

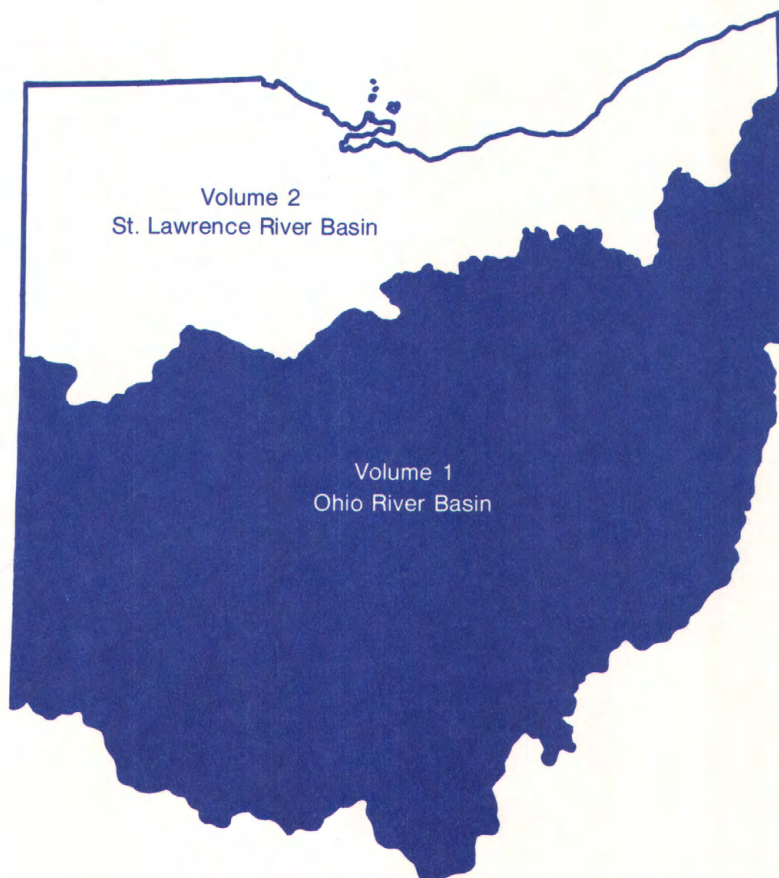


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Water Resources Data Ohio Water Year 1991

Volume 1. Ohio River Basin Excluding Project Data



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OH-91-1
Prepared in cooperation with the State of Ohio
and with other agencies

U.S. GEOLOGICAL SURVEY
RESTON, VA.

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CALENDAR FOR WATER YEAR 1991

1990

OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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7	8	9	10	11	12	13								2	3	4	5	6	7	8
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1991

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28	29	30					26	27	28	29	30	31		23	24	25	26	27	28	29
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	1	2	3	4	5	6					1	2	3	1	2	3	4	5	6	7
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U.S. DEPARTMENT OF THE INTERIOR

MANUEL LUJAN, JR, Secretary

U.S. GEOLOGICAL SURVEY

Dallas L. Peck, Director

**For additional information on the water program in Ohio write to
District Chief, Water Resources Division
U.S. Geological Survey
975 West Third Avenue
Columbus, OH 43212
1992**

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 the 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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15. Supplementary Notes Prepared in cooperation with the State of Ohio and with other agencies.				
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GAGING STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

(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.)

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DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

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,

OHIO RIVER BASIN

Station name	Station number	Drainage area (mi ²)	Period of record
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
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 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
LISBON CREEK AT LISBON (d)	03109000	6.19	1946-62
STATELINE CREEK NR NEGLEY (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
INDIAN F BL ATWOOD DAM NR NEW CUMBERLAND (d)	03121500	70.0	1960-75
SUGAR C AB BEACH CITY DAM AT BEACH CITY (d)	03123000	160	1945-75
HOME C NR NEW PHILADELPHIA (d)	03125000	1.64	1936-79
CLEAR FORK TRIB NR HANOVER (d)	03127970	.68	1978-81
TOUBY RUN AT MANSFIELD (d)	03130500	5.44	1946-78
ROCKY FORK NR MANSFIELD (d)	03131000	39.0	1925-32
CLEAR FORK AT BUTLER (d)	03132000	136	1945-75
CLEAR FORK AT NEWVILLE (d)	03132500	174	1934-39
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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
KILLBUCK CREEK AT LAYLAND (d)	03139500	503	1923-30
SALT FORK BL SALT F DAM NR CAMBRIDGE (d)	03142295	159	1970-81
WILLS CREEK AT BIRDS RUN (d)	03142500	730	1928-39
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

Station name	Station number	Drainage area (mi ²)	Period of record
MUSKINGUM R AT ZANESVILLE (d)	03148000	6,850	1939-55
SALT C NR CHANDLERSVILLE (d)	03149500	75.7	1935-47
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 AT ATHENS (d)	03159500	943	1915-76
SHADE R NR CHESTER (d)	03159540	156	1965-84
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	1978-81
			1921-61
SANDY RUN NR LAKE HOPE (d)	03201800	4.99	1957-78
RACCOON CREEK AT ADAMSVILLE (d)	03202000	585	1915-35
			1938-85
SYMMES 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 R 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
PAINT C NR GREENFIELD (d)	03232000	249	1926-35
			1939-56
			1966-81
RATTLESNAKE C AT CENTERFIELD (d)	03232300	209	1971-81
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 LONDON DERRY (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
L MIAMI R AT SPRING VALLEY (d)	03242000	360	1925-35
			1939-51

Discontinued Stations--Continued

Station name	Station number	Drainage area (mi ²)	Period of record
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 WELLMAND (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
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
MOOR[B]E 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 BUC[AK 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

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.

Discontinued continuous-record surface-water-quality stations

OHIO RIVER BASIN

Station name	Station number	Drainage area (mi ²)	Type of record	Period of record
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
OHIO RIVER AT STRATTON	03110700	23,500	Temp.	1961-70
			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
SAND FORK NR WAKATOMIKA	03144400	1.34	Sed.	1978-81
NORTH FORK LICKING R AT UTICA	03146000	116	Temp.	1970-73
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
N. B. HUNTERS RUN NR HOOKER	03155900	104	Sed.	1956-62
HOCKING RIVER AT ATHENS	03159500	943	Temp.	1954-65
			Cond.	1964-65
			Sed.	1956-65
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
L 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

Discontinued continuous-record surface-water-quality stations--Continued

Station name	Station number	Drainage area (mi ²)	Type of record	Period of record
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..	1970-75
			S.C.	1970-76
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

GROUND-WATER STATIONS FOR WHICH RECORDS ARE PUBLISHED

XIII

(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)	207
405425082173000	AS-3	Jerome Fork (l)	208
ATHENS COUNTY			
392004082071600	AT-2A	Athens (l)	209
392009082072200	AT-5	Athens (l)	210
AUGLAIZE COUNTY			
403233083574500	AU-3	Southwest of New Hampshire (l)	211
BELMONT COUNTY			
400118081082200	B-3	Mount Olivett (l)	212
BUTLER COUNTY			
391805084261800	BU-9	Northwest of Sharonville (l)	213
391904084371800	BU-12	East of Ross (l)	214
392017084345200	BU-7	Fairfield (l)	215
392021084340300	BU-56	Fairfield (l)	216
392048084311400	BU-8	East of Hamilton (l)	217
392445084333000	BU-36	Hamilton (c)	218
393202084241500	BU-15	Middletown (l)	219
392733084293000	BU-16	Wayne (l)	220
392939084231700	BU-3	Middletown (l)	221
393103084240900	BU-2	Middletown (l)	222
CARROLL COUNTY			
403709081052800	C-1	North of Carrollton (l)	223
CHAMPAIGN COUNTY			
400638083453900	CH-3	Urbana (l)	224
CLARK COUNTY			
395639084012200	CL-9	New Carlisle (l)	225
395840083495200	CL-7	Northwest of Springfield (l)	226
COSHOCKTON COUNTY			
401256081525100	CS-3	North of Conesville (l)	227
401735081523800	CS-2	Coshockton (l)	228
DARKE COUNTY			
400514084345700	D-2	East of Greenville (l)	229
DELAWARE COUNTY			
402126083040400	DL-3	Delaware (l)	230
FAIRFIELD COUNTY			
393450082403600	F-7	Southeast of Amanda (l)	231
394257082362900	F-6	Lancaster (l)	232
394544082271000	F-1	West Rushville (l)	233
395053082361900	F-5	Baltimore (l)	234
FAYETTE COUNTY			
393153083322000	FA-1	West of Washington Court House (l)	235
FRANKLIN COUNTY			
394956083002700	FR-18	South of Shadeville (l)	236
395118082573300	FR-3	Southwest of Rees (l)	237
400101083021800	FR-10	Columbus (l)	238
GALLIA COUNTY			
383638082103300	G-2	East of Crown City (l)	239
GREENE COUNTY			
394330083531400	GR-11	Near Wilberforce (l)	240
394411083561300	GR-1	North of Xenia (l)	241
394425083551100	GR-10	North of Xenia (l)	242
HAMILTON COUNTY			
391039084291500	H-11	Cincinnati (l)	243
391101084172100	H-3	Southeast of Miami (l)	244
391201084281600	H-10	Cincinnati (l)	245
391214084470100	H-1	Southeast of Harrison (l)	246
391324084272500	H-9	Cincinnati (l)	247
391341084275300	H-8	Wyoming (l)	248
391442084262900	H-7	Evendale (l)	249
391608084254400	H-6	Glendale (l)	250
391733084392400	H-2	South of Ross (l)	251
391748084393800	H-19	Southwest of Venice (c)	252
391817084393300	H-4	Southwest of Ross (l)	253
HARDIN COUNTY			
404218083503700	HN-1	Alger (l)	254
HOCKING COUNTY			
393200082235300	HK-1	Logan (l)	255
KNOX COUNTY			
402344082300700	K-1	Mt. Vernon (l)	256

Well number	Local number	Location	Page
MADISON COUNTY			
395301083272200	M-2	London (1)	257
395352083292100	M-5	Northwest of London (1)	258
395357083304400	M-4	Northwest of London (1)	259
395740083255700	M-3	North of London (1)	260
MAHONING COUNTY			
410042080453800	MA-1	Canfield (1)	261
MARION COUNTY			
403413083170500	MN-4	Southeast of New Bloomington (1)	262
403443083230400	MN-1	LaRue (1)	263
403601083110400	MN-2	West of Marion (1)	264
MEDINA COUNTY			
410120081431800	MD-3	Wadsworth (1)	265
MERCER COUNTY			
402833084375200	MR-2	Coldwater (1)	266
MIAMI COUNTY			
395848084085500	MI-3	Northeast of Tipp City (1)	267
400308084112900	MI-44	Troy (c)	268
MONTGOMERY COUNTY			
393757084173600	MT-928	Miamisburg (c)	269
394012084151700	MT-55	West Carrollton (1)	270
394025084162800	MT-49	West Carrollton (1)	271
394425084113200	MT-3	Dayton (1)	272
394533084113800	MT-6	Dayton (1)	273
394811084095000	MT-74	Dayton (1)	274
MUSKINGUM COUNTY			
395804081593200	MU-1A	Zanesville (1)	275
PICKAWAY COUNTY			
393327082571600	PK-7	South of Circleville (1)	276
393402082572500	PK-4	South of Circleville (1)	277
393638082572300	PK-6	Northwest of Circleville (1)	278
393438083072200	PK-8	Williamsport (1)	279
394742083094800	PK-9	Near Orient (1)	280
PIKE COUNTY			
390359083015100	PI-2	West of Piketon (1)	281
PORTAGE COUNTY			
411401081025000	PO-1	Windham (1)	282
PREBLE COUNTY			
394438084335900	PR-2	East of Eaton (1)	283
RICHLAND COUNTY			
404625082305100	R-4	Mansfield (1)	284
ROSS COUNTY			
391341083172200	RO-7	West of Bainbridge (1)	285
391913082580500	RO-8	Chillicothe (1)	286
SHELBY COUNTY			
401712084103500	SH-4	Sidney (1)	287
STARK COUNTY			
404939081203800	ST-5A	Canton (1)	288
405211081253500	ST-27	North Canton (1)	289
TRUMBULL COUNTY			
411604080505600	T-3	Near Warren (1)	290
TUSCARAWAS COUNTY			
403207081293800	TU-3	Dover (1)	291
403557081313600	TU-4	Strasburg (1)	292
403653081321800	TU-1	North of Strasburg (1)	293
403823081324200	TU-5	Near Strasburg (1)	294
UNION COUNTY			
401826083255200	U-4	Southeast of Raymond (1)	295
VINTON COUNTY			
391452082282900	V-1	McArthur (1)	296
WARREN COUNTY			
392712084191700	W-5	East of Monroe (1)	297
WASHINGTON COUNTY			
392553081281600	WA-2	Marietta (1)	298
WAYNE COUNTY			
404655081553200	WN-3	Near Wooster (1)	299
404802081583100	WN-2A	Near Wooster (1)	300
405745081510200	WN-7	Near Sterling (1)	301
405805081462300	WN-6	Rittman (1)	302

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 pertaining to the water resources of Ohio each water year. These data, accumulated during many years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the USGS, the data are published annually in this report series entitled "Water Resources Data--Ohio."

This report (in two volumes) includes records on surface water and ground water in the State. Specifically, it contains: (1) Discharge records for 131 streamflow-gaging stations, 95 miscellaneous sites; (2) stage and content records for 5 streams, lakes, and reservoirs; (3) water-quality data for 40 streamflow-gaging stations, 378 wells, and 74 partial-record sites; and (4) water levels for 431 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 figure 9.

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 introduction of this series and for several years concurrent with it, water-resources data for Ohio were published in a series of U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage through September 1960 were published annually under the title "Surface-Water Supply of the United States, Parts 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 consulted in the libraries of the principal cities of the United States, and can be purchased from the Books and Open-File Reports Section, U.S. Geological Survey, Box 24525, Federal Center, 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-91-1." 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.

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.

COOPERATION

The U.S. Geological Survey and agencies of the State of Ohio have had cooperative agreements for the collection of water-resource data since 1898. Organizations that assist in collecting data in this report are: Ohio Department of Natural Resources, Frances Buchholzer, Director; Ohio Environmental Protection Agency, D. R. Schregardus, Director; 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; Seneca Soil and Water Conservation District, Norman Daniel, Board Chairman; University of Toledo, R. Gallagher, Cuyahoga River Community Planning Organization, John Beeker; Northeast Regional Sewer District, E. J. Odeal, Executive Director; Ohio Water Development Authority, Warren Tyler, Chairman; City of Fremont, Warren Curtis, City Engineer; City of Akron, Linda Sowa, Administrator; City of Lima, A. Godsey, City Sanitary Engineer; Eastgate Development and Transportation Agency, J. Wells, Environment Project Manager; University of Cincinnati, J. Maynard, Department Head; U.S. Air Force, Air Force Logistics Command, A. F. Sculimbrene, Office of Environmental Management; Toledo Metropolitan Area Council of Governments, K. Erickson, Director of Regional Planning; and Ohio State University, Ohio Agricultural Research and Development Center (OARDC), Professor Warren Dick; U.S. Department of Energy, Ronald O. Hultgren, Deputy Assistant Manager for Enriching Operations. Funds or services were provided by the U.S. Army Corps of Engineers in collecting data for 72 hydrologic-data stations in this report. The Miami Conservancy District, U.S. Army Corps of Engineers, and Ohio Department of Natural Resources aided in collecting data.

SUMMARY OF HYDROLOGIC CONDITIONS

Ohio is part of three physiographic provinces, each with 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 preglacial valleys, and rerouted many streams.

Precipitation

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

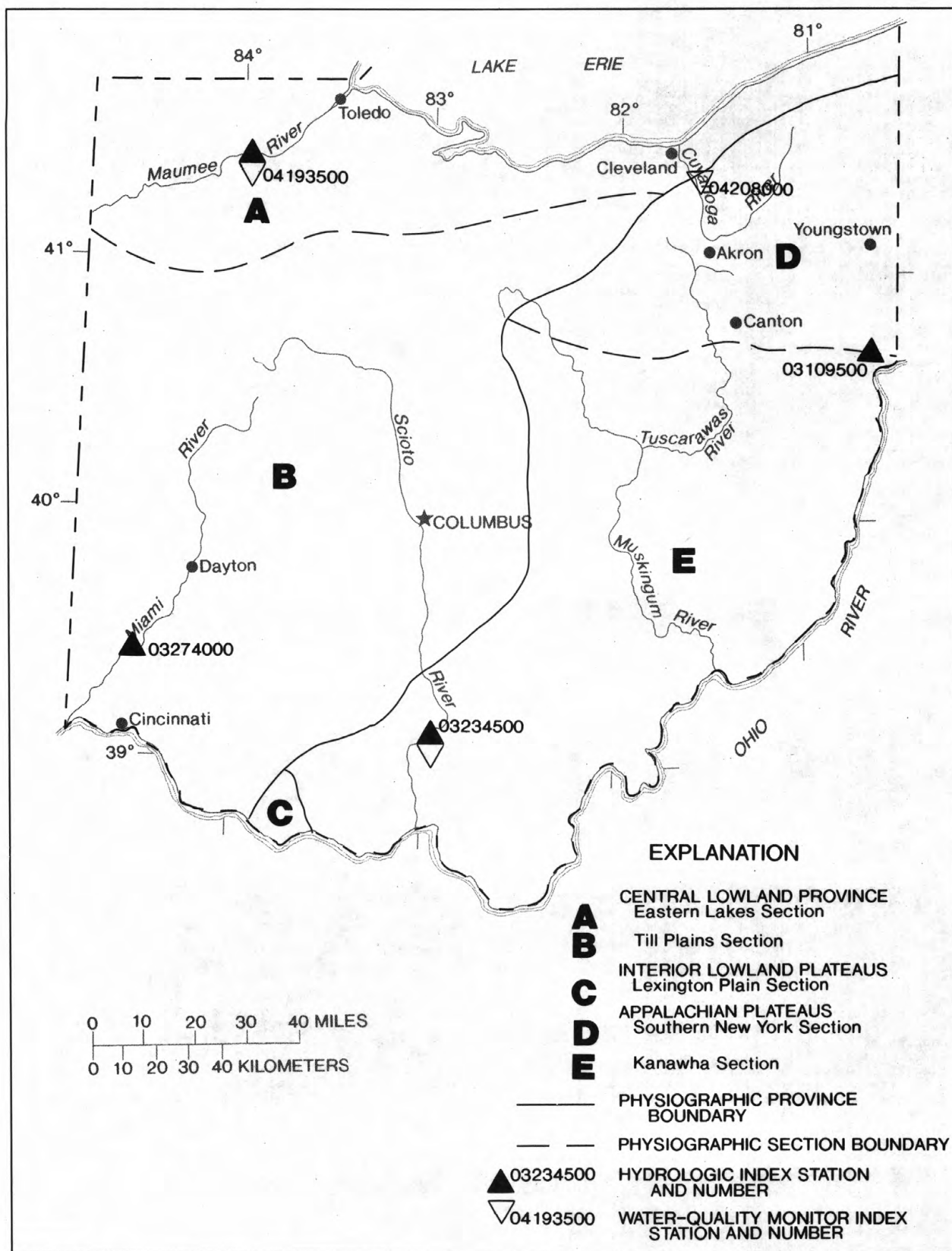


Figure 1.--Physiographic divisions and location of Hydrologic Index Stations.

Precipitation--Continued

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.

Surface WaterStreamflow

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 1990

At the beginning of the 1991 water year, streamflow was above normal¹ statewide following 3 months of above-normal streamflow at the end of 1990. Precipitation for calendar year 1990 was the highest on record (almost 14 inches above the statewide average), and the excessive flows continued through January. In late December, warm temperatures, snowmelt, and 2 to 3 inches of rain caused small-stream and urban flooding throughout much of the State; flooding was most serious in northern Ohio, where flows were in the 25-year-recurrence-interval range. Portage River at Woodville had a peak discharge corresponding to the 100-year recurrence interval.

Streamflow gradually declined into the normal range during the period from February through April in response to a decrease in precipitation. Below-average precipitation prevailed statewide for the remainder of water year 1991, causing streamflow to decline into the below-normal range throughout the State by July. Drought conditions worsened in areas of northeastern and central Ohio, where streamflow remained in the below-normal range for the rest of the year. The remainder of the State was either normal or below normal for the period August through September.

Water Quality

The U.S. Geological Survey collects long-term water-quality data in Ohio at 10 fixed stations (fig. X1). Nine NASQAN (National Stream Quality Accounting Network) 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 six stations, bimonthly at three stations, and monthly at the Benchmark station. Because of the fixed schedule, samples are collected at a variety of streamflows (fig. X2). Samples are analyzed for major anions and cations, nutrients, trace elements, suspended sediment, selected physical properties, and fecal coliform and fecal streptococci. Despite unusual streamflow conditions in this water year, samples were collected over a wide range of discharge at each site.

Box plots of selected constituents measured from 1981 through 1990 are shown in figure X2. Results of analysis of samples collected in water year 1991 are superimposed on the box plots. Chloride concentration, commonly correlated with the presence of municipal or industrial point sources of discharge, was generally less than 100 mg/L. Samples collected, however, were much higher (710 and 760 mg/L). Salt mining and processing in the lower Grand River basin as well as runoff from abandoned chemical-industry properties most likely contribute to the much higher chloride concentrations there. At all sites, the concentration of chloride increased as streamflow decreased.

Nitrate concentration is of concern for public water supplies--the maximum contaminant level is 10 milligrams per liter (as N) for finished drinking water. In Ohio streams, fertilizers are a major source of nitrate. Highest concentrations of nitrate in water year 1991 were found in the same rivers that highest 10-year median concentrations were found--Maumee River and Sandusky River. Two Cuyahoga River samples collected in water year 1991 exceeded the nitrate concentration for the previous 10-year period.

Agricultural runoff and municipal and industrial point discharges are the major sources of phosphorus. Total phosphorus concentrations were greatest and generally most variable in Scioto, Little Miami, and Great Miami Rivers. The basins drained by these rivers contain a mix of agricultural and urban land uses that contribute runoff of agricultural chemicals and municipal and industrial point sources.

At all sites, total dissolved-solids concentrations and fecal coliform bacteria counts for water year 1991 generally followed the distribution for the previous 10-year period. The range of total dissolved-solids concentrations for Grand River near Painesville is much greater than for the other sites.

¹Normal is defined as streamflow between the 25th and 75th percentiles as measured during the base period water years 1951 through 1980.

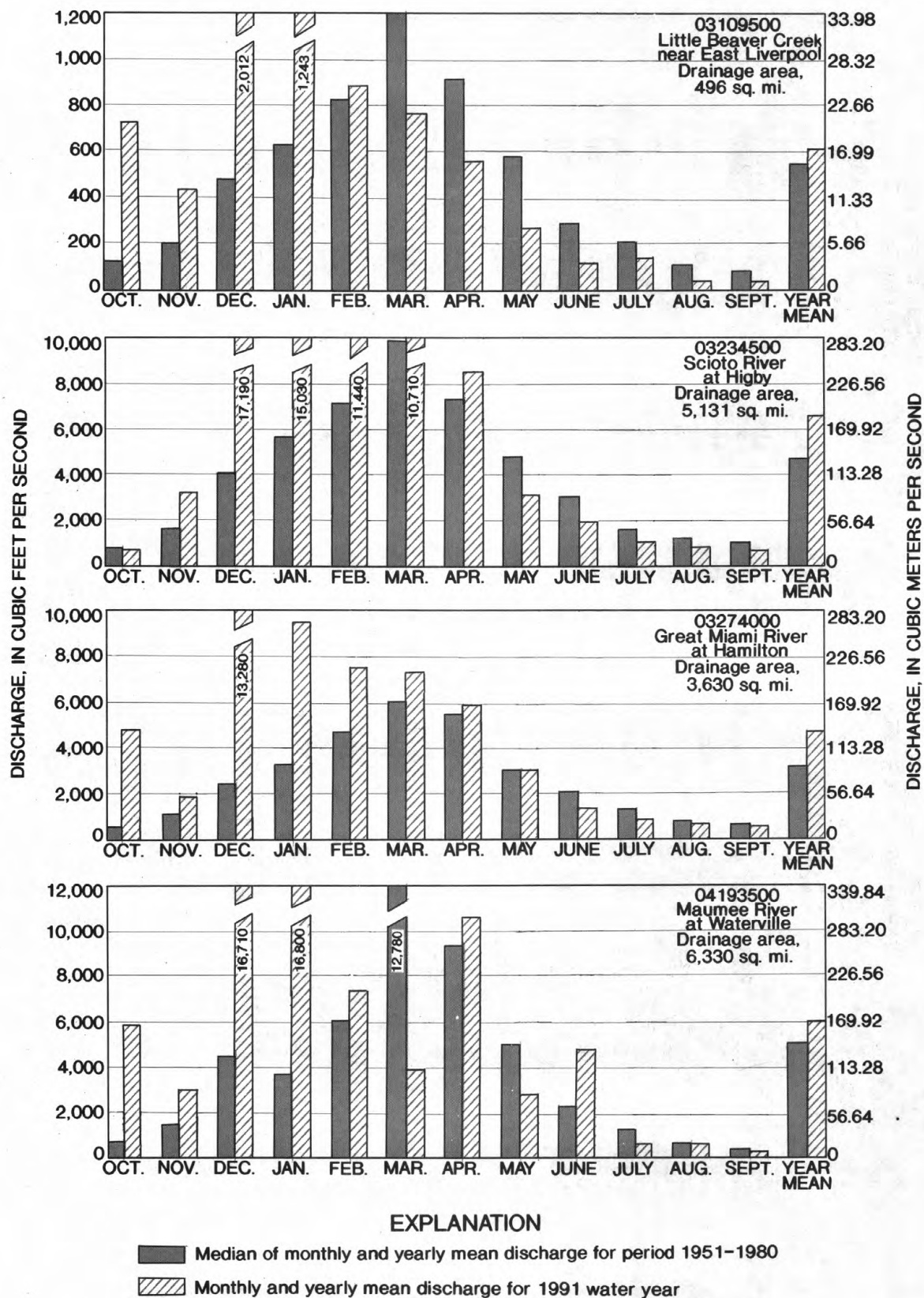


Figure 2.--Runoff during 1991 water year compared with median runoff for period 1951-1980 for four representative gaging stations.

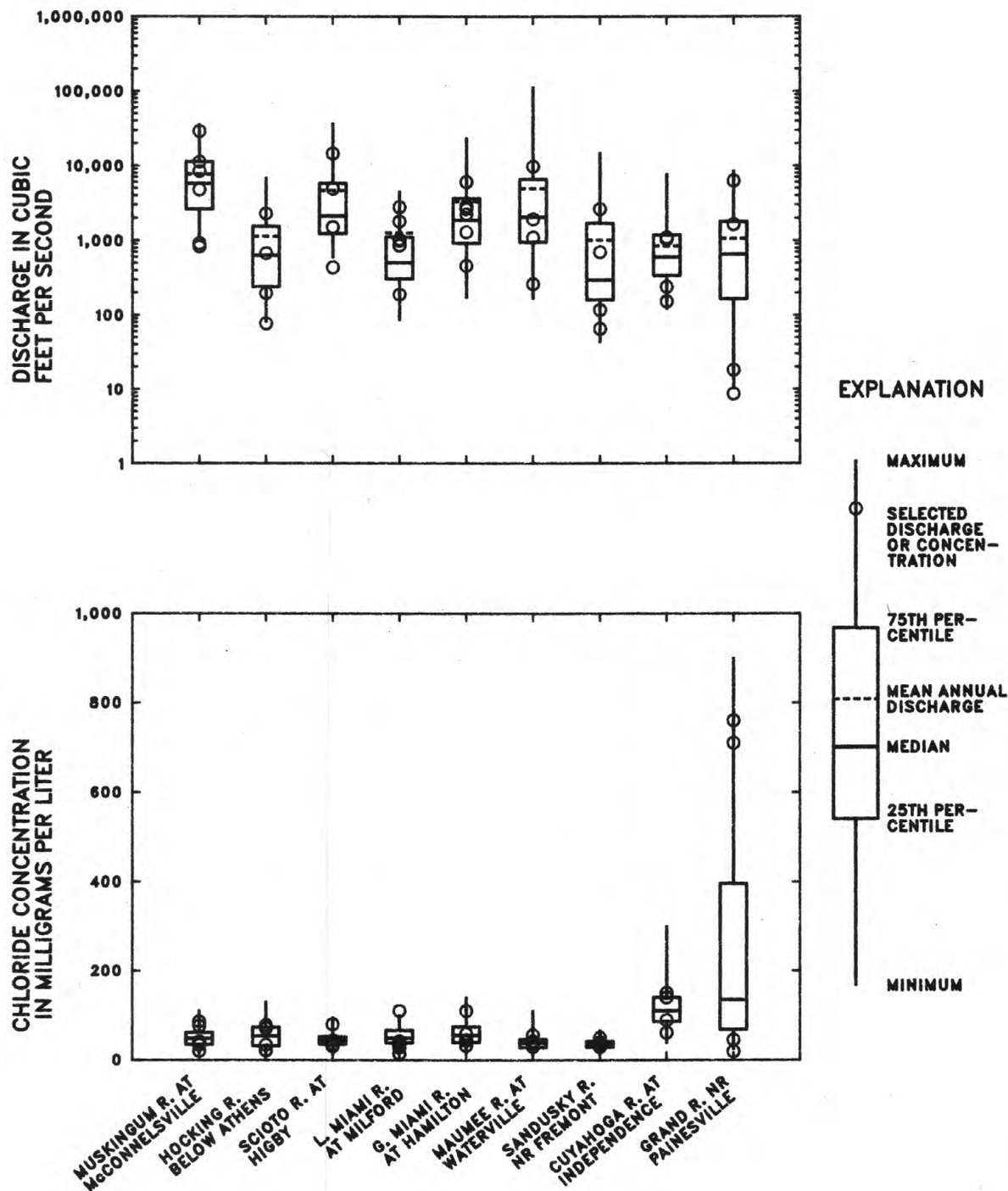


Figure 3.—Discharge and chemical concentrations measured in water year 1991 and the distribution of those constituents from measurements made during water years 1981-90 at NASQAN stations.

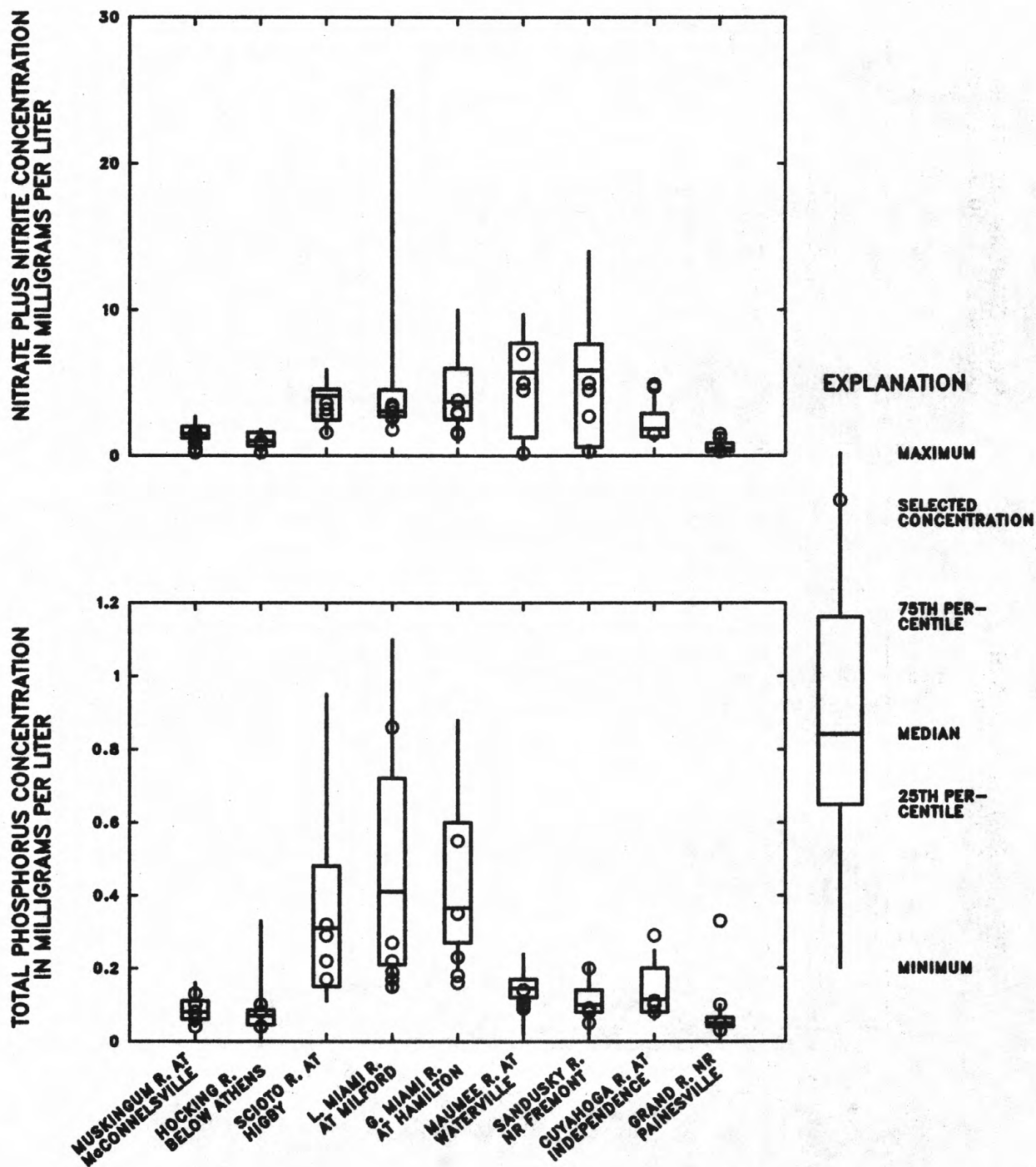


Figure 3.—Discharge and chemical concentrations measured in water year 1991 and the distribution of those constituents from measurements made during water years 1981–90 at NASQAN stations—Continued.

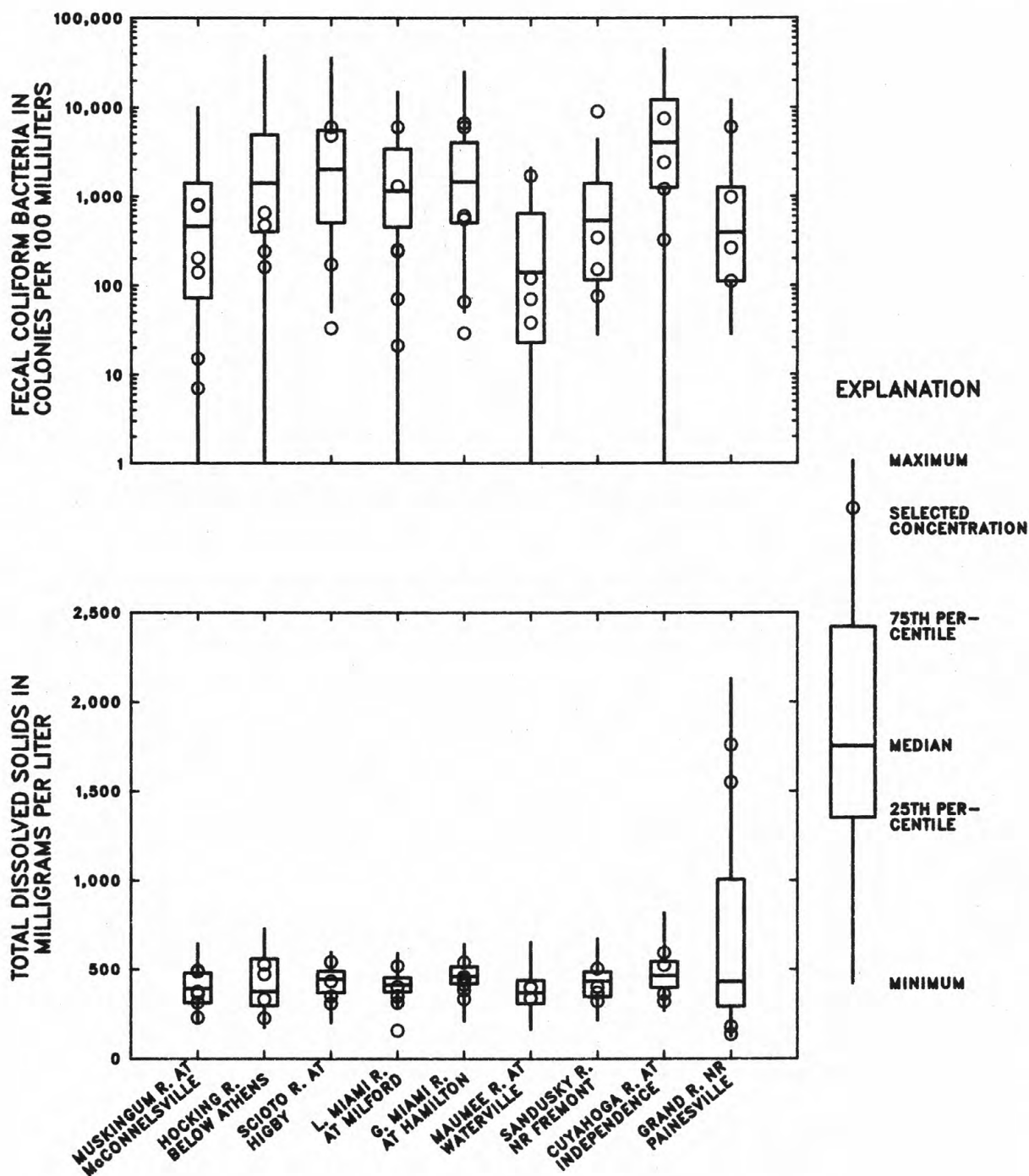


Figure 3.--Discharge and chemical concentrations measured in water year 1991 and the distribution of those constituents from measurements made during water years 1981-90 at NASQAN stations--Continued.

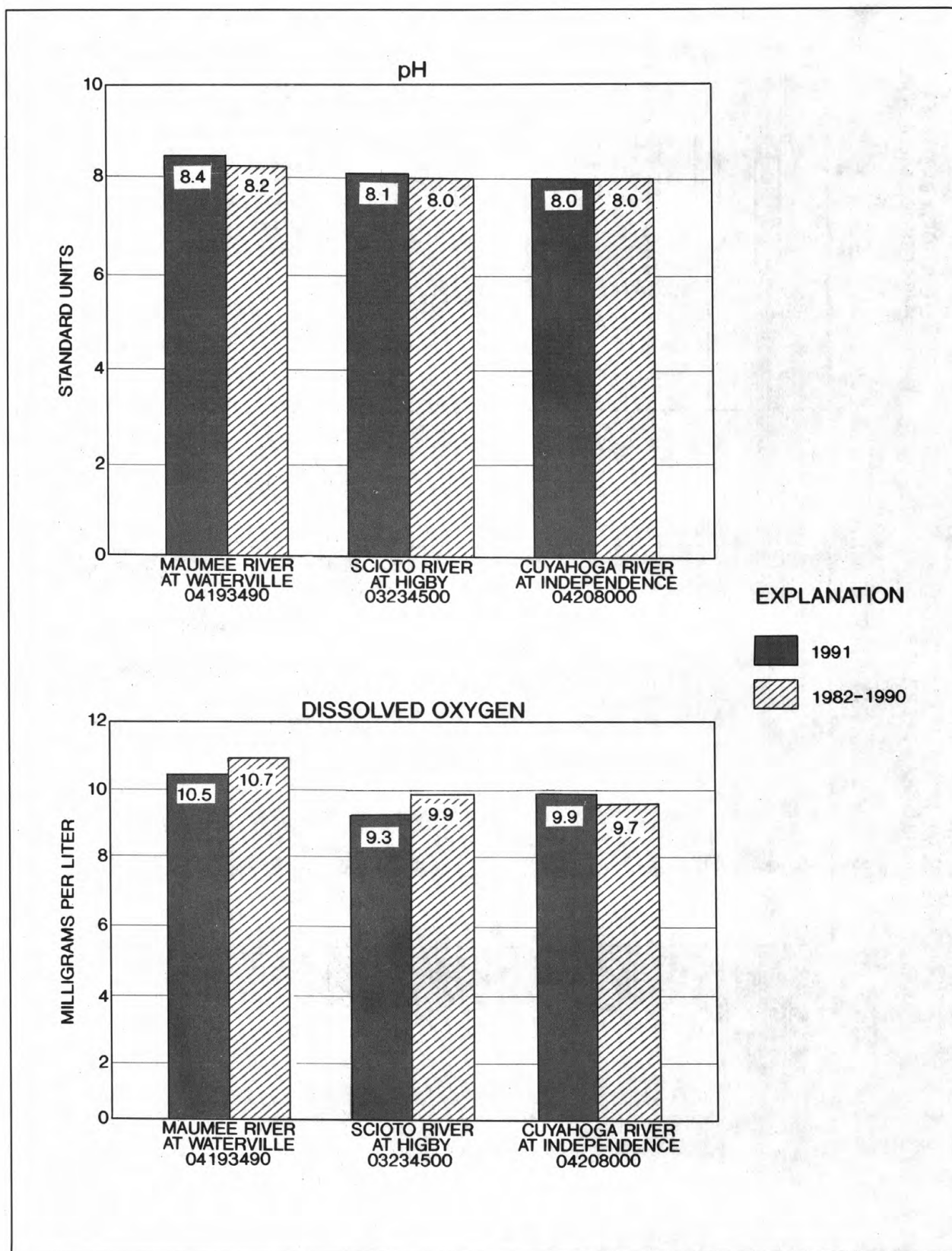


Figure 4.--Comparison of 1991 mean values of pH, dissolved oxygen, temperature, and specific conductance with the average of annual mean values for 1982-1990 for three water-quality-monitor index stations in Ohio.

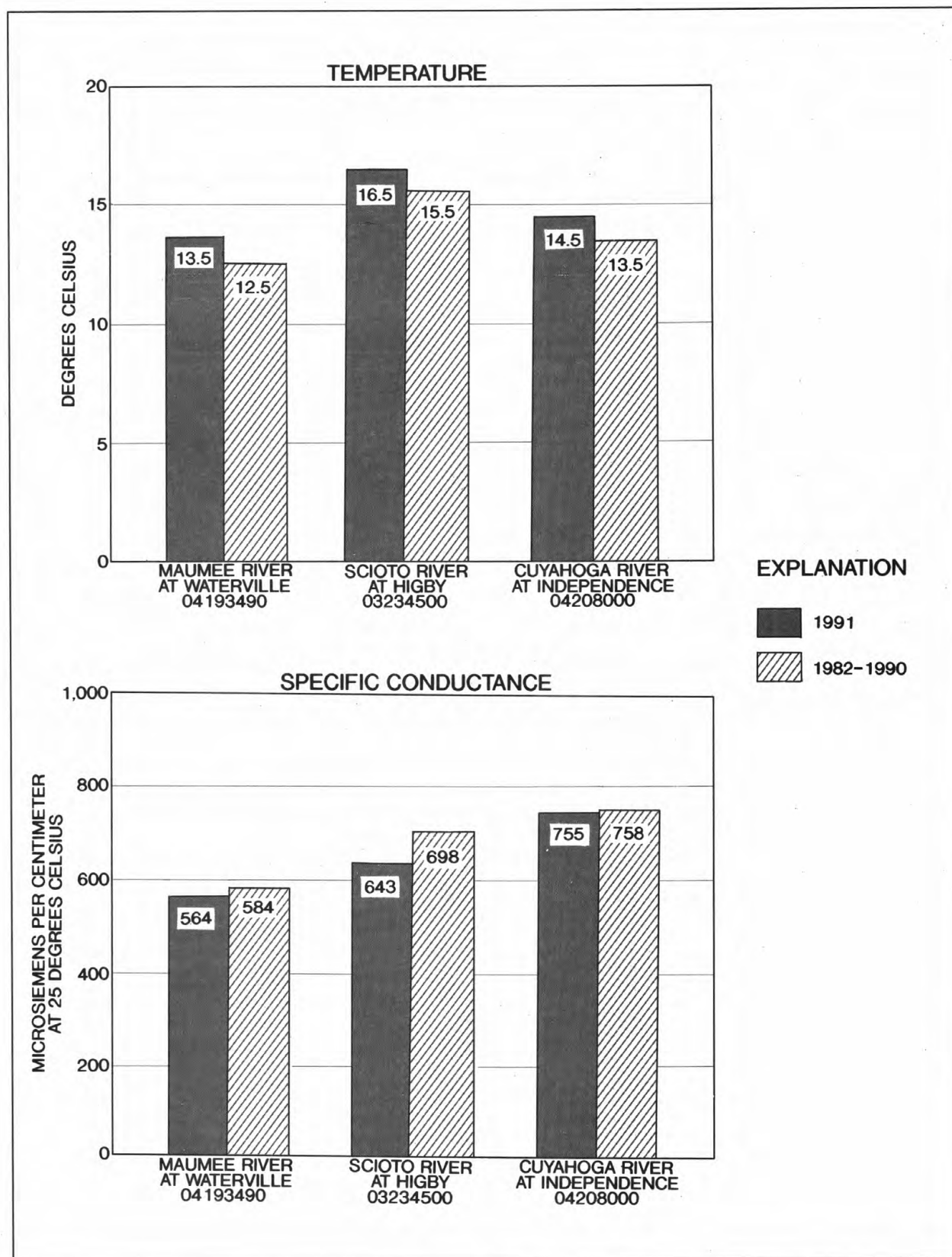


Figure 4.--Comparison of 1991 mean values of pH, dissolved oxygen, temperature, and specific conductance with the average of annual mean values for 1982-1990 for three water-quality-monitor index stations in Ohio--Continued.

Ground Water

Ground water serves the needs of 42 percent of Ohio's population. An estimated 740 million gallons of ground water per day is withdrawn for 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. 5) 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. 5) that yields only small amounts of water to wells. Silurian-age limestone and dolomite and Devonian limestone comprise the carbonate aquifer system (fig. 5) 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 of the ground-water observation wells in Ohio tap unconsolidated sand and gravel aquifers in buried valleys of watercourse systems 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 6. The observation-well network also includes some bedrock wells in areas where consolidated aquifers are heavily used water supplies, such as the carbonate-rock region of northwestern Ohio and various sandstone units of eastern Ohio. Sample 1-year and 5-year hydrographs of a well completed in a confined carbonate-rock aquifer are shown in figure 7. 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 ft.

Ground water levels at the beginning of the 1991 water year were above normal² throughout the State in response to the record high precipitation of 1990. Generally, ground-water levels rose and remained in the above-normal range throughout the period October through January. Record highs were established at several observation wells during these months. In February, above-normal levels continued, despite below-normal precipitation, although there were some declines in shallow, unconsolidated aquifers. In April and May, ground-water levels began to trend downward, although levels generally were close to normal. The decline accelerated in response to well-below-normal precipitation for much of the remainder of the year, primarily in northeastern and central Ohio where extreme drought prevailed. Ground-water levels were generally below normal statewide for the months of July through September, and record lows were established at several observation wells during this period.

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.

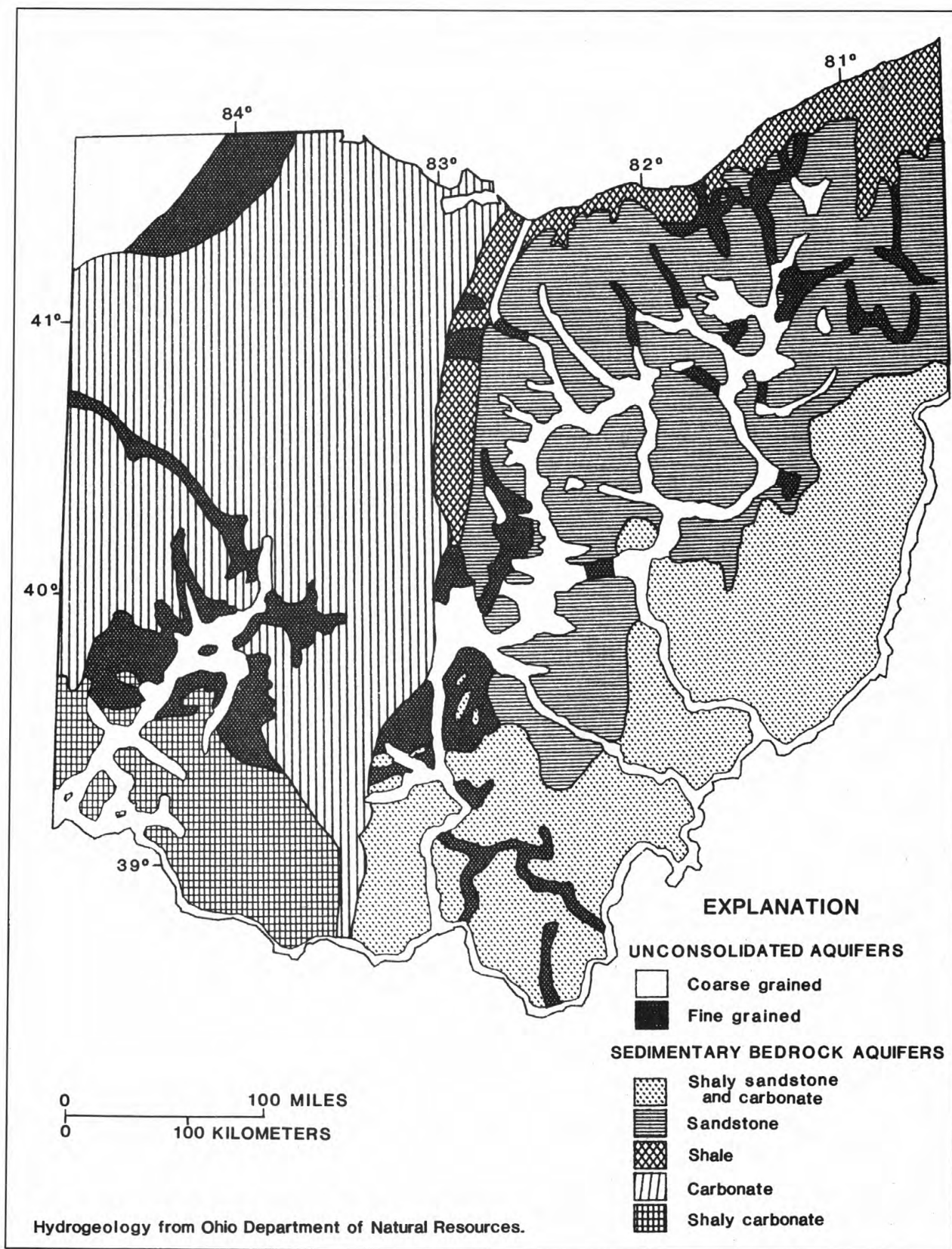


Figure 5.--Geographic distribution of principal aquifers in Ohio.

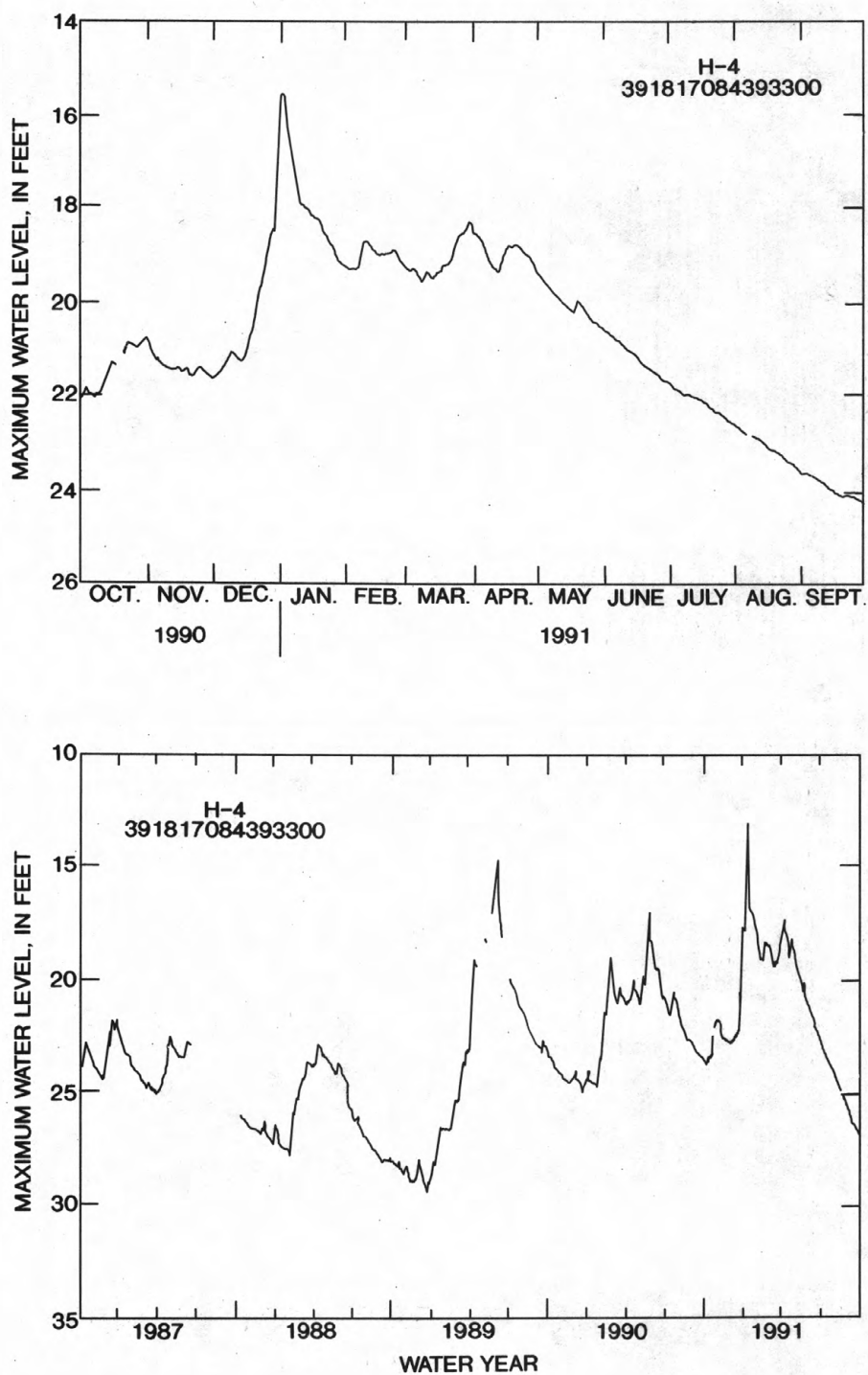


Figure 6.--Sample 1-year and 5-year hydrographs of a well completed in an unconfined unconsolidated aquifer.

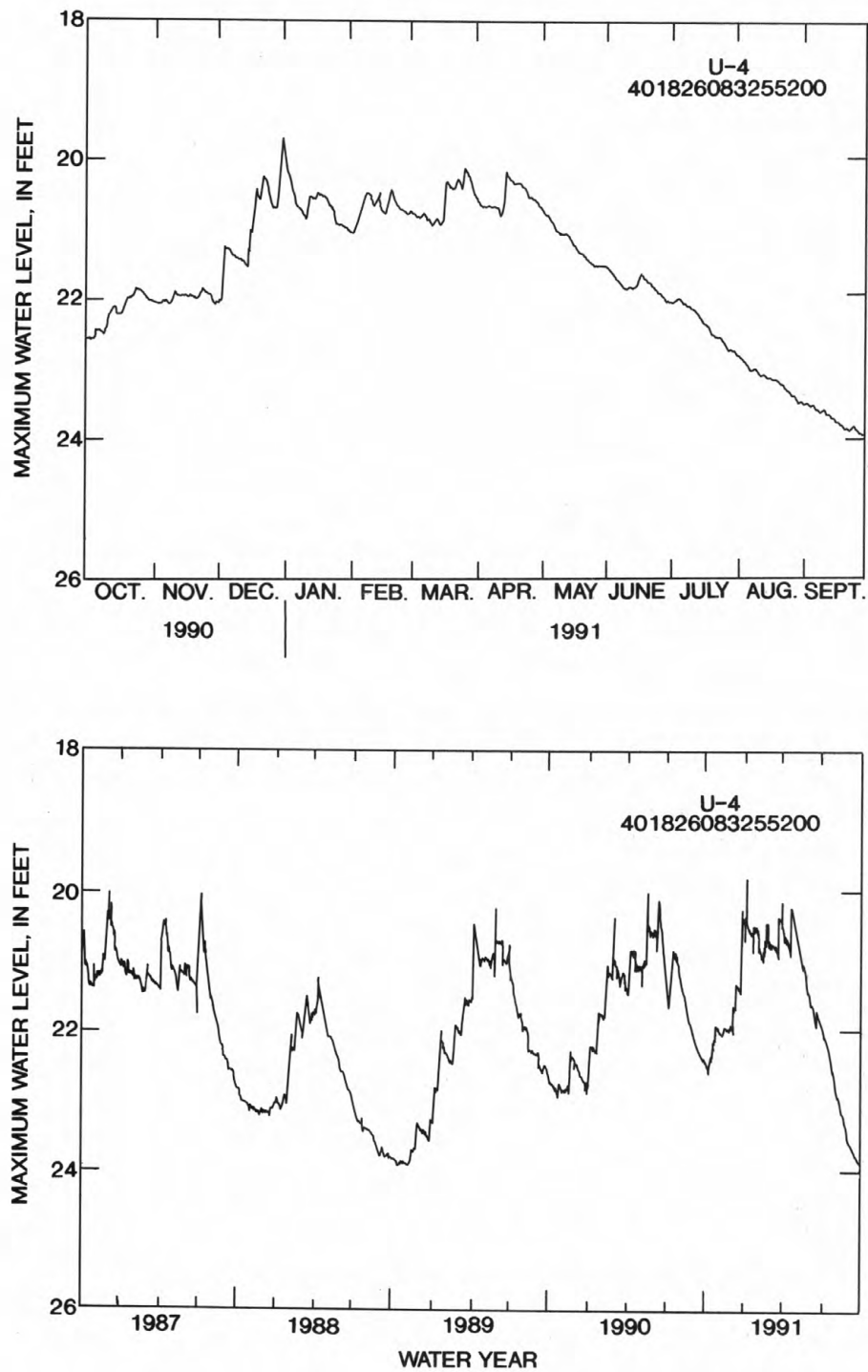


Figure 7.--Sample 1-year and 5-year hydrographs of a well completed in a confined carbonate-rock aquifer.

SPECIAL NETWORKS AND PROGRAM

Hydrologic Bench-Mark Network is a network of 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by human activity.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in general or regional water-quality planning and management. The approximately 500 sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the U.S. 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) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs; (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics; and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

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 1987 water year that began October 1, 1986 and ended September 30, 1987. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for surface and ground water, and ground-water-level data. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station, whether streamsite or wellsite, is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey 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 miscellaneous measurements are made.

Downstream Order System

Since October 1, 1950, the order of listing hydrologic-station records in Survey 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 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 8.)

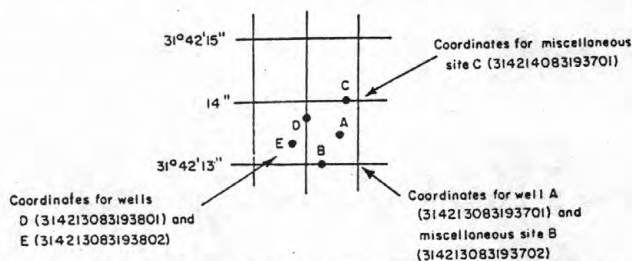


Figure 8.--System for numbering wells and miscellaneous sites (latitude and longitude)

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 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 figure 9.

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 consists 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 cassette tapes at selected time intervals. Measurements of discharge are made with current meters using methods adapted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey 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 the daily mean stages (gage heights) to the stage discharge curves or tables. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors 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, curves, or tables defining the relationship 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 relationship changes because of deposition of sediment in a lake or reservoir, periodic resurveys may be necessary to redefine the relationship. 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 relationships 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.

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.

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

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type 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 National Geodetic Vertical Datum of 1929 (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 and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

AVERAGE DISCHARGE.--The discharge value given is the arithmetic mean of the water-year mean discharges. It is computed only for stations having at least 5 water years of complete record, and only water years of complete record are included in the computation. It is not computed for stations where diversions, storage, or other water-use practices cause the value to be meaningless. If water developments significantly altering flow at the station are put into use after the station has been in operation for a period of years, a new average is computed as soon as 5 water years of record have accumulated following the development.

EXTREMES FOR PERIOD OF RECORD.--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 U.S. Geological Survey.

EXTREMES FOR CURRENT YEAR.--Extremes given here are similar to those for the period of record, except the peak discharge listing may include secondary peaks. 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. The peaks greater than the base discharge, including the highest one, are referred to as secondary peaks. 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 minimum for the current water year appears below the table of peak data.

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.

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.

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 Geological Survey 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 Geological Survey. 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 frequencies.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be 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. 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 figure 9.

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 at miscellaneous sites.

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. A1, A3, and A4. All of these references are listed on p. 21-22 of this report. Also, detailed information on collecting, treating, and shipping samples may be obtained from the Geological Survey 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 punches beginning at 0100 hours and ending at 2400 hours for each day of record. More detailed records (hourly values) may be obtained from the U.S. Geological Survey 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 taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small 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 were 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 Geological Survey 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 Geological Survey laboratory are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

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.

Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter ($\mu\text{g/L}$) 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 monograms per liter (ng/L). Present data above the $\mu\text{g/L}$ 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 U.S. Geological Survey will begin using new trace-element protocols in the near future.

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 Geological Survey 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 U.S. Geological Survey's computerized data 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 U.S. Geological Survey 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 (organisms 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

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 figure 9. 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 (LSD). 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 National Geodetic Vertical Datum of 1929 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 (LSD) is described in feet above (or below) National Geodetic Vertical Datum of 1929 (NGVD of 1929); 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-Survey) 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 U.S. Geological Survey 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 Survey, 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 (LSD), 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 on p. 21-22. 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 National WATER Data STorage and RETrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, VA.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from each of the Water Resources Division's District offices. (See address given on the back of the title page.)

General inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, VA 22092

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 44.5°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 ashed 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^3), and periphyton and benthic organisms in grams per square meter (g/m^2).

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, ft^3/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 manmade 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.

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-nympg-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, ug/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, ug/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, ug/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 Geodetic Vertical Datum of 1929 (NGVD of 1929) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

National Stream-Quality Accounting Network (NASQAN) is a data-collection network designed by the U.S. Geological Survey 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, such as an insect, phytoplankter, or zooplankter.

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 U.S. Geological Survey 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 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 classification is as follows:

<u>Classification</u>	<u>Size (mm)</u>	<u>Method of analysis</u>
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 ($\text{mg C}/(\text{m}^2/\text{time})$) for periphyton and macrophytes and ($\text{mg C}/(\text{m}^3/\text{time})$) for 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 either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time ($\text{mg O}_2/(\text{m}^2/\text{time})$) for periphyton and macrophytes and ($\text{mg O}_2/(\text{m}^3/\text{time})$) for phytoplankton are the 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 drain-age basins in the conterminous United States.

Recoverable from bottom material.--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.) shows 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 emersed 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 plexiglass 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 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 Geological Survey reports dealing with surface-water supply is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 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.

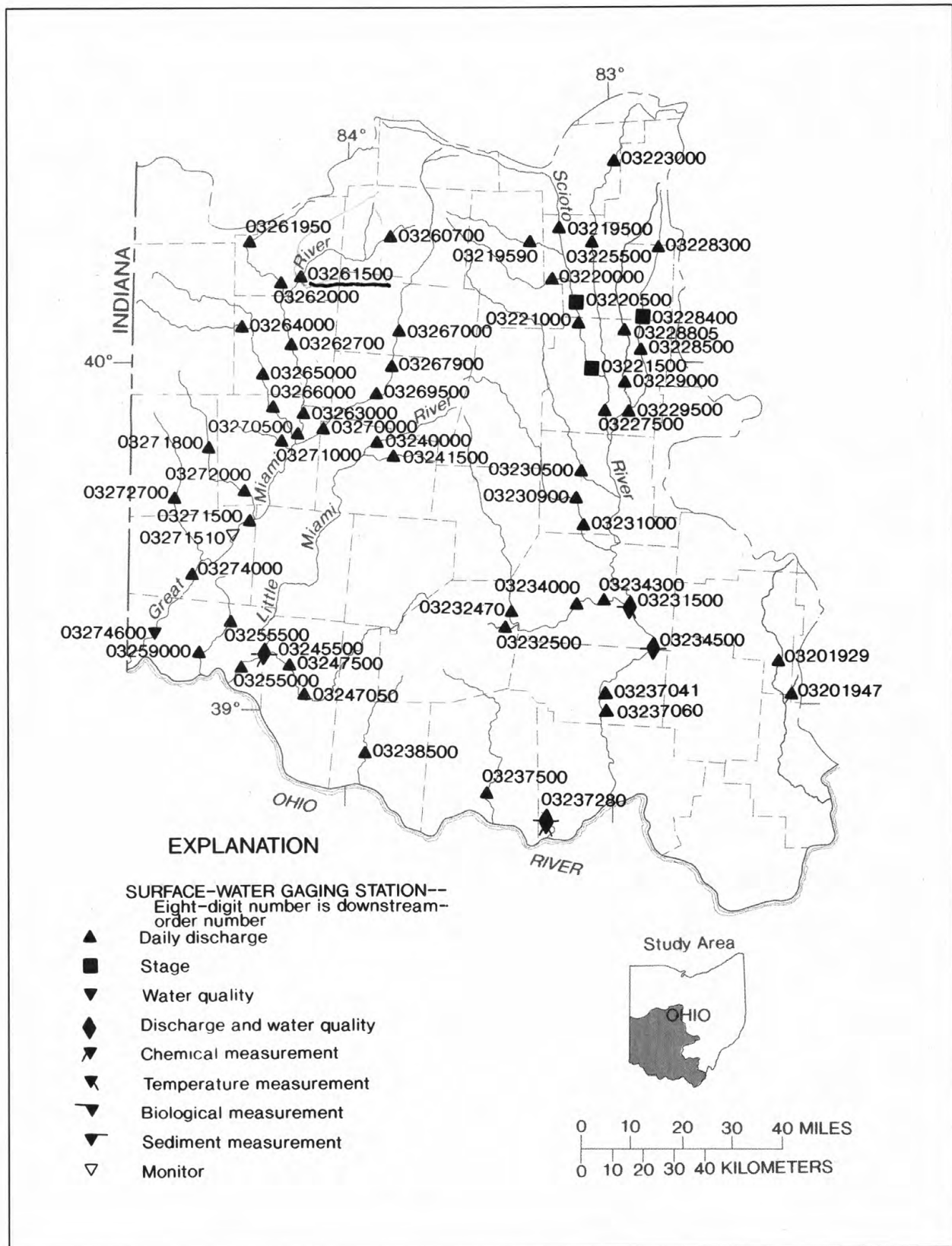


Figure 9a.--Location of data-collection stations.

