	161.20	163.40	165.40	166.50	167.30	---	---	---	167.10	167.50
13	166.00	152.00	161.90	163.00	165.30	165.70	167.20	---	---	---	167.30	167.50
14	166.10	160.80	162.10	161.80	165.60	165.90	167.00	---	---	---	167.00	167.50
15	166.40	162.10	162.10	162.10	165.90	166.20	167.00	---	---	---	167.20	167.60
16	166.40	162.10	162.00	161.90	166.00	165.70	167.10	---	---	---	167.40	167.30
17	165.70	162.30	162.20	162.50	165.90	166.10	166.90	---	---	---	167.40	167.40
18	166.70	161.00	162.00	162.70	166.00	166.40	167.40	---	---	---	167.40	167.10
19	166.90	161.10	159.90	163.30	165.90	166.40	167.50	---	---	---	167.40	167.50
20	166.90	146.90	162.80	164.50	165.40	166.60	167.60	---	---	---	167.20	167.80
21	166.40	146.60	162.80	165.00	165.70	166.90	167.80	---	---	---	167.60	167.90
22	166.50	160.40	162.20	165.10	165.90	167.00	167.90	---	---	---	167.90	168.00
23	166.50	161.60	162.30	163.90	165.20	166.70	168.10	---	---	---	167.90	167.80
24	165.40	148.00	160.00	164.30	165.30	166.60	---	---	---	---	168.10	167.80
25	165.70	160.20	160.20	164.10	165.50	167.20	---	---	---	---	168.20	167.70
26	165.80	147.60	149.00	164.20	165.40	167.00	---	---	---	---	168.20	167.70
27	165.80	160.00	160.60	164.50	165.40	166.40	---	---	---	---	168.20	167.80
28	164.70	160.00	162.20	164.60	166.00	166.50	---	---	---	---	168.20	167.80
29	164.80	161.50	160.90	164.00	---	167.00	---	---	---	---	168.30	167.80
30	149.10	162.10	162.20	163.50	---	167.30	---	---	---	---	166.40	167.90
31	164.60	---	150.50	163.60	---	167.40	---	---	---	---	---	---
MAX	166.90	163.60	162.80	165.10	166.00	167.40	168.10	---	---	166.10	168.30	168.00

CAL YR 1993 LOW 168.10

WTR YR 1994 LOW 168.30



GROUND-WATER RECORDS

MERCER COUNTY

402833084375200. Local number, MR-2.

LOCATION.--Lat 40°28'33", long 84°37'52", Hydrologic Unit 05120101, at AVCO Mfg. Co. building in Coldwater.

Owner: New Idea Farm Equipment Co.

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.

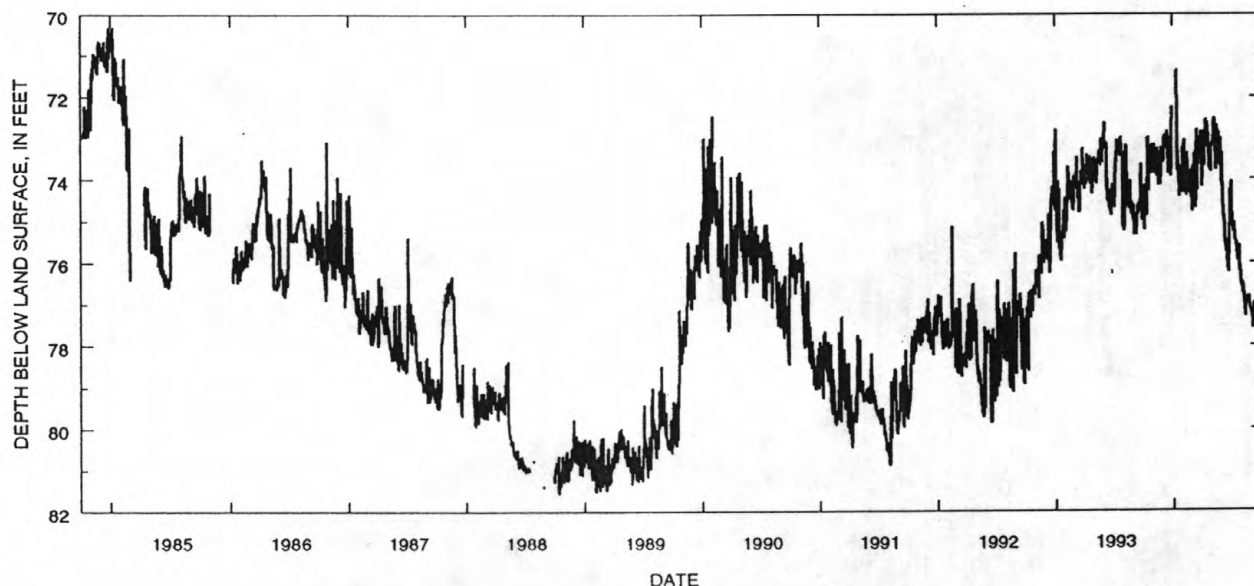
PERIOD OF RECORD.--February 1967 to current year.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74.32	73.92	73.58	---	74.34	74.78	73.81	73.19	74.10	75.16	76.48	77.59
2	74.45	73.80	73.43	72.26	74.15	73.70	73.05	73.06	74.58	75.05	76.66	77.46
3	74.41	73.33	73.59	---	73.25	73.89	73.08	72.96	74.74	75.27	76.79	77.33
4	74.15	73.17	73.06	---	73.06	74.60	73.10	73.19	74.87	75.28	76.56	77.24
5	75.21	73.28	72.96	---	73.11	74.03	72.84	72.75	74.96	75.09	76.90	77.06
6	75.23	73.30	73.10	---	73.67	73.40	73.42	72.73	74.89	75.05	76.98	76.96
7	74.62	73.45	73.27	---	74.25	73.91	73.68	72.54	75.16	75.06	76.95	77.03
8	74.65	73.58	73.16	---	73.97	74.33	73.39	72.62	75.47	75.18	77.02	77.22
9	74.65	73.55	73.29	72.26	74.25	73.99	72.94	73.01	75.60	75.31	77.29	77.35
10	74.47	73.73	73.05	---	74.40	73.36	73.14	73.78	75.65	75.48	77.20	77.53
11	74.30	73.78	73.20	---	74.30	74.70	73.23	73.65	75.54	75.49	76.93	77.63
12	74.59	73.95	73.14	71.37	73.98	74.35	72.56	73.78	75.73	75.54	76.87	77.51
13	74.64	73.46	73.02	72.62	73.38	73.12	73.01	73.62	75.76	75.62	76.86	77.55
14	74.88	73.26	72.84	73.28	73.74	73.37	73.04	72.92	75.46	75.54	76.92	77.41
15	73.08	73.56	73.01	73.79	73.86	72.82	72.65	72.70	75.81	75.65	76.88	77.32
16	73.00	73.58	73.18	73.85	74.29	74.27	72.83	72.91	75.93	75.96	76.94	77.39
17	73.04	73.56	73.87	73.35	73.89	74.02	72.93	73.34	76.02	75.96	76.95	77.54
18	74.29	74.16	73.63	73.97	74.29	73.37	72.93	73.57	76.10	75.76	76.92	77.67
19	74.05	73.79	73.29	74.25	74.31	73.33	72.94	73.16	76.23	75.69	76.82	77.61
20	73.93	73.71	73.23	74.41	74.18	73.36	73.41	72.86	76.23	75.72	76.84	77.54
21	73.75	73.94	73.57	74.30	74.36	73.19	73.35	72.99	75.38	75.65	76.82	77.78
22	73.60	74.01	73.68	74.20	74.27	73.25	73.75	73.10	74.81	75.60	76.94	77.77
23	73.40	73.35	73.38	74.05	73.81	73.29	73.62	73.68	74.65	76.01	77.06	77.66
24	73.29	74.14	73.21	74.16	74.45	73.00	73.35	73.36	74.25	76.22	77.05	77.82
25	73.32	73.76	73.01	74.20	73.78	73.44	73.80	73.16	74.39	76.09	77.19	77.77
26	73.88	73.28	73.94	74.05	74.48	73.45	73.83	73.02	74.38	76.36	77.13	77.57
27	73.62	73.30	73.62	73.70	74.15	72.85	73.68	73.20	74.22	76.48	77.22	77.87
28	73.17	73.31	72.85	73.84	74.67	73.46	73.33	73.89	74.06	76.46	77.17	77.77
29	73.22	73.28	72.27	73.99	---	73.24	73.15	74.08	74.69	76.54	77.22	77.81
30	73.40	73.62	72.56	73.23	---	74.13	73.16	73.37	74.96	76.59	77.26	77.78
31	73.38	---	---	74.23	---	74.18	---	74.17	---	76.58	77.40	---
MAX	75.23	74.16	73.94	74.41	74.67	74.78	73.83	74.17	76.23	76.59	77.40	77.87
CAL YR 1993	LOW 75.96											
WTR YR 1994	LOW 77.87											



GROUND-WATER RECORDS

247

MIAMI COUNTY

395848084085500. Local number, MI-3.

LOCATION.--Lat 39°58'48", long 84°08'55", Hydrologic Unit 05080001, 2.0 mi northeast of Tipp City.

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 ODNR 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 OBSERVATIONS

DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 13, 1993	11.42	Apr. 26, 1994	9.88

GROUND-WATER RECORDS

MIAMI COUNTY--Continued

400208084112900. Local number, MI-44.

LOCATION.--Lat 40°02'08", long 84°11'29", Hydrologic Unit 05080001, on left bank of Great Miami River 0.7 mi east of city hall in Troy.

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 1993 TO SEPTEMBER 1994

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	CALCIUM DIS- SOLVED (MG/L) AS CA (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG (00925)	SODIUM, DIS- SOLVED (MG/L) AS NA (00930)	POTAS- SIUM, DIS- SOLVED (MG/L) AS K (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)
NOV												
18...	1520	692	7.4	14.0	13.5	14	80	32	19	2.5	360	296
APR												
12...	1100	746	7.5	17.0	14.0	<10	86	32	20	2.2	356	288
SEP												
07...	1145	730	7.8	--	14.0	<10	78	31	22	2.7	367	300

DATE	SULFATE DIS- SOLVED (MG/L) AS SO4 (00945)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL (00940)	FLUO- RIDE, DIS- SOLVED (MG/L) AS F (00950)	SILICA, DIS- SOLVED (MG/L) AS SIO2 (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS N (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L) AS P (00671)	ARSENIC TOTAL (UG/L) AS AS (01002)	ARSENIC DIS- SOLVED (UG/L) AS AS (01000)
NOV											
18...	58	20	0.80	14	411	<0.010	0.150	0.330	<0.010	1	<1
APR											
12...	67	31	0.90	13	437	<0.010	<0.050	0.350	<0.010	--	<1
SEP											
07...	58	30	0.80	14	384	<0.010	<0.050	0.360	<0.010	1	1

DATE	CHRO- MIUM, DIS- SOLVED (UG/L) AS CR (01030)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L) AS CR (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L) AS CU (01042)	COPPER, DIS- SOLVED (UG/L) AS CU (01040)	IRON, DIS- SOLVED (UG/L) AS FE (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L) AS PB (01051)	LEAD, DIS- SOLVED (UG/L) AS PB (01049)	MANGA- NESE, DIS- SOLVED (UG/L) AS MN (01056)	ZINC, TOTAL RECOV- ERABLE (UG/L) AS ZN (01092)	ZINC, DIS- SOLVED (UG/L) AS ZN (01090)	CARBON, ORGANIC TOTAL (MG/L) AS C (00680)
NOV											
18...	<1	<1	1	<1	780	<1	<1	49	10	7	0.7
APR											
12...	<1	--	--	<1	1500	--	<1	48	--	6	0.9
SEP											
07...	<1	<1	<1	<1	1400	<1	<1	44	<10	<3	1.8

GROUND-WATER RECORDS

249

MONTGOMERY COUNTY

393757084173600. Local number MT-928.

LOCATION.--Lat 39°37'57", long 84°17'36", Hydrologic Unit 05080002, on right bank of Great Miami River 0.2 mi south of Linden Ave. bridge, Miamisburg.

Owner: City of Miamisburg.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled municipal supply water-table well, 20 in, depth 95 ft, screened below 70 ft.

PERIOD OF RECORD.--September 1983 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT MG/L AS HCO3 (00453)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)

NOV

18... 1320 789 7.8 18.0 16.0 13 85 29 38 4.1 315 256

APR

12... 1400 815 7.4 23.5 16.0 <10 83 29 36 3.6 329 262

SEP

07... 1445 810 7.7 -- 14.5 20 81 28 40 3.5 355 291

DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)

NOV

18... 70 65 0.30 9.4 464 0.020 0.630 0.020 0.030 1 1

APR

12... 59 64 0.40 8.9 471 0.020 2.80 0.070 <0.010 -- 1

SEP

07... 61 69 0.30 8.5 454 <0.010 0.480 0.020 0.030 1 1

DATE	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)

NOV

18... <1 <1 5 4 8 <1 <1 180 20 34 0.6

APR

12... <1 -- -- 3 9 -- <1 170 -- 8 1.1

SEP

07... <1 <1 4 4 4 <1 <1 170 <10 3 3.4

GROUND-WATER RECORDS

MONTGOMERY COUNTY--Continued

394012084151700. Local number, MT-55.

LOCATION.--Lat 39°40'12", long 84°15'17", Hydrologic Unit 05080002, Elm Street in West Carrollton.

Owner: Oxford Paper Company.

AQUIFER.--Shale of Ordovician 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.

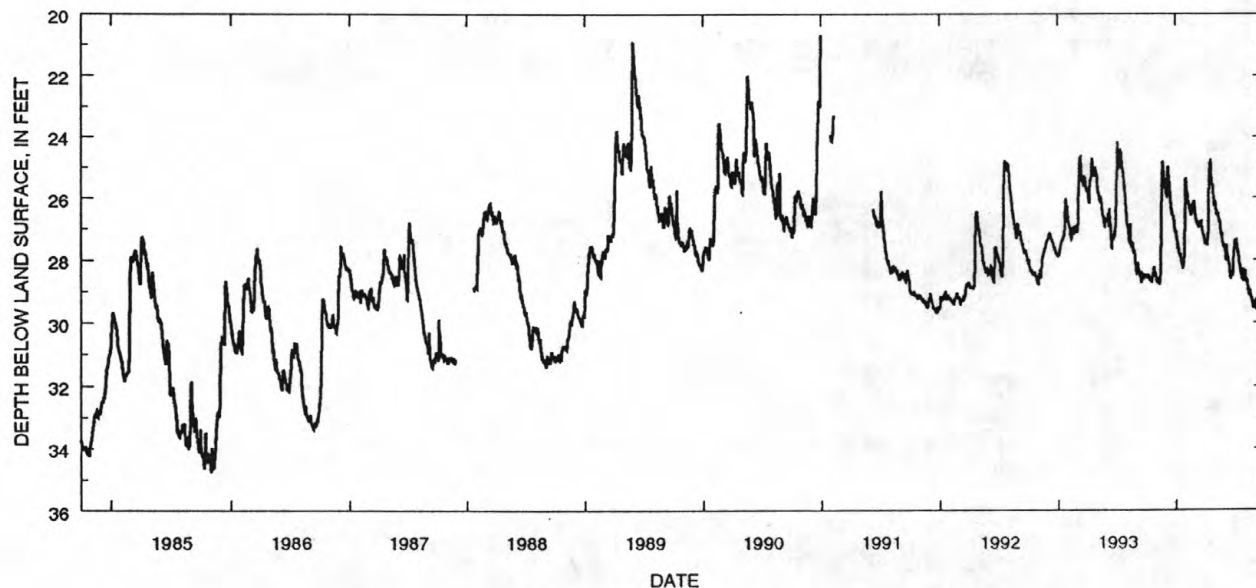
Measuring point: Floor of instrument shelter 0.30 ft above land-surface datum.

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, 20.69 ft below land-surface datum, Jan. 1, 1991.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.53	28.61	25.77	27.11	25.41	26.50	27.45	26.11	27.82	27.41	28.34	29.51
2	28.54	28.57	25.91	27.12	25.53	26.59	27.45	26.22	27.99	27.47	28.53	29.60
3	28.48	28.69	26.02	27.21	25.75	26.70	27.37	26.34	28.05	27.53	28.64	29.56
4	28.48	28.60	26.04	27.34	25.80	26.72	27.40	26.42	28.03	27.43	28.71	29.26
5	28.48	28.68	25.97	27.46	25.82	26.79	27.54	26.47	27.53	27.41	28.71	29.35
6	28.61	28.67	25.59	27.51	25.89	26.77	27.53	26.56	27.76	27.56	28.71	29.45
7	28.61	28.65	25.15	27.58	26.02	26.84	27.53	26.56	27.87	27.66	28.64	29.54
8	28.63	28.69	24.98	27.57	26.08	26.89	27.49	26.51	27.90	27.63	28.81	29.54
9	28.58	28.73	25.05	27.57	26.13	26.89	27.23	26.48	27.95	27.71	28.88	29.60
10	28.48	28.78	25.16	27.72	26.30	26.91	27.06	26.54	28.01	27.68	28.97	29.64
11	28.60	28.80	25.42	27.80	26.32	26.98	26.72	26.61	28.12	27.84	29.05	29.64
12	28.61	28.81	25.43	27.83	26.30	26.94	25.93	26.71	28.07	27.95	29.09	29.68
13	28.69	28.79	25.53	27.93	26.39	26.87	25.55	26.79	28.24	28.06	29.06	29.69
14	28.68	28.69	25.69	27.91	26.47	26.87	25.19	26.75	28.37	28.16	28.94	29.71
15	28.68	28.34	25.90	27.91	26.52	26.81	24.95	26.73	28.46	28.20	29.02	29.81
16	28.65	27.94	26.09	27.88	26.56	26.80	24.76	26.88	28.53	28.22	29.05	29.81
17	28.58	27.25	26.27	27.98	26.60	26.76	24.75	27.02	28.63	28.22	29.14	29.74
18	28.70	26.42	26.37	28.07	26.51	26.88	24.99	27.11	28.62	28.39	29.17	29.71
19	28.76	25.87	26.38	28.12	26.39	26.80	25.08	27.20	28.43	28.45	29.21	29.70
20	28.68	25.36	26.43	28.17	26.34	26.77	25.29	27.26	28.44	28.54	29.23	29.74
21	28.64	25.00	26.51	28.27	26.24	26.91	25.42	27.25	28.42	28.60	29.26	29.81
22	28.61	24.82	26.58	28.30	26.19	26.99	25.54	27.22	28.38	28.64	29.36	29.80
23	28.49	24.92	26.57	28.26	26.16	27.04	25.58	27.38	28.44	28.43	29.45	29.93
24	28.36	25.08	26.57	28.24	26.19	27.14	25.60	27.48	28.53	28.39	29.51	29.88
25	28.30	25.19	26.62	28.22	26.16	27.22	25.80	27.53	28.36	28.30	29.57	29.78
26	28.24	25.48	26.69	28.07	26.09	27.21	26.04	27.57	28.11	28.45	29.38	29.74
27	28.33	25.52	26.79	27.84	26.22	27.18	26.12	27.61	27.75	28.64	29.32	29.77
28	28.38	25.52	26.98	27.40	26.39	27.26	26.26	27.55	27.57	28.63	29.44	29.83
29	28.43	25.59	27.04	26.75	---	27.33	26.27	27.53	27.45	28.68	29.39	29.93
30	28.47	25.66	27.09	25.91	---	27.41	26.17	27.59	27.36	28.60	29.36	29.95
31	28.43	---	27.11	25.44	---	27.47	---	27.64	---	28.43	29.43	---
MAX	28.76	28.81	27.11	28.30	26.60	27.47	27.54	27.64	28.63	28.68	29.57	29.95

CAL YR 1993 LOW 28.81
WTR YR 1994 LOW 29.95

GROUND-WATER RECORDS

251

MONTGOMERY COUNTY--Continued

394025084162800. Local number, MT-49.

LOCATION.--Lat 39°40'25", long 84°16'28", Hydrologic Unit 05080002, 1.2 mi west of city hall in West Carrollton.

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.

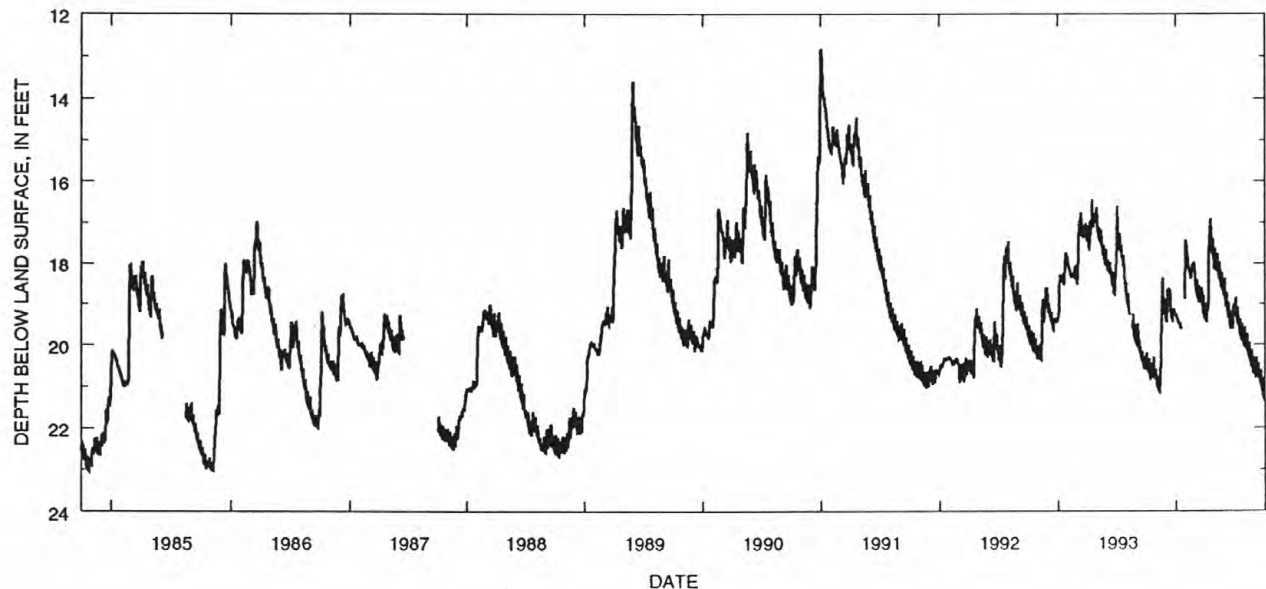
PERIOD OF RECORD.--November 1947 to current year.

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.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.56	20.87	19.38	19.28	17.52	18.48	19.37	17.63	18.96	19.27	19.87	20.77
2	20.27	20.93	19.45	19.30	17.57	18.61	19.37	17.95	19.04	19.24	19.98	20.75
3	20.20	20.96	19.49	19.31	17.69	18.69	18.99	18.02	19.08	18.92	20.08	20.63
4	20.54	20.99	19.49	19.36	17.75	18.79	19.37	18.10	19.01	18.85	20.07	20.36
5	20.60	21.05	19.01	19.39	17.83	18.79	19.46	18.13	18.74	19.26	20.15	20.31
6	20.66	21.06	18.64	19.38	17.91	18.41	19.28	18.19	19.08	19.39	19.93	20.69
7	20.68	20.79	18.68	19.42	17.99	18.82	19.05	18.11	19.15	19.49	19.73	20.77
8	20.67	21.00	18.79	19.45	18.00	18.83	19.14	17.77	19.22	19.50	20.10	20.81
9	20.63	21.11	18.81	19.48	18.13	18.84	19.17	18.15	19.29	19.43	20.19	20.79
10	20.34	21.16	18.87	19.49	18.16	18.91	18.86	18.27	19.36	19.09	20.24	20.72
11	20.63	21.12	18.89	19.50	18.22	18.97	18.20	18.32	19.28	19.50	20.28	20.45
12	20.73	21.19	18.67	19.50	18.24	18.96	17.71	18.37	18.97	19.59	20.34	20.78
13	20.82	21.19	18.69	19.51	18.31	18.56	17.44	18.41	19.37	19.66	20.19	20.81
14	20.83	20.79	18.71	19.55	18.33	18.76	17.31	18.16	19.45	19.68	19.95	20.81
15	20.82	20.35	18.79	19.60	18.36	18.81	17.29	17.98	19.52	19.78	20.29	20.90
16	20.76	19.96	19.15	19.61	18.35	18.83	16.93	18.35	19.59	19.68	20.37	20.96
17	20.45	19.52	19.28	19.62	18.26	18.85	16.91	18.47	19.62	19.38	20.47	20.89
18	20.80	19.07	19.36	---	18.22	18.97	17.29	18.52	19.49	19.77	20.51	20.60
19	20.83	18.64	19.14	---	18.14	18.96	17.47	18.58	19.20	19.87	20.53	20.93
20	20.82	18.56	19.39	---	18.07	18.61	17.56	18.63	19.51	19.91	20.43	21.05
21	20.76	18.37	19.47	---	18.05	18.96	17.69	18.54	19.57	19.89	20.13	21.12
22	20.73	18.77	19.29	---	18.03	18.72	17.75	18.24	19.60	19.93	20.54	21.16
23	20.59	18.94	19.18	---	17.97	18.97	17.64	18.64	19.62	19.80	20.63	21.25
24	20.30	19.09	19.14	---	18.01	19.18	17.39	18.68	19.58	19.50	20.68	21.23
25	20.62	18.88	19.14	---	17.97	19.25	17.83	18.71	19.47	19.79	20.69	20.81
26	20.72	19.25	19.17	---	18.05	19.22	17.96	18.73	19.07	19.91	20.71	21.17
27	20.77	19.25	19.21	18.89	18.08	18.81	18.06	18.80	19.05	19.96	20.63	21.26
28	20.79	18.98	19.23	18.62	18.25	19.24	18.13	18.71	19.08	20.03	20.31	21.24
29	20.85	19.25	19.25	17.80	---	19.34	18.15	18.44	19.16	20.07	20.51	21.33
30	20.86	19.34	19.28	17.42	---	19.34	18.03	18.42	19.22	19.91	20.62	21.36
31	20.60	---	19.30	17.42	---	19.21	---	18.83	---	19.57	20.71	---
MAX	20.86	21.19	19.49	19.62	18.36	19.34	19.46	18.83	19.62	20.07	20.71	21.36

CAL YR 1993 LOW 21.19
WTR YR 1994 LOW 21.36

GROUND-WATER RECORDS

MONTGOMERY COUNTY--Continued

394425084113200. Local number, MT-3.

LOCATION.--Lat 39°44'25", long 84°11'32", Hydrologic Unit 05080002, Patterson Blvd. at Stewart St., in Dayton.

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.