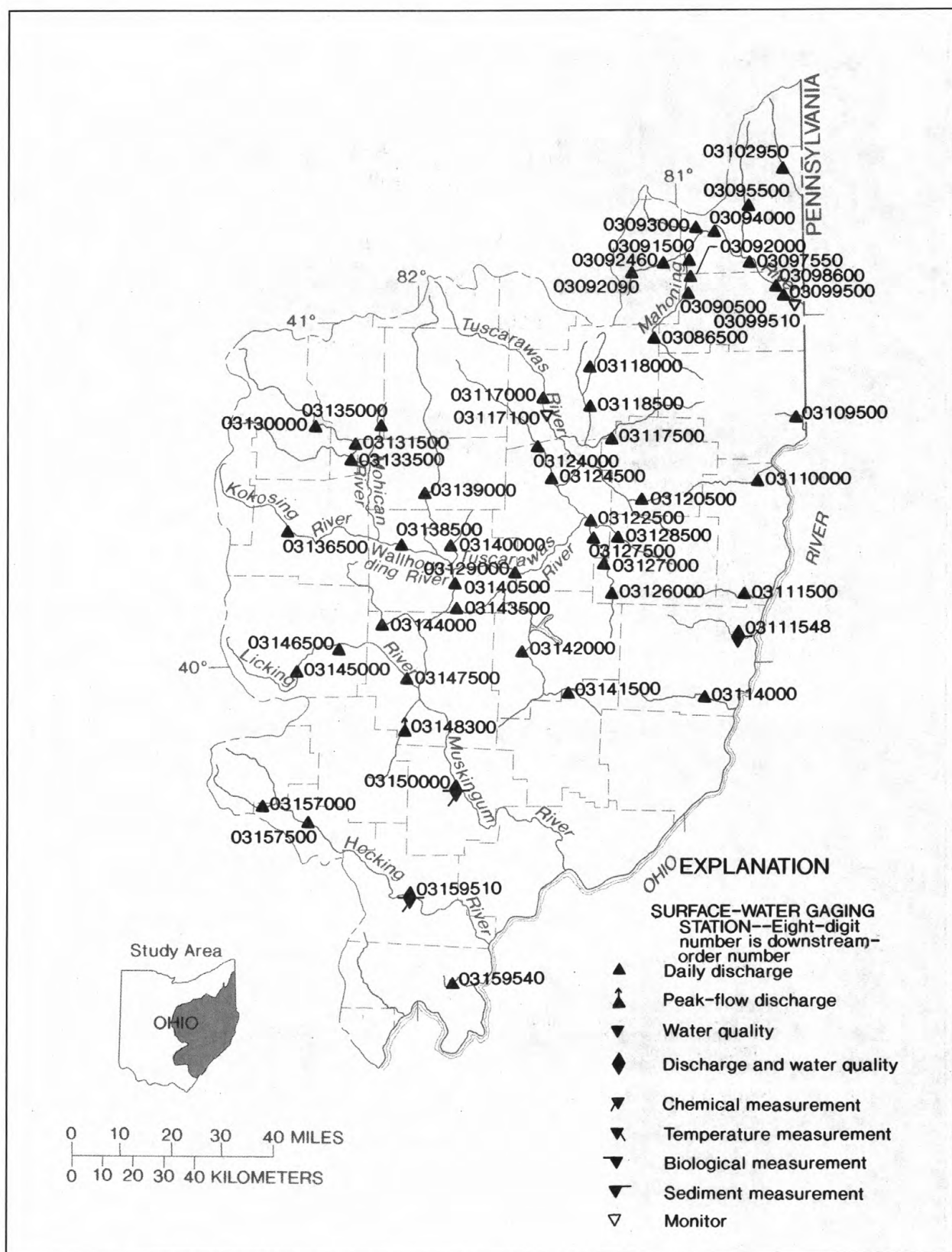


Figure 9b.--Location of data-collection stations.

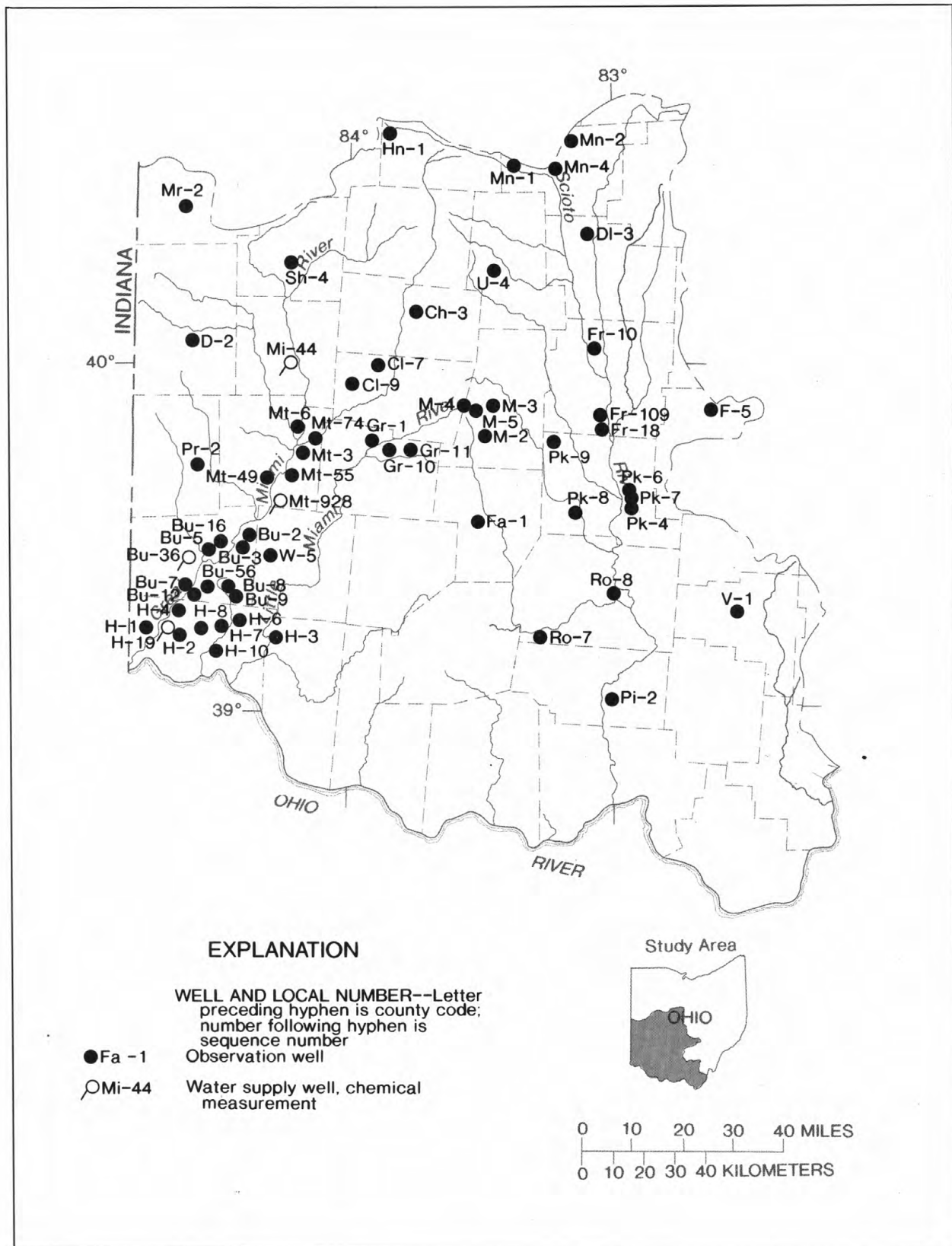


Figure 9c.--Location of wells.

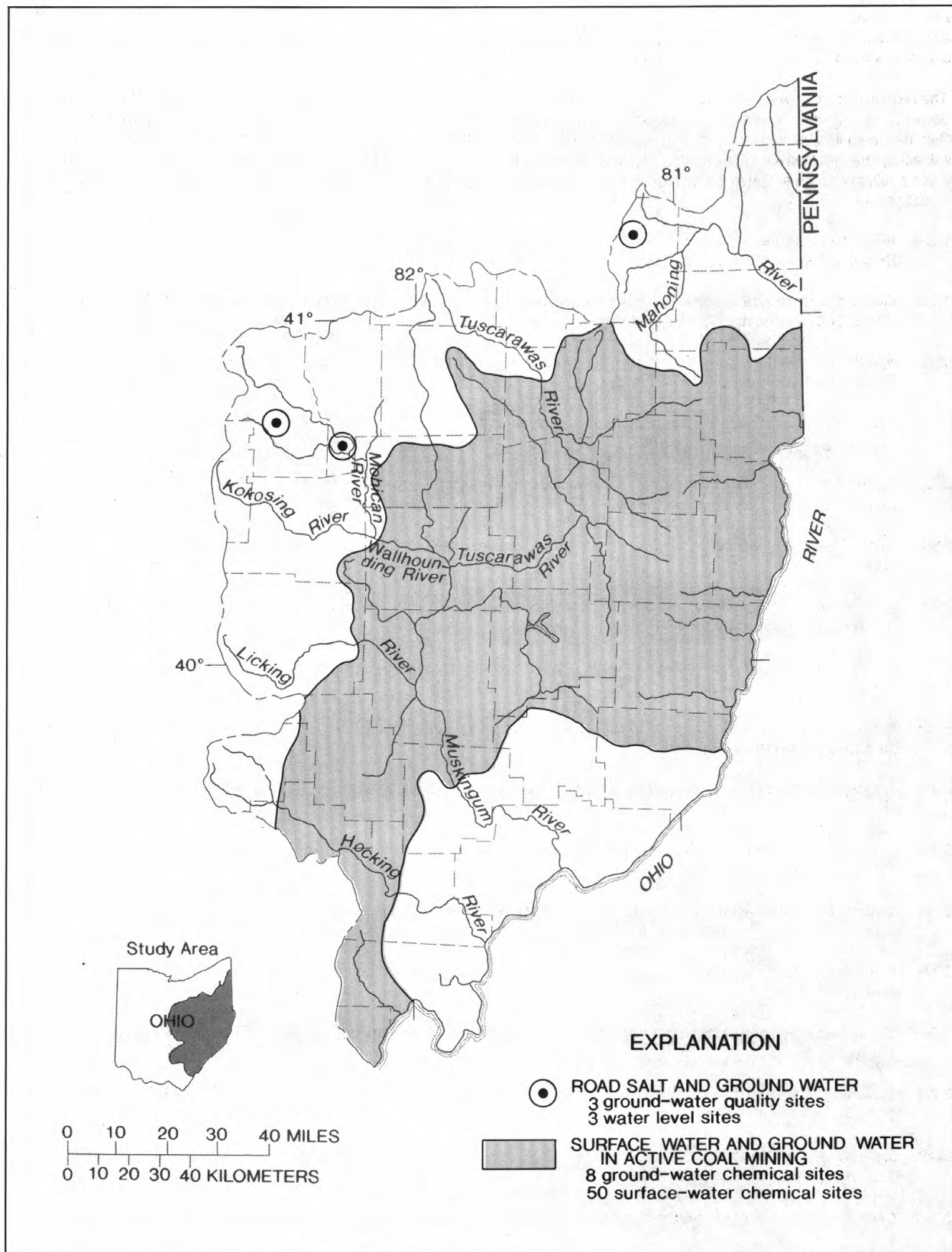


Figure 9d.--Location of data-collections stations for projects, Ohio River basin.

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

The reports listed below are for sale by the U.S. Geological Survey, Books and Open-File Reports Section, Federal Center, Box 25425, 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."

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- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F. P. Haeni: USGS--TWRI Book 2, Chapter D2. 1988. 86 pages.
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- 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*, by J. F. Wilson, Jr., E. D. Cobb, and F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A12. 1986. 41 pages.
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HYDROLOGIC-DATA STATION RECORDS

OHIO RIVER BASIN

BEAVER RIVER BASIN

03086500 MAHONING RIVER AT ALLIANCE, OH

LOCATION.--Lat 40°55'58", long 81°05'41", in SE 1/4 sec. 24, T.19 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 waterworks dam, and 4 mi upstream from Beech Creek.

DRAINAGE AREA.--89.2 mi².

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

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 1,037.3 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 23-29. Records fair except those for periods of estimated record which are poor. Flow slightly regulated by Westville Reservoir 9.3 mi upstream from station. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--50 years, 90.8 ft³/s, 13.83 in/yr, unadjusted for diversion 1941-55.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,740 ft³/s Jan. 21, 1959, gage height, 9.11 ft, from rating curve extended above 3,300 ft³/s on basis of computation of peak flow over dam; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 13	1300	904	3.22	Dec. 31	0200	*2,950	5.50
Dec. 19	0700	1,710	4.29	Feb. 20	0200	1,040	3.41
Dec. 23	2400	1,150	3.56	Mar. 7	0900	1,410	3.93

Minimum daily discharge, 0 ft³/s Sept. 25-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	47	48	579	46	63	35	38	17	12	2.6	3.3
2	45	44	49	231	43	71	38	35	15	11	2.6	4.4
3	37	42	221	160	86	102	33	29	11	9.7	3.1	5.1
4	171	43	684	102	180	579	32	26	9.1	17	2.5	5.5
5	352	54	363	84	245	415	38	30	8.8	20	2.2	5.3
6	140	102	158	129	212	380	42	84	7.0	11	2.5	5.1
7	86	81	128	109	357	1160	36	53	7.9	10	2.6	3.7
8	38	72	94	82	299	489	29	36	7.4	173	3.1	4.1
9	61	60	86	81	143	193	60	32	7.1	49	6.2	3.4
10	277	108	82	87	109	149	145	28	7.2	18	3.1	6.4
11	225	110	75	115	81	123	82	26	12	9.8	3.1	5.9
12	321	98	68	517	54	99	54	24	30	7.2	3.3	4.0
13	785	81	64	340	55	92	45	26	12	7.4	2.8	3.5
14	462	68	53	145	165	84	58	26	8.0	6.8	2.9	4.6
15	185	61	187	106	173	77	163	20	6.9	5.2	3.0	3.7
16	108	51	357	310	80	71	221	16	6.4	3.6	3.1	3.8
17	81	71	155	580	77	63	126	18	6.0	3.9	4.4	3.3
18	109	65	504	271	76	68	95	16	8.7	2.1	6.1	3.8
19	187	54	1430	137	542	74	78	15	31	3.0	6.8	5.6
20	111	48	590	119	936	68	87	14	8.4	3.2	6.3	5.2
21	84	46	310	129	489	57	84	14	6.6	2.6	4.4	5.9
22	85	53	462	82	205	55	107	14	8.5	2.8	3.5	6.3
23	252	161	699	50	129	71	82	15	8.0	8.3	3.2	7.4
24	242	101	864	45	96	74	72	15	7.5	12	3.1	1.2
25	135	72	331	40	81	63	72	15	6.7	6.0	2.8	.00
26	100	62	163	36	65	55	56	16	5.9	3.3	2.7	.00
27	81	54	113	34	50	56	50	25	5.4	3.1	3.1	.00
28	66	53	105	32	49	54	47	21	5.2	2.6	3.1	.00
29	61	54	222	30	---	44	49	18	5.0	2.9	3.1	.00
30	55	51	1130	89	---	42	48	16	9.6	3.0	2.9	.00
31	53	---	1900	109	---	34	---	19	---	2.6	2.9	---
TOTAL	5066	2067	11695	4960	5123	5025	2164	780	295.3	432.1	107.1	110.50
MEAN	163	68.9	377	160	183	162	72.1	25.2	9.84	13.9	3.45	3.68
MAX	785	161	1900	580	936	1160	221	84	31	173	6.8	7.4
MIN	37	42	48	30	43	34	29	14	5.0	2.1	2.2	.00
CFSM	1.83	.77	4.23	1.79	2.05	1.82	.81	.28	.11	.16	.04	.04
IN.	2.11	.86	4.88	2.07	2.14	2.10	.90	.33	.12	.18	.04	.05

CAL YR 1990 TOTAL 55130.0 MEAN 151 MAX 1900 MIN 4.6 CFSM 1.69 IN. 22.99
WTR YR 1991 TOTAL 37825.00 MEAN 104 MAX 1900 MIN .00 CFSM 1.16 IN. 15.77

BEAVER RIVER BASIN

03090500 MAHONING RIVER BELOW BERLIN DAM, NEAR BERLIN CENTER, OH

LOCATION.--Lat 41°02'54", long 81°00'05", in T.1 N., R.6 W., Mahoning County, Hydrologic Unit 05030103, on left bank 600 ft downstream from Berlin Dam, and 3.2 mi northwest of Berlin Center.

DRAINAGE AREA.--248 mi².

PERIOD OF RECORD.--October 1930 to September 1991 (discontinued). Prior to October 1942, published as "near Berlin Center".

REVISED RECORDS.--WSP 743: 1932. WSP 853: 1936. WSP 873: 1932-34, 1935(M), 1936-38. WSP 1907: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 958.00 ft above National Geodetic Vertical Datum of 1929, (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1942, at site 1.8 mi upstream at datum 966.15 ft above mean sea level, adjustment of 1912, levels by Mahoning Valley Sanitary District. Oct 1, 1942, to May 11, 1949, at site 200 ft downstream from present site at datum 8.00 ft lower than present datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since 1942 by Berlin Lake. Occasional small diversion during drought periods since 1958 from Berlin Lake to Meander Creek Reservoir, by the Berlin pipeline; diversion not included in figures of daily discharge. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--61 years, 241 ft³/s (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,630 ft³/s Jan. 25, 1937 gage height, 10.97 ft, site and datum then in use; no flow at times during 1948-49, 1967, 1970-71.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,230 ft³/s Jan. 3, gage height, 3.71 ft; minimum daily discharge, 21 ft³/s July 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	495	586	218	432	302	173	52	100	158	155	209	180
2	508	441	218	980	297	143	39	62	158	155	193	180
3	530	292	181	1220	297	146	39	38	158	139	184	165
4	404	292	201	1210	297	149	39	38	175	130	184	131
5	325	246	436	1210	299	348	39	38	188	102	184	116
6	328	218	598	1200	303	313	38	30	188	84	184	116
7	330	218	474	1200	302	181	38	24	188	85	184	116
8	330	218	395	1200	421	559	38	32	188	49	184	116
9	461	218	395	1190	496	1090	38	38	188	21	184	96
10	544	218	395	1190	496	1180	39	37	188	71	182	83
11	545	219	395	898	506	1180	55	37	188	111	180	83
12	548	270	290	839	506	798	64	37	172	145	180	83
13	552	302	223	1100	375	260	64	83	161	151	180	83
14	552	302	223	1180	298	145	65	116	161	151	180	83
15	855	298	226	1180	302	145	67	116	161	151	180	83
16	1150	297	225	1180	307	145	94	116	161	151	180	83
17	1160	297	223	1180	302	145	115	116	161	151	180	83
18	1160	297	147	1170	303	145	116	116	161	152	180	83
19	1160	297	87	1170	310	99	117	116	161	155	180	83
20	1150	250	353	1170	435	69	118	116	161	155	179	83
21	1140	218	417	1170	818	69	120	116	161	158	176	83
22	1130	218	241	1160	1120	69	121	116	160	158	176	82
23	1130	218	247	1150	1160	69	121	116	158	158	176	82
24	1120	218	436	1070	1150	69	121	116	171	158	176	83
25	1110	218	697	898	940	69	123	116	180	163	176	83
26	1060	218	776	774	607	69	124	116	180	183	191	82
27	1020	218	1040	748	385	69	124	116	180	184	201	81
28	1010	218	1180	487	251	69	124	158	180	184	201	81
29	840	218	722	299	---	69	124	184	180	200	205	81
30	643	218	250	297	---	69	109	184	165	209	190	81
31	590	---	248	301	---	69	---	168	---	209	180	---
TOTAL	23880	7956	12157	30453	13585	8172	2485	2912	5140	4428	5719	2948
MEAN	770	265	392	982	485	264	82.8	93.9	171	143	184	98.3
MAX	1160	586	1180	1220	1160	1180	124	184	188	209	209	180
MIN	325	218	87	297	251	69	38	24	158	21	176	81

CAL YR 1990 TOTAL 137981 MEAN 378 MAX 1190 MIN 33
WTR YR 1991 TOTAL 119835 MEAN 328 MAX 1220 MIN 21

BEAVER RIVER BASIN

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 National Geodetic Vertical Datum of 1929. 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. 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.

AVERAGE DISCHARGE.--62 years, 264 ft³/s (unadjusted).

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; minimum daily, 0.4 ft³/s Nov. 9, 1941, Feb. 19, 20, Oct. 11, 1945.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,430 ft³/s Jan. 5, gage height, 5.56 ft; minimum daily discharge, 12 ft³/s Mar. 29 to Apr. 7, Apr. 27, 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	595	670	283	438	429	163	12	13	137	151	175	151
2	527	511	283	955	429	131	12	14	137	151	146	151
3	457	371	236	1350	429	132	12	14	139	151	133	151
4	359	371	289	1380	429	136	12	13	152	152	146	153
5	303	321	541	1420	429	396	12	14	160	164	158	153
6	303	283	749	1420	429	405	12	14	160	151	163	153
7	303	283	635	1400	426	263	12	40	161	149	163	153
8	303	283	568	1400	536	688	14	36	163	147	163	153
9	408	283	568	1390	625	1230	15	20	164	144	163	153
10	603	283	568	1390	621	1330	13	20	165	160	163	153
11	698	283	564	1040	555	1330	13	20	166	175	163	153
12	698	324	448	757	512	972	13	20	168	166	163	153
13	697	350	360	1110	416	325	13	36	171	159	163	150
14	694	350	309	1340	353	131	13	49	172	158	163	149
15	1000	350	275	1370	353	131	14	46	174	156	163	149
16	1300	350	275	1290	353	131	14	46	176	154	163	149
17	1290	350	275	1220	353	131	14	65	177	152	163	149
18	1300	350	199	1220	353	131	14	82	178	157	162	149
19	1290	350	142	1220	360	86	15	82	181	163	160	149
20	1290	314	367	1190	450	56	15	84	182	161	160	149
21	1290	286	439	1190	827	56	15	86	184	160	160	149
22	1280	286	282	1220	1180	56	15	86	185	159	160	149
23	1280	286	285	1170	1240	56	14	86	186	158	160	149
24	1280	286	436	1010	1240	55	14	86	189	158	160	149
25	1280	286	655	778	1030	32	14	86	164	158	160	149
26	1150	286	773	672	728	15	13	86	145	156	160	147
27	1070	286	1100	689	480	15	12	86	146	156	160	146
28	1070	285	1300	526	271	13	12	127	148	156	162	146
29	955	283	817	429	---	12	13	161	149	164	163	146
30	760	283	280	429	---	12	13	160	150	175	157	148
31	673	---	278	429	---	12	---	145	---	175	152	---
TOTAL	26506	9883	14579	32842	15836	8632	399	1923	4929	4896	4950	4501
MEAN	855	329	470	1059	566	278	13.3	62.0	164	158	160	150
MAX	1300	670	1300	1420	1240	1330	15	161	189	175	175	153
MIN	303	283	142	429	271	12	12	13	137	144	133	146

CAL YR 1990 TOTAL 155304 MEAN 425 MAX 1370 MIN 17
WTR YR 1991 TOTAL 129876 MEAN 356 MAX 1420 MIN 12

BEAVER RIVER BASIN

37

03092000 KALE CREEK NEAR PRICETOWN, OH

LOCATION.--Lat 41°08'23", long 80°59'43", in T.3 N., R.5 W., Trumbull County, Hydrologic Unit 05030103, on right bank at downstream side of private road bridge, 0.4 mi north of Mahoning-Trumbull County line, 1.5 mi northwest of Pricetown, 2.2 mi upstream from mouth, and 3.5 mi south of Newton Falls.

DRAINAGE AREA.--21.9 mi².

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

REVISED RECORDS.--WSP 973: 1942. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 914.70 ft above National Geodetic Vertical Datum of 1929. Prior to June 27, 1941, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 24-29. Records fair except those for periods of estimated discharge, which are poor. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--51 years, 23.3 ft³/s, 14.45 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,890 ft³/s Jan. 21, 1959, gage height, 8.52 ft; no flow at times in 1952-55, 1962-66, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	0100	836	5.48	Feb. 19	2330	549	4.49
Dec. 23	1600	549	4.49	Mar. 7	0230	616	4.74
Dec. 30	1930	*979	*5.91				

Minimum daily discharge, 0.04 ft³/s Aug. 29, 30, Sept. 1, 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	5.7	5.4	38	35	13	4.8	3.8	1.8	.26	.09	.04
2	6.8	5.0	5.0	20	9.4	15	4.8	2.9	1.8	.24	.09	.04
3	6.9	5.1	96	14	20	31	4.5	2.4	1.1	.27	.08	.05
4	44	5.6	205	11	46	230	4.0	2.0	.74	.28	.08	.07
5	68	8.5	51	5.9	62	70	5.9	2.0	.49	.33	.06	.07
6	14	23	25	9.7	50	207	8.4	21	.32	.60	.06	.06
7	7.1	18	19	13	93	312	7.7	11	.30	.91	.06	.05
8	5.2	11	16	9.7	48	40	7.9	5.0	.25	7.6	.05	.05
9	23	9.4	12	8.4	25	21	19	3.1	.24	4.7	.09	.05
10	219	41	10	11	18	17	51	2.5	.21	1.6	.07	.07
11	88	39	9.1	25	13	19	20	1.8	.36	.66	.07	.07
12	104	24	7.9	183	8.2	13	10	1.7	2.1	.36	.06	.06
13	169	18	7.4	48	6.8	11	7.6	3.1	1.8	.29	.06	.06
14	42	12	6.5	23	58	9.6	11	129	1.3	.26	.06	.06
15	21	9.0	58	17	55	8.2	57	19	1.1	.25	.06	.06
16	13	8.5	74	162	45	6.8	65	4.6	.98	.19	.05	.05
17	9.2	14	24	127	32	5.9	39	1.5	.80	.15	.05	.06
18	14	15	295	41	13	6.6	32	.71	.69	.15	.06	.06
19	33	10	429	20	228	11	18	.43	.55	.13	.06	.06
20	15	8.3	45	19	236	10	36	.35	.40	.12	.06	.06
21	10	7.1	78	22	44	8.1	33	.40	.37	.15	.06	.06
22	11	7.7	231	16	27	7.1	40	.43	.34	.13	.06	.05
23	45	38	343	11	17	17	24	.43	.30	.15	.05	.07
24	30	22	102	5.0	12	24	14	.37	.31	.17	.05	.07
25	16	15	44	3.8	11	23	12	.51	.35	.22	.05	.10
26	11	12	15	3.2	8.9	13	8.6	.56	.30	.19	.05	.08
27	8.7	9.6	9.5	2.6	7.4	12	7.2	.82	.28	.17	.05	.06
28	7.6	9.1	8.4	2.4	6.9	12	6.1	1.4	.26	.14	.05	.06
29	8.6	7.9	76	2.3	---	9.4	5.3	1.6	.24	.12	.04	.06
30	6.0	6.3	604	19	---	7.0	4.8	1.4	.26	.10	.04	.06
31	5.8	---	325	47	---	5.3	---	1.7	---	.10	.05	---
TOTAL	1069.9	424.8	3236.2	940.0	1235.6	1195.0	568.6	227.51	20.34	20.99	1.87	1.82
MEAN	34.5	14.2	104	30.3	44.1	38.5	19.0	7.34	.68	.68	.060	.061
MAX	219	41	604	183	236	312	65	129	2.1	7.6	.09	.10
MIN	5.2	5.0	5.0	2.3	6.8	5.3	4.0	.35	.21	.10	.04	.04
CFSM	1.58	.65	4.77	1.38	2.02	1.76	.87	.34	.03	.03	.00	.00
IN.	1.82	.72	5.50	1.60	2.10	2.03	.97	.39	.03	.04	.00	.00

CAL YR 1990 TOTAL 14233.59 MEAN 39.0 MAX 821 MIN .11 CFSM 1.78 IN. 24.18
WTR YR 1991 TOTAL 8942.63 MEAN 24.5 MAX 604 MIN .04 CFSM 1.12 IN. 15.19

BEAVER RIVER BASIN

03092090 WEST BRANCH MAHONING RIVER NEAR RAVENNA, OH

LOCATION.--Lat 41°09'41", long 81°11'50", in T.3 N., R.8 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.--21.8 mi².

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,011.8 ft above Portage County bench mark.

REMARKS.--Estimated daily discharges: Jan. 23-29. Records fair except those for periods of estimated records, which are poor. Water-quality data collected at this site 1966 to 1978. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--26 years, 28.2 ft³/s, 17.57 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,810 ft³/s Sept. 14, 1979, inside gage height 8.63 ft, outside gage height, 9.34 ft; minimum, 0.02 ft³/s July 7, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 10	0230	717	5.46	Dec. 23	0800	576	5.02
Oct. 12	1800	502	4.76	Dec. 30	1230	*1,320	*6.94
Dec. 3	2400	558	4.96	Feb. 19	2300	464	4.62
Dec. 18	2000	741	5.53	Mar. 6	2100	491	4.72

Minimum daily discharge, 0.80 ft³/s Aug. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	13	9.7	63	24	30	13	13	6.0	6.0	1.1	1.1
2	58	12	9.2	41	22	40	14	11	4.0	3.5	1.0	1.1
3	45	11	166	32	40	49	13	9.6	3.1	4.5	.96	1.3
4	146	11	301	27	69	112	12	8.3	2.3	4.8	1.1	12
5	71	16	52	20	76	65	26	11	1.9	8.7	.96	2.5
6	20	49	33	27	51	217	25	24	1.7	8.5	.93	1.8
7	11	25	28	27	58	217	18	13	1.6	8.3	.80	1.4
8	8.2	20	24	26	38	52	15	9.6	1.4	20	.94	1.0
9	57	17	20	21	28	32	17	9.8	1.3	8.7	3.8	1.4
10	413	39	19	23	25	29	31	8.4	1.3	4.5	2.1	2.5
11	143	29	16	41	19	26	19	7.8	7.1	3.1	1.7	2.6
12	220	26	14	109	16	21	14	7.4	6.0	2.5	1.3	2.5
13	217	20	14	48	17	20	16	15	4.1	3.0	1.4	2.0
14	57	16	12	32	50	19	23	31	4.7	4.5	1.4	2.8
15	33	15	45	28	34	17	116	11	1.8	3.0	1.2	3.5
16	23	15	42	156	31	15	57	7.3	2.7	2.4	1.1	2.8
17	17	32	26	139	28	14	67	6.1	1.9	2.0	1.7	2.9
18	68	25	380	51	27	17	35	5.1	1.6	2.0	4.6	2.8
19	62	18	243	33	215	26	55	4.1	1.5	1.8	3.1	3.3
20	31	14	50	36	253	21	89	3.6	1.8	2.4	10	2.5
21	23	12	49	36	76	17	57	3.2	2.6	4.4	4.9	3.8
22	67	23	106	28	57	21	45	3.0	3.5	2.3	2.3	2.7
23	103	50	332	18	35	41	28	2.5	4.3	7.0	1.9	3.5
24	43	27	93	15	26	44	29	2.5	4.2	5.7	1.8	3.3
25	29	23	36	13	24	33	24	2.9	4.0	3.3	1.6	4.8
26	23	18	25	12	20	23	20	2.4	3.9	2.3	1.3	3.1
27	19	15	23	11	19	21	18	2.9	4.0	1.9	1.4	2.4
28	16	15	18	10	20	20	16	4.8	4.1	1.4	1.4	1.9
29	15	12	107	10	---	17	20	3.9	4.4	1.4	1.5	1.9
30	13	11	967	39	---	14	17	5.8	4.9	1.3	1.5	1.3
31	13	---	242	37	---	12	---	11	---	1.1	1.4	---
TOTAL	2114.2	629	3501.9	1209	1398	1302	949	261.0	97.7	136.3	62.19	82.5
MEAN	68.2	21.0	113	39.0	49.9	42.0	31.6	8.42	3.26	4.40	2.01	2.75
MAX	413	50	967	156	253	217	116	31	7.1	20	10	12
MIN	8.2	11	9.2	10	16	12	12	2.4	1.3	1.1	.80	1.0
CFSM	3.13	.96	5.18	1.79	2.29	1.93	1.45	.39	.15	.20	.09	.13
IN.	3.61	1.07	5.98	2.06	2.39	2.22	1.62	.45	.17	.23	.11	.14

CAL YR 1990 TOTAL 16507.9 MEAN 45.2 MAX 967 MIN 1.3 CFSM 2.07 IN. 28.17
WTR YR 1991 TOTAL 11742.79 MEAN 32.2 MAX 967 MIN .80 CFSM 1.48 IN. 20.04

LOCATION.--Lat 41°09'25", long 81°04'19", in T.3 N., R.6 W., Portage County, Hydrologic Unit 05030103, on right bank 200 ft upstream from bridge on Wayland Road, 0.4 mi downstream from Michael J. Kirwan Dam, and 0.2 mi south of Wayland.

PERIOD OF RECORD.--October 1968 to September 1991 (discontinued). Prior to October 1969 published as "West Branch Mahoning River below West Branch Dam, at Wayland."

REMARKS.--No estimated daily discharges. Records good. Flow completely regulated by Michael J. Kirwan Reservoir. Water-quality data collected at this site 1969 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,380 ft³/s Feb. 25, 1971, gage height, 11.82 ft present datum; minimum daily, 2.5 ft³/s Apr. 9, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 799 ft³/s Dec. 29, gage height, 8.67 ft; minimum daily, 26 ft³/s Apr. 3, 4, 6-9, 12, 13, 23-26.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	484	66	30	195	72	52	27	78	100	117	113	103
2	415	203	30	499	72	54	27	109	100	117	113	102
3	310	471	45	660	73	56	26	123	100	117	112	102
4	231	530	103	657	73	58	26	128	108	117	112	102
5	292	527	211	655	99	56	27	128	86	117	112	94
6	376	529	246	654	118	60	26	133	94	117	111	88
7	375	519	245	650	118	65	26	138	122	117	111	87
8	374	514	244	646	153	83	26	138	122	89	110	87
9	266	511	243	644	179	83	26	145	122	66	110	87
10	162	515	242	641	178	83	28	155	122	95	108	87
11	82	508	241	491	142	59	27	158	123	115	108	87
12	54	322	187	421	89	46	26	158	108	115	108	87
13	47	165	140	555	70	37	26	160	89	115	107	86
14	43	165	109	629	73	30	27	172	91	115	106	86
15	44	164	82	625	97	29	40	140	99	115	107	86
16	45	164	67	647	116	29	29	126	99	115	107	86
17	43	133	66	635	115	29	30	126	89	115	106	87
18	51	94	96	623	115	29	27	126	99	116	106	86
19	53	82	73	617	135	28	29	126	99	116	106	87
20	52	71	164	515	161	28	29	134	99	116	105	86
21	52	64	202	441	260	27	27	140	99	116	105	78
22	57	65	117	312	318	28	27	139	99	116	104	72
23	61	66	129	152	316	29	26	146	99	116	104	72
24	56	65	112	88	315	29	26	150	99	117	104	64
25	55	64	211	74	256	28	26	150	109	116	103	58
26	56	58	382	74	149	27	26	156	116	115	103	57
27	58	30	598	74	78	28	36	168	117	115	103	57
28	60	30	788	73	64	28	53	139	117	115	103	56
29	61	30	462	73	---	28	60	111	117	114	102	56
30	63	30	157	75	---	27	60	112	117	114	102	45
31	65	---	103	72	---	27	---	107	---	114	103	---
TOTAL	4443	6755	6125	13167	4004	1300	922	4219	3160	3490	3314	2418
MEAN	143	225	198	425	143	41.9	30.7	136	105	113	107	80.6
MAX	484	530	788	660	318	83	60	172	123	117	113	103
MIN	43	30	30	72	64	27	26	78	86	66	102	45
CAL YR 1990	TOTAL 52548	MEAN 144	MAX 788	MIN 20								
WTR YR 1991	TOTAL 53317	MEAN 146	MAX 788	MIN 26								

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 National Geodetic Vertical Datum of 1929, (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: Jan. 22-29. 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.

AVERAGE DISCHARGE.--62 years, 113 ft³/s, 15.73 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,150 ft³/s Sept. 15, 1979, gage height, 13.71 ft; minimum daily, 0.9 ft³/s Aug. 4, 1939.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 11	0100	2,270	11.34	Dec. 31	0100	*5,050	*12.98
Dec. 4	2100	1,670	10.54	Feb. 20	1600	1,470	10.17
Dec. 19	1330	2,280	11.35	Mar. 7	1530	1,850	10.84
Dec. 24	0400	1,750	10.67				

Minimum daily 9.6 ft³/s Sept. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	71	63	672	116	124	80	85	87	23	13	9.7
2	44	69	60	236	104	172	83	78	77	22	12	9.7
3	37	67	187	177	135	215	79	73	49	19	12	9.6
4	148	65	1180	133	233	438	75	68	38	18	12	13
5	527	65	870	111	297	341	91	66	32	22	12	22
6	168	146	216	129	254	509	139	110	28	25	12	14
7	82	132	160	138	255	1390	101	85	26	19	11	12
8	63	91	131	116	207	593	86	79	25	74	11	11
9	73	81	108	110	149	205	90	70	24	68	14	10
10	1030	116	97	117	125	165	161	67	24	28	16	12
11	1470	167	89	123	111	154	132	64	24	21	13	18
12	670	130	82	393	93	127	92	59	45	19	12	16
13	968	114	79	373	86	115	85	55	38	20	12	12
14	609	88	75	185	173	110	118	74	27	21	12	12
15	201	77	107	147	217	101	445	130	24	18	12	12
16	130	72	268	388	137	92	741	59	23	17	11	11
17	101	121	155	867	161	87	300	46	22	16	11	11
18	100	148	371	377	124	93	258	42	22	15	13	12
19	271	98	1740	188	291	127	168	40	22	15	16	11
20	183	82	644	166	1130	118	456	37	20	14	14	11
21	118	75	225	171	606	97	376	35	20	14	13	11
22	163	73	422	118	287	95	242	34	19	15	14	11
23	470	217	847	96	195	172	176	32	19	18	13	12
24	345	160	1270	80	140	245	138	30	20	52	12	15
25	162	119	297	72	128	240	133	31	19	24	11	16
26	120	102	170	66	115	143	110	32	18	17	11	16
27	99	86	126	60	101	123	99	31	18	15	11	14
28	90	83	125	56	99	115	92	33	17	14	10	14
29	86	76	191	54	---	100	99	36	19	13	10	14
30	79	68	2120	113	---	88	104	35	19	14	9.9	12
31	75	---	3370	175	---	81	---	75	---	14	9.9	---
TOTAL	8738	3059	15845	6207	6069	6775	5349	1791	865	704	375.8	384.0
MEAN	282	102	511	200	217	219	178	57.8	28.8	22.7	12.1	12.8
MAX	1470	217	3370	867	1130	1390	741	130	87	74	16	22
MIN	37	65	60	54	86	81	75	30	17	13	9.9	9.6
CFSM	2.89	1.04	5.24	2.05	2.22	2.24	1.83	.59	.30	.23	.12	.13
IN.	3.33	1.17	6.04	2.37	2.31	2.58	2.04	.68	.33	.27	.14	.15

CAL YR 1990 TOTAL 74020 MEAN 203 MAX 3370 MIN 19 CFSM 2.08 IN. 28.21
WTR YR 1991 TOTAL 56161.8 MEAN 154 MAX 3370 MIN 9.6 CFSM 1.58 IN. 21.41

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 National Geodetic Vertical Datum of 1929. 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. 24 to Jan. 2, Jan. 22 to Feb. 6, Feb. 16-18. Records good except for periods of estimated record which are fair. 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.

AVERAGE DISCHARGE.--51 years, 593 ft³/s.

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. Flood of Jan. 25 or 26, 1937 reached a stage of 17.8 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,010 ft³/s Dec. 31, gage height 14.68 ft; minimum daily, 144 ft³/s Apr. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1160	820	395	5000	720	514	158	207	390	241	316	266
2	1090	771	387	2800	620	506	158	217	355	243	309	267
3	892	753	680	2230	760	660	153	238	307	239	256	270
4	945	915	2390	2320	900	1630	144	245	281	254	271	307
5	1340	931	2440	2280	1100	1400	172	248	301	259	277	294
6	1110	956	1630	2340	1200	1970	255	336	248	265	296	273
7	824	1020	1390	2360	1270	3280	211	349	290	265	297	262
8	755	920	1160	2300	1240	2110	179	313	300	471	299	257
9	838	885	1090	2280	1200	1790	215	258	298	337	313	257
10	2680	1000	1050	2280	1120	1900	397	256	296	234	307	267
11	3440	1160	1020	2260	1040	1870	365	253	312	275	303	269
12	2290	1050	967	2340	887	1690	221	248	339	283	298	272
13	2760	851	707	2370	785	891	179	249	291	273	296	263
14	2220	728	626	2420	838	419	219	534	259	272	301	258
15	1370	682	648	2360	1150	356	687	478	263	271	295	252
16	1640	666	1050	2870	920	329	1420	282	266	267	293	248
17	1610	746	754	3650	820	315	818	247	262	265	291	248
18	1600	781	1430	2970	780	314	642	270	251	266	300	247
19	1820	638	3910	2340	1360	335	408	269	260	278	301	246
20	1760	576	2100	2200	3040	285	800	263	258	282	297	242
21	1610	478	1590	2080	2360	245	869	276	255	292	290	243
22	1650	470	1980	1800	2140	245	607	275	255	300	286	231
23	2130	716	2790	1600	2090	398	464	269	256	322	286	237
24	2160	737	3200	1400	1950	605	327	275	255	337	282	236
25	1770	598	2400	1200	1850	580	299	278	251	318	281	235
26	1580	549	1600	1000	1350	359	246	278	233	298	280	221
27	1350	494	1300	780	960	279	213	289	236	290	279	215
28	1300	419	1600	840	634	259	205	317	235	287	280	212
29	1250	434	2100	700	---	224	226	330	236	290	280	212
30	1040	410	4500	880	---	188	244	345	239	316	279	210
31	851	---	6600	1000	---	165	---	429	---	317	270	---
TOTAL	48835	22154	55484	65250	35084	26111	11501	9121	8278	8907	9009	7517
MEAN	1575	738	1790	2105	1253	842	383	294	276	287	291	251
MAX	3440	1160	6600	5000	3040	3280	1420	534	390	471	316	307
MIN	755	410	387	700	620	165	144	207	233	234	256	210

CAL YR 1990 TOTAL 361555 MEAN 991 MAX 6600 MIN 149
WTR YR 1991 TOTAL 307251 MEAN 842 MAX 6600 MIN 144

BEAVER RIVER BASIN

03095500 MOSQUITO CREEK BELOW MOSQUITO CREEK DAM, NEAR CORTLAND, OH

LOCATION.--Lat 41°17'59", long 80°45'31", in T.5 N., R.3 W., Trumbull County, Hydrologic Unit 05030103, on right bank 100 ft downstream from Mosquito Creek Dam, 0.8 mi upstream from Confusion Run, and 2.5 mi southwest of Cortland.

DRAINAGE AREA.--97.5 mi².

PERIOD OF RECORD.--May 1926 to September 1929 (published as "near Cortland"), May 1943 to September 1991 (discontinued).

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 873.98 ft above U.S. Army Corps of Engineers bench mark. Prior to Aug. 23, 1943, nonrecording gage, and Aug. 23, 1943 to Feb. 14, 1951, water-stage recorder, at site 900 ft downstream at datum 6.63 ft lower.

REMARKS.--No estimated daily discharges. Records fair. Flow completely regulated by Mosquito Creek Lake beginning 1943. Diversion at lake outlet for municipal supply of city of Warren since May 1954; diversion not included in figures of daily discharge. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--51 years, 89.1 ft³/s (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,890 ft³/s Jan. 19, 1929, gage height, 11.5 ft, from floodmark, site and datum then in use; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 900 ft³/s Jan. 13, gage height, 4.25 ft, minimum daily 1.6 ft³/s Sept. 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	178	89	63	138	54	81	9.3	8.1	6.7	105	128	47
2	178	89	64	480	34	53	9.6	8.1	6.5	105	128	47
3	122	89	45	680	33	53	9.6	8.1	6.1	105	128	47
4	93	89	33	764	36	53	9.6	8.1	7.0	117	128	47
5	147	89	111	799	38	124	9.6	8.1	9.5	124	128	33
6	180	90	182	795	37	111	9.6	8.1	8.1	124	116	24
7	181	91	181	803	37	53	9.6	8.6	8.4	124	109	24
8	181	91	180	808	57	230	9.6	8.6	7.8	87	99	24
9	181	91	180	819	79	548	9.6	8.6	7.6	64	94	25
10	182	91	180	846	79	657	9.9	8.6	7.1	106	94	25
11	183	91	180	612	80	656	10	8.8	7.0	124	94	10
12	183	91	127	553	82	420	10	9.1	8.1	124	94	2.0
13	184	91	91	764	82	101	10	9.1	8.1	124	94	1.7
14	183	91	93	874	82	44	10	9.6	19	124	94	1.7
15	310	91	93	870	132	44	10	9.6	27	124	94	1.6
16	416	91	93	866	163	25	10	9.6	27	124	94	8.9
17	413	92	93	871	163	13	10	9.6	27	124	84	15
18	413	93	43	753	163	12	10	9.6	44	124	79	15
19	440	93	9.6	558	163	11	10	9.6	54	124	79	15
20	453	70	92	290	175	10	10	9.5	71	124	79	15
21	453	56	111	177	312	10	10	9.1	82	124	79	15
22	452	56	45	118	412	10	8.5	9.1	82	124	77	15
23	452	56	45	79	412	10	8.1	9.1	82	124	66	15
24	434	56	45	83	336	10	7.4	9.0	82	115	58	15
25	340	56	125	86	289	10	8.1	8.6	82	109	57	7.1
26	409	68	339	84	289	10	8.1	8.6	82	117	57	3.1
27	408	64	466	83	223	10	8.1	8.2	88	141	57	3.8
28	407	64	484	85	147	9.6	8.1	7.7	100	153	57	7.7
29	335	64	264	86	---	9.6	8.4	8.7	105	138	56	10
30	219	64	29	86	---	9.6	8.4	7.2	105	128	51	10
31	126	---	30	86	---	9.6	---	6.9	---	128	47	---
TOTAL	8836	2397	4116.6	14996	4189	3407.4	279.2	269.3	1257.0	3702	2699	530.6
MEAN	285	79.9	133	484	150	110	9.31	8.69	41.9	119	87.1	17.7
MAX	453	93	484	874	412	657	10	9.6	105	153	128	47
MIN	93	56	9.6	79	33	9.6	7.4	6.9	6.1	64	47	1.6
(+)	22.1	19.0	19.6	21.2	21.9	20.5	21.1	23.2	24.0	23.3	23.2	21.8

CAL YR 1990 TOTAL 45838.1 MEAN 126 MAX 484 MIN 4.0 (+) 20.8
WTR YR 1991 TOTAL 46679.1 MEAN 128 MAX 874 MIN 1.6 (+) 21.7

+ Diversion, in cubic feet per second, furnished by city of Warren.

43

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.

GAGE.--Water-stage recorder. Datum of gage is 843.08 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Water diverted upstream from station for municipal supply for cities of Niles, Warren, and Youngstown. Some sewage returned to river upstream from station. Water also diverted upstream and downstream from station for industrial use, some of which is returned to river upstream from station. Flow regulated by Berlin Lake, 37 mi upstream, beginning in 1942, by Milton Reservoir, 29 mi upstream, by Michael J. Kirwan Reservoir, 32 mi upstream on West Branch, beginning in 1966 by Mosquito Creek Lake, 11 mi upstream, beginning in 1943, by Meander Creek Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,780 ft³/s Dec. 31, 1990, gage height 12.23; minimum daily discharge, 195 ft³/s Oct. 16, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,780 ft³/s Dec. 31, gage height 12.23; minimum daily discharge, 271 ft³/s Apr. 4.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1350	1050	570	5700	998	822	338	356	601	539	475	370
2	1290	957	554	2200	864	741	296	326	514	533	472	373
3	1130	860	854	2490	883	935	280	332	460	531	458	374
4	1250	991	2990	2960	1100	2980	271	339	396	626	437	523
5	1620	1070	3370	2970	1410	2630	288	351	385	655	448	408
6	1490	1130	2220	3080	1560	2850	361	461	380	628	460	382
7	1100	1190	1790	3100	1710	4630	370	487	363	629	465	370
8	987	1080	1520	3010	1660	3600	343	424	391	1430	454	370
9	1090	1030	1380	3000	1480	2380	401	388	424	755	473	368
10	2930	1180	1310	3030	1340	2560	621	362	421	415	448	394
11	4100	1390	1260	3170	1220	2580	631	369	467	402	440	373
12	3660	1310	1230	3510	1020	2400	419	359	502	449	437	343
13	4210	1120	991	3350	914	1670	331	333	447	444	436	322
14	3530	944	829	3270	1130	853	344	451	405	440	441	314
15	2100	867	931	3260	1530	562	767	651	404	457	437	315
16	1890	864	1430	3940	1190	506	1630	413	433	452	435	313
17	2000	947	1210	4860	1090	453	1240	353	430	422	440	335
18	2060	1010	2300	4370	1030	461	932	354	442	398	445	340
19	2210	885	5330	3330	2090	527	693	355	484	439	434	341
20	2290	795	4040	2860	4110	512	1090	356	455	447	469	325
21	2150	699	2250	2570	3490	465	1230	365	467	443	435	323
22	2110	662	2870	2230	2660	475	979	374	483	448	424	318
23	2610	896	4060	1910	2590	632	777	399	485	524	424	332
24	2840	1030	4540	1610	2410	928	571	361	492	534	408	323
25	2420	857	2720	1280	2250	921	481	385	503	495	400	353
26	2050	762	1740	1020	1780	712	423	363	504	455	398	294
27	1780	722	1770	968	1360	578	371	373	490	452	398	281
28	1690	663	2380	977	1020	581	342	430	498	456	399	278
29	1650	622	3010	808	---	466	349	442	521	472	395	280
30	1490	583	5330	988	---	394	381	464	544	479	397	288
31	1220	---	8480	1150	---	407	---	747	---	478	378	---
TOTAL	64297	28166	75259	82971	45889	41211	17550	12523	13791	16327	13460	10323
MEAN	2074	939	2428	2676	1639	1329	585	404	460	527	434	344
MAX	4210	1390	8480	5700	4110	4630	1630	747	601	1430	475	523
MIN	987	583	554	808	864	394	271	326	363	398	378	273

CAL YR 1990	TOTAL 485774	MEAN 1331	MAX 8480	MIN 253
WTR YR 1991	TOTAL 421767	MEAN 1156	MAX 8480	MIN 271

BEAVER RIVER BASIN

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 National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 10,500 ft³/s Dec. 31, 1990, gage height 13.67 ft; minimum daily discharge 181 ft³/s Oct. 17, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 10,500 ft³/s Dec. 31; gage height 13.67 ft; minimum daily discharge 270 ft³/s Sept. 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1430	1140	633	7310	1140	983	347	465	772	480	476	344
2	1370	1040	620	2650	997	913	338	425	548	460	468	339
3	1220	926	1110	2800	1010	1310	326	400	467	456	455	344
4	1530	1030	3740	3270	1270	4490	318	401	414	569	428	515
5	1790	1110	3840	3270	1600	3440	333	425	393	610	434	422
6	1620	1240	2450	3420	1790	3820	409	626	400	703	445	376
7	1210	1250	1910	3420	2040	6150	454	592	362	955	448	344
8	1090	1150	1610	3270	1970	4460	414	501	401	2420	438	338
9	1300	1080	1450	3270	1680	2580	529	446	405	1090	473	336
10	3250	1270	1370	3290	1510	2680	818	403	401	599	445	398
11	4590	1460	1310	3550	1370	2760	815	403	443	446	433	392
12	4910	1390	1290	4360	1170	2580	560	401	579	494	423	414
13	5330	1210	1090	3950	1050	1880	423	395	461	507	419	450
14	4250	1020	910	3650	1400	1060	424	568	401	499	418	315
15	2430	944	1230	3600	1790	693	929	773	377	488	422	302
16	2020	926	1670	4650	1400	626	1940	521	394	487	418	300
17	2100	1060	1440	5870	1260	584	1570	416	409	481	416	334
18	2220	1090	3680	5200	1190	560	1180	401	391	483	434	329
19	2350	969	7120	3810	2850	594	912	401	468	486	420	333
20	2400	860	5090	3180	5350	587	1330	391	424	479	448	323
21	2230	768	2700	2860	4340	514	1470	392	423	479	431	318
22	2180	730	3360	2400	3060	511	1280	396	430	482	414	319
23	2740	1040	5470	2060	2890	657	1020	388	432	549	407	342
24	3060	1160	5730	1730	2620	967	772	383	430	589	393	333
25	2570	972	3310	1400	2420	966	645	389	431	530	375	406
26	2120	854	1980	1140	1950	746	561	388	423	467	372	325
27	1840	802	1930	1060	1510	578	482	423	412	451	372	280
28	1730	741	2530	1090	1170	583	437	493	412	457	372	270
29	1680	699	3500	935	---	472	484	546	424	473	372	272
30	1540	659	7500	1200	---	399	489	551	462	483	372	279
31	1300	---	10400	1350	---	357	---	804	---	479	362	---
TOTAL	71400	30590	91973	95015	53797	49500	22009	14507	13189	18631	13003	10392
MEAN	2303	1020	2967	3065	1921	1597	734	468	440	601	419	346
MAX	5330	1460	10400	7310	5350	6150	1940	804	772	2420	476	515
MIN	1090	659	620	935	997	357	318	383	362	446	362	270

CAL YR 1990 TOTAL 574780 MEAN 1575 MAX 10400 MIN 320
WTR YR 1991 TOTAL 484006 MEAN 1326 MAX 10400 MIN 270

BEAVER RIVER BASIN

45

03099500 MAHONING RIVER AT LOWELLVILLE, OH

LOCATION.--Lat 41°02'12", long 80°32'11", in T.1 N., R.1 W., Mahoning County, Hydrologic Unit 05030103, on left bank 100 ft upstream from First Street Bridge at Lowellville, 1 mi upstream from Ohio-Pennsylvania State line, and 3 mi downstream from Yellow Creek.

DRAINAGE AREA.--1,073 mi².

PERIOD OF RECORD.--October 1942 to current year. Prior to August 1943 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1555: 1946(M), 1952(M), 1955(M), 1956. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 796.84 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 26, 1944, nonrecording gage at site 300 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by 5 flood control reservoirs at points 21 mi to 58 mi upstream and by reservoirs on Squaw Creek, 15 mi upstream, on Dry Run, 9 mi upstream, and on Yellow Creek, 5 mi upstream. Water-quality data collected at this site 1949 to 1973. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--49 years, 1,137 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 21,000 ft³/s Jan. 21, 1959, gage height, 14.43 ft; minimum daily, 155 ft³/s Feb. 5, 1944.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 17.8 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,000 ft³/s Dec. 30, gage height, 10.75 ft; minimum daily, 330 ft³/s, Sept. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1530	1230	717	10100	1330	1160	429	534	870	479	540	399
2	1450	1100	690	3270	1120	1070	423	506	585	446	531	394
3	1300	976	1350	3110	1140	1590	402	451	494	438	519	399
4	1820	1070	4580	3660	1420	6090	399	441	430	527	482	585
5	2020	1200	4470	3680	1820	4100	381	466	396	625	493	519
6	1820	1410	2920	3880	2090	4730	430	769	407	734	501	442
7	1320	1360	2240	3870	2460	7930	493	669	366	1110	510	408
8	1150	1260	1870	3700	2370	5530	467	563	396	3180	507	396
9	1430	1180	1650	3690	1980	3020	620	506	398	1280	568	395
10	3410	1460	1550	3690	1750	2980	923	455	394	731	519	521
11	5100	1650	1460	4010	1560	3090	889	445	441	509	493	511
12	5870	1600	1430	5350	1320	2900	619	432	614	558	485	452
13	6320	1380	1260	4670	1200	2260	490	428	474	564	483	546
14	4840	1140	1000	4170	1710	1290	495	637	403	554	489	401
15	2820	1030	1510	4100	2160	831	1050	809	370	542	490	356
16	2230	1010	2020	5640	1650	730	2160	573	384	534	483	350
17	2340	1270	1760	7090	1440	676	1850	446	407	526	481	386
18	2530	1270	4540	6160	1360	666	1340	421	378	527	536	388
19	2620	1130	8730	4370	3640	720	1040	415	448	523	627	389
20	2630	979	6330	3600	6820	682	1490	403	412	524	556	383
21	2440	884	3210	3260	5270	602	1660	403	409	516	551	374
22	2400	820	3780	2750	3550	596	1480	405	420	527	496	372
23	3010	1230	6540	2380	3270	743	1170	395	421	589	480	410
24	3350	1390	6860	2000	2960	1080	885	385	420	670	464	396
25	2830	1180	4090	1600	2750	1100	731	391	418	587	440	508
26	2360	1010	2370	1300	2270	878	630	387	409	530	437	415
27	2050	925	2180	1180	1750	700	559	469	394	507	439	352
28	1930	862	2690	1230	1370	687	491	494	395	512	437	335
29	1850	803	3740	1060	---	571	573	561	405	537	436	330
30	1710	749	9330	1420	---	496	547	635	461	548	435	337
31	1430	---	13700	1570	---	445	---	851	---	544	427	---
TOTAL	79910	34558	110567	111560	63530	59943	25116	15745	13219	20978	15335	12449
MEAN	2578	1152	3567	3599	2269	1934	837	508	441	677	495	415
MAX	6320	1650	13700	10100	6820	7930	2160	851	870	3180	627	585
MIN	1150	749	690	1060	1120	445	381	385	366	438	427	330

CAL YR 1990 TOTAL 685143 MEAN 1877 MAX 13700 MIN 329
WTR YR 1991 TOTAL 562910 MEAN 1542 MAX 13700 MIN 330

BEAVER RIVER BASIN

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OH

WATER-QUALITY RECORDS

LOCATION.--Lat 41°01'53", long 80°31'10", Mahoning County, Hydrologic Unit 05030103, on left bank 800 ft upstream from Ohio-Pennsylvania State line, just below Lowellville, 0.9 mi downstream from gaging station at Lowellville, and 3.9 mi downstream from Yellow Creek.

DRAINAGE AREA.--1,075 mi².

PERIOD OF RECORD.--January 1967 to September, 1991 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1967 to September, 1991 (discontinued).

pH: January 1967 to September, 1991 (discontinued).

WATER TEMPERATURES: January 1967 to September, 1991 (discontinued).

DISSOLVED OXYGEN: January 1967 to September, 1991 (discontinued).

INSTRUMENTATION.--Water-quality monitor since Jan. 1967. Digital recorder set for one-hour-interval punches since Oct. 1970.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. See records of daily discharge for gaging station at Lowellville (station 03099500).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,640 microsiemens Feb. 22, 1979; minimum, 172 microsiemens March 30, 1985.

pH: Maximum, 9.9 units Jan. 26, 1969; minimum, 3.0 units Jan. 24, 1967.

WATER TEMPERATURES: Maximum, 39.0°C June 29, 1971; minimum, 0.0°C Dec. 25, 1983, Dec. 26, 1985.

DISSOLVED OXYGEN: Maximum, 15.8 mg/L Apr. 3, 1991; minimum, 0.0 mg/L June 1, 1975, June 17, 1977.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 634 microsiemens Apr. 4; minimum, 250 microsiemens Dec. 20.

pH: Maximum, 8.2 units several times during year; minimum, 6.5 units June 28.

WATER TEMPERATURES: Maximum, 31.0°C July 20; minimum, 2.0°C Dec. 27, 28.

DISSOLVED OXYGEN: Maximum, 15.8 mg/L Apr. 3; minimum, 5.2 mg/L July 24.