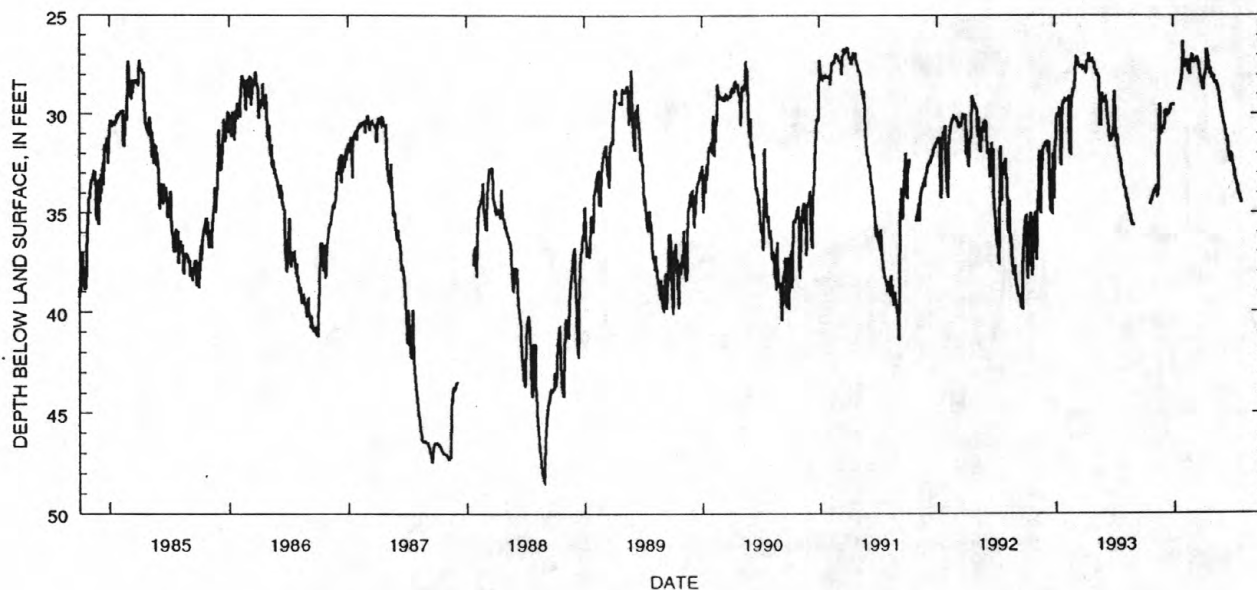
PERIOD OF RECORD.--May 1945 to June 1974. Reactivated June 1980.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low 79.45 ft below land-surface datum, Apr. 6, 1971;

minimum daily low, 25.72 ft below land-surface datum, Mar. 21, 1982.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	34.01	30.68	29.51	27.15	27.27	28.72	28.01	30.20	32.51	---	---
2	---	34.01	30.71	29.50	27.29	27.31	28.72	28.12	30.32	32.55	---	---
3	---	33.90	30.73	---	27.54	27.40	28.70	28.18	30.44	32.65	---	---
4	---	33.86	30.69	---	27.59	27.41	28.24	28.14	30.50	32.68	---	---
5	---	33.84	30.44	---	27.60	27.40	28.21	28.26	30.54	32.76	---	---
6	---	33.84	29.85	---	27.24	27.40	28.12	28.31	30.58	32.96	---	---
7	---	33.77	29.83	---	27.29	27.26	27.98	28.35	30.63	33.02	---	---
8	---	33.60	29.76	---	27.29	27.36	27.90	28.36	30.69	33.15	---	---
9	---	33.81	29.83	---	27.31	27.36	27.91	28.41	30.86	33.24	---	---
10	---	34.00	30.03	---	27.36	27.33	27.70	28.39	31.04	33.33	---	---
11	---	34.08	30.04	---	27.28	27.25	27.16	28.31	31.09	33.40	---	---
12	---	34.18	29.97	---	27.27	27.14	26.76	28.43	31.13	33.48	---	---
13	---	34.17	29.91	---	27.33	27.13	26.75	28.49	31.05	33.55	---	---
14	---	34.12	29.92	---	27.53	27.14	26.78	28.50	31.08	33.62	---	---
15	---	33.68	29.99	---	27.82	27.14	26.97	28.52	31.18	33.72	---	---
16	---	31.99	30.03	---	27.83	27.22	27.08	28.60	31.33	33.72	---	---
17	---	31.25	30.03	28.70	27.83	27.23	27.21	28.70	31.55	33.74	---	---
18	---	30.49	30.02	28.72	27.82	27.33	27.36	28.77	31.76	33.86	---	---
19	---	29.56	29.93	28.72	27.93	27.48	27.58	28.84	32.01	34.04	---	39.95
20	---	29.49	29.85	28.60	27.94	27.48	27.62	28.90	32.13	34.09	---	---
21	---	29.75	29.73	28.57	27.23	27.60	27.62	29.04	32.23	34.13	---	---
22	34.61	30.42	29.85	28.48	27.30	27.81	27.98	29.20	32.29	34.13	---	40.11
23	34.47	30.87	29.74	28.40	27.31	27.98	27.73	29.32	32.34	34.22	---	40.21
24	34.38	31.07	29.65	28.41	27.30	28.11	27.67	29.44	32.41	34.27	---	40.31
25	34.35	30.93	29.54	28.36	27.22	28.10	27.82	29.60	32.41	34.33	---	40.34
26	34.37	30.93	29.54	28.15	27.15	28.19	27.95	29.72	32.22	34.43	---	40.36
27	34.37	30.93	29.54	27.87	27.03	28.35	28.05	29.80	32.05	34.53	---	---
28	34.28	30.70	29.54	27.56	27.09	28.43	28.16	29.89	32.12	---	---	---
29	34.16	30.60	29.53	26.74	---	28.43	28.03	29.97	32.32	---	---	---
30	34.16	30.68	29.53	26.29	---	28.45	28.02	30.04	32.42	---	---	---
31	34.03	---	29.52	26.44	---	28.59	---	30.14	---	---	---	---
MAX	34.61	34.18	30.73	29.51	27.94	28.59	28.72	30.14	32.42	34.53	---	40.36
CAL YR 1993 LOW 35.67												
WTR YR 1994 LOW 40.36												



GROUND-WATER RECORDS

253

MONTGOMERY COUNTY--Continued

394533084113800. Local number, MT-6.

LOCATION.--Lat 39°45'33", long 84°11'38", Hydrologic Unit 05080002, 3rd and Ludlow Sts., Dayton.

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.--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 13.00 ft below land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

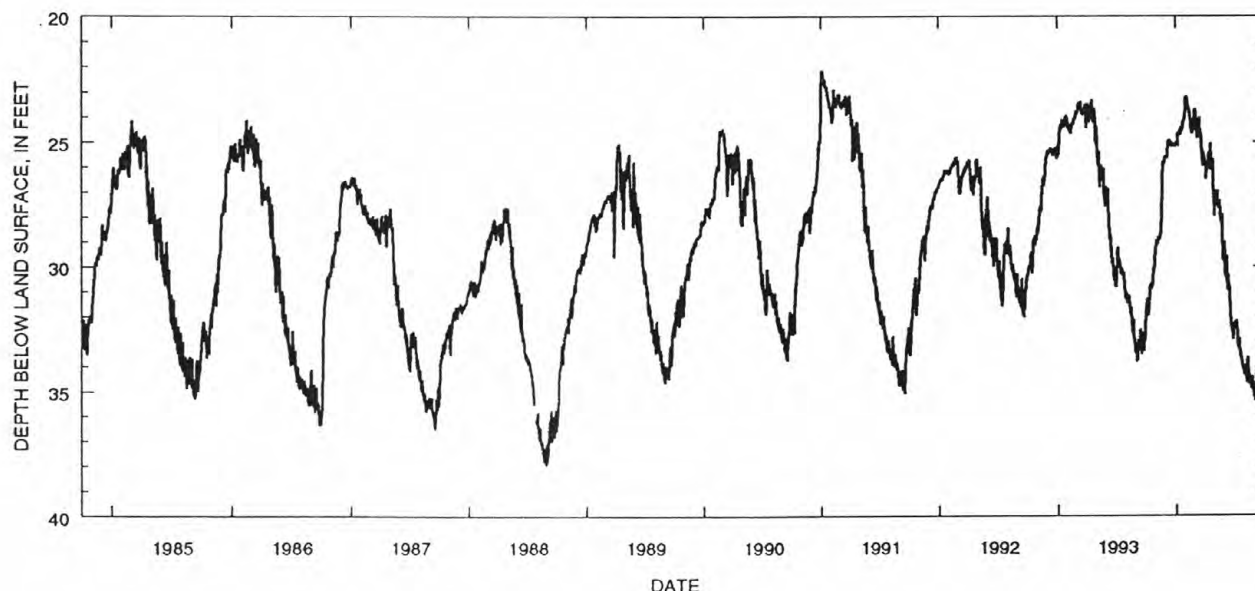
PERIOD OF RECORD.--February 1946 to current year.

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.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31.67	29.10	25.61	25.05	23.23	23.75	25.83	26.95	30.43	32.50	34.08	35.33
2	31.56	29.05	25.65	25.06	23.20	23.83	25.88	27.04	30.04	32.41	34.39	34.57
3	31.38	28.97	25.66	25.00	23.34	24.03	25.78	26.94	30.04	32.19	34.49	34.37
4	31.34	28.97	25.65	25.05	23.35	24.42	26.48	27.01	29.77	32.15	34.64	34.14
5	31.27	29.12	25.57	25.08	23.47	24.56	25.99	27.24	29.57	32.36	34.65	34.00
6	31.30	29.01	25.32	24.74	23.58	24.64	25.89	27.23	30.42	32.68	33.85	34.54
7	31.77	28.87	25.20	24.67	23.67	24.85	25.95	27.04	30.75	32.96	33.67	34.68
8	31.98	28.83	25.00	24.68	23.61	24.81	25.91	27.02	30.93	33.04	34.13	34.85
9	31.50	28.84	24.97	24.72	23.72	24.48	25.86	27.33	30.31	33.27	34.34	34.77
10	31.18	28.84	25.11	24.69	23.77	24.31	25.65	27.55	30.72	32.95	34.15	34.48
11	31.08	28.83	25.09	24.66	23.81	24.24	25.44	27.61	30.90	33.00	34.54	34.68
12	30.86	28.95	25.00	24.58	23.84	24.19	25.57	27.63	30.69	32.88	34.70	34.93
13	30.79	28.87	24.95	24.53	23.96	24.03	25.41	27.56	30.91	33.15	34.75	35.21
14	30.78	28.73	25.01	24.71	24.22	24.06	25.57	27.48	31.29	33.50	34.50	35.41
15	30.85	28.64	25.05	24.65	24.42	24.80	26.11	27.34	31.54	33.55	34.58	35.50
16	30.92	28.39	25.10	24.65	24.48	24.81	25.39	27.87	31.98	33.63	34.44	35.54
17	30.80	28.01	25.14	24.49	24.54	24.51	25.07	27.92	32.13	33.46	34.76	35.74
18	30.75	27.64	25.15	24.51	24.66	24.75	25.82	28.05	32.31	33.62	34.92	35.49
19	30.67	26.98	25.15	24.51	24.58	24.78	25.66	28.16	32.32	33.72	34.62	35.49
20	30.78	26.42	25.08	24.43	24.47	24.82	25.81	28.18	32.48	33.88	34.83	35.41
21	30.62	25.97	25.11	24.39	24.63	25.18	25.89	28.09	32.54	33.81	34.42	35.45
22	30.43	25.83	25.11	24.32	24.52	25.36	25.92	27.90	32.78	34.09	34.78	35.51
23	30.20	25.81	25.16	24.26	24.42	25.64	25.78	29.00	32.93	34.15	34.64	35.72
24	30.00	25.91	25.12	24.20	24.25	25.96	25.67	29.11	32.89	34.00	34.96	35.65
25	29.99	25.82	25.12	24.17	24.16	25.79	26.69	29.75	32.75	33.99	35.11	35.30
26	30.05	25.85	25.14	24.13	23.88	25.55	27.10	29.76	32.46	33.99	35.26	34.84
27	29.84	25.80	25.17	24.01	23.75	25.42	27.27	29.39	32.35	34.28	35.16	34.72
28	29.64	25.62	25.16	23.84	23.68	25.63	27.08	29.22	32.40	34.25	35.15	34.57
29	29.44	25.60	25.12	23.78	---	25.63	27.96	29.00	32.27	34.27	35.39	34.35
30	29.31	25.60	25.17	23.48	---	25.68	27.13	29.67	32.37	34.11	35.17	34.44
31	29.17	---	25.10	23.26	---	25.74	---	30.17	---	33.96	35.39	---
MAX	31.98	29.12	25.66	25.08	24.66	25.96	27.96	30.17	32.93	34.28	35.39	35.74

CAL YR 1993 LOW 33.73

WTR YR 1994 LOW 35.74



GROUND-WATER RECORDS

MONTGOMERY COUNTY--Continued

394811084095000. Local number, MT-74.

LOCATION.--Lat 39°48'11", long 84°09'50", Hydrologic Unit 05080002, Miami Well Field in Dayton.

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.--Type F continuous recorder.

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 18, 1990 to current year.

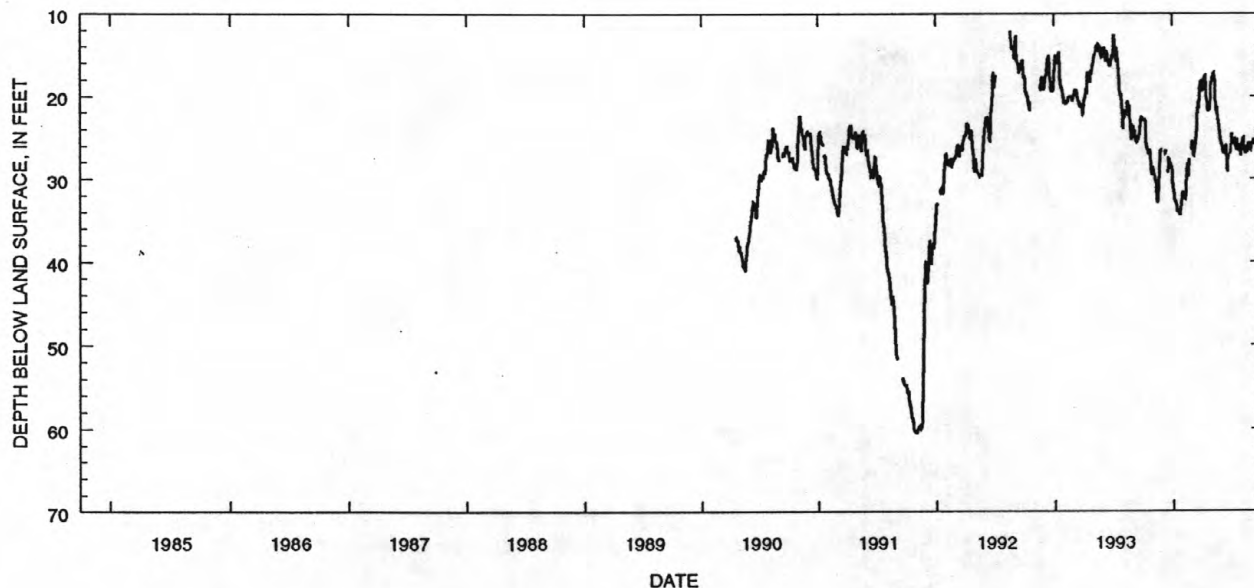
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 60.50 ft below land-surface datum, Oct. 31-Nov. 1, 1991; minimum daily low, 12.05 ft below land-surface datum, Aug. 20, 1992.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.81	28.60	---	30.43	31.85	25.51	19.44	17.69	26.20	25.06	25.62	25.83
2	22.84	28.72	---	30.79	31.96	25.39	19.43	17.68	26.69	25.41	25.45	25.74
3	22.85	28.87	---	31.05	31.96	25.80	19.36	17.68	27.02	25.64	25.23	25.63
4	22.97	29.04	---	31.47	31.96	26.87	19.34	17.45	---	25.56	25.18	25.33
5	22.97	29.26	---	32.07	32.07	27.13	19.00	17.34	---	25.69	25.10	25.24
6	22.83	29.58	27.17	32.21	32.03	27.16	18.83	17.28	---	25.91	25.67	25.23
7	22.85	29.85	27.17	32.45	32.10	27.04	18.74	17.21	---	25.90	26.29	25.31
8	22.91	30.13	---	32.68	32.38	26.81	18.03	17.75	27.15	25.48	26.60	25.41
9	22.96	30.32	27.14	32.73	32.47	26.55	17.58	18.10	26.58	25.23	26.78	25.67
10	23.16	30.53	26.67	32.73	31.85	26.31	17.53	18.11	26.67	25.03	26.94	25.89
11	24.93	30.80	26.65	32.86	30.65	26.08	17.58	20.30	26.05	26.17	26.94	25.85
12	25.49	31.06	26.60	33.00	29.90	25.67	17.57	21.03	25.87	26.17	26.85	25.78
13	25.91	31.20	---	33.45	29.10	25.30	19.00	21.50	26.20	26.41	26.79	25.95
14	26.25	32.18	---	33.70	28.40	24.82	20.01	21.83	26.50	26.61	26.75	25.90
15	26.53	32.93	---	33.95	28.10	24.48	20.54	21.37	28.10	26.60	26.70	26.04
16	26.10	32.93	29.05	33.95	28.90	24.07	21.04	21.42	28.80	26.25	26.65	26.02
17	26.76	32.47	29.17	33.71	29.58	22.70	21.60	22.03	29.18	25.07	26.92	25.99
18	27.09	31.87	29.34	33.88	29.78	21.62	21.94	22.42	28.05	25.45	26.30	25.99
19	27.13	31.08	28.55	33.98	29.17	21.55	21.94	22.75	27.37	26.20	25.65	26.12
20	26.68	30.25	27.67	34.11	27.70	21.42	21.85	23.10	27.16	26.68	25.81	26.56
21	26.46	29.56	27.75	34.19	---	21.00	21.73	23.28	27.16	26.15	25.82	26.54
22	26.95	29.15	28.05	34.27	---	21.07	21.76	23.64	---	25.77	25.54	26.73
23	26.52	27.18	28.05	34.35	---	21.47	21.74	23.97	---	26.37	25.67	27.02
24	27.06	26.72	28.08	34.36	---	19.66	21.61	24.28	---	26.49	25.94	27.20
25	27.60	26.65	28.23	34.00	---	19.04	21.49	24.60	---	26.49	26.41	---
26	28.14	26.73	28.35	33.57	---	18.65	19.90	25.00	27.06	26.75	26.53	---
27	28.59	26.77	28.45	33.20	26.60	18.31	19.25	25.29	26.63	27.17	26.54	---
28	28.98	---	28.52	32.78	25.88	18.25	18.87	25.55	24.98	27.19	26.44	---
29	29.38	---	28.65	32.43	---	19.21	18.45	25.78	24.61	27.19	26.35	27.20
30	29.71	---	28.75	31.96	---	19.39	18.10	25.78	24.58	26.07	26.10	27.08
31	29.05	---	29.10	31.50	---	19.44	---	25.80	---	25.81	25.88	---
MAX	29.71	32.93	29.34	34.36	32.47	27.16	21.94	25.80	29.18	27.19	26.94	27.20

CAL YR 1993 LOW 32.93

WTR YR 1994 LOW 34.36



GROUND-WATER RECORDS

255

MUSKINGUM COUNTY

395804081593200. Local number, MU-1A.

LOCATION.--Lat 39°58'04", long 81°59'32", Hydrologic Unit 05040004, 2.2 mi northeast of the "Y" bridge in Zanesville.

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.--Digital recorder -- 60-minute punch.

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.

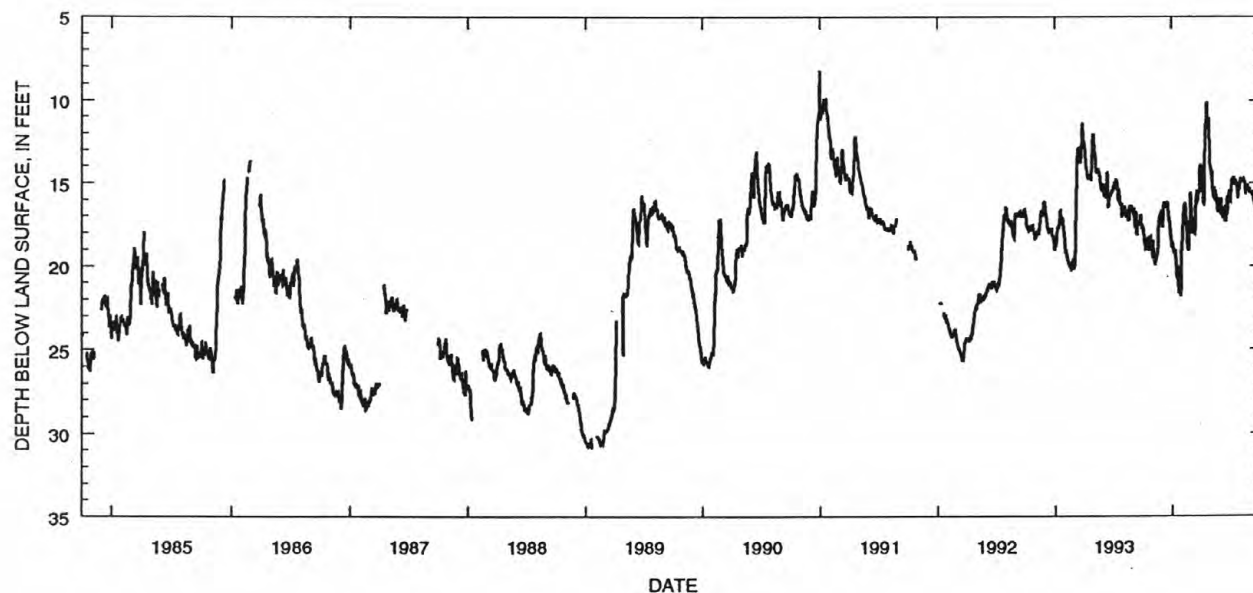
REMARKS.--Water level affected by nearby municipal wells and by stage of the Muskingum River. Prior to water year 1978, well depth reported as 132 ft.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 37.25 ft below land-surface datum, Aug. 1-2, 1954; minimum daily low, 8.22 ft below land-surface datum, Jan. 1, 1991.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.58	19.54	17.01	18.90	18.80	16.36	14.23	14.10	15.95	15.27	14.85	15.54
2	17.54	19.07	17.59	18.75	18.27	16.73	15.40	14.90	16.59	14.96	14.84	15.55
3	17.97	19.25	17.70	18.59	17.70	17.19	15.58	14.35	16.45	14.76	14.73	15.56
4	17.67	18.45	17.34	18.78	17.36	17.51	15.57	14.33	17.08	14.91	14.81	15.59
5	17.78	18.70	17.10	19.22	17.04	17.92	15.17	14.49	16.78	15.07	14.95	15.58
6	17.88	19.32	16.47	19.20	16.81	18.07	15.08	15.40	17.14	14.82	14.89	15.66
7	18.44	19.68	16.18	18.92	16.58	17.99	15.95	15.65	16.84	14.61	14.79	16.01
8	18.60	19.50	16.20	19.20	16.48	17.50	16.17	15.88	16.79	14.78	14.82	16.04
9	18.75	19.92	16.35	19.22	16.35	17.13	16.26	15.94	16.72	14.64	14.94	16.10
10	18.77	19.88	16.50	19.26	16.22	17.86	16.02	15.53	16.52	14.65	14.85	16.06
11	18.75	19.62	16.33	19.17	16.37	18.05	14.80	15.29	17.34	14.98	14.95	16.29
12	19.10	19.68	16.53	19.03	16.65	18.09	13.57	15.81	17.29	14.87	15.22	16.78
13	18.78	19.73	16.44	20.08	16.81	18.05	12.61	16.11	17.29	14.80	15.69	16.55
14	18.82	19.51	16.19	20.03	17.45	17.67	11.56	15.90	16.45	14.87	15.53	16.58
15	18.50	19.38	16.28	20.58	17.65	16.67	11.30	15.47	16.35	15.04	15.43	16.53
16	18.38	19.36	16.20	20.67	18.30	16.12	11.15	16.26	17.34	15.05	15.25	16.50
17	18.45	19.25	16.14	20.80	18.58	15.97	10.15	15.76	16.50	15.25	15.16	16.58
18	18.28	19.12	16.18	20.45	18.80	15.50	10.73	16.25	16.06	15.28	15.07	16.61
19	18.72	18.80	16.25	20.01	18.91	15.49	10.10	16.53	15.82	15.40	15.17	16.52
20	19.01	17.80	16.73	20.99	19.05	15.50	11.15	16.81	16.92	15.93	15.27	16.50
21	19.14	17.60	16.76	21.47	19.09	16.19	11.56	16.25	16.42	15.75	15.31	16.45
22	19.10	17.27	17.08	21.64	18.92	15.91	11.62	15.90	15.90	15.73	15.33	16.43
23	18.75	17.00	17.27	21.35	18.38	15.45	11.74	16.62	15.73	15.43	15.34	16.54
24	18.86	17.05	17.20	21.33	17.78	15.55	11.08	16.33	15.65	15.20	15.47	16.58
25	18.33	17.32	17.48	21.13	17.58	15.67	12.32	16.38	15.42	15.26	15.44	16.98
26	18.28	17.02	17.73	21.50	17.05	15.35	12.43	16.43	15.44	15.41	15.46	16.80
27	18.40	16.80	17.81	21.80	15.57	14.46	13.05	16.47	16.10	14.96	15.62	16.68
28	18.80	16.93	18.08	21.81	15.90	13.90	13.77	16.92	16.14	14.94	15.61	16.65
29	18.88	16.84	18.25	21.23	---	14.10	14.10	16.43	15.75	14.83	15.62	16.64
30	18.95	16.64	18.30	20.40	---	14.05	14.41	16.75	15.45	14.89	15.62	16.62
31	19.18	---	18.70	19.27	---	13.90	---	16.50	---	14.81	15.65	---
MAX	19.18	19.92	18.70	21.81	19.09	18.09	16.26	16.92	17.34	15.93	15.69	16.98

CAL YR 1993 LOW 20.20
WTR YR 1994 LOW 21.81

GROUND-WATER RECORDS

PICKAWAY COUNTY

393327082571600. Local number, PK-7.

LOCATION.--Lat 39°33'27", long 82°57'16", Hydrologic Unit 05060002, 3.1 mi south of Circleville.

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.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 705 ft above sea level, from topographic map.

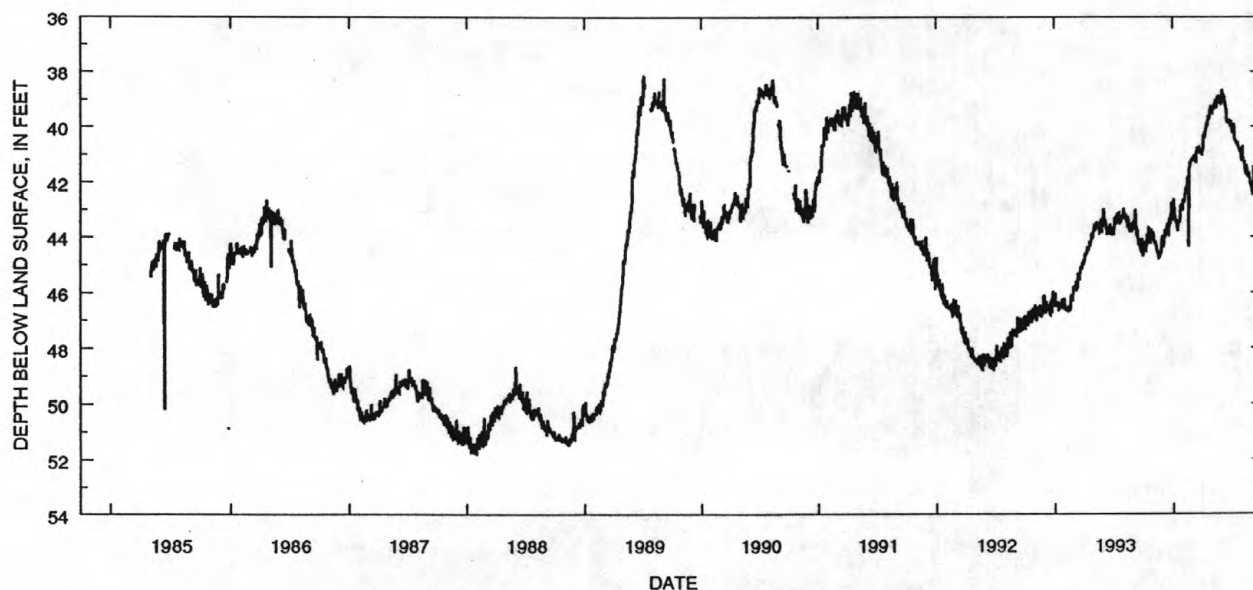
Measuring point: Floor of instrument shelter, 3.00 ft above land-surface datum.

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, 38.14 ft below land-surface datum, July 4, 1989.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44.63	44.03	44.35	42.89	42.75	41.13	40.82	39.34	38.83	40.25	40.76	42.47
2	44.53	44.16	44.30	42.62	42.75	41.13	40.74	39.35	38.90	40.13	41.03	42.47
3	44.16	44.17	44.25	42.70	42.71	41.17	40.49	39.35	38.94	40.03	41.17	42.43
4	44.18	44.22	44.24	43.13	42.70	41.17	40.27	39.35	38.95	39.97	41.17	41.82
5	44.47	44.27	43.75	43.34	42.56	41.24	40.34	39.35	38.91	39.90	41.30	41.41
6	44.54	44.27	43.87	43.34	42.35	41.12	40.33	39.40	38.85	40.13	41.28	41.69
7	44.55	44.15	43.98	43.44	42.31	40.99	40.44	39.37	38.97	40.34	41.28	41.97
8	44.55	44.22	43.98	43.47	42.30	41.17	40.44	39.04	39.10	40.45	41.49	42.11
9	44.52	44.39	43.96	43.40	42.21	41.17	40.33	39.10	39.12	40.46	41.59	42.13
10	44.16	44.43	43.95	43.35	42.21	41.10	40.04	39.31	39.25	40.44	41.63	42.16
11	43.88	44.48	43.89	43.42	42.17	41.30	40.17	39.34	39.26	40.56	41.71	41.95
12	44.01	44.56	43.73	43.59	42.07	41.29	40.16	39.33	39.26	40.64	41.71	42.05
13	44.13	44.56	43.52	43.78	41.89	41.02	39.98	39.30	39.50	---	41.70	42.20
14	44.20	44.46	43.53	43.70	41.86	40.77	39.95	39.30	39.75	---	41.39	42.29
15	44.20	44.66	43.72	43.58	41.86	40.73	39.96	39.01	39.88	---	41.59	42.38
16	44.15	44.68	43.88	43.58	41.82	40.90	39.94	38.90	39.88	40.70	41.74	42.42
17	43.70	44.68	43.90	43.40	44.35	40.96	39.83	39.06	39.88	40.56	41.78	42.42
18	43.73	44.75	43.86	43.45	41.58	40.87	39.67	39.06	39.88	40.56	41.83	42.38
19	43.95	44.72	43.45	43.48	41.55	40.90	39.59	39.06	39.76	40.75	41.82	42.48
20	44.00	44.67	43.30	43.46	41.42	40.87	39.65	39.09	39.72	40.84	41.79	42.53
21	44.15	44.57	43.50	43.34	41.27	40.70	39.75	39.09	39.77	40.85	41.64	42.56
22	44.24	44.53	43.51	43.16	41.38	40.90	39.73	39.02	39.86	40.87	41.77	42.55
23	44.24	44.58	43.52	42.96	41.28	40.91	39.59	38.89	39.99	40.87	41.95	42.56
24	43.93	44.58	43.35	42.81	41.22	40.90	39.28	38.89	39.99	40.86	42.04	42.52
25	43.73	44.50	42.99	42.85	41.24	40.97	39.25	38.90	39.99	40.83	42.05	42.38
26	43.87	44.19	42.75	43.03	41.24	40.98	39.35	38.94	39.95	41.03	42.11	42.37
27	43.96	44.00	43.07	43.03	41.22	40.90	39.37	39.22	39.90	41.11	42.16	42.70
28	43.97	43.95	43.25	43.01	41.14	40.83	39.39	39.22	40.07	41.14	42.15	42.94
29	43.98	44.15	43.30	43.01	---	40.97	39.48	39.10	40.11	41.25	42.20	43.15
30	44.01	44.35	43.41	42.83	---	41.03	39.49	38.80	40.24	41.10	42.33	43.17
31	43.83	---	43.16	42.72	---	40.99	---	38.66	---	40.79	42.38	---
MAX	44.63	44.75	44.35	43.78	44.35	41.30	40.82	39.40	40.24	41.25	42.38	43.17

CAL YR 1993 LOW 46.68
WTR YR 1994 LOW 44.75

GROUND-WATER RECORDS

257

PICKAWAY COUNTY--Continued

393402082572500. Local number, PK-4.

LOCATION.--Lat 39°34'02", long 82°57'25", Hydrologic Unit 05060002, 2 mi south of Circleville.