BEAVER RIVER BASIN

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OH--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	406	400	404	412	400	405	496	486	491	---	---	---
2	416	404	409	430	414	420	496	486	491	342	336	336
3	414	406	411	446	430	437	496	452	483	368	344	358
4	418	376	407	444	428	435	450	348	405	372	358	364
5	416	402	407	428	406	417	346	282	308	394	356	365
6	404	374	390	432	406	419	328	284	305	390	352	370
7	378	366	371	430	415	420	390	332	365	354	348	351
8	396	378	390	430	415	421	408	390	399	362	348	353
9	410	360	397	431	421	426	410	406	407	354	350	352
10	390	316	362	437	426	430	424	408	412	354	344	348
11	310	260	285	432	415	425	424	416	419	404	342	363
12	318	258	279	418	410	414	434	422	426	412	380	394
13	320	304	311	423	412	417	448	432	438	378	338	357
14	302	284	291	429	418	422	462	448	452	336	326	329
15	340	290	315	446	430	434	478	424	459	332	324	327
16	362	342	355	450	440	445	470	442	460	354	330	344
17	388	364	379	456	446	452	440	424	429	344	300	325
18	388	376	381	456	440	447	434	348	397	300	290	293
19	388	378	382	448	438	441	348	282	317	320	300	309
20	378	370	374	462	444	450	278	250	261	332	318	322
21	368	364	365	470	454	459	330	282	310	354	332	340
22	376	366	370	478	464	469	360	330	349	362	354	358
23	380	364	373	484	472	478	348	306	324	370	358	363
24	362	348	355	470	452	459	304	272	289	380	366	373
25	362	348	353	456	446	453	314	272	286	392	378	383
26	376	362	369	456	448	451	386	318	354	414	390	400
27	388	376	382	466	454	458	402	388	397	430	408	416
28	384	380	382	490	466	471	416	392	399	522	432	463
29	382	376	378	490	474	481	440	416	430	518	490	501
30	394	380	384	488	480	485	416	314	376	548	512	531
31	402	386	393	---	---	---	---	---	---	538	508	529
MONTH	418	258	368	490	400	441	496	250	388	548	290	374
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	506	490	497	496	456	468	600	586	594	562	554	559
2	500	488	491	530	494	501	612	602	607	576	552	569
3	502	490	495	528	396	501	628	612	623	578	570	575
4	492	472	483	444	394	407	634	624	630	582	572	576
5	470	446	462	394	370	376	630	618	624	590	548	577
6	444	418	428	388	362	375	630	608	616	558	506	537
7	428	412	419	368	318	348	614	606	610	550	546	549
8	418	404	408	314	292	299	620	588	609	548	534	536
9	412	404	407	344	310	330	586	558	574	---	---	---
10	410	398	402	368	346	362	582	556	567	---	---	---
11	406	402	404	368	358	362	564	532	546	---	---	---
12	428	404	412	368	364	366	538	528	531	---	---	---
13	456	426	433	396	368	380	564	538	546	---	---	---
14	476	454	464	446	398	417	580	566	574	---	---	---
15	468	446	455	490	448	468	576	514	553	---	---	---
16	446	438	442	524	492	508	528	388	462	486	476	483
17	458	436	443	542	522	530	382	366	373	532	482	502
18	516	456	467	552	538	542	404	376	389	548	526	540
19	570	484	535	560	546	553	428	406	413	540	516	530
20	482	358	415	562	552	555	432	418	425	530	514	523
21	356	326	335	574	562	566	422	394	403	534	516	525
22	360	338	348	578	566	571	410	396	400	542	528	536
23	374	362	368	582	542	574	442	410	424	558	536	548
24	378	372	374	552	516	536	464	444	451	558	544	552
25	376	370	372	514	496	500	484	466	472	574	548	563
26	394	378	387	508	492	495	512	484	493	564	546	559
27	406	394	398	534	508	521	534	514	522	556	512	545
28	476	406	428	544	532	536	546	528	538	550	530	541
29	---	---	---	564	544	554	542	526	535	534	524	527
30	---	---	---	578	568	573	558	540	550	532	434	506
31	---	---	---	588	580	586	---	---	---	518	452	491
MONTH	570	326	428	588	292	473	634	366	522	590	434	540

BEAVER RIVER BASIN

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OH--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	488	434	471	500	490	493	483	467	473	556	518	536
2	508	474	487	502	494	498	483	475	476	526	518	523
3	524	512	519	500	484	491	491	475	480	524	510	517
4	542	526	532	506	470	495	475	467	473	520	488	507
5	564	540	550	488	476	480	475	467	472	506	482	494
6	566	550	559	476	432	465	474	436	466	512	460	494
7	570	554	561	532	422	471	466	462	464	516	464	496
8	572	544	562	412	287	365	476	436	466	540	518	532
9	560	544	554	420	357	389	488	472	479	546	526	534
10	560	536	552	475	428	445	482	470	475	544	466	522
11	550	524	542	530	475	512	490	436	481	524	448	491
12	524	504	517	553	530	536	486	478	482	554	524	539
13	530	522	525	553	506	527	506	484	490	612	532	579
14	532	510	521	522	498	509	510	484	494	618	588	606
15	554	532	545	514	498	501	498	478	492	584	562	570
16	556	542	551	498	483	493	496	486	491	574	562	569
17	558	546	550	506	483	493	502	488	495	580	564	571
18	560	534	553	491	483	489	500	484	492	566	548	558
19	542	524	532	491	483	489	512	366	481	570	540	561
20	538	512	530	514	483	495	488	364	455	574	554	561
21	524	512	517	491	483	488	494	464	482	---	---	---
22	534	518	525	498	475	489	504	482	497	---	---	---
23	532	504	518	483	475	476	502	488	495	---	---	---
24	516	498	508	475	459	464	510	502	506	---	---	---
25	514	498	505	483	444	468	526	508	516	---	---	---
26	526	502	509	483	451	466	528	504	517	---	---	---
27	518	504	510	498	483	492	520	506	513	---	---	---
28	542	506	513	506	483	492	516	504	512	---	---	---
29	524	500	514	483	475	480	526	508	520	---	---	---
30	510	492	504	475	451	464	538	520	529	---	---	---
31	---	---	---	483	451	468	530	518	524	---	---	---
MONTH	572	434	528	553	287	480	538	364	490	618	448	538
YEAR	634	250	461									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

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

PH (STANDARD UNITS), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	7.8	7.7	7.8	7.8	7.8	7.8	8.1	7.7	7.8	8.0	7.6	7.7
2	7.7	7.7	7.7	7.9	7.6	7.8	8.1	7.7	7.9	7.9	7.5	7.7
3	7.7	7.7	7.7	7.8	7.7	7.8	8.2	7.8	8.0	8.0	7.6	7.8
4	7.8	7.7	7.7	7.8	7.8	7.8	8.2	7.7	7.9	7.9	7.5	7.7
5	7.8	7.7	7.7	7.8	7.7	7.7	7.9	7.6	7.8	8.1	7.6	7.8
6	7.7	7.7	7.7	7.7	7.7	7.7	8.0	7.6	7.8	7.8	7.4	7.6
7	7.8	7.7	7.7	7.7	7.5	7.6	7.9	7.5	7.7	7.9	7.6	7.7
8	7.8	7.7	7.7	7.6	7.5	7.5	7.8	7.2	7.6	---	---	---
9	7.8	7.7	7.7	7.7	7.6	7.6	8.0	7.4	7.7	---	---	---
10	7.8	7.7	7.7	7.9	7.7	7.7	7.7	7.5	7.6	---	---	---
11	7.9	7.7	7.8	7.9	7.7	7.8	7.8	7.6	7.7	---	---	---
12	7.8	7.7	7.8	7.9	7.8	7.8	8.1	7.6	7.8	---	---	---
13	7.8	7.7	7.8	7.9	7.8	7.8	7.7	7.6	7.7	---	---	---
14	7.8	7.7	7.8	7.8	7.7	7.8	7.7	7.6	7.6	---	---	---
15	7.9	7.7	7.8	7.9	7.7	7.8	7.7	7.5	7.6	---	---	---
16	7.8	7.7	7.8	7.9	7.7	7.8	7.6	7.6	7.6	7.8	7.4	7.6
17	7.9	7.7	7.8	7.9	7.7	7.8	7.6	7.5	7.5	7.6	6.6	7.4
18	7.8	7.7	7.7	7.8	7.7	7.7	7.6	7.5	7.5	7.6	7.4	7.5
19	7.8	7.7	7.8	7.9	7.7	7.8	7.6	7.5	7.5	7.5	7.4	7.4
20	7.7	7.6	7.7	8.1	7.8	7.9	7.6	7.5	7.5	7.5	7.3	7.4
21	7.6	7.5	7.5	8.2	7.8	8.0	7.6	7.5	7.6	7.7	7.4	7.6
22	7.7	7.4	7.6	8.0	7.1	7.8	7.6	7.4	7.6	7.8	7.5	7.6
23	7.7	7.7	7.7	8.0	7.7	7.8	7.7	7.5	7.6	7.8	7.5	7.6
24	7.7	7.7	7.7	7.7	7.6	7.7	7.7	7.6	7.7	7.7	7.4	7.5
25	7.8	7.7	7.7	7.9	7.6	7.7	7.7	7.6	7.7	7.6	7.4	7.4
26	7.8	7.7	7.7	7.8	7.7	7.7	7.7	7.6	7.6	7.6	7.4	7.5
27	7.8	7.7	7.7	7.9	7.7	7.7	7.8	7.6	7.7	7.4	7.3	7.4
28	7.9	7.7	7.8	8.1	7.6	7.8	7.8	7.5	7.7	7.4	7.2	7.3
29	---	---	---	8.1	7.7	7.8	7.7	7.5	7.6	7.5	7.3	7.4
30	---	---	---	8.0	7.7	7.8	8.2	7.5	7.8	7.4	7.2	7.3
31	---	---	---	8.1	7.7	7.9	---	---	---	7.3	7.1	7.2
MONTH	7.9	7.4	7.7	8.2	7.1	7.8	8.2	7.2	7.7	8.1	6.6	7.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.3	7.2	7.3	7.5	7.0	7.3	7.8	7.6	7.7	7.8	7.5	7.7
2	7.3	7.2	7.3	7.4	7.1	7.2	7.9	7.6	7.7	7.9	7.7	7.8
3	7.5	7.2	7.4	7.4	7.1	7.2	7.8	7.6	7.7	8.0	7.7	7.8
4	7.6	7.4	7.5	7.4	7.1	7.2	8.0	7.6	7.8	7.9	7.5	7.8
5	7.6	7.2	7.5	7.7	7.3	7.5	8.1	7.7	7.8	7.9	7.7	7.8
6	7.6	7.4	7.5	7.6	7.5	7.5	8.0	7.7	7.8	7.8	7.6	7.7
7	7.6	7.4	7.5	7.6	7.5	7.6	8.1	7.7	7.9	7.8	7.6	7.7
8	7.6	7.5	7.5	7.6	7.4	7.5	7.9	7.7	7.8	7.9	7.6	7.8
9	7.6	7.4	7.5	7.4	7.3	7.4	7.7	7.4	7.6	7.9	7.7	7.8
10	7.5	7.4	7.5	7.5	7.4	7.4	7.9	7.6	7.7	7.8	7.7	7.8
11	7.6	7.4	7.5	7.6	7.2	7.5	8.0	7.6	7.8	7.9	7.5	7.7
12	7.5	7.2	7.4	7.6	7.4	7.5	8.1	7.7	7.8	7.9	7.7	7.8
13	7.6	7.4	7.5	8.2	7.4	7.5	8.1	7.6	7.9	7.9	7.7	7.8
14	7.6	7.4	7.5	7.6	7.3	7.5	7.9	7.7	7.8	7.9	7.7	7.8
15	7.8	7.4	7.6	7.7	7.5	7.6	8.0	7.7	7.8	7.9	7.7	7.8
16	7.7	7.5	7.6	7.8	7.5	7.6	8.1	7.7	7.9	8.0	7.7	7.8
17	7.6	7.4	7.5	7.9	7.5	7.7	7.9	7.6	7.8	7.9	7.7	7.8
18	7.8	7.5	7.6	8.0	7.5	7.7	7.8	7.6	7.7	7.9	7.7	7.8
19	7.7	7.5	7.6	8.0	7.6	7.8	7.8	7.6	7.7	8.0	7.8	7.8
20	7.7	7.5	7.6	8.1	6.8	7.7	7.7	7.4	7.5	7.9	7.8	7.8
21	7.7	7.5	7.5	8.2	7.6	7.8	7.7	7.5	7.6	---	---	---
22	7.6	7.5	7.5	8.0	7.6	7.8	7.8	7.6	7.7	---	---	---
23	7.5	7.4	7.5	7.7	7.4	7.6	7.9	7.6	7.7	---	---	---
24	7.6	7.5	7.5	7.7	7.3	7.5	8.0	7.7	7.8	---	---	---
25	7.6	7.5	7.6	7.7	7.4	7.6	8.1	7.7	7.9	---	---	---
26	7.6	7.5	7.6	7.8	7.4	7.6	8.2	7.7	7.9	---	---	---
27	7.8	7.5	7.6	7.9	7.6	7.7	8.1	7.8	7.9	---	---	---
28	7.8	6.5	7.6	7.8	7.5	7.7	8.1	7.8	7.9	---	---	---
29	7.5	7.2	7.3	7.8	7.6	7.7	8.0	7.5	7.8	---	---	---
30	7.2	7.1	7.2	7.8	7.6	7.7	7.9	7.4	7.7	---	---	---
31	---	---	---	7.8	7.6	7.7	7.9	7.7	7.8	---	---	---
MONTH	7.8	6.5	7.5	8.2	6.8	7.6	8.2	7.4	7.8	8.0	7.5	7.8
YEAR	8.2	6.5	7.7									

BEAVER RIVER BASIN

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	19.0	18.0	18.5	14.5	13.0	13.5	10.5	10.0	10.5	---	---	---
2	19.0	17.5	18.5	14.5	13.0	14.0	10.5	9.0	10.0	3.5	3.0	3.5
3	18.5	17.0	17.5	15.5	14.0	14.5	9.0	8.0	8.5	3.5	3.0	3.0
4	19.0	18.0	18.5	15.5	14.5	15.0	9.0	6.0	7.5	3.0	2.0	2.5
5	19.0	18.0	18.5	15.5	15.0	15.0	6.0	4.5	5.5	2.5	2.0	2.0
6	19.0	18.0	18.5	14.5	13.0	14.0	5.0	4.5	4.5	2.5	2.5	2.5
7	19.5	18.0	18.5	13.0	12.5	13.0	6.0	5.0	5.5	3.0	2.5	2.5
8	20.0	18.5	19.5	12.5	11.0	12.0	6.0	5.5	5.5	2.5	2.0	2.5
9	20.5	20.0	20.0	10.5	10.0	10.5	6.0	5.5	6.0	3.0	2.5	3.0
10	19.5	18.0	19.0	10.5	10.0	10.5	6.5	5.5	6.0	3.0	3.0	3.0
11	18.0	16.5	17.0	10.0	9.5	10.0	6.5	6.0	6.0	3.0	2.5	2.5
12	16.5	15.0	15.5	9.5	8.5	9.0	7.0	6.0	6.5	3.0	2.5	2.5
13	15.5	15.5	15.5	9.0	8.5	9.0	7.5	7.0	7.5	2.5	2.0	2.5
14	15.5	15.0	15.5	9.5	8.5	9.0	7.5	7.0	7.0	2.5	2.0	2.0
15	16.0	15.5	16.0	10.5	9.0	9.5	7.5	6.5	7.0	3.0	2.0	2.5
16	16.5	16.0	16.0	11.5	10.0	11.0	7.0	6.0	6.5	3.5	3.0	3.5
17	17.0	16.0	16.5	11.5	10.5	11.0	6.0	6.0	6.0	3.5	3.0	3.5
18	17.0	16.0	17.0	11.0	10.0	10.5	7.5	6.0	7.0	3.0	2.5	3.0
19	16.0	14.5	15.5	10.0	9.5	9.5	6.5	6.0	6.5	3.5	2.5	3.0
20	14.5	13.5	14.0	10.0	9.0	9.5	6.0	5.5	5.5	4.0	3.5	3.5
21	14.5	13.5	14.0	10.0	9.0	9.5	6.5	5.5	6.0	3.5	3.0	3.5
22	15.0	14.0	15.0	11.5	10.0	10.5	7.0	6.5	6.5	2.5	2.0	2.5
23	15.0	14.0	15.0	11.5	10.5	11.0	7.5	6.5	7.0	2.5	2.0	2.0
24	14.0	13.5	14.0	10.0	9.5	10.0	6.5	3.5	5.5	3.0	2.0	2.5
25	13.5	13.0	13.5	10.0	9.5	9.5	3.5	2.5	3.0	3.0	2.0	2.5
26	13.0	12.5	13.0	10.0	9.0	9.5	2.5	2.0	2.5	3.0	2.0	2.5
27	13.0	12.0	12.5	12.0	10.0	11.0	2.0	1.5	2.0	3.5	2.5	3.0
28	12.5	12.0	12.0	13.0	12.0	12.5	2.5	1.5	2.0	4.0	3.5	3.5
29	12.5	11.5	12.0	12.5	11.5	12.0	4.0	2.5	3.5	4.5	3.0	3.5
30	12.5	11.5	12.0	11.5	10.5	11.0	5.5	4.0	5.0	5.0	4.5	5.0
31	13.5	12.0	12.5	---	---	---	---	---	---	4.5	3.0	3.5
MONTH	20.5	11.5	16.0	15.5	8.5	11.0	10.5	1.5	6.0	5.0	2.0	3.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	3.5	2.5	3.0	6.5	4.5	5.5	12.0	10.5	11.0	22.0	20.5	21.0
2	4.5	3.5	4.0	9.0	6.5	8.0	11.0	9.5	10.5	20.0	18.5	19.5
3	5.0	4.5	5.0	9.0	6.5	8.5	12.5	9.0	11.0	20.0	17.5	18.5
4	6.0	4.5	5.5	6.0	4.5	5.0	14.5	12.0	13.0	20.5	18.0	19.5
5	6.0	5.5	5.5	4.5	3.5	4.0	16.0	14.5	15.5	21.5	19.0	20.5
6	6.0	5.5	5.5	5.5	4.5	5.0	18.0	15.5	16.5	21.5	20.0	20.5
7	5.0	5.0	5.0	5.5	5.0	5.0	20.5	17.5	19.0	20.5	19.0	20.0
8	5.0	4.5	5.0	5.0	4.5	4.5	20.0	19.0	19.5	19.5	19.0	19.0
9	5.0	4.5	5.0	5.0	4.5	5.0	20.5	18.0	19.5	---	---	---
10	5.5	4.5	5.0	5.0	4.5	5.0	20.0	17.0	18.0	---	---	---
11	4.5	3.5	4.0	5.0	4.0	4.5	17.5	15.5	16.5	---	---	---
12	5.0	3.5	4.5	5.0	4.0	4.5	16.0	14.0	15.0	---	---	---
13	5.5	4.5	5.0	4.5	4.0	4.5	15.0	14.5	14.5	---	---	---
14	5.5	4.5	5.0	6.5	4.5	5.5	14.0	14.0	14.0	---	---	---
15	5.0	3.5	4.5	7.5	6.0	6.5	15.5	13.5	14.5	---	---	---
16	3.5	2.5	3.0	9.0	6.5	8.0	15.5	13.5	14.0	26.0	24.0	25.0
17	3.5	2.5	3.0	9.5	7.5	8.5	14.5	13.0	13.5	25.0	24.0	24.5
18	4.0	3.5	4.0	9.5	9.0	9.0	15.5	13.5	14.5	24.5	23.5	24.0
19	4.0	3.5	4.0	9.5	8.5	9.0	15.5	14.5	15.0	24.5	23.0	24.0
20	4.0	3.0	3.5	11.0	9.5	10.5	14.5	14.0	14.5	23.5	21.5	22.0
21	3.5	2.5	3.0	12.0	10.5	11.0	13.5	12.0	13.0	24.0	21.0	22.5
22	4.5	3.5	4.0	13.0	11.5	12.0	12.5	11.5	12.0	26.5	23.0	24.5
23	4.5	4.0	4.0	15.0	12.5	14.0	13.0	11.5	12.5	27.0	24.0	25.5
24	4.5	3.5	4.0	14.5	13.0	14.0	14.0	12.5	13.0	26.5	25.0	26.0
25	4.5	4.0	4.5	12.5	12.0	12.5	16.0	13.0	14.5	26.5	24.5	25.5
26	4.5	4.0	4.5	12.0	11.0	11.5	16.5	15.0	15.5	27.5	26.0	27.0
27	4.5	4.0	4.5	13.5	11.5	12.5	18.0	15.5	17.0	27.5	26.0	26.5
28	5.0	4.0	4.5	14.5	13.0	13.5	18.5	17.0	17.5	28.0	25.0	26.5
29	---	---	---	13.5	12.0	12.5	20.0	17.5	19.0	28.5	26.5	27.5
30	---	---	---	12.0	11.0	11.5	22.0	19.5	20.5	28.0	26.5	27.5
31	---	---	---	12.0	10.0	11.0	---	---	---	29.0	26.5	27.5
MONTH	6.0	2.5	4.5	15.0	3.5	8.5	22.0	9.0	15.0	29.0	17.5	23.5

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	26.5	24.0	25.0	30.0	27.5	28.5	27.5	25.0	26.0	28.5	26.5	27.5
2	25.5	23.5	24.5	29.5	28.0	28.5	28.0	25.5	26.5	27.0	25.0	26.5
3	26.0	23.5	24.5	30.0	27.5	28.5	27.5	26.5	27.0	26.5	25.0	26.0
4	25.0	23.5	24.5	29.0	27.5	28.5	27.0	25.5	26.0	26.0	24.0	25.0
5	25.0	23.0	24.0	29.5	27.5	28.5	25.5	24.0	25.0	26.0	24.0	25.0
6	25.0	23.0	24.0	28.0	26.5	27.5	25.0	23.0	24.0	25.0	23.5	24.5
7	25.0	22.5	24.0	27.5	26.0	27.0	25.5	23.0	24.5	25.0	23.0	24.0
8	25.5	22.5	24.0	26.5	24.0	25.0	24.5	23.0	23.5	25.5	23.5	24.5
9	26.5	23.0	25.0	25.5	24.0	24.5	23.5	23.0	23.0	25.0	23.5	24.0
10	26.5	11.0	25.5	26.5	24.0	25.0	24.0	22.5	23.0	24.0	23.5	24.0
11	25.5	24.0	24.5	27.0	24.5	25.5	24.5	22.0	23.5	26.0	24.0	25.0
12	27.0	23.5	25.5	27.0	25.5	26.5	24.5	22.5	23.5	25.5	24.0	25.0
13	26.5	25.0	25.5	28.0	26.5	27.0	25.0	23.0	24.0	25.0	24.0	24.5
14	26.5	23.5	25.0	28.0	26.5	27.0	25.5	24.5	25.0	25.5	24.0	25.0
15	27.5	24.5	26.0	28.0	25.5	27.0	26.5	25.0	25.5	26.5	25.0	26.0
16	28.0	26.5	27.0	28.5	26.0	27.0	27.0	25.0	26.0	27.5	26.0	27.0
17	29.0	26.5	28.0	29.0	26.5	27.5	26.5	25.5	26.0	27.5	26.5	27.0
18	29.0	27.0	28.0	30.0	27.5	28.5	26.5	25.0	26.0	26.5	24.0	25.0
19	30.0	27.0	28.5	30.5	28.0	29.5	26.0	23.5	25.5	24.0	22.0	23.0
20	30.5	27.5	29.0	31.0	29.0	30.0	25.0	23.5	24.5	22.0	21.0	21.0
21	30.0	27.0	28.5	30.0	28.5	29.0	25.0	24.0	24.5	---	---	---
22	29.0	27.5	28.0	30.0	28.5	29.0	25.0	23.5	24.5	---	---	---
23	27.5	26.5	26.5	29.5	28.0	29.0	26.5	24.0	25.0	---	---	---
24	27.0	25.0	26.0	30.0	28.0	29.0	26.5	24.5	25.5	---	---	---
25	27.5	25.0	26.0	29.0	27.5	28.5	27.0	25.0	26.0	---	---	---
26	28.0	25.5	26.5	28.5	26.5	27.5	27.5	25.5	26.5	---	---	---
27	28.5	25.5	27.0	27.5	25.5	26.5	27.5	25.5	26.5	---	---	---
28	28.5	26.5	27.5	26.5	25.0	26.0	29.5	27.0	28.0	---	---	---
29	27.0	25.0	26.0	26.0	25.0	25.5	30.5	28.0	29.0	---	---	---
30	27.0	25.0	26.0	26.0	24.5	25.0	30.0	28.5	29.5	---	---	---
31	---	---	---	27.5	25.0	26.0	30.0	28.5	29.5	---	---	---
MONTH	30.5	11.0	26.0	31.0	24.0	27.5	30.5	22.0	25.5	28.5	21.0	25.0
YEAR	31.0	1.5	15.5									

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

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

03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OH--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	---	---	---	12.5	12.1	12.3	13.4	10.8	11.7	9.2	7.5	8.2
2	---	---	---	12.1	10.5	11.5	13.9	10.8	12.0	9.2	7.1	8.1
3	---	---	---	10.9	10.3	10.7	15.8	10.9	12.6	9.8	7.8	8.6
4	---	---	---	11.5	11.0	11.2	13.6	8.9	11.6	9.7	7.7	8.6
5	---	---	---	11.9	11.5	11.7	9.9	7.9	8.7	10.1	7.7	8.7
6	---	---	---	11.8	11.5	11.7	10.4	7.7	8.8	8.6	6.8	7.8
7	---	---	---	11.8	11.5	11.6	10.1	7.5	8.5	9.1	7.7	8.3
8	---	---	---	12.0	11.8	11.9	9.2	7.4	8.1	---	---	---
9	---	---	---	12.3	12.0	12.2	9.4	6.9	7.9	---	---	---
10	---	---	---	12.5	12.2	12.4	8.3	7.2	7.8	---	---	---
11	---	---	---	13.2	12.5	12.8	9.3	8.0	8.6	---	---	---
12	---	---	---	13.6	12.9	13.3	10.5	8.6	9.4	---	---	---
13	---	---	---	12.6	11.6	11.9	9.1	8.6	8.8	---	---	---
14	---	---	---	11.8	11.3	11.6	9.1	8.2	8.6	---	---	---
15	---	---	---	11.7	11.1	11.4	9.1	7.3	8.3	---	---	---
16	---	---	---	11.8	11.0	11.3	9.6	8.5	9.1	9.0	6.9	7.7
17	---	---	---	11.6	10.8	11.1	9.5	9.3	9.4	7.9	7.1	7.4
18	---	---	---	11.0	10.4	10.7	9.5	9.0	9.3	7.9	7.1	7.5
19	---	---	---	11.2	10.4	10.7	9.2	8.8	9.0	7.9	7.1	7.4
20	---	---	---	11.8	10.4	11.0	9.0	8.7	8.9	8.3	7.2	7.7
21	---	---	---	12.0	10.5	11.1	9.5	9.0	9.3	8.9	7.7	8.2
22	---	---	---	11.5	10.3	10.7	9.8	9.5	9.6	9.0	7.5	8.2
23	---	---	---	11.3	9.9	10.5	9.9	9.4	9.6	9.1	7.3	8.0
24	---	---	---	10.4	9.7	10.0	9.6	9.2	9.4	8.6	7.1	7.7
25	---	---	---	11.3	10.3	10.8	9.9	8.9	9.3	8.2	7.0	7.4
26	---	---	---	11.2	10.7	10.9	9.5	8.6	8.9	8.2	6.8	7.3
27	---	---	---	11.5	10.5	10.9	9.7	8.4	8.9	7.0	6.4	6.8
28	12.4	12.1	12.3	11.7	10.1	10.7	9.4	8.1	8.7	7.5	6.3	6.8
29	---	---	---	11.7	10.3	10.8	8.7	7.8	8.3	7.5	6.4	6.9
30	---	---	---	12.0	10.4	11.1	9.9	7.4	8.4	7.0	5.9	6.5
31	---	---	---	13.5	10.6	11.7	---	---	---	6.9	5.8	6.5
MONTH	12.4	12.1	12.3	13.6	9.7	11.4	15.8	6.9	9.2	10.1	5.8	7.7
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	7.3	6.7	7.0	7.6	5.6	6.7	7.5	6.6	7.0	7.5	6.2	6.8
2	7.6	6.9	7.2	7.5	6.5	7.0	7.6	6.6	7.0	7.7	6.6	7.0
3	7.9	7.1	7.4	7.8	6.6	7.1	7.4	6.4	6.8	7.9	6.6	7.2
4	8.2	7.1	7.5	7.2	6.0	6.8	7.9	6.4	7.0	7.3	6.8	7.0
5	8.0	7.3	7.6	7.4	6.0	6.7	8.2	6.8	7.5	7.8	6.7	7.1
6	8.0	7.4	7.6	7.4	6.5	7.0	8.4	7.1	7.7	7.5	6.8	7.1
7	8.3	7.3	7.7	7.7	6.6	7.1	8.7	7.2	7.8	7.8	6.8	7.2
8	8.1	7.4	7.7	7.1	6.0	6.8	8.0	7.2	7.6	7.9	6.8	7.2
9	7.9	7.2	7.5	7.2	7.0	7.1	7.4	6.6	7.1	8.0	6.8	7.3
10	7.6	7.1	7.3	7.2	6.9	7.1	8.1	7.1	7.5	7.3	6.6	7.0
11	7.9	7.1	7.4	7.3	6.8	7.0	8.3	7.2	7.7	7.6	6.0	6.7
12	7.4	6.0	6.8	7.0	6.7	6.8	8.6	7.2	7.8	7.5	6.6	7.0
13	7.7	6.8	7.3	7.1	6.5	6.7	8.3	7.1	7.6	7.5	6.6	7.0
14	8.2	5.3	7.3	7.6	6.4	7.0	7.6	6.7	7.1	7.6	6.6	7.0
15	8.3	7.0	7.6	7.9	6.7	7.3	7.9	6.8	7.2	7.5	6.2	6.8
16	7.8	6.8	7.2	8.0	6.8	7.3	8.2	6.7	7.3	7.6	6.3	6.9
17	7.8	6.8	7.2	8.1	6.7	7.3	8.0	6.7	7.2	7.5	6.3	6.7
18	8.3	6.7	7.3	8.2	6.6	7.3	7.3	6.5	6.8	7.5	6.5	6.9
19	7.8	6.8	7.3	8.0	6.5	7.2	7.3	6.4	6.8	7.8	6.8	7.3
20	7.7	6.8	7.1	8.3	6.3	7.2	7.0	5.7	6.4	9.0	7.2	7.5
21	7.5	6.8	7.1	8.4	6.4	7.3	7.3	6.3	6.8	---	---	---
22	7.1	6.6	6.8	7.8	6.4	7.0	7.5	6.7	7.1	---	---	---
23	7.0	6.5	6.8	7.0	5.6	6.5	7.8	6.7	7.1	---	---	---
24	7.5	6.8	7.1	7.2	5.2	6.3	8.0	6.7	7.3	---	---	---
25	7.8	7.1	7.4	7.2	6.0	6.5	8.1	6.7	7.3	---	---	---
26	7.8	7.1	7.4	7.5	6.1	6.7	7.9	6.6	7.1	---	---	---
27	8.0	7.1	7.5	7.9	6.4	7.0	7.6	6.2	6.8	---	---	---
28	8.3	7.1	7.6	7.7	6.6	7.1	7.3	6.0	6.5	---	---	---
29	8.1	7.0	7.4	7.5	6.7	7.0	7.5	5.7	6.5	---	---	---
30	7.3	6.3	6.9	7.5	6.7	7.0	7.2	6.1	6.6	---	---	---
31	---	---	---	7.5	6.6	7.0	7.1	6.1	6.5	---	---	---
MONTH	8.3	5.3	7.3	8.4	5.2	7.0	8.7	5.7	7.1	9.0	6.0	7.0
YEAR	15.8	5.2	9.1									

BEAVER RIVER BASIN

53

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.

GAGE.--Water-stage recorder. Datum of gage is 906.8 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 23-29. Records good, except for periods of estimated record, which are fair. Water-quality data collected at this site 1966 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--26 years, 130 ft³/s, 18.26 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,740 ft³/s Nov. 6, 1985, gage height, 12.40 ft from rating curve extended above 800 ft³/s; minimum daily discharge, 0.02 ft³/s Aug. 16, 17, 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 13	0300	1,210	11.07	Dec. 31	0400	*2,320	*12.11
Dec. 19	0700	998	10.77	Mar. 7	0700	902	10.61
Dec. 23	1900	992	10.76				

Minimum daily discharge, 0.02 ft³/s Aug. 16, 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	75	96	1190	117	87	57	54	16	13	4.1	2.8
2	95	67	76	703	92	125	53	49	15	14	3.6	2.9
3	76	59	96	459	107	178	50	42	15	15	2.9	2.9
4	151	51	461	303	175	499	46	37	13	24	1.6	3.4
5	392	51	568	196	263	523	48	35	12	38	1.3	3.9
6	319	87	606	146	315	590	73	47	11	24	1.1	4.3
7	278	122	506	133	362	850	75	54	9.4	19	.77	4.8
8	235	145	375	130	355	744	67	51	7.4	227	.39	4.9
9	176	146	267	111	293	562	61	40	5.7	279	.44	5.0
10	604	170	189	103	220	384	101	35	4.8	177	.50	5.3
11	722	222	140	101	155	261	145	30	4.6	70	.44	5.7
12	895	217	113	199	112	166	143	26	5.5	27	.39	5.3
13	1070	198	97	248	86	119	111	23	6.2	17	.29	5.1
14	792	166	84	221	117	96	92	21	5.4	14	.16	5.1
15	655	134	92	184	189	81	164	18	4.9	12	.06	5.0
16	506	113	190	302	209	70	392	16	6.5	9.6	.02	4.3
17	377	117	216	564	211	61	407	15	6.6	8.1	.02	4.3
18	276	134	342	518	169	59	360	14	6.8	7.3	.16	4.5
19	238	140	898	435	288	78	230	13	6.6	7.1	.24	5.1
20	212	127	746	341	664	95	273	13	6.3	7.0	.77	5.0
21	178	107	672	258	615	98	328	12	7.1	7.1	4.0	5.1
22	162	93	751	203	536	88	354	12	6.8	6.7	5.2	5.4
23	251	164	865	120	386	90	318	12	6.9	8.2	5.1	6.6
24	287	192	882	90	259	149	237	11	6.8	9.3	4.7	8.1
25	251	202	717	72	167	220	163	12	6.4	8.7	3.9	12
26	205	201	532	62	121	218	116	15	6.8	8.3	3.3	14
27	161	194	389	56	99	182	91	22	6.4	7.3	3.7	15
28	130	169	247	52	87	136	71	22	6.8	6.8	3.6	14
29	112	139	221	48	---	107	67	21	8.0	6.2	3.6	14
30	97	118	1260	75	---	85	59	20	10	5.8	3.3	13
31	85	---	2100	110	---	67	---	18	---	5.2	2.9	---
TOTAL	10100	4120	14794	7733	6769	7068	4752	810	240.7	1088.7	62.55	196.8
MEAN	326	137	477	249	242	228	158	26.1	8.02	35.1	2.02	6.56
MAX	1070	222	2100	1190	664	850	407	54	16	279	5.2	15
MIN	76	51	76	48	86	59	46	11	4.6	5.2	.02	2.8
CFSM	3.37	1.42	4.94	2.58	2.50	2.36	1.64	.27	.08	.36	.02	.07
IN.	3.89	1.58	5.69	2.97	2.60	2.72	1.83	.31	.09	.42	.02	.08

CAL YR 1990 TOTAL 70734.1 MEAN 194 MAX 2100 MIN 3.8 CFSM 2.00 IN. 27.21
WTR YR 1991 TOTAL 57734.75 MEAN 158 MAX 2100 MIN .02 CFSM 1.64 IN. 22.21

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 National Geodetic Vertical Datum of 1929. Prior to Sept. 22, 1926, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 24 to Feb. 7, Feb. 28 to Mar. 6. 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.

AVERAGE DISCHARGE.--76 years, 523 ft³/s, 14.32 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s July 19, 1941, gage height, 17.4 ft, from rating curve extended above 16,000 ft³/s on basis of slope-area measurement of peak flow; minimum, 12 ft³/s several days in 1918, 1930, 1932, 1936.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,000 ft³/s and maximum (*).

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	0100	7,630	10.36	Dec. 30	1900	*12,300	*12.67

Minimum discharge, 30 ft³/s Sept. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	476	360	344	3600	640	580	367	431	220	178	44	33
2	340	339	341	2080	620	560	363	386	189	111	41	31
3	278	330	810	1650	620	580	336	357	155	80	38	30
4	365	324	2850	1340	620	1100	317	324	130	78	38	36
5	856	315	1900	1140	680	1000	339	315	118	138	35	56
6	487	405	1210	1290	780	1600	372	697	110	125	34	56
7	357	405	979	1150	1300	3830	333	532	104	89	33	47
8	308	339	813	986	1320	2200	311	388	98	740	32	38
9	290	325	700	922	982	1450	383	348	95	519	35	34
10	336	609	634	898	856	1220	1040	328	89	197	41	65
11	492	685	579	1080	753	1040	681	296	93	133	41	128
12	1490	548	532	2550	639	878	500	272	199	105	37	70
13	2810	487	508	1840	610	815	451	297	165	95	33	52
14	1560	426	462	1340	989	769	502	270	114	93	31	45
15	976	394	912	1100	1130	688	857	249	94	82	31	41
16	720	382	1760	1850	705	599	1260	214	88	74	32	38
17	597	460	1180	2410	715	552	881	196	85	66	32	44
18	990	476	2970	1620	686	558	776	186	82	61	50	49
19	1230	403	6060	1260	1820	602	659	177	77	56	62	41
20	768	372	3050	1130	2900	560	694	166	73	52	77	38
21	618	345	2290	1120	1940	497	655	160	68	50	195	36
22	571	348	2300	851	1410	482	695	154	65	49	148	34
23	937	703	3380	760	1110	617	652	146	87	54	85	41
24	992	676	3680	650	935	582	559	139	94	146	62	49
25	727	525	2060	580	843	535	549	171	79	115	50	70
26	611	465	1500	530	751	496	484	192	69	74	44	73
27	528	439	1160	490	673	507	449	158	63	57	40	60
28	477	430	1090	460	640	488	420	163	59	49	38	49
29	435	401	1430	430	---	440	509	176	57	46	37	41
30	400	365	6680	700	---	406	528	194	76	50	35	38
31	379	---	8220	740	---	374	---	260	---	50	34	---
TOTAL	22401	13081	62384	38547	27667	26605	16922	8342	3095	3812	1565	1463
MEAN	723	436	2012	1243	988	858	564	269	103	123	50.5	48.8
MAX	2810	703	8220	3600	2900	3830	1260	697	220	740	195	128
MIN	278	315	341	430	610	374	311	139	57	46	31	30
CFSM	1.46	.88	4.06	2.51	1.99	1.73	1.14	.54	.21	.25	.10	.10
IN.	1.68	.98	4.68	2.89	2.08	2.00	1.27	.63	.23	.29	.12	.11

CAL YR 1990 TOTAL 300880 MEAN 824 MAX 10500 MIN 110 CFSM 1.66 IN. 22.57
WTR YR 1991 TOTAL 225884 MEAN 619 MAX 8220 MIN 30 CFSM 1.25 IN. 16.94

YELLOW CREEK BASIN

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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 Ohio State Highway Department bench mark.

REMARKS.--Estimated daily discharges: Jan. 23-29. Records good except for July 1 to Sept. 30 and 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.

AVERAGE DISCHARGE.--51 years, 162 ft³/s, 14.97 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,580 ft³/s Jan. 27, 1952, gage height, 12.17 ft; minimum, 0.8 ft³/s Sept. 24 to Oct. 1, Oct. 7, 8, 1963.

EXTREMES OUTSIDE PERIOD OF RECORD.--The highest stage observed is reported to have occurred in 1912.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	0700	4,060	7.96	Dec. 31	0300	*8,170	*11.49

Minimum daily discharge, 1.6 ft³/s Aug. 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	146	110	117	1300	200	185	131	136	54	80	2.8	4.0
2	110	101	111	798	198	181	125	117	41	42	2.8	4.9
3	91	96	369	557	196	187	114	106	34	25	3.0	7.7
4	103	92	1250	414	200	381	108	96	28	20	2.8	7.7
5	155	89	754	344	211	307	116	95	25	26	2.6	7.7
6	103	114	456	359	254	420	122	191	22	25	2.2	9.0
7	88	101	340	319	520	1150	110	150	21	18	2.3	9.8
8	82	88	271	273	549	604	107	130	20	20	2.6	7.3
9	78	80	226	265	421	429	118	125	18	37	2.7	5.8
10	89	202	199	250	343	349	495	121	17	23	2.5	6.0
11	103	274	177	391	284	287	285	109	18	17	2.1	6.8
12	566	207	163	1150	237	239	210	104	76	14	1.7	5.5
13	1180	170	152	714	226	228	198	98	52	13	1.6	7.6
14	498	147	136	496	325	218	271	92	30	11	1.8	7.5
15	329	132	338	399	323	203	538	83	23	9.6	1.8	6.0
16	274	124	749	514	242	174	693	75	20	8.4	2.7	5.2
17	229	147	472	514	252	162	456	60	22	7.1	2.3	5.8
18	327	135	1590	426	233	164	346	49	30	6.3	4.7	5.5
19	378	122	3090	367	606	158	280	48	21	5.6	9.5	4.5
20	268	115	1390	338	891	140	252	46	18	5.2	17	4.1
21	225	105	1140	329	616	132	215	47	16	4.8	19	4.5
22	200	105	857	253	467	135	216	44	15	4.5	15	4.3
23	313	265	1200	230	361	257	185	41	15	4.4	10	4.7
24	327	256	1150	200	305	233	165	40	16	4.5	8.0	4.8
25	274	218	766	180	273	214	154	38	15	4.3	8.5	6.6
26	231	188	538	170	240	190	142	40	13	4.2	7.1	12
27	186	173	400	160	223	201	138	39	11	4.0	6.1	9.7
28	164	165	362	150	207	184	130	42	10	3.3	5.5	6.3
29	143	145	424	140	---	163	169	54	9.2	3.2	5.0	4.7
30	126	128	3180	225	---	152	166	45	9.4	3.4	4.7	4.0
31	124	---	4880	240	---	136	---	40	---	3.1	4.2	---
TOTAL	7510	4394	27247	12465	9403	8163	6755	2501	719.6	456.9	164.6	190.0
MEAN	242	146	879	402	336	263	225	80.7	24.0	14.7	5.31	6.33
MAX	1180	274	4880	1300	891	1150	693	191	76	80	19	12
MIN	78	80	111	140	196	132	107	38	9.2	3.1	1.6	4.0
CFSM	1.65	1.00	5.98	2.74	2.28	1.79	1.53	.55	.16	.10	.04	.04
IN.	1.90	1.11	6.90	3.15	2.38	2.07	1.71	.63	.18	.12	.04	.05

CAL YR 1990	TOTAL	99584	MEAN	273	MAX	4880	MIN	26	CFSM	1.86	IN.	25.20
WTR YR 1991	TOTAL	79969.1	MEAN	219	MAX	4880	MIN	1.6	CFSM	1.49	IN.	20.24

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. WRD-OH-82-1: 1981

GAGE.--Water-stage recorder. Datum of gage is 675.1 ft above 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: Jan. 23-28. Records fair except for those for periods of estimated record which are poor. 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.

AVERAGE DISCHARGE.--50 years, 131 ft³/s, 14.46 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,200 ft³/s June 15, 1990, gage height, 12.27 ft; minimum daily discharge, 2.8 ft³/s Sept. 21, 27, 1947.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 12	1800	1,640	6.41	Jan. 12	0030	1,290	5.73
Dec. 18	2330	*2,830	*8.23	Mar. 6	2400	1,240	5.62
Dec. 30	2330	2,820	8.21				

Minimum daily discharge, 16 ft³/s Aug. 17, Sept. 3, 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	91	79	511	220	171	134	119	86	41	22	26
2	92	89	76	405	208	169	129	120	69	58	20	17
3	84	86	360	353	198	165	122	110	62	43	20	16
4	114	79	617	305	190	332	119	108	56	41	39	43
5	136	78	290	279	195	246	122	109	51	63	31	56
6	97	106	216	297	278	420	122	233	50	41	23	27
7	84	83	181	279	370	673	116	168	47	40	20	21
8	76	76	154	252	318	342	113	141	46	61	18	18
9	75	73	136	252	269	279	122	136	43	59	21	16
10	94	216	126	244	243	257	204	132	42	44	22	19
11	170	169	116	569	219	236	141	123	45	37	20	28
12	876	125	109	803	199	216	122	116	94	33	19	21
13	574	105	105	421	198	213	158	113	59	34	18	20
14	287	95	92	340	294	212	344	109	46	31	19	46
15	206	89	302	302	278	207	474	103	43	27	19	28
16	167	86	273	408	227	186	379	97	41	26	17	21
17	142	110	188	371	222	176	259	93	46	24	16	20
18	203	90	1520	315	213	175	212	89	41	24	119	23
19	205	83	1250	279	387	179	190	83	50	22	53	21
20	151	79	488	266	373	166	187	82	41	22	64	19
21	129	73	477	283	298	158	170	79	37	21	57	18
22	124	77	425	237	261	154	174	75	36	21	36	17
23	251	244	656	200	232	221	158	70	37	21	28	21
24	216	149	556	180	216	193	145	68	36	22	26	30
25	171	123	386	170	206	174	135	68	34	21	22	115
26	145	107	325	150	194	163	130	65	31	21	20	62
27	128	103	283	150	185	177	125	62	31	21	19	38
28	116	103	282	140	176	162	122	71	29	19	17	30
29	106	90	401	206	---	146	135	121	28	21	17	26
30	99	83	1160	358	---	144	134	72	30	26	17	23
31	96	---	1190	276	---	137	---	125	---	27	21	---
TOTAL	5522	3160	12819	9601	6867	6849	5197	3260	1387	1012	880	886
MEAN	178	105	414	310	245	221	173	105	46.2	32.6	28.4	29.5
MAX	876	244	1520	803	387	673	474	233	94	63	119	115
MIN	75	73	76	140	176	137	113	62	28	19	16	16
CFSM	1.45	.86	3.36	2.52	1.99	1.80	1.41	.85	.38	.27	.23	.24
IN.	1.67	.96	3.88	2.90	2.08	2.07	1.57	.99	.42	.31	.27	.27

CAL YR 1990 TOTAL 83687 MEAN 229 MAX 3500 MIN 59 CFSM 1.86 IN. 25.31
WTR YR 1991 TOTAL 57440 MEAN 157 MAX 1520 MIN 16 CFSM 1.28 IN. 17.37

WHEELING CREEK BASIN

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.

WATER-DISCHARGE RECORDS

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 National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1988 at datum 1.00 ft higher.

REMARKS.--Estimated daily discharges: Jan. 23-28. Records good except periods of estimated record, which are fair. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--7 years, 113 ft³/s, 15.71 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,840 ft³/s July 12, 1990, gage height, 7.72 ft; minimum daily discharge, 7.0 ft³/s, Sept. 21-23, 1985.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 12	1100	1,680	4.71	Dec. 30	2100	2,800	5.95
Dec. 18	2130	*2,950	*6.10				

Minimum daily discharge, 16 ft³/s Sept. 9, 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	77	65	447	187	133	114	116	71	35	31	22
2	65	73	63	350	173	132	108	115	57	39	28	18
3	56	71	374	297	163	133	100	108	50	38	27	17
4	82	70	573	250	157	324	101	106	47	41	35	33
5	82	72	229	231	161	202	105	119	43	44	34	37
6	62	93	181	273	258	405	103	275	42	36	29	24
7	57	75	157	254	350	537	99	144	42	42	28	20
8	57	70	140	212	255	269	94	120	41	110	27	18
9	59	68	128	225	211	226	121	118	40	49	33	16
10	64	231	122	210	194	210	190	114	38	40	31	33
11	112	137	113	754	175	192	117	107	40	36	28	51
12	827	105	109	770	159	175	103	103	119	32	25	27
13	380	89	104	382	160	174	252	100	58	37	25	23
14	190	81	95	305	325	185	510	103	45	31	26	28
15	150	78	394	268	240	186	505	97	42	28	25	23
16	133	76	255	419	184	158	349	89	47	28	24	21
17	124	86	170	343	178	148	242	83	80	32	22	20
18	153	73	1780	275	203	153	206	83	47	30	75	19
19	137	69	1160	245	380	154	190	81	42	28	66	20
20	99	66	430	235	316	139	185	77	38	28	89	18
21	93	64	425	260	238	132	167	76	37	27	38	17
22	97	66	350	203	205	129	168	73	38	27	28	16
23	248	199	585	180	185	171	150	67	37	29	22	20
24	175	110	505	170	174	144	146	60	36	30	26	29
25	128	89	322	160	165	133	137	57	34	28	20	107
26	111	80	270	150	154	131	129	55	33	27	19	47
27	102	77	235	150	147	142	124	53	32	26	19	27
28	97	75	234	160	142	129	122	67	31	25	19	22
29	89	70	400	184	---	120	131	117	32	32	19	21
30	83	68	1170	514	---	122	129	70	32	36	18	20
31	81	---	1110	253	---	115	---	83	---	38	23	---
TOTAL	4279	2658	12248	9129	5839	5703	5197	3036	1371	1109	959	814
MEAN	138	88.6	395	294	209	184	173	97.9	45.7	35.8	30.9	27.1
MAX	827	231	1780	770	380	537	510	275	119	110	89	107
MIN	56	64	63	150	142	115	94	53	31	25	18	16
CFSM	1.41	.91	4.04	3.01	2.13	1.88	1.77	1.00	.47	.37	.32	.28
IN.	1.63	1.01	4.66	3.48	2.22	2.17	1.98	1.16	.52	.42	.37	.31

CAL YR 1990 TOTAL 63610 MEAN 174 MAX 2340 MIN 32 CFSM 1.78 IN. 24.22
WTR YR 1991 TOTAL 52342 MEAN 143 MAX 1780 MIN 16 CFSM 1.47 IN. 19.93

WHEELING CREEK BASIN

03111548 WHEELING CREEK BELOW BLAINE, OH--Continued

SEDIMENT ANALYSIS

PERIOD OF RECORD.--December 1982 to September 1987, October 1988 to September 1991 (discontinued).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 4,640 mg/L, May 22, 1983; minimum daily mean, 8 mg/L, Oct. 29, 1988.

SEDIMENT LOADS: Maximum daily 14,600 tons, May 22, 1983; minimum daily, 0.32 ton, Oct. 2, 3, 1988.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,250 mg/L, July 8; minimum daily mean, 12 mg/L, Oct. 7.

SEDIMENT LOADS: Maximum daily, 4,970 tons, Dec. 18; minimum daily, .70 ton, Sept. 17.

WHEELING CREEK BASIN

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03111548 WHEELING CREEK BELOW BLAINE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

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	86	15	3.4	77	33	6.9	65	43	7.5
2	65	13	2.4	73	31	6.2	63	48	8.1
3	56	15	2.2	71	23	4.4	374	556	801
4	82	51	13	70	24	4.5	573	631	1280
5	82	37	8.4	72	31	5.9	229	90	57
6	62	26	4.4	93	32	7.9	181	65	32
7	57	12	1.9	75	22	4.3	157	63	27
8	57	22	3.4	70	23	4.4	140	55	21
9	59	23	3.6	68	36	6.7	128	48	17
10	64	26	4.4	231	249	164	122	53	17
11	112	101	34	137	169	63	113	51	16
12	827	1120	2710	105	99	28	109	54	16
13	380	161	199	89	48	12	104	55	15
14	190	49	26	81	28	6.1	95	43	11
15	150	32	13	78	29	6.1	394	402	637
16	133	34	12	76	32	6.6	255	127	99
17	124	48	16	86	27	6.4	170	72	33
18	153	86	38	73	25	4.8	1780	907	4970
19	137	44	17	69	28	5.3	1160	320	1280
20	99	32	8.5	66	40	7.1	430	88	105
21	93	30	7.6	64	33	5.7	425	97	116
22	97	39	10	66	33	6.1	350	77	74
23	248	196	169	199	211	126	585	238	428
24	175	89	44	110	34	11	505	118	168
25	128	41	14	89	36	8.6	322	66	58
26	111	40	12	80	45	9.8	270	64	47
27	102	44	12	77	39	8.0	235	58	37
28	97	42	11	75	44	8.9	234	46	29
29	89	31	7.5	70	34	6.5	400	138	163
30	83	23	5.3	68	39	7.2	1170	444	2710
31	81	31	6.7	---	---	---	1110	407	1660
TOTAL	4279	---	3419.7	2658	---	558.4	12248	---	14939.6
JANUARY			FEBRUARY			MARCH			
1	447	100	122	187	153	78	133	41	15
2	350	63	60	173	121	56	132	49	18
3	297	62	50	163	95	42	133	68	26
4	250	49	33	157	74	31	324	227	209
5	231	41	25	161	55	24	202	78	43
6	273	49	36	258	92	65	405	479	1050
7	254	47	32	350	205	198	537	438	827
8	212	46	26	255	71	50	269	119	88
9	225	40	24	211	44	25	226	66	40
10	210	44	25	194	45	23	210	47	27
11	754	279	734	175	52	25	192	48	25
12	770	188	440	159	42	18	175	37	18
13	382	68	72	160	50	22	174	36	17
14	305	44	37	325	338	299	185	38	19
15	268	40	29	240	83	56	186	42	21
16	419	258	321	184	60	30	158	51	22
17	343	73	70	178	54	26	148	57	23
18	275	46	34	203	149	112	153	40	17
19	245	49	32	380	317	355	154	46	19
20	235	46	29	316	101	88	139	49	18
21	260	56	39	238	43	28	132	57	20
22	203	48	26	205	43	24	129	45	16
23	180	46	22	185	49	24	171	61	28
24	170	47	22	174	60	28	144	58	22
25	160	42	18	165	49	22	133	63	23
26	150	44	18	154	44	18	131	117	41
27	150	46	19	147	43	17	142	79	30
28	160	58	25	142	43	17	129	81	28
29	184	81	40	---	---	---	120	67	22
30	514	779	1260	---	---	---	122	59	19
31	253	238	172	---	---	---	115	85	26
TOTAL	9129	---	3892	5839	---	1801	5703	---	2817

WHEELING CREEK BASIN

03111548 WHEELING CREEK BELOW BLAINE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

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	114	48	15	116	60	19	71	233	45
2	108	63	18	115	78	24	57	163	25
3	100	61	16	108	68	20	50	148	20
4	101	60	16	106	82	24	47	118	15
5	105	44	13	119	154	53	43	91	11
6	103	60	17	275	528	488	42	102	12
7	99	80	21	144	81	33	42	109	12
8	94	57	14	120	66	21	41	95	10
9	121	106	41	118	59	19	40	75	8.1
10	190	177	99	114	67	20	38	80	8.2
11	117	50	16	107	56	16	40	77	8.6
12	103	44	12	103	51	14	119	368	132
13	252	393	463	100	67	18	58	131	21
14	510	709	1010	103	99	28	45	86	11
15	505	296	410	97	80	21	42	79	8.9
16	349	108	108	89	87	21	47	74	12
17	242	57	38	83	286	64	80	221	53
18	206	45	25	83	193	43	47	95	12
19	190	41	21	81	109	24	42	102	12
20	185	58	29	77	123	26	38	84	8.7
21	167	63	29	76	72	15	37	87	8.7
22	168	52	23	73	68	13	38	90	9.3
23	150	46	19	67	63	11	37	135	13
24	146	53	21	60	68	11	36	95	9.2
25	137	45	17	57	61	9.3	34	88	7.9
26	129	46	16	55	80	12	33	87	7.7
27	124	61	20	53	101	14	32	81	7.0
28	122	66	22	67	141	28	31	76	6.4
29	131	86	31	117	408	140	32	81	7.0
30	129	73	26	70	205	39	32	91	7.9
31	---	---	---	83	258	58	---	---	---
TOTAL	5197	---	2626	3036	---	1346.3	1371	---	529.6
JULY			AUGUST			SEPTEMBER			
1	35	63	6.0	31	28	2.3	22	91	5.6
2	39	71	7.4	28	34	2.6	18	48	2.3
3	38	83	8.5	27	25	1.9	17	45	2.1
4	41	82	9.0	35	25	2.4	33	60	5.9
5	44	73	8.6	34	43	3.9	37	49	5.0
6	36	77	7.5	29	58	4.5	24	41	2.7
7	42	168	32	28	33	2.4	20	35	1.9
8	110	2250	802	27	33	2.4	18	31	1.5
9	49	361	50	33	36	3.2	16	40	1.8
10	40	131	14	31	35	3.0	33	109	12
11	36	109	10	28	26	2.0	51	144	22
12	32	102	8.8	25	37	2.5	27	58	4.4
13	37	101	10	25	32	2.1	23	44	2.7
14	31	75	6.3	26	35	2.4	28	22	1.6
15	28	118	9.0	25	36	2.5	23	20	1.3
16	28	82	6.2	24	37	2.4	21	20	1.1
17	32	84	7.2	22	33	2.0	20	13	.70
18	30	64	5.2	75	302	75	19	15	.77
19	28	69	5.1	66	233	84	20	22	1.2
20	28	45	3.4	89	1060	333	18	29	1.4
21	27	52	3.8	38	81	8.8	17	23	1.0
22	27	39	2.8	28	45	3.3	16	20	.89
23	29	34	2.6	22	55	3.3	20	23	1.2
24	30	33	2.6	26	65	4.5	29	69	7.5
25	28	45	3.3	20	68	3.8	107	406	124
26	27	43	3.2	19	70	3.5	47	87	12
27	26	37	2.6	19	64	3.3	27	53	3.9
28	25	31	2.1	19	55	2.9	22	60	3.6
29	32	56	5.3	19	49	2.5	21	45	2.5
30	36	31	3.0	18	39	1.9	20	33	1.8
31	38	41	4.2	23	121	9.3	---	---	---
TOTAL	1109	---	1051.7	959	---	583.6	814	---	236.36
YEAR	52342		33801.26						

CAPTINA CREEK BASIN

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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 National Geodetic Vertical Datum of 1929. Aug. 20, 1926 to Sept. 30, 1935, nonrecording gage at same site, at datum 1.0 ft higher.

REMARKS.--Estimated daily discharges: Jan. 23-29, Feb. 14 to Mar. 1. 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.

AVERAGE DISCHARGE.--42 years, 166 ft³/s, 16.82 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,900 ft³/s Aug. 11, 1980, gage height, 17.48 ft; no flow at times during 1929-30, 1932, 1934, 1959, 1963-66, 1972-74, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 12	1630	3,760	8.01	Dec. 30	2230	4,850	9.08
Dec. 18	2200	*6,000	*9.99	Mar. 6	2100	3,030	7.21

Minimum daily discharge, 0.95 ft³/s July 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	92	84	671	286	130	142	97	41	6.5	4.8	1.2
2	72	87	82	460	234	127	130	95	26	21	3.2	1.1
3	61	80	906	351	205	124	118	85	27	15	2.2	.97
4	127	76	1390	262	184	343	111	78	27	8.1	2.2	1.2
5	150	75	492	244	176	254	112	78	19	21	2.3	1.6
6	93	109	318	330	272	930	109	526	15	22	2.4	2.1
7	75	82	239	353	499	983	100	208	13	11	2.5	2.8
8	67	74	196	262	342	437	93	141	11	12	1.8	1.9
9	63	70	167	255	266	309	179	122	10	9.7	1.8	1.4
10	62	358	151	238	227	265	346	109	9.2	6.6	2.1	2.0
11	125	226	134	1470	193	227	199	94	8.3	5.7	2.8	6.1
12	1540	160	122	1280	196	194	160	84	24	4.8	2.5	6.0
13	831	131	114	588	549	193	1130	77	19	4.5	2.0	4.1
14	377	113	99	408	620	236	1370	112	11	5.6	1.7	3.0
15	244	103	697	321	380	257	1230	91	10	4.5	1.3	2.5
16	176	97	461	622	250	206	700	68	11	2.6	1.0	2.5
17	143	114	278	601	210	186	423	60	76	1.8	.96	2.1
18	243	97	3570	425	190	195	300	54	34	1.3	1.1	1.7
19	223	90	2050	334	540	217	247	49	19	1.1	1.3	1.7
20	155	84	687	295	1000	191	230	45	14	.99	15	1.5
21	133	78	654	310	600	175	194	42	10	.95	21	1.3
22	139	80	535	233	400	167	198	37	8.4	1.1	11	1.4
23	529	288	1130	190	280	346	174	34	11	1.5	6.1	1.2
24	406	184	988	160	230	260	153	31	9.7	4.3	4.4	2.1
25	259	148	532	140	200	214	139	29	7.9	8.3	3.0	54
26	197	126	382	130	170	198	125	28	5.7	4.2	2.2	34
27	160	117	284	120	150	211	116	27	4.4	3.5	1.8	14
28	140	110	273	120	140	190	112	33	3.1	2.5	1.3	8.1
29	119	101	616	180	---	164	119	38	2.5	8.2	1.1	5.6
30	108	90	1650	827	---	162	115	28	2.1	12	1.1	4.9
31	99	---	1830	452	---	149	---	58	---	7.2	1.0	---
TOTAL	7225	3640	21111	12632	8989	8240	8874	2658	489.3	219.54	108.96	174.07
MEAN	233	121	681	407	321	266	296	85.7	16.3	7.08	3.51	5.80
MAX	1540	358	3570	1470	1000	983	1370	526	76	22	21	54
MIN	61	70	82	120	140	124	93	27	2.1	.95	.96	.97
CFSM	1.74	.91	5.08	3.04	2.40	1.98	2.21	.64	.12	.05	.03	.04
IN.	2.01	1.01	5.86	3.51	2.50	2.29	2.46	.74	.14	.06	.03	.05

CAL YR 1990 TOTAL 98321 MEAN 269 MAX 3570 MIN 25 CFSM 2.01 IN. 27.30
WTR YR 1991 TOTAL 74360.87 MEAN 204 MAX 3570 MIN .95 CFSM 1.52 IN. 20.64

MUSKINGUM RIVER BASIN

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 National Geodetic Vertical Datum of 1929. Prior to Aug. 19, 1944, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 23-29. 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.

AVERAGE DISCHARGE.--54 years, 448 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,700 ft³/s July 5, 1969, gage height, 16.43 ft; minimum daily, 49 ft³/s July 17, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,260 ft³/s Dec. 31, gage height, 12.52 ft; minimum daily, 57 ft³/s Sept. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	347	382	304	5520	544	579	345	363	316	122	77	77
2	299	353	293	4230	498	611	341	332	246	130	83	57
3	259	339	908	2650	575	675	316	306	203	121	90	74
4	684	325	2470	1520	759	967	305	289	174	107	94	189
5	1330	343	1930	995	972	917	326	294	159	96	94	269
6	715	601	1100	832	1080	1790	381	397	152	93	81	135
7	441	563	722	742	1300	3120	344	369	145	84	71	92
8	377	470	593	662	1200	2750	326	315	139	109	71	78
9	551	427	511	593	880	1660	364	289	132	163	109	90
10	3050	575	470	609	735	1060	1190	275	132	107	119	128
11	3810	609	439	764	648	822	916	245	146	91	84	155
12	3590	518	415	1620	536	706	520	224	251	92	71	110
13	3470	465	404	1330	462	640	425	225	212	104	73	94
14	2700	391	353	955	636	592	505	252	178	97	96	84
15	1800	348	768	745	861	500	953	284	156	95	101	74
16	1080	342	1270	1140	603	461	1130	249	145	91	79	72
17	819	397	854	1840	598	448	851	220	147	88	80	72
18	1240	435	1900	1530	569	491	788	198	142	83	200	77
19	1720	382	3790	974	1620	557	667	183	137	78	227	83
20	1150	345	3210	807	2760	555	1070	177	130	73	204	81
21	778	321	2090	837	2460	529	1030	175	126	67	200	73
22	864	341	2080	701	1670	506	978	175	122	83	125	71
23	1310	747	3050	520	1090	616	797	171	140	97	99	86
24	1030	616	3540	440	802	674	714	167	132	135	90	104
25	809	467	2660	380	696	578	714	267	123	111	78	102
26	686	401	1530	340	596	518	559	258	121	89	78	94
27	583	369	897	320	513	531	494	222	129	78	76	83
28	528	372	718	300	497	533	452	223	122	70	73	73
29	489	349	1080	280	---	444	420	204	113	73	72	67
30	457	318	3920	659	---	391	403	244	107	79	73	67
31	424	---	5990	731	---	356	---	356	---	79	74	---
TOTAL	37390	12911	50259	35566	26160	25577	18624	7948	4677	2985	3142	2911
MEAN	1206	430	1621	1147	934	825	621	256	156	96.3	101	97.0
MAX	3810	747	5990	5520	2760	3120	1190	397	316	163	227	269
MIN	259	318	293	280	462	356	305	167	107	67	71	57

CAL YR 1990 TOTAL 297046 MEAN 814 MAX 5990 MIN 113
WTR YR 1991 TOTAL 228150 MEAN 625 MAX 5990 MIN 57

MUSKINGUM RIVER BASIN

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03117100 TUSCARAWAS RIVER AT NAVARRE, OH

WATER QUALITY RECORDS

LOCATION.--Lat 40°43'36", long 81°31'47", Stark County, Hydrologic Unit 05040001, on left bank at Navarre water treatment plant, 800 ft upstream from bridge on Elton Road at Navarre, 3.5 mi downstream from gaging station at Massillon, 1.2 mi downstream from Pigeon Run, and just upstream from Wolf Creek.

DRAINAGE AREA.--534 mi².

PERIOD OF RECORD.--March 1968 to September 1986, August 1987 to September 1991 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1968 to September 1986, August 1987 to September 1991 (discontinued).

pH: March 1968 to September 1986, August 1987 to September 1991 (discontinued).

WATER TEMPERATURES: March 1968 to September 1986, August 1987 to September 1991 (discontinued).

DISSOLVED OXYGEN: March 1968 to September 1986, August 1987 to September 1991 (discontinued).

INSTRUMENTATION.--Water-quality monitor. Digital recorder set for one-hour-interval punches.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. See records of daily discharge for gaging station at Massillon (station 03117000).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 16,700 microsiemens Jan. 27, 1970; minimum, 200 microsiemens Mar. 8, 9, 1980.

pH: Maximum, 10.7 units Oct. 27, 1971; minimum, 3.9 units Oct. 26, 1969.

WATER TEMPERATURES: Maximum, 30.0°C June 27, 28, 1969, Aug. 25, 1975, July 7, 16, 20, 1977; minimum, 0.0°C on many days during winters.

DISSOLVED OXYGEN: Maximum, >20.0 mg/L July 15, 16, 23-26, 1982; minimum, 0.0 mg/L on many days during 1971 to 1973.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 2,090 microsiemens July 9; minimum, 300 microsiemens Dec. 30.

pH: Maximum recorded, 8.5 units March 5, 16; minimum recorded, 7.0 on several days during period of record.

WATER TEMPERATURES: Maximum, 27.0°C June 1, July 3; minimum, 0.5°C Jan. 25-27, Feb. 15, 16.

DISSOLVED OXYGEN: Maximum, 17.4 mg/L June 20; minimum, 2.8 mg/L June 1.