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.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 707 ft above sea level, from topographic map.

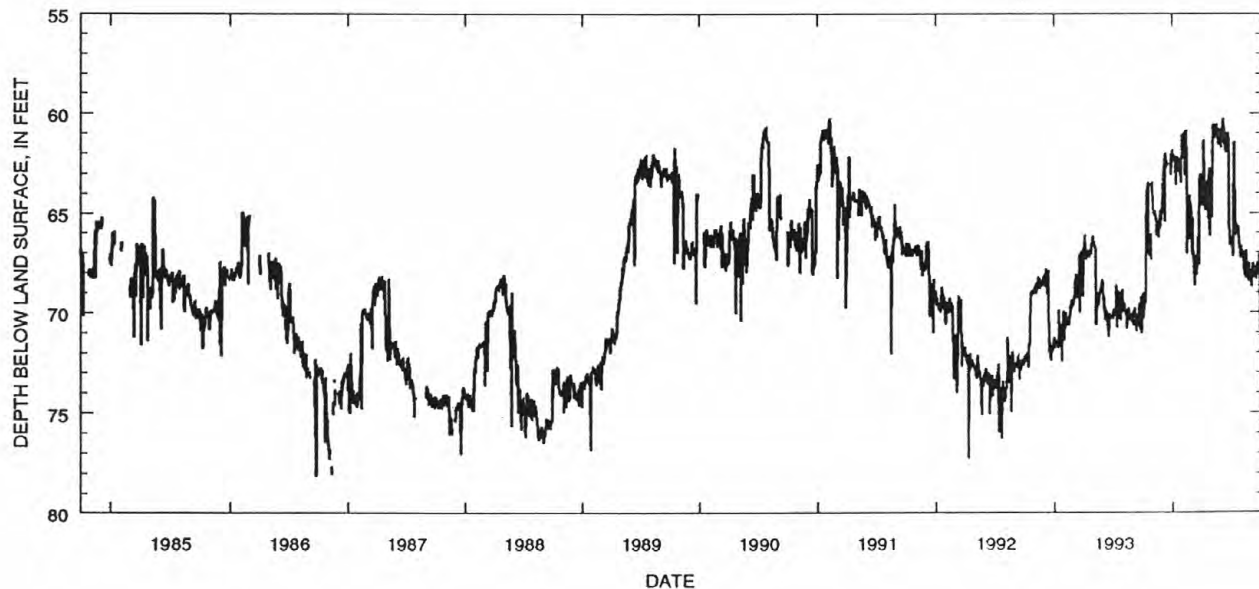
Measuring point: Floor of instrument shelter 3.50 ft above land-surface datum.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69.80	64.90	63.60	61.85	61.50	65.35	64.65	65.10	60.85	66.55	67.00	68.60
2	69.00	64.20	63.55	62.25	61.35	67.10	63.60	65.20	60.85	66.55	67.20	67.90
3	70.15	64.65	63.80	62.25	61.65	66.25	63.75	64.35	60.75	66.65	67.00	67.95
4	70.30	65.10	63.15	62.10	61.45	65.25	63.70	62.05	60.75	66.30	67.00	67.75
5	70.10	65.10	62.95	62.30	61.05	66.65	63.65	60.55	60.85	67.20	67.00	67.50
6	69.90	---	63.05	62.40	61.00	67.25	63.30	61.20	60.25	66.15	67.25	67.80
7	69.75	65.00	62.30	62.35	61.00	67.40	63.20	60.90	60.85	67.10	67.00	68.05
8	69.50	64.90	62.45	62.20	61.00	67.15	61.35	60.55	61.15	65.55	67.50	68.30
9	69.25	65.25	65.45	62.30	63.10	68.00	63.55	61.15	60.70	61.45	68.15	68.20
10	69.50	65.30	62.00	62.30	62.05	68.15	63.50	61.20	61.55	61.45	68.10	67.95
11	66.20	65.25	62.40	62.50	60.90	68.65	64.90	61.00	61.20	61.50	68.15	67.90
12	66.15	65.30	62.70	63.60	60.90	67.65	63.80	61.00	61.75	66.15	67.70	68.00
13	63.80	66.15	62.45	62.15	61.45	67.55	63.80	60.95	61.65	66.05	68.20	68.25
14	63.90	65.90	62.40	62.35	61.95	67.15	63.55	60.70	62.00	65.75	68.30	68.35
15	64.30	65.80	62.60	62.40	67.05	67.40	63.55	60.85	61.70	65.50	66.90	68.00
16	64.15	65.80	62.60	62.50	65.20	67.75	64.60	61.00	61.20	65.65	67.90	67.90
17	63.45	65.60	62.55	62.25	66.05	68.10	63.40	60.55	61.25	65.85	67.55	67.50
18	63.55	65.40	62.50	62.30	64.60	67.35	63.60	61.10	61.05	65.60	68.00	67.70
19	63.75	66.25	---	62.40	64.90	67.80	63.50	60.95	61.10	65.85	68.05	68.10
20	66.95	65.80	---	62.25	64.40	66.50	64.15	61.25	61.20	65.95	67.70	67.60
21	66.70	65.65	---	62.55	64.25	66.20	65.25	61.40	61.00	66.05	68.45	68.05
22	67.15	65.70	---	62.25	66.35	67.40	64.05	61.60	61.50	65.65	68.15	67.65
23	---	65.80	---	62.90	64.10	67.10	63.40	61.35	61.75	65.90	67.50	67.70
24	---	64.85	---	62.90	64.75	67.60	62.75	60.75	65.00	66.00	68.20	67.10
25	66.10	65.70	---	62.75	66.05	63.30	65.50	61.20	66.65	66.45	67.90	67.45
26	66.10	65.40	---	63.15	64.75	64.05	66.15	61.10	66.60	66.75	68.10	67.70
27	67.35	65.35	63.10	62.35	64.60	63.15	65.30	61.45	66.45	66.65	---	70.45
28	---	65.20	62.05	63.50	65.15	63.05	64.50	61.40	66.45	66.75	---	71.30
29	---	64.90	62.50	61.10	---	64.25	64.50	61.55	66.25	67.30	---	74.10
30	63.65	65.00	62.75	61.05	---	63.70	64.85	61.60	66.40	66.65	68.20	68.45
31	63.45	---	---	61.85	---	63.70	---	61.75	---	66.80	68.70	---
MAX	70.30	66.25	65.45	63.60	67.05	68.65	66.15	65.20	66.65	67.30	68.70	74.10

CAL YR 1993 LOW 72.45
WTR YR 1994 LOW 74.10

GROUND-WATER RECORDS

PICKAWAY COUNTY--Continued

393638082572300. Local number, PK-6.

LOCATION.--Lat 39°36'38", long 82°57'23", Hydrologic Unit 05060002, Water Works Plant 1 mi northwest of Circleville.

Owner: Circleville Water Dept.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water table well, diameter 6 in., depth 120 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

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.

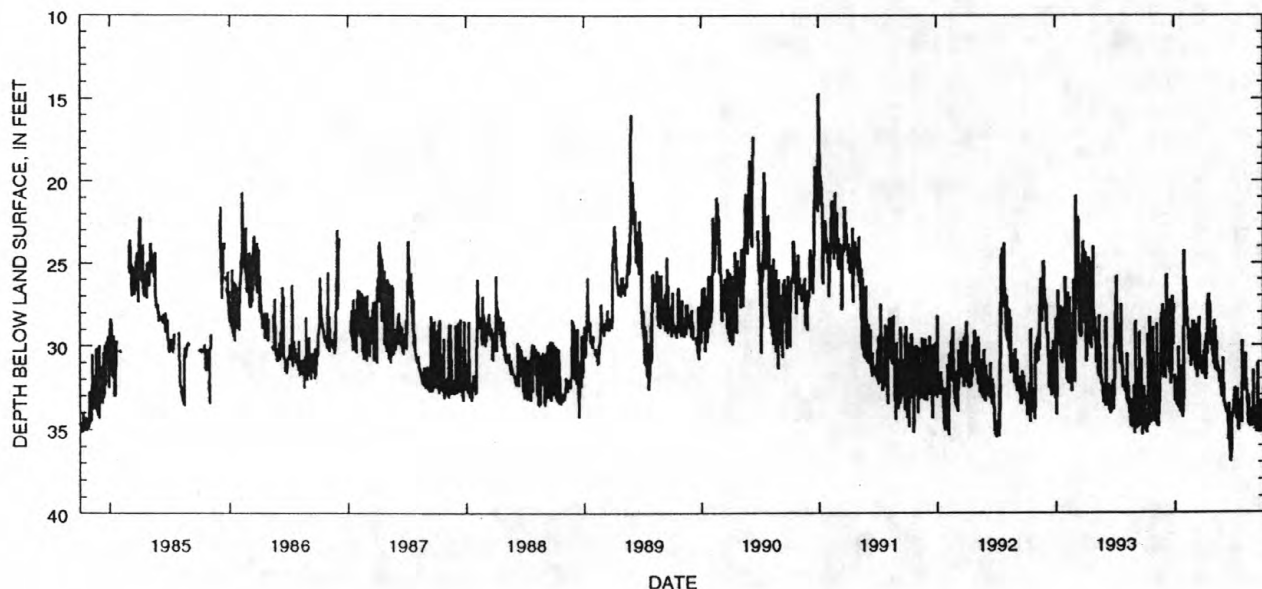
PERIOD OF RECORD.--July 1966 to current year.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33.00	34.60	31.40	33.30	---	28.70	31.40	28.50	33.50	33.20	32.50	34.00
2	34.00	34.20	27.90	33.20	---	30.75	31.80	31.35	33.55	33.20	32.70	34.40
3	34.85	33.80	31.95	33.30	25.85	31.20	31.85	30.55	33.55	33.10	32.45	34.90
4	35.10	34.40	31.30	33.30	27.05	31.20	29.75	28.85	33.70	32.55	32.70	34.50
5	33.90	33.20	28.90	33.10	27.00	31.35	31.90	31.45	33.75	33.60	30.50	34.05
6	34.55	34.70	29.20	33.35	28.30	30.50	32.00	31.00	33.90	33.40	32.40	34.45
7	34.00	28.70	28.50	33.55	28.50	31.50	31.50	29.90	33.90	32.70	32.00	35.15
8	35.20	34.80	25.70	32.30	28.25	30.90	29.25	29.75	34.00	34.45	32.65	35.15
9	34.60	34.30	29.15	33.25	28.45	30.05	30.15	31.50	34.00	33.35	32.80	35.15
10	33.25	34.70	28.50	33.60	29.35	28.75	30.55	31.60	34.05	32.80	32.90	33.35
11	33.75	34.70	28.80	33.70	29.60	31.90	28.65	31.00	34.10	32.75	34.00	33.35
12	29.30	34.85	29.70	30.10	29.65	30.90	27.40	31.60	34.15	34.90	34.65	31.10
13	34.80	34.05	30.20	33.40	30.55	31.00	27.50	31.25	35.30	35.10	34.70	34.75
14	33.80	34.10	30.95	33.10	29.20	31.45	27.55	31.70	35.65	33.50	33.00	35.25
15	34.65	32.75	31.70	33.70	29.00	30.75	26.90	31.40	33.50	35.05	33.45	35.25
16	34.60	32.80	27.25	33.80	30.20	30.65	27.75	31.95	34.30	33.60	34.70	33.45
17	28.30	31.40	31.60	33.95	30.65	28.30	28.20	32.20	36.30	33.20	34.75	33.75
18	34.25	31.45	31.60	---	30.20	30.35	28.70	31.95	35.80	34.50	34.80	35.25
19	34.65	29.50	29.80	---	31.25	30.75	27.50	31.55	34.40	34.25	34.80	33.50
20	34.30	28.35	32.30	---	29.40	31.10	29.15	32.45	36.95	34.30	34.90	33.30
21	34.35	30.65	31.70	---	30.95	31.35	29.55	32.40	36.50	34.25	34.30	34.15
22	34.40	28.00	31.75	31.20	30.70	31.10	30.05	32.75	36.00	34.50	34.85	34.20
23	33.55	30.65	31.35	33.85	30.75	31.30	29.00	32.95	36.15	34.10	34.85	34.35
24	32.90	30.60	30.30	34.25	29.60	31.75	30.35	33.00	34.40	34.55	34.85	34.90
25	34.50	31.70	27.05	34.25	28.60	31.45	29.40	33.05	34.25	34.65	33.80	35.15
26	34.40	27.55	27.05	33.75	28.60	31.30	30.55	33.05	34.00	29.75	33.90	34.25
27	28.85	30.70	29.90	32.70	30.25	30.60	30.70	32.70	34.35	31.90	34.10	34.30
28	34.35	31.95	28.50	30.80	30.35	31.65	29.60	30.75	33.30	32.75	34.15	34.10
29	34.60	28.70	27.50	26.90	---	31.50	31.10	32.50	33.70	31.50	31.55	34.35
30	30.40	28.60	---	24.25	---	31.10	29.95	32.30	33.00	32.00	34.00	32.60
31	32.90	---	31.75	25.90	---	30.30	---	33.35	---	32.35	33.60	---
MAX	35.20	34.85	32.30	34.25	31.25	31.90	32.00	33.35	36.95	35.10	34.90	35.25
CAL YR 1993	LOW 35.30											
WTR YR 1994	LOW 36.95											



GROUND-WATER RECORDS

259

PICKAWAY COUNTY--Continued

393438083072200. Local number, PK-8.

LOCATION.--Lat 39°34'38", long 83°07'22", Hydrologic Unit 05060002, 0.5 mi south of Williamsport.

Owner: Village of Williamsport.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 10 in., depth 18 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 723 ft above sea level, from topographic map.

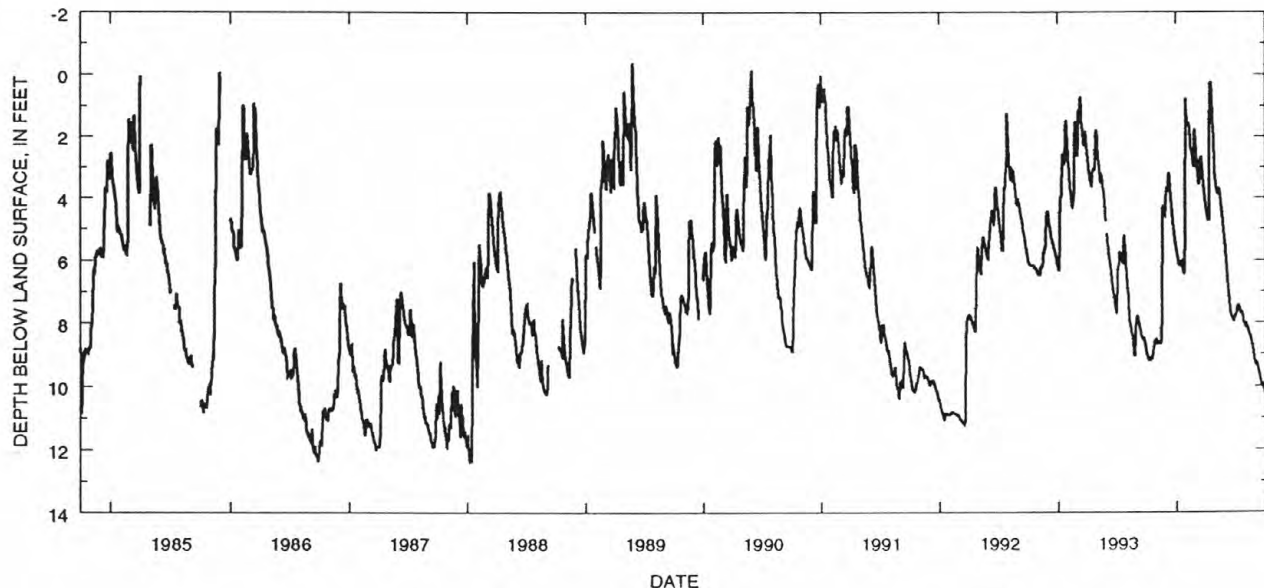
Measuring point: Floor of instrument shelter 0.9 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--April 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low 12.38 ft below land-surface datum, Jan. 9, 13-14, 1988;
minimum recorded daily low, 0.15 ft above land-surface datum, May 30, 1990.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.96	8.60	3.78	5.67	1.30	2.30	4.37	3.63	5.90	7.75	8.00	9.32
2	8.99	8.63	3.65	5.74	1.49	2.47	4.44	3.74	6.04	7.73	8.07	9.34
3	9.03	8.64	3.71	5.82	1.57	2.65	4.51	3.79	6.17	7.69	8.12	9.34
4	9.10	8.65	3.78	5.89	1.58	2.82	4.58	3.81	6.34	7.57	8.15	9.32
5	9.15	8.66	3.79	5.98	1.58	2.98	4.64	3.83	6.51	7.48	8.19	9.34
6	9.18	8.65	3.79	6.05	1.58	3.14	4.68	3.86	6.69	7.45	8.19	9.39
7	9.19	8.62	3.60	6.11	1.60	3.29	4.71	3.88	6.84	7.42	8.21	9.46
8	9.20	8.62	3.28	6.13	1.61	3.40	4.72	3.88	6.95	7.43	8.27	9.51
9	9.19	8.64	3.19	6.16	1.64	3.52	4.71	3.83	7.03	7.44	8.32	9.55
10	9.15	8.65	3.24	6.19	1.71	3.57	4.69	3.77	7.13	7.47	8.34	9.59
11	9.13	8.68	3.28	6.20	1.86	3.57	2.80	3.73	7.24	7.51	8.38	9.64
12	9.12	8.69	3.48	6.19	2.07	3.43	1.37	3.75	7.37	7.55	8.40	9.70
13	9.12	8.70	3.64	6.17	2.30	3.14	.98	3.81	7.52	7.62	8.43	9.76
14	9.14	8.66	3.78	6.13	2.50	2.93	.34	3.89	7.64	7.66	8.45	9.82
15	9.14	8.59	3.91	6.07	2.48	2.80	.23	3.98	7.72	7.70	8.48	9.87
16	9.15	8.27	4.05	6.05	2.50	2.74	.30	4.10	7.77	7.70	8.54	9.92
17	9.13	7.98	4.19	6.08	2.58	2.64	.41	4.20	7.81	7.68	8.59	9.93
18	9.11	7.15	4.32	6.13	2.67	2.69	.54	4.30	7.83	7.66	8.66	9.93
19	9.13	5.12	4.45	6.20	2.78	2.82	.70	4.39	7.83	7.68	8.73	9.91
20	9.13	4.40	4.58	6.27	2.88	2.94	.93	4.49	7.85	7.70	8.75	9.94
21	8.96	4.25	4.69	6.32	2.96	3.07	1.20	4.58	7.90	7.76	8.68	9.98
22	8.90	4.28	4.82	6.36	3.01	3.21	1.49	4.70	7.93	7.83	8.82	10.03
23	8.82	4.33	4.92	6.40	3.01	3.35	1.75	4.83	7.95	7.88	8.93	10.07
24	8.69	4.37	5.02	6.45	2.54	3.49	2.06	4.98	7.98	7.94	9.00	10.10
25	8.61	4.44	5.12	6.46	1.92	3.62	2.37	5.10	7.94	8.00	9.06	10.14
26	8.61	4.51	5.20	6.32	1.78	3.75	2.66	5.20	7.89	8.06	9.14	10.17
27	8.61	4.56	5.29	5.05	1.92	3.87	2.90	5.29	7.85	8.09	9.19	10.21
28	8.60	4.55	5.38	4.07	2.13	3.97	3.12	5.37	7.83	8.11	9.21	10.23
29	8.58	4.31	5.46	1.37	---	4.07	3.36	5.47	7.79	8.11	9.24	10.26
30	8.55	4.05	5.53	.75	---	4.21	3.51	5.56	7.78	8.10	9.30	10.30
31	8.53	---	5.60	1.00	---	4.31	---	5.76	---	8.07	9.31	---
MAX	9.20	8.70	5.60	6.46	3.01	4.31	4.72	5.76	7.98	8.11	9.31	10.30

CAL YR 1993 LOW 9.20
WTR YR 1994 LOW 10.30

GROUND-WATER RECORDS

PICKAWAY COUNTY--Continued

394742083094800. Local number, PK-9.

LOCATION.--Lat 39°47'42", long 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.--Type F continuous recorder.

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.

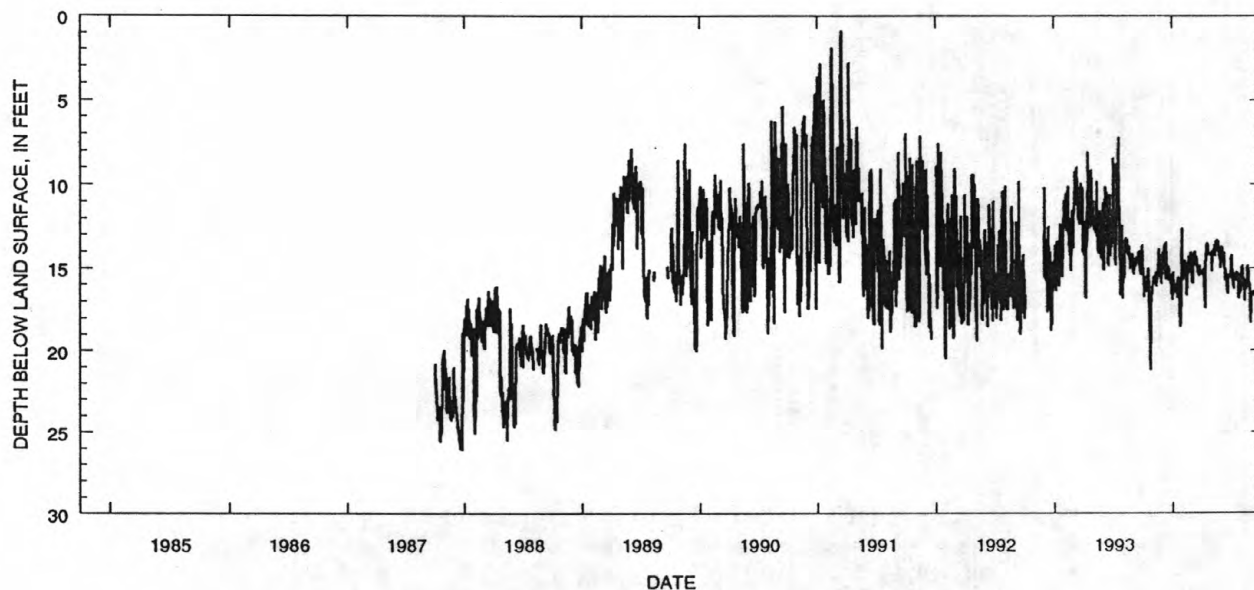
PERIOD OF RECORD.--October 1986 to current year.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.35	15.95	15.00	16.90	15.75	15.70	15.40	15.20	13.80	14.20	14.95	16.60
2	14.65	15.70	14.00	16.20	14.70	15.85	15.35	14.10	13.80	14.80	14.85	16.60
3	15.30	15.65	14.85	15.25	15.75	15.95	15.35	14.00	14.30	15.30	15.20	16.35
4	15.60	15.50	14.90	16.20	14.95	15.85	15.35	14.00	14.50	15.70	16.00	16.55
5	16.65	15.75	14.80	16.20	14.95	15.05	15.25	14.05	14.70	15.90	15.85	16.65
6	16.75	15.75	13.75	16.20	14.55	14.45	15.10	14.10	14.05	16.25	15.60	16.65
7	15.90	15.85	13.55	16.50	14.90	14.25	15.10	14.05	14.20	16.25	16.15	16.55
8	15.95	15.90	14.20	16.35	15.10	14.15	15.75	13.60	14.70	15.60	15.70	16.50
9	15.50	15.25	15.25	16.35	14.90	14.10	16.60	14.05	15.30	15.40	17.00	16.50
10	16.10	15.25	15.75	16.15	15.25	14.00	17.40	14.20	15.75	15.40	16.70	16.60
11	16.15	16.00	14.10	16.15	15.40	14.05	17.40	14.30	15.05	15.45	15.90	16.70
12	16.00	16.15	13.45	16.15	15.50	14.85	15.00	13.40	15.30	15.80	15.90	16.75
13	16.10	15.85	14.60	15.95	16.65	14.55	14.20	13.50	15.40	15.60	16.05	16.85
14	15.75	15.85	14.85	16.80	15.80	14.30	14.20	13.85	15.45	15.45	16.20	16.85
15	16.00	15.60	15.10	16.80	14.85	14.35	13.70	14.00	15.45	15.40	16.30	17.20
16	16.50	15.15	15.65	16.25	15.10	14.65	13.50	13.30	16.05	15.40	16.10	16.95
17	15.00	14.35	15.80	15.55	15.05	14.95	13.70	13.90	16.40	15.40	15.40	16.75
18	15.25	14.20	15.80	15.70	14.30	15.00	13.70	13.90	16.50	15.30	14.85	16.65
19	17.00	13.85	14.90	15.70	14.60	15.25	13.80	13.90	16.50	15.35	15.25	16.65
20	17.30	14.00	15.35	16.25	15.25	15.35	14.20	13.40	15.70	15.40	15.05	16.40
21	15.75	14.40	15.05	16.35	15.25	15.45	14.20	13.70	15.40	16.70	15.30	16.20
22	17.50	14.60	15.45	16.85	15.20	15.50	14.20	14.35	15.45	16.85	15.55	16.25
23	20.15	15.40	15.60	17.55	15.20	14.90	14.25	14.20	15.50	16.10	16.15	16.25
24	21.05	15.55	15.65	18.45	14.10	14.90	14.25	13.90	15.50	16.05	16.15	16.50
25	21.20	15.05	15.40	18.55	14.05	15.00	14.25	14.20	15.65	16.00	16.10	16.55
26	18.00	15.40	15.50	18.15	14.45	15.25	14.25	14.75	15.45	16.45	17.10	16.95
27	17.25	16.00	16.50	16.45	14.85	15.20	14.25	15.00	15.30	16.45	18.15	16.85
28	17.40	15.95	16.55	15.00	15.35	15.20	14.05	13.85	15.00	16.35	18.30	16.80
29	16.70	14.85	16.20	12.65	---	15.20	14.20	13.70	14.50	15.40	17.15	15.80
30	16.95	14.75	16.15	13.40	---	15.40	14.05	13.75	14.35	15.95	16.55	16.15
31	16.20	---	16.90	14.80	---	15.40	---	13.75	---	15.00	16.60	---
MAX	21.20	16.15	16.90	18.55	16.65	15.95	17.40	15.20	16.50	16.85	18.30	17.20
CAL YR 1993	LOW 21.20											
WTR YR 1994	LOW 21.20											



GROUND-WATER RECORDS

261

PIKE COUNTY

390359083015100. Local number, PI-2.

LOCATION.--Lat 39°03'59", long 83°01'51", Hydrologic Unit 05060002, 1 mi west of Piketon.

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.