MUSKINGUM RIVER BASIN

03117100 TUSCARAWAS RIVER AT NAVARRE, OH--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	1310	1210	1250	1130	1090	1110	1160	1120	1130	360	324	339
2	1250	1090	1130	1200	1090	1170	1180	1150	1170	444	360	381
3	1320	1090	1210	1220	1180	1200	1180	570	905	600	453	528
4	1330	837	1140	1220	1210	1210	483	408	438	699	606	648
5	861	516	597	1240	1100	1220	615	483	550	843	684	752
6	822	633	725	1260	948	1130	774	621	704	915	840	867
7	1060	798	883	972	912	939	837	780	803	948	891	916
8	1080	1000	1040	993	933	962	876	840	854	909	891	898
9	1120	630	941	1030	993	1020	909	876	890	966	876	917
10	858	327	465	1010	924	987	972	912	944	999	909	954
11	438	363	408	909	852	867	981	963	970	978	720	897
12	453	417	439	951	885	918	1010	981	994	789	612	705
13	477	432	451	978	936	957	1040	1000	1020	690	624	649
14	561	483	517	1010	969	985	1040	1010	1030	783	696	746
15	651	567	611	1150	1030	1110	1070	798	927	855	777	811
16	762	648	714	1150	1140	1150	714	534	589	852	630	782
17	849	762	801	1160	1110	1130	735	639	693	612	543	562
18	837	558	735	1130	975	1030	741	363	579	672	570	621
19	591	501	536	1050	975	1010	399	324	349	786	672	725
20	717	597	660	1100	1050	1080	492	402	448	819	789	808
21	846	717	782	1140	1110	1120	585	495	538	852	810	823
22	867	762	818	1150	1030	1110	588	501	525	915	825	863
23	729	636	658	1180	711	945	513	339	416	975	921	951
24	741	657	696	834	714	765	438	339	381	996	975	980
25	891	744	793	942	840	891	558	444	502	1040	951	990
26	936	864	894	1010	945	975	780	564	634	1130	1050	1100
27	951	876	909	1070	1010	1030	900	735	793	1130	1080	1110
28	981	948	967	1140	1080	1100	879	789	831	1220	1090	1140
29	1010	987	998	1090	1060	1080	891	741	843	1170	1120	1140
30	1040	1010	1030	1120	1080	1100	726	300	444	1120	1010	1060
31	1090	1040	1060	---	---	---	321	303	309	1060	972	1010
MONTH	1330	327	802	1260	711	1040	1180	300	716	1220	324	828
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1030	993	1020	1030	918	969	1100	1060	1080	1030	990	1000
2	1020	1000	1010	966	912	932	1110	1080	1100	1080	1030	1050
3	1020	933	982	915	837	881	1100	1070	1090	1130	1070	1090
4	927	807	880	864	765	810	1150	1060	1120	1130	1090	1110
5	801	696	754	999	762	905	1150	1120	1140	1150	1080	1140
6	699	681	692	951	483	719	1180	993	1100	1230	1020	1110
7	702	654	677	492	459	471	1030	981	997	1090	939	991
8	723	657	687	591	495	537	1080	1030	1060	1070	1010	1030
9	780	726	753	690	591	637	1100	1050	1080	1130	1070	1090
10	825	780	805	756	693	725	1030	495	755	1160	1120	1140
11	882	825	857	816	762	790	741	585	660	1180	1150	1160
12	951	882	900	864	819	835	897	750	811	1240	1090	1170
13	996	936	961	897	867	879	972	897	922	1330	1250	1310
14	1000	900	981	918	894	900	1010	876	955	1340	1280	1310
15	882	795	834	975	888	921	897	642	780	1400	1190	1290
16	954	831	875	1040	975	997	699	624	657	1190	1130	1150
17	960	900	931	1000	981	993	792	708	743	1210	1150	1180
18	1030	969	1000	1010	975	1000	792	747	760	1290	1170	1220
19	987	558	788	1010	936	969	825	762	795	1330	1290	1310
20	552	510	523	942	909	926	813	642	720	1390	1320	1350
21	606	540	571	951	915	927	696	636	666	1440	1390	1420
22	675	606	641	960	927	944	723	699	713	1460	1430	1440
23	738	675	701	957	909	945	780	720	743	1470	1430	1460
24	804	738	770	879	795	832	831	786	805	1470	1420	1450
25	843	804	825	906	846	881	801	750	777	1460	825	1260
26	894	831	858	933	909	919	873	783	825	1320	1010	1170
27	960	882	908	963	936	947	906	870	882	1330	1110	1210
28	978	963	971	954	942	949	930	909	918	1300	1180	1250
29	---	---	---	993	921	948	969	933	954	1310	1260	1280
30	---	---	---	1050	996	1030	996	972	986	1290	804	1180
31	---	---	---	1070	1050	1050	---	---	---	1260	993	1090
MONTH	1030	510	827	1070	459	876	1180	495	886	1470	804	1210

MUSKINGUM RIVER BASIN

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03117100 TUSCARAWAS RIVER AT NAVARRE, OH--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	1320	969	1120	1590	1450	1500	1800	1720	1770	---	---	---
2	1080	1000	1040	1700	1540	1640	1790	1690	1750	---	---	---
3	1170	1080	1130	1540	1430	1500	1770	1650	1730	---	---	---
4	1300	1150	1190	1460	1400	1440	1750	1540	1670	---	---	---
5	1440	1310	1390	1510	1460	1480	1560	1480	1530	---	---	---
6	1460	1420	1440	1560	1450	1520	1530	1490	1510	---	---	---
7	1480	1450	1470	1640	1510	1580	1520	1480	1510	---	---	---
8	1490	1460	1470	1680	1510	1590	1550	1480	1520	---	---	---
9	1510	1460	1480	2090	1640	1880	1580	1390	1500	---	---	---
10	1520	1470	1500	1770	903	1130	1780	1600	1670	---	---	---
11	1560	1490	1530	1350	1100	1260	1870	1360	1700	---	---	---
12	1630	1490	1570	1540	1360	1470	1350	1280	1310	1150	1100	1140
13	1600	1090	1270	1540	1210	1410	1520	1330	1440	1150	1080	1110
14	1280	1170	1230	---	---	---	1720	1520	1590	1200	1080	1110
15	1290	1240	1260	---	---	---	1850	1730	1780	1370	1210	1300
16	1360	1290	1330	---	---	---	1960	1270	1610	1480	1390	1440
17	1440	1370	1400	---	---	---	1380	1150	1290	1540	1430	1510
18	1510	1450	1470	---	---	---	1750	1010	1340	1600	1490	1550
19	1540	1370	1450	---	---	---	1900	744	1190	1640	1570	1620
20	1500	1370	1440	---	---	---	1060	801	918	1670	1610	1650
21	1510	1390	1460	---	---	---	1310	1090	1170	1620	1580	1610
22	1510	1390	1480	---	---	---	1120	1060	1080	1620	1550	1580
23	1560	1510	1540	1720	1640	1680	1200	1130	1170	1570	1500	1550
24	1630	1510	1590	2020	1630	1830	1340	1210	1270	1530	1460	1500
25	1490	1350	1430	1840	1410	1690	1490	1350	1430	1670	1520	1610
26	1550	1500	1530	1370	1270	1310	1500	1420	1450	1710	1570	1640
27	1610	1510	1570	1460	1300	1410	1560	1420	1500	1670	1420	1490
28	1650	1460	1580	1510	1390	1480	1670	1550	1620	1600	1480	1550
29	1450	1390	1430	1630	1510	1570	1680	1630	1650	1590	1420	1480
30	1510	1370	1470	1660	1580	1630	---	---	---	1490	1420	1460
31	---	---	---	1770	1660	1710	---	---	---	---	---	---
MONTH	1650	969	1410	2090	903	1530	1960	744	1470	1710	1080	1470
YEAR	2090	300	1060									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

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

03117100 TUSCARAWAS RIVER AT NAVARRE, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

[illegible]

MUSKINGUM RIVER BASIN

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03117100 TUSCARAWAS RIVER AT NAVARRE, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	17.5	15.0	16.0	13.5	11.0	12.0	6.5	5.0	6.0	4.0	3.0	3.5
2	17.0	14.5	16.0	13.5	11.5	12.5	7.0	6.0	6.5	3.0	2.5	3.0
3	17.0	14.5	15.5	14.0	12.0	13.0	7.0	6.5	6.5	3.5	3.0	3.0
4	17.5	16.5	17.0	14.0	12.0	13.0	7.0	5.5	6.5	3.0	2.5	2.5
5	17.0	16.0	16.5	13.5	13.0	13.5	5.5	4.0	4.5	3.0	2.5	2.5
6	18.0	16.5	17.0	12.5	10.5	11.5	4.5	3.5	4.0	3.5	3.0	3.5
7	18.5	16.5	17.5	10.5	9.0	10.0	5.5	4.5	5.0	4.5	3.5	4.0
8	18.5	17.5	18.0	9.5	8.0	9.0	5.5	4.5	5.0	4.0	3.0	3.5
9	18.0	17.5	18.0	8.5	8.0	8.5	5.5	4.0	4.5	4.0	3.5	4.0
10	17.5	16.5	17.0	9.0	8.0	8.5	6.0	4.5	5.0	4.5	4.0	4.5
11	16.5	15.0	16.0	8.5	7.5	8.0	6.0	4.5	5.0	4.0	3.5	4.0
12	15.0	14.0	14.5	8.0	7.0	7.5	6.5	4.5	5.5	4.0	3.5	3.5
13	14.5	14.0	14.5	7.5	6.0	7.0	7.5	6.5	7.0	3.5	3.0	3.0
14	15.0	14.5	15.0	7.5	5.5	6.5	6.5	5.5	6.0	3.5	3.0	3.0
15	15.5	15.0	15.0	8.5	6.0	7.0	5.5	5.0	5.5	4.5	3.0	4.0
16	15.0	14.0	14.5	10.0	7.5	8.5	5.5	5.0	5.0	5.5	4.5	5.0
17	15.0	13.5	14.0	10.0	9.0	9.5	5.5	5.0	5.5	5.0	4.0	4.5
18	15.5	14.0	15.0	9.0	7.5	8.5	7.5	5.5	7.0	4.0	3.0	3.5
19	14.0	11.5	13.0	8.0	6.5	7.5	7.0	5.5	6.5	3.5	2.5	3.0
20	12.0	11.0	11.5	8.0	6.0	7.0	5.5	5.0	5.5	4.5	3.5	4.0
21	13.0	11.5	12.0	8.0	6.5	7.0	7.0	5.0	6.0	4.5	2.5	3.5
22	13.5	12.5	13.0	9.5	8.0	8.5	8.5	7.0	8.0	2.5	1.0	2.0
23	13.5	13.0	13.0	10.0	8.5	9.0	8.5	5.5	7.0	2.0	1.0	1.5
24	13.0	12.0	12.5	8.5	7.5	8.0	5.5	3.0	4.0	2.5	1.0	1.5
25	12.0	11.5	12.0	8.0	7.0	7.5	2.5	2.0	2.0	2.0	.5	1.0
26	11.5	10.0	11.0	8.5	7.0	7.5	2.5	1.5	2.0	2.0	.5	1.0
27	10.5	9.0	10.0	11.0	8.5	10.0	2.0	1.5	1.5	2.5	.5	1.5
28	10.0	9.5	10.0	12.5	11.0	11.5	3.0	1.5	2.5	3.5	1.5	2.5
29	10.5	9.0	9.5	11.0	8.5	10.0	6.0	3.0	4.5	3.5	1.5	2.5
30	11.0	8.5	9.5	8.5	6.5	7.5	7.5	6.0	7.0	3.5	3.0	3.0
31	12.5	10.0	11.0	---	---	---	6.5	4.5	5.5	3.0	1.5	2.0
MONTH	18.5	8.5	14.0	14.0	5.5	9.0	8.5	1.5	5.0	5.5	.5	3.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	2.5	1.0	1.5	6.0	4.0	5.0	9.5	8.0	8.5	19.5	17.5	18.5
2	4.5	2.0	3.0	9.5	6.0	8.0	11.0	7.5	9.0	18.0	16.0	17.0
3	5.0	3.0	4.0	9.0	7.0	8.5	11.5	7.5	9.5	18.0	14.5	16.0
4	5.5	3.5	4.5	6.5	3.0	5.0	12.5	9.5	11.0	17.0	14.5	16.0
5	6.0	4.5	5.0	5.0	2.5	3.5	14.0	12.0	13.0	18.5	15.0	16.5
6	5.5	5.0	5.0	6.0	4.5	5.5	16.0	12.5	14.0	17.5	16.0	17.0
7	5.0	4.5	4.5	5.5	4.5	5.0	18.0	13.5	15.5	18.0	15.0	16.0
8	4.5	4.0	4.0	4.5	3.5	4.0	18.0	16.0	17.0	18.0	14.5	16.0
9	4.0	4.0	4.0	5.0	4.0	4.5	19.0	16.5	17.5	19.5	16.0	17.5
10	5.0	4.0	4.5	5.0	4.5	5.0	17.5	12.5	15.0	20.5	17.0	18.5
11	4.5	3.0	4.0	5.5	4.0	4.5	12.5	11.0	12.0	21.5	17.5	19.5
12	4.0	2.5	3.5	5.0	3.5	4.5	13.0	10.5	11.5	22.5	18.5	20.5
13	4.0	3.0	3.5	5.0	4.5	4.5	12.5	11.5	12.0	24.0	20.0	22.0
14	4.5	4.0	4.0	6.5	4.5	5.5	12.0	11.5	11.5	25.0	21.5	23.0
15	3.5	1.5	3.0	7.5	5.0	6.0	13.5	11.5	12.0	25.0	21.5	23.0
16	2.0	.5	1.0	8.5	5.5	6.5	14.5	12.5	13.5	24.5	21.5	23.0
17	2.5	.5	1.5	9.0	6.0	7.5	15.0	13.5	14.0	24.5	22.5	23.0
18	3.5	2.0	2.5	9.0	8.0	8.5	15.5	13.5	14.0	23.0	20.5	21.0
19	3.5	2.5	3.0	9.0	8.0	8.0	14.0	13.0	13.5	21.0	18.5	19.5
20	3.0	3.0	3.0	9.5	7.0	8.5	13.0	11.5	12.5	21.0	18.0	19.5
21	4.0	2.5	3.5	12.0	8.5	10.0	11.5	10.0	11.0	23.0	18.5	20.5
22	5.0	4.0	4.5	12.0	10.5	11.5	11.0	9.5	10.0	24.0	19.5	21.5
23	5.0	3.5	4.5	14.0	11.5	12.5	12.0	10.0	11.0	24.5	20.0	22.0
24	5.0	3.5	4.5	12.5	10.5	12.0	13.0	11.5	12.0	24.0	20.5	22.5
25	5.0	4.0	4.5	11.5	9.5	10.5	14.5	11.5	12.5	23.5	21.5	22.5
26	4.5	3.5	4.0	10.0	9.5	10.0	16.5	13.0	14.5	23.5	21.5	22.5
27	4.0	3.0	3.5	12.0	10.0	11.0	17.0	14.0	15.5	23.0	22.0	22.5
28	4.5	3.0	3.5	13.5	10.5	12.0	18.5	16.0	17.0	24.5	21.0	22.5
29	---	---	---	12.0	9.5	11.0	19.5	17.5	18.5	25.5	22.0	23.5
30	---	---	---	10.0	8.0	9.0	21.0	18.0	19.0	25.5	23.0	24.5
31	---	---	---	9.5	6.5	8.0	---	---	---	26.0	23.0	24.5
MONTH	6.0	.5	3.5	14.0	2.5	7.5	21.0	7.5	13.0	26.0	14.5	20.5

MUSKINGUM RIVER BASIN

03117100 TUSCARAWAS RIVER AT NAVARRE, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	27.0	23.5	25.0	26.0	22.5	24.5	24.0	21.5	23.0	---	---	---
2	25.0	23.0	24.5	26.0	24.0	25.0	25.5	22.0	23.5	---	---	---
3	25.5	22.0	24.0	27.0	23.5	25.5	25.5	23.0	24.0	---	---	---
4	23.5	21.0	22.5	26.5	24.0	25.0	25.0	23.0	24.0	---	---	---
5	22.0	19.0	21.0	25.5	23.5	24.5	24.0	21.5	22.5	---	---	---
6	21.5	18.0	19.5	26.5	23.0	24.5	23.0	20.0	21.5	---	---	---
7	21.5	18.0	20.0	26.5	24.0	25.5	23.5	20.0	21.5	---	---	---
8	22.0	18.0	20.0	26.0	24.0	25.0	23.0	20.5	21.5	---	---	---
9	23.5	18.5	21.0	25.0	23.0	24.0	21.0	20.5	21.0	---	---	---
10	23.0	19.5	21.5	24.5	21.5	23.0	23.0	19.5	21.0	---	---	---
11	23.0	21.0	22.0	24.0	21.5	23.0	23.0	19.5	21.5	---	---	---
12	24.5	21.0	22.5	24.0	21.5	22.0	23.5	20.0	22.0	22.0	21.0	21.0
13	24.5	21.0	22.5	---	---	---	23.0	21.0	22.0	22.0	20.5	21.5
14	24.5	20.0	22.5	---	---	---	23.5	21.0	22.0	23.5	20.5	21.5
15	25.5	21.0	23.5	---	---	---	24.0	21.0	22.5	23.5	21.5	22.5
16	25.0	22.5	24.0	---	---	---	24.0	21.5	22.5	25.0	22.5	23.5
17	25.5	22.0	24.0	---	---	---	23.5	22.0	22.5	25.0	23.0	24.5
18	25.0	22.0	23.5	---	---	---	24.0	21.5	22.5	25.0	23.0	24.0
19	26.0	22.0	24.0	---	---	---	23.0	21.5	22.5	23.5	21.5	22.5
20	26.5	22.5	24.5	---	---	---	22.0	21.0	21.5	22.0	19.5	20.0
21	26.5	22.5	24.5	---	---	---	22.5	20.5	21.5	19.0	17.0	18.0
22	26.0	23.0	24.0	---	---	---	23.0	20.0	21.5	17.5	14.5	16.0
23	23.0	21.0	22.0	26.0	24.5	25.0	24.5	21.0	22.5	18.0	14.5	16.0
24	24.0	20.0	22.0	26.5	22.5	24.5	24.5	21.5	23.0	18.0	16.5	17.5
25	24.0	20.5	22.0	26.0	23.0	24.5	24.5	22.0	23.5	18.0	15.5	16.5
26	24.5	21.0	22.5	25.5	22.5	23.5	24.5	22.5	24.0	17.0	16.0	16.5
27	25.5	21.0	23.5	23.5	21.0	22.5	24.5	22.5	23.5	17.0	15.5	16.0
28	25.5	22.0	24.0	23.0	19.5	21.5	25.5	23.0	24.5	16.0	13.5	15.0
29	26.0	23.0	24.5	22.5	21.0	22.0	26.0	23.5	24.5	16.0	13.5	14.5
30	26.0	23.5	25.0	23.0	21.0	22.0	26.0	24.0	24.5	16.5	14.5	15.5
31	---	---	---	24.0	19.5	22.0	---	---	---	---	---	---
MONTH	27.0	18.0	23.0	27.0	19.5	24.0	26.0	19.5	22.5	25.0	13.5	19.0
YEAR	27.0	.5	13.5									

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.0	7.0	7.5	8.9	8.5	8.7	12.1	10.0	10.8	8.8	8.2	8.5
2	8.7	7.3	7.8	9.2	8.1	8.7	12.0	10.0	10.8	11.6	8.4	10.1
3	9.0	7.4	8.1	9.4	8.4	8.8	10.3	9.4	10.0	11.5	11.0	11.3
4	8.0	6.7	7.3	9.4	8.3	8.8	9.5	8.9	9.1	11.6	11.1	11.4
5	6.7	6.0	6.5	9.0	8.3	8.6	10.1	9.5	9.9	11.9	11.6	11.8
6	7.7	6.7	7.2	9.3	8.4	8.9	10.2	7.3	8.5	11.8	11.5	11.7
7	7.9	7.0	7.3	9.4	8.6	9.0	8.6	7.5	8.1	11.8	11.5	11.6
8	7.7	6.8	7.2	10.7	9.5	10.1	8.3	7.1	7.7	11.9	11.5	11.7
9	7.2	6.7	7.0	10.7	10.1	10.3	9.3	8.1	8.6	11.6	11.3	11.4
10	6.9	4.4	5.8	10.7	9.9	10.2	9.2	8.3	8.7	11.5	11.2	11.4
11	5.6	4.5	5.1	10.3	9.8	10.0	9.9	8.2	9.0	11.8	11.2	11.5
12	5.7	5.4	5.5	11.2	10.1	10.5	10.3	8.5	9.2	11.5	8.8	10.8
13	5.8	5.5	5.7	11.6	10.5	10.9	9.8	8.7	9.1	11.1	8.9	10.3
14	5.5	5.2	5.4	11.9	10.7	11.1	10.4	8.3	9.4	9.9	8.6	9.4
15	5.3	4.9	5.0	11.8	10.5	10.9	10.2	9.2	9.6	12.0	8.4	10.8
16	6.6	4.6	5.3	11.5	9.8	10.5	10.3	9.4	9.8	11.5	11.1	11.4
17	8.0	6.4	7.5	10.7	9.5	9.9	10.9	9.7	10.2	11.6	11.1	11.3
18	7.7	7.2	7.5	11.1	9.4	10.0	10.5	7.3	9.3	12.1	11.6	11.9
19	6.7	5.5	6.0	11.7	9.8	10.6	9.2	7.3	8.0	12.3	11.9	12.1
20	8.4	5.6	6.5	11.9	10.2	10.8	8.1	6.9	7.6	11.9	11.5	11.8
21	7.2	6.2	6.8	12.0	9.7	10.6	10.0	9.9	9.9	12.0	11.5	11.7
22	6.3	5.5	5.9	9.9	9.0	9.5	10.1	9.7	9.9	12.6	11.8	12.2
23	8.2	5.3	7.2	8.9	8.1	8.7	10.3	7.5	9.4	12.6	12.2	12.4
24	8.8	8.2	8.6	9.4	8.2	8.9	8.5	7.7	8.1	12.7	12.2	12.4
25	9.1	8.7	8.9	10.4	9.4	9.8	9.6	8.4	9.0	12.7	12.2	12.4
26	9.0	5.4	7.5	11.1	9.6	10.1	9.6	8.6	9.1	12.6	12.1	12.3
27	8.9	7.4	8.3	10.5	9.0	9.6	9.5	9.0	9.2	12.6	12.0	12.2
28	9.2	8.7	8.9	8.8	8.2	8.6	9.4	8.7	9.1	12.4	11.9	12.1
29	9.3	8.9	9.1	10.0	8.2	8.9	8.9	8.0	8.5	12.5	11.8	12.1
30	9.5	9.1	9.2	11.4	9.0	10.0	8.3	7.3	7.8	12.0	11.7	11.9
31	9.1	8.8	9.0	---	---	---	8.4	7.6	8.0	12.2	11.6	11.9
MONTH	9.5	4.4	7.1	12.0	8.1	9.7	12.1	6.9	9.1	12.7	8.2	11.5

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	12.9	12.1	12.5	13.0	11.7	12.3	11.9	9.5	10.5	7.7	6.4	7.0
2	13.1	12.1	12.5	12.2	10.7	11.4	12.9	8.8	10.4	6.9	5.3	6.1
3	12.8	11.8	12.2	10.7	10.1	10.4	12.0	8.7	9.9	7.2	5.1	5.7
4	12.2	11.6	11.9	11.6	10.5	11.1	10.3	7.1	8.4	6.1	5.1	5.7
5	11.9	11.5	11.7	12.3	11.5	12.0	12.5	5.8	9.0	5.5	3.9	4.7
6	11.7	11.5	11.7	11.9	11.2	11.5	12.9	7.9	9.8	7.6	3.0	5.7
7	11.9	11.6	11.8	11.4	10.9	11.1	13.9	7.3	9.9	7.9	5.6	6.9
8	11.9	11.7	11.8	11.7	11.1	11.5	11.9	7.2	9.1	9.4	7.1	8.0
9	11.9	11.6	11.8	13.1	11.2	11.7	10.4	6.0	7.7	9.3	6.9	8.0
10	12.4	11.5	11.9	13.1	11.5	12.2	7.0	4.2	5.6	8.9	6.4	7.5
11	12.5	11.6	12.0	12.9	11.5	12.4	9.4	7.1	8.5	9.1	6.1	7.3
12	13.1	11.9	12.4	12.7	11.9	12.3	10.8	9.4	10.0	8.8	5.8	7.1
13	12.4	11.5	12.0	12.2	11.5	11.8	9.8	9.1	9.5	8.6	5.3	6.8
14	11.9	11.2	11.5	12.9	11.4	12.0	9.6	8.7	9.2	8.6	5.0	6.4
15	12.3	11.3	11.8	13.0	11.2	12.0	9.1	8.6	8.9	7.9	4.8	6.1
16	13.5	12.2	12.7	13.5	11.1	12.1	8.7	8.5	8.6	8.0	4.4	5.9
17	13.6	12.6	13.0	13.7	11.0	12.1	9.5	8.5	8.8	7.9	4.5	5.9
18	12.8	12.0	12.5	11.2	10.2	10.6	9.7	8.3	9.0	7.2	4.1	5.6
19	12.5	12.0	12.2	12.1	9.8	10.8	9.1	8.4	8.8	6.9	5.0	5.8
20	12.1	12.0	12.1	13.1	10.3	11.5	8.7	8.4	8.6	6.8	5.2	5.9
21	12.1	11.8	12.0	12.7	10.2	11.2	9.3	8.6	8.9	7.2	5.0	5.9
22	11.8	11.5	11.7	10.6	9.2	9.9	10.3	9.3	9.8	7.2	4.9	5.9
23	12.3	11.6	12.0	10.9	8.9	9.6	10.3	9.5	9.9	9.1	4.7	6.6
24	12.7	12.0	12.3	9.1	8.8	9.0	9.4	8.5	9.0	8.7	5.1	6.6
25	12.5	11.7	12.0	11.7	9.2	10.2	9.6	8.3	9.0	7.1	4.8	5.7
26	12.8	11.7	12.2	11.2	10.0	10.5	9.6	8.2	8.8	6.2	4.7	5.3
27	13.2	11.7	12.4	11.3	9.5	10.2	9.7	7.8	8.7	5.8	5.1	5.4
28	13.1	12.0	12.4	11.3	8.9	9.9	9.6	7.5	8.3	6.3	4.8	5.5
29	---	---	---	11.1	8.7	9.7	8.3	6.6	7.3	6.9	5.0	5.9
30	---	---	---	12.1	9.2	10.4	8.7	6.1	7.2	6.5	4.8	5.4
31	---	---	---	12.4	9.3	10.6	---	---	---	5.5	4.5	5.0
MONTH	13.6	11.2	12.1	13.7	8.7	11.1	13.9	4.2	8.9	9.4	3.0	6.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	4.7	2.8	3.9	10.5	5.4	7.8	9.0	5.3	7.3	---	---	---
2	5.5	3.7	4.5	10.9	5.8	8.2	6.8	4.2	5.6	---	---	---
3	5.9	4.4	5.1	10.6	6.2	8.4	5.4	3.2	4.2	---	---	---
4	7.0	4.6	5.5	10.1	6.8	8.4	6.6	4.2	5.3	---	---	---
5	8.1	5.0	6.3	9.8	6.5	8.3	6.3	4.7	5.6	---	---	---
6	8.5	5.9	7.0	10.4	7.0	8.7	7.3	4.7	6.2	---	---	---
7	9.3	6.3	7.7	11.2	6.7	8.8	7.8	5.7	6.8	---	---	---
8	10.3	6.5	8.2	9.8	6.6	8.3	7.3	5.8	6.7	---	---	---
9	10.9	6.9	8.7	13.0	6.2	9.2	6.8	5.3	6.1	---	---	---
10	11.0	6.8	8.8	10.8	6.3	8.7	7.5	5.5	6.5	---	---	---
11	10.0	6.5	8.4	10.2	7.0	8.7	8.1	5.4	6.7	---	---	---
12	10.9	5.4	7.9	9.1	7.0	7.8	7.7	5.7	6.9	6.6	5.0	5.6
13	10.0	6.3	8.1	---	---	---	7.2	5.3	6.4	6.6	5.0	5.9
14	11.7	6.2	8.5	---	---	---	8.0	5.3	6.6	6.6	5.1	5.9
15	13.4	6.7	9.7	---	---	---	8.2	5.0	6.5	7.0	5.0	5.9
16	12.6	6.7	9.5	---	---	---	9.4	5.3	7.5	6.9	5.1	6.1
17	13.7	6.3	9.6	---	---	---	8.4	5.9	7.0	6.6	4.8	5.8
18	14.3	6.6	10.2	---	---	---	6.5	4.9	5.6	6.5	4.7	5.6
19	15.7	6.7	10.8	---	---	---	6.1	4.4	5.3	6.4	5.1	5.8
20	17.4	7.5	12.3	---	---	---	6.0	4.9	5.4	7.2	5.4	6.2
21	16.8	7.1	11.9	---	---	---	7.1	5.3	6.0	7.7	6.3	7.0
22	13.5	6.1	8.6	---	---	---	7.6	5.5	6.5	8.2	6.9	7.5
23	8.9	6.1	7.7	10.7	5.4	7.4	7.6	5.3	6.3	8.6	7.1	7.8
24	10.4	6.2	8.2	12.0	5.4	8.6	8.0	5.5	6.7	8.0	6.8	7.5
25	9.8	6.6	8.3	12.4	4.7	8.4	8.1	5.6	7.0	8.1	6.9	7.4
26	11.6	5.7	8.7	9.2	5.0	7.1	8.2	5.5	7.0	8.2	6.6	7.3
27	12.7	6.3	9.3	8.7	4.7	7.1	7.8	5.4	6.8	8.4	6.7	7.5
28	13.0	6.0	9.5	10.3	5.8	8.0	7.5	4.9	6.2	8.7	7.1	7.7
29	11.8	6.2	9.4	9.4	5.8	7.8	6.0	4.1	5.2	9.0	7.3	8.0
30	10.2	5.7	7.9	10.0	5.6	7.8	---	---	---	9.1	7.2	8.1
31	---	---	---	9.6	5.0	7.7	---	---	---	---	---	---
MONTH	17.4	2.8	8.3	13.0	4.7	8.2	9.4	3.2	6.3	9.1	4.7	6.8
YEAR	17.4	2.8	8.8									

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 National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 26-29, Jan. 23-29. Records good except for periods of estimated record, and discharges between 800 and 1,600 ft³/s, 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.

AVERAGE DISCHARGE.--53 years, 272 ft³/s, 14.60 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,000 ft³/s Jan. 22, 1959, gage height, 10.05 ft, from rating curve extended above 8,000 ft³/s on basis of contracted-opening and flow-over-road measurement of peak flow; minimum, 6.9 ft³/s Sept. 12, 13, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	0830	3,410	6.89	Feb. 20	1000	2,070	5.10
Dec. 23	2230	2,530	5.77	Mar. 7	0900	2,300	5.44
Dec. 31	0600	*4,960	*8.01				

Minimum discharge, 23 ft³/s Aug. 28, 31, Sept. 2, 16, 20-22, 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	311	255	188	3250	391	365	206	226	123	71	34	24
2	226	241	182	1690	326	349	200	214	95	86	32	23
3	192	235	479	1080	386	362	193	201	85	59	31	25
4	521	227	1220	743	456	839	185	189	79	65	31	62
5	684	223	935	598	508	657	194	180	76	61	29	44
6	412	293	746	669	545	825	216	282	71	52	29	35
7	315	269	596	617	789	1940	206	276	70	48	29	30
8	274	242	449	519	717	1300	191	207	69	73	30	27
9	258	224	369	476	582	924	237	186	65	123	33	26
10	358	299	335	484	518	678	537	175	64	72	31	31
11	366	351	309	593	448	551	379	167	66	58	29	31
12	681	286	280	1350	370	464	289	157	84	51	27	25
13	1460	253	254	1040	340	412	258	212	80	50	24	27
14	1010	228	234	830	530	391	321	159	68	45	25	27
15	798	217	511	661	581	361	607	132	63	43	26	24
16	592	212	813	944	487	322	746	118	60	41	25	23
17	445	255	641	1170	459	295	635	113	59	40	25	29
18	469	251	1240	911	372	286	526	106	57	39	36	26
19	582	214	3090	719	1290	299	422	103	56	37	32	25
20	440	200	2250	644	1910	285	391	98	55	37	34	23
21	359	194	1580	630	1400	259	372	95	52	36	35	23
22	356	200	1480	489	1060	246	359	92	52	41	32	23
23	595	382	1900	370	760	316	340	87	53	39	32	26
24	598	342	2070	310	584	350	305	85	52	39	31	28
25	476	277	1700	270	516	292	299	95	50	38	28	39
26	416	251	1200	240	442	263	282	100	48	36	25	36
27	371	234	840	220	387	260	261	100	46	34	25	31
28	338	228	660	210	363	267	245	101	44	32	23	27
29	309	219	600	200	---	248	236	131	44	33	24	25
30	286	203	2410	443	---	228	234	128	46	34	25	23
31	268	---	4660	512	---	215	---	160	---	34	23	---
TOTAL	14766	7505	34221	22882	17517	14849	9872	4675	1932	1547	895	868
MEAN	476	250	1104	738	626	479	329	151	64.4	49.9	28.9	28.9
MAX	1460	382	4660	3250	1910	1940	746	282	123	123	36	62
MIN	192	194	182	200	326	215	185	85	44	32	23	23
CFSM	1.88	.99	4.36	2.92	2.47	1.89	1.30	.60	.25	.20	.11	.11
IN.	2.17	1.10	5.03	3.36	2.58	2.18	1.45	.69	.28	.23	.13	.13

CAL YR 1990 TOTAL 172869 MEAN 474 MAX 4660 MIN 72 CFSM 1.87 IN. 25.42
WTR YR 1991 TOTAL 131529 MEAN 360 MAX 4660 MIN 23 CFSM 1.42 IN. 19.34

MUSKINGUM RIVER BASIN

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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 National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 20 to Dec. 5, Jan. 23-29. Records fair except for estimated daily discharges and questionable period May 7-29 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 1991, 12.5 ft³/s. At times low flow regulated by small pools above station. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--50 years, 36.5 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,470 ft³/s Jan. 22, 1959, gage height, 6.50 ft, from rating curve extended above 1,600 ft³/s on basis of contracted-opening measurement of peak flow; minimum daily, 0.2 ft³/s Nov. 9, 1944, Sept. 19, 1962.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft³/s and maximum (*).

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	0700	454	5.05	Dec. 30	2400	*776	*5.86

Minimum daily discharge, 0.46 ft³/s Sept. 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	39	31	212	64	54	36	33	25	4.3	3.6	1.9
2	38	38	29	147	56	58	36	31	20	4.3	3.4	1.8
3	35	37	150	119	64	68	34	30	17	4.3	3.5	1.6
4	67	36	160	100	85	151	33	29	14	4.7	3.4	2.2
5	102	52	94	89	100	120	36	32	12	4.7	3.1	1.8
6	67	60	70	89	96	144	36	43	11	4.6	2.9	1.7
7	51	50	60	83	113	283	35	40	11	4.7	2.9	1.5
8	44	44	54	76	102	157	35	37	10	5.2	2.8	1.9
9	72	38	48	73	80	107	44	35	9.7	6.3	4.0	2.4
10	233	56	45	71	69	88	56	36	9.2	6.4	3.7	1.8
11	183	68	42	86	61	77	49	37	10	5.6	3.5	1.5
12	192	54	42	180	55	68	41	38	12	5.2	3.3	1.3
13	285	49	41	136	54	64	38	41	9.6	5.5	3.0	1.2
14	171	44	38	99	69	61	45	42	7.9	5.4	2.8	1.3
15	121	41	72	83	72	57	67	41	7.1	5.4	2.7	1.5
16	92	44	108	132	69	53	87	40	6.6	5.2	2.5	1.6
17	73	48	73	174	62	51	65	40	5.9	4.9	2.5	1.1
18	79	45	186	127	54	53	57	40	5.6	4.7	2.8	.85
19	51	43	382	96	164	54	51	39	5.3	4.7	2.9	.77
20	46	41	185	84	214	51	50	39	5.0	4.5	2.9	.65
21	42	40	147	84	134	49	50	40	4.7	4.2	2.6	.56
22	62	52	236	76	100	48	51	40	4.6	4.3	2.4	.46
23	80	64	306	62	79	50	47	38	4.7	3.9	2.4	.65
24	66	57	246	52	69	49	45	37	4.7	3.4	2.4	.75
25	58	50	146	44	63	47	45	38	4.7	3.8	2.8	1.2
26	54	44	109	38	59	44	41	37	5.0	3.7	2.8	.84
27	49	39	102	35	56	44	38	38	4.6	3.4	2.4	.66
28	46	38	84	33	54	44	37	36	4.5	3.3	2.2	.64
29	44	37	109	31	---	41	37	32	4.5	3.4	2.2	.64
30	42	33	416	72	---	38	35	28	4.4	3.6	2.3	.84
31	40	---	526	80	---	36	---	33	---	3.5	2.1	---
TOTAL	2626	1381	4337	2863	2317	2309	1357	1140	260.3	141.1	88.8	37.61
MEAN	84.7	46.0	140	92.4	82.7	74.5	45.2	36.8	8.68	4.55	2.86	1.25
MAX	285	68	526	212	214	283	87	43	25	6.4	4.0	2.4
MIN	35	33	29	31	54	36	33	28	4.4	3.3	2.1	.46

CAL YR 1990 TOTAL 24351.9 MEAN 66.7 MAX 526 MIN 6.6
WTR YR 1991 TOTAL 18857.81 MEAN 51.7 MAX 526 MIN .46

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 National Geodetic Vertical Datum of 1929. Prior to Dec. 13, 1923, nonrecording gage at site 1 mi upstream at different datum. Prior to Dec. 11, 1990 at site 0.9 mile downstream at datum 5.95 ft lower.

REMARKS.--Estimated daily discharges: Jan. 24-29. 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 1991 water year, 18.4 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.

AVERAGE DISCHARGE.--70 years, 190 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,600 ft³/s Jan. 21, 1959, gage height, 11.29 ft, from rating curve extended above 6,500 ft³/s on basis of slope-area measurement of peak flow; minimum, 3.6 ft³/s Sept. 2, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 12	2230	2,430	5.72	Dec. 30	2100	*4,740	*10.10
Dec. 18	2300	3,250	8.21	Mar. 7	0230	2,210	6.64
Dec. 23	1430	2,460	7.03				

Minimum daily, 62 ft³/s Sept. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	195	191	163	767	264	250	178	173	130	89	75	63
2	179	186	156	535	256	277	176	164	117	91	74	62
3	168	179	817	449	300	346	171	157	116	86	75	87
4	624	176	1040	380	355	721	170	152	111	137	71	194
5	394	251	458	378	387	433	198	201	106	92	76	86
6	249	326	329	403	388	1040	175	242	104	87	74	76
7	200	225	283	354	531	1360	167	172	104	81	73	71
8	189	201	248	321	393	536	188	158	101	105	76	68
9	588	198	223	320	323	390	279	152	96	89	122	109
10	1120	357	217	307	289	345	291	148	100	87	80	100
11	807	262	215	589	264	315	206	141	147	86	73	76
12	1390	233	214	900	245	290	182	136	154	91	74	71
13	1460	210	209	491	257	281	193	142	112	105	76	72
14	645	194	198	382	396	270	272	145	106	81	74	70
15	447	186	573	342	314	250	540	136	100	83	73	65
16	348	199	437	678	258	234	360	132	96	82	71	71
17	308	222	305	653	249	229	277	130	100	81	77	82
18	494	191	1760	443	306	266	238	125	109	81	135	70
19	390	187	1940	356	1240	251	237	122	106	79	112	71
20	299	181	638	343	1010	233	231	123	99	77	104	67
21	267	174	640	354	503	225	231	123	94	74	79	66
22	393	255	1230	300	387	229	245	122	91	105	75	63
23	457	315	1940	279	319	255	215	119	87	110	73	92
24	348	231	969	240	289	228	246	120	92	91	69	85
25	294	201	509	230	280	213	221	168	91	82	67	127
26	259	192	399	210	263	214	201	126	97	80	72	77
27	234	187	345	190	250	217	189	186	94	75	71	70
28	215	183	339	180	248	210	179	136	91	72	71	66
29	209	174	622	180	---	192	182	127	85	76	70	64
30	203	167	3050	464	---	181	174	181	84	77	72	67
31	200	---	2260	337	---	173	---	176	---	76	67	---
TOTAL	13573	6434	22726	12355	10564	10654	6812	4635	3120	2708	2451	2408
MEAN	438	214	733	399	377	344	227	150	104	87.4	79.1	80.3
MAX	1460	357	3050	900	1240	1360	540	242	154	137	135	194
MIN	168	167	156	180	245	173	167	119	84	72	67	62

CAL YR 1990 TOTAL 129735 MEAN 355 MAX 3050 MIN 105
WTR YR 1991 TOTAL 98440 MEAN 270 MAX 3050 MIN 62

MUSKINGUM RIVER BASIN

73

03120500 MCGUIRE CREEK BELOW LEESVILLE DAM, NEAR LEESVILLE, OH

LOCATION.--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.--48.3 mi².

PERIOD OF RECORD.--October 1938 to September 1991 (discontinued). Published as McGuire Creek near Leesville 1938-39.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder and V-notch weir. Datum of gage is 915.00 ft above National Geodetic Vertical Datum of 1929. Prior to May 27, 1942, nonrecording gage at site 100 ft upstream at present datum.

REMARKS.--Estimated daily discharges: Dec. 30 to Jan. 2. Records fair except period of estimated daily discharges, which is poor. Flow regulated by Leesville Lake. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--53 years, 53.7 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 740 ft³/s Mar. 4, 1940; maximum gage height, 7.88 ft Mar. 4, 1940 (backwater from Conotton Creek); no flow several days during 1939-41.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 306 ft³/s Feb. 11, gage height, 4.71 ft; maximum gage height, 5.75 ft, Dec. 31 (backwater from Conotton Creek); minimum daily, 1.5 ft³/s Sept. 21-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	53	149	150	267	40	8.4	47	20	6.2	2.1	2.1
2	46	47	148	150	265	40	11	42	16	6.2	2.1	2.1
3	40	42	149	126	262	40	16	37	13	5.8	2.1	2.2
4	47	42	56	125	271	51	20	32	9.6	5.4	2.1	2.2
5	54	44	131	125	266	60	32	34	8.0	5.2	2.1	2.3
6	50	51	231	125	260	82	36	59	7.4	4.7	2.1	2.3
7	45	45	254	125	273	122	35	58	6.8	4.5	2.1	2.3
8	41	40	250	125	277	139	35	54	6.3	6.5	2.1	2.3
9	39	37	247	125	277	156	43	51	6.0	6.5	2.1	1.8
10	39	52	245	125	271	156	81	47	5.6	5.9	2.1	1.7
11	42	59	242	125	293	170	86	41	5.8	5.5	2.0	1.7
12	64	59	240	127	301	184	83	36	7.7	5.0	2.0	1.7
13	108	57	186	126	297	65	82	32	7.4	4.9	2.0	1.8
14	114	53	62	125	297	2.5	87	29	6.8	4.4	2.0	1.8
15	111	106	6.8	125	293	2.5	109	24	6.4	3.9	2.0	1.8
16	158	129	6.9	126	221	2.5	151	19	6.0	3.3	2.0	1.9
17	144	131	174	127	153	2.4	202	17	5.8	2.7	2.1	2.0
18	81	128	142	128	153	2.4	209	16	5.5	2.5	2.1	2.0
19	87	127	29	129	155	2.4	156	15	5.1	2.5	2.1	2.2
20	83	126	84	130	158	2.4	85	13	4.8	2.1	2.1	2.0
21	78	125	58	130	140	2.4	84	12	4.6	1.8	2.1	1.5
22	77	125	106	211	62	2.4	83	11	4.3	3.5	2.0	1.5
23	87	125	122	266	39	2.4	113	10	5.0	4.3	2.0	1.5
24	88	125	125	279	39	2.4	81	9.7	4.6	4.2	2.0	1.5
25	102	125	123	276	39	30	62	9.6	4.1	4.0	2.0	1.5
26	97	141	172	271	39	27	59	9.6	3.6	3.7	2.0	1.5
27	80	151	236	267	39	6.9	56	10	3.3	3.5	2.0	1.5
28	75	150	246	269	40	2.9	53	11	2.6	3.4	2.0	1.5
29	69	150	246	269	---	3.6	54	12	2.2	2.4	2.0	1.5
30	63	150	180	269	---	5.3	53	12	2.9	2.1	2.1	1.5
31	58	---	150	268	---	6.7	---	22	---	2.1	2.1	---
TOTAL	2319	2795	4796.7	5344	5447	1414.1	2265.4	831.9	197.2	128.7	63.7	55.2
MEAN	74.8	93.2	155	172	195	45.6	75.5	26.8	6.57	4.15	2.05	1.84
MAX	158	151	254	279	301	184	209	59	20	6.5	2.1	2.3
MIN	39	37	6.8	125	39	2.4	8.4	9.6	2.2	1.8	2.0	1.5

CAL YR 1990 TOTAL 27566.1 MEAN 75.5 MAX 254 MIN 1.4
WTR YR 1991 TOTAL 25657.9 MEAN 70.3 MAX 301 MIN 1.5

MUSKINGUM RIVER BASIN

03122500 TUSCARAWAS RIVER BELOW DOVER DAM, NEAR DOVER, OH

LOCATION.--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.--1,405 mi².

PERIOD OF RECORD.--October 1923 to September 1991 (discontinued). Published as Tuscarawas River near Dover 1923-39.

REVISED RECORDS.--WSP 803: 1933(M). WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 861.51 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 30, 1930, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Diversion from basin at Portage Lakes (See REMARKS for stations 03116000 and 03117000). Records include diversion from Sugar Creek well field. Mean pumpage for the 1991 water year, 18.4 ft³/s (see REMARKS for station 03124500). Flow regulated by four flood-control reservoirs since 1936 at points 2.2 mi to 25 mi upstream. Water quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--68 years, 1,442 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,400 ft³/s Jan. 26, 1937, gage height, 15.51 ft; minimum daily, 6.5 ft³/s Oct. 26, 1948.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,770 ft³/s Jan. 28, gage height, 7.26 ft; minimum daily, 231 ft³/s Sept. 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1360	1370	1270	1880	5090	2000	1210	1360	976	680	341	302
2	1150	1280	1220	5270	3670	2030	1190	1270	767	518	336	301
3	975	1230	1970	5630	2890	2110	1130	1170	656	468	346	288
4	1370	1180	4840	5610	3020	2820	1080	1090	591	535	362	480
5	3330	1170	4820	5630	3440	3300	1130	1050	546	584	354	619
6	2620	1600	4440	5640	3740	3870	1230	1420	518	461	357	463
7	1620	1690	4220	5630	4100	5110	1160	1510	503	414	340	343
8	1320	1450	3730	5660	4420	5110	1080	1230	490	456	329	295
9	1250	1310	2970	5670	3800	5260	1260	1110	476	502	368	282
10	3240	1550	2440	5640	3030	5290	2360	1050	462	532	427	391
11	4940	2020	2260	5680	2680	5180	2810	984	469	430	385	381
12	5240	1750	1960	5600	2450	4420	1960	905	622	396	343	361
13	5200	1550	1860	5730	2210	3510	1640	877	672	421	334	310
14	5220	1400	1690	5740	2520	2380	1810	924	570	398	337	293
15	5180	1280	2000	5660	3160	2090	2730	880	508	374	363	274
16	4650	1380	3930	5640	2660	1860	4170	832	473	367	362	257
17	4670	1470	3420	5640	2320	1740	3650	765	451	359	346	286
18	4470	1570	4090	5630	2240	1730	3190	711	459	350	446	284
19	5130	1460	5140	5650	3680	1810	2710	673	471	340	537	271
20	4340	1390	5170	5640	5230	1740	2610	649	444	329	571	271
21	3280	1320	5190	5630	5240	1630	2670	595	426	323	506	257
22	2890	1310	5290	5640	5320	1550	2560	610	415	326	421	251
23	3350	1980	5200	5620	5250	1730	2420	608	411	397	356	268
24	3510	2290	5260	5640	5030	1950	2030	591	420	418	324	305
25	2820	1850	5240	5650	3410	1740	2000	617	420	405	311	365
26	2330	1650	5260	5380	3050	1620	1890	886	407	361	294	359
27	2040	1590	4830	4990	2520	1630	1700	735	404	336	297	300
28	1830	1560	4710	5180	2030	1660	1540	790	404	324	298	273
29	1680	1510	4810	5470	---	1480	1460	697	395	323	302	245
30	1560	1410	3650	5500	---	1340	1450	711	448	341	305	231
31	1460	---	2330	5430	---	1260	---	1070	---	345	307	---
TOTAL	94025	45570	115210	169000	98200	80950	59830	28370	15274	12813	11305	9606
MEAN	3033	1519	3716	5452	3507	2611	1994	915	509	413	365	320
MAX	5240	2290	5290	5740	5320	5290	4170	1510	976	680	571	619
MIN	975	1170	1220	1880	2030	1260	1080	591	395	323	294	231

CAL YR 1990 TOTAL 852734 MEAN 2336 MAX 5370 MIN 470
WTR YR 1991 TOTAL 740153 MEAN 2028 MAX 5740 MIN 231

MUSKINGUM RIVER BASIN

75

03124000 SUGAR CREEK BELOW BEACH CITY DAM, NEAR BEACH CITY, OH

LOCATION.--Lat 40°38'08", long 81°33'11", in T10 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.--300 mi².

PERIOD OF RECORD.--October 1938 to September 1991 (discontinued). Published as Sugar Creek near Beach City prior to 1940.

REVISED RECORDS.--WSP 953: 1941.

GAGE.--Water-stage recorder. Datum of gage is 928.00 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 23, 1939, nonrecording gage at site 500 ft downstream at datum 1 ft higher. Mar. 23, 1939, to Sept. 26, 1949, water-stage recorder at site 300 ft downstream at present datum.

REMARKS.--Estimated daily discharges: Jan. 23-29. Records good except periods of estimated record which are fair. Flood flow regulated by Beach City Lake. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--53 years, 276 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,520 ft³/s July 6, 1969, gage height, 11.26 ft, from floodmark in well; no flow Oct. 7-30, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,860 ft³/s Jan. 1, gage height, 6.21 ft; minimum daily, 11 ft³/s Sept. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	146	182	130	436	348	294	184	212	228	144	13	12
2	113	170	124	687	354	288	178	202	133	115	12	11
3	97	157	289	1080	372	295	165	178	91	68	12	12
4	157	148	1300	1540	417	387	156	163	75	41	12	37
5	665	149	1470	1740	469	410	172	159	63	42	14	61
6	418	250	1150	1760	531	622	204	208	56	37	13	36
7	233	251	526	1730	719	1380	175	184	53	30	12	21
8	176	189	396	1730	887	1540	159	148	50	30	12	13
9	172	166	334	1730	626	1350	180	135	48	33	15	17
10	699	216	290	1730	497	621	403	130	46	28	21	117
11	1080	311	256	1690	427	472	399	121	47	25	21	73
12	962	238	231	1470	355	406	250	114	69	24	15	33
13	840	199	217	1730	329	374	217	108	70	25	12	22
14	1170	175	197	1710	400	360	351	102	50	33	12	18
15	1490	160	358	1710	461	329	692	102	43	27	12	17
16	1560	153	1170	1700	298	287	1350	92	41	22	12	15
17	618	164	796	1640	340	264	909	85	43	20	12	21
18	415	170	592	1740	333	278	558	80	41	18	22	36
19	710	155	363	1690	755	308	450	78	42	16	44	21
20	601	144	391	1130	1510	282	740	75	40	16	66	16
21	396	134	397	604	1320	255	723	72	35	15	99	14
22	347	135	617	475	793	240	619	69	32	15	63	13
23	634	309	523	350	566	325	535	66	32	16	30	15
24	635	336	1140	320	459	368	450	63	34	33	19	21
25	454	244	1680	290	410	296	417	69	32	31	15	28
26	358	201	1690	270	364	257	354	144	29	21	13	35
27	302	179	1660	260	328	282	317	110	28	16	12	24
28	263	171	1690	250	305	275	286	105	27	13	12	18
29	233	157	1610	240	---	240	261	87	25	12	12	15
30	210	140	814	386	---	217	240	74	30	13	12	14
31	195	---	433	569	---	195	---	174	---	13	12	---
TOTAL	16349	5753	22834	34387	14973	13497	12094	3709	1633	992	663	806
MEAN	527	192	737	1109	535	435	403	120	54.4	32.0	21.4	26.9
MAX	1560	336	1690	1760	1510	1540	1350	212	228	144	99	117
MIN	97	134	124	240	298	195	156	63	25	12	12	11

CAL YR 1990 TOTAL 152809 MEAN 419 MAX 1720 MIN 47
WTR YR 1991 TOTAL 127690 MEAN 350 MAX 1760 MIN 11

MUSKINGUM RIVER BASIN

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 National Geodetic Vertical Datum of 1929. 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: Jan. 22-29. Records 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 1991, 18.4 ft³/s. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--34 years (1931-32, 1935-38, 1961-91), 310 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,700 ft³/s Aug. 7, 1935, gage height, 14.70 ft (present datum), from rating curve extended above 8,400 ft³/s; no flow all or part of each day Sept. 29 to Nov. 6, 1963, Sept. 20, Dec. 3, 4, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,460 ft³/s Dec. 30, gage height, 5.93 ft; minimum daily, 5.6 ft³/s Sept. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	197	151	547	424	349	191	240	249	154	11	7.3
2	94	181	146	802	433	341	185	223	152	135	10	5.6
3	78	167	314	1260	438	346	170	195	101	85	10	5.7
4	122	157	1510	1820	491	446	161	178	82	56	10	20
5	705	156	1690	2110	548	485	174	175	71	56	10	49
6	477	248	1350	2140	624	711	213	221	62	51	10	51
7	255	281	584	2090	825	1570	183	211	59	42	9.4	24
8	186	206	435	2080	1070	1780	166	166	57	40	8.1	13
9	169	177	373	2080	774	1650	183	151	50	45	10	11
10	722	213	314	2080	605	764	408	144	46	39	13	72
11	1190	341	269	2100	515	540	455	137	47	36	16	79
12	1130	264	239	1790	429	449	274	129	65	24	12	32
13	914	217	223	2100	391	405	232	123	73	24	9.0	20
14	1280	189	195	2070	471	390	358	115	53	31	7.5	17
15	1640	172	350	2070	550	356	748	113	45	28	7.4	16
16	1800	165	1270	2080	359	307	1550	100	43	23	7.1	14
17	746	171	905	1990	398	281	1100	89	42	21	6.8	14
18	455	183	726	2110	397	288	662	83	43	19	14	32
19	779	168	406	2060	867	327	517	79	43	18	33	22
20	688	155	423	1400	1790	300	817	78	43	17	59	16
21	449	144	440	742	1620	270	852	76	38	15	83	13
22	381	144	675	450	978	253	718	73	36	14	53	13
23	693	307	660	380	691	332	622	70	36	15	26	14
24	721	382	1220	340	553	399	515	67	39	27	17	17
25	515	275	1960	320	490	319	479	71	38	30	14	22
26	402	224	2000	300	436	276	406	142	35	21	12	30
27	339	201	1970	280	390	297	363	120	33	17	9.7	22
28	296	191	2010	270	364	299	327	108	31	14	8.8	16
29	262	181	1970	260	---	257	298	91	29	13	8.0	12
30	233	162	1410	457	---	231	271	77	39	12	7.9	12
31	215	---	593	691	---	207	---	165	---	12	8.3	---
TOTAL	18064	6219	26781	41269	17921	15225	13598	4010	1780	1134	521.0	691.6
MEAN	583	207	864	1331	640	491	453	129	59.3	36.6	16.8	23.1
MAX	1800	382	2010	2140	1790	1780	1550	240	249	154	83	79
MIN	78	144	146	260	359	207	161	67	29	12	6.8	5.6

CAL YR 1990 TOTAL 171205 MEAN 469 MAX 2010 MIN 42
WTR YR 1991 TOTAL 147213.6 MEAN 403 MAX 2140 MIN 5.6

MUSKINGUM RIVER BASIN

03126000 STILLWATER CREEK AT PIEDMONT, OH

LOCATION.--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.--122 mi².

PERIOD OF RECORD.--October 1938 to September 1991 (discontinued). Prior to February 1939 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WDR-OH-81-1: 1980 (M) (m).

GAGE.--Water-stage recorder. Datum of gage is 872.00 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 9, 1949, at site 1,000 ft downstream at datum 1.00 ft higher.

REMARKS.--Estimated daily discharges: Jan. 23-30. Records good except for estimated discharges, which are fair. Flow regulated by Piedmont Lake. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--53 years, 139 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,470 ft³/s Dec. 4, 1950; maximum gage height, 11.44 ft Mar. 5, 1963; minimum daily discharge, 0.2 ft³/s Sept. 3, 4, 10, 1953.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 985 ft³/s Dec. 19, gage height, 8.91 ft; minimum daily, 3.6 ft³/s Aug. 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	88	329	378	261	131	54	117	46	44	6.7	7.5
2	94	84	332	246	167	130	41	103	33	77	5.5	6.9
3	85	84	476	218	161	132	38	89	27	54	5.0	6.1
4	104	83	426	315	263	262	37	88	23	51	8.8	12
5	111	79	296	475	290	260	40	96	21	51	8.9	18
6	95	96	542	543	282	404	40	143	19	36	6.0	11
7	87	86	676	525	412	381	39	120	19	29	5.6	8.3
8	81	80	660	523	232	322	44	110	18	54	4.8	7.1
9	79	77	642	605	98	316	58	107	17	46	4.8	7.1
10	91	184	463	657	83	306	101	106	17	34	5.2	15
11	96	174	270	572	116	293	88	101	19	22	4.8	24
12	252	140	245	428	116	279	88	96	53	18	3.9	16
13	323	246	177	296	116	284	152	93	28	19	3.7	13
14	210	297	103	503	171	287	323	112	23	17	3.8	14
15	298	235	135	696	153	240	391	101	20	15	3.8	13
16	351	219	134	696	124	195	334	91	19	14	3.6	13
17	306	225	386	672	124	192	391	85	22	13	4.2	15
18	259	216	714	677	142	167	465	79	24	12	62	15
19	141	257	773	682	313	113	468	74	23	12	24	13
20	119	286	318	672	372	70	477	69	21	11	15	12
21	111	286	206	682	329	51	458	65	18	11	13	11
22	110	289	322	677	203	50	462	60	17	11	11	10
23	285	350	373	640	101	81	438	54	17	11	11	12
24	363	315	340	600	92	66	335	47	16	10	11	14
25	289	302	464	540	109	56	209	42	15	9.5	10	38
26	160	293	601	480	130	54	157	37	13	8.2	9.8	25
27	110	291	675	400	134	99	139	36	13	7.3	9.0	18
28	103	290	663	320	133	101	137	37	11	6.7	8.6	16
29	99	314	640	220	---	81	142	36	11	6.3	8.3	14
30	96	331	496	180	---	79	158	35	15	6.5	7.9	13
31	93	---	609	325	---	75	---	50	---	7.0	7.6	---
TOTAL	5110	6297	13486	15443	5227	5557	6304	2479	638	723.5	297.3	418.0
MEAN	165	210	435	498	187	179	210	80.0	21.3	23.3	9.59	13.9
MAX	363	350	773	696	412	404	477	143	53	77	62	38
MIN	79	77	103	180	83	50	37	35	11	6.3	3.6	6.1

CAL YR 1990 TOTAL 80216 MEAN 220 MAX 773 MIN 25
WTR YR 1991 TOTAL 61979.8 MEAN 170 MAX 773 MIN 3.6

MUSKINGUM RIVER BASIN

03127000 STILLWATER CREEK AT TIPPECANOE, OH

LOCATION.--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 at 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.--282 mi².

PERIOD OF RECORD.--October 1938 to September 1991 (discontinued). Prior to January 1939 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 849.00 ft above National Geodetic Vertical Datum of 1929. Prior to Feb. 9, 1939, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 23-30. Records good except those for periods of estimated record which are fair. Flow regulated by Clendenning Lake on Brushy Fork, 1.9 mi upstream, and Piedmont Lake, 16 mi upstream. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--53 years, 324 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,410 ft³/s Mar. 7, 1945, Mar. 5, 1963; maximum gage height, 17.29 ft Mar. 5, 1963; minimum daily discharge, 1.1 ft³/s Oct. 4, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,310 ft³/s Dec. 20, gage height, 14.89 ft; minimum daily discharge, 10 ft³/s Aug. 14-17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	336	230	645	2010	717	261	174	317	83	62	16	15
2	220	216	640	1210	417	259	134	249	67	168	15	14
3	168	205	850	647	368	264	117	219	52	113	14	13
4	176	202	1370	657	396	460	116	206	43	77	15	16
5	293	192	1130	999	574	547	130	201	35	84	20	28
6	224	231	1100	1270	680	701	148	298	32	76	18	25
7	179	232	1250	1330	1010	1450	142	303	30	54	15	19
8	154	202	1290	1270	1140	1240	139	252	28	62	13	15
9	142	186	1250	1220	565	912	169	230	27	84	13	15
10	209	342	1130	1310	411	753	418	224	25	65	13	21
11	216	628	787	1440	376	697	384	209	25	48	12	34
12	424	457	676	1550	440	602	301	195	45	37	12	37
13	1130	393	555	1450	400	471	338	184	61	35	11	28
14	915	513	293	1090	489	471	873	183	42	35	10	25
15	696	493	246	1430	642	465	1240	196	34	31	10	27
16	789	517	573	1420	431	371	1490	167	31	27	10	24
17	574	522	632	1410	394	344	1190	147	29	25	10	23
18	562	507	1350	1410	387	340	1110	129	32	23	54	26
19	660	516	2100	1370	835	293	1050	117	37	20	82	25
20	454	585	2200	1330	1120	205	1080	110	33	19	42	21
21	369	584	1400	1340	931	153	1010	104	28	17	29	19
22	327	582	949	1300	623	159	811	98	25	21	24	17
23	587	762	1180	1100	350	245	706	90	24	25	21	18
24	961	798	1350	1000	291	265	632	82	27	26	19	19
25	887	694	1380	880	267	214	491	77	29	24	19	33
26	597	644	1360	800	280	185	369	71	27	22	18	58
27	364	622	1390	780	281	228	328	65	25	20	17	41
28	312	630	1400	680	271	264	310	65	24	18	16	30
29	281	631	1390	560	---	217	315	65	22	17	16	26
30	262	653	1480	500	---	199	326	63	24	16	15	23
31	246	---	2090	831	---	183	---	65	---	16	15	---
TOTAL	13714	13969	35436	35594	15086	13418	16041	4981	1046	1367	614	735
MEAN	442	466	1143	1148	539	433	535	161	34.9	44.1	19.8	24.5
MAX	1130	798	2200	2010	1140	1450	1490	317	83	168	82	58
MIN	142	186	246	500	267	153	116	63	22	16	10	13

CAL YR 1990 TOTAL 190298 MEAN 521 MAX 2200 MIN 72
WTR YR 1991 TOTAL 152001 MEAN 416 MAX 2200 MIN 10

MUSKINGUM RIVER BASIN

79

03127500 STILLWATER CREEK AT UHRICHSVILLE, OH

LOCATION.--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.--367 mi².

PERIOD OF RECORD.--July 1922 to September 1991 (discontinued).

REVISED RECORDS.--WSP 853: Drainage area. WSP 1113: 1923-24, 1926-31, 1932(M), 1933-35.

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 839.37 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1936, nonrecording gage at site 1.7 mi upstream at same datum. Auxiliary water-stage recorder below concrete dam at datum 10.00 ft lower.

REMARKS.--Estimated daily discharges: Oct. 13-15, Dec. 4-6, Dec. 18 to Jan. 2, Jan. 6-30, Feb. 7-8, 20-21, Mar. 7-10, Apr. 15-22. Records good, except estimated periods which are poor. Flow regulated by Piedmont Lake, 35 mi upstream, and Clendening Lake on Brushy Fork, 22 mi upstream, beginning in 1938. Water is diverted from Dennison water-supply dam 1.7 mi upstream from station for municipal supply of cities of Dennison and Uhrichsville; diversion not included in figures of daily discharge. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--69 years, 431 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,650 ft³/s Aug. 8, 9, 1935, gage height, 14.2 ft at former site, 12.8 ft at present site; no flow at times in 1930, 1932, 1936, 1939-40, 1953, 1973.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of about 17.5 ft at former site, and about 15.5 ft at present site.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,700 ft³/s Dec. 20, maximum gage height, 7.99 ft Dec. 31 (backwater from Tuscarawas River); minimum daily discharge, 14 ft³/s Sept. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	472	266	673	2400	949	336	250	393	81	112	19	15
2	348	246	667	1600	648	327	231	329	89	238	19	15
3	255	230	921	1650	487	334	187	289	71	234	20	14
4	236	219	1600	822	448	477	176	258	57	117	21	19
5	344	219	1500	965	587	672	184	248	49	87	19	19
6	328	241	1200	1300	760	797	213	314	44	89	21	25
7	256	272	1250	1400	1100	1500	212	384	41	77	21	22
8	217	243	1290	1400	1200	1600	207	328	40	74	20	18
9	194	218	1260	1300	1070	1100	280	287	35	79	19	26
10	204	336	1210	1400	656	920	850	272	34	86	17	39
11	256	687	1010	1600	508	880	730	258	32	64	17	31
12	433	633	785	1900	525	795	501	239	38	47	17	33
13	1200	464	710	1700	513	629	453	224	60	39	16	32
14	1000	499	472	1400	561	574	968	214	60	37	17	26
15	800	519	390	1500	806	569	1400	222	46	35	16	23
16	835	533	822	1600	645	498	1700	208	37	31	15	23
17	710	558	718	1600	514	424	1400	180	34	27	18	24
18	592	550	1600	1500	499	414	1200	163	34	26	26	21
19	776	521	2500	1500	909	402	1100	146	41	24	77	22
20	615	572	2700	1500	1200	337	1200	136	46	23	87	20
21	455	596	2400	1400	1000	242	1100	128	44	22	50	18
22	407	605	1400	1300	1020	221	980	119	41	20	32	17
23	639	806	1500	1200	655	302	921	108	41	23	26	19
24	1020	924	1700	1100	452	406	825	100	39	26	21	19
25	1020	814	1600	1000	390	349	688	96	42	27	21	25
26	819	721	1600	960	361	300	526	91	43	25	22	44
27	527	679	1500	900	361	308	447	82	41	23	21	57
28	384	673	1500	840	350	360	406	79	39	22	21	39
29	337	669	1600	780	---	340	390	78	39	21	21	28
30	305	670	2200	720	---	294	406	74	57	19	21	24
31	284	---	2600	907	---	268	---	72	---	18	18	---
TOTAL	16268	15183	42878	41144	19174	16975	20131	6119	1395	1792	776	757
MEAN	525	506	1383	1327	685	548	671	197	46.5	57.8	25.0	25.2
MAX	1200	924	2700	2400	1200	1600	1700	393	89	238	87	57
MIN	194	218	390	720	350	221	176	72	32	18	15	14
(+)	1.81	1.73	1.63	1.77	1.86	1.85	1.88	2.08	2.12	2.04	1.95	1.88

CAL YR 1990 TOTAL 230117 MEAN 630 MAX 2700 MIN 82 (+) 1.72
WTR YR 1991 TOTAL 182592 MEAN 500 MAX 2700 MIN 14 (+) 1.88

(+) Diversion, in cubic feet per second, for municipal supply of cities of Dennison and Uhrichsville, furnished by Dennison Water Supply Company.

MUSKINGUM RIVER BASIN

03128500 LITTLE STILLWATER CREEK BELOW TAPPAN DAM, AT TAPPAN, OH

LOCATION.--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.--71.1 mi².

PERIOD OF RECORD.--October 1938 to September 1991 (discontinued). Published as Little Stillwater Creek at Tappan 1938-39.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder and masonry control. Datum of gage is 861.00 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 30, 1939, water-stage recorder at gate house of Tappan Dam at datum 9 ft higher. Jan. 30 to Mar. 24, 1939, nonrecording gage and Mar. 25, 1939, to Aug. 6, 1944, water-stage recorder, at site 150 ft downstream at present datum.

REMARKS.--No estimated daily discharges. Records fair except discharges below 50 ft³/s which are poor. Flow completely regulated by Tappan Lake. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--53 years, 77.6 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,050 ft³/s Mar. 13, 1939, gage height, 10.00 ft; no flow Sept. 12-15, 18, 19, 21-29, Oct. 13-21, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 496 ft³/s Jan. 14, gage height 6.79 ft; minimum daily, 1.1 ft³/s Aug. 17, 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	59	225	56	300	33	6.5	75	25	7.9	3.3	2.0
2	43	55	226	58	59	39	4.7	71	24	8.9	3.3	1.5
3	39	55	338	88	59	40	5.8	69	21	8.9	3.3	1.7
4	43	53	344	298	92	40	11	65	17	8.9	3.3	2.1
5	47	52	344	412	105	36	8.6	65	13	10	3.1	2.3
6	47	54	387	409	150	40	8.6	75	12	9.6	3.2	2.5
7	47	52	390	408	247	60	8.6	76	12	9.6	3.5	2.2
8	44	50	390	407	102	147	8.6	74	13	13	3.9	2.2
9	42	49	388	402	11	169	8.8	72	10	12	3.4	2.3
10	47	61	384	455	11	169	5.3	71	9.3	12	3.2	2.6
11	47	73	381	429	35	203	6.7	67	8.3	11	3.4	3.9
12	62	75	344	201	50	223	9.7	64	9.7	10	3.2	3.5
13	93	74	183	187	51	150	20	58	8.9	9.4	2.2	3.8
14	99	72	77	386	73	114	64	54	8.4	8.0	1.8	4.0
15	267	198	27	486	89	79	91	53	7.6	6.3	1.9	4.0
16	285	231	27	464	67	63	110	50	7.1	4.8	1.5	4.1
17	106	225	254	421	68	65	274	47	6.8	4.2	1.1	4.2
18	71	222	227	413	69	65	361	40	6.1	4.0	1.1	4.2
19	136	239	3.3	409	63	37	315	35	5.3	4.7	1.7	3.5
20	135	273	5.0	406	95	12	258	31	5.1	4.8	1.8	2.8
21	130	281	5.0	404	111	12	246	29	4.1	3.6	1.8	2.8
22	123	283	5.1	432	79	12	169	26	3.1	10	1.8	2.7
23	129	282	5.3	446	112	12	61	24	3.9	14	2.0	2.7
24	135	281	5.4	442	114	5.6	63	24	9.0	14	1.8	4.9
25	132	278	153	441	71	4.8	66	23	12	13	1.7	7.9
26	99	278	345	439	63	4.8	69	23	9.7	8.4	1.5	5.3
27	68	281	399	433	81	4.8	69	22	9.0	6.5	2.4	4.1
28	67	273	400	433	43	4.9	68	21	8.6	6.2	2.5	4.2
29	64	273	400	467	---	4.9	72	20	8.3	4.9	2.3	4.7
30	63	242	146	474	---	4.9	75	20	9.1	3.3	2.0	4.1
31	61	---	55	469	---	4.9	---	23	---	3.3	2.0	---
TOTAL	2817	4974	6863.1	11675	2470	1859.6	2543.9	1467	306.4	255.2	75.0	102.8
MEAN	90.9	166	221	377	88.2	60.0	84.8	47.3	10.2	8.23	2.42	3.43
MAX	285	283	400	486	300	223	361	76	25	14	3.9	7.9
MIN	39	49	3.3	56	11	4.8	4.7	20	3.1	3.3	1.1	1.5

CAL YR 1990 TOTAL 39519.98 MEAN 108 MAX 444 MIN .81
WTR YR 1991 TOTAL 35409.0 MEAN 97.0 MAX 486 MIN 1.1

MUSKINGUM RIVER BASIN

81

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 National Geodetic Vertical Datum of 1929. 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: Jan. 23-29. 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.

AVERAGE DISCHARGE.--70 years, 2,548 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,800 ft³/s Jan. 26, 1937, gage height, 20.65 ft, site and datum then in use; minimum daily, 170 ft³/s Aug. 6, 1930.

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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,800 ft³/s Dec. 31, gage height, 10.63 ft; minimum daily, 294 ft³/s Sept. 2-3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2310	2230	2500	8040	7560	3050	1930	2430	1480	1030	347	306
2	2090	2080	2390	8660	6400	3040	1860	2250	1310	972	341	294
3	1740	1940	3200	9290	4650	3090	1770	2050	1050	929	337	294
4	1810	1850	6490	8620	4410	3640	1670	1890	906	746	349	328
5	3480	1780	7510	8970	4640	4670	1710	1790	816	927	352	519
6	4390	1900	7220	9530	5450	5130	1850	2030	756	736	337	609
7	2980	2380	6480	9750	6380	8440	1870	2440	714	636	337	494
8	2210	2220	5780	9660	7450	8870	1760	2170	686	675	326	392
9	1930	1970	5240	9650	7010	8780	1890	1900	665	640	323	351
10	2480	2060	4540	9540	5340	8100	4090	1770	644	690	335	595
11	4960	2790	4170	10100	4440	7190	4810	1680	628	642	371	559
12	6710	3070	3640	11800	3980	6570	3630	1570	699	557	352	506
13	8360	2620	3320	11000	3680	5640	2930	1480	842	524	322	445
14	7360	2340	2840	10500	3820	4420	3770	1500	832	524	311	389
15	6880	2240	2870	10100	4690	3710	5500	1460	719	498	330	366
16	6740	2310	4910	10300	4620	3280	7560	1430	655	471	325	348
17	6390	2450	5550	10600	3740	2930	7830	1320	628	451	323	355
18	5360	2550	6330	10200	3600	2830	6620	1230	600	432	370	372
19	5730	2530	10700	10100	4860	2910	5780	1140	612	415	461	354
20	5950	2440	9010	9890	7500	2780	5690	1080	605	399	656	339
21	4850	2440	8620	9170	8680	2540	5690	1030	573	386	773	325
22	4110	2410	8530	8600	8220	2370	5330	1010	549	373	621	315
23	4440	2990	9000	8000	7300	2600	4880	970	531	389	502	322
24	5160	3870	8990	7600	6660	3010	4250	944	525	475	418	336
25	4980	3570	8620	7200	5640	2900	3800	913	533	470	372	383
26	4240	3150	8660	6800	4400	2570	3490	1070	526	456	354	434
27	3590	2950	8400	6400	4050	2550	3130	1150	509	407	336	442
28	3080	2850	7950	6400	3380	2600	2800	1120	505	372	328	401
29	2760	2840	8060	6600	---	2500	2620	1040	494	360	323	361
30	2540	2680	11200	7890	---	2230	2530	974	483	349	320	333
31	2360	---	14500	7930	---	2040	---	1200	---	349	312	---
TOTAL	131970	75500	207220	278890	152550	126980	113040	46031	21075	17280	11864	11867
MEAN	4257	2517	6685	8996	5448	4096	3768	1485	702	557	383	396
MAX	8360	3870	14500	11800	8680	8870	7830	2440	1480	1030	773	609
MIN	1740	1780	2390	6400	3380	2040	1670	913	483	349	311	294
CAL YR 1990	TOTAL 1403980	MEAN 3847	MAX 14500	MIN 747								
WTR YR 1991	TOTAL 1194267	MEAN 3272	MAX 14500	MIN 294								

MUSKINGUM RIVER BASIN

03130000 BLACK FORK BELOW CHARLES MILL DAM, NEAR MIFFLIN, OH

LOCATION.--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.--217 mi².

PERIOD OF RECORD.--October 1938 to September 1991 (discontinued). Prior to October 1940, published as Black Fork near Mifflin. Monthly discharge only for October 1938, published in WSP 1305.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 981.56 ft above National Geodetic Vertical Datum of 1929. Dec. 3, 1941, to Dec. 5, 1944, water-stage recorder at site 300 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Charles Mill Lake. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--53 years, 206 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,800 ft³/s Mar. 13, 1964 from rating curve extended above 1,900 ft³/s; maximum gage height, 8.45 ft Mar. 14, 1939; minimum daily discharge, 0.5 ft³/s Nov. 18, 1982.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a discharge of 11,700 ft³/s, computed by U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,430 ft³/s Jan. 12, gage height, 5.94 ft; minimum daily, 8.2 ft³/s Aug. 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	106	140	31	221	259	174	207	184	44	16	13
2	57	49	132	344	211	242	112	105	258	43	14	10
3	58	60	203	896	210	239	78	42	419	42	13	10
4	89	68	370	1200	235	235	82	53	459	38	8.3	27
5	222	76	655	1230	301	222	92	64	393	36	8.2	31
6	355	126	1040	1220	410	216	97	78	305	31	9.4	45
7	411	175	1170	1220	523	375	101	83	178	29	9.4	46
8	403	168	1120	1230	587	610	105	85	70	27	9.3	41
9	366	159	920	1210	594	662	119	85	67	24	17	37
10	391	159	713	1310	551	639	136	85	64	23	16	37
11	465	154	550	1120	482	552	140	83	63	22	15	49
12	557	152	428	1130	403	461	139	81	69	20	14	50
13	660	148	347	1420	339	380	140	78	110	23	12	46
14	706	141	282	1380	307	323	152	92	130	21	12	42
15	703	135	274	1340	288	275	284	124	121	18	12	36
16	626	131	301	1240	257	239	366	124	110	16	9.6	32
17	518	127	343	1290	238	216	365	118	103	15	10	29
18	443	121	257	1340	225	211	327	104	98	14	19	24
19	393	117	585	1340	259	208	289	90	90	14	31	22
20	377	59	875	1280	388	210	300	82	80	13	46	19
21	376	27	1080	1230	582	208	337	76	71	13	48	15
22	369	43	1260	1260	728	202	371	68	65	17	45	13
23	359	65	326	1130	731	201	382	63	57	23	41	17
24	373	91	836	791	649	208	383	60	35	28	36	16
25	397	115	1260	580	542	207	361	61	21	27	31	16
26	374	163	1220	443	444	200	337	64	21	25	28	16
27	324	205	1200	353	358	194	304	73	21	23	25	14
28	283	184	1170	296	299	205	273	89	41	21	23	12
29	239	167	1030	257	---	201	245	91	49	19	20	12
30	211	150	240	245	---	191	225	87	45	20	18	11
31	192	---	53	232	---	179	---	126	---	18	17	---
TOTAL	11350	3641	20380	29588	11362	8970	6816	2721	3797	747	633.2	788
MEAN	366	121	657	954	406	289	227	87.8	127	24.1	20.4	26.3
MAX	706	205	1260	1420	731	662	383	207	459	44	48	50
MIN	53	27	53	31	210	179	78	42	21	13	8.2	10

CAL YR 1990 TOTAL 127842 MEAN 350 MAX 1260 MIN 27
WTR YR 1991 TOTAL 100793.2 MEAN 276 MAX 1420 MIN 8.2

MUSKINGUM RIVER BASIN

83

03131500 BLACK FORK AT LOUDONVILLE, OH

LOCATION.--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.--349 mi².

PERIOD OF RECORD.--May 1931 to September 1991 (discontinued).

REVISED RECORDS.--WSP 873: 1935. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 929.16 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 23, 1941, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since 1936 by Charles Mill Lake, 16 mi upstream from station. Records include diversion from Clear Fork Reservoir which enters the Black Fork drainage as sewage effluent from the city of Mansfield (see REMARKS for station 03133500). Water-quality data collected at this site 1958, 1968 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--60 years, 361 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,460 ft³/s July 5, 1969, gage height, 14.11 ft, from rating curve extended above 4,000 ft³/s on basis of contracted-opening measurement of peak flow; minimum daily, 29 ft³/s Aug. 7, 8, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,340 ft³/s Dec. 31, gage height, 11.96 ft; minimum daily, 75 ft³/s Sept. 29-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	151	299	256	756	420	487	341	422	403	152	86	81
2	150	167	245	655	410	476	305	357	391	134	85	76
3	149	169	1040	1130	462	485	223	216	579	117	84	81
4	450	177	1460	1490	564	485	221	212	633	110	95	260
5	450	186	937	1550	652	492	276	225	559	106	85	141
6	513	331	1210	1580	722	1110	264	284	458	104	82	109
7	552	334	1420	1530	962	1460	250	252	360	98	81	113
8	570	319	1400	1520	949	1070	248	242	169	95	81	109
9	656	305	1250	1500	928	1050	315	239	157	93	119	102
10	1160	358	1000	1510	868	1020	499	231	150	92	104	104
11	865	321	798	1720	771	901	349	226	158	89	91	104
12	843	301	661	1580	668	772	322	223	168	89	86	108
13	1050	289	559	1780	591	678	331	217	175	93	84	105
14	1010	276	470	1730	604	597	449	212	206	93	129	103
15	973	262	738	1660	557	526	946	216	204	86	94	101
16	883	259	665	1780	484	465	837	230	192	84	86	97
17	759	271	585	1880	458	427	698	253	183	84	92	94
18	857	250	1700	1730	452	504	626	219	176	83	185	90
19	726	240	1710	1680	1050	497	601	201	171	83	187	86
20	612	218	1330	1650	909	453	827	187	163	81	225	83
21	581	145	1390	1600	904	427	716	177	150	80	140	83
22	652	160	2020	1510	1060	414	718	172	141	146	125	80
23	663	303	2500	1520	1070	489	696	166	136	115	116	83
24	593	238	1250	1170	982	453	780	162	129	173	108	91
25	602	244	1650	856	844	425	695	185	106	105	101	82
26	585	251	1560	686	715	418	639	245	103	100	96	80
27	524	352	1490	574	606	450	579	288	101	97	93	78
28	471	327	1470	512	529	425	538	247	104	92	91	76
29	409	306	1720	459	---	395	502	209	127	90	87	75
30	370	273	3620	572	---	372	465	198	125	91	81	75
31	342	---	4020	489	---	349	---	466	---	93	82	---
TOTAL	19171	7931	42124	40359	20191	18572	15256	7379	6877	3148	3281	2950
MEAN	618	264	1359	1302	721	599	509	238	229	102	106	98.3
MAX	1160	358	4020	1880	1070	1460	946	466	633	173	225	260
MIN	149	145	245	459	410	349	221	162	101	80	81	75

CAL YR 1990 TOTAL 225755 MEAN 619 MAX 4020 MIN 124
WTR YR 1991 TOTAL 187239 MEAN 513 MAX 4020 MIN 75

MUSKINGUM RIVER BASIN

03133500 CLEAR FORK BELOW PLEASANT HILL DAM, NEAR PERRYVILLE, OH

LOCATION.--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.--198 mi².

PERIOD OF RECORD.--October 1938 to September 1991 (discontinued). Published as Clear Fork near Perrysville prior to 1940. Monthly discharge only for October 1938, published in WSP 1305.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 967.00 ft above National Geodetic Vertical Datum of 1929. Prior to May 1, 1947, water-stage recorder at site 0.5 mi downstream at datum 4.88 ft lower.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Pleasant Hill Lake. Water diverted from Clear Fork Reservoir (upstream from Pleasant Hill Lake) for municipal supply of city of Mansfield since 1953; mean pumpage for 1991 water year 14.6 ft³/s returned to Rocky Fork as sewage effluent. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--53 years, 199 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,340 ft³/s Jan. 23, 1959, gage height, 4.89 ft; minimum daily, 0.6 ft³/s Nov. 2, 4, 1938.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,810 ft³/s Dec. 31, gage height 4.36 ft; minimum daily, 24 ft³/s July 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	119	111	1730	258	167	140	201	185	38	26	27
2	72	113	111	1650	212	182	130	189	164	40	34	27
3	68	107	160	1560	212	183	138	193	145	39	35	27
4	112	104	694	1460	273	244	126	186	122	36	33	55
5	198	103	922	1350	441	196	104	160	103	35	30	80
6	186	116	832	1060	542	315	110	166	89	33	26	69
7	158	128	736	767	541	771	133	152	79	31	25	59
8	135	122	604	639	438	751	144	139	71	30	35	51
9	152	117	598	594	330	560	161	128	66	29	40	48
10	515	120	555	576	330	512	240	121	63	28	38	49
11	668	123	529	561	330	544	256	155	62	28	37	44
12	522	122	413	569	230	382	198	95	67	27	36	40
13	380	119	266	570	169	236	197	96	64	30	36	37
14	378	112	163	562	221	255	246	95	59	29	36	36
15	331	114	48	552	246	177	422	91	56	27	36	34
16	276	124	49	545	212	91	749	89	55	26	36	33
17	231	121	600	556	212	91	724	104	53	26	36	33
18	245	114	769	558	212	151	408	94	51	34	36	38
19	311	126	720	549	248	301	252	88	49	35	36	38
20	287	141	582	536	441	348	328	83	47	32	30	40
21	244	149	591	523	498	292	384	81	45	30	27	46
22	225	187	612	766	352	217	454	78	45	31	26	44
23	242	224	728	866	282	216	436	75	44	33	26	44
24	244	244	1050	799	281	218	398	74	42	45	25	42
25	229	244	1010	636	281	258	377	78	42	42	24	40
26	202	269	838	413	239	275	268	86	42	37	30	40
27	178	265	826	410	172	237	232	96	41	32	31	39
28	159	259	837	719	154	220	228	107	40	29	30	37
29	150	188	741	595	---	207	221	100	39	27	28	37
30	137	120	1040	224	---	184	212	93	38	27	28	37
31	127	---	1760	293	---	184	---	145	---	27	27	---
TOTAL	7438	4514	19495	23188	8357	8965	8416	3638	2068	993	979	1271
MEAN	240	150	629	748	298	289	281	117	68.9	32.0	31.6	42.4
MAX	668	269	1760	1730	542	771	749	201	185	45	40	80
MIN	68	103	48	224	154	91	104	74	38	26	24	27

CAL YR 1990 TOTAL 103002 MEAN 282 MAX 1760 MIN 36
WTR YR 1991 TOTAL 89322 MEAN 245 MAX 1760 MIN 24

MUSKINGUM RIVER BASIN

85

03135000 LAKE FORK BELOW MOHICANVILLE DAM, NEAR MOHICANVILLE, OH

LOCATION.--Lat 40°43'24", long 82°09'18", in sec. 3, T.20 N., R.15 W., Ashland County, Hydrologic Unit 05040001, 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.--271 mi².

PERIOD OF RECORD.--October 1938 to current year. Published as Lake Fork near Mohicanville prior to 1940.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 930.00 ft above National Geodetic Vertical Datum of 1929. Prior to July 25, 1949, water-stage recorder at site 500 ft downstream at same datum.

REMARKS.--Estimated daily discharges: June 11-13, July 1-3. Records good except those for June 1-July 15 which are poor. Flow regulated by Mohicanville Reservoir. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--53 years, 242 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,490 ft³/s July 5, 1969, gage height, 14.32 ft; minimum daily 1.0 ft³/s June 10, 1947, Jan. 25, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,210 ft³/s Dec. 23, gage height, 8.43 ft; minimum daily, 12 ft³/s Aug. 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	138	168	128	157	1110	282	136	171	515	150	15	18
2	126	160	122	237	1110	283	130	156	269	90	14	14
3	115	152	642	443	895	315	118	142	271	30	14	14
4	398	146	1060	695	766	321	115	132	162	17	17	236
5	706	153	1070	943	912	349	143	129	107	18	14	99
6	358	250	1070	1060	1010	445	141	217	81	21	14	38
7	235	193	870	1090	931	991	124	166	65	23	14	24
8	195	166	607	1100	961	1050	116	132	52	23	13	18
9	299	158	451	1100	781	1100	183	119	48	24	37	16
10	803	245	367	1110	600	1070	429	110	45	23	24	40
11	806	233	319	1120	504	930	253	100	50	24	17	28
12	820	190	288	1120	412	887	182	94	130	23	14	19
13	828	167	259	1110	327	615	172	89	70	27	13	17
14	825	151	231	1100	310	485	257	206	37	31	13	16
15	810	145	512	1090	437	401	836	151	31	24	14	15
16	794	143	808	1090	376	344	753	99	29	20	12	14
17	629	156	509	1090	351	285	467	103	28	19	14	14
18	613	160	801	1100	318	234	356	82	26	17	61	15
19	697	148	1060	1100	290	281	340	75	24	17	39	14
20	474	139	1060	1090	960	322	775	71	22	16	58	16
21	367	132	1070	1080	1060	262	707	66	21	15	42	14
22	468	162	1070	1100	1080	212	648	62	19	31	28	14
23	678	387	920	1110	995	293	475	59	20	25	21	16
24	461	260	982	1110	712	281	508	56	19	44	16	21
25	358	198	1060	1120	546	219	437	68	19	23	14	18
26	295	170	1080	1110	445	196	330	94	18	17	13	17
27	256	161	1090	1080	370	227	285	120	17	16	13	16
28	231	158	1080	1100	314	217	251	123	17	14	13	15
29	205	145	1020	1110	---	177	228	84	16	14	13	14
30	187	134	644	656	---	154	200	74	14	17	14	14
31	178	---	199	835	---	139	---	631	---	17	27	---
TOTAL	14353	5330	22449	30356	18883	13367	10095	3981	2242	870	645	844
MEAN	463	178	724	979	674	431	336	128	74.7	28.1	20.8	28.1
MAX	828	387	1090	1120	1110	1100	836	631	515	150	61	236
MIN	115	132	122	157	290	139	115	56	14	14	12	14

CAL YR 1990 TOTAL 145906 MEAN 400 MAX 1090 MIN 40
WTR YR 1991 TOTAL 123415 MEAN 338 MAX 1120 MIN 12

MUSKINGUM RIVER BASIN

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 National Geodetic Vertical Datum of 1929. (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: Jan. 17 to Feb. 5 and Apr. 15 to May 21. Records fair except for estimated daily discharges, 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.

AVERAGE DISCHARGE.--38 years, (1954-91), 218 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,000 ft³/s Jan. 21, 1959, gage height, 18.19 ft, from rating curve extended above 9,000 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 8.6 ft³/s Aug. 22, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,480 ft³/s Dec. 30 gage height 9.29 ft; minimum daily, 20 ft³/s Aug. 26-30, Sept. 2, 22, 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	116	101	1670	390	198	213	340	234	40	23	23
2	69	113	99	1190	270	202	221	330	148	61	23	20
3	63	106	624	1020	200	229	200	310	129	52	23	23
4	149	102	1600	693	150	259	182	290	103	45	23	79
5	467	103	734	459	280	264	202	280	82	41	23	96
6	241	126	397	415	435	515	279	440	72	39	23	68
7	154	143	279	381	761	1500	234	400	67	37	23	49
8	119	125	220	338	581	839	200	360	63	35	22	38
9	127	116	181	317	419	510	203	340	59	35	23	33
10	1070	128	161	291	347	401	260	310	58	35	23	34
11	801	144	143	420	294	340	238	270	58	34	22	33
12	505	135	129	1040	240	300	194	250	70	34	21	30
13	452	120	119	671	221	276	235	230	68	41	21	28
14	371	106	108	469	314	261	783	200	61	36	23	28
15	276	100	747	397	332	241	2900	190	57	33	23	25
16	215	99	1400	611	252	222	2600	170	57	32	22	24
17	181	98	587	500	246	203	2000	150	59	31	22	24
18	297	98	1820	400	243	249	1500	140	55	29	25	24
19	458	94	3180	330	1160	338	1200	120	53	29	28	24
20	293	91	1400	300	1170	315	900	100	50	28	35	22
21	222	88	905	270	660	270	760	80	47	27	32	21
22	219	91	1090	240	469	237	680	74	45	29	29	20
23	332	214	1660	210	367	384	600	71	45	32	26	22
24	269	211	1490	190	306	435	540	69	55	32	24	24
25	217	168	628	180	274	318	500	73	47	31	22	26
26	184	143	380	170	243	271	460	73	45	28	20	25
27	162	132	255	170	215	438	430	94	47	26	20	24
28	147	126	225	160	202	423	400	138	43	23	20	23
29	134	120	521	160	---	347	370	110	41	22	20	21
30	124	111	4440	250	---	275	350	90	39	24	20	20
31	121	---	4720	400	---	227	---	116	---	24	23	---
TOTAL	8510	3667	30343	14312	11041	11287	19834	6208	2057	1045	727	951
MEAN	275	122	979	462	394	364	661	200	68.6	33.7	23.5	31.7
MAX	1070	214	4720	1670	1170	1500	2900	440	234	61	35	96
MIN	63	88	99	160	150	198	182	69	39	22	20	20

CAL YR 1990 TOTAL 142897 MEAN 391 MAX 4720 MIN 52
WTR YR 1991 TOTAL 109982 MEAN 301 MAX 4720 MIN 20

MUSKINGUM RIVER BASIN

87

03138500 WALHONDING RIVER BELOW MOHAWK DAM, AT NELLIE, OH

LOCATION.--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.--1,505 mi².

PERIOD OF RECORD.--December 1910 to March 1913 (gage heights and discharge measurements only), September 1921 to September 1991 (discontinued). Published as Mohican River at Pomerene 1910-13, as Walhonding River at Pomerene 1921-37, and as Walhonding River at Nellie 1938-39.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 790.00 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 7, 1925, nonrecording gage and Nov. 7, 1925, to Sept. 30, 1937, water-stage recorder at site 3.8 mi upstream at datum 15.53 ft higher. Oct. 1, 1937, to Sept. 30, 1938, nonrecording gage at present site at datum 2.09 ft higher. U.S. Army Corps of Engineers satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Flow regulated beginning 1936 by 5 flood-control reservoirs at points 1.7 mi to 54 mi upstream. Water-quality data collected at this site 1964 to 1977.

AVERAGE DISCHARGE.--70 years, 1,533 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge at site at Pomerene, 43,800 ft³/s Jan. 25, 1937; maximum discharge at present site since regulation began at Mohawk Dam, 24,000 ft³/s Jan. 25, 26, 1937, gage height, 18.8 ft, present datum (from floodmarks), from rating curve extended above 13,000 ft³/s; minimum daily discharge, 19 ft³/s Feb. 27 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 26.9 ft, discharge, 102,000 ft³/s present site and datum, from information by U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,860 ft³/s Jan. 22, gage height, 11.03 ft; minimum daily, 201 ft³/s Sept. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	598	1110	893	988	5680	1760	1530	1490	1670	326	225	211
2	569	980	859	996	2790	1740	1420	1370	1390	409	213	209
3	541	858	2000	1550	2440	1800	1290	1180	1220	359	213	201
4	690	829	6550	3590	2520	1940	1180	1080	1280	334	230	275
5	2170	828	6430	5980	2910	2010	1210	1050	1110	312	233	816
6	1890	1020	4930	6530	3340	3410	1360	1180	955	296	210	462
7	1450	1140	4620	6620	3990	6550	1300	1170	825	289	205	359
8	1290	1050	3870	6650	5170	6630	1260	1020	681	284	205	318
9	1290	982	3370	6650	3640	5620	1420	962	525	270	217	294
10	4810	1070	2920	6650	3160	4270	3050	920	490	265	286	289
11	5480	1230	2510	6520	2780	3720	2350	881	480	264	254	295
12	4340	1110	2260	5150	2420	3340	1850	875	546	258	225	278
13	4220	1020	1870	6130	2080	2650	1780	801	556	280	215	265
14	3810	958	1660	6720	2240	2400	3120	780	531	280	213	258
15	3350	957	2640	6720	2520	2210	5470	882	524	269	261	249
16	2970	1110	5400	6690	2130	1840	6330	797	506	244	222	236
17	2620	1130	3570	6730	2020	1650	4820	781	488	233	213	240
18	2640	1130	5040	6730	1970	1710	3360	798	463	229	260	227
19	3450	1090	6410	6690	4100	2070	2620	713	452	230	401	222
20	2720	1070	6690	6630	5560	2120	3010	658	439	231	495	217
21	2220	1030	6650	6560	4560	1940	3230	621	413	225	395	207
22	2170	822	6390	6680	4120	1740	3060	600	399	232	317	220
23	3000	1140	4370	6730	3610	2080	2910	573	386	323	278	225
24	2650	1450	5250	6730	3070	2310	2670	547	372	353	256	224
25	2250	1250	6520	6730	2720	2020	2780	566	355	351	245	240
26	1980	1150	6490	6640	2400	1920	2400	659	328	268	230	232
27	1740	1170	6580	6430	2090	2290	2080	718	320	250	221	221
28	1550	1190	6590	6500	1850	2190	1910	879	314	236	224	216
29	1390	1140	6460	6650	---	2000	1760	765	310	225	220	208
30	1270	983	3420	6610	---	1760	1640	670	326	221	215	204
31	1180	---	951	6500	---	1590	---	822	---	223	208	---
TOTAL	72298	31997	134163	183674	87880	81280	74170	26808	18654	8569	7805	8118
MEAN	2332	1067	4328	5925	3139	2622	2472	865	622	276	252	271
MAX	5480	1450	6690	6730	5680	6630	6330	1490	1670	409	495	816
MIN	541	822	859	988	1850	1590	1180	547	310	221	205	201

CAL YR 1990 TOTAL 903820 MEAN 2476 MAX 6690 MIN 526
WTR YR 1991 TOTAL 735416 MEAN 2015 MAX 6730 MIN 201

MUSKINGUM RIVER BASIN

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. WRD-OH-77-1: Drainage area. WRD-OH-87-1: 1984-86.

GAGE.--Water-stage recorder. Datum of gage is 788.05 ft above National Geodetic Vertical Datum of 1929. 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.--No estimated daily discharges. Records good. 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.

AVERAGE DISCHARGE.--61 years, 423 ft³/s, 12.43 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,500 ft³/s July 5, 1969, gage height, 26.40 ft (from flood- marks), from rating curve extended above 11,000 ft³/s on basis of slope-area measurement of peak flow at site then in use; minimum, 23 ft³/s Sept. 10-15, 28-30, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 13	1530	2,260	15.37	Dec. 30	2230	*4,380	*16.29
Dec. 19	1400	2,640	15.77				

Minimum daily discharge 34 ft³/s Aug. 1, 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	319	468	298	3150	515	535	414	386	440	224	34	77
2	284	445	285	2860	521	521	400	360	367	160	34	53
3	259	434	819	2830	546	515	379	329	331	113	35	46
4	461	400	1780	2570	579	583	365	309	281	91	39	147
5	616	395	1550	2070	654	570	361	299	239	83	39	221
6	485	491	1390	1690	728	971	361	402	210	79	39	129
7	437	446	1240	1400	1030	1890	344	357	186	73	68	91
8	397	418	1040	1160	1060	1860	330	327	169	73	58	71
9	540	395	809	987	1000	1850	361	307	159	73	55	61
10	1630	461	642	837	913	1670	585	288	146	73	75	87
11	1940	479	555	900	778	1350	541	263	139	71	62	80
12	2010	460	516	1440	659	1060	479	247	176	68	54	67
13	2210	432	480	1390	619	834	470	233	172	69	50	66
14	2210	409	438	1260	671	707	622	220	151	76	46	60
15	2000	392	927	1120	657	623	1360	228	132	74	46	53
16	1670	375	1360	1110	570	565	1610	220	121	66	46	47
17	1310	375	1110	1200	558	528	1250	198	120	64	45	46
18	1250	357	1440	1210	565	535	955	189	116	62	64	46
19	1430	341	2540	1180	1100	538	739	181	115	61	97	46
20	1200	327	2420	1100	1180	513	758	172	106	58	135	46
21	1000	307	2230	1010	1190	494	720	169	100	57	102	45
22	966	313	2160	838	1270	479	715	169	99	57	75	43
23	1150	438	2290	719	1210	578	669	164	103	65	66	42
24	1060	456	2580	663	1020	552	644	168	95	86	63	47
25	941	429	2420	586	804	518	611	227	91	78	54	54
26	810	387	2230	589	665	499	568	308	89	63	49	53
27	694	363	1920	519	598	522	531	250	85	59	45	51
28	618	350	1540	514	560	514	497	266	79	54	44	47
29	559	336	1430	488	---	486	460	221	78	49	44	45
30	516	316	2470	616	---	460	423	194	90	45	44	41
31	486	---	3880	611	---	428	---	443	---	35	50	---
TOTAL	31458	11995	46789	38617	22220	23748	18522	8094	4785	2359	1757	2008
MEAN	1015	400	1509	1246	794	766	617	261	159	76.1	56.7	66.9
MAX	2210	491	3880	3150	1270	1890	1610	443	440	224	135	221
MIN	259	307	285	488	515	428	330	164	78	35	34	41
CFSM	2.19	.86	3.25	2.68	1.71	1.65	1.33	.56	.34	.16	.12	.14
IN.	2.52	.96	3.75	3.10	1.78	1.90	1.48	.65	.38	.19	.14	.16

CAL YR 1990 TOTAL 281011 MEAN 770 MAX 3880 MIN 133 CFSM 1.66 IN. 22.53
WTR YR 1991 TOTAL 212352 MEAN 582 MAX 3880 MIN 34 CFSM 1.25 IN. 17.02

MUSKINGUM RIVER BASIN

89

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 down-stream 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 National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 23 to Feb. 5, Feb. 11-13, 16. Records good except for periods of estimated daily discharges which are fair, and July 2-Sept. 30 which is poor. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--55 years, 28.8 ft³/s, 14.38 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,720 ft³/s July 5, 1969, gage height, 13.92 ft, from rating curve extended above 2,200 ft³/s on basis of slope-area measurement of peak flow; maximum gage height, 15.38 ft Sept. 14, 1979; no flow Sept. 28, 29, 1954, Aug. 29-31, 1962, and part of each day Dec. 23, 31, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 18	2030	893	9.32	Dec. 30	1300	*2,210	*11.79
Dec. 23	1015	785	8.86				

Minimum daily discharge 0.12 ft³/s Sept. 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	11	12	117	22	28	23	24	4.4	6.2	.22	.23
2	4.8	10	11	78	18	28	20	21	4.1	17	.23	.24
3	4.2	9.6	265	58	16	28	18	19	4.0	3.2	.24	.26
4	59	9.3	172	45	20	38	18	18	3.3	2.0	.27	.89
5	24	11	63	42	32	32	38	26	2.8	1.6	.24	1.6
6	14	21	46	47	49	175	29	32	2.7	1.3	.35	.53
7	11	12	38	40	112	139	25	20	2.6	1.1	.29	.30
8	9.3	10	32	34	63	67	24	18	2.7	5.4	.27	.25
9	9.4	10	28	33	51	53	60	17	2.5	2.2	.31	.60
10	13	26	26	31	44	45	70	15	2.3	1.4	.30	3.3
11	23	18	22	166	32	39	41	13	2.4	1.2	.29	1.5
12	65	15	21	178	25	35	34	12	5.4	1.1	.28	.64
13	52	13	19	81	30	35	49	12	3.0	1.2	.28	.37
14	33	12	16	59	52	33	137	11	2.2	1.5	.22	.39
15	25	11	132	50	39	29	317	9.5	2.1	.89	.23	.54
16	19	11	68	79	27	26	142	8.6	2.2	.55	.26	.41
17	17	14	47	62	32	24	80	8.2	2.1	.40	.27	6.3
18	32	11	466	49	96	32	58	7.7	1.9	.34	.43	1.0
19	24	10	246	44	162	28	59	7.3	1.8	.31	3.4	.20
20	19	9.7	95	42	131	25	61	6.7	1.7	.29	3.4	.17
21	17	9.1	123	41	76	24	53	6.0	1.6	.27	2.3	.14
22	23	21	239	30	58	25	50	5.6	1.6	.29	1.1	.12
23	35	40	388	24	46	50	44	5.2	1.8	1.3	.41	.16
24	27	25	153	22	42	36	42	7.7	1.7	2.8	.28	.23
25	23	21	78	20	37	31	37	11	1.5	1.1	.26	.41
26	20	18	57	18	33	34	34	6.9	1.4	.48	.23	.94
27	17	17	46	18	31	35	32	6.7	1.3	.37	.19	.75
28	16	16	44	18	30	32	30	6.6	1.3	.29	.18	.43
29	13	13	95	18	---	29	29	5.3	1.2	.24	.18	.38
30	13	12	969	34	---	25	25	4.7	1.2	.24	.19	.34
31	12	---	251	26	---	22	---	4.8	---	.23	.22	---
TOTAL	679.9	446.7	4268	1604	1406	1282	1679	376.5	70.8	56.79	17.32	23.62
MEAN	21.9	14.9	138	51.7	50.2	41.4	56.0	12.1	2.36	1.83	.56	.79
MAX	65	40	969	178	162	175	317	32	5.4	17	3.4	6.3
MIN	4.2	9.1	11	18	16	22	18	4.7	1.2	.23	.18	.12
CFSM	.81	.55	5.06	1.90	1.85	1.52	2.06	.45	.09	.07	.02	.03
IN.	.93	.61	5.84	2.19	1.92	1.75	2.30	.51	.10	.08	.02	.03

CAL YR 1990 TOTAL 17521.5 MEAN 48.0 MAX 969 MIN 1.9 CFSM 1.76 IN. 23.96
WTR YR 1991 TOTAL 11910.63 MEAN 32.6 MAX 969 MIN .12 CFSM 1.20 IN. 16.29

MUSKINGUM RIVER BASIN

03140500 MUSKINGUM RIVER NEAR COSHOCTON, OH

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 highway bridge, 1 mi southwest of Coshocton, and 2 mi downstream from confluence of Tuscarawas and Walhonding Rivers.

DRAINAGE AREA.--4,859 mi².

PERIOD OF RECORD.--July 1936 to current year.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 725.00 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 19, 1936, nonrecording gage and Sept. 20, 1936 to Sept. 30, 1977, water-stage recorder at same site at datum 5.00 ft higher.

REMARKS.--Estimated daily discharges: Jan. 23-29. Records good except for period of estimated record which is fair. Flow regulated by 13 flood-control reservoirs at points 19 mi to 88 mi upstream. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--55 years, 5,008 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 78,700 ft³/s Jan. 26, 1937, gage height, 21.98 ft; minimum daily, 420 ft³/s Sept. 13, 1954.

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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 30,700 ft³/s Dec. 30, gage height, 17.58 ft; minimum daily, 585 ft³/s Sept. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3460	4380	4220	22400	14700	6000	4500	4980	3730	1320	692	587
2	3430	4120	4010	16000	11000	5870	4310	4660	3510	1930	658	606
3	3020	3790	6080	16100	8410	5890	4080	4280	2940	1650	646	585
4	3340	3620	15100	16400	7720	6410	3830	3920	2800	1450	677	698
5	5720	3520	17300	18800	8190	7300	3910	3750	2480	1440	692	1230
6	6980	3770	15600	19700	9480	9130	4100	3970	2240	1340	670	1430
7	5580	4370	13700	19400	11600	17700	4090	4390	2040	1200	642	1140
8	4470	4260	11800	19000	14600	18500	3910	4150	1880	1210	644	928
9	4000	3880	10400	18500	12600	17700	4020	3740	1640	1200	661	829
10	6680	3990	8890	18100	10300	15300	7790	3520	1540	1130	686	982
11	11000	4780	7820	18800	8670	13100	8150	3340	1490	1170	777	1090
12	12300	5150	6990	21100	7680	11900	6820	3190	1580	1050	719	988
13	15100	4660	6260	20500	7060	10100	5910	2980	1730	1000	661	883
14	14100	4250	5620	20400	7180	8480	7720	2860	1750	991	622	809
15	13300	4060	6060	19700	8120	7230	13300	2900	1620	984	665	752
16	12500	4190	11800	19600	7860	6470	17500	2830	1510	918	648	711
17	11600	4370	11600	20000	6870	5850	16300	2670	1420	866	632	709
18	10200	4450	14600	19500	6730	5680	12700	2570	1360	827	697	726
19	10800	4410	23400	19200	10100	5960	10300	2390	1330	806	943	682
20	10800	4260	22100	18900	15100	5950	9900	2210	1320	795	1210	657
21	9120	4220	21100	18300	15600	5600	10100	2190	1260	776	1440	624
22	7720	4080	21600	17200	14400	5250	9640	2110	1220	757	1240	610
23	8620	4930	21700	15600	12700	5800	8980	2070	1190	831	1020	631
24	9420	6090	20700	14600	11300	6370	8060	1980	1160	936	859	637
25	8950	5910	21200	13800	10100	6100	7610	2020	1140	1040	777	707
26	7740	5280	20600	13000	8170	5650	7050	2130	1100	921	722	764
27	6720	4960	19700	12400	7360	5900	6400	2460	1070	825	676	783
28	5880	4900	18900	12000	6550	5900	5900	2510	1040	762	651	737
29	5330	4740	18500	14000	---	5630	5520	2420	1020	729	635	683
30	4920	4480	24300	15800	---	5160	5260	2200	1010	705	624	641
31	4620	---	28900	15900	---	4750	---	2150	---	697	613	---
TOTAL	247420	133870	460550	544700	280150	252630	227660	93540	51120	32256	23499	23839
MEAN	7981	4462	14860	17570	10010	8149	7589	3017	1704	1041	758	795
MAX	15100	6090	28900	22400	15600	18500	17500	4980	3730	1930	1440	1430
MIN	3020	3520	4010	12000	6550	4750	3830	1980	1010	697	613	585

CAL YR 1990 TOTAL 2890140 MEAN 7918 MAX 28900 MIN 1820
WTR YR 1991 TOTAL 2371234 MEAN 6497 MAX 28900 MIN 585

MUSKINGUM RIVER BASIN

91

03141500 SENECA FORK BELOW SENECAVILLE DAM, NEAR SENECAVILLE, OH

LOCATION.--Lat 39°55'28", long 81°26'17", Guernsey County, Hydrologic Unit 05040005, on left bank 650 ft down-stream from Senecaville Dam and 1.5 mi southeast of Senecaville.

DRAINAGE AREA.--118 mi².

PERIOD OF RECORD.--September 1938 to September 1991 (discontinued). Published as Seneca Fork near Senecaville prior to 1940.

REVISED RECORDS.--WSP 1907: Drainage area. WDR-OH-81-1: (M). WDR-OH-83-1: 1982. WDR-OH-88-1: 1987.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 799.00 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 24, 1942, at site 150 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Dec. 18, 19, 26-29. Records good except those for periods of estimated discharges which are fair. Flow regulated by Senecaville Lake. Water is diverted from Senecaville Lake for U.S. Fish Hatchery; figures for diversion after 1982 unavailable, diversion not included in figures of daily discharge. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--53 years, 133 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 985 ft³/s Aug. 24, 1980, gage height, 9.69 ft; maximum gage height, 10.96 ft Aug. 11, 1980 (affected by backwater); no flow May 3, 4, 1939, Jan. 28, 29, Feb. 4, 5, Apr. 25, 1952.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 935 ft³/s Jan. 11, gage height, 9.27 ft; maximum gage height, 9.82 ft Dec. 28 (affected by backwater from Wills Creek); minimum daily, 1.6 ft³/s, Aug. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	254	75	295	6.9	494	4.0	26	114	4.0	2.9	1.6	3.3
2	205	75	294	7.1	6.8	4.0	4.3	113	4.1	3.0	3.1	2.4
3	5.0	75	267	173	6.8	3.4	4.2	113	4.0	3.0	2.8	2.5
4	4.5	75	14	532	206	185	4.3	113	3.8	2.8	2.8	2.6
5	4.3	75	444	741	436	259	4.2	114	3.9	2.6	2.0	2.6
6	5.8	75	779	746	454	154	4.0	272	4.0	2.4	3.0	2.6
7	5.6	75	797	743	281	112	3.8	137	4.0	2.5	4.3	2.3
8	4.9	75	803	730	141	281	4.6	5.5	4.0	3.6	5.4	2.2
9	67	60	788	833	142	337	5.7	4.8	4.0	4.1	4.5	2.5
10	319	5.5	786	906	143	336	5.1	4.8	3.9	4.5	5.1	3.1
11	73	5.4	797	377	50	335	4.8	4.7	3.8	4.5	5.2	3.0
12	69	5.4	655	6.3	4.8	334	4.7	4.3	3.7	4.0	4.0	2.6
13	6.6	291	372	6.9	5.0	333	4.8	78	3.2	3.6	2.7	2.1
14	6.9	689	226	519	205	333	5.5	113	3.1	3.6	3.1	2.5
15	209	685	7.1	902	317	232	7.1	114	3.1	3.3	2.9	2.3
16	698	434	7.1	905	316	108	7.4	67	3.3	3.0	2.9	2.1
17	643	171	430	900	317	107	416	3.9	3.2	3.0	2.6	2.3
18	244	170	220	889	317	38	690	3.9	3.4	2.9	2.5	2.5
19	101	230	4.8	877	318	5.2	509	3.6	3.2	2.9	2.7	2.6
20	5.1	297	4.6	866	259	4.3	547	3.4	3.1	2.9	3.2	2.7
21	5.1	296	156	858	155	3.9	699	3.2	3.1	3.0	3.0	2.6
22	5.1	295	293	870	155	3.8	701	3.4	3.1	3.1	2.9	2.8
23	79	295	113	879	155	3.7	707	3.5	3.2	3.3	2.9	2.9
24	225	295	4.5	877	154	3.4	700	3.7	3.3	4.3	2.8	3.2
25	698	294	454	885	50	219	587	3.7	3.3	4.1	2.7	3.4
26	632	329	827	864	4.8	228	165	3.5	3.2	3.1	2.8	3.4
27	75	460	899	842	4.6	170	7.1	3.8	3.1	3.0	2.6	3.5
28	75	532	787	639	4.1	169	7.1	3.9	3.1	2.9	2.5	3.6
29	75	526	315	313	---	105	5.8	4.0	3.0	2.9	2.6	3.6
30	75	408	22	317	---	71	79	4.3	2.9	3.1	2.5	3.4
31	75	---	8.6	604	---	71	---	4.1	---	2.8	3.2	---
TOTAL	4949.9	7373.3	11869.7	19614.2	5101.9	4552.7	5920.5	1428.0	104.1	100.7	96.9	83.2
MEAN	160	246	383	633	182	147	197	46.1	3.47	3.25	3.13	2.77
MAX	698	689	899	906	494	337	707	272	4.1	4.5	5.4	3.6
MIN	4.3	5.4	4.5	6.3	4.1	3.4	3.8	3.2	2.9	2.4	1.6	2.1

CAL YR 1990 TOTAL 67257.1 MEAN 184 MAX 899 MIN 2.3
WTR YR 1991 TOTAL 61195.1 MEAN 168 MAX 906 MIN 1.6

MUSKINGUM RIVER BASIN

03142000 WILLS CREEK AT CAMBRIDGE, OH

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.

GAGE.--Water-stage recorder. Datum of gage is 772.34 ft above National Geodetic Vertical Datum of 1929. 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: Oct. 4, 10-11, Jan. 22-29. Records good except for periods of estimated daily discharges which are fair. 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.

AVERAGE DISCHARGE.--56 years, 448 ft³/s (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 8,500 ft³/s June 6 or 7, 1963; maximum gage height, 24.51 ft Aug. 13, 1980 (backwater from tributaries); minimum daily discharge, 0.7 ft³/s Oct. 6, 1960.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,460 ft³/s Dec. 20, gage height, 17.16 ft; minimum daily 3.8 ft³/s Sept. 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	519	218	470	3570	1130	245	328	240	93	21	15	5.8
2	456	207	399	3090	739	230	282	258	57	27	15	5.5
3	289	200	787	1800	356	257	231	257	102	26	14	4.9
4	174	195	1930	824	318	456	211	238	118	24	17	6.3
5	344	195	2060	922	509	773	206	234	55	22	17	21
6	237	244	1410	1120	956	905	225	292	40	20	19	16
7	155	288	1160	1340	1570	1850	206	480	35	19	18	8.8
8	123	216	1070	1320	1590	1930	186	260	33	15	16	6.0
9	112	196	1010	1140	949	1110	314	145	30	12	22	4.8
10	375	442	968	1150	639	788	922	136	28	14	20	5.4
11	410	1240	943	1510	527	720	781	131	26	17	22	5.1
12	589	619	924	2470	364	643	382	115	29	17	18	4.9
13	1800	318	730	2630	311	629	604	103	38	24	15	5.4
14	1710	652	508	1710	695	761	1860	149	39	23	13	5.1
15	626	811	516	1190	1470	895	2400	192	30	20	13	4.7
16	738	786	1340	1310	969	614	2910	187	26	14	11	5.9
17	813	470	825	1410	704	441	2570	140	43	14	11	7.1
18	713	368	1600	1390	737	434	1650	66	126	12	22	6.8
19	859	321	3560	1290	1240	476	1150	59	47	10	17	5.1
20	437	373	4380	1220	1360	444	878	60	47	10	17	4.6
21	248	402	3850	1210	1060	356	904	66	26	11	19	4.3
22	240	410	3080	1040	698	337	984	67	20	12	28	3.8
23	776	689	2380	980	555	718	980	63	21	15	15	4.5
24	1540	844	2390	920	477	929	934	56	23	22	10	5.4
25	1210	593	1970	860	447	523	897	49	23	24	8.7	12
26	1020	504	1310	840	326	605	739	49	22	22	8.2	14
27	628	530	1220	820	267	652	349	49	20	17	7.1	11
28	307	653	1240	800	257	585	229	49	17	15	8.3	5.1
29	264	682	1400	860	---	492	213	54	16	15	7.7	4.4
30	245	652	1800	903	---	387	220	57	16	19	6.2	5.9
31	231	---	2820	1390	---	338	---	78	---	16	6.4	---
TOTAL	18188	14318	50050	43029	21220	20523	24745	4379	1246	549	456.6	209.6
MEAN	587	477	1615	1388	758	662	825	141	41.5	17.7	14.7	6.99
MAX	1800	1240	4380	3570	1590	1930	2910	480	126	27	28	21
MIN	112	195	399	800	257	230	186	49	16	10	6.2	3.8
(+)	4.66	4.38	4.37	4.41	4.31	4.28	4.52	5.26	5.85	5.50	5.30	5.31

CAL YR 1990 TOTAL 243402 MEAN 667 MAX 4380 MIN 35 (+) 5.08
WTR YR 1991 TOTAL 198913.2 MEAN 545 MAX 4380 MIN 3.8 (+) 4.85

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

MUSKINGUM RIVER BASIN

93

03143500 WILLS CREEK BELOW WILLS CREEK DAM, AT WILLS CREEK, OH

LOCATION.--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.--842 mi².

PERIOD OF RECORD.--October 1938 to September 1991 (discontinued). Prior to October 1939, published as Wills Creek at Wills Creek.

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 717.00 ft above National Geodetic Vertical Datum of 1929. Prior to Feb. 18, 1939, nonrecording gage and Feb. 18, 1939, to Sept. 30, 1949, water-stage recorder, at site 1,500 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Senecaville Lake on Seneca Fork, 80 mi upstream, Salt Fork Reservoir 43 mi upstream, and Wills Creek Lake, 0.2 mi upstream. Water-quality data collected at this site 1957, 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--53 years, 935 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,930 ft³/s Mar. 7, 1940, gage height, 17.40 ft; maximum gage height, 17.50 ft Mar. 22, 1964 (backwater from Muskingum River); minimum daily discharge, 1.0 ft³/s Aug. 10, Oct. 27-29, 1948, Jan. 28, 1952, July 6-9, 1969, Apr. 3, 1970, Feb. 25, 1975, Feb. 19, 1976, when gates at Wills Creek Lake were closed.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a discharge of 22,300 ft³/s, computed by U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,930 ft³/s Jan. 12, gage height, 15.30 ft; minimum daily, 24 ft³/s Sept. 3, 7, 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	548	637	920	1490	2130	801	813	661	181	46	29	27
2	765	593	848	712	2010	754	752	639	190	48	28	25
3	756	557	935	878	1690	736	694	629	199	48	28	24
4	734	525	2240	2510	1190	784	628	609	184	50	34	26
5	727	500	3300	5390	969	889	599	626	176	52	36	27
6	750	512	3570	5860	1080	1280	587	686	176	52	34	25
7	710	518	3250	5780	1800	2610	584	688	155	51	31	24
8	579	554	2560	5730	2560	3390	583	763	132	50	29	26
9	482	549	2050	5740	2780	3620	618	746	111	50	32	36
10	429	557	1750	5780	2410	3150	873	603	97	47	31	59
11	493	746	1550	5820	1840	2310	1250	503	88	43	30	56
12	774	1310	1420	5270	1430	1870	1420	450	84	42	30	50
13	1640	1340	1320	5730	1150	1600	1200	410	80	42	31	45
14	2580	950	1200	5890	1090	1430	1840	376	74	42	32	42
15	2980	835	1100	5830	1400	1390	3180	352	72	39	34	38
16	2370	979	1540	5760	1930	1470	3350	366	74	37	33	34
17	1560	1050	2020	5790	1950	1340	3880	387	76	36	32	34
18	1400	960	2030	5770	1630	1100	5260	389	73	36	51	33
19	1430	793	1270	5740	1740	1010	5200	377	72	36	59	30
20	1440	688	1470	5650	2250	994	3650	342	86	35	62	28
21	1220	647	2600	5630	2570	967	2440	303	97	33	60	26
22	918	675	3220	5710	2430	908	2000	281	99	32	55	24
23	931	803	2090	5690	2010	961	1890	246	91	34	50	28
24	1400	987	2540	5680	1620	1230	1800	260	79	37	46	29
25	2120	1190	4290	5590	1330	1550	1690	241	68	35	44	34
26	2210	1080	5340	4040	1140	1330	1570	220	60	32	42	35
27	1880	932	5770	2160	1000	1190	1380	205	54	29	38	35
28	1450	870	5760	1840	879	1220	1070	197	50	28	34	36
29	1020	901	5400	1860	---	1170	831	187	47	30	32	39
30	797	937	2710	1990	---	1030	712	175	45	31	29	41
31	695	---	2080	2020	---	912	---	177	---	30	28	---
TOTAL	37788	24175	78143	139330	48008	44996	52344	13094	3070	1233	1164	1016
MEAN	1219	806	2521	4495	1715	1451	1745	422	102	39.8	37.5	33.9
MAX	2980	1340	5770	5890	2780	3620	5260	763	199	52	62	59
MIN	429	500	848	712	879	736	583	175	45	28	28	24

CAL YR 1990 TOTAL 494810 MEAN 1356 MAX 5770 MIN 166
WTR YR 1991 TOTAL 444361 MEAN 1217 MAX 5890 MIN 24

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 Frazeysburg, 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 National Geodetic Vertical Datum of 1929. Prior to Oct. 31, 1936, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Nov. 21-Dec. 7, Jan. 23-Feb. 7 except for estimated daily discharges, which are fair. 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.

AVERAGE DISCHARGE.--55 years, 155 ft³/s, 15.04 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,800 ft³/s Sept. 14, 1979, gage height, 14.07 ft, from rating curve extended above 7,700 ft³/s on basis of contracted-opening measurement of peak flow; minimum, 2.0 ft³/s Oct. 3, 1963, gage height, 0.94.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	0730	4,230	7.88	Mar. 7	0200	1,920	5.24
Dec. 23	2000	2,760	6.31	Apr. 16	0430	3,480	7.09
Dec. 31	0030	*8,990	*11.09				

Minimum discharge, 3.3 ft³/s Sept. 2, 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	61	62	910	130	124	154	112	28	10	6.3	4.0
2	29	57	60	550	120	125	137	105	27	18	5.8	3.4
3	26	55	300	389	95	125	119	96	57	24	5.7	3.4
4	129	53	1100	282	94	176	109	90	32	15	9.0	3.9
5	173	55	560	235	120	157	147	89	25	12	11	4.1
6	70	85	350	256	257	780	147	115	22	10	7.4	4.1
7	53	67	240	235	757	1170	126	101	20	9.9	6.0	4.0
8	46	56	182	190	546	507	119	83	18	11	5.7	3.9
9	43	53	154	176	367	362	153	77	17	13	6.2	4.4
10	147	77	125	163	289	275	1050	78	16	11	6.9	21
11	150	92	109	437	226	217	468	70	16	9.9	6.4	18
12	256	70	99	994	177	185	305	64	18	9.7	5.8	8.8
13	476	62	93	570	169	184	476	60	18	10	5.5	6.4
14	205	57	81	394	286	199	1120	56	16	12	5.0	6.2
15	137	55	519	297	250	191	2060	52	14	11	4.7	5.7
16	100	55	733	352	202	154	2200	47	14	9.0	4.4	5.0
17	83	60	381	338	200	148	809	44	19	8.3	4.5	5.1
18	282	57	1430	265	288	202	493	41	16	7.9	7.7	5.4
19	298	53	2830	229	1040	185	366	39	14	7.5	12	6.6
20	152	51	765	219	694	162	364	37	14	7.4	18	6.0
21	118	48	550	207	487	150	296	36	13	7.0	12	5.1
22	122	46	1000	154	353	182	266	33	18	6.6	9.3	4.7
23	281	140	1910	146	293	574	230	32	20	6.9	7.8	5.4
24	191	130	1180	130	253	412	204	31	15	13	6.4	6.1
25	147	110	550	120	216	282	193	30	13	12	5.9	7.9
26	118	92	369	120	186	244	164	29	12	8.4	5.5	8.5
27	98	82	276	110	161	358	152	30	11	6.9	4.8	7.0
28	87	76	246	110	139	294	142	32	11	6.4	4.7	6.0
29	77	70	369	110	---	235	134	29	10	6.2	4.5	5.7
30	69	64	3500	150	---	197	127	27	10	6.3	4.7	5.2
31	66	---	4250	140	---	162	---	33	---	6.4	4.4	---
TOTAL	4265	2089	24373	8978	8395	8718	12830	1798	554	312.7	214.0	191.0
MEAN	138	69.6	786	290	300	281	428	58.0	18.5	10.1	6.90	6.37
MAX	476	140	4250	994	1040	1170	2200	115	57	24	18	21
MIN	26	46	60	110	94	124	109	27	10	6.2	4.4	3.4
CFSM	.98	.50	5.62	2.07	2.14	2.01	3.05	.41	.13	.07	.05	.05
IN.	1.13	.56	6.48	2.39	2.23	2.32	3.41	.48	.15	.08	.06	.05

CAL YR 1990 TOTAL 101938 MEAN 279 MAX 4390 MIN 13 CFSM 1.99 IN. 27.09
WTR YR 1991 TOTAL 72717.7 MEAN 199 MAX 4250 MIN 3.4 CFSM 1.42 IN. 19.32

MUSKINGUM RIVER BASIN

95

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 National Geodetic Vertical Datum of 1929. Prior to Sept. 13, 1974 nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Nov. 1-9, Dec. 24-26, Dec. 30-Jan. 3, Jan. 20-24. Records good except for estimated daily discharges which are fair. Occasional regulation by Buckeye Lake, capacity, 27,300 acre-ft, on unnamed tributary 5.6 mi upstream from station. Occasional diversion from Buckeye Lake into Jonathan Creek which bypasses station. Water-quality data collected at this site 1969 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--32 years, 158 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,120 ft³/s Mar. 6, 1945, gage height, 12.1 ft, from flood marks; no flow Aug. 22, 1942.

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.

EXTREMES FOR CURRENT YEAR.--Maximum recorded discharge, 2,020 ft³/s June 9, gage height 9.80 ft but may have been more on Dec. 30; minimum daily, 1.7 ft³/s Sept. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	170	358	1500	155	181	95	53	16	10	4.0	6.4
2	22	130	348	840	111	84	81	48	18	68	4.1	6.5
3	16	100	705	600	107	83	74	41	22	59	3.2	8.2
4	186	84	1150	537	119	149	67	38	19	19	4.2	6.9
5	305	70	499	608	165	259	90	44	17	12	4.7	5.8
6	95	96	370	637	502	682	111	62	14	9.5	3.9	5.0
7	48	86	312	722	982	1300	85	58	13	11	5.8	4.3
8	33	56	280	695	606	539	75	43	12	9.7	5.2	4.2
9	52	22	260	742	262	248	169	37	10	7.5	8.1	5.8
10	251	34	248	705	184	258	754	34	10	6.8	5.6	7.7
11	261	79	255	699	167	244	307	33	12	7.1	4.8	4.3
12	233	55	321	864	202	260	150	30	17	6.2	3.9	3.1
13	444	38	318	383	201	259	644	29	12	6.4	2.9	3.6
14	276	30	306	350	448	271	1480	30	10	5.9	2.6	6.8
15	178	37	570	541	392	629	1550	27	9.1	5.4	2.6	5.5
16	69	98	838	487	253	398	1390	23	8.8	5.1	2.5	4.9
17	44	103	423	603	236	331	768	21	10	4.8	2.8	6.7
18	192	101	1020	493	382	345	588	20	12	4.8	5.1	8.7
19	397	98	1770	385	1260	296	427	21	12	4.1	4.2	3.3
20	139	96	1400	300	953	184	453	22	9.9	3.5	3.2	3.0
21	77	93	625	230	421	142	532	21	9.1	3.7	6.4	2.2
22	84	114	821	190	360	307	491	22	11	3.9	4.8	1.8
23	354	365	1110	150	299	1020	161	19	40	3.7	2.9	2.3
24	192	254	700	110	269	444	123	17	22	4.6	2.5	3.8
25	175	170	500	88	252	219	111	17	15	4.6	2.7	5.5
26	154	166	350	71	238	364	86	17	12	4.0	2.8	6.3
27	135	237	330	70	228	607	74	18	10	4.2	3.0	2.7
28	135	245	319	77	221	463	67	20	8.2	3.8	2.6	1.9
29	204	268	452	74	---	379	62	20	6.9	3.0	2.3	1.7
30	206	362	1700	222	---	342	61	20	8.0	2.8	2.2	2.0
31	206	---	2000	279	---	271	---	16	---	3.1	3.8	---
TOTAL	5199	3857	20658	14252	9975	11558	11126	921	406.0	307.2	119.4	140.9
MEAN	168	129	666	460	356	373	371	29.7	13.5	9.91	3.85	4.70
MAX	444	365	2000	1500	1260	1300	1550	62	40	68	8.1	8.7
MIN	16	22	248	70	107	83	61	16	6.9	2.8	2.2	1.7

CAL YR 1990 TOTAL 102967 MEAN 282 MAX 2600 MIN 14
WTR YR 1991 TOTAL 78519.5 MEAN 215 MAX 2000 MIN 1.7

MUSKINGUM RIVER BASIN

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 National Geodetic Vertical Datum of 1929. Prior to May 9, 1940, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 21-30. Records good, except for estimated daily discharges which are fair. 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.

AVERAGE DISCHARGE.--52 years, 619 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 45,000 ft³/s Jan. 21, 1959, gage height, 20.3 ft (from high-water mark), from rating curve extended above 24,000 ft³/s on basis of flood-routing studies from station at Toboso; minimum daily, 28 ft³/s Sept. 27, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	0230	12,400	12.42	Mar. 7	0030	8,680	10.35
Dec. 23	1400	7,800	9.87	Apr. 15	1730	8,820	10.42
Dec. 30	2200	*17,000	*13.82				

Minimum daily discharge, 51 ft³/s Sept. 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	182	324	650	3970	677	643	602	473	157	103	70	55
2	164	296	632	2210	622	560	559	439	236	163	70	55
3	154	272	3360	1750	621	557	521	413	308	180	68	67
4	848	251	4930	1480	649	732	500	392	184	124	82	72
5	1110	265	1980	1430	819	1010	550	410	163	108	69	61
6	531	368	1340	1490	1720	3690	555	435	154	101	68	59
7	341	377	1060	1570	3870	5360	504	411	150	101	69	56
8	255	320	899	1450	2220	1950	484	374	146	102	73	53
9	240	288	798	1430	1330	1220	739	353	142	96	96	55
10	2710	406	744	1390	1050	1040	4430	347	139	94	78	70
11	1570	552	699	2060	867	912	1510	332	138	95	70	68
12	1240	440	738	3500	790	851	931	315	151	100	69	60
13	1990	365	732	1810	759	865	2470	303	135	102	67	58
14	1180	326	686	1290	1290	933	5610	293	133	90	67	57
15	825	301	2520	1370	1300	1650	6550	280	129	88	65	54
16	569	342	3160	1620	872	1360	4040	258	129	84	64	53
17	458	373	1610	1880	846	1100	2100	232	124	84	65	67
18	1640	369	5880	1510	1390	1520	1700	214	125	84	103	57
19	1790	369	9220	1220	5350	1380	1440	203	123	82	71	57
20	920	369	3770	1130	3110	1010	1350	199	124	79	77	56
21	645	317	2400	900	1630	824	1230	192	120	77	76	53
22	1020	327	3400	740	1290	1150	1140	188	130	77	69	52
23	2100	1050	5680	600	1060	3380	732	180	165	82	63	59
24	1160	899	3890	470	931	1700	667	173	147	85	61	55
25	847	643	2020	380	843	1040	689	167	131	79	60	64
26	697	573	1450	350	766	1090	632	165	121	78	63	58
27	595	583	1320	330	709	1700	583	166	115	74	57	56
28	526	610	1250	320	670	1370	550	186	111	73	59	52
29	535	602	1920	350	---	1100	525	182	106	71	58	52
30	538	655	8840	700	---	943	510	182	103	71	57	51
31	414	---	11300	1140	---	822	---	171	---	70	57	---
TOTAL	27794	13232	88878	41840	38051	43462	44403	8628	4339	2897	2141	1742
MEAN	897	441	2867	1350	1359	1402	1480	278	145	93.5	69.1	58.1
MAX	2710	1050	11300	3970	5350	5360	6550	473	308	180	103	72
MIN	154	251	632	320	621	557	484	165	103	70	57	51

CAL YR 1990 TOTAL 499069 MEAN 1367 MAX 14300 MIN 145
WTR YR 1991 TOTAL 317407 MEAN 870 MAX 11300 MIN 51

MUSKINGUM RIVER BASIN

97

03147500 LICKING RIVER BELOW DILLON DAM, NEAR DILLON FALLS, OH

LOCATION.--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.--742 mi².

PERIOD OF RECORD.--October 1939 to September 1991 (discontinued). Prior to October 1962, published as Licking River at Dillon.

REVISED RECORDS.--WSP 2107: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 700.0 ft above National Geodetic Vertical Datum of 1929, U.S. Army Corps of Engineers bench mark. Prior to Oct. 27, 1940, water-stage recorder at site 2.3 mi downstream at different datum. Oct. 27, 1940, to Sept. 30, 1962, water-stage recorder at site 2.6 mi downstream at datum 16.3 ft lower.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Dillon Lake since December 1960. Water-quality data collected at this site 1965 to 1977. Water-temperature data collected 1961 to 1975. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--21 years (water years 1940-60), 760 ft³/s; 31 years (water years 1961-91), 896 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,000 ft³/s Jan. 22, 1959, gage height, 32.46 ft; minimum daily, 19 ft³/s Dec. 22, 1960.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 37.0 ft site and datum in use 1940-62, from floodmark, backwater from Muskingum River.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,570 ft³/s Dec. 23, gage height, 10.51 ft; minimum daily, 27 ft³/s Sept. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	342	596	377	129	1190	823	850	706	233	44	46	42
2	381	361	377	124	619	681	119	564	233	44	46	42
3	191	185	1610	434	618	678	66	421	336	205	46	42
4	210	184	3780	1470	873	880	372	381	391	312	47	43
5	632	843	4730	3400	1160	1090	680	382	252	183	46	38
6	753	580	4550	4260	1450	2180	680	567	173	48	46	34
7	748	350	2200	4260	3120	3820	680	704	131	48	46	35
8	740	441	788	4680	3840	3870	785	467	130	47	47	37
9	327	338	788	4910	3090	3230	1010	282	130	83	48	98
10	706	407	1190	4940	2910	3530	2130	300	131	110	47	240
11	2490	403	1050	3660	1330	3000	3310	364	131	109	46	400
12	1480	402	752	2730	900	1910	2840	363	346	110	207	457
13	865	656	793	4430	964	1350	2070	362	237	106	327	357
14	2290	643	703	4970	1510	1340	3370	369	82	104	325	192
15	1450	306	620	5040	1830	1510	4750	411	70	105	323	190
16	559	373	2000	4990	1520	1810	4850	390	70	105	148	94
17	496	457	3840	4910	968	1790	4860	285	70	105	38	38
18	757	458	2080	4970	502	1770	4960	213	71	105	40	37
19	1440	458	139	5050	2610	1820	4940	214	70	105	42	36
20	1440	457	725	4950	4760	1720	4720	202	71	105	39	36
21	1410	454	3730	4850	4990	1220	4450	222	80	105	38	37
22	694	455	4950	4900	3800	1110	3820	286	99	105	38	38
23	1800	458	1490	4920	1850	1380	1920	287	97	105	37	39
24	1750	464	2300	5000	1820	1710	1130	276	417	105	37	39
25	997	465	4560	4990	1560	2260	1050	214	728	68	37	40
26	729	753	4990	4820	1310	3600	888	210	298	47	38	37
27	376	1540	5010	4430	1060	3610	885	210	43	46	38	32
28	368	861	4890	1630	895	2420	881	209	42	46	38	28
29	729	693	4790	500	---	1440	579	208	44	48	39	27
30	851	548	2300	897	---	1080	486	207	44	47	39	32
31	646	---	136	1740	---	1080	---	258	---	46	40	---
TOTAL	28647	15589	72238	112984	53049	59712	64131	10534	5250	2951	2419	2837
MEAN	924	520	2330	3645	1895	1926	2138	340	175	95.2	78.0	94.6
MAX	2490	1540	5010	5050	4990	3870	4960	706	728	312	327	457
MIN	191	184	136	124	502	678	66	202	42	44	37	27

CAL YR 1990 TOTAL 568241 MEAN 1557 MAX 5010 MIN 71
WTR YR 1991 TOTAL 430341 MEAN 1179 MAX 5050 MIN 27

MUSKINGUM RIVER BASIN

03150000 MUSKINGUM RIVER AT MCCONNELLSVILLE, OH

(National stream quality accounting network station)

LOCATION.--Lat 39°38'42", long 81°51'00", in SE 1/4 sec. 11, T.10 N., R.12 W., Morgan County Hydrologic Unit 05040004, on left bank just upstream from Dam 7, at McConnelsville, and 3.5 mi downstream from Ollspring Run.

DRAINAGE AREA.--7,422 mi².

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder. Datum of gage is 650.31 ft above National Geodetic Vertical Datum of 1929. Prior to July 27, 1922, nonrecording gage at site 0.5 mi upstream at same datum. July 27, 1922, to Aug. 10, 1926, nonrecording gage and Aug. 11, 1926, to Sept. 8, 1959, water-stage recorder at present site and datum. Sept. 9, 1959, to July 18, 1960, nonrecording gage at site 0.5 mi upstream at same datum.