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;

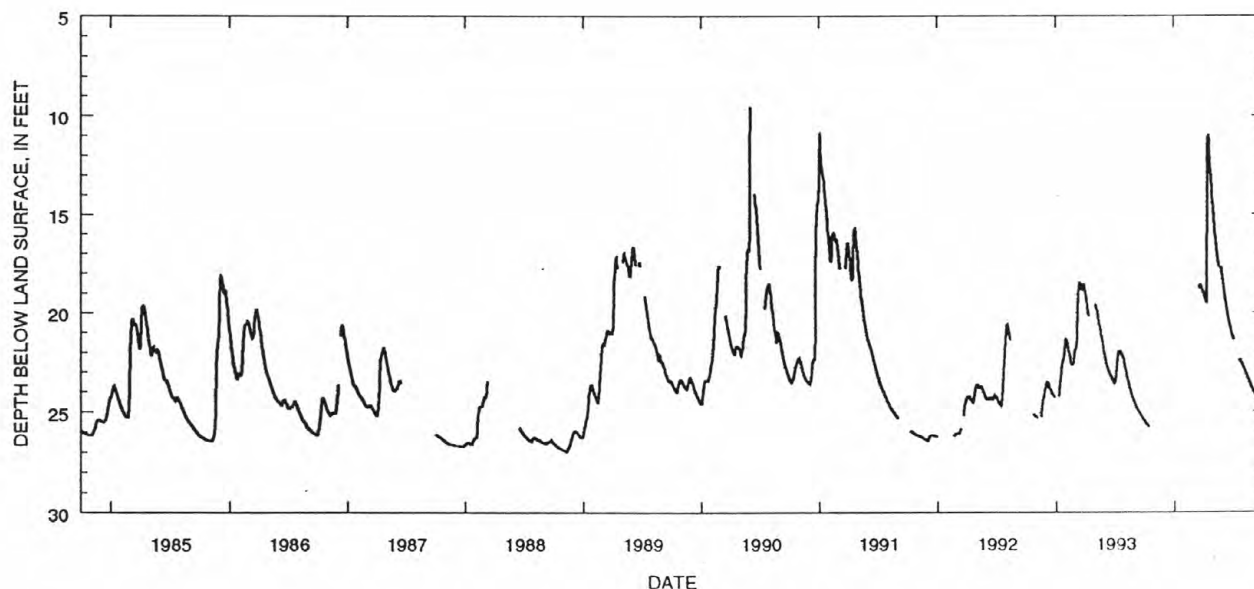
minimum daily low, 9.52 ft below land-surface datum, June 1, 1990.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.48	---	---	---	---	---	19.03	14.86	18.65	21.35	22.83	24.07
2	25.51	---	---	---	---	---	19.07	15.10	18.77	21.37	22.87	24.10
3	25.55	---	---	---	---	---	19.12	15.33	18.89	21.40	22.91	24.14
4	25.56	---	---	---	---	---	19.18	15.53	19.02	---	22.95	24.17
5	25.58	---	---	---	---	---	19.24	15.72	19.14	---	22.99	24.19
6	25.60	---	---	---	---	---	19.29	15.92	19.25	---	23.03	24.22
7	25.62	---	---	---	---	---	19.38	16.09	19.36	---	23.07	24.24
8	25.64	---	---	---	---	---	19.45	16.27	19.47	---	23.11	24.27
9	25.66	---	---	---	---	---	19.52	16.45	19.58	---	23.15	24.30
10	25.67	---	---	---	---	---	19.53	16.63	19.69	---	23.19	24.33
11	25.71	---	---	---	---	---	19.50	16.79	19.79	---	23.23	24.36
12	25.71	---	---	---	---	---	18.37	16.94	19.89	---	23.27	24.39
13	25.73	---	---	---	---	---	13.71	17.09	19.99	---	23.31	24.41
14	25.76	---	---	---	---	---	11.70	17.24	20.09	---	23.36	24.44
15	25.76	---	---	---	---	---	11.11	17.37	20.19	---	23.40	24.47
16	---	---	---	---	---	---	10.96	17.52	20.29	22.40	23.44	24.50
17	---	---	---	---	---	18.80	11.07	17.65	20.38	22.40	23.48	24.53
18	---	---	---	---	---	18.76	11.28	17.70	20.47	22.41	23.52	24.56
19	---	---	---	---	---	18.69	11.62	---	20.56	22.42	23.57	24.61
20	---	---	---	---	---	18.65	11.97	---	20.64	22.44	23.61	24.65
21	---	---	---	---	---	18.62	12.29	---	20.72	22.46	23.64	24.69
22	---	---	---	---	---	18.61	12.57	---	20.80	22.48	23.69	24.72
23	---	---	---	---	---	18.63	12.85	---	20.88	22.50	23.74	24.75
24	---	---	---	---	---	18.67	13.11	---	20.95	22.53	23.78	24.78
25	---	---	---	---	---	18.69	13.36	17.71	21.03	22.56	23.82	24.82
26	---	---	---	---	---	18.78	13.61	17.85	21.09	22.60	23.86	24.84
27	---	---	---	---	---	18.82	13.86	17.99	21.16	22.63	23.89	24.88
28	---	---	---	---	---	18.86	14.12	18.13	21.22	22.67	23.93	24.91
29	---	---	---	---	---	18.91	14.38	18.26	21.27	22.71	23.97	24.94
30	---	---	---	---	---	18.95	14.62	18.39	21.31	22.75	24.00	24.97
31	---	---	---	---	---	18.99	---	18.52	---	22.79	24.04	---
MAX	25.76	---	---	---	---	18.99	19.53	18.52	21.31	22.79	24.04	24.97

CAL YR 1993 LOW 25.76

WTR YR 1994 LOW 25.76



GROUND-WATER RECORDS

PORTAGE COUNTY

411401081025000. Local number, PO-1.

LOCATION.--Lat 41°14'01", long 81°02'50" Hydrologic Unit 05030103. Bauer Street in Windham.

Owner: Cristopher Minter.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in., depth 55 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 980 ft above sea level, from topographic map.

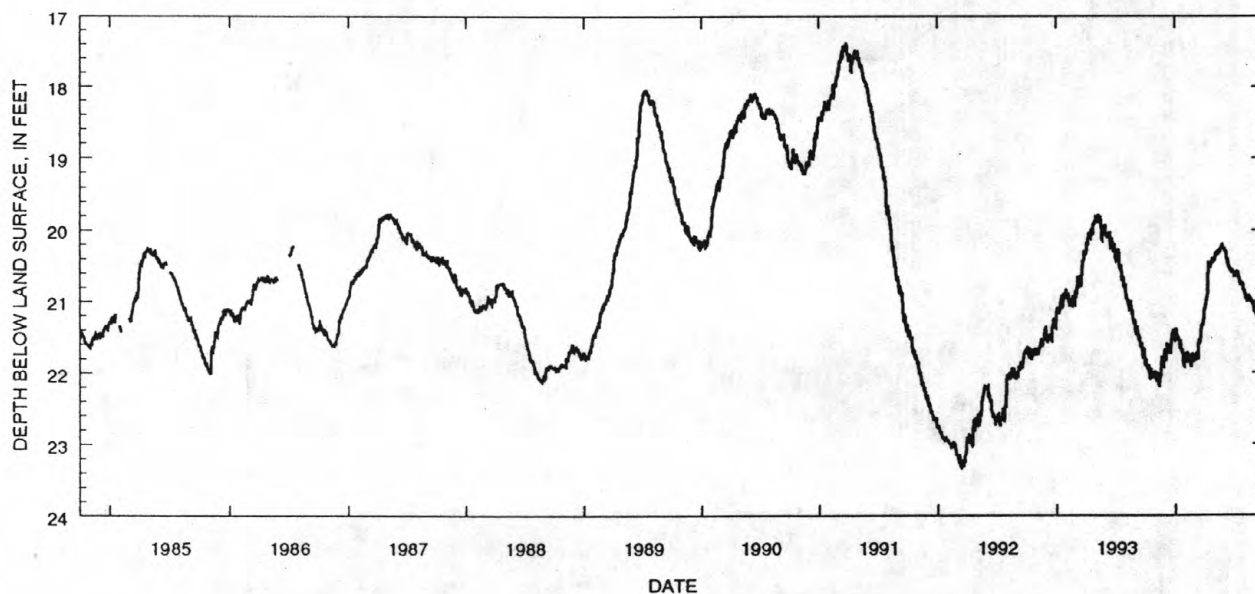
Measuring point: Floor of instrument shelter 0.60 ft above land-surface datum.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.87	22.08	21.81	21.45	21.75	21.83	21.10	20.38	20.27	20.64	20.85	21.14
2	21.83	22.13	21.82	21.38	21.75	21.83	21.09	20.40	20.29	20.65	20.87	21.15
3	21.83	22.10	21.84	21.38	21.85	21.80	21.08	20.40	20.29	20.65	20.89	21.15
4	21.86	22.08	21.83	21.44	21.85	21.80	21.07	20.37	20.29	20.65	20.89	21.16
5	21.93	22.01	21.59	21.51	21.84	21.80	21.03	20.35	20.30	20.65	20.94	21.16
6	21.93	22.01	21.65	21.50	21.71	21.76	21.01	20.33	20.29	20.65	20.95	21.15
7	21.96	22.02	21.71	21.51	21.78	21.71	20.98	20.33	20.33	20.58	20.94	21.18
8	21.95	22.09	21.73	21.51	21.78	21.80	20.98	20.31	20.38	20.57	20.95	21.18
9	21.91	22.15	21.73	21.50	21.83	21.80	20.93	20.31	20.41	20.57	20.99	21.20
10	21.90	22.16	21.69	21.51	21.84	21.79	20.88	20.32	20.41	20.58	20.99	21.23
11	21.89	22.17	21.70	21.55	21.85	21.80	20.79	20.32	20.41	20.59	20.99	21.25
12	21.96	22.20	21.66	21.55	21.85	21.80	20.75	20.32	20.46	20.59	21.00	21.26
13	22.04	22.20	21.60	21.58	21.75	21.63	20.45	20.33	20.46	20.62	21.00	21.26
14	22.06	22.09	21.61	21.65	21.80	21.54	20.48	20.32	20.48	20.63	20.91	21.26
15	22.10	22.05	21.69	21.66	21.86	21.56	20.48	20.27	20.50	20.65	20.95	21.28
16	22.09	22.05	21.73	21.65	21.90	21.58	20.49	20.30	20.52	20.69	20.95	21.29
17	21.95	22.04	21.73	21.55	21.91	21.58	20.49	20.30	20.53	20.69	20.95	21.29
18	22.04	21.88	21.70	21.67	21.91	21.56	20.50	20.30	20.53	20.69	20.98	21.34
19	22.04	21.81	21.56	21.70	21.91	21.56	20.47	20.29	20.54	20.72	20.99	21.35
20	22.04	21.78	21.55	21.70	21.80	21.47	20.50	20.27	20.56	20.77	20.98	21.35
21	22.05	21.78	21.48	21.70	21.73	21.42	20.48	20.27	20.56	20.77	20.96	21.36
22	22.07	21.84	21.46	21.68	21.78	21.36	20.47	20.26	20.60	20.72	20.99	21.37
23	22.07	21.86	21.45	21.67	21.78	21.35	20.46	20.25	20.60	20.75	21.01	21.38
24	21.98	21.91	21.45	21.78	21.82	21.34	20.42	20.25	20.57	20.77	21.01	21.42
25	22.01	21.92	21.40	21.81	21.86	21.33	20.40	20.19	20.57	20.75	20.99	21.42
26	22.01	21.83	21.39	21.90	21.81	21.33	20.40	20.25	20.59	20.75	21.00	21.42
27	22.02	21.76	21.43	21.91	21.78	21.31	20.43	20.27	20.58	20.75	21.01	21.43
28	22.03	21.73	21.44	21.90	21.74	21.30	20.46	20.27	20.59	20.78	21.01	21.45
29	22.05	21.67	21.43	21.72	---	21.28	20.43	20.27	20.58	20.83	21.04	21.48
30	22.08	21.76	21.54	21.72	---	21.23	20.42	20.27	20.60	20.85	21.07	21.50
31	21.98	---	21.57	21.72	---	21.17	---	20.25	---	20.85	21.07	---
MAX	22.10	22.20	21.84	21.91	21.91	21.83	21.10	20.40	20.60	20.85	21.07	21.50

CAL YR 1993 LOW 22.20
WTR YR 1994 LOW 22.20

GROUND-WATER RECORDS

263

PREBLE COUNTY

394438084335900. Local number, PR-2.

LOCATION.--Lat 39°44'38", long 84°33'59", Hydrologic Unit 05080002, Stover Rd 4 mi east of Eaton.

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.

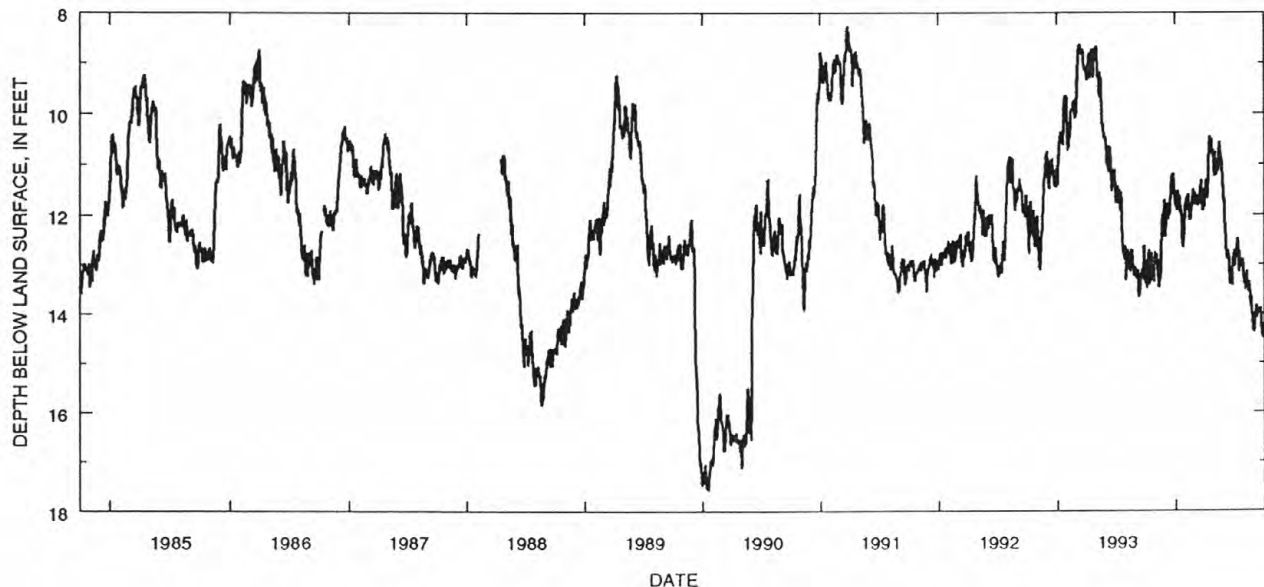
Measuring point: Floor of instrument shelter 1.50 ft above land-surface datum.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.22	12.84	12.44	11.83	11.82	11.56	11.55	10.75	12.17	13.06	13.40	14.12
2	13.22	12.87	12.30	11.81	11.67	11.71	11.38	11.03	12.25	13.00	13.48	14.10
3	13.29	12.95	12.13	11.74	11.80	11.81	11.42	10.93	12.50	12.79	13.47	14.02
4	13.32	12.98	11.90	11.92	11.86	11.71	11.29	10.93	12.65	12.69	13.39	13.93
5	13.39	12.80	11.86	11.87	11.92	11.72	11.41	11.10	12.75	12.73	13.33	13.84
6	13.49	13.11	11.77	11.59	11.59	11.78	11.45	11.21	12.83	12.71	13.25	13.84
7	13.33	12.90	11.88	11.51	11.84	11.75	11.35	11.08	12.90	12.58	13.13	13.96
8	13.04	13.25	12.02	11.55	11.60	11.81	11.67	11.01	12.89	12.70	13.38	14.09
9	12.78	13.26	12.10	11.61	11.60	11.83	11.54	11.09	12.72	12.61	13.34	13.98
10	13.02	13.45	11.98	11.81	11.90	11.60	11.20	11.10	12.79	12.47	13.38	13.95
11	12.81	13.39	11.85	11.73	11.90	11.81	11.17	11.10	12.81	12.63	13.40	13.94
12	12.71	13.47	11.86	11.61	11.80	11.72	10.86	10.92	12.88	13.04	13.51	13.93
13	13.31	13.36	12.01	11.69	12.10	11.72	10.80	10.73	12.88	13.16	13.49	13.90
14	13.42	13.32	12.02	11.88	12.10	11.68	10.70	10.65	13.19	13.02	13.35	13.95
15	13.33	13.25	11.91	11.95	12.00	11.62	10.45	10.55	13.13	12.74	13.49	13.94
16	13.00	13.25	11.65	11.85	12.07	11.80	10.55	10.76	13.42	13.03	13.54	13.93
17	12.83	13.11	11.66	11.83	11.79	11.42	10.53	10.78	13.35	12.88	13.58	13.89
18	12.77	12.57	11.39	11.99	11.92	11.56	10.53	10.81	13.34	12.96	13.68	13.88
19	13.07	12.48	11.33	12.02	11.91	11.58	10.67	10.79	13.30	13.02	13.87	13.90
20	13.22	12.16	11.30	12.45	11.74	11.31	10.56	10.96	13.41	13.06	13.79	14.07
21	13.34	12.00	11.19	12.53	11.76	11.48	10.49	11.11	13.41	12.98	13.65	14.25
22	13.25	12.26	11.25	12.50	11.52	11.51	10.76	10.93	13.43	12.90	13.99	14.36
23	13.28	12.03	11.21	12.53	11.49	11.66	10.80	11.13	13.37	12.98	14.03	14.50
24	13.26	12.42	11.21	12.66	11.55	11.80	10.79	11.20	13.11	12.91	14.07	14.46
25	13.30	12.15	11.18	12.56	11.57	11.91	10.71	11.43	12.99	12.91	14.30	14.37
26	13.36	11.96	11.21	12.48	11.72	11.84	10.94	11.40	12.87	13.07	14.32	14.30
27	13.22	11.83	11.42	12.31	11.64	11.78	10.98	11.66	12.85	13.24	14.34	14.37
28	13.04	11.69	11.43	12.00	11.80	11.82	11.05	11.77	12.73	13.31	14.31	14.48
29	12.98	11.91	11.72	12.07	---	11.81	11.23	11.67	12.87	13.39	14.38	14.32
30	12.92	12.44	11.78	11.94	---	11.84	10.88	11.74	13.00	13.29	14.38	14.21
31	12.81	---	11.83	11.81	---	11.65	---	12.15	---	13.36	14.28	---
MAX	13.49	13.47	12.44	12.66	12.10	11.91	11.67	12.15	13.43	13.39	14.38	14.50
CAL YR 1993	LOW 13.66											
WTR YR 1994	LOW 14.50											



GROUND-WATER RECORDS

RICHLAND COUNTY

404625082305100. Local number, R-4.

LOCATION.--Lat 40°46'25", long 82°30'51", Hydrologic Unit 05040002, at Ohio Brass Plant in Mansfield.

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 1150 ft above sea level, from topographic map.

Measuring point: Top of platform 5.00 ft above land-surface datum.

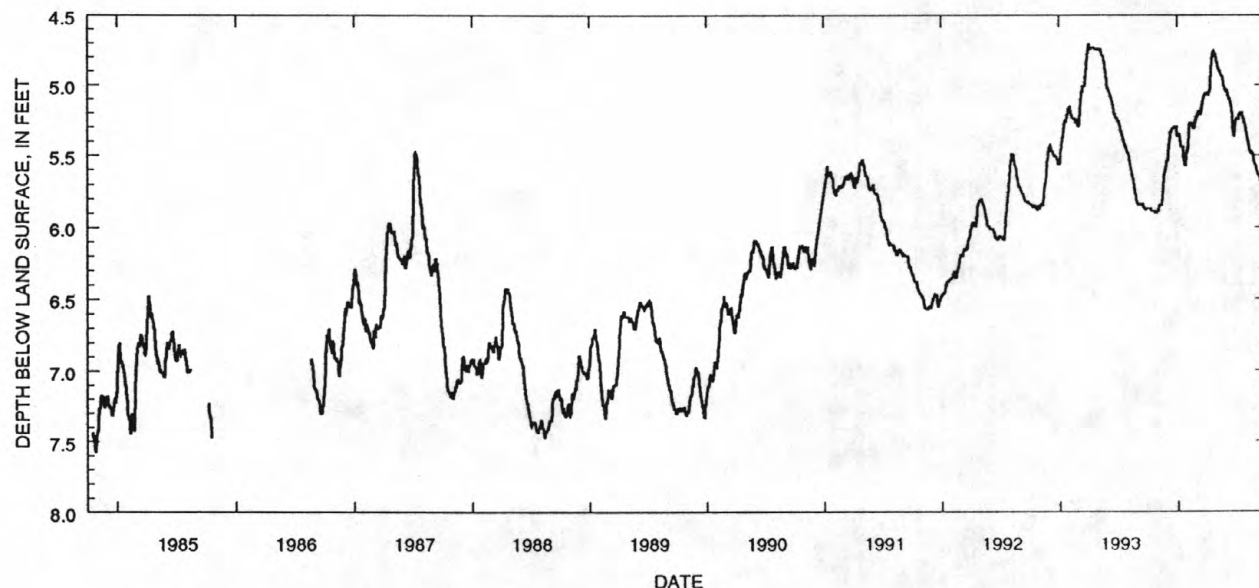
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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, 20, 1962; minimum daily low, 4.71 ft below land-surface datum, Apr. 3-4, 1993.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.87	5.89	5.54	5.35	5.47	5.23	5.07	4.83	5.03	5.25	5.34	5.60
2	5.87	5.89	5.54	5.35	5.47	5.23	5.07	4.84	5.04	5.24	5.35	5.61
3	5.87	5.89	5.54	5.35	5.45	5.23	5.07	4.84	5.04	5.24	5.37	5.62
4	5.87	5.89	5.53	5.35	5.45	5.21	5.07	4.84	5.05	5.24	5.38	5.63
5	5.87	5.88	5.48	5.35	5.31	5.20	5.07	4.87	5.06	5.24	5.39	5.63
6	5.87	5.85	5.44	5.35	5.29	5.19	5.07	4.87	5.07	5.25	5.40	5.63
7	5.87	5.85	5.42	5.35	5.27	5.19	5.06	4.88	5.09	5.25	5.41	5.63
8	5.87	5.85	5.41	5.35	5.27	5.19	5.06	4.89	5.10	5.25	5.42	5.64
9	5.87	5.85	5.39	5.38	5.27	5.19	5.05	4.90	5.10	5.21	5.44	5.64
10	5.87	5.85	5.37	5.42	5.27	5.19	5.05	4.90	5.10	5.21	5.45	5.64
11	5.87	5.85	5.34	5.44	5.27	5.19	5.04	4.90	5.10	5.21	5.47	5.65
12	5.88	5.85	5.34	5.44	5.27	5.21	5.03	4.90	5.12	5.21	5.47	5.65
13	5.89	5.85	5.34	5.44	5.27	5.21	4.96	4.91	5.13	5.20	5.46	5.67
14	5.89	5.85	5.34	5.44	5.27	5.21	4.92	4.92	5.14	5.20	5.47	5.68
15	5.89	5.82	5.33	5.44	5.28	5.20	4.88	4.92	5.15	5.20	5.47	5.68
16	5.89	5.80	5.31	5.44	5.29	5.17	4.84	4.93	5.17	5.20	5.48	5.69
17	5.89	5.79	5.31	5.44	5.30	5.17	4.81	4.94	5.18	5.20	5.48	5.70
18	5.89	5.74	5.31	5.44	5.31	5.15	4.80	4.94	5.21	5.20	5.49	5.70
19	5.89	5.71	5.31	5.44	5.31	5.13	4.78	4.94	5.24	5.21	5.49	5.71
20	5.89	5.67	5.31	5.52	5.31	5.12	4.78	4.95	5.29	5.23	5.49	5.73
21	5.89	5.64	5.31	5.52	5.31	5.11	4.77	4.96	5.33	5.24	5.49	5.74
22	5.89	5.63	5.30	5.56	5.31	5.10	4.76	4.98	5.35	5.24	5.50	5.74
23	5.89	5.62	5.30	5.56	5.30	5.09	4.76	5.00	5.36	5.25	5.51	5.75
24	5.90	5.61	5.30	5.57	5.27	5.08	4.77	5.01	5.37	5.25	5.54	5.75
25	5.90	5.60	5.30	5.57	5.25	5.07	4.78	5.02	5.35	5.26	5.55	5.76
26	5.90	5.60	5.30	5.57	5.27	5.07	4.78	5.03	5.34	5.27	5.55	5.74
27	5.90	5.59	5.30	5.57	5.23	5.07	4.78	5.04	5.30	5.28	5.56	5.74
28	5.90	5.57	5.30	5.56	5.23	5.06	4.78	5.04	5.28	5.28	5.56	5.74
29	5.90	5.55	5.30	5.50	---	5.06	4.79	5.04	5.26	5.29	5.57	5.74
30	5.89	5.54	5.30	5.47	---	5.06	4.81	5.03	5.25	5.31	5.57	5.74
31	5.89	---	5.37	5.47	---	5.07	---	5.03	---	5.33	5.58	---
MAX	5.90	5.89	5.54	5.57	5.47	5.23	5.07	5.04	5.37	5.33	5.58	5.76
CAL YR 1993	LOW 5.90											
WTR YR 1994	LOW 5.90											



GROUND-WATER RECORDS

265

ROSS COUNTY

391341083172200. Local number, RO-7.

LOCATION.--Lat 39°13'41", long 83°17'22", Hydrologic Unit 05060003, Highland County well field, 1 mi west of Bainbridge.

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.

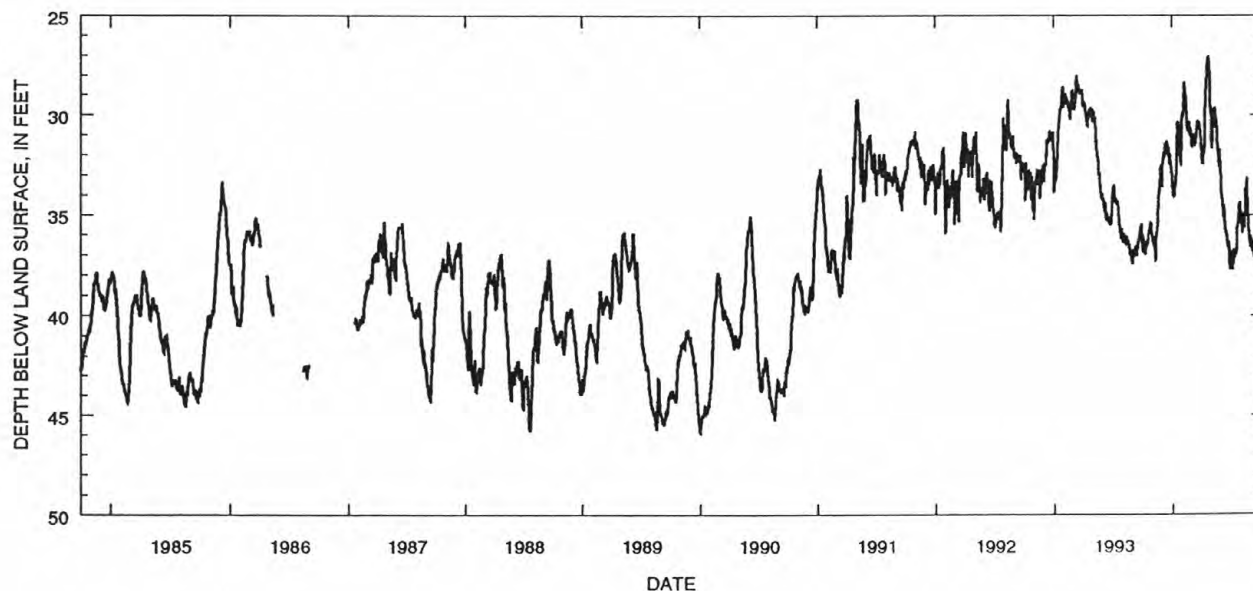
Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36.90	36.34	33.63	33.52	29.89	31.46	32.16	31.05	34.21	37.64	35.93	36.79
2	36.78	36.48	32.81	33.65	30.10	31.64	32.32	31.69	34.18	37.70	35.96	36.82
3	36.05	36.53	32.14	34.01	30.06	30.92	32.45	31.60	34.24	37.71	35.77	36.83
4	36.03	36.31	32.29	34.03	29.64	31.04	32.05	31.10	34.51	37.52	35.40	36.77
5	36.34	36.11	31.89	33.67	28.94	31.13	32.45	30.56	34.69	37.26	35.20	36.79
6	36.44	36.23	31.97	34.05	28.89	31.27	32.05	30.13	35.01	37.48	35.06	36.91
7	36.72	36.09	32.21	34.06	28.80	31.34	31.92	29.88	35.13	36.69	34.96	37.11
8	36.86	36.58	32.05	34.04	28.35	31.44	31.92	29.91	34.51	36.85	35.15	37.13
9	36.94	36.90	31.75	33.48	28.90	31.46	31.86	29.91	34.90	37.12	35.57	36.68
10	36.92	37.28	31.42	33.51	29.29	31.50	31.30	29.86	35.24	36.93	35.68	36.30
11	36.55	37.25	31.99	33.40	28.92	30.92	30.94	29.60	35.49	37.11	34.50	36.16
12	36.44	36.87	31.73	33.45	29.20	31.29	29.99	29.85	35.70	36.81	33.65	36.06
13	36.39	36.14	31.45	32.57	29.52	31.23	29.24	30.31	35.84	36.85	34.48	35.96
14	36.48	36.08	31.47	31.83	30.14	31.30	29.05	30.65	35.89	36.90	34.91	36.25
15	36.64	35.67	31.30	31.28	30.65	31.44	28.34	30.07	35.83	36.95	34.93	36.67
16	36.58	35.63	31.45	30.83	30.84	30.82	27.94	30.43	35.90	36.58	33.65	36.92
17	36.48	35.53	31.52	30.31	30.62	30.70	27.83	30.22	36.11	36.10	33.13	37.07
18	36.40	34.95	31.54	30.39	30.62	30.57	27.21	30.86	36.34	35.76	33.88	36.45
19	36.12	34.50	31.66	30.62	30.68	30.26	27.43	31.23	36.52	35.53	34.47	36.86
20	36.02	34.31	31.82	31.04	30.73	30.49	27.26	31.61	36.65	35.33	34.87	37.06
21	35.86	33.81	32.27	31.30	30.82	30.56	27.12	31.65	36.36	35.07	35.28	37.07
22	35.81	33.67	31.66	31.50	30.31	30.51	27.05	32.09	36.41	34.92	35.64	36.47
23	35.80	33.84	32.50	31.73	30.82	30.42	27.19	32.32	36.91	34.78	35.94	36.88
24	35.60	33.68	32.49	31.89	31.04	30.31	27.42	32.43	37.30	34.63	36.26	37.27
25	35.45	32.87	31.94	31.91	30.83	30.49	27.66	32.62	37.72	34.47	36.50	37.43
26	35.78	32.71	32.26	32.27	30.63	30.54	27.91	31.71	37.54	34.36	36.62	37.22
27	35.80	32.67	32.32	32.54	30.85	30.69	28.68	32.18	36.84	34.76	36.29	36.84
28	35.43	32.50	32.47	32.54	31.04	30.82	29.24	32.46	37.04	35.15	36.04	36.93
29	35.48	32.54	32.73	31.07	---	30.91	29.89	32.77	37.23	35.27	36.28	37.34
30	35.93	33.24	32.81	30.83	---	31.32	30.08	33.14	37.42	34.87	36.55	37.52
31	35.95	---	33.02	30.31	---	31.42	---	33.78	---	35.02	36.24	---
MAX	36.94	37.28	33.63	34.06	31.04	31.64	32.45	33.78	37.72	37.71	36.62	37.52

CAL YR 1993 LOW 37.45
WTR YR 1994 LOW 37.72

GROUND-WATER RECORDS

ROSS COUNTY--Continued.

391913082580500. Local number, RO-8.

LOCATION.--Lat 39°19'13", long 82°58'05", Hydrologic Unit 05060003, Mead Paper wood yard in Chillicothe.

Owner: Mead Paper Corp.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 6 in., depth 95 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 631.30 ft above sea level.

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.--May 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 32.65 ft below land-surface datum, Dec. 7, 1988;

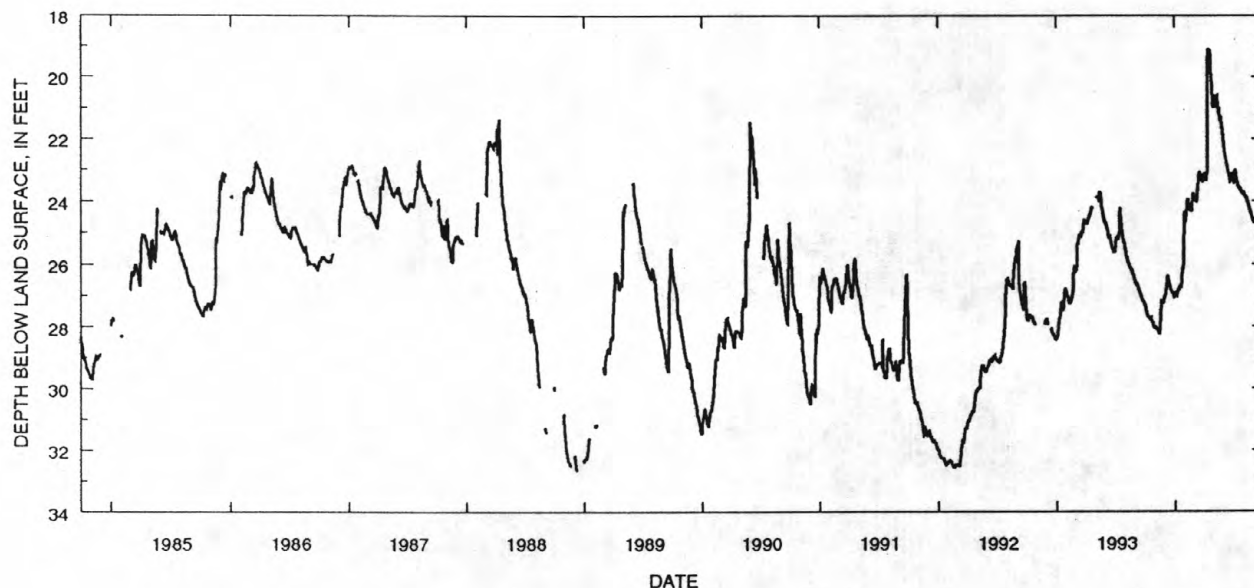
minimum daily low, 19.08 ft below land-surface datum, April 14, 1994.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.32	27.99	27.02	26.98	24.63	23.89	23.21	20.83	22.33	23.35	23.76	24.67
2	27.35	27.97	26.99	26.95	24.64	23.89	23.24	20.64	22.41	23.45	23.81	24.65
3	27.39	27.99	26.93	26.95	24.56	23.95	23.31	20.64	22.48	23.36	23.84	24.59
4	27.46	28.04	26.86	26.97	24.45	23.98	23.31	20.65	22.54	23.06	23.85	24.58
5	27.54	28.07	26.80	27.00	24.32	24.00	23.27	20.73	22.62	23.04	23.86	24.58
6	27.59	28.09	26.64	27.00	24.23	24.00	23.32	20.93	22.67	23.11	23.87	24.64
7	27.63	28.12	26.57	26.98	24.13	23.99	23.32	20.95	22.73	23.18	23.88	24.68
8	27.65	28.13	26.47	26.95	24.06	24.02	23.24	20.89	22.78	23.21	23.91	24.71
9	27.68	28.15	26.35	26.89	23.95	24.01	23.11	20.64	22.83	23.27	23.92	24.72
10	27.69	28.18	26.42	26.85	23.96	23.94	23.05	20.62	22.86	23.33	23.94	24.75
11	27.66	28.19	26.50	26.82	24.04	23.73	21.12	20.71	22.90	23.38	23.98	24.78
12	27.66	28.22	26.54	26.82	24.12	23.64	19.39	20.86	22.95	23.44	24.01	24.81
13	27.71	28.23	26.57	26.82	24.24	23.50	19.31	20.97	23.02	23.49	24.04	24.85
14	27.73	28.22	26.61	26.76	24.28	23.38	19.08	21.08	23.06	23.53	24.08	24.88
15	27.77	28.06	26.68	26.72	24.30	23.23	19.17	21.09	23.13	23.56	24.12	24.94
16	27.79	27.90	26.71	26.71	24.30	23.10	19.16	21.07	23.19	23.58	24.15	24.99
17	27.75	27.79	26.74	26.66	24.23	23.05	19.14	21.18	23.24	23.61	24.20	25.01
18	27.73	27.64	26.81	26.73	24.24	23.10	19.16	21.32	23.29	23.62	24.25	25.04
19	27.78	27.25	26.84	26.74	24.27	23.13	19.13	21.35	23.33	23.57	24.29	25.08
20	27.79	27.21	26.84	26.69	24.30	23.16	19.14	21.34	23.37	23.61	24.33	25.11
21	27.83	27.23	26.87	26.57	24.31	23.22	19.39	21.31	23.36	23.64	24.34	25.18
22	27.84	27.24	26.88	26.46	24.28	23.23	19.76	21.31	23.34	23.66	24.36	25.22
23	27.86	27.25	26.91	26.34	24.13	23.25	20.03	21.45	23.35	23.68	24.41	25.24
24	27.88	27.26	26.91	26.27	23.87	23.31	20.27	21.53	23.22	23.71	24.45	25.24
25	27.95	27.26	26.92	26.22	23.75	23.35	20.49	21.63	23.10	23.73	24.49	25.25
26	27.97	27.24	26.94	26.09	23.79	23.37	20.65	21.72	23.14	23.73	24.53	25.26
27	27.99	27.21	26.96	25.99	23.84	23.37	20.82	21.82	23.15	23.68	24.57	25.28
28	28.01	27.15	27.00	25.74	23.87	23.35	20.97	21.90	23.20	23.72	24.60	25.31
29	28.04	27.07	27.03	24.39	---	23.19	20.98	22.02	23.26	23.75	24.63	25.34
30	28.04	27.05	27.05	24.33	---	23.16	20.98	22.14	23.31	23.73	24.65	25.36
31	28.01	---	27.02	24.49	---	23.19	---	22.23	---	23.73	24.67	---
MAX	28.04	28.23	27.05	27.00	24.64	24.02	23.32	22.23	23.37	23.75	24.67	25.36

CAL YR 1993 LOW 28.36

WTR YR 1994 LOW 28.23



GROUND-WATER RECORDS

267

SHELBY COUNTY

401707084103100. Local number, SH-5.

LOCATION.--Lat 40°17'07", long 84°10'31", Hydrologic Unit 05080001, at Sidney.

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.

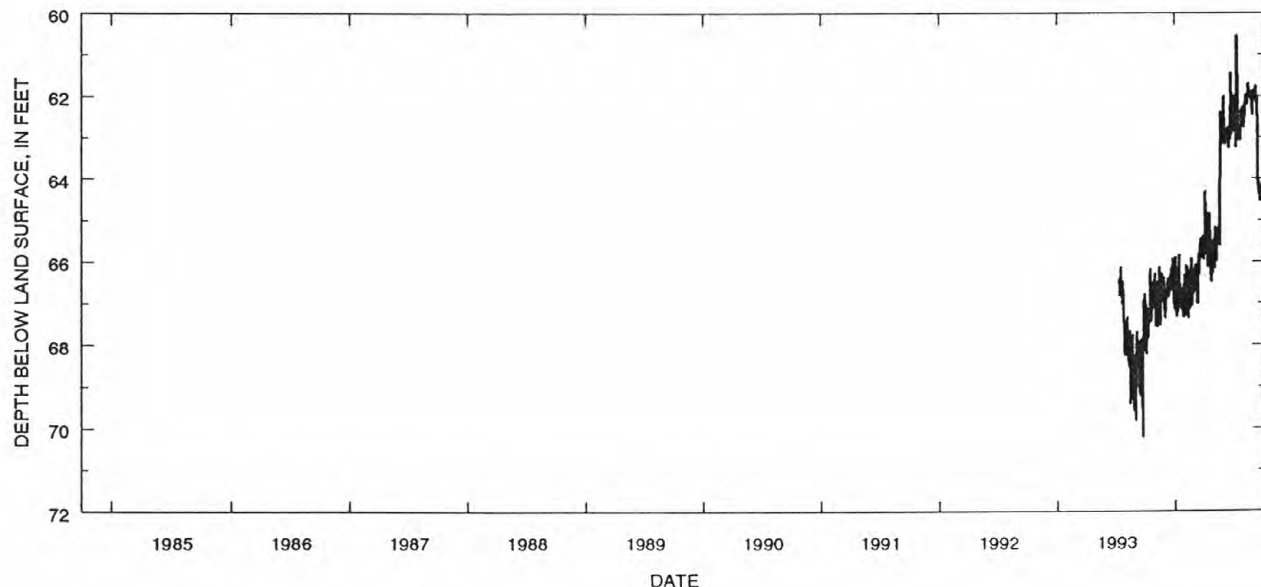
PERIOD OF RECORD.--July 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 70.22 ft below land-surface datum, Sept. 23, 1993;

minimum daily low, 60.54 ft below land-surface datum, July 10, 1994.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67.68	67.34	67.38	66.64	67.30	66.64	65.75	66.02	63.07	62.49	62.58	61.96
2	66.97	67.56	67.17	65.89	67.23	66.38	65.44	66.16	63.19	62.53	62.44	62.04
3	67.13	67.47	67.22	66.42	67.06	66.23	65.15	65.68	63.16	62.47	62.51	62.07
4	67.48	67.38	67.11	67.13	66.88	66.10	64.31	65.17	63.15	61.97	62.34	62.10
5	67.89	66.49	66.69	67.32	66.13	66.18	64.85	65.18	62.95	62.29	62.01	62.03
6	68.25	66.73	66.65	66.87	66.15	66.07	65.35	65.41	62.87	62.87	62.03	61.76
7	67.54	66.76	66.87	66.97	66.78	66.29	65.78	65.86	62.96	63.25	61.96	61.95
8	67.32	67.57	66.88	66.92	66.72	66.51	65.83	65.99	62.96	63.02	61.98	62.08
9	67.25	67.47	66.55	67.08	67.18	66.41	65.35	65.36	62.78	62.66	62.23	62.11
10	67.51	67.32	66.39	67.04	67.36	66.37	65.45	65.48	62.83	60.54	62.20	62.21
11	67.83	67.19	66.88	67.22	67.25	67.02	66.15	65.47	62.86	60.66	62.13	62.02
12	67.11	66.88	66.84	66.45	67.06	66.98	66.12	65.40	62.87	62.27	62.14	62.94
13	67.50	66.76	66.80	65.83	66.21	66.36	64.94	65.48	62.75	62.61	61.86	64.00
14	67.22	66.12	66.80	66.47	66.66	66.02	65.20	65.41	63.17	62.79	61.69	64.30
15	67.21	66.88	66.71	66.71	66.79	65.80	64.84	65.17	63.00	62.85	61.92	64.03
16	66.45	67.53	66.72	66.81	67.05	66.19	64.92	65.29	63.27	63.00	61.83	64.39
17	66.18	67.37	66.69	66.54	67.13	66.30	65.25	65.44	62.76	63.04	61.94	64.29
18	66.83	67.21	66.44	66.91	66.89	65.62	65.49	65.51	62.82	63.09	61.95	64.27
19	66.80	66.79	66.17	66.97	66.35	65.60	65.25	65.62	62.98	62.91	61.88	64.51
20	66.65	66.40	66.43	67.12	65.93	65.82	65.59	62.38	63.06	63.07	62.06	64.56
21	66.84	66.29	66.49	67.17	67.03	65.44	65.59	63.00	61.44	63.06	61.96	64.46
22	67.47	66.75	66.53	67.11	67.06	65.65	66.16	63.19	62.40	62.43	61.88	64.39
23	66.82	66.97	66.70	66.70	66.32	65.46	66.48	63.06	62.89	62.35	62.02	64.33
24	66.73	66.55	66.27	66.71	66.69	65.42	65.67	63.09	62.96	62.38	62.10	64.22
25	66.94	66.84	65.92	66.63	66.67	65.82	65.51	62.88	62.62	62.41	62.11	64.13
26	66.77	66.81	65.95	67.33	66.79	65.89	65.50	62.62	62.59	62.27	62.15	64.09
27	66.76	66.42	66.00	67.32	66.55	65.51	65.56	62.98	62.43	62.31	62.45	64.10
28	67.11	66.38	66.90	66.78	66.74	65.38	66.27	63.01	62.87	62.39	62.01	64.25
29	67.10	66.74	67.15	66.32	---	65.93	65.71	62.90	62.58	62.40	62.07	64.46
30	66.62	67.06	67.10	66.81	---	65.97	65.92	62.90	62.66	62.42	61.97	64.50
31	66.28	---	66.69	67.14	---	65.89	---	62.01	---	62.77	61.85	---
MAX	68.25	67.57	67.38	67.33	67.36	67.02	66.48	66.16	63.27	63.25	62.58	64.56

CAL YR 1993 LOW 70.22
WTR YR 1994 LOW 68.25

GROUND-WATER RECORDS

STARK COUNTY

404939081203800. Local number, ST-5A.

LOCATION.--Lat 40°49'39", long 81°20'38", Hydrologic Unit 05040001, Northeast well field off Harrisburg Rd, Canton.

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.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 1060 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.

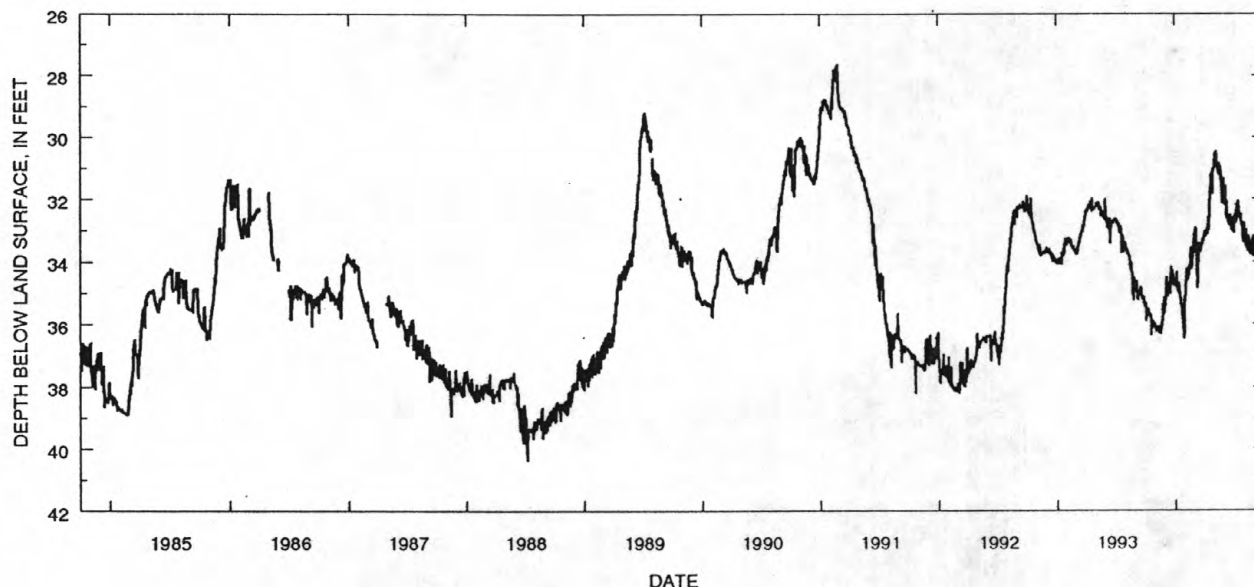
PERIOD OF RECORD.--June 1949 to current year.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35.43	36.17	35.42	34.75	35.26	33.53	33.10	30.84	32.20	33.10	32.84	33.28
2	35.34	36.08	35.28	34.81	34.93	33.05	33.05	30.70	32.11	32.66	32.80	33.53
3	35.35	36.08	35.17	34.79	34.68	33.44	32.99	30.50	32.13	32.60	33.36	33.86
4	35.92	36.08	34.68	34.79	34.57	32.90	33.21	30.89	31.73	32.56	32.99	33.28
5	35.73	36.26	34.48	34.67	34.23	33.40	33.15	30.50	32.03	32.51	33.30	33.73
6	35.53	36.15	35.07	34.30	34.23	32.95	33.13	30.73	31.58	32.79	33.53	33.49
7	35.51	36.14	35.10	34.62	34.20	33.38	33.13	30.45	32.54	32.76	33.06	33.59
8	35.70	36.13	35.10	34.68	34.45	34.11	33.11	30.66	32.61	32.35	32.97	33.43
9	35.50	36.28	35.10	34.89	34.60	34.23	33.06	30.94	32.05	32.70	33.61	33.50
10	35.55	36.13	34.90	35.00	34.35	34.57	32.83	30.84	32.35	32.14	33.27	33.44
11	35.66	36.08	34.90	34.92	34.57	34.85	32.80	30.94	32.71	32.32	33.64	33.32
12	35.71	36.21	34.67	34.67	34.39	34.54	33.14	30.92	32.55	32.50	33.70	33.70
13	35.72	36.25	34.73	34.86	34.20	34.16	32.88	31.10	32.56	32.05	33.37	33.63
14	35.65	36.31	34.76	34.90	34.16	33.65	32.56	31.25	32.77	32.45	33.17	33.44
15	35.69	36.18	34.76	35.01	34.16	34.05	32.98	30.84	32.81	32.10	33.25	34.08
16	35.70	36.18	34.82	35.01	34.02	33.40	32.18	30.89	32.64	32.41	33.45	33.92
17	35.71	36.34	35.05	34.98	33.75	33.64	32.06	30.93	32.62	32.30	33.72	34.13
18	35.73	36.24	34.60	35.33	33.55	33.45	32.00	30.96	32.64	32.34	33.73	34.15
19	36.36	36.08	34.15	35.39	33.85	33.59	31.89	30.96	32.50	32.61	33.79	33.94
20	35.98	35.98	34.61	35.42	33.85	33.70	31.74	30.98	32.77	32.48	33.80	34.15
21	36.09	36.08	34.65	35.50	34.26	33.70	31.49	31.30	32.74	32.58	33.35	34.25
22	36.08	35.91	34.66	35.48	34.09	33.55	31.30	31.49	32.97	32.46	33.67	33.69
23	35.96	35.89	34.75	35.58	33.97	33.53	31.19	31.09	32.99	32.49	33.34	33.88
24	35.95	35.35	34.27	35.80	33.81	33.49	31.29	32.16	32.83	32.82	33.42	34.05
25	35.94	35.70	34.52	35.54	33.75	33.46	31.15	31.44	33.04	32.85	33.68	34.34
26	35.95	35.63	34.43	36.14	33.70	33.42	31.58	31.31	32.57	32.90	33.50	34.37
27	36.15	35.15	34.60	35.78	33.50	33.34	31.84	31.60	33.05	33.27	33.83	34.05
28	36.05	35.69	34.67	36.48	33.11	33.27	31.00	31.89	32.94	33.05	33.33	34.46
29	35.97	35.56	34.67	36.25	---	33.23	31.10	31.45	32.77	33.40	33.17	34.30
30	35.99	35.38	34.77	35.54	---	33.35	30.95	31.34	32.85	32.75	33.68	34.56
31	36.01	---	34.77	35.25	---	33.25	---	31.95	---	33.27	33.29	---
MAX	36.36	36.34	35.42	36.48	35.26	34.85	33.21	32.16	33.05	33.40	33.83	34.56

CAL YR 1993 LOW 36.36

WTR YR 1994 LOW 36.48



GROUND-WATER RECORDS

269

STARK COUNTY--Continued

405211081253500. Local number, ST-27.

LOCATION.--Lat 40°52'11", long 81°25'35", Hydrologic Unit 05040001, Dresler Rd near North Canton.

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.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 1060 ft above sea level, from topographic map.

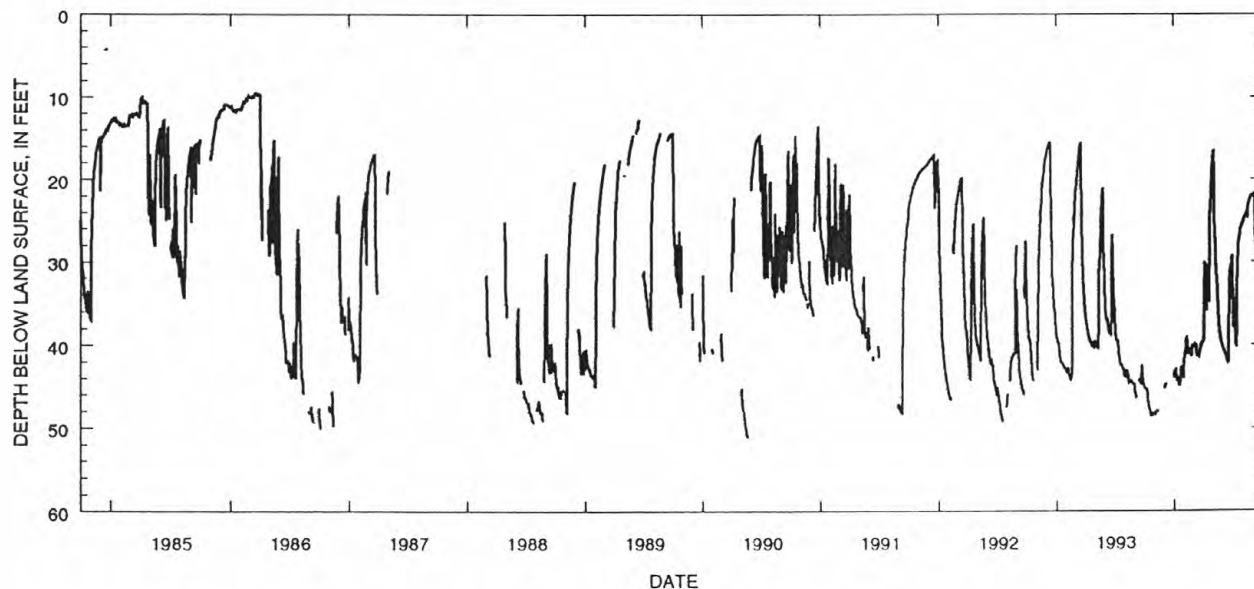
Measuring point: Floor of instrument shelter 2.50 ft above land-surface datum.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45.10	48.40	45.25	43.90	41.95	40.25	39.55	17.35	40.55	36.30	25.25	21.90
2	45.15	48.50	45.20	43.90	41.25	40.05	39.45	16.95	40.60	37.70	24.95	21.90
3	45.25	48.50	45.10	43.40	40.95	39.95	39.45	16.50	40.65	38.00	24.90	21.90
4	45.25	48.40	45.00	43.10	40.75	39.95	33.90	19.50	40.75	34.70	24.85	21.85
5	45.30	48.20	44.90	43.00	40.50	40.00	30.10	22.30	40.85	34.50	24.75	21.85
6	45.35	48.15	44.75	43.40	40.25	40.05	31.45	24.70	40.95	36.50	24.70	22.35
7	45.35	48.10	44.70	43.80	39.80	40.00	33.55	26.40	41.05	37.85	24.60	25.85
8	45.35	48.00	44.55	43.80	39.40	40.10	34.85	28.10	41.15	37.85	24.50	27.95
9	45.35	48.00	---	43.55	39.30	40.10	35.75	29.85	41.35	38.65	24.35	27.95
10	45.90	47.95	---	43.90	39.75	40.15	35.95	30.95	41.40	39.85	24.25	25.50
11	46.35	47.90	---	44.30	40.00	40.75	32.00	31.45	41.55	40.25	24.20	24.40
12	46.65	47.90	---	44.35	40.50	41.25	30.40	31.95	41.70	37.50	24.10	23.85
13	46.95	47.85	---	44.35	41.10	41.30	32.20	32.35	41.80	33.00	24.05	25.70
14	47.20	---	---	43.80	41.10	41.30	33.35	33.20	41.95	31.00	24.00	28.15
15	47.45	---	---	43.95	41.05	41.20	34.05	34.30	42.00	29.85	24.85	30.30
16	47.65	---	---	44.55	40.80	41.05	34.40	35.30	42.05	29.05	23.55	31.15
17	47.85	---	---	44.90	40.65	41.15	34.70	36.20	42.00	28.45	23.30	30.00
18	48.10	---	---	44.90	40.65	41.30	34.90	36.90	38.50	27.90	23.10	27.30
19	48.35	---	---	44.40	40.65	41.30	34.95	37.55	34.40	27.45	22.90	26.10
20	48.55	---	---	44.00	40.60	41.00	33.90	38.00	32.50	27.15	22.80	25.45
21	48.60	---	---	43.85	40.80	40.80	27.50	38.45	31.40	26.90	22.70	24.95
22	48.60	---	---	42.70	41.30	40.65	24.80	38.70	30.50	26.60	22.55	24.55
23	48.60	---	---	42.55	41.40	40.60	23.10	39.00	32.35	26.40	22.40	24.25
24	48.55	---	---	43.15	41.05	40.30	21.90	39.20	34.30	26.15	22.30	23.95
25	48.45	---	---	43.60	40.55	40.10	20.90	39.50	34.35	26.00	22.10	23.80
26	48.40	---	---	43.95	40.30	40.05	20.05	39.75	31.90	25.80	22.10	23.70
27	48.30	---	---	43.25	40.20	39.90	19.45	39.85	30.05	25.65	22.05	23.00
28	48.25	---	---	43.75	40.25	39.80	18.85	40.00	29.25	25.55	22.00	22.95
29	48.20	---	---	44.05	---	39.75	18.30	40.05	32.05	25.45	21.95	26.00
30	48.20	---	43.30	44.00	---	39.70	17.90	40.25	34.50	25.40	21.95	27.90
31	48.25	---	43.65	42.95	---	39.65	---	40.35	---	25.35	21.95	---
MAX	48.60	48.50	45.25	44.90	41.95	41.30	39.55	40.35	42.05	40.25	25.25	31.15

CAL YR 1993 LOW 48.60
WTR YR 1994 LOW 48.60

GROUND-WATER RECORDS

TRUMBULL COUNTY

411604080505600. Local number, T-3

LOCATION.--Lat 41°16'04", long 80°50'56", Hydrologic Unit 05030103, N. River Rd near Warren.

Owner: Copperweld Steel Corp.

AQUIFER.--Sandstone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in., depth 125 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 890 ft above sea level, from topographic map.