REMARKS.--Estimated daily discharges: Apr. 14-30, May 25-31. Records good except estimated daily discharges, which are fair. Flow regulated by 17 flood-control reservoirs 36.6 mi to 148 mi upstream from station. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--70 years, 7,679 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 126,000 ft³/s Jan. 26, 1937, gage height, 21.14 ft; minimum daily, 325 ft³/s Oct. 12, 1930, may have been lower during August 1930.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 44,100 ft³/s Dec. 31, gage height, 11.44 ft; minimum daily, 616 ft³/s Sept. 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5000	6870	6620	35700	20600	10100	8390	7980	3760	1320	772	670
2	5480	6330	6330	25100	18500	9320	7140	7380	4820	1830	754	617
3	5230	5640	10200	19800	14900	9170	6580	6680	4830	2250	742	626
4	5610	5240	19900	20000	12500	9720	6230	6130	4290	2210	834	650
5	7790	5390	24500	23300	12400	10700	6600	5800	3790	2030	826	694
6	9560	5900	24900	28700	14400	13100	6840	6100	3260	1730	773	1180
7	9320	5520	22100	30000	19300	23300	6820	6420	2970	1610	730	1440
8	7610	6120	18400	29400	22700	27300	6780	6270	2750	1470	749	1170
9	6320	5740	16200	29200	22400	25900	7800	5610	2550	1500	812	963
10	5860	6790	14600	28800	20200	25500	11400	5180	2340	1550	800	1110
11	12500	6880	13200	30500	16500	22500	15400	4810	2300	1440	767	1550
12	16000	7550	11500	33100	13700	19300	14400	4450	2490	1480	835	1690
13	18000	7900	10500	31700	12000	17000	16000	4290	2620	1470	1100	1610
14	19300	7400	9550	31400	13700	16100	17000	4090	2410	1360	1100	1270
15	19400	6320	10100	31000	14500	14400	16000	3880	2350	1300	1060	1110
16	17300	6190	14900	30400	14100	13000	15000	3820	2230	1260	1030	994
17	15900	6720	19400	30500	13400	11900	14000	3620	2120	1230	743	838
18	14900	6830	26800	30300	12000	11500	13000	3340	2050	1170	849	754
19	15300	6710	34000	29800	15800	11300	12000	3200	2050	1090	954	725
20	15600	6350	28400	29300	22000	11200	11000	3020	1920	1080	1180	713
21	14600	6110	28200	29100	25000	10400	11000	2870	1870	1060	1430	620
22	12400	6090	30700	28200	24200	9960	10000	2820	2270	1040	1580	616
23	13600	7420	33000	27300	20500	13900	10000	2670	2390	1060	1420	687
24	14900	8270	29500	27000	18400	13000	9800	2600	1980	1170	1170	696
25	14000	9050	29900	26400	16800	12700	9600	2400	2400	1210	977	768
26	13200	8560	30400	25800	14600	12900	9400	2300	2200	1210	880	769
27	11300	8780	30300	23600	12700	13900	9000	2200	1540	1060	811	806
28	9850	8120	29900	21500	11200	12600	8800	2100	1420	960	771	812
29	8740	7300	29900	18400	---	11200	8400	2000	1350	888	740	798
30	8230	7250	33000	19800	---	9910	8200	2300	1320	863	727	761
31	7370	---	42900	21300	---	9050	---	2900	---	830	706	---
TOTAL	360170	205340	689800	846400	469000	441830	312580	129230	76640	41731	28622	27707
MEAN	11620	6845	22250	27300	16750	14250	10420	4169	2555	1346	923	924
MAX	19400	9050	42900	35700	25000	27300	17000	7980	4830	2250	1580	1690
MIN	5000	5240	6330	18400	11200	9050	6230	2000	1320	830	706	616
CAL YR 1990	TOTAL 4581220	MEAN 12550	MAX 42900	MIN 2910								
WTR YR 1991	TOTAL 3629050	MEAN 9943	MAX 42900	MIN 616								

MUSKINGUM RIVER BASIN

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1950 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: November 1978 to September 1991 (discontinued).

REMARKS.--Samples collected as part of the National Stream Quality Accounting Network. Water-quality monitor data collected at site, 1.0 mi upstream from discharge station, from 1973 to 1980.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,710 mg/L, Aug. 11, 1980; minimum daily, 2 mg/L, Jan. 28, 1983.
SEDIMENT LOADS.--Maximum daily 167,000, tons Aug. 11, 1980; minimum daily, 19 tons, Jan. 22, 23, 1984.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 432 mg/L, Dec. 31; minimum daily mean, 12 mg/L, Sept. 25-30.
SEDIMENT LOADS: Maximum daily, 50,100 tons, Dec. 31; minimum daily, 24 tons, Sept. 22.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV 26...	1020	8400	603	8.3	7.5	4.0	10	9.2	72	800	280
JAN 08...	1000	29000	364	7.9	0.5	0.0	39	13.3	92	780	1600
MAR 20...	1100	11200	570	8.0	18.5	9.0	16	12.4	109	200	210
MAY 13...	1200	4740	682	8.8	29.0	22.5	4.0	10.5	124	K15	K4
JUL 30...	1135	898	893	7.9	26.5	26.0	41	4.2	53	140	K7
AUG 28...	1030	816	770	8.2	27.0	27.0	1.3	5.9	75	K7	170

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
NOV 26...	260	68	21	23	3.6	149	0	122	120	34	0.30
JAN 08...	150	40	12	11	3.7	88	0	73	71	20	0.20
MAR 20...	220	60	18	19	2.7	134	0	110	110	34	0.20
MAY 13...	270	72	22	26	3.1	139	22	140	130	41	0.20
JUL 30...	290	71	28	51	6.0	120	0	95	160	76	0.20
AUG 28...	290	70	27	57	6.1	146	0	120	170	86	0.40

K Results based on colony count outside the acceptable range.

MUSKINGUM RIVER BASIN

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
NOV 26...	6.2	360	0.020	1.30	0.040	0.070	0.40	0.080	0.020	0.010	30
JAN 08...	7.3	229	0.010	1.40	0.100	0.090	0.50	0.130	0.020	0.020	80
MAR 20...	6.2	314	<0.010	1.60	0.050	0.010	0.40	0.040	0.010	<0.010	--
MAY 13...	3.4	374	0.020	0.880	0.020	0.020	0.90	0.060	<0.010	0.010	50
JUL 30...	0.44	487	0.030	0.220	0.250	0.250	0.80	0.080	0.030	<0.010	20
AUG 28...	1.7	493	0.020	0.450	<0.010	0.020	1.0	0.100	0.030	<0.010	--

[illegible][illegible]

MUSKINGUM RIVER BASIN

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03150000 MUSKINGUM RIVER AT MCCONNELLSVILLE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

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	5000	125	1690	6870	29	532	6620	19	345
2	5480	109	1600	6330	40	695	6330	19	318
3	5230	69	970	5640	23	350	10200	32	1130
4	5610	91	1340	5240	44	617	19900	286	15700
5	7790	58	1230	5390	28	418	24500	317	20900
6	9560	82	2130	5900	50	796	24900	193	13000
7	9320	74	1850	5520	45	677	22100	110	6630
8	7610	66	1360	6120	44	722	18400	64	3200
9	6320	48	821	5740	25	391	16200	51	2230
10	5860	66	1050	6790	42	771	14600	43	1690
11	12500	110	3930	6880	42	774	13200	36	1300
12	16000	293	12700	7550	35	706	11500	31	977
13	18000	283	13800	7900	29	611	10500	29	817
14	19300	287	14900	7400	30	602	9550	25	637
15	19400	207	10900	6320	17	293	10100	37	1070
16	17300	123	5770	6190	24	396	14900	117	4810
17	15900	91	3940	6720	57	1040	19400	190	9960
18	14900	79	3190	6830	52	958	26800	360	27900
19	15300	86	3570	6710	25	461	34000	387	35800
20	15600	88	3710	6350	38	643	28400	230	17700
21	14600	82	3260	6110	20	336	28200	158	12000
22	12400	68	2280	6090	20	323	30700	146	12100
23	13600	66	2410	7420	27	542	33000	183	16300
24	14900	67	2710	8270	47	1040	29500	152	12100
25	14000	60	2280	9050	40	985	29900	108	8720
26	13200	54	1930	8560	49	1120	30400	94	7710
27	11300	45	1370	8780	42	1010	30300	79	6450
28	9850	50	1340	8120	42	921	29900	73	5880
29	8740	50	1190	7300	38	755	29900	68	5500
30	8230	32	708	7250	26	510	33000	189	17900
31	7370	40	806	---	---	---	42900	432	50100
TOTAL	360170	---	110735	205340	---	19995	689800	---	320874
JANUARY			FEBRUARY			MARCH			
1	35700	263	25700	20600	40	2210	10100	20	535
2	25100	171	11700	18500	35	1760	9320	20	510
3	19800	138	7390	14900	55	2180	9170	22	555
4	20000	104	5590	12500	43	1450	9720	25	669
5	23300	96	5990	12400	36	1200	10700	28	808
6	28700	91	7060	14400	46	1840	13100	68	2660
7	30000	84	6780	19300	88	4670	23300	342	21500
8	29400	73	5790	22700	109	6690	27300	309	22800
9	29200	65	5100	22400	94	5720	25900	174	12200
10	28800	64	4990	20200	69	3750	25500	116	8000
11	30500	73	6050	16500	48	2150	22500	86	5260
12	33100	116	10400	13700	36	1310	19300	62	3210
13	31700	113	9680	12000	41	1330	17000	48	2220
14	31400	81	6920	13700	61	2250	16100	41	1790
15	31000	74	6160	14500	57	2210	14400	39	1510
16	30400	68	5620	14100	42	1610	13000	30	1070
17	30500	71	5880	13400	30	1070	11900	27	874
18	30300	61	5010	12000	39	1260	11500	23	728
19	29800	48	3850	15800	62	2810	11300	24	743
20	29300	51	4080	22000	192	11500	11200	26	783
21	29100	57	4450	25000	179	12100	10400	27	752
22	28200	47	3550	24200	127	8310	9960	30	801
23	27300	41	3050	20500	81	4490	13900	153	5950
24	27000	42	3070	18400	66	3280	13000	129	4520
25	26400	47	3350	16800	51	2320	12700	68	2330
26	25800	31	2150	14600	38	1500	12900	56	1950
27	23600	26	1680	12700	29	1010	13900	63	2360
28	21500	28	1600	11200	24	742	12600	56	1910
29	18400	32	1610	---	---	---	11200	42	1290
30	19800	28	1510	---	---	---	9910	29	789
31	21300	41	2380	---	---	---	9050	24	591
TOTAL	846400	---	178140	469000	---	92722	441830	---	111668

MUSKINGUM RIVER BASIN

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

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	8390	22	494	7980	63	1360	3760	70	703
2	7140	18	342	7380	70	1380	4820	61	789
3	6580	16	278	6680	77	1380	4830	63	825
4	6230	14	237	6130	63	1050	4290	44	503
5	6600	14	258	5800	63	984	3790	49	508
6	6840	16	297	6100	75	1240	3260	35	306
7	6820	16	300	6420	63	1100	2970	41	327
8	6780	14	259	6270	63	1070	2750	35	257
9	7800	20	438	5610	63	957	2550	49	337
10	11400	65	2080	5180	66	924	2340	111	701
11	15400	138	5720	4810	67	866	2300	107	664
12	14400	168	6580	4450	72	865	2490	91	613
13	16000	266	12500	4290	57	667	2620	97	686
14	17000	265	12200	4090	52	580	2410	82	535
15	16000	255	11000	3880	40	416	2350	79	500
16	15000	340	13800	3820	39	404	2230	58	348
17	14000	227	8600	3620	33	325	2120	45	257
18	13000	145	5100	3340	36	329	2050	24	134
19	12000	105	3410	3200	42	360	2050	26	140
20	11000	81	2400	3020	54	437	1920	70	361
21	11000	69	2040	2870	78	608	1870	59	297
22	10000	64	1730	2820	96	733	2270	53	324
23	10000	55	1480	2670	53	385	2390	59	377
24	9800	44	1160	2600	55	387	1980	71	380
25	9600	39	999	2400	45	291	2400	72	466
26	9400	39	994	2300	59	364	2200	37	218
27	9000	40	965	2200	37	218	1540	40	166
28	8800	37	879	2100	47	266	1420	24	91
29	8400	29	657	2000	52	282	1350	20	71
30	8200	33	721	2300	49	303	1320	48	171
31	---	---	---	2900	56	438	---	---	---
TOTAL	312580	---	97918	129230	---	20969	76640	---	12055
JULY			AUGUST			SEPTEMBER			
1	1320	49	174	772	70	146	670	48	87
2	1830	40	198	754	60	123	617	22	36
3	2250	47	285	742	35	69	626	17	30
4	2210	34	204	834	25	55	650	20	34
5	2030	21	118	826	18	40	694	16	30
6	1730	20	94	773	14	30	1180	20	65
7	1610	19	81	730	14	28	1440	22	86
8	1470	15	58	749	21	43	1170	50	156
9	1500	25	101	812	58	127	963	59	153
10	1550	69	288	800	67	144	1110	64	194
11	1440	65	251	767	63	131	1550	67	280
12	1480	59	234	835	54	121	1690	51	232
13	1470	56	223	1100	47	140	1610	61	268
14	1360	48	178	1100	47	141	1270	35	121
15	1300	50	176	1060	30	86	1110	27	81
16	1260	38	129	1030	15	41	994	23	63
17	1230	28	93	743	15	30	838	26	59
18	1170	21	67	849	27	63	754	48	97
19	1090	25	74	954	71	184	725	52	103
20	1080	49	143	1180	75	241	713	34	66
21	1060	52	149	1430	81	313	620	18	30
22	1040	36	102	1580	71	304	616	14	24
23	1060	39	111	1420	57	217	687	17	31
24	1170	42	132	1170	58	184	696	22	41
25	1210	23	74	977	26	71	768	12	25
26	1210	13	42	880	15	37	769	12	25
27	1060	13	38	811	20	43	806	12	26
28	960	14	36	771	34	71	812	12	26
29	888	22	53	740	65	130	798	12	26
30	863	67	157	727	49	97	761	12	25
31	830	74	167	706	23	44	---	---	---
TOTAL	41731	---	4230	28622	---	3494	27707	---	2520
YEAR	3629050		975320						

HOCKING RIVER BASIN

103

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 National Geodetic Vertical Datum of 1929. Prior to May 2, 1940, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 23-Feb. 5. Records good except for periods of estimated record which are fair. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--52 years, 90.4 ft³/s, 13.80 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft³/s July 22, 1948, gage height, 17.68 ft (from high-water mark in well), from rating curve extended above 4,300 ft³/s on basis of slope-area measurement of peak flow; minimum, 3.0 ft³/s Dec. 29, 1947, result of freezeup, and July 31, 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,900 ft³/s and maximum (*);

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 18	2215	*3 270	*10.01	Mar. 23	0300	2,110	7.92
Dec. 30	1745	2,590	8.87	Apr. 15	1530	1,990	7.67

Minimum discharge, 3.0 ft³/s July 31.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	54	47	348	84	97	126	71	59	19	12	16
2	35	49	46	250	78	101	113	67	48	42	13	14
3	31	46	345	200	74	98	104	65	76	25	14	13
4	270	45	329	148	72	129	100	64	46	21	18	15
5	137	48	146	147	70	164	109	70	38	20	16	16
6	74	57	112	201	350	420	99	82	35	18	14	14
7	58	48	93	225	655	456	92	65	31	19	15	14
8	49	44	81	170	301	214	98	60	30	20	16	13
9	46	44	72	152	215	168	204	61	27	21	44	13
10	52	65	68	141	180	147	280	58	25	21	21	14
11	54	61	63	398	150	129	170	54	24	22	17	16
12	110	52	62	346	128	118	137	52	24	20	16	14
13	154	48	59	216	145	265	575	51	23	20	15	17
14	94	46	52	177	513	414	873	49	22	19	16	32
15	71	45	212	155	250	247	1100	46	25	18	16	20
16	59	46	165	216	134	179	496	44	26	17	15	16
17	53	50	112	247	157	158	281	43	23	17	15	15
18	155	46	1890	182	284	266	204	41	21	17	21	15
19	116	44	1250	153	470	188	174	40	20	16	19	15
20	79	43	400	145	354	156	149	39	20	17	19	15
21	66	42	380	148	230	143	131	38	19	16	24	14
22	132	53	540	111	189	223	122	36	22	16	17	15
23	262	156	786	98	157	952	110	36	26	18	15	17
24	131	92	378	88	143	311	106	35	21	21	16	17
25	95	74	223	80	127	214	94	34	20	16	15	19
26	78	65	177	76	115	332	90	34	19	15	14	18
27	69	61	153	74	108	364	86	39	19	14	14	16
28	64	58	153	72	102	246	82	41	18	14	14	16
29	57	51	289	90	---	187	80	35	19	14	14	16
30	54	47	1170	100	---	158	75	34	19	17	16	16
31	57	---	1020	94	---	137	---	33	---	12	16	---
TOTAL	2804	1680	10873	5248	5835	7381	6460	1517	845	582	527	481
MEAN	90.5	56.0	351	169	208	238	215	48.9	28.2	18.8	17.0	16.0
MAX	270	156	1890	398	655	952	1100	82	76	42	44	32
MIN	31	42	46	72	70	97	75	33	18	12	12	13
CFSM	1.02	.63	3.94	1.90	2.34	2.68	2.42	.55	.32	.21	.19	.18
IN.	1.17	.70	4.54	2.19	2.44	3.09	2.70	.63	.35	.24	.22	.20

CAL YR 1990 TOTAL 56254 MEAN 154 MAX 3250 MIN 23 CFSM 1.73 IN. 23.51
WTR YR 1991 TOTAL 44233 MEAN 121 MAX 1890 MIN 12 CFSM 1.36 IN. 18.49

HOCKING RIVER BASIN

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 National Geodetic Vertical Datum of 1929. Prior to Oct. 24, 1933, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 21-29. Records good, except for periods of estimated record, which are fair. 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.

AVERAGE DISCHARGE.--61 years, 467 ft³/s, 13.82 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,000 ft³/s Mar. 10, 1964, gage height, 21.31 ft, from rating curve extended above 17,000 ft³/s on basis of contracted-opening and slope-area measurement of peak flow; minimum daily, 23 ft³/s Aug. 12, 13, 1944.

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.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 3,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	0630	*9,130	*15.19	Mar. 7	0630	3,910	9.20
Dec. 23	1730	4,470	10.58	Mar. 23	1300	5,490	11.49
Dec. 31	0600	8,230	14.20	Apr. 15	2300	7,130	13.21

Minimum daily discharge, 44 ft³/s Sept. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	287	251	244	3330	799	555	755	439	227	96	64	82
2	202	233	233	1880	715	542	675	413	208	453	58	62
3	167	218	1550	1420	656	530	610	383	461	248	57	54
4	666	211	2400	1130	621	705	569	366	271	151	79	64
5	816	215	1160	977	628	807	592	360	201	127	69	65
6	422	289	789	1110	1290	1400	571	467	172	111	60	57
7	302	260	620	1300	2950	3110	519	379	156	100	60	50
8	247	233	500	1050	2030	1590	518	341	146	106	59	46
9	223	221	433	951	1360	1160	1100	340	139	134	164	44
10	237	367	398	895	1110	957	1840	332	137	111	129	45
11	269	455	372	1890	922	822	1150	309	133	111	89	60
12	450	340	352	2720	783	731	870	289	150	100	69	71
13	840	305	331	1680	750	917	2800	278	144	101	62	68
14	555	276	290	1260	2040	1850	5950	269	129	100	61	98
15	410	254	811	1030	1900	1700	6130	254	130	87	60	72
16	324	247	1260	1110	1070	1200	5390	242	139	78	57	58
17	282	270	771	1230	1040	976	2540	230	140	74	53	55
18	518	251	4270	1040	1070	1230	1720	214	121	71	97	53
19	683	237	8160	879	2740	1120	1370	202	113	69	77	60
20	442	229	4080	818	2150	919	1170	195	107	69	78	56
21	367	219	2390	720	1530	820	980	190	102	65	110	49
22	464	236	2520	600	1220	1020	876	184	107	62	99	51
23	1190	763	3560	520	991	4480	777	178	357	71	76	62
24	815	593	3050	450	863	2400	730	172	186	307	93	63
25	578	441	1720	430	772	1490	665	169	142	125	64	74
26	452	369	1240	400	694	1490	616	163	123	86	55	73
27	386	335	983	390	642	2330	574	174	111	72	53	64
28	342	319	871	390	587	1590	540	201	103	64	51	57
29	303	288	1250	580	---	1190	517	179	98	62	51	52
30	280	260	3230	1100	---	984	483	164	95	67	53	48
31	264	---	7340	1200	---	832	---	159	---	68	74	---
TOTAL	13783	9185	57178	34480	33923	41447	43597	8235	4848	3546	2281	1813
MEAN	445	306	1844	1112	1212	1337	1453	266	162	114	73.6	60.4
MAX	1190	763	8160	3330	2950	4480	6130	467	461	453	164	98
MIN	167	211	233	390	587	530	483	159	95	62	51	44
CFSM	.97	.67	4.02	2.42	2.64	2.91	3.17	.58	.35	.25	.16	.13
IN.	1.12	.74	4.63	2.79	2.75	3.36	3.53	.67	.39	.29	.18	.15

CAL YR 1990 TOTAL 298949 MEAN 819 MAX 8950 MIN 110 CFSM 1.78 IN. 24.23
WTR YR 1991 TOTAL 254316 MEAN 697 MAX 8160 MIN 44 CFSM 1.52 IN. 20.61

HOCKING RIVER BASIN

03159510 HOCKING RIVER BELOW ATHENS, OH

NATIONAL STREAM-QUALITY ACCOUNTING NETWORK STATION

LOCATION.--Lat 39°19'39", long 82°00'18", Athens County, Hydrologic Unit 05030204, at downstream side of Harmony Lane Bridge, 3.5 mi east of Athens, 1.1 mi downstream from Strouds Run, and 2.8 mi upstream from Scott Creek.

DRAINAGE AREA.--957 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

REVISED RECORDS.--WRD-OH-90-1: 1979(M), 1983(M), 1986(M).

GAGE.--Water-stage recorder. Datum of gage is 600.00 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 17, 1931, nonrecording gage at site 5.3 mi upstream at datum 11.26 ft higher, Aug. 18, 1931 to June 18, 1970, at datum 14.81 ft higher, and Oct. 1, 1971 to Sept. 30, 1976, at datum 11.26 ft higher.

REMARKS.--Estimated daily discharges: Jan. 21-28. Records good except for periods of estimated discharges, which are fair. Some regulation by Burr Oak Reservoir on East Branch Sunday Creek 34.3 mi upstream beginning 1952; by Hocking Lake, capacity 3,080 acre-ft, on Clear Fork 44.7 mi upstream beginning in 1949; by temporary retention in eight retarding basins, combined capacity, 8,710 acre-ft, constructed between 1955 and 1961 upstream from Lancaster, and Dow Lake capacity 1,884 acre-ft, on Strouds Run, 1.1 mi upstream. U.S. Army Corps of Engineers Satellite Telemeter at station.

AVERAGE DISCHARGE.--15 years, 1,142 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,700 ft³/s May 30, 1990, gage height, 26.45 ft; minimum daily, 52 ft³/s Sept. 19, 1986.

EXTREMES OUTSIDE PERIOD RECORD.--Flood of Mar. 11, 1964 reached a stage of 24.18 ft at site and datum then in use, discharge, 32,900 ft³/s. Flood in March 1907 reached a stage of 27 ft, site and datum then in use, discharge 50,000 ft³/s, estimated by U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,600 ft³/s Dec. 20, gage height, 23.44 ft; minimum daily, 81 ft³/s Sept. 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	995	464	527	10300	1790	1080	1640	884	397	166	127	120
2	539	440	497	5970	1470	1040	1480	836	612	684	124	126
3	386	414	1650	3050	1340	1020	1330	800	603	1340	118	115
4	374	392	6200	2710	1260	1180	1230	765	710	629	154	105
5	939	396	3900	2310	1210	1480	1180	754	489	528	134	104
6	899	411	2060	2380	1660	2010	1180	775	393	568	130	123
7	580	465	1550	3280	4330	5500	1120	820	342	393	118	109
8	447	431	1180	2770	5630	4570	1050	723	310	599	115	97
9	386	403	943	2270	3130	2540	1030	702	285	553	195	89
10	367	708	843	2100	2290	2020	1890	695	265	483	423	90
11	372	1240	766	3120	1900	1730	2420	661	250	482	258	97
12	610	909	698	5720	1610	1490	1690	623	239	325	181	91
13	1520	698	659	4350	1460	1640	2380	592	244	302	146	102
14	1280	611	616	2890	3130	3750	7800	568	236	317	131	123
15	875	623	790	2420	4920	3670	9350	545	271	249	122	117
16	822	600	2520	2310	2810	2750	9790	519	288	213	117	121
17	804	551	1780	2470	2100	2110	9440	496	551	182	113	103
18	858	493	4810	2220	2030	2150	5440	472	365	167	135	92
19	1040	458	10000	1790	3290	2500	3290	449	294	154	148	86
20	1010	432	11300	1610	4290	1970	2720	431	277	145	210	82
21	782	422	8200	1400	3350	1680	2290	417	227	140	210	83
22	688	443	5450	1200	2560	1720	2000	404	249	133	227	81
23	1790	1050	5960	1100	1990	4810	1710	391	295	150	170	82
24	2030	1540	7730	1060	1660	7410	1430	379	447	249	146	110
25	1410	1060	5700	1000	1490	3950	1300	364	311	451	144	172
26	1080	851	3430	990	1340	2760	1200	352	245	287	124	134
27	823	796	2690	980	1230	4030	1110	343	211	192	108	117
28	670	777	2090	1100	1150	4370	1060	402	190	155	100	107
29	601	727	2200	1330	---	2960	998	418	175	140	99	96
30	540	640	4470	1500	---	2220	949	368	166	138	98	90
31	493	---	9470	2370	---	1890	---	338	---	133	105	---
TOTAL	26010	19445	110679	80070	66420	84000	81497	17286	9937	10647	4730	3164
MEAN	839	648	3570	2583	2372	2710	2717	558	331	343	153	105
MAX	2030	1540	11300	10300	5630	7410	9790	884	710	1340	423	172
MIN	367	392	497	980	1150	1020	949	338	166	133	98	81

CAL YR 1990 TOTAL 653395 MEAN 1790 MAX 18200 MIN 216
WTR YR 1991 TOTAL 513885 MEAN 1408 MAX 11300 MIN 81

HOCKING RIVER BASIN

03159510 HOCKING RIVER BELOW ATHENS, OHIO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year.

REMARKS.--Water-quality monitor data collected at this site 1966 to 1980. Daily sediment data collected 1978-1982.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

		DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI, KF AGAR (COLS. PER 100 ML)	
DEC 13...	0945	666	511	7.7	6.0	2.5	12	12.3	93	470	150	
MAR 19...	1410	2270	410	7.5	10.0	9.0	35	11.5	101	650	270	
JUN 11...	1245	194	875	8.8	27.0	23.0	4.0	11.0	130	160	160	
AUG 27...	1410	76	847	8.0	29.0	26.0	4.5	8.2	102	240	58	
DATE		HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3)	ALKA-LINITY WAT WH TOT FET FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
DEC 13...	220	57	19	23	2.6	127	0	104	98	34	0.40	
MAR 19...	150	38	14	14	1.8	85	0	68	96	21	0.20	
JUN 11...	310	79	27	48	2.9	161	2	133	210	71	0.40	
AUG 27...	310	79	27	54	4.2	139	0	112	220	78	0.30	
DATE		SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)
DEC 13...	9.2	332	<0.010	1.00	0.090	0.100	0.50	0.040	<0.010	<0.010		10
MAR 19...	7.9	226	<0.010	0.950	0.070	0.020	0.50	0.040	<0.010	<0.010		40
JUN 11...	6.5	472	0.020	0.230	0.010	0.020	1.0	0.100	<0.010	<0.010		50
AUG 27...	6.3	526	0.010	0.740	<0.010	0.020	0.30	0.080	0.020	<0.010		20
DATE		ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	
DEC 13...	<1	42	<0.5	<1.0	<1	<3	2	11	1		13	
MAR 19...	<1	32	<0.5	<1.0	<1	<3	2	13	<1		11	
JUN 11...	<1	49	<0.5	<1.0	<1	<3	2	5	<1		20	
AUG 27...	<1	50	<0.5	<1.0	<1	<3	1	120	<1		18	
DATE		MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	
DEC 13...	320	<0.1	<10	8	<1	<1.0	280	<6	10		28	
MAR 19...	220	<0.1	<10	7	<1	<1.0	190	<6	14		93	
JUN 11...	79	<0.1	<10	6	<1	<1.0	390	<6	4		32	
AUG 27...	100	<0.1	<10	3	<1	<1.0	360	<6	8		41	

SHADE RIVER BASIN

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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 National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 21-29. Records fair. Water-quality data collected at this site 1965-77, 1979-81. Sediment data collected 1970-74.

AVERAGE DISCHARGE.--26 years, 170 ft³/s, 14.80 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,170 ft³/s May 25, 1968, gage height, 27.39 ft; minimum, 0.17 ft³/s Sept. 28, 29, 1987.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	1200	*4,100	*20.82	Mar. 23	0530	2,990	18.16
Dec. 23	1300	2,760	17.52	Apr. 14	1230	2,940	18.03
Dec. 31	1730	3,840	20.29				

Minimum discharge, 1.1 ft³/s June 30 and July 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	82	98	1490	166	105	188	71	11	1.1	1.5	3.3
2	43	79	95	632	141	104	152	64	11	1.1	1.4	3.3
3	27	75	427	244	132	103	131	57	12	1.5	1.5	3.4
4	79	73	1340	167	120	214	121	52	20	3.6	1.5	3.5
5	258	72	399	143	116	221	133	49	19	3.5	1.5	3.6
6	82	72	233	346	688	837	144	59	14	2.4	1.8	3.6
7	50	77	186	1160	1370	1920	120	66	11	1.9	1.8	3.5
8	38	79	159	568	793	409	112	54	8.1	1.7	1.8	3.5
9	33	78	142	525	335	226	133	47	6.5	1.6	4.3	3.6
10	30	232	133	598	224	180	667	66	5.4	1.6	107	3.7
11	28	396	127	724	172	150	214	55	5.1	63	29	3.9
12	449	175	120	780	137	133	141	45	4.6	26	8.5	4.0
13	636	135	116	390	148	541	1360	40	3.7	9.7	3.1	4.0
14	200	116	109	255	1260	980	2720	37	3.4	6.1	2.5	4.3
15	137	106	286	199	965	359	1920	36	3.1	4.2	2.0	4.3
16	109	100	528	211	281	211	1140	33	3.1	2.5	1.7	4.4
17	94	98	236	243	221	169	350	30	365	1.8	1.4	4.6
18	154	98	2480	193	293	336	219	26	78	1.5	1.4	4.3
19	191	99	3940	159	577	482	170	25	84	1.4	1.4	4.3
20	125	96	1270	149	435	245	259	23	32	1.4	2.0	4.3
21	104	92	506	130	331	196	189	21	12	1.4	2.9	4.3
22	102	89	480	110	221	793	153	20	5.5	1.4	3.8	4.5
23	561	667	1980	100	172	2590	134	19	42	1.4	4.0	4.6
24	323	350	1950	96	147	965	120	18	17	1.4	4.0	5.6
25	174	189	437	92	134	277	111	16	5.9	1.4	4.2	60
26	137	151	246	90	123	318	103	14	2.8	1.5	3.8	59
27	117	132	179	90	115	667	95	13	1.9	1.5	3.5	29
28	107	124	246	100	110	728	88	12	1.4	1.5	3.4	15
29	98	117	524	125	---	348	87	12	1.2	1.5	3.2	9.4
30	90	105	1160	265	---	252	85	11	1.1	1.5	3.1	6.2
31	86	---	3590	431	---	250	---	11	---	1.5	3.3	---
TOTAL	4747	4354	23722	10805	9927	15309	11559	1102	790.8	153.6	216.3	275.0
MEAN	153	145	765	349	355	494	385	35.5	26.4	4.95	6.98	9.17
MAX	636	667	3940	1490	1370	2590	2720	71	365	63	107	60
MIN	27	72	95	90	110	103	85	11	1.1	1.1	1.4	3.3
CFSM	.98	.93	4.91	2.23	2.27	3.17	2.47	.23	.17	.03	.04	.06
IN.	1.13	1.04	5.66	2.58	2.37	3.65	2.76	.26	.19	.04	.05	.07

CAL YR 1990	TOTAL 96648.8	MEAN 265	MAX 3940	MIN 7.2	CFSM 1.70	IN. 23.05
WTR YR 1991	TOTAL 82960.7	MEAN 227	MAX 3940	MIN 1.1	CFSM 1.46	IN. 19.78

RACCOON CREEK BASIN

03201929 ZINNS RUN NEAR RADCLIFF, OH

LOCATION.--Lat 39°07'39", long 82°21'08", Vinton County, Hydrologic Unit 05090101, on right bank
1200 ft southwest of intersection of Co Rd 28 and Twp Rd 18, 2800 ft upstream from mouth, 1.2 mi
east-southeast of intersection of St Rt 160 and Vinton Co Rd 28, and 1.5 mi southeast of Radcliff.

DRAINAGE AREA.--3.41 mi².

PERIOD OF RECORD.--October 1987 to September 1991 (discontinued), no winter records. Records for water years 1988
and 1989 published in Water Data Reports OH-88-1 and OH-89-1 are unreliable and should not be used.

GAGE.--Water-stage recorder. Elevation of gage is 650 ft above National Geodetic Vertical Datum of 1929,
from topographic map.

REMARKS.--Estimated daily discharges: Dec. 3 to Dec. 20. Records poor. Record not collected Dec. 21 to May 31.
Data collected for Surface-Water Effects of Longwall Mining project, additional data in Volume 2 of this report.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge during operating period, 58 ft³/s, Dec. 3; maximum recorded
gage height 16.49 ft May 23 (backwater from Raccoon Creek); minimum daily discharge, 0.00 ft³/s, many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	.03	1.1	---	---	---	---	---	.00	.00	.00	.00
2	1.1	.00	.75	---	---	---	---	---	1.0	.00	.00	.00
3	.89	.00	58	---	---	---	---	---	1.5	.00	.00	.00
4	4.2	.00	35	---	---	---	---	---	.29	.00	.00	.00
5	3.3	.68	21	---	---	---	---	---	.00	.00	.00	.00
6	1.9	1.3	13	---	---	---	---	---	.00	.00	.00	.00
7	1.2	.77	8.4	---	---	---	---	---	.00	.00	.00	.00
8	1.2	.77	5.4	---	---	---	---	---	.00	.00	.00	.00
9	1.2	1.1	3.4	---	---	---	---	---	.00	.00	.00	.00
10	1.2	19	2.3	---	---	---	---	---	.00	.00	.00	.00
11	1.7	7.9	1.5	---	---	---	---	---	.00	.00	.00	.00
12	7.8	3.2	1.1	---	---	---	---	---	.00	.00	.00	.00
13	5.8	1.7	.72	---	---	---	---	---	.00	.00	.00	.00
14	3.5	1.1	.47	---	---	---	---	---	.00	.00	.00	.00
15	3.3	.65	13	---	---	---	---	---	.00	.00	.00	.00
16	2.9	.63	2.0	---	---	---	---	---	.00	.00	.00	.00
17	3.2	1.2	2.5	---	---	---	---	---	.00	.00	.00	.00
18	5.4	.64	54	---	---	---	---	---	.00	.00	.00	.00
19	5.1	.43	35	---	---	---	---	---	.00	.00	.00	.00
20	4.5	.28	10	---	---	---	---	---	.00	.00	.00	.00
21	3.8	.14	---	---	---	---	---	---	.00	.00	.00	.00
22	28	6.0	---	---	---	---	---	---	1.8	.00	.00	.00
23	36	48	---	---	---	---	---	---	2.2	.00	.00	.00
24	10	14	---	---	---	---	---	---	.68	.00	.00	.00
25	4.6	7.0	---	---	---	---	---	---	.00	.00	.00	.00
26	2.5	4.2	---	---	---	---	---	---	.00	.00	.00	.00
27	1.4	3.1	---	---	---	---	---	---	.00	.00	.00	.00
28	.96	2.5	---	---	---	---	---	---	.00	.00	.00	.00
29	.34	1.8	---	---	---	---	---	---	.00	.00	.00	.00
30	.14	1.3	---	---	---	---	---	---	.00	.00	.00	.00
31	.07	---	---	---	---	---	---	---	---	.00	.00	---
TOTAL	148.70	129.42	---	---	---	---	---	---	7.47	0.00	0.00	0.00
MEAN	4.80	4.31	---	---	---	---	---	---	.25	.000	.000	.000
MAX	36	48	---	---	---	---	---	---	2.2	.00	.00	.00
MIN	.07	.00	---	---	---	---	---	---	.00	.00	.00	.00
CFSM	1.41	1.27	---	---	---	---	---	---	.07	.00	.00	.00
IN.	1.62	1.41	---	---	---	---	---	---	.08	.00	.00	.00

03201947 STRONGS RUN NEAR EWINGTON, OH

LOCATION.--Lat 39°01'35", long 82°20'16", Gallia County, Hydrologic Unit 05090101, on right bank 15 ft downstream of Strongs Run Rd Bridge, 1000 ft of Gallia-Vinton County line, 0.65 mi south-southeast of intersection of St Rt 160 and Strongs Run Rd, 0.85 mi northeast of intersection of St Rt 160 and Adney Rd, and 1.75 mi north-east of Ewington.

DRAINAGE AREA.--15.8 mi².

PERIOD OF RECORD.--October 1987 to September 1991 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 620 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: May 18 to June 11. Record poor. Data collected as part of Surface-Water Effects of Longwall Mining project, additional data in Volume 2 of this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,300 ft³/s, gage height, 8.34 on April 28, 1989, minimum daily discharge, 0.00 ft³/s, many days 1987, 1988, and 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and maximum (*).

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	2400	907	8.82	Mar. 23	0645	588	8.53
Dec. 23	1400	816	8.53	Apr. 13	2115	566	8.40
Dec. 30	2345	*1,020	*9.15				

Minimum daily discharge, 0.00 ft³/s many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	4.5	3.1	80	23	10	25	4.7	.50	.26	.00	.08
2	1.3	4.3	3.0	70	18	10	19	4.2	.40	.27	.00	.02
3	1.0	4.2	94	51	16	9.7	15	3.6	5.2	.26	.00	.00
4	8.2	4.2	72	31	14	22	13	3.3	2.7	.26	.12	.09
5	8.1	4.3	17	22	14	25	18	3.2	1.5	.30	.00	.09
6	4.5	5.2	11	65	86	151	16	4.1	.80	.25	.00	.08
7	3.4	4.8	7.6	126	148	173	12	3.3	.44	.24	.00	.02
8	3.0	4.1	5.6	69	73	50	10	2.6	.24	.30	.05	.05
9	2.9	4.0	4.5	79	47	34	12	3.0	.13	.28	.28	.00
10	2.8	14	3.8	72	35	27	25	2.7	.07	.31	.23	.10
11	2.7	10	3.5	124	27	21	13	2.0	.04	.31	.44	.09
12	8.3	6.7	2.7	84	19	16	9.2	1.7	.31	.33	.27	.12
13	12	5.0	2.5	52	25	118	318	1.4	.34	.30	.14	.18
14	7.5	4.5	2.1	40	212	86	217	1.2	.31	.27	.13	.18
15	5.5	3.8	33	32	84	46	176	1.1	.39	.26	.13	.16
16	4.5	3.6	20	37	27	32	89	.99	.34	.21	.18	.17
17	4.0	4.2	11	35	34	27	61	.94	.37	.12	.16	.01
18	6.9	3.9	569	28	55	74	43	.88	.34	.04	.25	.00
19	8.1	3.4	372	23	64	53	29	.81	.40	.02	.19	.00
20	5.6	3.1	42	22	56	36	34	.75	.35	.01	.19	.00
21	4.9	2.9	56	27	41	31	22	.70	.32	.00	.20	.00
22	19	4.1	56	19	32	126	18	.66	1.1	.00	.18	.00
23	74	54	471	18	24	343	15	.61	3.4	.07	.20	.00
24	23	15	91	15	20	68	12	.57	1.1	.26	.15	.11
25	15	8.8	25	12	17	42	9.9	.53	.58	.11	.15	.07
26	12	6.3	12	9.6	14	91	8.4	.49	.45	.01	.03	.06
27	10	5.3	8.0	9.3	13	84	7.2	.46	.30	.00	.03	.02
28	8.0	4.9	11	13	11	117	6.7	2.5	.25	.00	.01	.01
29	5.0	3.9	48	12	---	51	6.2	1.5	.24	.00	.01	.05
30	4.8	3.4	269	46	---	38	5.1	1.0	.24	.00	.13	.00
31	4.7	---	333	37	---	32	---	.69	---	.00	.10	---
TOTAL	282.7	210.4	2659.4	1359.9	1249	2043.7	1264.7	56.18	23.15	5.05	3.95	1.76
MEAN	9.12	7.01	85.8	43.9	44.6	65.9	42.2	1.81	.77	.16	.13	.059
MAX	74	54	569	126	212	343	318	4.7	5.2	.33	.44	.18
MIN	1.0	2.9	2.1	9.3	11	9.7	5.1	.46	.04	.00	.00	.00
CFSM	.58	.44	5.43	2.78	2.82	4.17	2.67	.11	.05	.01	.01	.00
IN.	.67	.50	6.26	3.20	2.94	4.81	2.98	.13	.05	.01	.01	.00

CAL YR 1990 TOTAL 8956.89 MEAN 24.5 MAX 569 MIN .26 CFSM 1.55 IN. 21.09
WTR YR 1991 TOTAL 9159.89 MEAN 25.1 MAX 569 MIN .00 CFSM 1.59 IN. 21.57

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 National Geodetic Vertical Datum of 1929 (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: July 16 to Aug. 8. Records good except for estimated daily discharges, 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.

AVERAGE DISCHARGE.--59 years, 462 ft³/s, 11.06 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,100 ft³/s Mar. 22, 1927, gage-height, 15.0 ft, from graph based on gage readings at site and datum then in use, and Jan. 21, 1959, gage height, 15.30 ft; minimum, 3.5 ft³/s Sept. 13, 1953.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 25, 1913, reached a stage of 21.1 ft, discharge, 27,000 ft³/s, computed by Franklin County Conservancy District, at site and datum used 1925-32.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 24	1800	5,980	11.64	Jan. 01	1500	*8,380	*14.19

Minimum discharge 8.3 ft³/s Sept. 28-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	144	209	198	8280	297	293	339	269	117	26	13	14
2	109	188	176	8060	293	294	304	237	279	32	15	13
3	98	177	780	6700	392	301	279	210	214	37	16	12
4	285	180	2340	4470	775	295	253	190	285	34	19	46
5	493	150	3120	2380	1420	269	243	174	267	42	18	62
6	552	179	3320	1150	1980	284	243	169	156	43	16	39
7	428	222	1990	772	2530	673	238	163	106	37	16	38
8	309	242	961	637	2440	811	227	153	85	37	17	26
9	307	207	616	536	1960	552	227	140	72	38	18	18
10	1100	275	469	471	1170	401	318	128	63	32	20	16
11	1720	383	385	546	764	334	312	121	60	28	19	15
12	2140	407	334	1230	551	293	263	117	73	27	20	13
13	2190	319	301	1570	432	274	281	111	75	28	21	12
14	1420	254	268	1360	428	269	866	109	101	25	22	12
15	802	211	745	885	464	319	1560	107	110	20	20	11
16	555	187	1650	1030	348	405	1940	105	94	17	16	11
17	422	170	1970	1610	316	540	1530	106	71	15	15	11
18	788	156	2650	1910	379	775	808	96	56	18	16	12
19	1260	144	3520	1410	1170	1030	488	92	48	17	18	11
20	1390	134	4170	816	2110	1050	492	94	44	18	37	10
21	986	126	4350	661	3070	704	1050	89	40	16	27	9.3
22	784	130	4050	636	2530	499	1290	84	52	19	26	9.3
23	998	208	5230	460	1320	643	958	78	64	15	24	12
24	1030	315	5920	424	776	1130	636	74	43	18	22	15
25	783	333	5530	398	552	1070	626	71	38	17	18	11
26	547	264	4220	334	444	710	641	80	34	14	16	9.7
27	415	214	2210	306	376	981	481	119	28	15	16	9.3
28	339	186	911	275	325	1190	389	153	27	18	16	8.5
29	293	178	1070	257	---	1020	334	164	28	15	15	8.4
30	258	183	5200	272	---	655	300	126	26	13	15	8.6
31	230	---	7340	292	---	428	---	106	---	11	16	---
TOTAL	23175	6531	75994	50138	29612	18492	17916	4035	2756	742	583	503.1
MEAN	748	218	2451	1617	1058	597	597	130	91.9	23.9	18.8	16.8
MAX	2190	407	7340	8280	3070	1190	1940	269	285	43	37	62
MIN	98	126	176	257	293	269	227	71	26	11	13	8.4
CFSM	1.32	.38	4.32	2.85	1.87	1.05	1.05	.23	.16	.04	.03	.03
IN.	1.52	.43	4.99	3.29	1.94	1.21	1.18	.26	.18	.05	.04	.03

CAL YR 1990 TOTAL 330751 MEAN 906 MAX 7340 MIN 65 CFSM 1.60 IN. 21.70
WTR YR 1991 TOTAL 230477.1 MEAN 631 MAX 8280 MIN 8.4 CFSM 1.11 IN. 15.12

SCIOTO RIVER BASIN

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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 National Geodetic Vertical Datum of 1929 from topographic map.

REMARKS.--Estimated daily discharges: Jan. 21-28. Records good except for periods of estimated record, which are fair.

AVERAGE DISCHARGE.--9 years, 73.6 ft³/s, 12.01 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,420 ft³/s July 3, 1987, gage height 13.54 ft; minimum, no flow many days during 1982-1989, 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s and maximum (*).

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 5	0730	1,180	9.89	Dec. 23	0715	1,720	10.68
Dec. 16	2030	838	9.28	Dec. 30	1100	*2,260	*11.34
Dec. 20	0245	1,530	10.42				

Minimum, no flow many days during the year.

 DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	22	24	1120	54	29	39	27	6.3	1.1	.00	.00
2	2.8	20	24	1110	44	29	33	23	4.9	1.4	.00	.00
3	2.4	20	360	453	58	30	29	20	12	7.8	.01	.00
4	12	18	1000	101	146	32	26	19	13	6.7	.01	.00
5	17	18	929	71	245	29	26	17	12	3.2	.01	.00
6	19	24	201	58	294	37	27	17	14	1.9	.01	.00
7	18	27	114	52	453	132	26	16	8.8	1.6	.01	.00
8	13	42	83	47	299	119	25	15	6.0	1.6	.01	.00
9	14	35	65	43	131	64	25	14	4.6	2.0	.01	.00
10	42	47	54	39	92	47	95	12	3.4	1.8	.00	.00
11	143	76	47	75	71	40	113	11	3.1	1.6	.00	.00
12	100	68	42	298	55	34	57	10	7.8	1.4	.00	.00
13	56	48	37	231	45	33	84	10	5.6	1.3	.00	.00
14	37	39	33	104	57	33	393	9.4	54	1.2	.00	.00
15	28	33	244	82	65	56	639	8.4	30	.98	.00	.00
16	20	30	760	177	53	138	329	8.2	16	.78	.00	.00
17	17	27	375	322	50	272	138	9.2	16	.64	.00	.00
18	40	25	705	168	64	422	80	8.6	8.4	.58	.00	.00
19	185	24	1280	90	360	358	60	8.5	5.5	.49	.00	.00
20	111	22	1090	68	512	146	71	8.3	3.9	.41	.00	.00
21	62	21	281	57	221	90	121	8.1	3.1	.33	.00	.00
22	55	24	667	49	115	75	85	7.4	2.5	.26	.00	.00
23	81	32	1210	44	81	233	73	6.7	6.3	.20	.00	.00
24	94	30	1360	40	61	246	59	5.8	4.2	.14	.00	.00
25	64	30	706	37	49	99	50	5.1	2.1	.08	.00	.00
26	47	31	245	35	42	105	51	5.0	1.8	.02	.00	.00
27	38	28	128	33	35	342	43	6.4	1.5	.00	.00	.00
28	32	26	106	31	31	186	38	7.2	1.4	.00	.00	.00
29	27	23	168	30	---	96	34	6.5	1.3	.00	.00	.00
30	25	22	1170	40	---	64	31	5.9	1.2	.00	.00	.00
31	23	---	1030	46	---	48	---	7.3	---	.00	.00	---
TOTAL	1428.8	932	14538	5151	3783	3664	2900	343.0	260.7	39.51	0.07	0.00
MEAN	46.1	31.1	469	166	135	118	96.7	11.1	8.69	1.27	.002	.000
MAX	185	76	1360	1120	512	422	639	27	54	7.8	.01	.00
MIN	2.4	18	24	30	31	29	25	5.0	1.2	.00	.00	.00
CFSM	.55	.37	5.64	2.00	1.62	1.42	1.16	.13	.10	.02	.00	.00
IN.	.64	.42	6.50	2.30	1.69	1.64	1.30	.15	.12	.02	.00	.00

CAL YR 1990	TOTAL	48370.8	MEAN	133	MAX	1420	MIN	1.6	CFSM	1.59	IN.	21.63
WTR YR 1991	TOTAL	33040.08	MEAN	90.5	MAX	1360	MIN	.00	CFSM	1.09	IN.	14.77

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 National Geodetic Vertical Datum of 1929 (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: Jan. 21-28. Records good, except for 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.

AVERAGE DISCHARGE.--49 years, 157 ft³/s, 11.98 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,300 ft³/s Jan. 21, 1959, gage height, 13.85 ft, from rating curve extended above 14,000 ft³/s; no flow Sept. 25, 26, 1944, Sept. 19, 1948.

EXTREMES OUTSIDE PERIOD OF RECORD.--A stage of 18.0 ft occurred in March 1913.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 3	2030	4,210	7.98	Dec. 23	0730	3,330	7.25
Dec. 18	2015	3,540	7.44	Dec. 30	1715	*8,210	*10.28

Minimum daily discharge, 0.54 ft³/s Sept. 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	26	40	1420	145	57	79	52	26	5.7	2.1	3.1
2	9.4	25	34	325	100	60	70	44	20	9.2	2.5	3.8
3	11	23	1770	208	179	67	62	39	24	28	3.2	3.1
4	211	23	2580	139	366	71	55	35	20	77	2.7	3.5
5	141	24	832	107	575	61	68	34	24	47	2.9	4.6
6	53	42	272	95	745	86	72	40	19	22	3.4	4.0
7	33	55	174	90	1470	577	64	34	15	16	3.5	3.0
8	22	55	127	80	631	258	55	33	12	12	3.4	3.2
9	217	39	96	70	285	124	61	30	10	10	4.3	3.8
10	670	99	79	65	193	89	320	28	10	12	7.0	2.0
11	504	164	72	395	145	74	215	26	9.4	8.6	5.7	1.0
12	227	92	64	1290	100	66	98	25	36	7.4	3.9	.54
13	142	60	58	526	85	70	627	23	53	6.7	3.1	2.4
14	88	46	51	221	213	83	1630	23	40	5.8	3.0	4.8
15	60	39	942	180	239	257	1420	23	24	6.2	3.0	5.9
16	45	35	1600	619	109	694	656	22	34	3.9	2.8	3.9
17	36	33	437	660	113	926	243	24	119	3.0	3.9	2.7
18	199	30	2340	322	355	1500	143	26	33	4.6	3.1	1.3
19	522	29	2960	165	1620	756	109	30	20	4.1	4.4	2.5
20	172	26	1060	129	1050	293	248	26	16	4.8	3.0	1.6
21	85	26	503	98	381	174	227	22	13	4.0	3.2	2.3
22	141	43	1540	82	210	223	155	19	18	4.6	1.9	4.3
23	216	137	2720	73	141	1050	124	17	16	3.2	3.3	3.9
24	150	80	1690	65	105	513	123	17	13	4.6	2.9	3.4
25	86	62	360	61	86	187	122	15	9.9	4.0	3.7	6.8
26	58	46	192	55	74	410	101	15	8.2	3.1	2.9	4.2
27	45	39	115	52	65	1180	79	28	7.3	3.4	2.1	4.8
28	37	38	114	50	60	530	67	35	7.8	3.6	2.6	3.1
29	33	40	618	51	---	226	62	24	6.8	4.0	.93	4.2
30	28	39	5600	183	---	131	59	19	8.1	1.6	3.0	3.1
31	28	---	5980	178	---	94	---	20	---	.76	3.7	---
TOTAL	4280.4	1515	35020	8054	9840	10887	7414	848	672.5	330.86	101.13	100.84
MEAN	138	50.5	1130	260	351	351	247	27.4	22.4	10.7	3.26	3.36
MAX	670	164	5980	1420	1620	1500	1630	52	119	77	7.0	6.8
MIN	9.4	23	34	50	60	57	55	15	6.8	.76	.93	.54
CFSM	.78	.28	6.35	1.46	1.97	1.97	1.39	.15	.13	.06	.02	.02
IN.	.89	.32	7.32	1.68	2.06	2.28	1.55	.18	.14	.07	.02	.02

CAL YR 1990 TOTAL 121606.8 MEAN 333 MAX 7090 MIN 6.3 CFSM 1.87 IN. 25.41
WTR YR 1991 TOTAL 79063.73 MEAN 217 MAX 5980 MIN .54 CFSM 1.22 IN. 16.52

SCIOTO RIVER BASIN

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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 National Geodetic Vertical Datum of 1929. 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. 15-16, Dec. 29-30, and Jan. 4. Records 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.

AVERAGE DISCHARGE.--70 years, 801 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,200 ft³/s Jan. 22, 1959, gage height, 22.04 ft, from floodmark; minimum daily, 0.4 ft³/s Nov. 8, 1924.

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, Ohio State University.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 23,800 ft³/s Dec. 30, gage height, 14.94 ft; minimum daily, 17 ft³/s Sept. 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	314	227	161	12500	541	1020	766	220	61	57	51	22
2	243	200	229	9930	578	615	589	878	58	78	51	22
3	60	353	1800	8100	428	126	223	423	55	56	52	41
4	572	352	7360	5430	1090	520	579	180	68	57	55	59
5	700	352	5330	3450	2570	812	768	552	510	124	50	72
6	526	351	4240	1920	3000	699	328	253	435	58	49	56
7	764	311	3010	1250	5100	550	45	184	159	60	49	56
8	605	264	2270	1320	4410	1940	530	232	56	61	51	56
9	241	390	1570	1720	3330	1300	718	252	56	60	50	50
10	1860	248	1050	1110	2660	754	395	333	57	154	48	22
11	2440	748	714	692	2350	581	937	337	59	59	48	20
12	2910	1060	707	2520	541	333	747	146	59	56	48	18
13	2600	574	694	3210	489	807	328	58	65	57	73	41
14	2230	437	618	2330	1020	549	1440	59	227	54	51	57
15	1460	185	1440	1790	963	334	4200	59	294	53	50	58
16	921	423	3960	1850	905	968	3790	60	300	53	50	58
17	689	505	3520	2900	588	2360	2620	60	294	53	50	57
18	562	170	7180	3250	675	3020	1770	60	150	55	49	40
19	1920	214	9050	2980	2700	3170	2750	58	52	54	48	29
20	2100	319	6750	2060	4380	2830	1740	58	53	55	51	20
21	2090	169	5470	803	4130	1630	746	57	53	55	40	19
22	944	286	6970	939	3720	1000	996	106	54	55	20	19
23	1390	424	10600	808	2400	1110	1600	53	54	55	20	20
24	1790	420	9630	749	2060	2810	1600	53	54	54	19	19
25	1460	393	7000	689	1080	2210	1500	53	55	53	19	17
26	1050	533	5190	747	432	1450	691	53	57	52	46	29
27	738	734	3280	537	506	2010	1560	58	58	51	251	51
28	573	328	2710	383	629	2570	746	55	58	51	47	51
29	330	398	1400	602	---	1940	66	60	56	51	27	51
30	326	330	15000	690	---	1680	141	63	57	96	51	51
31	437	---	19700	540	---	1450	---	63	---	52	46	---
TOTAL	34845	11698	148603	77799	53275	43148	34909	5136	3624	1939	1610	1181
MEAN	1124	390	4794	2510	1903	1392	1164	166	121	62.5	51.9	39.4
MAX	2910	1060	19700	12500	5100	3170	4200	878	510	154	251	72
MIN	60	169	161	383	428	126	45	53	52	51	19	17

CAL YR 1990 TOTAL 621910 MEAN 1704 MAX 19700 MIN 16
WTR YR 1991 TOTAL 417767 MEAN 1145 MAX 19700 MIN 17

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 National Geodetic Vertical Datum of 1929. (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: Jan. 3-29. Records good except estimated daily discharges, which are fair. 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.

AVERAGE DISCHARGE.--45 years, 156 ft³/s, 13.49 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,900 ft³/s Jan. 22, 1959, gage height, 16.77 ft, from rating curve extended above 4,700 ft³/s on basis of contracted-opening measurement of peak flow; no flow Oct. 2-26, 1953, Sept. 14-22, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 4	1430	2,660	10.58	Dec. 24	0200	2,510	10.36
Dec. 19	1230	2,290	10.01	Jan. 01	1730	*6,030	*13.47

Minimum discharge, 0.30 ft³/s Sept. 1-3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	105	102	4520	140	84	64	62	191	5.4	3.5	.39
2	35	100	95	4890	129	92	59	56	174	6.3	4.1	.30
3	28	98	590	2050	217	95	54	50	95	6.0	3.0	.39
4	261	96	2330	1200	519	90	51	46	64	5.5	2.4	23
5	700	100	2170	760	760	83	56	44	50	7.4	2.7	97
6	296	158	691	560	641	148	65	47	41	6.7	3.2	43
7	158	177	252	420	704	761	63	45	33	5.4	2.5	16
8	123	141	192	340	459	419	57	39	28	5.4	2.1	8.6
9	148	125	154	280	277	165	78	37	24	5.6	2.6	5.1
10	932	182	135	240	221	124	352	34	21	5.0	3.1	3.4
11	1100	199	121	210	186	105	229	32	20	4.1	6.3	2.7
12	539	163	110	780	149	94	111	29	25	3.8	4.9	2.4
13	403	135	102	1000	140	89	94	28	29	3.7	3.3	2.0
14	352	119	92	540	163	83	247	28	23	3.2	2.8	1.9
15	225	112	318	360	167	74	407	42	17	2.9	2.2	1.8
16	169	108	745	250	143	68	444	33	19	2.7	1.5	1.4
17	142	106	315	610	142	66	203	29	25	2.4	1.2	1.1
18	339	101	862	400	156	81	123	25	27	2.1	1.9	1.2
19	666	98	2130	320	931	115	104	24	17	1.9	5.3	1.3
20	299	97	1820	260	1080	110	148	20	13	1.7	16	2.9
21	191	92	586	225	466	91	215	19	11	1.8	32	2.2
22	273	102	1420	200	238	80	214	17	10	2.8	14	1.5
23	483	232	1940	175	170	142	160	15	9.8	3.8	10	1.4
24	277	222	2150	160	136	192	167	40	9.4	15	7.4	1.6
25	192	158	1240	150	117	113	203	126	8.8	24	4.4	1.5
26	160	131	319	135	104	95	138	120	8.0	12	3.3	3.4
27	141	120	235	130	93	125	109	267	7.4	6.1	2.6	3.1
28	130	112	192	120	85	124	94	165	6.5	3.7	1.8	2.2
29	119	109	168	115	---	100	83	101	6.1	3.0	1.1	1.6
30	113	105	209	123	---	80	71	74	5.9	2.6	.86	1.1
31	110	---	1180	149	---	68	---	82	---	2.7	.62	---
TOTAL	9144	3903	22965	21672	8733	4156	4463	1776	1018.9	164.7	152.68	235.48
MEAN	295	130	741	699	312	134	149	57.3	34.0	5.31	4.93	7.85
MAX	1100	232	2330	4890	1080	761	444	267	191	24	32	97
MIN	28	92	92	115	85	66	51	15	5.9	1.7	.62	.30
CFSM	1.88	.83	4.72	4.45	1.99	.85	.95	.36	.22	.03	.03	.05
IN.	2.17	.92	5.44	5.14	2.07	.98	1.06	.42	.24	.04	.04	.06

CAL YR 1990 TOTAL 102873.8 MEAN 282 MAX 2330 MIN 6.7 CFSM 1.80 IN. 24.38
WTR YR 1991 TOTAL 78383.76 MEAN 215 MAX 4890 MIN .30 CFSM 1.37 IN. 18.57

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 National Geodetic Vertical Datum of 1929 (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. 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.

AVERAGE DISCHARGE.--23 years (water years 1924-34, 1939-50), 358 ft³/s; 41 years (water years 1951-91), 357 ft³/s.

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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,880 ft³/s Dec. 21, gage height, 8.90 ft; minimum daily, 6.0 ft³/s July 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96	170	114	54	242	226	51	268	221	6.7	32	28
2	120	213	114	37	245	196	12	190	273	7.1	32	23
3	118	214	515	2290	246	196	7.6	113	273	6.4	32	21
4	406	213	1140	4570	516	196	7.3	80	182	6.4	32	21
5	608	213	2510	4570	1300	194	8.2	81	94	6.3	32	20
6	395	213	3420	4540	1660	200	7.5	122	56	6.2	32	22
7	397	213	2770	4410	1850	825	7.5	140	47	6.1	33	22
8	393	297	1840	4390	1490	1100	7.5	137	47	6.1	33	23
9	700	275	1770	4350	958	881	8.5	135	38	6.0	33	23
10	1210	188	1360	3230	449	867	11	95	18	15	33	23
11	1700	185	369	1440	179	456	97	77	7.0	24	33	23
12	1510	185	240	896	251	248	226	76	7.2	25	34	23
13	1010	184	240	1210	251	247	279	76	6.8	25	36	23
14	1000	217	182	1190	421	244	305	76	6.7	25	36	23
15	793	231	186	809	390	214	794	39	329	23	44	23
16	397	233	800	1140	249	162	1560	7.9	316	21	44	22
17	237	233	1740	1530	249	156	1670	9.3	6.9	21	44	22
18	343	232	1430	1080	271	257	1230	344	6.5	21	44	22
19	558	231	627	543	1090	455	667	318	6.3	21	39	22
20	828	197	1540	542	1830	357	554	6.9	6.2	21	38	22
21	802	181	3320	536	1980	205	423	6.6	6.2	21	34	21
22	404	184	3710	531	1520	138	51	6.5	6.4	24	32	22
23	447	269	1490	334	897	529	113	6.5	8.8	31	32	23
24	703	309	1750	244	879	788	382	6.2	6.8	31	32	23
25	665	309	3140	244	420	433	522	6.2	6.5	32	32	23
26	247	465	3980	243	128	237	524	51	6.3	32	33	23
27	117	734	4480	241	208	823	213	250	6.2	32	33	23
28	118	360	3530	241	249	648	213	400	6.2	32	33	23
29	117	223	2500	240	---	293	253	400	6.2	32	33	23
30	117	186	1260	249	---	99	270	226	6.2	32	32	22
31	117	---	108	244	---	99	---	148	---	31	32	---
TOTAL	16673	7557	52175	46168	20418	11969	10474.1	3898.1	2013.4	629.3	1074	677
MEAN	538	252	1683	1489	729	386	349	126	67.1	20.3	34.6	22.6
MAX	1700	734	4480	4570	1980	1100	1670	400	329	32	44	28
MIN	96	170	108	37	128	99	7.3	6.2	6.2	6.0	32	20

CAL YR 1990 TOTAL 227883.0 MEAN 624 MAX 4480 MIN 5.4
WTR YR 1991 TOTAL 173725.9 MEAN 476 MAX 4570 MIN 6.0

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 National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1924, nonrecording gage at site 200 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Apr. 5, Apr. 10-16. 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.

AVERAGE DISCHARGE.--71 years, 1,412 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 68,200 ft³/s Jan. 22, 1959, gage height, 27.22 ft, from high-water mark in well, from rating curve extended above 46,000 ft³/s; minimum daily, 47 ft³/s Sept. 6, 1930.