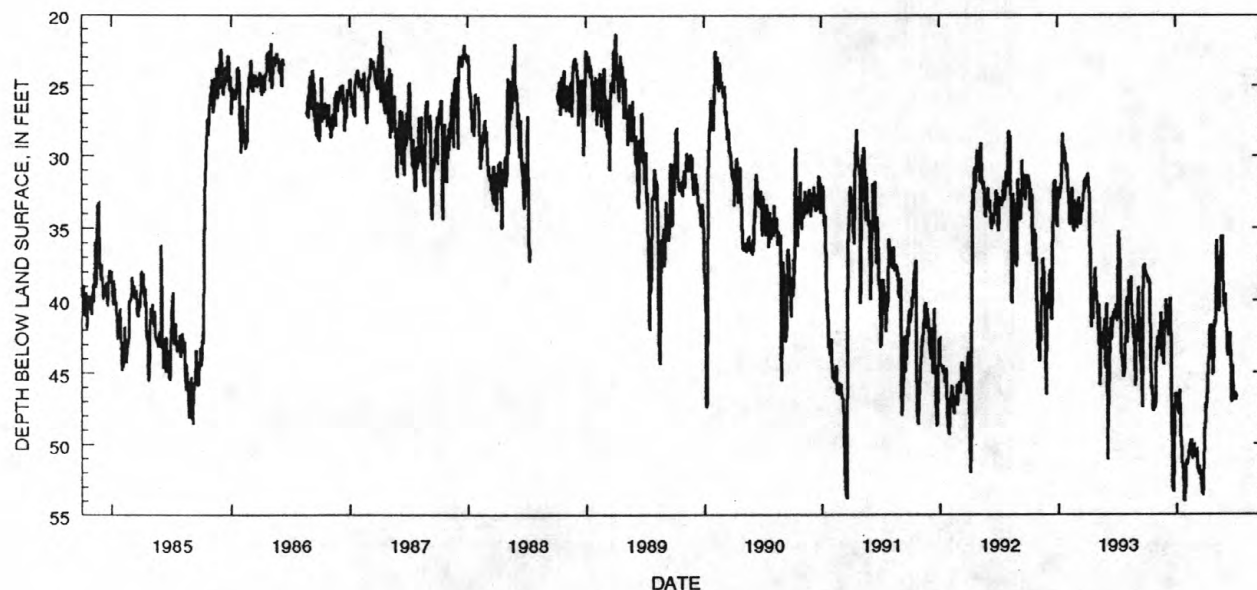
Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

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, 60.30 ft below land-surface datum, July 2, 1975;
minimum daily low, 19.35 ft below land-surface datum, Feb. 21, 1982.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38.38	42.82	41.50	47.07	51.51	50.89	47.43	40.29	41.04	46.88	---	---
2	38.32	42.67	41.33	46.97	51.21	50.51	47.40	37.72	41.55	46.94	---	---
3	38.26	42.50	41.89	47.17	51.07	50.32	46.88	36.71	42.26	46.54	---	---
4	38.57	43.04	41.90	47.31	51.04	50.85	46.74	35.90	43.22	---	---	---
5	38.66	43.50	41.45	47.58	50.64	51.75	46.25	36.70	43.85	---	---	---
6	38.78	42.77	42.52	47.95	50.37	51.92	45.43	37.19	43.82	---	---	---
7	38.53	42.22	42.17	47.82	50.54	51.97	44.86	37.09	42.50	---	---	---
8	38.83	42.07	41.13	47.80	50.73	51.99	44.46	37.00	42.25	---	---	---
9	38.71	42.76	40.61	46.81	50.23	51.72	43.99	38.90	42.43	---	---	---
10	38.69	42.71	40.48	46.22	50.32	51.66	43.44	40.78	43.05	---	---	---
11	38.87	43.42	40.23	46.85	50.25	52.12	42.57	40.74	42.44	---	---	---
12	39.55	43.19	39.92	47.45	50.30	52.13	42.24	40.27	42.46	---	---	---
13	43.74	42.13	39.92	49.04	49.75	51.85	41.72	39.14	42.24	---	---	---
14	44.69	40.86	40.83	49.95	49.75	52.09	42.17	38.22	42.77	---	---	---
15	45.46	42.00	43.79	50.25	50.77	52.44	42.10	37.53	44.16	---	---	---
16	46.12	43.90	46.89	50.14	51.08	52.68	41.66	37.19	46.88	---	---	---
17	45.91	43.43	51.83	51.09	50.94	52.95	41.97	37.08	47.06	---	---	---
18	46.42	43.62	52.83	51.64	50.91	53.18	42.47	36.26	46.30	---	---	---
19	46.66	43.67	53.21	51.84	50.92	53.44	42.05	35.73	45.53	---	---	---
20	47.59	43.07	53.26	52.02	50.57	53.50	43.50	35.59	44.55	---	---	---
21	47.51	44.43	53.34	52.00	50.33	53.47	44.70	35.61	44.62	---	---	---
22	47.70	44.04	53.02	53.18	50.31	53.14	45.06	35.59	45.30	---	---	---
23	47.39	42.40	51.44	53.97	50.00	52.05	45.01	37.96	46.08	---	---	---
24	47.27	41.37	50.14	54.00	50.83	51.56	43.13	39.54	46.87	---	---	---
25	47.50	42.01	49.01	53.85	50.68	50.97	41.97	40.24	46.89	---	---	---
26	47.46	41.74	48.10	53.25	51.00	50.16	42.08	40.29	46.95	---	---	---
27	47.41	42.23	46.45	52.80	50.78	49.22	41.62	40.47	46.59	---	---	---
28	47.10	40.78	46.54	52.40	50.79	48.68	41.38	40.25	46.37	---	---	---
29	47.21	39.98	46.50	51.78	---	48.72	41.63	39.96	46.83	---	---	---
30	45.03	40.44	46.48	51.12	---	48.35	41.40	39.56	46.85	---	---	---
31	43.46	---	46.43	51.17	---	47.35	---	40.96	---	---	---	---
MAX	47.70	44.43	53.34	54.00	51.51	53.50	47.43	40.96	47.06	46.94	---	---
CAL YR 1993 LOW 53.34												
WTR YR 1994 LOW 54.00												



GROUND-WATER RECORDS

271

TUSCARAWAS COUNTY

403207081293800. Local number, TU-3.

LOCATION.--Lat 40°32'07", long 81°29'38", Hydrologic Unit 05040001, in the northwest part of Dover.

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.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 19.35 ft below land-surface datum, Nov. 29-30, 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 OBSERVATIONS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 1, 1993	12.75	Feb. 1, 1994	9.30	May 31, 1994	8.89
Nov. 1, 1993	13.25	Mar. 1, 1994	8.72	July 1, 1994	10.45
Nov. 30, 1993	11.95	Apr. 1, 1994	8.17	Aug. 1, 1994	11.11
Jan. 3, 1994	11.42	May 3, 1994	7.34	Aug. 31, 1994	12.05

GROUND-WATER RECORDS

TUSCARAWAS COUNTY--Continued.

403557081313600. Local number, TU-4.

LOCATION.--Lat 40°35'57", long 81°31'36", Hydrologic Unit 05040001, near Fire Dept. building in Strasburg.

Owner: Strasburg Water Dept.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water table well, diameter 6 in., depth 42.5 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

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.

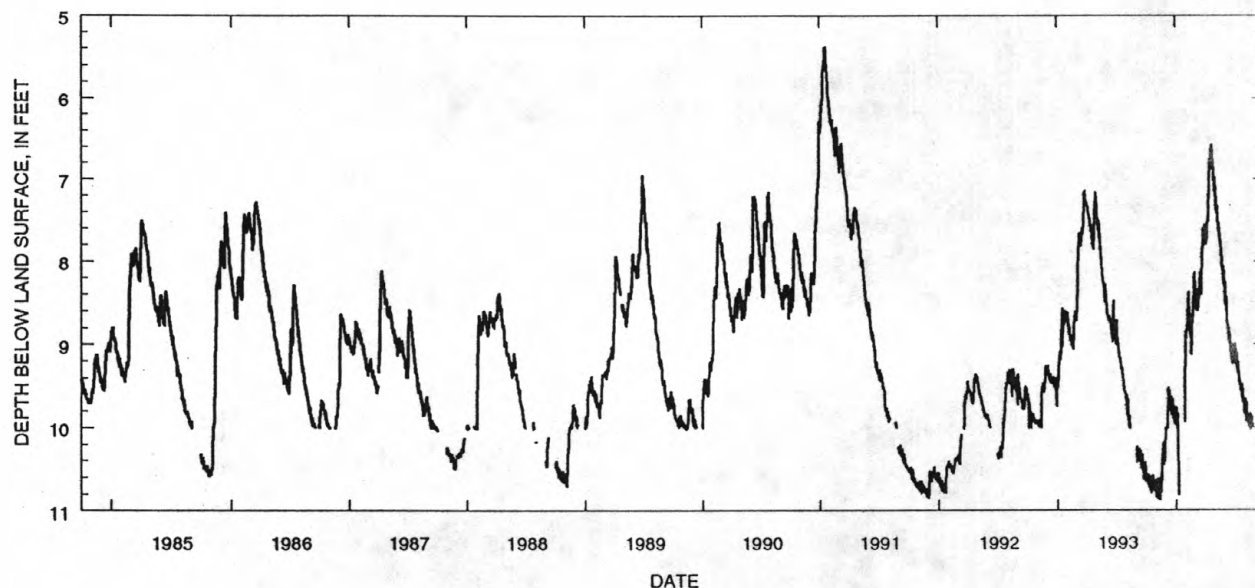
PERIOD OF RECORD.--June 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 10.88 ft below land-surface datum, Nov. 12, 1993;
minimum daily low, 4.05 ft below land-surface datum, July 13, 1969.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.64	10.81	9.99	9.75	8.93	8.33	7.58	7.21	8.24	9.17	9.64	---
2	10.66	10.84	10.02	9.98	8.77	8.34	7.80	7.08	8.52	8.99	9.93	---
3	10.64	10.84	10.01	9.77	8.81	8.43	7.62	7.34	8.50	9.24	9.71	---
4	10.68	10.85	10.01	10.00	8.75	8.44	7.76	7.40	8.58	9.05	9.91	---
5	10.66	10.61	10.01	9.82	8.58	8.59	7.76	7.22	8.42	9.28	9.69	---
6	10.67	10.75	9.70	10.00	8.67	8.35	7.63	7.22	8.73	9.09	9.86	---
7	10.72	10.80	9.73	10.00	8.45	8.59	7.73	7.42	8.72	9.28	9.86	---
8	10.56	10.61	9.51	9.82	8.57	8.39	7.60	7.33	8.76	9.29	9.91	---
9	10.73	10.85	9.70	---	8.37	8.60	7.45	7.51	8.79	9.29	9.94	---
10	10.75	10.66	9.72	9.88	8.73	8.51	7.52	7.55	8.81	9.35	9.96	---
11	10.68	10.85	9.54	---	8.73	8.56	7.30	7.63	8.93	9.21	9.98	---
12	10.74	10.88	9.65	---	8.75	8.35	7.21	7.53	8.93	9.45	9.97	---
13	10.58	10.64	9.77	---	8.84	8.44	7.22	7.70	8.99	9.32	9.99	---
14	10.76	10.77	9.75	---	8.67	8.22	6.74	7.58	8.80	9.49	9.82	---
15	10.80	10.79	9.75	---	8.91	8.27	6.90	7.72	9.08	9.45	10.03	---
16	10.70	10.54	9.81	---	8.87	8.13	6.63	7.80	8.88	9.48	9.82	---
17	10.77	10.67	9.62	---	9.12	8.39	6.82	7.66	9.11	9.54	10.01	---
18	10.59	10.38	9.86	---	8.89	8.25	6.63	7.94	9.11	9.55	9.83	---
19	10.70	10.25	9.66	---	8.85	8.35	6.74	7.75	9.14	9.55	---	---
20	10.75	10.31	9.85	---	8.63	8.41	6.74	8.06	9.17	9.56	9.95	---
21	10.57	10.18	9.87	---	8.75	8.22	6.57	7.84	9.22	9.64	9.86	---
22	10.76	10.41	9.65	---	8.60	7.95	6.80	8.11	9.00	9.48	---	---
23	10.65	10.43	9.91	---	8.45	7.84	6.64	7.95	9.23	9.46	10.00	---
24	10.72	10.46	9.73	---	8.40	7.84	6.88	8.20	9.24	9.69	9.94	---
25	10.77	10.35	9.90	---	8.18	7.59	6.77	8.17	9.00	9.53	---	---
26	10.63	10.23	9.93	---	8.32	7.81	6.94	8.05	9.13	9.77	9.97	---
27	10.77	10.41	9.74	9.93	8.13	7.64	6.96	8.28	9.13	9.83	---	---
28	10.63	10.23	9.97	9.68	8.36	7.70	6.89	8.11	8.99	9.74	---	---
29	10.75	10.07	9.78	8.85	---	7.73	7.15	8.28	9.16	9.79	---	---
30	10.85	10.01	9.97	9.00	---	7.55	6.97	8.34	9.00	9.76	9.99	---
31	10.63	---	9.83	8.83	---	7.76	---	8.49	---	9.81	---	---
MAX	10.85	10.88	10.02	10.00	9.12	8.60	7.80	8.49	9.24	9.83	10.03	---

CAL YR 1993 LOW 10.88

WTR YR 1994 LOW 10.88



GROUND-WATER RECORDS

273

TUSCARAWAS COUNTY--Continued

403653081321800. Local number, TU-1.

LOCATION.--Lat 40°36'53", long 81°32'18", Hydrologic Unit 05040001, 1.3 mi north of Strasburg.

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, 16.28 ft below land-surface datum, Nov. 13-14, 1993;

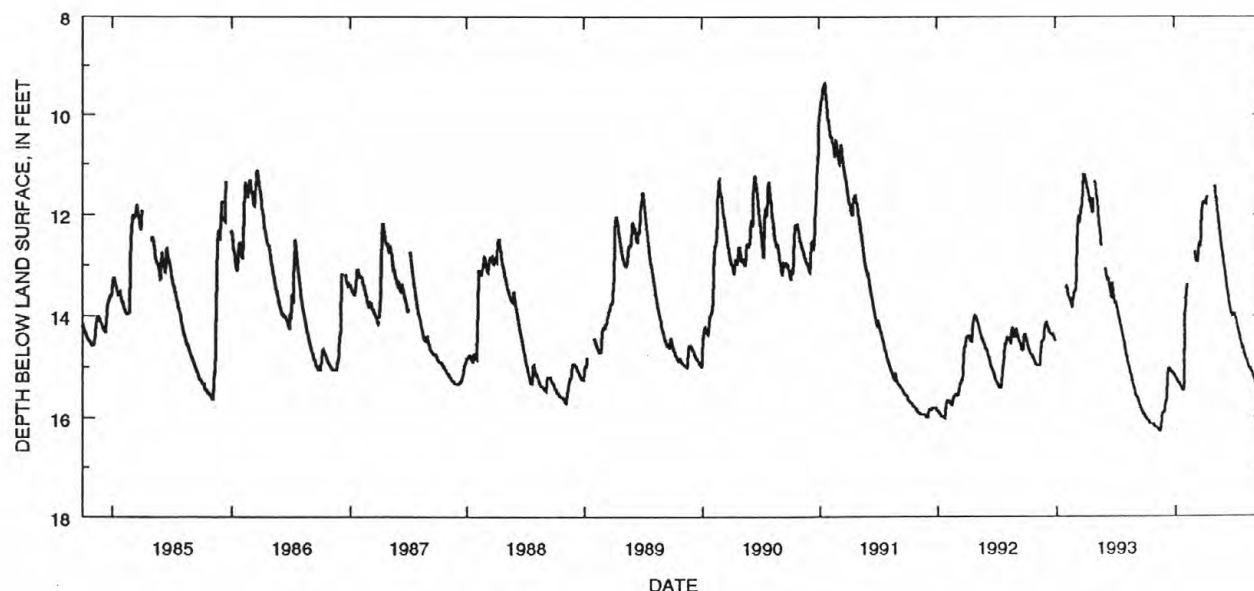
minimum daily low, 6.64 ft below land-surface datum, July 14, 1969.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.00	16.19	15.71	15.20	13.88	12.74	11.74	---	13.05	13.95	14.80	15.29
2	16.00	16.20	15.68	15.22	13.80	12.74	11.75	11.42	13.10	14.00	14.83	15.30
3	16.00	16.19	15.68	15.22	13.65	12.77	11.78	11.42	13.15	14.03	14.85	15.31
4	16.01	16.19	15.68	15.23	13.58	12.82	11.78	11.47	13.21	14.03	14.86	15.33
5	16.03	16.20	15.63	15.25	13.49	12.88	11.76	11.54	13.24	14.05	14.86	15.35
6	16.04	16.21	15.48	15.26	13.42	12.90	11.77	11.61	13.30	14.09	14.86	15.37
7	16.05	16.22	15.30	15.27	13.36	12.92	11.78	11.65	13.36	14.13	14.87	15.39
8	16.05	16.23	15.15	15.28	---	12.95	11.74	11.71	13.43	14.15	14.90	15.41
9	16.06	16.24	15.08	15.30	---	12.94	11.66	11.79	13.48	14.18	14.94	15.43
10	16.07	16.25	15.04	15.30	---	12.93	11.66	11.85	13.51	14.23	14.96	15.45
11	16.08	16.26	15.03	15.32	---	12.95	---	11.90	13.57	14.25	14.99	15.48
12	16.09	16.27	15.03	15.32	---	12.93	---	11.99	13.61	14.30	15.01	15.50
13	16.10	16.28	15.03	15.33	---	12.84	---	12.06	13.63	14.32	15.03	15.51
14	16.11	16.28	15.03	15.34	---	12.76	---	12.09	13.70	14.35	15.03	15.53
15	16.12	16.27	15.05	15.35	---	12.64	---	12.15	13.74	14.37	15.03	15.55
16	16.13	16.26	15.06	15.37	---	12.62	---	12.22	13.78	14.40	15.03	15.56
17	16.13	16.23	15.08	15.38	---	12.60	---	12.27	13.82	14.43	15.03	15.57
18	16.13	16.15	15.09	15.40	---	12.62	---	12.33	13.86	14.46	15.05	15.59
19	16.13	16.06	15.09	15.42	---	12.63	---	12.40	13.91	14.50	15.08	15.60
20	16.13	15.97	15.09	15.43	---	12.63	---	12.45	13.94	14.53	15.10	15.61
21	16.13	15.93	15.10	15.44	---	12.60	---	12.52	13.95	14.56	15.10	15.63
22	16.13	15.91	15.10	15.45	---	12.46	---	12.58	13.96	14.57	15.10	15.66
23	16.13	15.91	15.12	15.47	---	12.21	---	12.65	13.99	14.60	15.12	15.68
24	16.13	15.91	15.12	15.47	---	12.05	---	12.70	13.99	14.61	15.13	15.70
25	16.14	15.91	15.13	15.47	---	11.93	---	12.72	13.98	14.60	15.16	15.71
26	16.15	15.91	15.15	15.45	---	11.88	---	12.76	13.98	14.62	15.17	15.71
27	16.16	15.91	15.15	15.39	---	11.80	---	12.80	13.96	14.64	15.20	15.72
28	16.17	15.90	15.15	14.95	---	11.79	---	12.85	13.97	14.68	15.20	15.73
29	16.18	15.83	15.16	14.38	---	11.77	---	12.91	13.96	14.71	15.24	15.74
30	16.18	15.75	15.19	14.15	---	11.76	---	12.97	13.94	14.74	15.25	15.75
31	16.19	---	15.19	13.98	---	11.75	---	13.02	---	14.76	15.25	---
MAX	16.19	16.28	15.71	15.47	13.88	12.95	11.78	13.02	13.99	14.76	15.25	15.75

CAL YR 1993 LOW 16.28

WTR YR 1994 LOW 16.28



GROUND-WATER RECORDS

TUSCARAWAS COUNTY--Continued.

403823081324200. Local number, TU-5.

LOCATION.--Lat 40°38'23", long 81°32'42", Hydrologic Unit 05040001, Sugar Creek well field near Strasburg.

Owner: Canton Water Dept.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water table well, diameter 6 in., depth 100 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 937.93 ft above sea level.

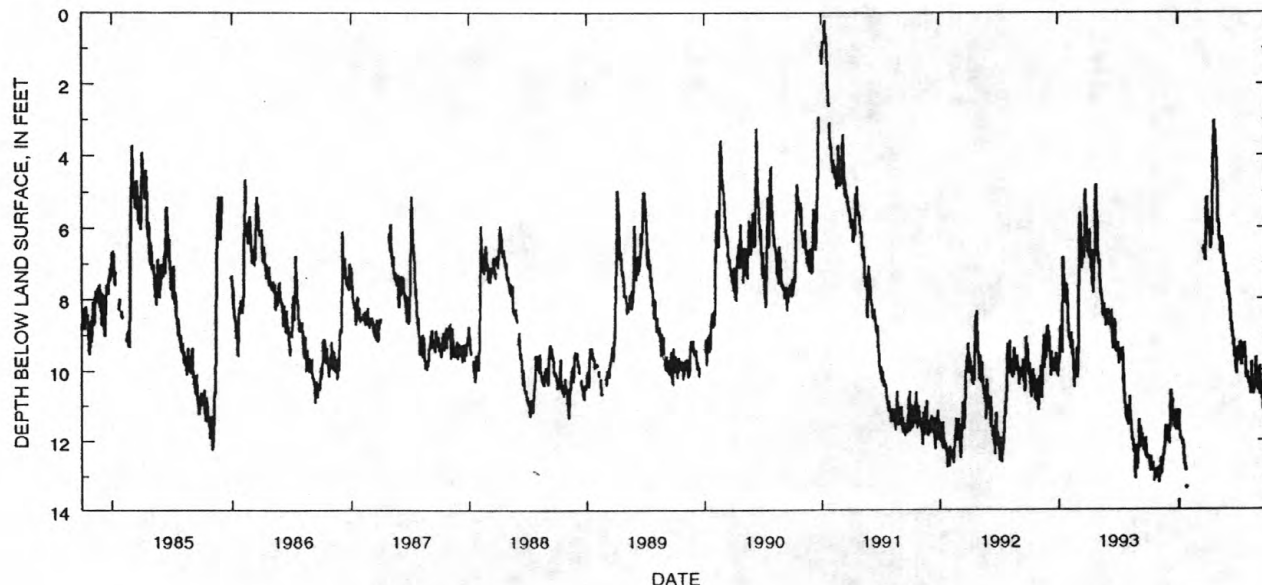
Measuring point: Floor of instrument shelter 4.00 ft above land-surface datum.

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, 13.35 ft below land-surface datum, Jan. 23-24, 1994;
minimum daily low, 0.20 ft below land-surface datum, Jan. 13, 1991.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.45	13.02	11.72	11.23	9.99	6.95	5.74	6.34	7.89	9.63	10.48	10.70
2	12.50	13.21	11.99	11.14	---	---	5.79	6.24	7.99	9.64	10.50	10.32
3	12.51	13.05	12.11	11.58	---	---	5.85	6.31	8.09	9.74	10.54	9.88
4	12.43	13.17	11.80	11.88	---	---	6.22	6.47	8.35	9.20	10.68	9.95
5	12.48	13.13	11.70	11.95	---	---	6.26	6.49	8.36	9.24	10.28	10.30
6	12.65	12.97	11.27	11.90	---	---	6.61	6.68	8.63	9.41	10.37	10.55
7	12.87	12.48	10.57	11.96	---	---	6.46	6.76	8.67	9.79	10.40	10.15
8	12.88	12.73	10.57	11.97	---	---	5.77	6.55	8.73	9.82	9.76	10.59
9	12.68	12.95	10.79	11.92	---	---	5.88	6.28	8.73	9.79	10.50	10.84
10	12.45	12.97	10.79	---	---	---	6.25	6.40	8.84	9.88	10.18	10.88
11	12.84	12.90	10.98	12.14	---	---	5.47	6.76	9.05	9.26	10.57	11.14
12	12.60	12.73	10.85	12.00	---	---	5.40	6.45	8.93	9.40	10.58	10.55
13	12.65	12.75	10.81	12.28	---	---	4.53	6.60	9.28	9.58	10.68	10.73
14	12.83	12.70	10.92	12.39	---	---	4.46	6.90	9.33	9.43	10.62	11.04
15	12.81	12.50	11.37	12.36	---	6.59	3.46	7.09	9.14	9.45	10.56	11.06
16	12.82	12.46	11.40	12.53	---	6.75	3.64	6.92	9.66	9.49	10.38	10.65
17	12.63	12.36	11.50	12.59	---	6.52	3.03	7.00	9.60	9.67	10.43	10.65
18	12.97	12.30	11.64	12.73	---	6.67	3.57	7.14	9.64	9.24	10.44	10.29
19	13.10	12.12	11.17	12.78	---	6.72	3.34	7.29	9.60	9.47	10.42	10.61
20	13.17	11.75	11.54	12.87	---	6.68	3.30	7.02	9.91	9.78	9.84	10.97
21	---	11.63	11.55	---	---	6.93	3.33	7.24	9.99	10.17	10.10	11.30
22	---	11.56	11.72	13.29	---	6.16	3.69	7.33	9.97	10.14	9.63	11.41
23	12.88	11.62	11.65	13.35	---	5.54	3.80	7.54	10.10	10.24	10.26	11.52
24	12.87	11.87	11.15	13.35	---	5.39	4.35	7.70	9.90	10.04	10.36	11.18
25	12.87	11.96	11.27	---	---	5.18	4.37	7.59	9.71	10.20	10.46	10.96
26	12.92	11.84	11.17	---	---	5.67	5.08	7.35	9.34	10.04	10.59	10.97
27	13.09	11.80	11.13	---	---	5.17	5.30	7.30	9.39	10.27	10.49	10.98
28	---	11.80	11.19	---	---	5.90	5.87	7.93	9.37	10.20	10.41	11.14
29	13.07	11.62	11.45	---	---	5.59	5.80	7.40	9.47	10.38	10.38	11.18
30	13.02	11.61	11.27	---	---	5.93	6.01	7.62	9.60	10.33	10.52	11.08
31	12.75	---	11.32	---	---	6.06	---	7.86	---	10.26	10.68	---
MAX	13.17	13.21	12.11	13.35	9.99	6.95	6.61	7.93	10.10	10.38	10.68	11.52
CAL YR 1993	LOW 13.21											
WTR YR 1994	LOW 13.35											



GROUND-WATER RECORDS

275

UNION COUNTY

401826083255200. Local number, U-4.

LOCATION.--Lat 40°18'26", long 83°25'52", Hydrologic Unit 05060001, 2.6 mi southeast of Raymond.

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.--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 3.00 ft above land-surface datum.

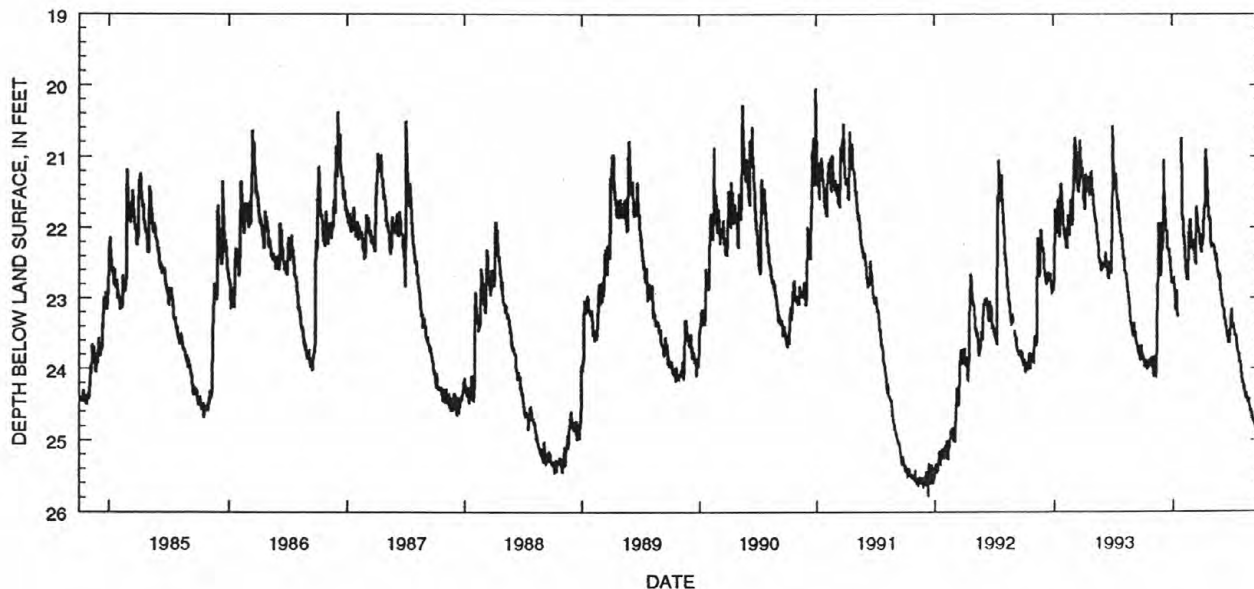
PERIOD OF RECORD.--January 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 25.79 ft below land-surface datum, Dec. 11, 1991;

minimum daily low, 19.32 ft below land-surface datum, Feb. 24, 1975.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.81	24.09	22.32	22.77	21.89	22.28	22.21	22.22	23.03	23.33	24.16	24.73
2	23.85	24.12	22.25	22.77	21.89	22.17	22.20	22.26	23.10	23.34	24.19	24.75
3	23.86	24.00	22.21	22.76	22.13	22.18	22.24	22.28	23.15	23.39	24.21	24.74
4	23.83	23.95	22.07	22.75	22.13	22.20	22.23	22.25	23.15	23.37	24.19	24.75
5	23.95	23.82	21.05	22.87	22.18	22.32	22.08	22.25	23.15	23.38	24.27	24.72
6	23.99	23.95	21.43	22.80	22.30	22.29	22.05	22.28	23.15	23.41	24.28	24.73
7	23.94	24.05	21.59	22.84	22.40	22.29	21.75	22.27	23.18	23.42	24.27	24.78
8	23.88	24.10	21.71	23.00	22.33	22.37	21.78	22.29	23.29	23.44	24.30	24.79
9	23.89	24.11	21.72	23.16	22.57	22.33	21.68	22.29	23.30	23.48	24.38	24.79
10	24.00	24.10	21.74	23.16	22.63	22.36	21.63	22.39	23.30	23.54	24.40	24.85
11	24.00	24.05	22.00	23.06	22.63	22.49	21.37	22.38	23.33	23.54	24.39	24.89
12	23.90	24.05	22.05	23.03	22.62	22.50	21.15	22.41	23.40	23.52	24.37	24.92
13	24.00	24.03	22.07	22.89	22.75	22.27	20.90	22.46	23.41	23.53	24.36	24.90
14	24.01	23.57	22.05	22.90	22.75	21.85	21.03	22.46	23.42	23.56	24.38	24.90
15	24.02	22.80	22.07	23.15	22.75	21.70	21.06	22.37	23.51	23.63	24.43	24.93
16	24.00	22.79	22.27	23.27	22.75	21.87	21.27	22.49	23.53	23.69	24.44	24.93
17	23.88	22.76	22.34	---	22.56	21.89	21.45	22.58	23.53	23.68	24.44	24.91
18	23.96	21.95	22.30	---	22.37	21.88	21.49	22.59	23.53	23.73	24.48	24.99
19	24.00	21.95	22.32	---	22.17	21.98	21.56	22.60	23.58	23.76	24.48	25.03
20	23.93	22.25	22.32	---	21.98	22.00	21.67	22.65	23.64	23.80	24.45	25.02
21	23.86	22.39	22.30	---	22.04	22.03	21.75	22.69	23.61	23.80	24.41	25.00
22	23.94	22.50	22.33	---	22.08	22.07	21.82	22.72	23.64	23.78	24.48	24.98
23	23.95	22.55	22.50	---	21.88	22.03	21.90	22.72	23.62	23.89	24.56	24.97
24	23.90	22.50	22.51	---	21.90	22.13	21.85	22.69	23.49	23.90	24.59	24.99
25	23.88	22.70	22.42	---	21.95	22.24	21.85	22.65	23.53	23.91	24.58	25.00
26	23.86	22.67	22.53	---	22.20	22.25	21.94	22.72	23.52	23.91	24.58	24.96
27	23.84	22.62	22.69	---	22.29	22.10	22.10	22.88	23.35	23.92	24.59	24.99
28	23.83	21.93	22.78	20.74	22.28	22.17	22.20	22.92	23.17	23.96	24.60	25.03
29	23.90	22.04	22.73	21.47	---	22.30	22.27	22.92	23.15	24.04	24.62	25.10
30	23.90	22.32	22.78	21.68	---	22.36	22.26	22.99	23.24	24.08	24.70	25.15
31	23.94	---	22.77	21.80	---	22.30	---	23.00	---	24.14	24.64	---
MAX	24.02	24.12	22.78	23.27	22.75	22.50	22.27	23.00	23.64	24.14	24.70	25.15
CAL YR 1993	LOW 24.12											
WTR YR 1994	LOW 25.15											



GROUND-WATER RECORDS

UNION COUNTY--Continued.

402010083321900. Local number, U-5.

LOCATION.--Lat 40°20'10", long 83°32'19", Hydrologic Unit 05060001, east of East Liberty.

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.

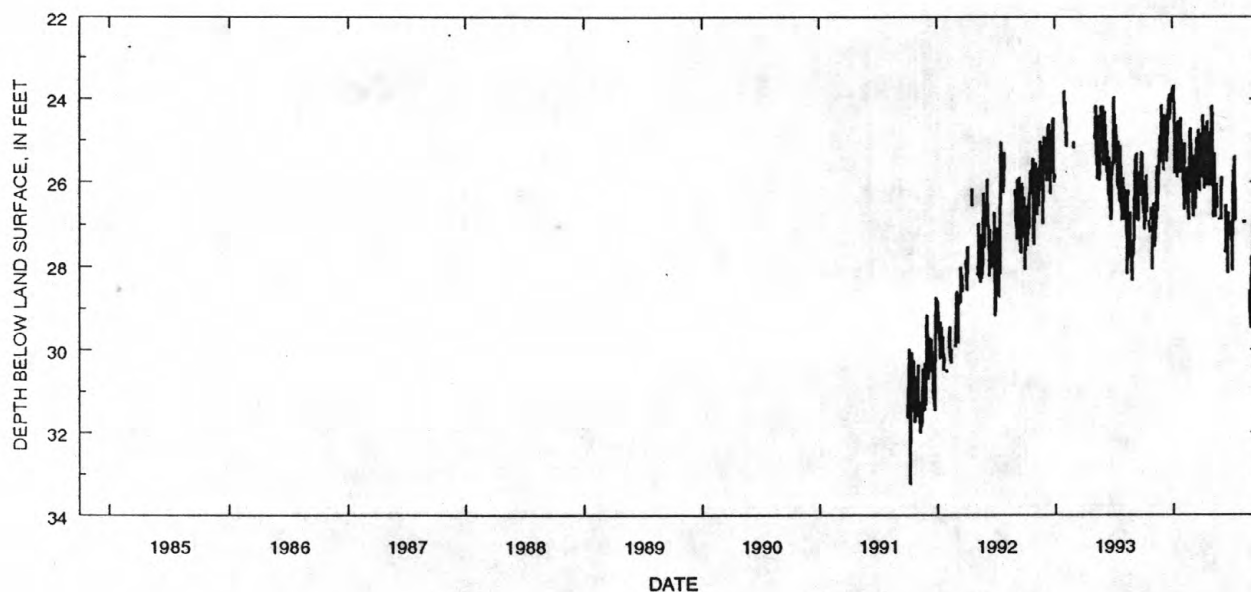
PERIOD OF RECORD.--October 1991 to current year.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.68	27.35	24.39	23.80	26.01	26.01	25.33	24.18	---	28.10	26.80	29.19
2	26.46	27.23	24.82	23.79	25.71	26.34	24.71	24.51	---	27.85	---	28.55
3	25.97	26.49	25.74	23.77	26.03	26.49	24.40	25.65	---	26.72	---	28.17
4	26.36	26.89	25.17	23.70	26.66	26.80	24.62	26.51	---	26.22	---	27.78
5	27.12	27.36	24.39	24.49	26.07	26.30	25.52	26.48	26.63	25.85	---	27.20
6	26.95	27.54	24.41	24.35	25.08	25.38	25.85	26.82	---	25.61	---	26.92
7	26.90	27.27	24.47	25.79	---	26.22	26.00	26.47	---	26.09	26.97	27.86
8	26.92	27.20	25.08	25.19	---	25.87	26.15	25.32	---	26.03	26.92	28.37
9	26.91	27.05	24.88	24.79	---	25.88	25.61	26.16	---	25.57	---	28.96
10	26.40	27.01	25.19	25.21	---	26.60	24.67	26.71	27.68	25.39	---	29.46
11	26.10	26.77	24.87	24.92	26.47	26.64	25.39	26.82	27.58	26.92	---	28.83
12	25.84	26.21	24.39	24.63	26.30	26.17	25.68	---	26.55	---	---	27.85
13	26.72	25.90	25.04	24.95	25.84	25.20	26.09	---	---	---	---	28.74
14	---	25.63	25.51	25.89	25.66	25.24	25.90	---	---	---	---	29.14
15	---	26.68	25.08	25.38	26.34	24.94	25.81	26.05	---	---	---	29.66
16	---	26.42	24.98	24.96	26.73	25.24	25.41	26.62	---	---	26.96	30.46
17	26.62	26.17	24.82	24.59	26.52	25.28	24.55	---	28.16	26.94	---	29.87
18	---	25.91	24.38	24.55	26.88	26.17	25.60	---	27.87	---	---	29.22
19	26.91	25.73	24.23	24.73	26.46	25.76	25.83	---	26.71	---	---	28.18
20	26.91	25.53	24.07	25.29	25.42	24.84	25.67	---	---	---	---	29.53
21	27.19	24.91	23.93	25.80	26.26	24.75	25.79	---	---	---	---	29.37
22	---	25.13	23.90	25.41	25.84	25.50	26.10	26.89	---	---	---	29.79
23	---	24.98	24.54	24.86	24.87	25.74	25.79	26.85	---	---	28.58	30.17
24	26.59	25.55	24.54	24.98	24.73	26.22	24.82	---	---	---	28.85	30.29
25	26.89	25.38	24.19	24.82	25.43	25.91	25.24	---	---	---	29.38	29.82
26	---	24.82	24.06	24.47	25.24	25.69	25.77	---	---	---	29.18	28.68
27	---	24.36	24.06	25.53	25.07	24.85	26.11	---	26.36	---	29.48	29.08
28	---	24.16	24.04	25.58	25.64	25.46	25.75	26.89	---	---	28.80	29.38
29	28.07	25.02	23.88	25.56	---	25.58	24.90	26.29	26.93	---	27.77	29.80
30	27.73	24.81	23.88	25.18	---	25.90	24.56	25.88	27.89	---	28.39	28.96
31	26.80	---	23.86	25.54	---	25.73	---	---	---	---	28.86	---
MAX	28.07	27.54	25.74	25.89	26.88	26.80	26.15	26.89	28.16	28.10	29.48	30.46
CAL YR 1993	LOW 28.33											
WTR YR 1994	LOW 30.46											



GROUND-WATER RECORDS

277

VINTON COUNTY

391452082282900. Local number, V-1.

LOCATION.--Lat 39°14'52", long 82°28'29", Hydrologic Unit 05090101, State Highway garage in McArthur.

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.

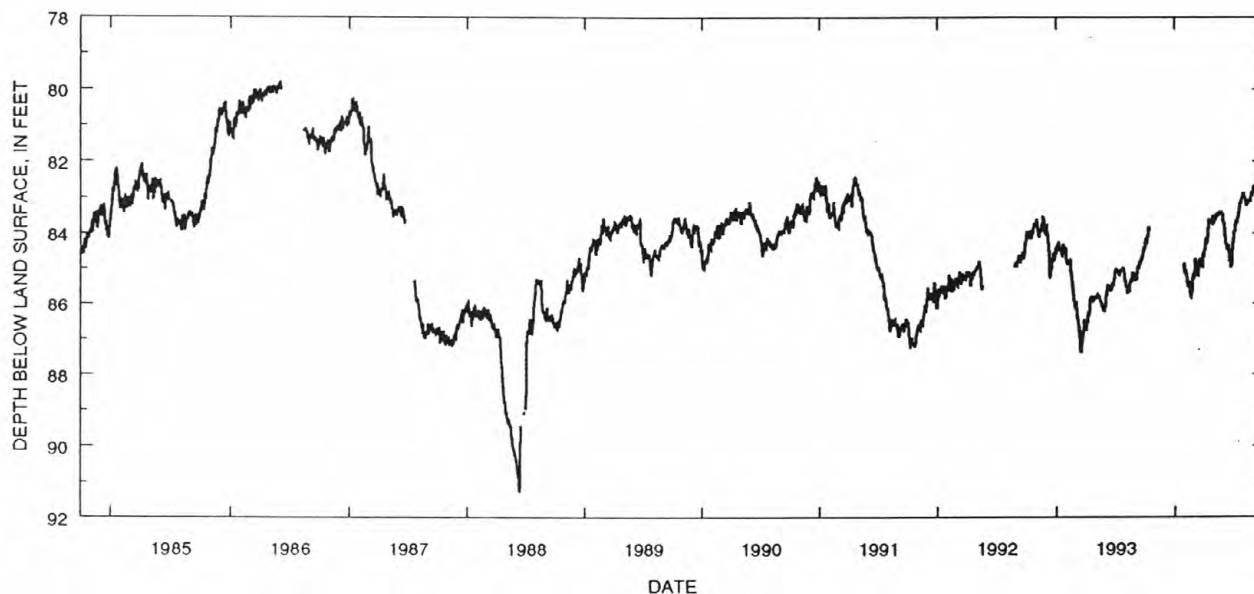
PERIOD OF RECORD.--September 1959 to current year.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84.41	---	---	---	85.13	85.18	84.50	83.61	83.91	83.95	83.03	82.76
2	84.27	---	---	---	85.12	84.98	84.46	83.63	84.03	83.95	83.03	82.83
3	84.27	---	---	---	85.17	84.76	84.32	83.63	84.15	83.93	83.09	82.82
4	84.13	---	---	---	85.17	84.74	84.31	83.60	84.27	83.83	83.13	82.79
5	84.24	---	---	---	85.18	84.81	84.19	83.56	84.32	83.72	83.13	82.66
6	84.29	---	---	---	85.31	84.92	84.13	83.50	84.32	83.65	83.23	82.60
7	84.27	---	---	---	85.39	84.94	84.30	83.50	84.35	83.64	83.23	82.69
8	84.17	---	---	---	85.39	85.07	84.32	83.48	84.43	83.70	83.17	82.73
9	84.04	---	---	---	85.50	85.08	84.22	83.42	84.49	83.70	83.14	82.70
10	84.12	---	---	---	85.51	85.10	84.05	83.49	84.42	83.63	83.17	82.76
11	84.09	---	---	---	85.42	85.20	84.14	83.50	84.36	83.58	83.15	82.76
12	83.84	---	---	---	85.37	85.23	84.01	83.49	84.37	83.52	83.09	82.77
13	83.84	---	---	---	85.48	85.13	83.76	83.50	84.33	83.45	83.13	82.69
14	83.91	---	---	---	85.52	84.93	83.66	83.49	84.51	83.42	83.07	82.63
15	83.94	---	---	---	85.66	84.86	83.68	83.44	84.64	83.32	83.07	82.63
16	---	---	---	---	85.75	84.76	83.60	83.39	84.73	83.29	83.13	82.72
17	---	---	---	---	85.77	84.76	83.62	83.48	84.72	83.21	83.08	82.91
18	---	---	---	---	85.81	84.71	83.65	83.49	84.74	83.17	83.12	83.10
19	---	---	---	---	85.80	84.90	83.60	83.49	84.91	83.18	83.11	83.12
20	---	---	---	---	85.68	84.92	83.73	83.42	84.99	83.17	83.03	83.12
21	---	---	---	---	85.67	84.88	83.74	83.39	84.94	83.13	82.94	83.07
22	---	---	---	---	85.64	84.91	83.68	83.44	84.86	83.03	82.84	83.07
23	---	---	---	---	85.35	84.87	83.70	83.43	84.68	83.03	82.89	83.03
24	---	---	---	---	85.17	84.81	83.58	83.49	84.53	83.07	82.90	83.03
25	---	---	---	---	85.18	84.96	83.50	83.48	84.43	83.01	82.91	82.99
26	---	---	---	84.97	85.31	84.96	83.54	83.48	84.38	82.91	82.87	82.90
27	---	---	---	84.98	85.32	84.71	83.68	83.64	84.17	82.90	82.86	82.97
28	---	---	---	84.86	85.25	84.57	83.74	83.72	84.13	82.90	82.75	83.13
29	---	---	---	84.96	---	84.63	83.71	83.74	83.98	82.94	82.69	83.27
30	---	---	---	85.01	---	84.67	83.66	83.74	83.95	82.99	82.75	83.27
31	---	---	---	85.12	---	84.56	---	83.79	---	82.99	82.68	---
MAX	84.41	---	---	85.12	85.81	85.23	84.50	83.79	84.99	83.95	83.23	83.27

CAL YR 1993 LOW 87.36

WTR YR 1994 LOW 85.81



GROUND-WATER RECORDS

WARREN COUNTY

392712084191700. Local number, W-5.

LOCATION.--Lat 39°27'12", long 84°19'17", Hydrologic Unit 05080002, Union Rd., 2 mi east of Monroe.

Owner: Bob Proeschel.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in., depth 121 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

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.

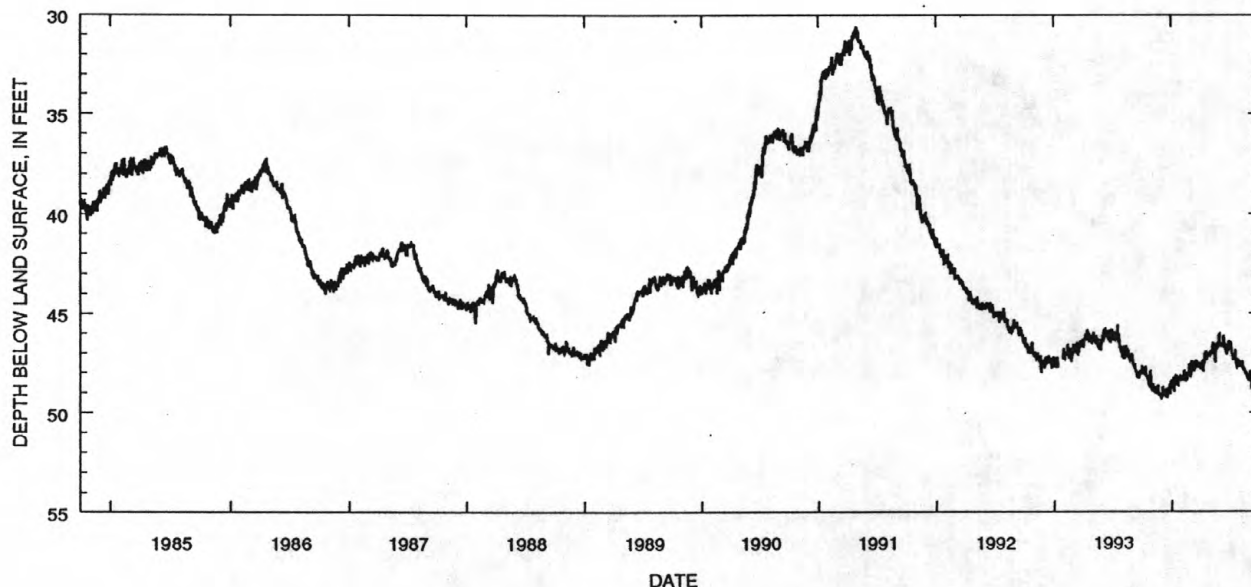
PERIOD OF RECORD.--March 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 50.35 ft below land-surface datum, Sept. 30, 1994;
minimum daily low, 17.70 ft below land-surface datum, Apr. 30, 1975.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47.65	48.95	49.25	48.40	48.35	48.00	47.55	47.00	46.65	46.60	47.60	48.15
2	47.95	48.85	49.00	48.55	48.15	47.45	47.55	47.10	46.70	46.85	47.65	48.75
3	48.00	48.60	49.05	48.35	48.30	47.55	47.55	47.05	46.80	46.75	47.75	48.75
4	47.90	48.60	48.70	48.70	48.15	47.45	47.60	46.80	46.70	47.00	47.45	48.75
5	48.10	48.55	49.05	48.70	48.10	47.95	47.40	46.80	46.75	47.10	47.55	48.85
6	48.10	48.80	49.20	48.20	48.25	47.85	47.50	46.80	46.80	47.20	47.75	48.65
7	48.00	49.00	49.20	48.35	48.35	47.75	47.95	46.50	46.30	47.40	47.70	48.85
8	48.00	48.95	49.15	48.95	47.90	47.85	47.75	46.70	46.15	47.30	47.85	49.00
9	48.20	49.00	49.00	48.75	48.35	47.50	47.50	46.70	46.35	47.30	47.85	49.10
10	48.10	48.90	48.90	48.40	48.30	47.60	47.50	46.85	46.50	47.35	47.90	49.30
11	47.90	48.70	49.25	48.50	48.00	47.95	47.50	46.75	46.55	47.35	47.80	49.45
12	47.70	48.85	49.20	48.20	48.10	47.75	47.15	46.75	46.65	47.30	47.85	49.50
13	47.90	48.70	49.20	48.10	48.30	47.60	47.00	47.35	46.75	47.30	48.00	49.50
14	48.10	48.80	48.80	48.10	48.15	47.45	47.10	47.50	46.90	46.90	48.00	49.50
15	48.20	49.10	49.00	48.65	48.35	47.40	46.95	46.75	46.95	47.25	48.10	49.55
16	48.10	49.10	49.25	48.55	48.30	47.60	47.40	46.80	46.95	47.35	47.95	49.55
17	48.20	48.80	49.25	48.30	48.10	47.70	47.35	46.70	47.10	47.45	48.05	49.50
18	48.40	49.00	49.05	48.55	48.05	47.45	47.25	46.65	47.00	47.60	48.10	49.50
19	48.25	48.65	49.15	48.60	48.10	47.80	47.10	46.50	47.00	47.70	48.20	49.50
20	48.15	49.10	49.05	48.35	48.00	47.65	47.30	46.65	47.00	47.55	48.30	49.70
21	48.50	49.15	48.90	48.20	48.10	47.65	47.20	46.85	46.60	47.60	48.15	49.80
22	48.55	49.20	49.00	48.35	48.05	47.70	47.20	46.60	46.95	47.35	48.25	49.75
23	48.60	49.05	49.10	48.25	47.55	47.55	47.20	46.70	46.95	47.40	48.45	49.75
24	48.45	49.10	48.85	48.35	47.85	47.60	47.00	46.45	46.40	47.65	48.35	49.85
25	48.75	49.20	48.60	48.20	47.80	47.80	47.10	46.15	46.80	47.70	48.35	49.85
26	48.50	49.05	48.80	48.35	48.20	47.55	47.10	46.10	46.50	47.65	48.30	49.70
27	48.25	49.05	49.10	48.10	48.25	47.50	47.10	46.45	46.50	47.50	48.45	50.05
28	47.90	49.20	49.10	48.15	48.00	47.70	47.25	46.60	46.50	47.45	48.20	50.00
29	48.45	49.20	48.45	48.40	---	47.75	47.05	46.75	46.50	47.60	48.00	50.25
30	48.45	49.35	48.80	48.45	---	47.85	47.10	46.70	46.60	47.75	47.95	50.35
31	48.75	---	48.70	48.40	---	47.55	---	46.60	---	47.70	47.95	---
MAX	48.75	49.35	49.25	48.95	48.35	48.00	47.95	47.50	47.10	47.75	48.45	50.35

CAL YR 1993 LOW 49.35

WTR YR 1994 LOW 50.35



GROUND-WATER RECORDS

279

WASHINGTON COUNTY

392553081281600. Local number, WA-2.

LOCATION.--Lat 39°25'53", long 81°28'16", Hydrologic Unit 05040004 near county fairgrounds north of Marietta.

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.

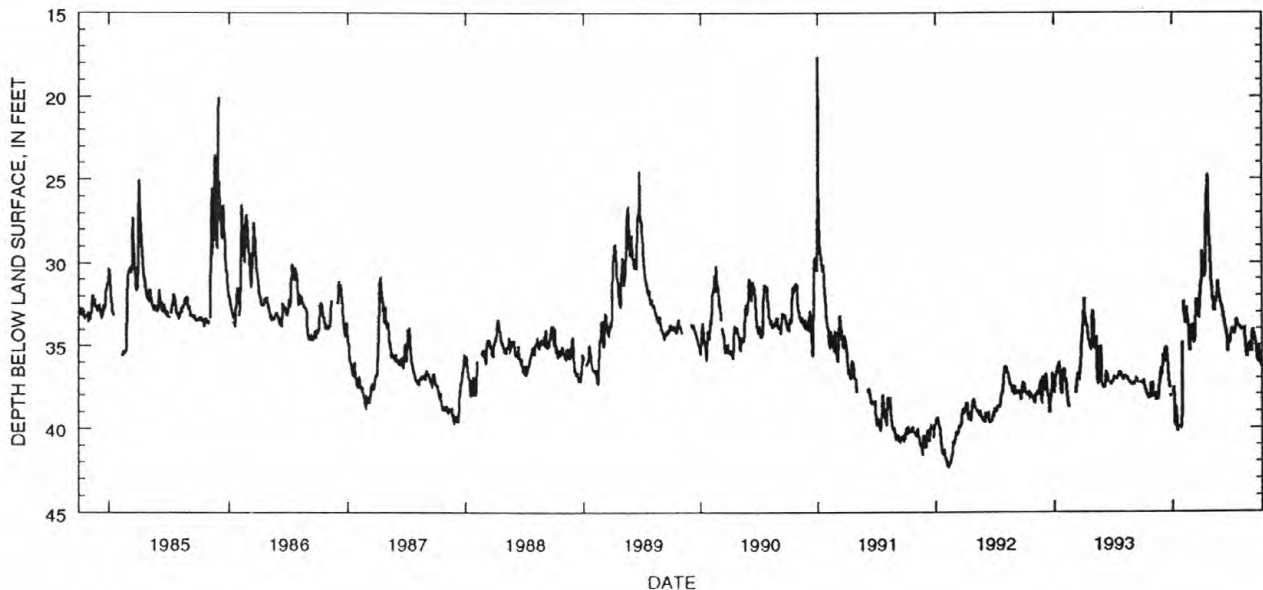
Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

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. 7-8, 1992;
minimum daily low, 17.60 ft below land-surface datum, Jan. 2, 1991.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37.30	37.55	36.20	37.80	---	34.00	29.75	32.20	32.85	34.20	34.05	34.20
2	37.35	37.80	35.55	---	32.30	34.00	29.75	32.20	32.95	34.15	34.00	34.05
3	37.25	37.95	35.80	37.90	32.95	34.05	29.55	32.25	33.10	34.15	33.95	34.20
4	37.10	38.00	35.90	37.55	33.15	34.45	30.00	32.50	33.30	34.25	34.00	34.35
5	37.30	38.10	35.95	38.35	33.20	34.50	30.40	32.70	33.40	34.25	34.10	34.40
6	37.40	38.10	35.80	39.15	33.25	34.55	30.70	32.85	33.45	34.35	34.10	34.30
7	37.50	37.95	35.60	39.70	33.70	34.80	30.90	32.90	33.55	34.30	34.05	34.50
8	37.60	38.05	35.30	39.90	33.50	34.75	30.90	32.90	33.75	34.30	34.40	34.65
9	37.65	38.20	35.20	39.10	33.40	34.75	30.75	32.45	33.85	34.25	34.70	34.75
10	37.75	38.30	35.10	38.70	33.35	34.35	30.55	32.10	33.95	34.15	35.05	34.85
11	37.80	38.30	35.20	38.70	33.10	33.70	29.20	32.30	34.05	34.05	35.25	34.95
12	37.85	37.85	35.25	38.95	32.70	32.85	27.70	32.40	34.15	33.75	35.45	35.15
13	37.95	38.15	35.20	39.70	33.05	32.30	26.45	32.30	34.10	33.45	35.60	35.30
14	38.00	38.25	35.45	40.00	33.30	32.25	26.10	31.95	34.20	33.60	35.70	35.70
15	38.00	38.25	35.65	40.15	33.35	32.55	25.80	31.90	34.80	33.70	35.70	35.80
16	38.05	38.25	35.95	40.15	33.65	32.50	25.15	31.90	35.30	33.70	35.60	35.95
17	38.05	38.25	36.30	39.95	33.80	32.60	24.70	31.25	35.40	33.75	35.40	36.00
18	38.15	38.20	36.65	---	33.95	32.60	25.15	31.15	35.20	33.75	35.40	36.00
19	38.20	38.00	36.90	---	34.70	32.65	26.00	31.45	34.80	33.85	35.30	36.00
20	38.20	37.60	37.10	---	35.10	33.05	26.70	31.85	34.65	33.85	35.05	35.55
21	38.20	37.30	37.30	---	35.30	33.20	27.45	31.90	34.60	33.85	34.95	35.10
22	38.20	37.15	37.45	---	35.30	33.40	28.15	32.00	34.75	33.90	34.95	35.60
23	38.20	37.15	37.60	---	35.10	33.20	28.75	32.15	34.85	33.95	34.90	36.00
24	38.15	36.90	---	39.85	34.45	32.40	29.30	32.20	34.80	33.95	34.95	36.05
25	37.45	36.40	38.00	39.90	34.00	31.90	29.80	32.35	34.75	33.95	35.10	36.05
26	37.30	36.70	38.15	39.95	---	31.90	30.25	32.45	34.55	34.00	35.20	36.00
27	37.85	36.80	---	39.90	---	31.50	30.70	32.50	34.25	34.10	35.30	36.10
28	38.05	36.80	38.10	39.60	33.70	31.25	31.00	32.55	34.25	34.10	35.40	36.20
29	38.10	36.75	---	39.10	---	31.25	31.30	32.60	34.00	34.10	35.40	36.35
30	37.60	36.50	---	34.80	---	30.95	31.70	32.65	34.00	34.10	34.55	36.20
31	37.25	---	---	---	---	29.30	---	32.75	---	34.05	34.25	---
MAX	38.20	38.30	38.15	40.15	35.30	34.80	31.70	32.90	35.40	34.35	35.70	36.35

CAL YR 1993 LOW 38.70
WTR YR 1994 LOW 40.15

GROUND-WATER RECORDS

WASHINGTON COUNTY--Continued.

393241081353500. Local number, WA-3.

LOCATION.--Lat 39°32'41", long 81°35'35", Hydrologic Unit 05040004 near Beverly.

Owner: Tri-County Rural Water Association.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth, 49 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 620 ft above sea level, from topographic map.