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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 41,300 ft³/s Dec. 30, gage height, 24.45 ft; minimum daily, 103 ft³/s June 30 and Sept. 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	309	617	568	14500	1080	1390	1400	680	442	114	144	124
2	353	469	394	10400	1200	1430	1100	970	746	855	142	117
3	357	576	2450	8890	1070	801	591	1120	816	267	135	124
4	1780	672	8360	10100	1230	840	681	522	520	206	291	203
5	1600	740	7060	8350	3100	1350	1600	659	470	191	159	168
6	1390	828	7510	6930	5140	1640	951	875	885	228	129	140
7	1050	663	6490	5990	8040	2230	349	536	508	158	127	130
8	1240	628	4160	5550	6920	2460	340	463	279	183	129	125
9	1880	761	3820	6040	4810	3300	1500	552	220	181	310	193
10	4000	1020	2650	5680	4180	2030	660	592	203	177	194	279
11	4090	654	2080	3950	2580	1870	1460	588	254	242	158	162
12	4740	1230	913	3710	2030	1150	1100	513	746	164	152	129
13	4140	1350	1130	4990	990	1190	720	324	247	171	148	236
14	3250	518	941	4140	1980	1810	1800	294	214	173	157	191
15	3000	779	2290	3510	1990	1700	6600	260	415	162	126	152
16	1710	547	4150	2990	1780	1580	5600	193	710	146	146	142
17	1390	865	5210	4500	1250	2550	4720	198	781	116	162	179
18	1410	750	10300	4740	1830	4030	3740	251	448	115	316	134
19	1760	564	12000	4060	3860	3950	3540	541	218	112	188	126
20	3100	570	8980	3610	6000	3550	3350	525	152	112	167	116
21	2630	618	7550	1700	5890	2860	1730	205	135	109	149	103
22	3160	714	11000	1950	5640	1990	1550	174	162	109	139	104
23	1860	931	13400	1690	4010	3040	1610	205	147	132	130	200
24	2210	943	11400	1370	3230	3470	2190	181	163	202	126	151
25	2580	866	9860	1200	2890	3840	2140	145	119	124	123	149
26	1740	870	8730	1310	970	2620	1760	149	110	123	123	137
27	1270	1290	7860	1170	913	3110	1840	1340	110	125	126	127
28	914	1410	6700	969	1050	4220	1550	807	106	133	140	125
29	770	752	5260	1070	---	2970	810	699	104	139	142	125
30	501	778	19600	1880	---	2330	581	737	103	149	135	125
31	552	---	23500	1420	---	2060	---	524	---	147	133	---
TOTAL	60736	23973	216316	138359	85653	73361	57563	15822	10533	5565	4946	4516
MEAN	1959	799	6978	4463	3059	2366	1919	510	351	180	160	151
MAX	4740	1410	23500	14500	8040	4220	6600	1340	885	855	316	279
MIN	309	469	394	969	913	801	340	145	103	109	123	103

CAL YR 1990 TOTAL 963634 MEAN 2640 MAX 23500 MIN 176
WTR YR 1991 TOTAL 697343 MEAN 1911 MAX 23500 MIN 103

SCIOTO RIVER BASIN

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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 National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 6-17. Records good except for estimated daily discharges which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,690 ft³/s Dec. 30, 1990, gage height, 11.86 ft; minimum, no flow many days July-Sept. 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 15	1700	2,220	9.02	Dec. 20	1530	*5,690	*11.86
Dec. 18	2130	3,690	10.39				

Minimum discharge, no flow many days July-Sept.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	23	38	367	83	57	68	40	29	.27	.01	.00
2	32	20	35	209	77	62	66	34	14	.43	.00	.00
3	25	20	982	144	108	72	56	31	7.0	.43	.00	.01
4	50	21	1040	98	128	79	49	30	4.2	.37	.00	.14
5	55	23	245	95	260	126	70	32	2.9	.32	.00	.00
6	35	41	130	90	391	532	95	53	1.9	.28	.00	.00
7	25	48	95	91	918	774	71	43	3.1	.23	.00	.01
8	23	36	76	74	323	215	61	32	2.8	.22	.00	.00
9	50	31	65	71	181	125	86	27	2.4	.27	.00	.00
10	173	56	58	66	135	98	300	24	2.0	.29	.01	.00
11	51	59	52	246	102	82	102	19	1.9	.27	.01	.00
12	35	45	48	695	74	71	69	16	2.1	.24	.01	.00
13	30	37	45	246	74	73	438	15	.81	.29	.01	.00
14	25	34	38	141	205	107	891	17	.48	.29	.01	.00
15	23	30	1050	121	152	300	902	14	1.6	.23	.01	.00
16	25	30	657	410	102	213	382	13	2.5	.16	.02	.00
17	50	31	208	439	100	132	166	23	1.9	.06	.01	.00
18	359	32	2120	208	300	515	106	28	.59	.01	.01	.00
19	252	27	1690	127	1390	257	90	18	.45	.01	.01	.00
20	101	23	364	114	498	155	116	11	.61	.01	.01	.00
21	67	21	308	123	220	112	111	7.2	.50	.01	.00	.00
22	266	48	797	82	147	109	111	5.5	.42	.01	.01	.00
23	295	204	1330	97	105	595	86	4.4	.54	.01	.01	.00
24	116	106	504	62	88	214	146	3.8	.45	.00	.01	.00
25	75	70	195	64	78	117	159	5.6	.39	.00	.01	.00
26	58	55	140	55	67	186	103	5.6	.42	.00	.01	.00
27	46	50	119	49	58	369	79	23	.43	.00	.01	.01
28	39	52	114	46	57	240	66	47	.36	.00	.01	.00
29	34	49	576	43	---	130	58	26	.32	.00	.01	.00
30	30	43	3340	138	---	90	49	16	.28	.00	.01	.00
31	27	---	1670	133	---	71	---	12	---	.00	.01	---
TOTAL	2516	1365	18129	4944	6421	6278	5152	676.1	86.35	4.71	0.23	0.17
MEAN	81.2	45.5	585	159	229	203	172	21.8	2.88	.15	.007	.006
MAX	359	204	3340	695	1390	774	902	53	29	.43	.02	.14
MIN	23	20	35	43	57	57	49	3.8	.28	.00	.00	.00
CFSM	.80	.45	5.79	1.58	2.27	2.01	1.70	.22	.03	.00	.00	.00
IN.	.93	.50	6.68	1.82	2.36	2.31	1.90	.25	.03	.00	.00	.00

CAL YR 1990 TOTAL 69993.41 MEAN 192 MAX 3340 MIN .91 CFSM 1.90 IN. 25.78
WTR YR 1991 TOTAL 45572.56 MEAN 125 MAX 3340 MIN .00 CFSM 1.24 IN. 16.79

SCIOTO RIVER BASIN

03228500 BIG WALNUT CREEK AT CENTRAL COLLEGE, OH

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.

DRAINAGE AREA.--190 mi².

PERIOD OF RECORD.--July 1938 to current year.

REVISED RECORDS.--WSP 873: 1938. WSP 1435: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 815.16 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 26-Feb. 6, Feb. 28-Mar. 7. 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.

AVERAGE DISCHARGE.--53 years, 193 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,800 ft³/s Jan. 21, 1959, gage height, 19.75 ft, from rating curve extended above 7,200 ft³/s on basis of computation of peak flow over Hoover Dam; no flow for many days in 1944 and 1955.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,340 ft³/s Dec. 31, gage height, 12.90 ft; minimum daily, 97 ft³/s Nov. 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	137	129	106	3480	130	105	110	193	180	179	172	146
2	103	123	106	1240	126	109	150	170	179	134	190	161
3	135	122	128	168	128	108	135	161	162	166	168	169
4	146	122	125	1060	128	200	145	158	161	155	139	125
5	138	124	118	1180	150	240	110	154	156	166	153	147
6	129	120	121	180	460	500	147	155	175	170	152	147
7	137	108	105	132	1100	1320	138	155	194	186	147	155
8	146	123	114	121	1910	848	129	174	206	153	159	168
9	174	124	116	107	349	140	135	178	224	145	123	170
10	150	113	119	119	127	128	115	201	189	166	139	144
11	128	108	121	132	120	106	114	202	181	171	125	155
12	120	129	112	124	117	155	174	200	207	145	174	146
13	105	115	113	137	117	147	202	192	172	144	159	146
14	111	108	103	325	115	140	510	197	193	154	142	144
15	115	112	249	1350	122	121	1240	203	193	171	159	156
16	111	121	1320	1090	115	151	1330	217	170	172	162	152
17	113	103	1300	124	115	161	413	199	200	190	149	148
18	126	117	3590	136	489	667	221	173	200	212	128	140
19	111	110	3000	125	2260	1360	160	152	226	189	151	142
20	119	101	1470	115	1460	1050	177	177	213	180	135	144
21	102	124	1130	128	910	142	190	184	216	172	146	149
22	139	104	1410	129	157	161	160	211	176	171	157	155
23	122	102	1840	118	139	149	148	206	168	167	159	160
24	100	97	1610	132	135	1110	169	192	185	156	164	144
25	103	117	122	123	139	904	209	208	172	148	162	145
26	127	108	138	120	138	186	207	167	195	160	166	151
27	113	101	400	110	138	184	186	143	196	166	165	144
28	122	101	900	100	106	152	174	175	199	157	174	147
29	158	111	154	300	---	138	170	173	193	167	168	157
30	148	106	3260	200	---	133	168	178	208	154	171	156
31	139	---	5210	160	---	126	---	181	---	167	158	---
TOTAL	3927	3403	28710	13065	11500	11141	7636	5629	5689	5133	4816	4513
MEAN	127	113	926	421	411	359	255	182	190	166	155	150
MAX	174	129	5210	3480	2260	1360	1330	217	226	212	190	170
MIN	100	97	103	100	106	105	110	143	156	134	123	125

CAL YR 1990 TOTAL 119955 MEAN 329 MAX 5210 MIN 94

WTR YR 1991 TOTAL 105162 MEAN 288 MAX 5210 MIN 97

SCIOTO RIVER BASIN

119

03228805 ALUM CREEK AT AFRICA, OH

LOCATION.--Lat 40°11'00", long 82°57'47", 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 National Geodetic Vertical Datum of 1929. (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.

AVERAGE DISCHARGE.--9 years (water years 1964-72), 115 ft³/s, 18 years (water years 1974-91), 109 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,160 ft³/s Mar. 10, 1964, gage height, 13.95 ft, from graph based on gage readings, site and datum then in use; no flow at times 1963-65.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,750 ft³/s Dec. 23 gage height, 5.30 ft; minimum daily, 5.2 ft³/s July 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	67	100	63	126	83	17	88	13	20	6.9	8.9
2	85	67	98	62	126	83	8.1	88	14	20	7.0	7.2
3	85	67	104	870	126	82	8.1	63	24	18	7.2	7.6
4	152	67	285	1640	73	108	8.1	20	31	18	8.4	10
5	175	65	805	1550	74	124	8.1	20	30	16	8.5	9.5
6	175	64	1080	1490	161	129	8.1	20	18	15	8.1	8.5
7	175	64	444	1440	535	332	8.1	20	12	15	8.3	8.9
8	175	66	20	1120	587	418	8.1	20	12	16	8.8	8.9
9	285	44	20	612	362	281	8.8	20	12	16	8.5	10
10	397	22	20	281	360	279	9.7	20	8.8	13	8.0	7.6
11	613	22	20	98	361	178	8.5	21	9.5	7.1	8.2	5.4
12	463	21	20	98	133	135	7.8	21	10	7.2	8.5	5.7
13	172	224	20	98	22	135	11	20	10	6.2	8.5	5.7
14	172	655	20	447	55	136	10	20	10	5.8	8.5	6.0
15	172	203	24	594	86	136	9.7	20	10	5.2	8.3	6.1
16	172	70	21	527	86	135	8.3	20	10	5.9	8.3	13
17	172	70	466	593	86	135	8.1	20	10	11	8.1	17
18	202	70	493	199	87	135	8.1	19	9.9	15	8.1	12
19	203	70	215	21	444	232	8.1	19	9.5	10	9.5	6.8
20	203	70	566	21	725	272	8.1	14	9.4	7.3	10	6.5
21	203	70	1240	21	725	272	8.1	10	15	7.6	10	6.5
22	203	70	1660	66	419	238	8.1	10	22	7.5	9.2	6.5
23	328	70	801	128	47	177	8.1	10	22	7.2	8.4	6.6
24	321	70	812	164	47	175	9.4	9.5	17	8.0	8.5	6.8
25	248	70	1430	100	72	273	30	7.2	18	8.2	8.8	6.8
26	143	109	1630	20	83	319	69	6.7	18	8.5	8.1	6.8
27	96	126	1250	20	83	321	86	8.5	18	8.3	8.1	6.8
28	95	126	400	29	83	316	86	7.1	18	8.3	7.7	6.8
29	94	126	59	34	---	147	87	8.6	18	7.7	7.9	6.8
30	94	114	80	100	---	37	88	14	19	7.7	8.2	7.0
31	77	---	65	126	---	36	---	14	---	8.1	8.9	---
TOTAL	6207	3019	14268	12632	6174	5859	659.6	678.6	458.1	334.8	259.5	238.7
MEAN	200	101	460	407	220	189	22.0	21.9	15.3	10.8	8.37	7.96
MAX	613	655	1660	1640	725	418	88	88	31	20	10	17
MIN	57	21	20	20	22	36	7.8	6.7	8.8	5.2	6.9	5.4

CAL YR 1990 TOTAL 68204.1 MEAN 187 MAX 1660 MIN 5.7
WTR YR 1991 TOTAL 50788.3 MEAN 139 MAX 1660 MIN 5.2

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 National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. 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.

AVERAGE DISCHARGE.--65 years, 176 ft³/s.

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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,850 ft³/s Dec. 30, gage height, 9.36 ft; minimum daily, 14 ft³/s, Sept. 21-22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	89	121	237	177	122	84	121	36	28	2.9	5.1
2	67	90	117	172	170	125	70	121	68	239	2.6	3.9
3	81	91	916	365	170	145	59	121	74	31	2.3	3.0
4	685	92	510	1610	152	205	54	86	36	16	61	7.7
5	228	146	668	1600	117	209	82	103	30	10	39	7.5
6	188	133	1190	1580	405	581	72	95	27	7.3	22	5.9
7	181	90	860	1510	1030	496	62	65	23	5.4	14	4.6
8	179	90	99	1400	853	583	62	57	17	6.3	13	3.7
9	660	101	70	789	495	383	194	53	13	9.0	94	60
10	1340	144	62	492	471	369	206	51	10	34	42	104
11	715	66	56	461	459	301	78	48	36	22	25	72
12	834	53	50	409	349	182	70	46	107	10	14	55
13	360	53	44	219	90	278	539	43	30	7.8	8.7	81
14	265	687	40	317	265	358	487	48	17	7.3	8.2	88
15	241	440	517	770	195	350	546	42	12	6.0	15	65
16	227	96	195	681	148	247	200	35	9.6	4.2	8.8	47
17	219	103	289	701	139	232	104	32	7.0	3.2	29	58
18	516	89	2390	502	435	528	80	37	6.0	2.5	45	58
19	330	85	709	90	701	320	98	43	5.5	2.0	25	51
20	276	86	702	82	854	384	98	35	4.6	1.7	22	44
21	263	83	942	99	799	370	76	30	3.6	1.6	19	37
22	601	224	2020	86	716	520	72	27	26	1.6	8.8	32
23	488	174	1890	138	133	681	66	24	39	19	6.2	66
24	503	110	786	222	108	308	95	22	23	53	4.8	70
25	341	97	1260	221	106	316	74	20	15	23	3.7	58
26	286	102	1640	79	129	604	78	19	9.2	13	3.1	48
27	130	180	1540	69	127	557	123	320	6.5	8.0	2.7	40
28	124	176	737	82	125	474	123	75	5.2	5.9	2.3	34
29	119	166	449	78	---	366	131	42	4.4	4.4	2.0	30
30	118	156	2680	381	---	97	124	40	3.8	3.5	3.2	28
31	114	---	646	220	---	84	---	51	---	3.1	6.9	---
TOTAL	10715	4292	24195	15662	9918	10775	4207	1952	704.4	588.8	556.2	1267.4
MEAN	346	143	780	505	354	348	140	63.0	23.5	19.0	17.9	42.2
MAX	1340	687	2680	1610	1030	681	546	320	107	239	94	104
MIN	36	53	40	69	90	84	54	19	3.6	1.6	2.0	3.0

CAL YR 1990 TOTAL 128588 MEAN 352 MAX 4080 MIN 14
WTR YR 1991 TOTAL 84832.8 MEAN 232 MAX 2680 MIN 1.6

SCIOTO RIVER BASIN

121

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 National Geodetic Vertical Datum of 1929. 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.--No estimated daily discharges. Record good. 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.

AVERAGE DISCHARGE.--67 years, 532 ft³/s (adjusted for diversion).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 59,800 ft³/s Jan. 22, 1959, gage height, 22.03 ft (from high-water 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.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 25, 1913 reached a stage of 20.5 ft, present datum, at site 0.3 mi upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,600 ft³/s Dec. 31, gage height, 14.55 ft; minimum daily, 24 ft³/s Aug. 29, 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	198	214	4320	388	264	257	259	139	58	29	29
2	101	189	202	1950	378	284	217	272	213	794	30	26
3	144	176	2020	1080	373	279	194	250	621	178	28	28
4	1570	171	1640	1950	378	565	189	213	150	88	161	77
5	786	225	931	2630	356	626	297	192	119	83	103	52
6	393	364	1420	2270	1120	1300	222	277	107	68	48	35
7	319	224	1200	1750	3880	3010	186	170	103	61	38	29
8	294	193	339	1620	2680	1860	196	161	89	70	35	25
9	527	183	212	1050	1610	908	665	161	102	91	246	44
10	2790	408	195	696	775	614	1560	165	105	90	116	359
11	1230	256	184	927	698	536	431	177	95	70	55	98
12	1400	177	176	1240	602	365	282	166	401	70	39	46
13	1200	150	167	601	297	534	1900	155	176	72	34	117
14	584	636	148	459	863	832	2000	161	105	61	32	127
15	444	624	1190	1780	659	1010	3260	145	85	60	41	57
16	376	197	1670	2000	360	548	1910	134	106	49	34	36
17	345	205	1160	1470	376	452	1090	153	75	42	33	90
18	1050	178	6200	960	815	1210	528	179	70	39	189	75
19	816	167	7510	381	3940	1720	407	152	86	36	74	47
20	468	161	2780	321	2860	1710	386	107	68	37	48	40
21	405	157	2200	358	2190	914	341	99	85	42	63	32
22	930	394	3700	307	1360	1070	322	101	360	41	34	28
23	1160	661	4710	296	481	2120	254	107	381	37	31	84
24	787	323	2920	376	331	1090	322	96	130	136	38	78
25	526	240	2010	349	300	1710	288	95	92	57	28	61
26	446	209	1870	253	302	1160	303	92	70	46	26	52
27	265	297	1780	197	292	1210	315	639	61	38	25	37
28	241	300	1640	284	280	872	298	293	61	30	25	31
29	224	283	1380	257	---	668	289	141	56	28	24	29
30	247	251	4740	853	---	344	284	115	58	28	24	27
31	259	---	8900	657	---	266	---	162	---	27	35	---
TOTAL	20430	8197	65408	33642	28944	30051	19193	5589	4369	2627	1766	1896
MEAN	659	273	2110	1085	1034	969	640	180	146	84.7	57.0	63.2
MAX	2790	661	8900	4320	3940	3010	3260	639	621	794	246	359
MIN	101	150	148	197	280	264	186	92	56	27	24	25
(+)	121	118	115	117	120	119	114	136	156	151	146	136

CAL YR 1990 TOTAL 318637 MEAN 873 MAX 9720 MIN 57

WTR YR 1991 TOTAL 222112 MEAN 609 MAX 8900 MIN 24

(+) Average diversions to City of Columbus Municipal Water Supply.

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 left bank 150 ft downstream from bridge on State Highway 316, 0.4 mi northeast of Darbyville, 0.4 mi upstream from Lizzard Run, and 3.0 mi downstream from Greenbrier Creek.

DRAINAGE AREA.--534 mi².

PERIOD OF RECORD.--October 1921 to December 1935, January 1938 to current year. Prior to October 1959, published as Darby Creek at Darbyville.

REVISED RECORDS.--WSP 1083: 1922(M), 1924(M), 1927(M), 1933(M), 1938(M). WSP 1305: 1928-31(M), 1934(M), 1945(M). WSP 1505: 1932(M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 713.69 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 17, 1940, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 31-Jan. 8, Jan. 19-29. Records good except for estimated daily discharges 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.

AVERAGE DISCHARGE.--67 years, 461 ft³/s, 11.72 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 49,000 ft³/s Jan. 22, 1959, gage height, 17.94 ft from rating curve extended above 22,000 ft³/s on basis of contracted-opening measurement of peak flow; minimum observed, 1.4 ft³/s Sept. 17, 1932.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 4,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 5	0030	5,160	9.50	Dec. 24	0930	5,250	9.59
Dec. 20	0200	6,820	10.83	Dec. 31	2000	*13,000	*13.64

Minimum discharge, 9.1 ft³/s Sept. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	257	258	5200	585	384	513	326	282	51	18	12
2	80	245	253	2400	510	382	458	300	235	49	18	11
3	74	233	1060	2030	477	387	412	278	334	57	18	9.5
4	339	224	3900	1600	562	402	380	264	248	49	21	9.1
5	643	224	3470	1400	712	387	380	256	195	49	22	10
6	546	250	1410	1250	1310	596	380	267	163	68	23	10
7	336	265	996	1100	3430	770	372	257	145	79	21	10
8	238	299	800	1000	2960	807	351	235	130	63	22	12
9	193	261	664	899	1620	513	373	221	118	53	25	14
10	1840	323	571	806	1150	424	466	212	109	48	25	13
11	2110	443	514	1080	900	376	544	207	102	44	24	11
12	1330	465	471	2590	692	350	417	196	189	41	22	13
13	983	361	442	2520	598	430	1020	190	183	41	21	17
14	749	313	403	1450	971	903	2630	232	132	41	21	17
15	590	288	692	1150	1100	1170	4050	238	112	36	21	22
16	470	273	2460	1150	708	1220	2680	204	102	34	20	22
17	391	267	1730	1690	599	1390	1440	185	93	33	20	20
18	434	256	3130	1360	702	1930	934	206	104	30	20	18
19	834	242	6360	950	2280	2300	734	207	117	28	21	17
20	815	235	5820	750	2990	1240	749	221	93	28	19	16
21	527	228	2400	610	1700	865	930	201	82	27	18	14
22	618	239	2610	540	1100	1060	664	178	76	25	19	14
23	998	344	3970	450	822	2530	566	166	72	24	17	16
24	837	424	5040	400	656	2140	510	157	69	24	16	15
25	600	381	2530	350	563	1100	475	149	75	22	14	17
26	477	325	1300	325	489	1050	446	141	66	21	13	15
27	403	301	944	300	443	1870	407	334	65	21	12	15
28	356	291	799	275	408	1700	382	553	60	20	11	14
29	320	282	965	250	---	1120	367	367	53	19	11	14
30	289	264	3720	642	---	771	353	265	51	19	11	15
31	272	---	11200	832	---	598	---	257	---	18	11	---
TOTAL	18798	8803	70882	37349	31037	31165	24383	7470	3855	1162	575	432.6
MEAN	606	293	2287	1205	1108	1005	813	241	128	37.5	18.5	14.4
MAX	2110	465	11200	5200	3430	2530	4050	553	334	79	25	22
MIN	74	224	253	250	408	350	351	141	51	18	11	9.1
CFSM	1.14	.55	4.28	2.26	2.08	1.88	1.52	.45	.24	.07	.03	.03
IN.	1.31	.61	4.94	2.60	2.16	2.17	1.70	.52	.27	.08	.04	.03

CAL YR 1990 TOTAL 345673 MEAN 947 MAX 11200 MIN 63 CFSM 1.77 IN. 24.08
WTR YR 1991 TOTAL 235911.6 MEAN 646 MAX 11200 MIN 9.1 CFSM 1.21 IN. 16.43

SCIOTO RIVER BASIN

123

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 September 1991 (discontinued).

REVISED RECORDS.--WRD Ohio 1972: 1971.

GAGE.--Water-stage recorder. Datum of gage is 768.00 ft above National Geodetic Vertical Datum of 1929, 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.

AVERAGE DISCHARGE.--25 years 264 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,500 ft³/s (estimated) Mar. 10, 1964, gage height, 12.93 ft, present datum; no flow May 25-27, 1968, result of dam closure.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,390 ft³/s Dec. 26, gage height, 6.47 ft; minimum daily, 9.9 ft³/s Apr. 2-4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	243	142	13	347	234	294	184	182	20	15	18
2	127	243	142	13	214	236	9.9	184	514	25	18	18
3	174	241	440	821	215	236	9.9	154	859	34	18	18
4	263	239	1200	2310	216	235	9.9	123	494	42	18	18
5	629	239	1320	2250	242	236	10	123	195	54	18	18
6	735	237	1110	2180	508	236	10	164	89	54	18	18
7	726	237	555	2140	970	495	10	182	89	54	18	17
8	715	236	355	2210	1320	476	11	182	87	54	18	18
9	352	236	354	2240	1340	303	11	161	86	44	18	18
10	537	236	351	2220	1290	302	10	117	86	26	18	18
11	744	236	265	1610	913	268	11	98	86	26	18	18
12	747	235	223	1240	398	222	11	99	87	26	18	18
13	744	233	223	1410	319	296	12	95	87	26	18	18
14	741	233	142	1220	476	730	12	94	88	26	18	18
15	737	306	73	755	719	1060	432	95	89	26	18	18
16	730	343	76	602	443	981	827	99	78	23	18	18
17	722	340	578	532	364	963	876	101	58	20	18	18
18	716	337	714	484	363	835	868	103	40	20	18	18
19	471	335	165	422	882	850	580	104	14	18	18	18
20	357	334	176	419	1220	594	386	104	14	12	18	18
21	355	269	1250	342	1010	363	388	105	16	12	18	18
22	355	236	1760	290	521	433	386	106	16	16	18	18
23	468	235	614	237	365	527	385	106	34	25	18	17
24	521	233	342	241	363	549	314	106	55	22	18	18
25	519	233	1100	256	363	949	284	106	55	20	19	18
26	515	230	1840	212	306	1030	192	98	43	18	19	17
27	510	229	2290	211	233	1030	125	173	20	18	19	18
28	505	228	1490	210	234	1190	125	636	20	18	19	18
29	419	226	879	211	---	1020	150	818	20	18	19	18
30	281	170	732	241	---	717	185	412	20	18	19	18
31	243	---	11	450	---	705	---	214	---	15	19	---
TOTAL	15761	7608	20912	27992	16154	18301	6934.7	5446	3621	830	562	537
MEAN	508	254	675	903	577	590	231	176	121	26.8	18.1	17.9
MAX	747	343	2290	2310	1340	1190	876	818	859	54	19	18
MIN	103	170	11	13	214	222	9.9	94	14	12	15	17

CAL YR 1990 TOTAL 159069 MEAN 436 MAX 2540 MIN 11
WTR YR 1991 TOTAL 124658.7 MEAN 342 MAX 2310 MIN 9.9

SCIOTO RIVER BASIN

03231000 DEER CREEK AT WILLIAMSPORT, OH

LOCATION.--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.--333 mi².

PERIOD OF RECORD.--August 1926 to December 1935, January 1938 to September 1956, water years 1959, 1961-62, annual maximum. July 1962 to current year.

REVISED RECORDS.--WSP 1083: 1929. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 718.66 ft above National Geodetic Vertical Datum of 1929. Prior to Feb. 29, 1940, nonrecording gage, and Feb. 29, 1940, to Aug. 24, 1954, water-stage recorder, same site at datum 3.00 ft higher. Aug. 24, 1954 to Sept. 30, 1956, nonrecording gage at same site and datum. Oct. 1, 1958, to June 1962, crest-stage gage at site 120 ft downstream at same datum. U.S. Army Corps of Engineers satellite telemeter at station.

REMARKS.--No estimated daily discharges. Flow regulated by Deer Creek Lake 9.0 mi upstream beginning in 1968. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--56 years (1926-35, 1938-56, 1962-91), 305 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,600 ft³/s Jan. 22, 1959, gage height, 17.6 ft (from flood-marks), from rating curve extended above 25,000 ft³/s on basis of contracted-opening measurement of peak flow; minimum daily, 1.8 ft³/s July 25, 1934, Oct. 1-4, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,590 ft³/s Dec. 30, gage height, 9.74 ft; minimum daily, 13 ft³/s July 21, 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	117	267	165	214	428	266	431	201	193	30	14	17
2	169	265	164	160	252	268	58	197	411	31	17	15
3	207	263	588	556	250	263	48	181	884	43	17	17
4	440	262	1350	2520	251	284	46	137	610	45	20	16
5	730	265	1440	2480	283	299	47	140	246	60	17	17
6	836	259	1240	2440	753	525	44	164	103	60	17	16
7	815	253	676	2400	1580	668	42	186	97	62	17	16
8	800	252	399	2430	1570	613	44	185	93	65	17	15
9	486	252	387	2470	1520	364	93	178	90	62	18	17
10	538	269	381	2450	1450	344	170	135	90	40	17	18
11	800	268	315	2230	1110	316	79	111	89	36	16	19
12	848	260	254	1470	470	259	62	128	90	36	16	17
13	848	253	249	1610	395	465	425	122	90	37	18	19
14	805	250	201	1430	741	1130	406	116	89	36	19	18
15	782	303	201	864	885	1310	877	110	89	37	18	18
16	763	355	203	704	453	1090	974	110	88	37	16	18
17	753	351	523	612	415	1040	963	111	62	30	17	17
18	768	345	2070	563	456	1090	918	115	58	31	20	17
19	562	342	758	475	1040	944	704	120	23	29	18	16
20	403	340	383	470	1490	720	422	114	20	17	18	16
21	396	292	1130	406	1210	422	412	110	21	13	17	16
22	467	256	2270	327	649	537	407	109	20	13	19	17
23	603	272	1390	292	427	1150	397	108	22	19	16	19
24	603	264	450	264	415	672	346	108	54	26	16	17
25	578	256	1080	317	406	945	292	106	56	20	16	19
26	556	250	1790	253	364	1280	243	103	67	17	19	16
27	543	250	2520	254	270	1220	155	128	33	17	18	16
28	534	248	2010	248	268	1320	153	546	29	17	17	17
29	465	243	867	243	---	1150	162	843	28	18	17	16
30	322	205	2650	310	---	747	202	484	29	18	16	18
31	269	---	580	464	---	722	---	241	---	17	21	---
TOTAL	17806	8210	28684	31926	19801	22423	9622	5747	3874	1019	539	510
MEAN	574	274	925	1030	707	723	321	185	129	32.9	17.4	17.0
MAX	848	355	2650	2520	1580	1320	974	843	884	65	21	19
MIN	117	205	164	160	250	259	42	103	20	13	14	15

CAL YR 1990 TOTAL 202230 MEAN 554 MAX 3110 MIN 13
WTR YR 1991 TOTAL 150161 MEAN 411 MAX 2650 MIN 13

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.

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.

GAGE.--Water-stage recorder. Datum of gage is 594.05 ft above National Geodetic Vertical Datum of 1929. 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.

AVERAGE DISCHARGE.--71 years, 3,513 ft³/s.

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).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 49,400 ft³/s Jan. 2, gage height, 17.58 ft; minimum daily, 347 ft³/s Sept. 3.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1770	2400	2220	41800	4790	3050	4920	2300	1520	685	533	465
2	1420	2290	1960	45600	3490	3320	3400	2230	1510	740	530	422
3	1390	2090	3000	29100	3370	3250	2910	2250	2220	2190	512	347
4	2080	2130	12900	19200	3160	3030	2390	2370	3520	1280	566	420
5	7390	2200	17400	18100	3610	4230	2390	1970	2030	945	677	510
6	5540	2400	14700	17900	7410	4580	2780	2000	1610	880	770	587
7	4280	2600	12800	16400	16000	11200	2590	2300	1710	875	583	505
8	3550	2290	10300	14200	20100	10400	2050	1940	1460	876	539	452
9	3470	2210	6830	13200	18300	7820	2220	1830	1240	867	728	425
10	4550	2450	5960	12700	12100	6180	4840	1810	1110	893	872	427
11	11100	3010	4670	12500	9210	4770	5010	1790	1080	851	837	814
12	9860	2640	3600	12600	6390	4140	3120	1760	1100	869	652	814
13	11000	3030	2540	13000	4820	4050	5010	1670	1640	802	568	638
14	9060	2960	2580	11600	6060	8020	13500	1550	1400	755	558	647
15	6990	2460	2540	9090	8820	8550	16600	1500	1150	741	538	840
16	6090	2930	8360	9140	6090	6980	19400	1450	1150	718	561	675
17	4630	2300	10700	9580	4630	6310	16300	1380	1230	697	521	541
18	4290	2520	15900	10500	4110	8580	10600	1340	1350	632	547	527
19	5760	2320	25600	9170	9050	11300	7960	1420	1220	608	755	576
20	5810	2120	30600	7240	16500	10600	7030	1650	1050	593	700	515
21	6020	2080	30100	6420	16700	8550	6400	1590	896	584	620	473
22	5500	2040	22000	4610	13400	6590	4680	1330	851	560	570	443
23	8130	2910	23300	4420	10500	14200	4140	1220	963	564	533	429
24	7080	3620	25800	3930	7140	13600	4060	1210	1230	576	534	523
25	6200	3060	27500	3520	6090	9870	4460	1180	1030	708	481	642
26	5680	2680	22300	3170	5180	9770	4270	1140	914	660	448	572
27	4540	2560	17900	3140	3240	11100	3670	1120	830	580	432	527
28	3690	3150	15900	3130	3020	11000	3400	2070	757	544	440	496
29	3230	3090	13200	3070	---	9780	3220	2120	725	548	435	463
30	2840	2350	16200	3610	---	7060	2570	1870	707	542	481	448
31	2400	---	28500	6170	---	5590	---	1480	---	546	455	---
TOTAL	165340	76890	437860	377810	233280	237470	175890	52840	39203	23909	17976	16163
MEAN	5334	2563	14120	12190	8331	7660	5863	1705	1307	771	580	539
MAX	11100	3620	30600	45600	20100	14200	19400	2370	3520	2190	872	840
MIN	1390	204										

CAL YR 1990	TOTAL 2502920	MEAN 6857	MAX 33000	MIN 1060
WTR YR 1991	TOTAL 1854631	MEAN 5081	MAX 45600	MIN 347

SCIOTO RIVER BASIN

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. Digital recorder set for one-hour-interval punch since Feb. 1977. 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 1988; minimum, 0.0 mg/L April 27, Aug. 12, Sept. 22, 1966.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 914 microsiemens Aug. 7; minimum, 206 micromhos Jan. 2.

pH: Maximum recorded, 9.0 units June 27, July 15, 30, Aug. 28, 29; minimum recorded, 7.3 units July 3.

WATER TEMPERATURES: Maximum, 30°C July 22; minimum, 0.5°C Jan. 27, Feb. 16.

DISSOLVED OXYGEN: Maximum, 19.1 mg/L June 28; minimum, 4.2 mg/L July 9.

SCIOTO RIVER BASIN

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03231500 SCIOTO RIVER AT CHILLICOTHE, OH--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	762	652	684	640	616	628	634	594	618	282	214	246
2	674	598	641	664	636	648	616	602	609	230	206	215
3	634	566	599	660	634	647	602	300	428	264	232	248
4	636	522	565	682	648	660	462	352	392	286	266	274
5	544	398	468	684	676	678	412	362	388	298	280	291
6	430	400	414	674	656	661	448	384	420	318	290	298
7	480	432	457	664	644	654	424	398	418	320	304	311
8	512	480	497	640	606	617	396	378	386	316	310	313
9	530	512	520	622	610	615	418	394	408	312	306	309
10	560	468	535	626	616	623	434	418	423	326	306	316
11	438	330	359	634	622	629	476	436	459	352	324	332
12	438	396	424	624	596	604	506	468	481	392	356	379
13	458	414	436	602	584	592	578	510	545	398	390	393
14	446	434	440	602	566	581	606	578	594	438	400	416
15	468	440	452	616	596	605	600	578	589	462	438	447
16	470	450	455	622	578	612	580	436	524	476	440	460
17	468	448	456	592	568	581	452	426	435	464	442	454
18	472	444	463	614	578	593	474	344	422	456	430	441
19	458	412	443	622	608	617	340	306	318	446	428	435
20	434	392	412	618	582	601	304	290	295	494	448	472
21	436	420	426	640	596	619	358	302	325	496	484	490
22	446	428	437	608	558	592	386	364	379	508	482	494
23	434	410	426	556	490	521	380	336	356	546	508	525
24	506	390	456	550	522	533	336	300	321	556	536	544
25	546	506	527	562	542	553	300	298	299	572	522	538
26	564	542	549	586	552	568	310	300	303	566	512	534
27	566	552	559	564	536	550	318	308	313	530	504	521
28	574	562	567	596	540	558	332	318	325	532	500	518
29	588	552	567	626	600	614	390	332	348	548	522	535
30	596	578	585	648	612	629	454	328	413	568	542	560
31	626	586	602	---	---	---	312	266	285	604	534	565
MONTH	762	330	497	684	490	606	634	266	414	604	206	415
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	580	500	518	570	540	552	578	560	570	738	706	721
2	564	516	535	594	566	578	626	578	600	742	714	728
3	572	550	562	580	556	568	664	620	641	746	720	734
4	596	560	575	556	534	547	694	660	678	756	720	737
5	620	588	606	542	530	536	738	692	715	750	716	728
6	624	504	578	706	536	632	764	736	751	756	730	739
7	500	386	434	674	448	521	776	740	758	764	738	749
8	428	368	380	464	404	435	808	762	775	736	708	724
9	374	360	366	522	464	499	806	782	793	760	724	742
10	398	370	381	566	496	538	782	654	738	792	762	774
11	418	400	407	596	566	579	652	522	568	820	794	806
12	456	410	435	594	582	589	656	582	620	822	806	814
13	468	438	449	584	484	552	678	514	607	838	778	814
14	480	384	439	488	412	439	528	402	435	822	790	806
15	414	390	406	566	498	539	440	408	425	828	808	817
16	480	412	444	---	---	---	492	414	452	838	816	826
17	492	478	485	---	---	---	566	494	532	862	840	850
18	518	494	506	---	---	---	602	564	581	856	836	850
19	510	454	494	530	526	528	602	562	581	848	758	830
20	440	366	383	526	508	515	570	540	561	834	780	818
21	430	382	403	526	514	518	542	530	536	802	762	780
22	428	414	419	558	528	543	568	540	552	778	754	766
23	414	404	408	526	392	430	578	568	574	774	752	766
24	430	404	416	480	402	435	592	574	585	772	736	754
25	438	432	435	516	486	501	588	570	581	764	708	743
26	446	432	438	506	486	494	656	584	619	746	682	718
27	500	446	472	484	450	469	698	658	678	728	676	704
28	550	502	527	526	470	504	688	678	684	774	640	724
29	---	---	---	530	514	522	696	660	677	634	602	620
30	---	---	---	542	526	535	726	692	707	656	612	633
31	---	---	---	562	536	549	---	---	---	710	652	685
MONTH	624	360	461	706	392	523	808	402	619	862	602	758

SCIOTO RIVER BASIN

03231500 SCIOTO RIVER AT CHILLICOTHE, OH--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	748	704	722	756	728	743	849	787	815	872	833	851
2	758	744	751	746	688	720	869	812	838	867	825	845
3	750	672	713	814	686	770	856	812	835	853	835	845
4	720	576	634	726	616	667	864	784	829	857	828	844
5	604	560	579	624	602	613	871	824	846	850	824	834
6	674	608	635	662	612	636	884	865	876	855	818	833
7	716	672	692	726	654	689	914	863	886	855	817	833
8	736	710	724	766	726	748	898	824	879	843	807	823
9	728	694	710	784	758	768	819	688	758	841	804	823
10	750	718	733	778	758	771	763	667	706	850	819	831
11	768	748	756	794	760	774	831	765	793	877	828	845
12	790	760	773	857	786	817	861	822	838	893	867	881
13	872	788	833	872	843	854	832	759	790	888	831	870
14	826	720	748	881	851	862	769	750	758	834	757	801
15	716	680	701	900	860	876	788	749	767	746	689	714
16	718	678	697	877	793	839	830	776	801	826	728	769
17	772	714	742	812	774	793	847	814	831	882	830	855
18	778	728	767	832	781	801	855	786	829	828	707	765
19	722	696	707	821	784	801	863	838	854	729	690	702
20	734	688	716	821	778	800	857	838	846	700	671	687
21	714	672	688	828	782	803	882	835	855	748	684	711
22	720	674	693	819	738	782	873	817	858	757	720	738
23	740	720	728	781	694	742	863	784	798	735	708	722
24	792	734	768	755	588	695	816	780	796	710	679	693
25	784	706	767	641	547	596	853	807	825	740	688	711
26	694	632	670	636	486	570	828	797	814	744	721	730
27	726	632	683	566	489	525	855	816	833	728	701	715
28	738	708	719	567	488	525	870	844	855	705	665	687
29	732	714	720	786	508	663	895	863	877	681	643	662
30	752	726	739	804	766	783	887	843	871	720	666	689
31	---	---	---	815	757	789	859	831	844	---	---	---
MONTH	872	560	717	900	486	736	914	667	826	893	643	777
YEAR	914	206	614									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

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

PH (STANDARD UNITS), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	8.1	8.1	8.1	8.3	8.3	8.3	8.0	8.0	8.0	8.1	8.0	8.1
2	8.1	8.0	8.1	8.3	8.3	8.3	8.0	7.9	8.0	8.2	8.0	8.1
3	---	---	---	8.4	8.2	8.3	8.0	7.8	7.9	8.4	8.1	8.2
4	---	---	---	8.3	8.3	8.3	7.9	7.9	7.9	8.3	8.1	8.2
5	---	---	---	8.4	8.3	8.3	8.0	7.9	8.0	8.2	8.0	8.1
6	---	---	---	8.3	7.9	8.1	8.0	7.9	8.0	8.1	8.0	8.1
7	---	---	---	8.1	7.9	8.0	8.0	8.0	8.0	8.2	8.0	8.1
8	---	---	---	8.1	7.9	8.0	8.0	7.9	8.0	8.4	8.1	8.2
9	---	---	---	8.1	8.1	8.1	8.0	7.9	8.0	8.4	8.1	8.3
10	---	---	---	8.2	8.1	8.1	8.0	7.9	7.9	8.5	8.2	8.3
11	8.2	8.1	8.1	8.1	8.1	8.1	7.8	7.7	7.8	8.6	8.2	8.4
12	8.4	8.2	8.2	8.1	8.1	8.1	7.9	7.8	7.9	8.5	8.2	8.4
13	8.4	8.3	8.3	8.1	8.1	8.1	7.9	7.9	7.9	8.4	8.1	8.3
14	8.4	8.3	8.3	8.1	8.1	8.1	7.9	7.7	7.7	8.3	8.1	8.2
15	8.4	8.3	8.4	8.1	8.1	8.1	7.7	7.7	7.7	8.1	8.0	8.1
16	8.4	8.0	8.3	---	---	---	7.8	7.7	7.7	8.2	7.9	8.0
17	8.3	8.3	8.3	---	---	---	7.8	7.8	7.8	8.2	7.9	8.0
18	8.4	8.3	8.3	---	---	---	7.9	7.8	7.9	8.0	7.8	7.9
19	8.4	8.3	8.4	8.1	8.1	8.1	8.0	7.9	8.0	7.9	7.7	7.8
20	8.3	8.3	8.3	8.1	8.0	8.1	8.0	7.9	8.0	7.9	7.8	7.9
21	8.4	8.2	8.3	8.0	8.0	8.0	8.0	7.9	8.0	8.0	7.8	7.9
22	8.4	8.3	8.4	8.0	8.0	8.0	8.0	8.0	8.0	8.2	7.8	8.0
23	8.4	8.3	8.3	8.0	7.8	7.9	8.0	8.0	8.0	8.2	8.0	8.1
24	8.3	8.3	8.3	7.9	7.8	7.8	8.0	8.0	8.0	8.1	7.9	8.0
25	8.3	8.3	8.3	7.9	7.9	7.9	8.0	8.0	8.0	8.0	7.6	7.9
26	8.3	8.3	8.3	8.0	7.9	8.0	8.1	8.0	8.0	8.0	7.6	7.8
27	8.3	8.3	8.3	8.0	7.9	7.9	8.0	8.0	8.0	8.1	7.6	7.9
28	8.3	8.2	8.3	8.0	7.9	7.9	8.0	8.0	8.0	8.1	7.7	7.9
29	---	---	---	8.0	7.9	8.0	8.0	7.9	8.0	8.0	7.7	7.9
30	---	---	---	8.0	7.9	8.0	8.0	8.0	8.0	8.3	8.0	8.1
31	---	---	---	8.0	8.0	8.0	---	---	---	8.2	8.0	8.1
MONTH	8.4	8.0	8.3	8.4	7.8	8.1	8.1	7.7	7.9	8.6	7.6	8.1
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	8.1	8.0	8.1	8.3	7.5	7.8	8.9	8.4	8.6	8.7	8.2	8.4
2	8.1	8.0	8.1	7.7	7.4	7.5	8.8	8.1	8.5	8.7	8.2	8.5
3	8.0	7.9	8.0	7.8	7.3	7.5	8.7	8.0	8.4	8.5	8.2	8.4
4	7.9	7.8	7.9	7.7	7.4	7.5	8.8	8.1	8.5	8.4	8.1	8.3
5	7.9	7.8	7.8	7.8	7.5	7.6	8.8	8.5	8.7	8.4	8.0	8.2
6	8.2	7.9	8.0	8.2	7.6	7.8	8.7	8.5	8.6	8.4	8.1	8.2
7	8.3	8.1	8.2	8.5	7.9	8.1	8.9	8.4	8.6	8.6	8.2	8.3
8	8.4	8.0	8.2	8.3	7.9	8.0	8.9	8.5	8.7	8.6	8.2	8.4
9	8.4	8.1	8.2	8.0	7.8	7.9	8.6	8.0	8.3	8.5	8.2	8.4
10	8.4	8.1	8.2	7.9	7.8	7.9	8.4	7.9	8.1	8.5	8.1	8.3
11	8.3	8.0	8.2	8.1	7.8	7.9	8.6	8.1	8.3	8.5	8.2	8.3
12	8.2	8.0	8.1	8.3	7.9	8.1	8.9	8.2	8.5	8.4	8.2	8.3
13	8.0	7.5	7.7	8.6	8.2	8.4	8.7	8.4	8.6	8.3	8.1	8.2
14	7.5	7.5	7.5	8.8	8.3	8.5	8.7	8.2	8.4	8.3	8.0	8.1
15	7.5	7.4	7.5	9.0	8.5	8.7	8.7	8.3	8.5	8.1	7.9	8.0
16	7.5	7.5	7.5	8.9	8.3	8.7	8.9	8.4	8.6	8.3	7.9	8.1
17	7.6	7.5	7.5	8.6	7.9	8.2	8.8	8.5	8.6	8.4	8.0	8.2
18	7.8	7.5	7.6	8.5	7.8	8.0	8.7	8.4	8.5	8.2	8.0	8.1
19	8.0	7.7	7.8	8.2	7.6	7.9	8.5	8.4	8.4	8.4	8.1	8.2
20	8.2	7.8	8.0	8.5	8.0	8.2	8.4	8.2	8.3	8.4	8.1	8.2
21	8.1	7.7	7.9	8.4	8.2	8.3	8.5	8.1	8.3	8.4	8.1	8.2
22	7.9	7.4	7.7	8.5	8.2	8.3	8.6	8.1	8.4	8.3	8.2	8.2
23	8.2	7.9	8.0	8.6	8.2	8.4	8.7	8.3	8.5	8.3	8.1	8.2
24	8.1	7.9	8.0	8.8	8.4	8.6	8.8	8.4	8.6	8.2	8.1	8.2
25	8.6	8.0	8.2	8.8	8.3	8.6	8.8	8.5	8.6	8.2	8.1	8.2
26	8.6	8.1	8.4	8.9	8.4	8.6	8.8	8.4	8.6	8.3	8.1	8.2
27	9.0	8.3	8.6	8.8	8.2	8.5	8.9	8.5	8.7	8.3	8.2	8.2
28	8.9	8.3	8.6	8.7	8.0	8.4	9.0	8.6	8.8	8.3	8.1	8.2
29	8.7	7.9	8.3	8.9	8.4	8.6	9.0	8.6	8.8	8.3	8.1	8.2
30	8.6	7.8	8.2	9.0	8.6	8.8	8.8	8.5	8.7	8.4	8.2	8.3
31	---	---	---	8.9	8.5	8.7	8.7	8.4	8.5	---	---	---
MONTH	9.0	7.4	8.0	9.0	7.3	8.2	9.0	7.9	8.5	8.7	7.9	8.2
YEAR	9.0	7.3	8.1									

SCIOTO RIVER BASIN

03231500 SCIOTO RIVER AT CHILLICOTHE, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	20.5	19.0	20.0	13.5	11.5	12.5	7.0	6.0	6.5	4.5	4.0	4.0
2	20.0	19.0	19.5	13.5	12.0	13.0	7.5	6.5	7.0	4.0	3.0	3.5
3	19.5	18.0	19.0	14.0	12.5	13.0	9.5	7.5	8.5	3.5	2.5	3.0
4	20.0	19.0	19.5	14.0	13.0	13.5	9.5	7.0	8.0	2.5	1.5	2.0
5	19.5	19.0	19.5	14.0	13.5	14.0	6.5	5.0	6.0	2.5	1.5	2.0
6	20.0	18.5	19.0	13.0	12.0	12.5	5.5	5.0	5.5	3.0	2.5	3.0
7	20.0	19.0	19.5	12.0	10.5	11.0	5.5	5.0	5.5	3.5	3.0	3.5
8	20.5	19.5	20.0	10.5	9.5	10.0	5.0	4.5	5.0	3.5	3.0	3.5
9	21.0	20.5	20.5	10.0	9.5	9.5	5.0	4.0	4.5	3.5	3.0	3.5
10	20.5	19.0	20.5	9.5	9.0	9.5	5.0	4.5	5.0	3.5	3.0	3.5
11	19.0	17.5	18.0	10.0	9.0	9.5	5.5	4.5	5.0	4.0	3.0	3.5
12	17.0	16.5	16.5	9.5	8.5	9.0	6.5	5.5	6.0	4.5	4.0	4.5
13	16.5	16.0	16.0	9.0	7.5	8.5	7.5	6.5	7.0	4.0	3.5	3.5
14	17.0	16.0	16.5	8.5	7.5	8.0	7.0	6.5	6.5	4.0	3.0	3.5
15	17.0	16.5	16.5	9.5	7.5	8.5	7.5	6.5	7.0	4.5	3.5	4.0
16	16.5	15.5	16.0	10.5	9.0	9.5	7.0	6.0	7.0	5.0	4.5	5.0
17	17.0	15.5	16.5	10.5	9.5	10.0	6.0	5.5	6.0	5.0	4.5	5.0
18	17.0	15.5	16.5	9.5	8.5	9.0	8.0	6.0	7.0	4.5	4.0	4.5
19	15.5	14.5	15.0	9.0	8.5	8.5	7.5	6.5	7.0	4.0	3.5	4.0
20	14.0	13.5	14.0	9.0	8.0	8.5	6.5	5.5	6.0	5.0	4.0	4.5
21	14.5	13.0	14.0	8.5	7.5	8.0	7.0	5.5	6.5	4.5	3.5	4.0
22	15.0	14.5	14.5	10.0	8.5	9.0	8.0	7.5	7.5	3.0	2.5	3.0
23	15.0	14.5	14.5	10.0	9.0	9.5	8.0	6.0	7.0	2.5	2.0	2.5
24	14.5	13.5	14.0	9.0	8.0	8.5	6.0	3.0	4.5	3.0	2.0	2.5
25	13.5	12.5	13.0	9.5	8.5	9.0	3.0	2.0	2.0	2.0	1.5	1.5
26	12.5	11.5	12.0	10.5	9.0	10.0	2.0	1.5	1.5	1.5	1.0	1.5
27	11.5	10.5	11.5	13.0	11.0	12.0	1.5	1.5	1.5	2.0	.5	1.5
28	11.5	11.0	11.5	13.0	11.0	12.5	2.5	1.5	2.0	3.0	2.0	2.5
29	11.5	10.0	11.0	11.0	8.0	9.5	5.0	2.5	3.5	3.5	2.5	3.0
30	11.5	10.0	10.5	7.5	6.0	7.0	7.5	5.0	6.5	4.0	3.5	4.0
31	12.5	10.5	11.5	---	---	---	7.5	4.5	6.0	3.5	2.0	2.5
MONTH	21.0	10.0	16.0	14.0	6.0	10.0	9.5	1.5	5.5	5.0	.5	3.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	2.5	1.0	2.0	7.5	5.5	6.5	10.0	9.0	9.5	18.5	17.0	18.0
2	4.0	2.5	3.0	10.0	7.5	8.5	11.0	9.0	10.0	18.0	16.5	17.5
3	5.0	3.5	4.5	9.5	7.0	8.5	11.5	9.0	10.5	18.5	16.5	17.5
4	6.0	4.0	5.0	7.0	6.0	6.5	12.5	10.5	11.5	18.0	17.0	17.5
5	7.0	6.0	6.5	7.0	5.5	6.0	14.0	12.0	13.0	18.0	16.5	17.0
6	7.0	6.0	6.5	7.5	7.0	7.0	15.5	13.0	14.0	17.5	16.0	16.5
7	6.0	5.0	5.5	7.0	6.0	6.5	17.0	14.5	15.5	17.5	15.0	16.0
8	5.0	3.5	4.5	6.0	5.0	5.5	17.0	16.0	16.5	18.0	15.5	17.0
9	3.5	3.0	3.5	6.0	5.0	5.5	18.0	16.5	17.0	19.0	17.0	18.0
10	4.0	3.5	4.0	6.0	5.0	5.5	16.5	13.5	15.5	20.0	18.0	18.5
11	4.0	3.5	4.0	6.5	5.0	6.0	13.5	12.5	13.0	21.5	19.0	20.0
12	4.0	3.0	3.5	6.0	5.5	6.0	13.0	11.5	12.5	23.0	20.0	21.0
13	4.5	3.5	4.0	5.5	4.0	5.0	13.0	12.5	12.5	23.5	21.0	22.0
14	4.5	3.5	4.0	4.5	3.5	4.0	13.0	12.0	12.5	24.0	22.0	23.0
15	3.5	1.0	2.5	6.0	4.5	5.0	14.5	13.0	13.5	25.0	22.0	23.5
16	1.5	.5	1.0	---	---	---	15.0	14.0	14.5	24.5	23.0	24.0
17	2.0	1.0	1.5	---	---	---	15.5	14.5	15.0	25.0	23.0	24.0
18	3.5	2.0	3.0	---	---	---	15.5	14.5	15.0	24.0	22.5	23.0
19	4.5	3.5	4.0	7.5	7.0	7.5	15.0	14.0	14.5	23.0	21.5	22.0
20	4.0	3.5	4.0	8.0	6.5	7.5	14.0	12.5	13.5	22.5	21.0	22.0
21	4.5	3.5	4.0	9.5	8.0	8.5	12.5	11.0	12.0	23.0	20.5	21.5
22	4.5	4.0	4.5	12.0	10.0	11.0	11.5	10.5	11.0	23.5	21.5	22.5
23	5.0	4.0	4.5	13.5	12.0	12.5	12.0	10.5	11.5	23.5	22.0	23.0
24	5.0	4.0	4.5	13.0	11.0	12.0	12.0	11.5	11.5	25.0	22.0	23.5
25	5.0	4.5	5.0	11.0	10.0	11.0	13.0	11.5	12.0	26.0	23.0	24.5
26	5.0	4.0	4.5	10.5	10.0	10.5	15.5	13.0	14.0	25.0	24.0	24.5
27	4.5	4.0	4.5	11.5	10.0	11.0	16.0	14.5	15.0	24.5	23.0	23.5
28	6.0	4.0	5.0	12.0	11.5	12.0	16.5	15.5	16.0	24.0	22.5	23.5
29	---	---	---	12.0	10.0	11.0	17.5	16.5	17.0	24.0	22.5	23.5
30	---	---	---	10.0	9.0	9.5	19.0	16.5	17.5	25.0	23.0	24.0
31	---	---	---	9.5	8.0	9.0	---	---	---	26.0	24.0	25.0
MONTH	7.0	.5	4.0	13.5	3.5	8.0	19.0	9.0	13.5	26.0	15.0	21.0

03231500 SCIOTO RIVER AT CHILLICOTHE, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	26.5	24.5	25.5	28.5	26.0	27.0	27.5	23.5	25.5	27.0	24.5	25.5
2	26.5	24.5	25.5	29.5	26.5	27.5	28.5	25.0	26.5	26.5	23.5	25.0
3	25.0	24.0	24.5	28.0	27.0	27.5	27.5	25.5	26.5	25.5	24.0	24.5
4	24.5	23.0	24.0	27.0	25.5	26.0	27.5	25.0	26.0	24.5	24.0	24.0
5	23.5	22.0	22.5	27.0	24.5	26.0	26.0	24.5	25.5	24.5	23.0	23.5
6	23.0	21.0	22.0	27.5	25.0	26.0	25.0	23.5	24.0	25.0	22.5	23.5
7	23.0	21.0	22.0	28.5	26.0	27.0	26.5	22.5	24.5	25.5	22.5	24.0
8	23.5	21.0	22.0	27.5	25.0	26.0	27.0	24.0	25.0	25.0	22.5	23.5
9	24.5	21.0	22.5	25.5	24.0	24.5	25.0	23.0	24.0	24.0	22.5	23.5
10	24.5	22.0	23.5	25.0	24.0	24.5	25.0	22.0	23.5	25.5	23.0	24.0
11	24.5	22.5	23.5	26.0	23.5	24.5	26.0	23.0	24.0	25.5	23.5	24.5
12	25.0	22.5	23.5	26.0	24.5	25.5	26.5	23.5	24.5	24.5	23.0	23.5
13	26.0	23.0	24.5	27.5	25.0	26.0	24.5	23.0	24.0	25.0	22.5	23.5
14	26.0	23.0	24.5	27.5	25.0	26.0	24.5	22.5	23.5	25.5	23.5	24.5
15	26.5	24.0	25.5	28.0	25.0	26.0	26.0	23.0	24.0	26.0	24.0	25.0
16	26.0	24.5	25.5	28.0	24.5	26.0	26.5	23.5	24.5	26.5	24.5	25.5
17	26.0	24.5	25.0	28.0	25.0	26.5	25.5	24.0	24.5	26.5	25.0	25.5
18	27.0	24.5	25.5	28.5	25.5	27.0	25.5	23.5	24.5	25.0	23.0	24.0
19	27.0	25.0	26.0	28.0	26.5	27.0	24.5	23.5	24.0	22.5	21.0	22.0
20	28.0	25.0	26.5	29.0	26.0	27.5	23.5	22.0	23.0	20.5	18.5	19.5
21	27.0	25.5	26.5	29.0	27.0	28.0	24.5	21.5	23.0	20.0	17.5	18.5
22	26.0	24.5	25.5	30.0	27.0	28.5	25.5	22.0	23.5	19.0	17.0	18.0
23	25.0	23.0	24.0	29.5	27.5	28.5	26.0	23.5	24.5	20.0	18.0	18.5
24	25.5	23.5	24.5	29.0	26.5	27.5	27.0	24.0	25.5	18.5	16.5	17.5
25	26.5	24.0	25.0	27.5	26.5	27.0	28.0	25.0	26.0	18.0	16.0	16.5
26	26.5	24.0	25.5	27.5	25.5	26.5	27.5	25.0	26.0	17.0	15.5	16.5
27	27.0	24.0	25.5	27.5	24.5	26.0	27.5	25.0	26.0	17.0	14.5	15.5
28	27.0	25.0	26.0	25.5	24.0	24.5	28.0	25.5	26.5	17.0	15.5	16.0
29	27.5	25.0	26.0	25.5	22.0	24.0	29.0	26.0	27.0	17.5	15.0	16.5
30	28.0	25.5	26.5	26.0	23.5	24.5	27.5	26.5	27.0	19.0	16.0	17.0
31	---	---	---	26.5	23.0	24.5	27.5	25.5	26.5	---	---	---
MONTH	28.0	21.0	24.5	30.0	22.0	26.0	29.0	21.5	25.0	27.0	14.5	21.5
YEAR	30.0	.5	15.0									

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	9.8	8.5	9.1	7.4	6.5	6.9	13.4	10.9	11.9	12.6	11.3	11.7
2	9.6	8.5	9.1	7.4	6.6	6.9	12.3	10.6	11.3	13.7	12.0	12.5
3	10.0	8.8	9.4	7.5	6.7	7.0	10.6	8.7	10.0	13.6	12.7	13.0
4	9.7	8.5	9.0	7.6	6.9	7.2	10.9	8.3	10.0	14.3	13.1	13.8
5	8.5	6.8	7.4	7.3	6.3	7.0	---	---	---	14.9	14.2	14.4
6	7.9	7.1	7.5	10.7	7.3	8.8	12.4	11.9	12.2	14.4	13.3	13.8
7	8.6	7.9	8.3	11.1	10.0	10.3	12.3	12.1	12.2	14.2	13.0	13.4
8	8.8	8.3	8.5	10.5	10.0	10.2	12.3	12.1	12.2	14.4	13.1	13.6
9	8.6	8.3	8.5	10.4	9.9	10.2	12.1	12.0	12.1	14.3	13.1	13.5
10	8.4	7.2	8.2	10.4	9.8	10.0	12.1	11.9	12.0	14.5	13.2	13.7
11	8.3	7.1	7.8	10.5	10.2	10.3	11.9	11.5	11.8	14.5	12.9	13.6
12	9.3	8.3	8.9	10.6	10.3	10.5	11.5	11.0	11.4	13.0	12.1	12.4
13	9.4	9.1	9.2	10.6	10.3	10.5	11.0	10.7	10.8	13.5	12.1	12.3
14	9.3	9.1	9.2	10.5	10.0	10.3	10.8	10.7	10.7	13.7	12.4	12.7
15	9.3	9.2	9.2	10.8	10.2	10.5	10.9	10.7	10.8	13.4	12.2	12.5
16	9.5	9.3	9.4	10.7	10.0	10.4	10.8	10.4	10.6	13.5	12.1	12.6
17	9.4	9.1	9.3	10.2	9.9	10.0	11.5	10.9	11.3	13.3	12.1	12.3
18	9.2	8.9	9.1	10.0	9.7	9.8	11.6	10.5	11.0	13.7	12.4	12.8
19	9.5	9.2	9.3	9.8	9.6	9.7	10.5	10.4	10.4	14.0	12.8	13.1
20	9.7	9.2	9.5	12.5	9.5	10.3	11.0	10.4	10.7	13.9	12.3	12.8
21	10.0	9.7	9.8	13.0	10.7	11.7	11.1	10.9	11.0	13.5	12.2	12.5
22	9.7	9.6	9.7	11.0	9.9	10.6	10.9	10.6	10.8	13.7	12.4	12.6
23	9.7	8.9	9.4	10.9	10.0	10.4	10.9	10.6	10.7	14.8	12.4	13.5
24	9.0	7.4	8.4	11.3	10.3	10.8	11.8	10.8	11.3	14.7	13.4	13.7
25	7.5	7.2	7.4	12.0	10.4	11.0	13.3	11.8	12.2	16.5	12.9	14.0
26	7.6	7.3	7.5	12.2	10.3	11.0	13.2	12.6	12.9	14.9	13.1	13.5
27	7.8	7.2	7.6	11.9	9.5	10.4	13.9	13.2	13.6	15.6	13.0	13.7
28	7.3	6.9	7.2	10.1	8.8	9.5	14.8	13.5	13.9	15.3	13.5	14.1
29	7.9	7.2	7.5	12.2	9.5	10.7	14.1	12.4	13.2	14.8	13.2	13.8
30	8.2	7.1	7.6	13.0	10.6	11.5	12.8	10.5	11.7	14.2	12.8	13.2
31	7.6	6.6	7.1	---	---	---	11.3	10.4	10.7	14.7	13.0	13.3
MONTH	10.0	6.6	8.6	13.0	6.3	9.8	14.8	8.3	11.5	16.5	11.3	13.2

03231500 SCIOTO RIVER AT CHILLICOTHE, OH--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	14.8	12.9	13.7	12.9	12.3	12.6	7.9	7.7	7.8	9.2	7.9	8.5
2	15.0	12.8	13.5	12.4	11.9	12.1	8.3	7.2	7.8	9.9	8.1	8.9
3	14.5	12.7	13.3	12.4	12.0	12.1	11.8	7.1	9.3	11.7	8.3	9.7
4	14.0	12.2	12.9	12.5	12.3	12.3	10.3	9.7	10.0	9.8	8.4	9.1
5	13.2	11.7	12.2	12.7	12.3	12.6	9.9	9.4	9.7	9.4	7.6	8.5
6	12.2	11.6	12.0	12.1	10.5	11.5	9.7	9.1	9.3	8.9	7.6	8.2
7	13.6	11.9	12.5	11.9	11.2	11.6	9.8	8.9	9.3	10.1	7.8	8.7
8	13.9	12.0	12.8	12.6	11.6	12.2	9.2	8.5	8.9	10.9	7.8	9.3
9	14.2	12.7	13.2	12.7	12.4	12.5	9.3	8.4	8.8	11.9	8.1	9.7
10	14.3	12.6	13.0	12.8	8.0	9.7	8.6	8.1	8.4	13.3	8.4	10.5
11	15.5	12.6	13.9	9.4	7.4	8.2	8.7	7.8	8.1	15.8	8.6	11.8
12	15.4	12.8	14.2	8.5	7.5	7.8	9.6	8.7	9.2	19.0	9.4	13.8
13	12.8	12.3	12.6	8.3	7.1	7.7	9.4	9.1	9.2	17.6	9.4	13.5
14	12.3	12.1	12.2	8.7	8.0	8.4	9.4	8.7	9.1	16.2	8.7	12.5
15	12.6	12.1	12.3	8.1	7.1	7.9	8.7	8.4	8.6	15.5	7.3	11.0
16	12.8	12.6	12.7	---	---	---	8.4	8.2	8.4	13.0	7.5	10.3
17	14.8	12.6	13.2	---	---	---	8.4	8.2	8.3	12.2	6.2	8.8
18	13.3	12.8	13.0	---	---	---	8.9	8.3	8.7	9.5	5.9	7.6
19	13.0	12.0	12.6	10.9	8.2	9.9	8.9	8.7	8.8	8.5	5.5	6.7
20	12.7	12.4	12.6	10.2	8.0	8.5	9.1	8.7	8.9	7.8	5.4	6.6
21	13.4	12.1	12.8	10.2	8.2	9.1	9.4	8.8	9.1	9.7	5.9	7.4
22	12.9	12.4	12.7	10.6	7.1	7.7	9.6	9.3	9.5	12.2	6.7	9.0
23	12.4	12.2	12.3	10.6	6.5	7.3	9.6	9.4	9.5	11.8	7.0	9.5
24	12.3	11.9	12.1	10.0	6.6	7.3	9.7	9.4	9.5	14.5	6.8	10.0
25	12.0	11.8	11.9	8.6	7.0	7.6	9.6	9.3	9.5	15.6	7.4	11.1
26	12.1	11.9	12.0	8.3	8.0	8.1	9.3	9.0	9.3	14.2	7.1	10.5
27	11.9	11.5	11.7	9.2	6.9	7.9	9.1	8.6	8.9	10.6	6.0	8.0
28	13.3	11.2	12.2	7.1	6.9	7.0	8.7	8.2	8.5	7.7	4.3	5.8
29	---	---	---	8.4	6.9	7.6	8.4	8.1	8.2	5.2	4.3	4.7
30	---	---	---	8.4	7.5	8.0	8.6	7.8	8.1	7.2	4.8	5.7
31	---	---	---	8.8	7.5	8.0	---	---	---	7.6	5.3	6.3
MONTH	15.5	11.2	12.7	12.9	6.5	9.4	11.8	7.1	8.9	19.0	4.3	9.1
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	7.2	5.2	6.2	17.0	9.2	13.0	16.8	9.8	13.0	12.2	6.1	8.5
2	7.0	5.1	6.0	17.6	8.9	13.0	17.3	9.8	13.3	12.8	6.8	9.4
3	5.5	5.0	5.2	12.9	5.3	7.5	14.8	9.6	12.4	10.2	7.0	8.5
4	6.6	4.3	5.5	8.1	4.4	5.9	14.9	7.2	10.8	8.9	6.2	7.3
5	7.1	6.0	6.5	9.6	4.5	6.8	14.0	8.6	11.5	9.1	5.5	7.1
6	10.2	7.0	8.2	11.5	5.4	7.9	12.0	7.8	10.0	9.9	6.4	7.8
7	10.7	7.9	9.1	12.1	5.6	8.2	14.9	7.5	11.0	11.3	7.0	8.7
8	11.0	7.5	9.1	8.3	4.4	5.7	14.9	8.6	11.3	11.4	7.2	9.0
9	11.2	7.2	9.0	7.3	4.2	5.3	9.3	5.7	7.0	9.8	7.5	8.6
10	11.9	7.1	9.3	6.5	5.0	5.7	9.5	5.1	7.0	9.9	6.5	8.0
11	11.9	7.5	9.6	8.2	5.0	6.3	11.7	6.3	8.5	10.2	7.0	8.2
12	11.9	7.3	9.5	8.1	5.0	6.7	13.7	7.1	9.9	9.3	6.6	7.8
13	9.4	6.7	8.0	11.0	6.3	8.3	11.4	8.4	9.9	8.9	6.5	7.5
14	7.5	5.1	6.3	13.2	7.1	9.6	12.1	6.8	9.2	8.9	6.3	7.5
15	9.9	5.4	7.3	16.9	7.8	11.7	12.8	7.6	10.1	7.9	5.6	6.6
16	10.4	6.2	7.9	17.4	10.3	13.4	13.5	8.2	10.7	8.8	5.9	7.1
17	10.0	5.8	7.7	15.6	9.5	12.3	12.0	8.4	10.0	9.7	6.3	7.6
18	11.8	6.7	8.9	14.3	8.5	11.0	11.8	6.6	8.8	8.0	6.4	7.1
19	12.9	6.9	9.5	10.3	7.4	8.8	9.5	7.1	8.3	8.6	6.4	7.3
20	16.0	7.2	11.1	11.1	6.0	7.9	8.2	6.1	7.3	9.0	6.9	7.7
21	17.8	9.2	13.3	10.2	5.6	7.4	10.4	6.1	7.8	9.8	7.3	8.1
22	12.9	8.7	10.3	11.1	5.4	7.7	11.4	6.8	8.7	9.2	7.7	8.4
23	13.4	7.1	9.7	10.6	5.8	7.9	12.0	7.4	9.5	9.4	7.2	8.1
24	14.5	6.9	10.4	14.2	5.9	9.2	13.1	8.1	10.4	8.8	7.5	8.0
25	15.8	7.8	11.5	13.6	7.6	10.5	13.2	8.3	10.5	8.8	7.4	8.0
26	14.6	8.6	11.7	14.6	7.1	10.6	12.5	7.8	10.0	9.0	7.6	8.2
27	18.4	8.1	12.9	16.3	7.6	11.6	13.0	8.0	10.4	9.4	7.8	8.4
28	19.1	11.3	15.2	14.8	8.9	12.1	14.2	8.4	11.1	9.8	8.0	8.7
29	17.5	10.1	14.1	17.0	7.2	11.2	14.7	8.4	11.4	9.6	8.1	8.8
30	17.1	9.5	13.3	15.8	9.1	12.2	12.6	8.0	10.3	10.4	8.2	9.1
31	---	---	---	17.3	9.6	13.2	11.6	6.7	8.8	---	---	---
MONTH	19.1	4.3	9.4	17.6	4.2	9.3	17.3	5.1	10.0	12.8	5.5	8.0
YEAR	19.1	4.2	10.0									

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	32	245	51	951	447	657	286	692	56	6.7	18
2	4.6	298	245	52	825	413	567	367	493	39	6.9	18
3	25	663	1130	2630	493	416	377	284	385	39	7.4	17
4	610	657	2270	7360	294	504	255	499	520	39	7.9	18
5	1350	654	2410	7000	442	634	354	514	602	39	8.5	17
6	1350	522	2260	6630	1390	779	403	288	418	39	8.5	17
7	1010	366	1410	6330	1290	1430	403	368	224	39	8.5	17
8	1000	342	891	5880	1810	1430	404	381	176	40	8.6	17
9	596	342	624	5420	2690	919	405	343	176	40	9.2	17
10	440	342	545	3820	2660	572	997	281	176	40	9.1	17
11	878	343	519	2260	3190	572	983	310	176	39	9.1	17
12	1070	346	424	1890	3500	569	591	310	176	71	8.5	18
13	1090	462	391	1910	3510	1010	834	201	146	95	20	19
14	1100	792	391	1900	3410	2060	1140	146	133	69	24	21
15	1760	786	393	1860	2630	2290	1130	231	134	44	24	20
16	2160	476	405	1560	1190	2290	1820	303	135	44	24	17
17	2030	372	1640	984	700	2250	4440	434	68	45	24	18
18	1840	372	996	929	806	2240	5200	532	61	45	26	19
19	1390	300	6.3	911	1360	2060	4580	775	93	27	24	19
20	934	276	4.2	498	2130	1230	2670	1040	93	5.1	24	18
21	761	276	2310	479	2290	533	1120	758	93	5.0	24	18
22	685	276	6920	618	1810	780	884	540	93	5.2	45	17
23	1330	462	2370	580	1250	497	684	386	92	5.3	68	16
24	1260	624	870	503	1050	1210	534	386	92	5.5	54	16
25	1300	621	3560	408	702	3590	488	465	92	5.7	36	16
26	1490	536	6030	317	607	4360	455	523	93	5.7	19	14
27	758	509	7320	318	519	4260	398	521	93	6.0	19	11
28	755	457	5970	489	519	3450	400	927	93	6.1	34	12
29	505	350	4270	661	---	1700	333	2260	93	6.1	29	13
30	184	286	3210	868	---	962	213	3320	93	6.5	17	12
31	22	---	50	1160	---	862	---	1720	---	6.7	18	---
TOTAL	29692.2	13140	60079.5	66276	44018	46319	33719	19699	6004	957.9	651.9	504
MEAN	958	438	1938	2138	1572	1494	1124	635	200	30.9	21.0	16.8
MAX	2160	792	7320	7360	3510	4360	5200	3320	692	95	68	21
MIN	4.6	32	4.2	51	294	413	213	146	61	5.0	6.7	11
CAL YR 1990	TOTAL 382539.7 MEAN 1048 MAX 7320 MIN 4.2											
WTR YR 1991	TOTAL 321060.5 MEAN 880 MAX 7360 MIN 4.2											

SCIOTO RIVER BASIN

03232500 ROCKY FORK NEAR BARRETT'S 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 National Geodetic Vertical Datum of 1929, (levels by U.S. Army Corps of Engineers). Prior to Feb. 15, 1940, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records fair. Some diurnal fluctuation caused by mill 6 mi upstream from station. 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.