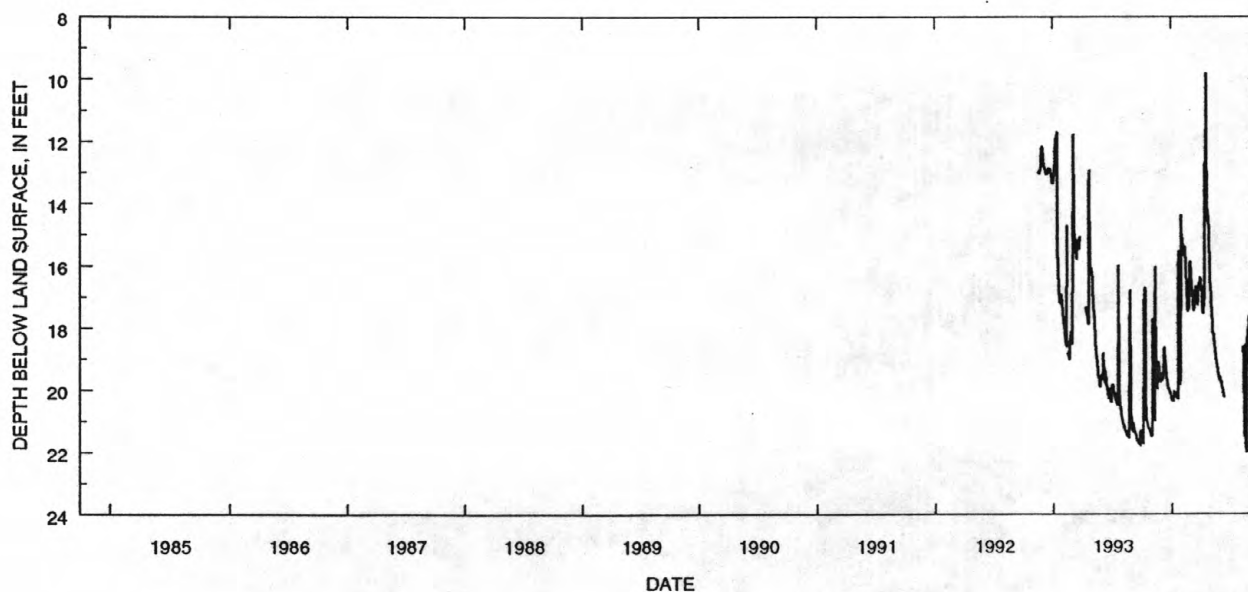
Measuring point: Floor of instrument shelter 3.25 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 22.00 ft below land-surface datum, Aug. 16-17, 1994;
minimum daily low, 9.80 ft below land-surface datum, Apr. 16, 1994.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.68	21.46	19.46	20.34	15.11	16.40	16.74	17.24	19.76	---	---	19.19
2	21.48	21.43	19.50	20.35	15.15	16.55	16.92	17.45	19.88	---	---	19.17
3	21.58	17.70	19.63	20.36	15.30	16.73	17.12	17.62	19.94	---	---	17.60
4	21.65	20.25	19.69	20.37	15.35	16.83	17.27	17.79	19.96	---	18.80	17.57
5	21.72	20.76	19.68	20.37	15.42	16.95	17.38	17.97	20.02	---	18.73	---
6	21.75	20.87	19.37	20.36	15.52	17.07	17.50	18.13	20.09	---	18.63	---
7	18.05	20.90	19.00	20.35	15.64	17.20	17.53	18.20	20.14	---	18.64	---
8	17.25	20.93	18.75	20.15	15.67	17.42	17.53	18.23	20.22	---	20.09	---
9	16.89	21.02	18.62	20.10	15.52	17.46	17.07	18.36	20.25	---	19.95	---
10	16.68	17.20	18.81	20.11	15.38	17.30	17.07	18.47	---	---	21.51	---
11	20.40	16.57	18.94	20.12	15.63	16.97	14.30	18.58	---	---	18.64	---
12	20.73	16.33	19.08	20.12	15.83	16.94	12.68	18.67	---	---	18.53	---
13	16.78	16.03	19.24	20.12	16.23	16.85	12.83	18.79	---	---	19.93	---
14	20.35	19.88	19.37	20.06	16.59	16.79	13.27	18.89	---	---	21.73	---
15	20.77	19.94	19.50	20.10	16.90	16.70	13.44	18.99	---	---	21.95	---
16	20.96	19.98	19.60	20.13	17.13	16.65	9.80	19.08	---	---	22.00	---
17	21.06	19.98	19.71	20.23	17.31	16.72	12.62	19.15	---	---	22.00	---
18	21.14	19.86	19.75	20.30	17.47	16.94	13.30	19.21	---	---	18.40	---
19	21.22	19.43	19.83	20.30	---	17.10	13.74	19.27	---	---	18.18	---
20	21.24	19.16	19.90	16.00	---	17.24	14.03	19.35	---	---	18.09	---
21	21.24	19.10	19.95	15.73	---	17.27	14.36	19.43	---	---	18.05	17.88
22	21.27	19.15	19.97	15.51	17.40	17.05	14.60	19.50	---	---	19.17	17.89
23	21.29	19.33	20.00	19.28	17.00	16.77	14.40	19.57	---	---	19.17	17.90
24	21.30	19.50	20.00	19.74	16.35	16.58	14.98	19.64	---	---	17.71	18.16
25	21.32	19.62	20.06	19.83	16.06	16.53	15.37	19.71	---	---	17.68	18.33
26	21.34	19.73	20.09	19.83	15.85	16.56	15.77	19.55	---	---	17.64	21.30
27	21.38	19.80	20.13	19.61	15.94	16.63	16.13	19.64	---	---	17.64	18.59
28	21.42	19.79	20.17	19.34	16.17	16.56	16.42	19.64	---	---	17.65	18.69
29	21.48	19.67	20.23	15.55	---	16.41	16.70	19.69	---	---	19.24	18.78
30	21.50	19.60	20.27	14.37	---	16.44	16.96	19.74	---	---	19.24	18.86
31	21.51	---	20.31	14.90	---	16.54	---	19.76	---	---	19.22	---
MAX	21.75	21.46	20.31	20.37	17.47	17.46	17.53	19.76	20.25	---	22.00	21.30
CAL YR 1993	LOW 21.77											
WTR YR 1994	LOW 22.00											



GROUND-WATER RECORDS

281

WAYNE COUNTY

404655081553200. Local number, WN-3.

LOCATION.--Lat 40°46'55", long 81°55'32", Hydrologic Unit 05040003, OARDC-OSU Experiment Station near Wooster.

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 1040 ft above sea level, from topographic map.

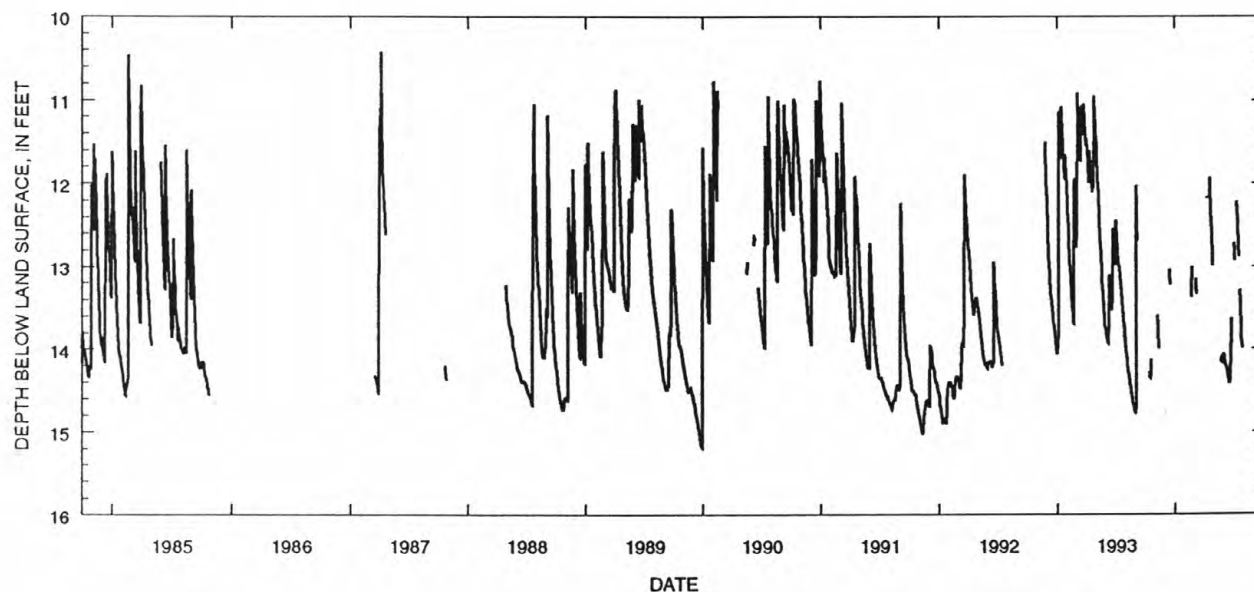
Measuring point: Floor of instrument shelter 3.50 ft above land-surface datum.

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, 10.43 ft below land-surface datum, Apr. 6, 1987.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	14.09	---	---	---
2	---	---	---	---	---	---	---	---	14.12	12.71	---	---
3	---	---	---	---	---	---	---	---	14.16	12.79	---	---
4	---	---	---	---	---	---	---	---	14.18	12.92	---	---
5	---	13.22	---	---	---	---	---	---	14.20	---	---	---
6	---	---	---	---	---	13.14	---	---	14.21	---	---	---
7	---	---	---	---	---	13.25	12.25	---	14.22	---	---	---
8	---	13.59	---	---	---	13.33	---	---	14.23	---	---	---
9	---	13.72	---	---	---	---	12.16	---	14.25	---	---	---
10	---	13.84	---	---	---	---	12.18	---	14.27	12.22	---	---
11	---	13.93	---	---	---	---	---	---	14.28	12.33	---	---
12	---	13.99	---	---	---	---	---	---	14.31	12.44	---	---
13	---	---	---	---	---	---	---	---	14.33	12.57	---	---
14	14.28	---	---	---	---	---	---	---	14.35	12.69	---	---
15	14.31	---	13.03	---	---	11.58	---	---	14.38	12.76	---	---
16	14.34	---	13.09	---	---	---	---	---	14.41	12.88	---	---
17	14.35	---	13.22	---	---	---	---	---	14.41	---	---	---
18	14.30	---	---	---	---	---	11.93	---	14.41	---	---	---
19	14.12	---	---	---	---	---	12.04	---	14.37	13.28	---	---
20	---	---	---	---	13.37	---	12.13	---	14.30	13.43	---	---
21	---	---	---	---	13.23	---	12.23	---	14.09	13.55	---	---
22	---	---	---	---	13.09	---	12.35	14.10	13.78	13.66	---	---
23	---	---	---	---	13.00	---	12.46	14.15	13.69	13.77	---	---
24	---	---	---	---	---	---	12.58	14.16	13.62	13.86	---	---
25	---	---	---	14.43	---	---	12.69	14.16	---	13.92	---	---
26	---	---	---	---	---	---	12.81	14.08	---	13.99	---	---
27	---	13.07	---	---	---	---	12.89	---	---	---	---	---
28	---	---	---	---	---	---	12.99	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	14.05	---	---	---	---
31	---	---	---	---	---	12.89	---	14.08	---	---	---	---
MAX	14.35	13.99	13.22	14.43	13.37	13.33	12.99	14.16	14.41	13.99	---	---
CAL YR 1993	LOW 14.78											
WTR YR 1994	LOW 14.43											



GROUND-WATER RECORDS

WAYNE COUNTY--Continued.

404802081583100. Local number, WN-2A.

LOCATION.--Lat 40°48'02", long 81°58'31", Hydrologic Unit 05040003, in well field by Killbuck Creek near Wooster.

Owner: Wooster Water Dept.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 6 in., depth 65 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

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.

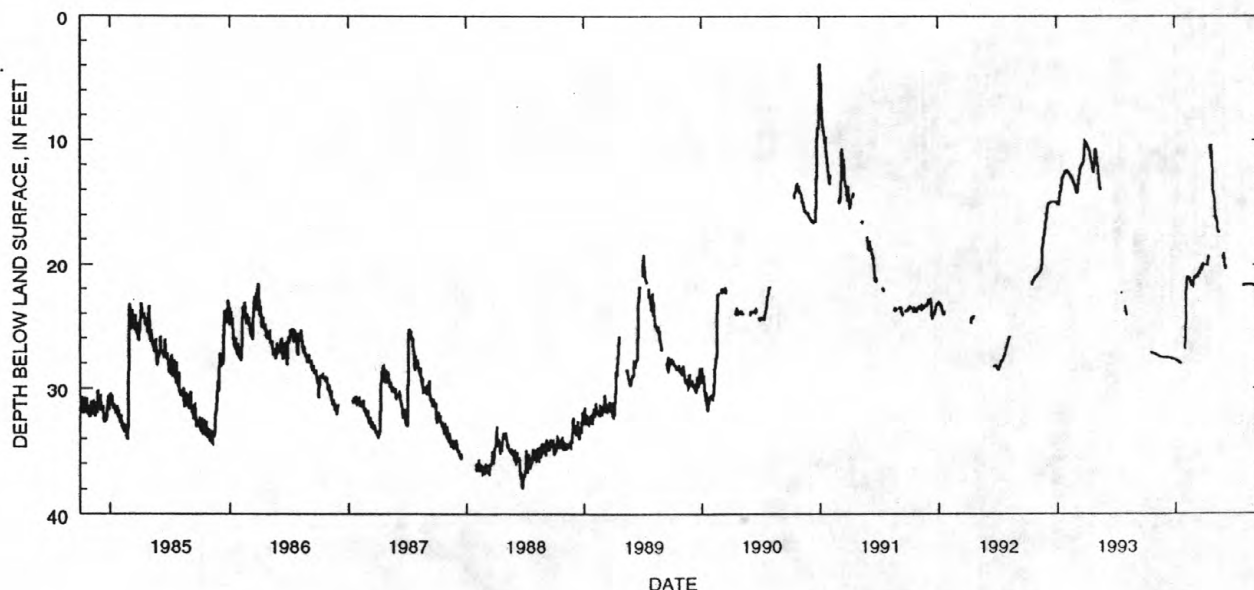
PERIOD OF RECORD.--July 1951 to current year.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	27.29	27.55	27.75	25.88	21.12	---	14.54	19.78	---	21.65	21.72
2	---	27.30	27.55	27.75	24.01	21.14	---	14.81	20.04	---	21.64	21.72
3	---	27.32	27.55	27.76	22.47	21.13	---	15.32	20.24	---	21.64	21.72
4	---	27.35	27.55	27.78	21.71	21.13	19.98	15.87	20.27	---	21.65	21.72
5	---	27.38	27.55	27.78	21.28	21.13	20.09	16.10	20.20	---	21.65	21.72
6	---	27.39	27.56	27.82	20.96	21.07	---	16.31	20.36	---	21.65	21.72
7	---	27.40	27.56	27.83	20.93	20.82	---	16.32	---	---	21.65	21.76
8	---	27.41	27.56	27.84	21.00	20.91	---	16.12	---	---	21.62	21.80
9	---	27.43	27.56	27.84	21.00	20.95	---	16.28	---	---	21.62	21.82
10	---	27.45	27.58	27.87	21.14	21.00	20.13	16.77	---	---	21.63	21.83
11	---	27.47	27.58	27.88	21.19	21.00	19.83	17.03	---	---	21.64	21.84
12	---	27.48	27.58	27.92	21.21	20.99	19.80	17.33	---	---	21.65	21.85
13	---	27.49	27.58	27.95	21.12	20.73	19.55	17.38	---	---	21.66	21.89
14	27.09	27.49	27.59	27.97	21.02	20.58	19.39	17.46	---	---	21.66	21.96
15	27.11	27.49	27.60	27.99	21.14	20.65	19.33	17.38	---	---	21.63	22.01
16	27.12	27.51	27.61	28.00	21.30	20.71	---	17.40	---	---	21.63	22.05
17	27.12	27.52	27.62	28.02	21.44	20.73	---	17.46	---	---	21.64	22.07
18	27.14	27.53	27.63	28.06	21.61	20.73	---	---	---	---	21.65	22.07
19	27.15	27.55	27.64	---	21.72	20.56	10.31	---	---	---	21.65	22.11
20	27.17	27.55	27.65	---	21.70	20.29	10.65	---	---	---	21.65	22.15
21	27.18	27.55	27.66	---	21.66	20.14	11.06	---	---	---	21.65	22.19
22	27.20	27.55	27.68	---	21.70	20.25	11.46	---	---	---	21.63	22.24
23	27.20	27.56	27.69	---	21.75	20.33	10.39	---	---	---	21.62	22.28
24	27.20	27.56	27.70	---	21.77	20.36	11.54	---	---	---	21.63	22.32
25	27.21	27.56	27.70	28.32	21.75	20.31	11.96	---	---	21.71	21.65	22.32
26	27.22	27.56	27.70	---	21.65	20.31	12.50	---	---	21.71	21.66	22.35
27	27.24	27.56	27.70	---	21.43	20.01	13.22	19.46	---	21.71	21.67	22.38
28	27.25	27.56	27.71	---	21.12	19.84	13.88	19.49	---	21.70	21.67	22.42
29	27.27	27.56	27.72	---	---	19.99	14.32	19.48	---	21.70	21.67	22.47
30	27.27	27.55	27.74	---	---	20.11	14.48	19.06	---	21.70	21.69	22.52
31	27.27	---	27.74	26.90	---	---	---	19.23	---	21.69	21.69	---
MAX	27.27	27.56	27.74	28.32	25.88	21.14	20.13	19.49	20.36	21.71	21.69	22.52
CAL YR 1993 LOW 27.74												
WTR YR 1994 LOW 28.32												



GROUND-WATER RECORDS

283

WAYNE COUNTY--Continued

405745081510200. Local number, WN-7.

LOCATION.--Lat 40°57'45", long 81°51'02", Hydrologic Unit 05040001, in well field along Steele Ditch near Sterling.

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.--Type F continuous recorder.

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.

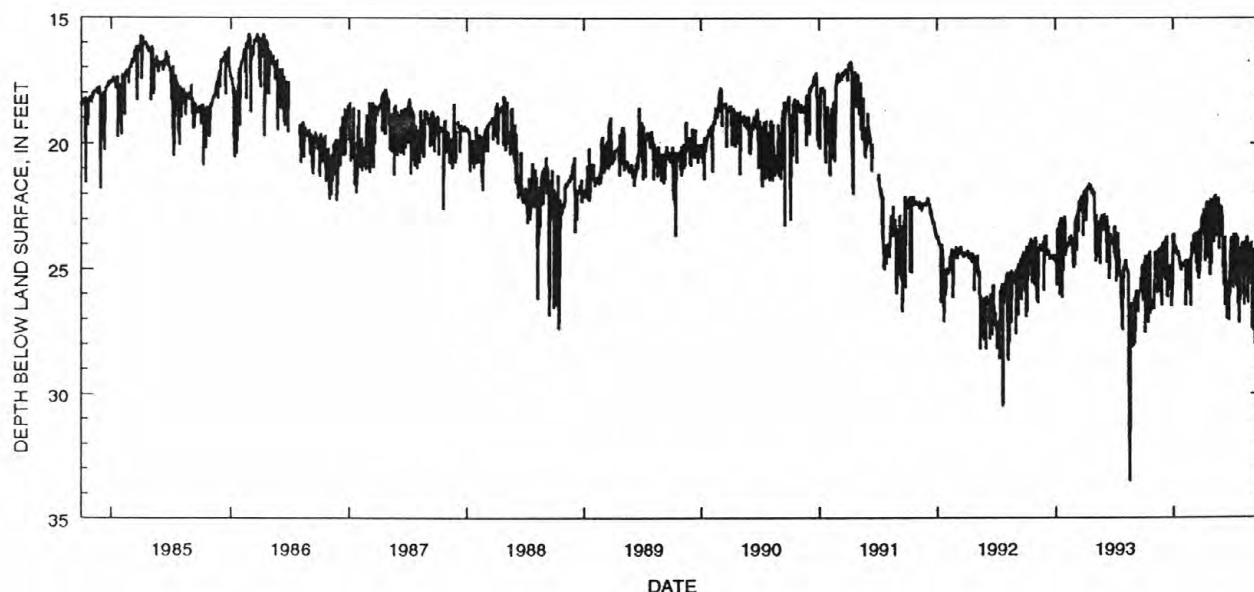
PERIOD OF RECORD.--April 1979 to current year.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.90	26.50	25.30	23.60	24.85	24.10	22.85	23.90	24.45	23.85	24.20	25.00
2	24.95	26.60	24.00	23.70	24.75	23.80	22.80	23.60	24.75	25.45	24.20	24.65
3	25.60	26.50	24.05	24.30	24.80	23.65	22.60	22.30	25.10	25.80	26.05	27.50
4	24.85	24.35	24.10	24.30	24.75	23.75	22.65	22.15	25.65	25.35	24.20	26.15
5	24.50	24.30	25.50	24.30	24.75	23.70	22.70	22.25	24.85	23.60	26.45	25.90
6	27.55	24.40	23.95	24.05	24.85	23.75	22.70	23.95	24.50	23.75	24.10	24.20
7	26.50	24.35	23.85	24.10	26.45	24.40	24.70	22.10	26.45	25.15	23.95	26.40
8	25.10	24.50	23.90	24.20	24.70	24.00	24.30	23.25	23.70	25.50	24.10	28.05
9	25.00	24.45	23.70	24.45	24.85	23.60	24.30	22.05	25.80	25.65	23.90	24.55
10	25.05	24.55	23.75	24.30	24.70	23.55	24.40	22.45	25.45	23.60	24.00	26.00
11	25.15	26.00	23.75	24.40	25.40	24.80	22.65	23.75	25.75	23.70	25.35	24.30
12	25.65	24.45	26.10	24.45	24.65	23.70	22.45	22.20	25.90	23.70	24.05	24.40
13	25.75	24.45	26.15	24.35	24.65	24.75	22.30	22.20	25.50	25.75	23.95	24.35
14	24.45	24.25	25.90	24.25	24.70	24.00	24.30	22.20	27.00	23.90	23.70	24.40
15	24.50	24.45	25.75	24.40	24.75	25.15	24.60	22.30	26.45	24.15	23.85	24.35
16	27.15	24.30	25.85	24.35	25.15	23.55	24.50	22.15	26.30	23.82	26.00	24.35
17	26.20	24.20	25.80	24.45	25.85	23.50	24.60	22.20	26.50	23.75	26.35	24.25
18	24.40	25.95	25.60	24.60	25.40	24.70	24.50	22.20	26.60	26.40	26.40	24.25
19	24.35	24.20	25.45	24.85	25.60	25.40	24.25	22.30	26.90	24.50	24.50	24.95
20	24.30	24.15	24.85	24.70	25.50	25.10	24.25	24.20	27.05	27.15	24.40	24.90
21	24.65	25.50	25.70	24.90	25.55	25.15	22.30	22.45	25.10	25.30	24.00	24.85
22	26.80	24.15	25.65	25.00	26.50	25.05	22.35	22.50	26.00	24.85	24.05	24.90
23	26.40	24.20	25.65	25.00	25.15	23.45	25.25	22.85	24.70	24.25	24.20	24.80
24	26.70	25.80	25.60	24.95	24.00	23.45	22.20	22.90	24.50	24.15	24.35	24.35
25	26.25	26.45	25.65	25.05	24.00	24.70	22.35	22.65	24.10	26.25	24.30	24.30
26	26.35	24.10	26.50	24.85	24.00	23.95	24.60	22.50	23.95	24.25	24.30	24.20
27	26.40	24.15	25.70	24.95	24.00	23.00	22.45	22.50	23.75	24.30	24.00	24.25
28	26.35	23.95	25.60	24.75	24.00	23.15	24.80	22.60	24.15	24.10	23.95	24.20
29	26.40	24.05	25.65	24.80	---	23.00	22.35	22.70	25.25	24.05	27.40	24.25
30	26.50	24.05	23.60	24.85	---	22.85	22.30	23.00	24.15	23.95	24.30	24.40
31	26.40	---	23.90	24.90	---	23.00	---	23.05	---	24.00	26.10	---
MAX	27.55	26.60	26.50	25.05	26.50	25.40	25.25	24.20	27.05	27.15	27.40	28.05

CAL YR 1993 LOW 33.50

WTR YR 1994 LOW 28.05



GROUND-WATER RECORDS

WAYNE COUNTY--Continued

405805081462300. Local number, WN-6.

LOCATION.--Lat 40°58'05", long 81°46'23", Hydrologic Unit 05040001, Salt Street, Rittman.

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.

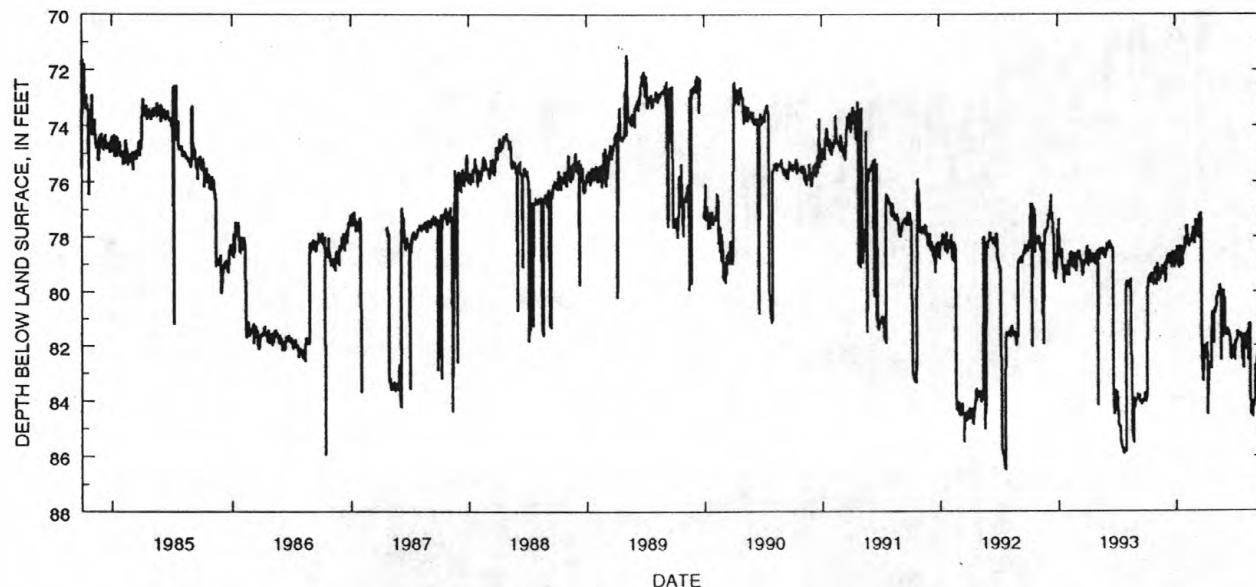
Measuring point: Floor of instrument shelter 2.30 ft above land-surface datum.

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 1993 TO SEPTEMBER 1994
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83.86	79.65	79.60	78.80	78.32	78.06	82.21	80.59	81.41	81.86	81.55	82.69
2	83.78	79.77	79.28	78.70	78.29	77.82	82.17	80.68	81.59	81.80	82.04	82.76
3	83.86	79.51	79.13	78.68	77.60	77.40	82.17	80.63	81.64	81.92	82.03	82.75
4	83.68	79.31	78.92	78.35	77.60	77.40	82.22	80.47	81.60	81.92	82.13	82.71
5	79.94	78.97	78.71	78.70	77.89	77.80	81.95	80.30	81.50	81.80	82.13	82.59
6	79.97	79.20	78.79	78.64	77.97	77.82	81.90	80.22	81.39	81.76	81.60	82.34
7	79.74	79.52	79.02	78.39	78.24	77.69	82.61	80.22	81.33	81.41	81.50	82.46
8	79.60	79.61	78.95	78.60	78.12	77.88	84.52	80.02	81.55	81.49	81.44	82.49
9	79.45	79.61	78.93	79.07	78.18	77.90	83.01	80.02	81.57	81.54	82.55	82.44
10	79.69	79.55	78.61	79.10	78.38	77.69	83.16	80.16	81.52	81.66	82.50	82.52
11	79.69	79.38	78.83	78.81	78.18	78.01	83.27	80.16	81.49	81.67	81.51	82.57
12	79.39	79.40	78.89	78.75	78.13	78.03	83.02	80.04	81.54	81.54	81.40	82.60
13	79.65	79.31	78.86	78.35	78.08	77.71	82.59	80.12	81.56	81.52	81.32	82.58
14	79.67	79.15	78.72	78.31	78.15	77.46	82.65	80.05	81.61	81.52	81.15	82.62
15	79.70	79.47	78.62	78.87	78.06	77.15	82.66	79.75	81.71	81.60	81.24	82.64
16	79.56	79.55	79.07	79.05	78.24	77.35	82.66	79.92	82.44	81.66	83.62	82.59
17	79.31	79.33	79.09	78.52	78.16	77.42	82.80	80.07	82.45	81.64	84.37	82.14
18	79.54	79.42	78.91	78.88	78.11	77.12	82.86	80.07	82.40	81.53	84.49	82.26
19	79.61	79.06	78.75	79.02	78.00	77.28	81.66	82.53	82.45	81.62	84.49	82.37
20	79.57	79.11	78.71	79.03	77.85	77.40	81.82	80.49	82.42	81.86	84.39	82.37
21	79.64	79.24	78.55	79.00	77.97	82.48	80.90	80.42	82.23	82.19	84.33	82.70
22	79.71	79.35	78.65	78.65	78.05	82.67	80.81	80.38	82.18	82.11	84.54	83.88
23	79.72	79.34	78.92	78.35	77.64	82.82	80.77	80.25	82.20	82.52	84.61	82.13
24	79.57	79.24	78.88	78.46	77.70	83.16	80.92	80.22	81.98	82.22	84.42	81.15
25	79.48	79.37	78.55	78.43	77.82	83.30	81.87	81.71	82.24	82.31	84.06	81.14
26	79.36	79.28	78.88	78.56	78.12	82.61	81.93	79.95	82.34	82.81	84.15	81.19
27	79.20	79.06	79.13	78.52	78.25	81.98	80.74	80.18	82.45	82.84	84.15	81.41
28	79.11	78.93	79.15	78.00	78.20	82.07	80.89	80.22	82.47	81.55	83.97	81.02
29	79.16	79.30	78.98	78.28	---	82.33	80.71	80.26	82.29	81.58	84.05	82.20
30	79.19	79.62	78.97	78.42	---	82.47	80.74	80.21	82.09	81.64	84.06	81.30
31	79.15	---	78.84	78.36	---	82.34	---	81.34	---	81.65	83.96	---
MAX	83.86	79.77	79.60	79.10	78.38	83.30	84.52	82.53	82.47	82.84	84.61	83.88

CAL YR 1993 LOW 85.94
WTR YR 1994 LOW 84.61

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CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
<i>Length</i>		
inch (in.)	2.54×10^1	millimeter
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter
mile (mi)	1.609×10^0	kilometer
<i>Area</i>		
acre	4.047×10^3	square meter
	4.047×10^{-1}	square hectometer
	4.047×10^{-3}	square kilometer
square mile (mi ²)	2.590×10^0	square kilometer
<i>Volume</i>		
gallon (gal)	3.785×10^0	liter
	3.785×10^0	cubic decimeter
	3.785×10^{-3}	cubic meter
million gallons (Mgal)	3.785×10^3	cubic meter
	3.785×10^{-3}	cubic hectometer
cubic foot (ft ³)	2.832×10^1	cubic decimeter
	2.832×10^{-2}	cubic meter
cubic-foot-per-second day [(ft ³ /s) d]	2.447×10^3	cubic meter
	2.447×10^{-3}	cubic hectometer
acre-foot (acre-ft)	1.233×10^3	cubic meter
	1.233×10^{-3}	cubic hectometer
	1.233×10^{-6}	cubic kilometer
<i>Flow</i>		
cubic foot per second (ft ³ /s)	2.832×10^1	liter per second
	2.832×10^1	cubic decimeter per second
	2.832×10^{-2}	cubic meter per second
gallon per minute (gal/min)	6.309×10^{-2}	liter per second
	6.309×10^{-2}	cubic decimeter per second
	6.309×10^{-5}	cubic meter per second
million gallons per day (Mgal/d)	4.381×10^1	cubic decimeter per second
	4.381×10^{-2}	cubic meter per second
<i>Mass</i>		
ton (short)	9.072×10^{-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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