AVERAGE DISCHARGE.--52 years, 154 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,400 ft³/s Mar. 10, 1964 from rating curve extended above 8,800 ft³/s on basis of velocity-area studies; maximum gage height, 15.56 ft Mar. 6, 1945; minimum daily discharge, 0.90 ft³/s Sept. 10, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,320 ft³/s Dec. 18, gage height, 9.48 ft; minimum daily, 3.7 ft³/s Sept. 21, 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	157	89	85	920	241	166	205	79	99	35	27	17
2	121	85	79	386	145	175	182	87	91	36	27	13
3	97	80	747	128	144	204	168	86	151	44	27	11
4	922	78	858	142	100	308	203	90	132	44	33	18
5	637	82	549	155	65	191	219	109	101	41	26	21
6	411	88	265	382	661	434	127	140	82	37	28	15
7	182	81	115	731	2120	575	130	125	71	34	12	14
8	150	75	119	439	1180	383	140	114	63	57	9.6	12
9	141	71	116	402	543	207	231	144	56	120	27	10
10	326	95	112	277	345	200	486	147	52	113	16	11
11	315	97	106	727	201	190	402	135	48	111	9.6	11
12	749	90	103	822	193	182	314	122	44	123	8.5	11
13	765	84	100	529	309	432	1560	112	40	158	8.4	16
14	242	79	91	74	720	539	1810	104	37	119	9.9	27
15	71	76	250	166	582	433	1920	164	37	89	9.4	21
16	75	76	323	323	386	349	910	155	37	70	9.4	17
17	81	78	396	163	200	318	519	167	36	59	10	13
18	227	71	3160	160	407	708	306	184	34	50	16	9.4
19	193	69	2690	156	907	507	246	177	33	43	11	7.4
20	162	68	1200	158	560	348	285	148	33	38	12	5.1
21	143	65	542	166	228	313	266	129	32	34	12	3.7
22	265	95	587	154	232	690	244	113	45	31	11	3.7
23	375	221	834	148	218	2060	223	101	80	30	13	4.9
24	295	181	504	144	211	1070	215	92	71	28	15	5.4
25	242	156	162	138	200	275	193	82	60	27	16	7.1
26	193	134	169	137	188	486	182	75	52	28	16	5.5
27	160	123	166	144	180	656	174	122	46	27	16	5.5
28	137	117	297	171	171	400	169	163	42	29	17	5.4
29	115	103	665	270	---	241	184	138	39	29	17	5.3
30	103	90	2060	436	---	235	132	120	36	28	16	5.3
31	95	---	2120	381	---	218	---	102	---	27	16	---
TOTAL	8147	2897	19570	9529	11637	13493	12345	3826	1780	1739	501.8	331.7
MEAN	263	96.6	631	307	416	435	411	123	59.3	56.1	16.2	11.1
MAX	922	221	3160	920	2120	2060	1920	184	151	158	33	27
MIN	71	65	79	74	65	166	127	75	32	27	8.4	3.7

CAL YR 1990 TOTAL 94719 MEAN 260 MAX 4400 MIN 15
WTR YR 1991 TOTAL 85796.5 MEAN 235 MAX 3160 MIN 3.7

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 National Geodetic Vertical Datum of 1929. See WSP 1725 for history of changes prior to May 3, 1939.

REMARKS.--Estimated daily discharges: Oct. 6-9, Apr. 7, Aug. 11-17, Aug. 22 and Aug. 27-Sept. 4. Records fair, except for estimated records 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.

AVERAGE DISCHARGE.--68 years (1921-36, 1939-91), 818 ft³/s.

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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,800 ft³/s Dec. 30, gage height, 16.08 ft; minimum daily, 27 ft³/s Aug. 13, 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	414	203	347	2190	1990	1020	1220	511	1030	191	39	37
2	188	182	331	1430	1350	964	979	618	703	141	42	37
3	149	706	2380	1010	1180	960	858	681	672	152	41	37
4	1580	746	3790	6340	837	1190	814	779	646	151	45	40
5	2120	750	3340	6420	814	1310	956	869	775	139	45	41
6	2000	729	2920	6500	2110	1560	818	722	694	130	36	42
7	1350	504	2060	7250	6440	2680	760	733	547	121	40	35
8	1300	427	1320	6370	3700	2410	737	634	387	126	39	35
9	840	418	944	5920	3900	1500	716	676	365	160	40	35
10	857	482	829	5120	3510	1060	1540	594	352	189	61	35
11	1240	488	723	4420	3500	959	1740	596	340	188	34	35
12	2460	457	658	3860	3920	930	1240	579	334	186	38	35
13	2560	470	558	3380	3900	1850	3640	542	306	254	27	36
14	1730	699	535	2500	5270	3280	4570	428	273	247	28	38
15	1630	956	840	2320	4190	3170	4980	456	266	185	27	45
16	2250	669	1070	2620	2540	2970	3270	573	263	158	38	44
17	2220	460	1490	1640	1340	2840	4950	644	263	142	40	43
18	2380	439	7950	1400	1670	3570	5150	802	192	131	58	42
19	2050	409	6020	1350	2920	3220	5330	953	210	123	42	40
20	1470	332	2480	1140	3580	2250	3670	1260	206	98	32	38
21	1080	326	1650	503	3020	1270	2090	1150	202	74	29	37
22	1360	358	6910	540	2700	1650	1570	843	206	64	40	37
23	2050	802	6570	972	1830	5300	1240	609	255	59	47	36
24	2110	942	2080	1040	1720	2650	1070	579	233	54	72	36
25	1340	861	2960	980	1200	3680	935	565	223	50	53	36
26	2230	796	5190	833	1100	4800	896	654	211	48	38	35
27	1130	634	6420	822	923	5230	795	708	203	45	42	35
28	1050	646	6350	1060	1080	4680	772	906	207	43	40	35
29	919	516	5150	1220	---	2680	767	1630	203	97	37	35
30	518	436	8160	1910	---	1680	660	3290	195	43	37	35
31	255	---	5900	1990	---	1390	---	2510	---	38	36	---
TOTAL	44830	16843	97925	85050	72234	74703	58733	27094	10962	3827	1263	1127
MEAN	1446	561	3159	2744	2580	2410	1958	874	365	123	40.7	37.6
MAX	2560	956	8160	7250	6440	5300	5330	3290	1030	254	72	45
MIN	149	182	331	503	814	930	660	428	192	38	27	35

CAL YR 1990 TOTAL 587812 MEAN 1610 MAX 10100 MIN 73
WTR YR 1991 TOTAL 494591 MEAN 1355 MAX 8160 MIN 27

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.--WRD-OH-88-1: 1986(M), 1987(M).

GAGE.--Water-stage recorder. Elevation of gage is 600 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. 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.

AVERAGE DISCHARGE.--6 years, 1,232 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,100 ft³/s May 29, 1990, gage height 24.67; minimum daily, 43 ft³/s Oct. 22-25, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 24,300 ft³/s Dec. 31, gage height, 22.49 ft; minimum daily, 61 ft³/s Sept. 29-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	964	634	776	4240	2200	1160	1710	696	1360	206	92	69
2	526	598	731	4230	1590	1090	1380	761	898	191	92	66
3	455	901	3360	1790	1460	1070	1260	756	1050	185	92	65
4	1990	1140	5750	6690	997	1430	946	714	821	192	96	65
5	3120	1150	4380	7110	928	1770	1020	904	915	172	97	65
6	2880	1170	3820	7510	3100	1990	1000	931	850	159	87	68
7	1880	976	2950	8750	11800	4070	948	763	595	151	80	67
8	1690	843	1920	7420	5020	3290	929	764	437	152	80	66
9	1550	811	1550	6800	4740	2130	974	807	396	162	192	65
10	1220	886	1370	5980	4110	1580	1960	745	378	215	155	65
11	1720	986	1230	5920	3890	1350	2260	698	364	224	111	65
12	3380	932	1180	5370	4330	1290	1680	681	352	229	93	65
13	3880	877	1030	4230	4250	2900	5480	655	342	299	82	66
14	2590	980	980	3310	7260	5520	7120	518	307	297	77	76
15	2120	1370	1450	2990	5520	4510	8400	542	291	243	77	95
16	2850	1200	2110	3280	3370	3820	5110	643	287	196	77	86
17	2830	920	2010	2350	1930	3540	5440	701	292	177	77	78
18	3090	852	13900	1900	2220	4750	5650	928	233	164	98	71
19	2870	834	13500	1810	4170	4220	6050	1020	206	156	103	69
20	2100	745	8740	1660	4770	3170	4300	1400	224	153	90	66
21	1610	715	8740	1220	3850	1910	2810	1360	221	138	87	65
22	2030	741	9010	1320	3520	2440	2090	1010	229	123	98	64
23	3350	1360	10000	1310	2460	10500	1670	771	285	114	92	64
24	3150	1490	3600	1200	2280	3800	1450	687	276	109	99	64
25	1950	1380	3650	1080	1680	4270	1250	665	255	106	106	65
26	2940	1290	5770	915	1510	5550	1190	755	238	105	95	65
27	1740	1110	7040	861	1290	6960	1070	830	226	102	83	65
28	1550	1090	7070	1240	1220	5870	1020	1340	218	100	73	64
29	1470	976	6440	1360	---	3540	996	1810	213	149	72	61
30	1020	851	12600	2490	---	2350	905	3610	206	107	101	61
31	766	---	14600	2610	---	1890	---	3160	---	93	81	---
TOTAL	65281	29808	161257	108946	95465	103730	78068	31625	12965	5169	2935	2036
MEAN	2106	994	5202	3514	3409	3346	2602	1020	432	167	94.7	67.9
MAX	3880	1490	14600	8750	11800	10500	8400	3610	1360	299	192	95
MIN	455	598	731	861	928	1070	905	518	206	93	72	61

CAL YR 1990 TOTAL 256346 MEAN 2786 MAX 14600 MIN 455
WTR YR 1991 TOTAL 697285 MEAN 1910 MAX 14600 MIN 61

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. Digital recorder set for one-hour-interval punch. 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, 7.2 units Oct. 17, 1989.

WATER TEMPERATURES: Maximum, 31.5°C July 17, Aug. 18, 1988; minimum 0.0°C on many days during winter in water year 1988.

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, 724 microsiemens June 29; minimum, 141 microsiemens Dec. 31.

pH: Maximum, 8.6 units May 10, 11, July 14; minimum 7.7 units Oct. 4, 5, Aug. 31.

WATER TEMPERATURE: Maximum, 31.0°C July 9; minimum, 0.5°C Jan. 27, Feb. 16.

DISSOLVED OXYGEN: Maximum, 13.4 mg/L Dec. 1; minimum, 5.0 mg/L July 23.

SCIOTO RIVER BASIN

03234300 PAINT CREEK AT CHILLICOTHE, OH--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	634	588	612	634	594	618	398	294	350
2	458	420	444	642	590	619	616	602	609	440	356	403
3	474	422	450	612	482	561	602	300	428	502	446	475
4	424	246	339	634	576	607	556	380	465	472	322	359
5	344	260	314	618	598	609	566	506	534	346	324	331
6	388	344	363	634	590	610	512	442	477	320	298	311
7	402	354	374	622	602	613	468	438	458	324	250	294
8	372	354	364	642	610	626	468	460	466	344	308	329
9	384	370	374	624	610	617	488	466	476	390	268	336
10	436	388	411	614	580	599	502	484	491	458	392	425
11	456	398	432	622	582	601	518	498	506	462	388	416
12	414	300	381	624	582	604	534	520	527	424	400	409
13	398	290	354	632	594	613	558	530	544	432	378	418
14	418	392	405	638	582	612	572	526	556	470	422	446
15	434	402	420	638	590	615	570	448	534	482	472	478
16	488	414	439	634	594	611	476	444	459	498	454	471
17	462	430	444	630	604	616	512	454	480	562	502	534
18	486	448	464	648	604	629	540	212	332	580	560	571
19	496	464	474	644	624	634	316	212	250	606	582	592
20	512	486	500	630	582	608	390	322	355	596	580	585
21	528	484	506	640	596	619	426	390	414	632	598	620
22	532	448	505	608	558	592	412	338	365	634	610	620
23	460	418	433	556	490	521	336	268	296	646	622	634
24	518	472	503	550	522	533	360	294	327	650	628	641
25	558	522	542	562	542	553	358	314	345	668	616	641
26	562	534	548	586	552	568	312	212	276	670	656	663
27	580	542	561	564	536	550	354	206	304	670	634	653
28	566	550	558	596	540	558	374	344	357	638	554	601
29	574	548	563	626	600	614	402	338	368	602	578	590
30	590	532	568	648	612	629	376	212	320	602	494	548
31	606	568	588	---	---	---	314	141	214	596	498	550
MONTH	606	246	454	648	482	598	634	141	424	670	250	493
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	628	576	605	548	520	533	488	460	476	531	484	505
2	598	564	585	526	504	516	518	481	500	529	487	510
3	614	562	591	574	516	546	527	477	504	523	483	506
4	626	566	598	596	528	568	532	503	516	519	499	510
5	584	558	571	528	482	498	521	478	503	498	477	488
6	562	404	495	524	430	497	506	469	487	519	465	488
7	398	304	338	484	394	422	515	478	495	532	474	509
8	466	348	407	538	492	521	500	479	487	505	460	484
9	468	438	455	558	512	529	490	463	479	481	452	470
10	444	418	434	536	524	530	490	425	452	478	440	461
11	470	428	448	544	504	526	484	444	464	479	434	460
12	452	418	436	556	536	547	491	461	476	475	441	458
13	452	402	431	562	386	479	477	253	354	482	443	465
14	454	418	430	474	374	407	337	253	309	482	452	469
15	540	458	512	482	398	448	353	231	295	503	456	485
16	533	471	514	430	356	387	362	273	333	477	428	455
17	549	533	541	444	406	421	415	366	394	445	408	432
18	557	400	522	416	368	389	423	380	402	452	414	437
19	416	384	397	453	392	418	390	360	375	468	427	453
20	518	416	463	486	450	465	410	377	390	462	433	451
21	518	431	459	480	446	464	461	411	438	477	445	463
22	464	438	451	479	330	422	486	434	451	480	442	463
23	474	454	464	295	225	251	479	448	464	478	456	467
24	486	464	474	401	301	357	510	462	494	482	453	470
25	502	488	496	458	401	432	544	475	512	476	447	463
26	514	496	506	416	381	408	499	471	485	464	444	456
27	558	514	523	375	305	332	505	477	490	468	447	456
28	528	508	518	375	315	348	499	472	484	506	399	447
29	---	---	---	449	380	412	494	460	478	428	407	418
30	---	---	---	484	452	473	499	467	482	438	343	394
31	---	---	---	505	467	486	---	---	---	371	323	349
MONTH	628	304	488	596	225	453	544	231	449	532	323	463

SCIOTO RIVER BASIN

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03234300 PAINT CREEK AT CHILLICOTHE, OH--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	372	347	359	532	512	522	547	494	525	621	573	598
2	422	355	377	524	480	512	577	534	555	634	578	608
3	441	334	385	537	508	525	577	549	560	621	596	607
4	425	343	392	548	529	539	584	532	549	668	598	617
5	438	421	430	560	529	545	581	548	563	634	598	619
6	479	433	456	558	534	545	587	561	575	642	590	619
7	509	468	486	551	524	540	596	544	574	643	583	616
8	516	489	505	565	532	543	582	549	566	640	577	610
9	534	491	514	559	532	550	580	436	521	624	582	602
10	526	496	511	546	519	536	523	457	492	609	568	593
11	524	501	513	535	500	519	549	511	529	605	567	587
12	530	498	516	517	432	500	555	515	535	625	587	605
13	538	500	521	485	393	448	566	534	553	617	554	594
14	550	512	528	462	427	447	588	545	569	595	551	577
15	550	512	532	485	445	464	577	535	559	624	561	588
16	543	507	527	504	454	480	580	540	560	585	540	566
17	543	503	525	507	453	482	582	541	567	571	538	556
18	542	499	522	502	447	476	566	518	548	581	554	567
19	550	504	526	485	456	472	571	526	555	606	532	568
20	550	492	524	492	429	465	559	526	545	592	551	571
21	541	465	508	473	435	454	572	535	553	632	555	587
22	519	447	502	466	440	454	615	546	578	623	564	588
23	539	504	520	496	453	474	581	554	564	582	543	566
24	531	490	513	535	500	519	604	567	589	619	561	591
25	514	493	502	544	525	534	609	553	584	604	566	588
26	538	506	523	555	524	542	591	549	572	616	569	592
27	540	507	524	557	521	541	587	550	569	633	575	606
28	693	499	543	561	534	546	594	560	576	617	570	594
29	724	500	535	545	493	528	605	561	582	615	562	589
30	535	501	519	542	478	506	611	571	591	616	545	579
31	---	---	---	486	444	468	567	458	512	---	---	---
MONTH	724	334	495	565	393	506	615	436	557	668	532	592
YEAR	724	141	497									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	8.1	8.0	8.1	8.5	8.3	8.4	8.0	7.9	7.9
2	8.2	8.0	8.1	8.1	8.1	8.1	8.4	8.2	8.3	8.0	7.9	7.9
3	8.2	8.0	8.1	8.2	8.0	8.1	8.2	7.8	8.0	8.0	7.9	7.9
4	8.1	7.7	7.9	8.2	8.2	8.2	8.3	7.9	8.1	8.1	8.0	8.0
5	8.1	7.7	7.9	8.2	8.1	8.2	8.2	8.1	8.2	8.0	8.0	8.0
6	8.1	8.0	8.1	8.2	8.1	8.2	8.1	8.1	8.1	8.0	8.0	8.0
7	8.1	8.0	8.0	8.3	8.2	8.2	8.2	8.1	8.2	8.0	8.0	8.0
8	8.0	7.9	8.0	8.3	8.2	8.2	8.2	8.2	8.2	8.0	8.0	8.0
9	8.0	7.9	8.0	8.2	8.2	8.2	8.2	8.2	8.2	8.1	8.0	8.1
10	8.0	7.9	8.0	8.2	8.2	8.2	8.2	8.2	8.2	8.1	8.1	8.1
11	8.1	8.0	8.1	8.3	8.2	8.3	8.2	8.2	8.2	8.1	8.0	8.1
12	8.1	7.8	8.0	8.3	8.2	8.3	8.2	8.2	8.2	8.1	8.0	8.0
13	8.0	7.8	7.9	8.4	8.2	8.3	8.2	8.1	8.2	8.1	8.1	8.1
14	8.0	8.0	8.0	8.4	8.3	8.3	8.3	8.2	8.2	8.1	8.0	8.0
15	8.0	8.0	8.0	8.4	8.3	8.3	8.2	8.1	8.2	8.1	8.0	8.0
16	8.1	8.0	8.0	8.4	8.3	8.3	8.2	8.1	8.2	8.1	8.0	8.1
17	8.0	8.0	8.0	8.4	8.2	8.3	8.3	8.2	8.2	8.1	8.0	8.1
18	8.1	8.0	8.0	8.4	8.2	8.3	8.3	7.8	8.0	8.1	8.0	8.1
19	8.1	8.1	8.1	8.4	8.2	8.3	8.0	7.9	7.9	8.1	8.1	8.1
20	8.2	8.1	8.1	8.4	8.2	8.3	8.0	8.0	8.0	8.1	8.1	8.1
21	8.1	8.1	8.1	8.4	8.2	8.3	8.0	7.9	8.0	8.1	8.1	8.1
22	8.1	8.0	8.1	8.2	8.1	8.2	8.0	7.9	7.9	8.2	8.1	8.1
23	8.0	8.0	8.0	8.2	8.1	8.2	7.9	7.9	7.9	8.2	8.1	8.2
24	8.1	8.1	8.1	8.3	8.2	8.3	8.0	7.9	7.9	8.2	8.1	8.2
25	8.1	8.1	8.1	8.5	8.3	8.4	8.1	7.9	8.0	8.4	8.2	8.3
26	8.2	8.1	8.2	8.5	8.3	8.4	8.0	7.9	7.9	8.4	8.1	8.2
27	8.2	8.1	8.1	8.4	8.2	8.3	8.0	7.9	7.9	8.3	8.1	8.2
28	8.1	8.1	8.1	8.3	8.2	8.3	8.0	7.9	7.9	8.2	8.1	8.2
29	8.2	8.1	8.1	8.4	8.2	8.3	8.0	8.0	8.0	8.2	8.1	8.2
30	8.1	8.1	8.1	8.5	8.3	8.3	8.0	7.8	7.9	8.2	8.2	8.2
31	8.1	8.1	8.1	---	---	---	8.0	7.9	8.0	8.3	8.2	8.2
MONTH	8.2	7.7	8.0	8.5	8.0	8.3	8.5	7.8	8.1	8.4	7.9	8.1

03234300 PAINT CREEK AT CHILLICOTHE, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

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

SCIOTO RIVER BASIN

03234300 PAINT CREEK AT CHILLICOTHE, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	13.0	11.0	12.0	7.0	6.0	6.5	4.5	4.0	4.5
2	19.0	16.5	17.5	13.5	11.0	12.0	7.5	6.5	7.0	5.5	4.5	5.0
3	18.5	15.5	17.0	13.5	11.5	12.5	9.5	7.5	8.5	5.0	4.5	5.0
4	18.0	17.0	17.5	13.0	11.5	12.5	9.5	6.5	8.0	5.0	4.0	5.0
5	19.0	17.0	18.0	12.5	12.0	12.5	6.5	6.0	6.5	5.0	4.5	4.5
6	19.5	18.0	19.0	12.0	10.0	11.0	6.5	5.5	6.0	5.0	4.5	4.5
7	19.0	18.0	19.0	9.5	9.0	9.5	6.0	5.0	5.5	4.5	4.0	4.0
8	19.5	18.5	19.0	9.0	8.0	8.5	5.0	4.0	4.5	4.0	3.5	4.0
9	19.5	19.0	19.5	8.5	8.0	8.5	5.0	4.0	4.5	4.0	3.5	4.0
10	19.0	18.0	18.5	8.5	8.0	8.5	5.5	4.5	5.0	4.0	3.5	3.5
11	17.5	16.0	16.5	8.5	7.5	8.0	6.0	4.5	5.5	5.0	3.5	4.0
12	16.5	14.5	15.5	9.0	7.5	8.0	7.0	5.0	6.0	5.0	4.5	5.0
13	16.5	14.5	16.0	8.0	7.0	7.5	7.5	6.5	7.5	4.5	4.0	4.0
14	17.0	16.0	16.5	7.5	6.5	7.0	6.5	5.5	6.0	5.0	4.0	4.5
15	16.0	15.5	15.5	9.0	7.0	8.0	7.0	5.5	6.5	5.5	4.5	5.0
16	15.5	14.0	15.0	10.0	8.0	9.0	7.0	6.5	6.5	5.5	5.0	5.5
17	16.0	14.5	15.5	10.0	8.0	9.5	6.5	6.0	6.0	5.0	4.5	5.0
18	16.0	14.0	15.5	8.0	7.0	7.5	9.5	6.0	8.5	5.0	4.0	4.5
19	14.0	13.5	14.0	7.5	7.0	7.0	8.5	6.5	7.5	5.0	4.0	4.5
20	14.0	13.0	13.5	9.0	7.5	8.0	7.0	6.0	6.5	5.5	5.0	5.5
21	15.0	13.0	14.0	8.5	7.5	8.0	9.0	7.0	8.0	5.0	3.5	4.5
22	15.0	13.5	14.5	10.0	8.5	9.0	10.5	9.0	9.5	3.0	1.5	2.5
23	14.0	13.0	13.5	10.0	9.0	9.5	9.0	7.0	8.0	2.5	1.0	2.0
24	13.5	12.5	13.0	9.0	8.0	8.5	6.5	4.5	5.0	2.5	2.0	2.5
25	13.5	12.0	12.5	9.5	8.5	9.0	5.5	4.0	5.0	2.0	1.0	1.5
26	12.5	11.5	12.0	10.5	9.0	10.0	6.5	5.5	6.0	2.0	1.0	1.5
27	12.0	10.5	11.5	13.0	11.0	12.0	6.0	5.0	5.5	2.0	.5	1.0
28	12.0	11.0	11.5	13.0	11.0	12.5	6.5	5.5	6.0	2.5	1.5	2.0
29	11.0	10.0	10.5	11.0	8.0	9.5	7.5	5.5	6.5	3.0	1.5	2.5
30	11.5	9.5	10.5	7.5	6.0	7.0	9.0	6.5	8.0	3.0	2.5	3.0
31	12.5	10.5	11.5	---	---	---	8.0	4.5	6.0	2.5	1.5	2.0
MONTH	19.5	9.5	15.0	13.5	6.0	9.5	10.5	4.0	6.5	5.5	.5	4.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	2.0	1.0	1.5	8.0	5.5	6.5	11.0	9.5	10.0	18.5	16.5	17.5
2	3.5	2.0	3.0	10.5	8.0	9.0	11.5	9.0	10.0	18.0	15.5	16.5
3	4.5	2.5	3.5	10.5	6.5	8.5	11.5	9.0	10.5	18.0	15.5	17.0
4	5.5	3.5	4.5	6.5	4.5	5.5	12.0	10.0	11.0	17.0	16.0	16.5
5	7.5	5.5	6.5	7.0	4.0	5.5	14.0	12.0	12.5	17.0	15.5	16.0
6	7.5	6.5	7.0	7.5	7.0	7.0	15.0	12.0	13.5	16.5	15.0	16.0
7	6.5	4.5	5.5	7.5	5.5	6.5	16.5	13.5	15.0	17.0	13.5	15.5
8	4.5	4.0	4.5	6.0	4.5	5.5	16.5	15.5	16.0	18.0	15.5	16.5
9	5.0	4.5	4.5	6.5	5.0	6.0	17.0	15.5	16.0	18.0	17.0	17.5
10	5.5	5.0	5.0	6.0	5.5	6.0	16.0	12.0	14.0	19.5	17.5	18.5
11	5.0	4.0	4.5	7.5	5.0	6.5	13.5	11.0	12.0	21.0	18.5	19.5
12	4.0	3.0	4.0	6.0	5.0	5.5	13.0	12.0	12.5	22.0	19.5	20.5
13	4.5	3.5	4.0	5.0	3.5	4.0	13.0	11.5	12.0	22.5	20.0	21.0
14	4.5	3.0	4.0	4.5	3.0	4.0	14.5	12.5	13.5	24.5	21.0	22.5
15	3.0	1.5	2.5	5.5	4.0	5.0	15.5	14.0	14.5	24.5	21.0	22.5
16	2.0	.5	1.5	6.0	4.0	5.0	15.5	13.5	14.5	24.0	22.0	23.0
17	2.5	1.5	2.0	6.5	4.5	5.5	15.5	14.0	15.0	24.0	22.0	23.0
18	3.0	2.5	2.5	7.5	6.5	7.0	15.5	14.0	15.0	22.5	20.5	21.5
19	4.5	2.5	4.0	7.5	6.5	7.0	15.0	14.0	14.5	21.0	19.0	20.0
20	4.5	3.0	4.0	9.0	6.5	7.5	14.5	13.5	14.0	20.5	19.0	20.0
21	5.0	3.0	4.0	11.5	9.0	10.0	13.0	11.5	12.5	21.5	19.0	20.5
22	6.0	5.0	5.5	13.0	11.5	12.0	13.0	11.5	12.0	22.5	20.0	21.5
23	5.5	4.5	5.0	13.0	12.0	12.5	13.0	11.5	12.5	23.0	21.0	22.0
24	5.5	4.5	5.0	12.0	10.0	10.5	13.0	12.0	12.5	24.0	21.5	23.0
25	6.5	5.0	5.5	12.0	9.5	11.0	14.5	11.5	13.0	25.0	22.5	23.5
26	10.0	4.5	7.5	12.0	11.0	11.5	16.5	13.5	15.0	24.0	23.5	24.0
27	5.0	4.0	4.5	13.0	11.0	12.0	16.5	14.5	15.5	23.5	22.0	22.5
28	6.0	4.0	5.0	13.0	12.0	12.5	16.5	15.0	16.0	24.0	21.0	22.5
29	---	---	---	12.0	10.0	11.0	17.5	15.5	16.5	25.0	22.5	24.0
30	---	---	---	9.5	8.5	9.0	19.0	16.5	17.5	25.5	23.5	24.5
31	---	---	---	10.0	8.0	9.0	---	---	---	26.0	24.0	25.0
MONTH	10.0	.5	4.5	13.0	3.0	8.0	19.0	9.0	13.5	26.0	13.5	20.5

SCIOTO RIVER BASIN

03234300 PAINT CREEK AT CHILLICOTHE, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	26.0	24.5	25.5	29.0	26.0	27.5	28.0	22.5	25.0	27.0	23.0	25.0
2	26.0	24.0	25.0	30.5	26.0	28.0	28.5	24.0	26.5	26.5	22.0	24.5
3	25.5	23.5	24.5	28.5	26.0	27.5	27.5	25.0	26.5	25.5	23.5	24.5
4	24.5	22.5	23.5	27.0	25.0	26.0	28.5	24.5	26.5	24.5	23.0	23.5
5	23.0	21.0	22.5	28.0	24.0	26.0	26.0	24.0	25.0	24.0	22.0	23.0
6	23.0	20.5	22.0	27.5	24.5	26.0	25.0	23.0	23.5	25.5	21.5	23.0
7	23.0	20.5	22.0	29.0	25.5	27.0	26.5	21.5	23.5	25.5	21.0	23.5
8	23.5	20.5	22.0	28.0	24.5	26.0	27.0	23.0	25.0	25.0	20.5	23.0
9	24.5	20.5	22.5	25.5	23.5	24.0	25.0	22.0	23.5	24.0	21.5	23.0
10	24.5	21.0	23.0	24.5	23.0	23.5	25.0	21.0	23.0	26.0	22.5	24.0
11	24.5	22.0	23.0	26.0	22.5	24.0	25.5	21.5	23.5	26.5	23.5	25.0
12	25.0	22.5	23.5	25.5	23.5	24.5	26.5	22.0	24.0	24.5	22.0	23.5
13	26.0	22.0	24.0	27.0	23.5	25.0	24.5	22.0	23.0	26.0	22.0	24.0
14	26.5	22.0	24.5	27.5	24.0	25.5	25.0	21.0	23.0	27.0	23.5	25.0
15	26.5	23.5	25.0	27.5	23.5	25.5	26.0	21.5	24.0	27.5	24.0	25.5
16	26.5	24.0	25.5	27.5	22.5	25.0	26.5	22.0	24.5	28.0	24.5	26.0
17	26.5	24.0	25.0	28.0	23.5	26.0	25.5	22.5	24.0	27.5	25.0	26.0
18	27.0	23.5	25.0	28.5	24.5	26.5	26.0	22.5	24.0	25.0	23.0	24.0
19	27.0	24.0	25.5	28.0	26.0	27.0	24.5	22.5	23.5	23.0	20.0	21.5
20	28.0	24.0	26.0	29.5	25.5	27.5	23.0	21.0	22.0	20.0	17.5	19.0
21	27.5	24.5	26.5	30.0	26.5	28.0	25.0	20.0	22.0	19.0	15.0	17.0
22	26.5	24.0	25.0	31.0	27.0	29.0	26.0	21.0	23.5	18.0	15.0	16.5
23	24.5	22.0	23.5	31.0	27.5	29.0	26.5	22.5	24.5	20.5	17.0	18.0
24	26.5	22.0	24.5	29.5	26.0	27.5	27.0	23.5	25.0	18.0	15.5	16.0
25	26.5	23.0	25.0	27.0	25.5	26.5	27.5	24.5	26.0	17.0	14.5	15.5
26	27.0	23.0	25.0	27.5	24.5	25.5	27.5	24.0	26.0	17.0	14.5	16.0
27	27.0	23.0	25.0	27.0	23.5	25.5	27.5	24.0	25.5	17.0	13.0	15.0
28	27.5	24.0	25.5	25.5	22.5	24.0	27.0	24.5	26.0	16.5	14.0	15.0
29	27.5	24.5	26.0	24.5	22.5	23.5	28.0	24.5	26.5	17.5	14.0	15.5
30	29.0	25.0	27.0	25.5	23.0	24.0	27.5	25.0	26.0	19.0	15.0	17.0
31	---	---	---	26.5	21.5	24.0	26.5	24.0	25.0	---	---	---
MONTH	29.0	20.5	24.5	31.0	21.5	26.0	28.5	20.0	24.5	28.0	13.0	21.5
YEAR	31.0	.5	15.0									

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	9.7	9.4	9.5	13.4	10.9	11.9	11.1	10.5	10.8
2	10.1	8.5	9.1	9.7	8.3	9.3	12.3	10.6	11.3	10.8	10.3	10.5
3	10.4	8.6	9.3	8.3	7.7	8.1	10.6	8.7	10.0	10.5	10.2	10.3
4	8.7	7.9	8.3	8.5	7.6	7.9	11.5	8.3	10.1	11.2	10.5	11.1
5	8.6	7.9	8.3	8.7	7.9	8.4	11.4	11.0	11.2	11.3	11.2	11.2
6	8.7	8.3	8.4	10.9	7.9	9.4	11.7	10.9	11.4	11.4	11.2	11.3
7	9.0	8.2	8.5	11.3	10.4	10.8	11.8	11.6	11.7	11.7	11.4	11.5
8	8.7	8.1	8.3	11.7	10.6	11.1	11.9	11.0	11.7	11.5	11.3	11.5
9	8.3	8.0	8.2	11.4	10.7	11.0	11.9	11.5	11.8	11.9	11.5	11.6
10	8.4	7.9	8.1	11.5	10.6	11.0	11.8	11.6	11.8	11.6	11.3	11.5
11	9.1	8.2	8.7	12.1	10.8	11.3	11.8	11.5	11.7	11.2	10.9	11.1
12	9.1	8.6	8.8	12.2	10.8	11.4	11.7	11.2	11.5	11.1	10.8	10.9
13	8.6	8.1	8.2	12.5	11.0	11.6	11.3	10.5	11.1	11.4	11.1	11.2
14	8.5	8.1	8.4	12.7	11.2	11.8	12.0	10.7	11.5	11.2	10.9	11.1
15	8.7	8.4	8.6	12.0	11.0	11.4	11.6	10.9	11.4	11.0	10.8	10.9
16	9.1	8.7	9.0	12.0	10.5	11.1	11.2	10.8	11.1	10.9	10.7	10.8
17	9.4	8.8	9.0	12.3	10.3	11.1	11.6	11.2	11.4	10.7	10.5	10.6
18	9.2	8.7	9.0	12.9	10.8	11.6	11.6	9.5	10.3	10.7	10.6	10.6
19	9.8	9.2	9.5	12.5	11.0	11.6	11.2	10.3	10.8	10.7	10.5	10.6
20	9.9	9.3	9.7	13.0	10.9	11.7	11.4	11.2	11.2	10.5	10.3	10.4
21	9.8	9.2	9.5	13.0	10.7	11.7	11.1	10.4	10.7	10.7	10.3	10.5
22	9.3	9.1	9.2	11.0	9.9	10.6	10.8	9.5	10.3	11.2	10.7	11.0
23	9.4	9.3	9.3	10.9	10.0	10.4	11.0	9.7	10.3	11.3	11.1	11.2
24	9.9	9.4	9.7	11.3	10.3	10.8	11.4	10.4	10.9	11.2	11.1	11.1
25	9.9	9.5	9.7	12.0	10.4	11.0	11.6	10.0	11.0	11.5	11.1	11.3
26	10.2	9.7	9.9	12.2	10.3	11.0	11.7	9.9	10.9	11.3	11.2	11.2
27	10.2	9.7	10.0	11.9	9.5	10.4	11.9	10.5	11.2	11.4	11.1	11.2
28	10.0	9.4	9.8	10.1	8.8	9.5	11.5	10.1	10.6	11.3	11.1	11.2
29	10.4	9.5	10.1	12.2	9.5	10.7	11.1	10.0	10.5	11.2	11.1	11.2
30	10.2	9.3	10.0	13.0	10.6	11.5	10.8	8.9	10.1	11.3	11.1	11.2
31	9.9	9.5	9.7	---	---	---	11.0	9.6	10.5	11.6	11.3	11.5
MONTH	10.4	7.9	9.1	13.0	7.6	10.6	13.4	8.3	11.0	11.9	10.2	11.0

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	11.7	11.5	11.6	10.8	10.4	10.7	9.9	9.6	9.8	9.5	8.0	8.7
2	11.5	11.2	11.3	10.3	9.8	10.2	9.9	9.6	9.8	9.9	8.1	8.9
3	11.2	11.0	11.1	10.2	9.7	10.0	10.0	9.7	9.8	10.4	8.1	9.1
4	10.9	10.6	10.8	11.0	10.3	10.7	9.8	9.4	9.7	9.9	7.8	8.7
5	10.6	10.2	10.4	11.0	10.5	10.8	9.7	9.2	9.5	10.0	8.1	8.9
6	10.6	10.1	10.3	10.5	10.2	10.4	9.7	9.0	9.4	9.1	7.8	8.4
7	11.1	10.7	10.9	10.8	10.3	10.5	9.6	8.9	9.2	10.5	8.0	9.1
8	11.1	11.1	11.1	11.0	10.8	10.9	9.5	8.6	9.0	10.9	8.0	9.2
9	11.0	11.0	11.0	10.8	10.6	10.7	9.6	8.6	9.0	10.0	7.4	8.5
10	11.0	11.0	11.0	10.7	10.6	10.6	9.3	8.5	8.9	10.5	7.4	8.8
11	11.3	11.0	11.1	10.8	10.5	10.7	9.8	9.3	9.5	10.5	7.3	8.8
12	11.4	11.3	11.3	10.7	10.5	10.6	10.0	9.3	9.6	9.8	7.0	8.2
13	11.5	10.4	11.3	11.2	10.7	11.0	9.6	9.3	9.5	9.6	6.7	8.0
14	11.3	11.2	11.2	11.3	11.2	11.2	9.4	9.1	9.3	9.1	6.3	7.6
15	11.6	11.3	11.5	11.3	11.2	11.3	9.0	8.7	8.9	8.4	6.1	7.2
16	11.7	11.4	11.5	11.6	11.2	11.4	9.1	8.7	8.9	7.1	5.9	6.4
17	11.4	11.2	11.3	11.2	10.9	11.1	9.2	8.8	9.0	7.2	5.4	6.1
18	11.7	11.2	11.3	10.8	10.7	10.7	9.2	8.9	9.1	6.5	5.2	5.8
19	11.7	11.3	11.4	10.8	10.6	10.7	9.0	8.8	9.0	7.0	5.7	6.3
20	11.7	11.5	11.6	10.6	10.1	10.5	9.0	8.8	8.9	6.6	5.7	6.1
21	11.7	11.2	11.5	10.1	9.5	9.9	9.1	8.9	9.0	6.4	5.6	6.0
22	11.2	10.9	11.1	9.5	9.3	9.4	9.3	9.1	9.2	6.7	5.5	6.0
23	11.1	10.9	11.0	9.4	9.2	9.3	9.3	9.0	9.1	6.6	5.4	5.9
24	11.5	10.9	11.2	10.2	9.4	9.8	9.4	9.0	9.2	7.0	5.3	6.0
25	10.9	10.8	10.8	10.0	9.7	9.9	9.5	9.0	9.3	7.1	5.3	6.1
26	11.1	10.9	11.0	9.8	9.7	9.8	9.3	8.8	9.1	6.5	5.5	5.9
27	11.6	11.0	11.1	9.8	9.4	9.7	9.2	8.7	8.9	6.4	5.5	5.9
28	11.3	10.8	11.1	9.6	9.4	9.5	9.4	8.6	8.9	6.0	5.8	6.0
29	---	---	---	9.5	9.4	9.5	9.4	8.5	8.9	6.3	5.8	6.0
30	---	---	---	9.9	9.6	9.7	9.5	8.3	8.8	6.1	5.9	6.0
31	---	---	---	10.0	9.7	9.8	---	---	---	6.2	5.8	6.1
MONTH	11.7	10.1	11.1	11.6	9.2	10.4	10.0	8.3	9.2	10.9	5.2	7.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	6.0	5.7	5.9	7.0	5.5	6.2	7.7	6.5	7.0	7.5	5.8	6.5
2	6.1	5.8	5.9	6.5	5.2	5.8	7.8	6.3	7.0	7.8	6.0	6.7
3	6.1	5.8	6.0	6.3	5.2	5.7	7.4	6.1	6.8	7.4	6.0	6.6
4	7.2	6.0	6.6	6.4	5.4	5.8	7.8	6.2	6.9	7.3	6.0	6.5
5	7.5	7.1	7.3	6.6	5.6	6.0	7.9	6.1	6.9	7.9	6.1	6.8
6	7.6	7.3	7.5	6.7	5.5	6.0	7.7	6.4	7.0	7.9	6.3	7.0
7	7.7	7.3	7.5	6.6	5.4	5.9	8.3	6.7	7.4	8.0	6.3	7.0
8	7.8	7.4	7.6	5.9	5.1	5.5	8.1	6.4	7.1	8.1	6.3	7.0
9	7.9	7.5	7.7	6.6	5.6	6.0	6.6	6.3	6.5	7.9	6.2	7.0
10	8.1	7.4	7.7	7.2	5.7	6.4	7.1	6.6	6.8	7.9	6.1	6.8
11	8.2	7.2	7.6	7.4	6.4	6.9	7.5	6.5	6.9	7.6	5.9	6.7
12	8.2	7.2	7.6	7.1	6.3	6.6	7.7	6.5	7.0	7.7	5.9	6.6
13	8.5	7.1	7.7	7.6	6.3	6.8	7.5	6.5	6.9	7.8	6.1	6.7
14	9.0	6.9	7.8	8.1	6.3	7.1	8.1	6.7	7.3	7.6	5.9	6.6
15	8.9	6.9	7.9	8.1	6.4	7.1	8.0	6.6	7.2	7.6	5.8	6.6
16	9.2	6.7	7.8	8.4	6.4	7.2	8.1	6.5	7.1	7.5	5.6	6.4
17	9.0	6.6	7.6	8.3	6.1	7.2	7.7	6.3	6.9	7.3	5.5	6.3
18	9.3	6.5	7.8	8.1	6.0	7.0	7.8	6.2	6.8	7.2	5.6	6.2
19	8.9	6.2	7.5	7.4	5.6	6.5	7.2	6.1	6.7	7.6	5.9	6.5
20	8.6	6.0	7.2	7.8	5.6	6.6	7.5	6.4	6.9	8.2	6.6	7.3
21	8.5	5.6	7.0	7.8	5.6	6.6	7.9	6.5	7.1	8.7	7.0	7.7
22	7.2	5.2	6.1	7.5	5.3	6.3	8.1	6.4	7.0	8.9	7.3	8.0
23	7.5	5.3	6.3	7.2	5.0	6.0	8.3	6.1	7.1	8.7	7.3	7.9
24	7.3	5.6	6.4	7.2	5.3	6.1	7.9	6.3	7.0	8.1	7.2	7.6
25	8.1	5.7	6.9	6.9	5.4	6.1	8.0	6.1	6.9	8.9	7.5	8.0
26	8.1	6.3	7.1	7.4	5.8	6.5	7.8	6.0	6.8	8.8	7.5	8.1
27	7.9	6.2	7.0	7.4	5.9	6.6	7.7	6.0	6.7	9.0	7.6	8.2
28	8.1	6.1	7.0	7.3	5.8	6.6	7.6	5.9	6.6	9.2	7.7	8.3
29	7.9	5.9	6.8	6.8	5.7	6.3	7.5	5.8	6.6	9.3	7.7	8.3
30	7.7	5.8	6.7	7.5	5.9	6.7	7.2	5.8	6.4	9.2	7.6	8.3
31	---	---	---	7.4	6.5	6.9	6.7	5.1	5.9	---	---	---
MONTH	9.3	5.2	7.1	8.4	5.0	6.4	8.3	5.1	6.9	9.3	5.5	7.1
YEAR	13.4	5.0	8.9									

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OH
(National Stream Quality Accounting Network Station)

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 National Geodetic Vertical Datum of 1929. Prior to Nov. 7, 1930, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Nov. 9, 10, Dec. 13, July 11, 12, Aug. 7-9. Records good, except for estimated discharges which are fair. Flow slightly regulated by 8 reservoirs 45 mi to 105 mi upstream from station. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--61 years, 4,654 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 177,000 ft³/s Jan. 23, 1937, from rating curve extended above 112,000 ft³/s; maximum gage height, 26.4 ft Jan. 23, 1937, from floodmarks, and Jan. 23, 1959; minimum daily discharge, 244 ft³/s Oct. 23, 1930.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 42,700 ft³/s Jan. 2, gage height, 18.50 ft; minimum daily, 493 ft³/s Sept. 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2320	2490	2500	36500	7510	4610	7020	3300	3380	1010	713	573
2	1500	2370	2270	41800	5640	4750	5450	3240	2800	1030	708	562
3	1400	2450	5870	34000	5310	4760	4720	3400	3740	2350	702	504
4	2910	2680	15400	24500	4680	4750	3920	3490	4780	1640	785	493
5	8800	2760	19300	23600	4740	6150	3700	3110	3240	1250	784	592
6	7450	2860	17400	23800	8840	6710	4160	3250	2620	1140	1040	718
7	5520	3010	14300	24000	23700	13800	4030	3410	2490	1120	780	669
8	4550	2580	11500	21000	24500	13400	3420	2870	2100	1140	700	588
9	4420	2460	8200	19100	22800	9670	3430	2800	1800	1120	800	544
10	4950	2560	7070	18000	16300	8140	6280	2720	1630	1190	1090	525
11	10900	3450	5760	18200	12600	6390	7670	2600	1540	1200	1140	825
12	11200	3010	4930	17900	10600	5820	5230	2540	1520	1200	886	1030
13	13500	3270	3560	16700	9170	7090	10200	2440	2330	1350	755	807
14	10700	3340	3460	14700	12700	12900	20100	2220	1830	1220	714	776
15	8170	3180	3790	11900	14200	12400	23500	2120	1530	1160	689	1010
16	7940	3520	8520	11900	9770	10600	25100	2180	1510	1070	689	858
17	6620	2760	10900	11500	6960	9420	21200	2180	1800	1030	674	670
18	6450	2700	22500	11900	6660	12100	15900	2340	1810	975	758	602
19	7540	2630	36800	10800	11900	14400	13600	2450	1520	922	891	663
20	6970	2360	31100	9190	19600	13100	11200	3110	1400	920	932	595
21	6780	2260	31100	8080	19600	10300	9420	3070	1250	898	816	539
22	6450	2300	28100	6420	16200	9040	7160	2500	1200	836	759	516
23	10200	3700	30400	6160	12400	22100	6210	2260	1330	797	709	507
24	9220	4610	28600	5620	9360	18100	5820	2090	1610	788	709	510
25	7420	3970	28000	5130	7900	13300	6020	2010	1380	860	697	703
26	7520	3450	26900	4640	7030	14400	5760	2030	1270	921	631	622
27	5790	3120	23400	4480	5090	16700	5150	2130	1170	797	581	573
28	4730	3480	21600	4800	4680	16400	4940	4080	1100	753	567	550
29	4150	3640	18700	4920	---	13300	4650	4910	1060	805	562	524
30	3430	2800	23000	6080	---	9690	3840	6050	1030	787	584	501
31	2750	---	38100	8590	---	7800	---	5460	---	750	661	---
TOTAL	202250	89770	533030	465910	320440	332090	258800	92360	57770	33029	23506	19149
MEAN	6524	2992	17190	15030	11440	10710	8627	2979	1926	1065	758	638
MAX	13500	4610	38100	41800	24500	22100	25100	6050	4780	2350	1140	1030
MIN	1400	2260	2270	4480	4680	4610	3420	2010	1030	750	562	493
CAL YR 1990	TOTAL 3095670		MEAN 8481		MAX 38600		MIN 1080					
WTR YR 1991	TOTAL 2428104		MEAN 6652		MAX 41800		MIN 493					

SCIOTO RIVER BASIN

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03234500 SCIOTO RIVER AT HIGBY, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1967 to current year.

pH: March 1967 to current year.

WATER TEMPERATURES: March 1967 to current year.

DISSOLVED OXYGEN: March 1967 to current year.

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 each month 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.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 971 microsiemens Aug. 22; minimum, 224 microsiemens Dec. 31.

pH: Maximum, 9.0 units June 26-28; minimum, 7.3 units May 26, 27, 29.

WATER TEMPERATURES: Maximum, 31.0°C July 22, 23; minimum, 0.5°C Jan. 1, 2, 5.

DISSOLVED OXYGEN: Maximum recorded, 17.0 mg/L May 13; minimum recorded, 3.7 mg/L Aug. 4.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
DEC 12...	0945	4890	551	8.2	2.5	6.0	65	12.8	95	4800	660
MAR 19...	1030	14500	560	8.1	11.0	8.0	85	10.9	94	>6000	9400
JUN 11...	0930	1490	791	8.4	25.0	23.5	13	9.0	108	170	2000
AUG 27...	1100	430	892	8.3	27.0	26.0	2.7	8.6	107	33	160

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
DEC 12...	260	69	22	18	4.4	221	0	178	54	31	0.20
MAR 19...	230	59	21	18	2.6	196	0	161	57	36	0.20
JUN 11...	310	76	28	40	3.4	276	2	220	110	44	0.40
AUG 27...	310	78	27	67	6.3	257	2	213	140	80	0.50

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
DEC 12...	7.4	349	3.60	0.070	0.050	0.90	0.290	0.180	0.170	40
MAR 19...	5.7	309	3.20	0.180	0.110	1.3	0.170	0.070	0.060	60
JUN 11...	5.7	433	2.80	0.010	0.030	1.1	0.220	0.110	0.080	40
AUG 27...	6.0	542	1.60	<0.010	0.020	0.80	0.320	0.190	0.130	50

DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)
DEC 12...	1	55	<0.5	<1.0	<1	<3	3	68	<1	8
MAR 19...	<1	47	<0.5	<1.0	<1	<3	26	57	1	5
JUN 11...	2	85	<0.5	<1.0	<1	<3	2	56	1	12
AUG 27...	3	82	<0.5	<1.0	<1	<3	2	100	<1	14

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	SEDI- MENT, SUS- PENDE (MG/L)
DEC 12...	11	<0.1	<10	3	<1	<1.0	1000	<6	7	67
MAR 19...	7	<0.1	<10	4	<1	<1.0	890	<6	46	153
JUN 11...	12	<0.1	10	4	<1	<1.0	1300	<6	8	56
AUG 27...	22	<0.1	<10	4	<1	<1.0	1200	<6	11	37

SCIOTO RIVER BASIN

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03234500 SCIOTO RIVER AT HIGBY, OH--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	694	620	645	729	710	721	720	716	719	316	287	301
2	768	698	735	729	702	712	740	722	733	286	270	276
3	770	718	743	769	700	741	734	248	484	336	280	303
4	722	442	617	729	694	716	534	396	475	375	340	364
5	588	442	506	729	720	725	536	466	499	390	374	380
6	484	458	469	720	714	718	540	492	520	380	368	373
7	550	488	519	728	718	725	492	476	487	382	372	376
8	580	552	563	732	718	726	476	452	460	388	378	385
9	604	586	596	720	716	718	500	464	485	---	---	---
10	672	606	633	720	652	695	510	500	505	432	402	407
11	666	432	492	700	672	688	556	514	535	---	---	---
12	536	466	505	706	692	701	576	556	564	---	---	---
13	548	476	510	700	692	696	632	578	603	---	---	---
14	556	540	547	710	690	700	678	636	659	---	---	---
15	574	556	567	712	694	706	678	492	619	546	544	545
16	570	564	566	724	712	718	604	528	565	560	526	549
17	574	562	566	714	686	697	520	488	495	552	522	535
18	580	546	567	710	704	705	502	272	382	552	536	544
19	588	546	566	744	710	731	---	---	---	552	536	542
20	580	544	559	740	722	734	---	---	---	584	552	568
21	588	576	580	736	722	728	---	---	---	598	586	594
22	596	526	578	746	684	738	---	---	---	624	598	607
23	532	510	520	668	480	572	---	---	---	656	626	641
24	534	516	522	666	636	651	---	---	---	678	656	667
25	588	536	563	644	632	637	---	---	---	684	676	679
26	592	584	589	672	644	660	---	---	---	700	686	693
27	622	594	611	696	674	683	---	---	---	702	676	690
28	634	624	629	718	702	712	---	---	---	680	642	662
29	651	634	639	722	718	721	---	---	---	662	642	650
30	682	644	663	720	714	717	---	---	---	660	562	617
31	714	678	694	---	---	---	308	224	252	670	572	628
MONTH	770	432	583	769	480	703	740	224	528	702	270	522
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	686	634	660	658	650	656	578	566	574	692	671	681
2	664	638	649	664	656	660	610	578	594	697	691	694
3	678	662	673	660	646	654	638	612	625	700	691	697
4	696	678	689	648	626	640	662	636	648	709	695	703
5	704	692	697	624	598	609	674	662	667	704	671	681
6	698	564	639	646	462	600	704	672	687	681	647	662
7	552	404	440	538	474	503	690	680	685	716	683	705
8	458	434	448	518	488	497	684	658	676	716	686	702
9	462	450	455	578	522	550	652	638	647	688	677	683
10	474	460	464	616	562	584	652	606	624	698	679	691
11	492	476	486	638	616	629	592	500	545	707	693	700
12	516	476	493	648	636	640	588	514	554	708	673	697
13	518	498	508	644	398	530	592	264	419	679	645	665
14	494	416	442	470	403	428	404	368	378	661	639	652
15	514	428	476	572	478	540	390	304	348	662	643	654
16	566	516	534	576	558	567	430	342	386	652	625	636
17	610	572	598	580	558	567	498	434	465	651	614	632
18	614	426	576	578	530	547	510	500	504	636	601	623
19	526	430	491	546	532	540	512	496	505	621	600	610
20	---	---	---	552	530	543	526	498	518	606	585	596
21	---	---	---	548	540	545	550	518	532	589	565	581
22	---	---	---	546	448	512	574	552	561	575	527	557
23	---	---	---	441	332	378	594	576	587	563	527	546
24	---	---	---	448	364	398	618	586	599	565	507	538
25	---	---	---	506	450	484	620	606	614	534	481	511
26	---	---	---	504	442	481	638	606	616	510	482	499
27	---	---	---	450	428	441	668	640	654	532	500	519
28	650	628	635	476	424	449	672	660	665	562	520	545
29	---	---	---	516	478	498	660	640	649	554	478	504
30	---	---	---	550	518	536	784	651	671	477	447	463
31	---	---	---	568	550	558	---	---	---	472	447	458
MONTH	704	404	553	664	332	541	784	264	573	716	447	616

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	515	477	506	759	737	749	886	859	878	---	---	---
2	545	514	533	760	696	736	886	865	877	---	---	---
3	546	519	533	774	687	727	879	869	874	---	---	---
4	652	522	586	771	715	749	882	867	877	---	---	---
5	596	588	592	713	671	691	880	854	862	---	---	---
6	640	592	612	704	685	695	900	871	881	---	---	---
7	693	640	672	741	694	718	941	903	925	---	---	---
8	748	694	717	778	740	758	948	908	929	---	---	---
9	751	723	735	793	777	784	904	817	887	---	---	---
10	732	721	726	812	793	802	880	757	803	---	---	---
11	744	734	739	800	792	799	818	747	774	---	---	---
12	762	744	752	808	735	792	879	822	852	---	---	---
13	810	755	774	788	705	749	922	881	904	---	---	---
14	827	768	807	799	785	792	923	888	908	---	---	---
15	761	715	738	796	786	792	892	885	889	---	---	---
16	721	692	708	825	792	804	886	865	875	---	---	---
17	720	691	709	831	774	800	908	877	891	---	---	---
18	771	713	751	801	784	790	923	829	906	---	---	---
19	776	732	757	830	805	819	922	914	919	908	792	877
20	762	736	749	851	831	836	941	913	924	786	742	756
21	770	725	745	867	854	859	964	944	957	781	751	765
22	735	706	718	907	868	882	971	962	966	791	776	781
23	759	710	734	912	896	905	---	---	---	847	792	818
24	760	721	738	908	883	893	---	---	---	854	786	827
25	797	759	782	888	855	873	---	---	---	783	750	757
26	795	709	765	854	822	834	---	---	---	769	750	757
27	736	699	717	860	839	846	---	---	---	780	766	771
28	726	717	721	866	842	852	---	---	---	785	772	776
29	734	714	722	857	814	836	---	---	---	790	783	788
30	750	734	743	888	811	846	---	---	---	786	761	771
31	---	---	---	855	826	842	---	---	---	---	---	---
MONTH	827	477	703	912	671	802	971	747	889	908	742	787
YEAR	971	224	645									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.9	7.9	7.9	8.0	8.0	8.0	8.3	8.2	8.2	8.0	7.9	7.9
2	7.9	7.8	7.9	8.0	8.0	8.0	8.3	8.2	8.2	8.0	7.9	8.0
3	7.9	7.8	7.9	8.0	7.9	8.0	8.2	7.7	8.0	7.9	7.9	7.9
4	8.0	7.8	7.9	8.0	8.0	8.0	8.0	7.9	7.9	8.1	7.9	8.0
5	7.9	7.7	7.8	8.0	8.0	8.0	8.1	8.0	8.0	8.1	8.0	8.1
6	7.9	7.7	7.8	8.1	8.0	8.0	8.1	8.0	8.1	8.0	8.0	8.0
7	8.0	7.9	7.9	8.1	8.0	8.1	8.0	8.0	8.0	8.0	8.0	8.0
8	8.0	7.9	8.0	8.1	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
9	8.0	7.9	8.0	8.1	8.0	8.1	8.0	8.0	8.0	---	---	---
10	8.0	7.9	7.9	8.1	8.0	8.1	8.0	8.0	8.0	8.0	7.8	8.0
11	7.9	7.7	7.8	8.1	8.1	8.1	8.0	8.0	8.0	---	---	---
12	7.9	7.8	7.9	8.1	8.0	8.1	8.0	8.0	8.0	---	---	---
13	7.9	7.9	7.9	8.2	8.1	8.1	8.0	8.0	8.0	---	---	---
14	8.0	7.9	7.9	8.2	8.1	8.1	8.0	8.0	8.0	---	---	---
15	8.0	7.9	7.9	8.2	8.1	8.2	8.0	8.0	8.0	---	---	---
16	8.0	8.0	8.0	8.2	8.1	8.2	8.0	7.9	8.0	8.1	8.0	8.0
17	8.0	8.0	8.0	8.2	8.1	8.1	8.0	7.9	8.0	8.0	8.0	8.0
18	8.0	8.0	8.0	8.2	8.1	8.2	8.1	7.8	7.9	8.1	8.0	8.1
19	8.0	8.0	8.0	8.2	8.1	8.1	7.8	7.7	7.8	8.0	8.0	8.0
20	8.0	8.0	8.0	8.2	8.1	8.2	8.0	7.8	7.9	8.0	8.0	8.0
21	8.0	8.0	8.0	8.2	8.1	8.2	---	---	---	8.0	8.0	8.0
22	8.0	8.0	8.0	8.2	8.0	8.1	---	---	---	8.0	8.0	8.0
23	8.0	7.9	8.0	8.2	7.9	8.0	---	---	---	8.0	8.0	8.0
24	8.0	7.9	7.9	8.1	8.1	8.1	---	---	---	8.0	8.0	8.0
25	8.0	8.0	8.0	8.2	8.1	8.1	---	---	---	8.0	8.0	8.0
26	8.1	8.0	8.1	8.2	8.1	8.2	---	---	---	8.0	8.0	8.0
27	8.1	8.0	8.1	8.2	8.1	8.2	---	---	---	8.1	8.0	8.0
28	8.1	8.0	8.0	8.1	8.1	8.1	---	---	---	8.1	8.0	8.0
29	8.1	8.0	8.0	8.2	8.1	8.1	---	---	---	8.1	8.0	8.1
30	8.1	8.0	8.0	8.3	8.1	8.2	---	---	---	8.1	8.1	8.1
31	8.0	8.0	8.0	---	---	---	7.9	7.7	7.8	8.1	8.1	8.1
MONTH	8.1	7.7	8.0	8.3	7.9	8.1	8.3	7.7	8.0	8.1	7.8	8.0

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	20.0	18.0	19.0	13.5	12.0	13.0	8.5	7.5	8.0	5.5	.5	3.0
2	20.0	18.0	19.0	14.0	12.5	13.0	9.0	8.5	8.5	4.5	.5	3.0
3	19.0	17.5	18.5	14.0	13.0	13.5	10.0	9.0	9.5	4.5	3.5	4.0
4	19.0	18.5	19.0	14.0	13.0	13.5	10.0	7.5	9.0	4.5	1.5	3.0
5	19.5	18.0	19.0	14.0	13.5	14.0	7.5	6.0	7.0	3.5	.5	2.5
6	20.0	18.0	19.0	13.5	12.0	12.5	6.0	5.5	6.0	4.0	3.5	4.0
7	20.0	18.5	19.5	12.0	11.0	11.5	6.0	6.0	6.0	5.5	4.0	4.5
8	20.5	19.0	20.0	11.0	10.0	10.5	6.0	5.5	5.5	4.5	3.0	4.0
9	20.5	20.0	20.5	10.5	10.0	10.0	5.5	5.0	5.5	5.0	4.0	4.5
10	20.5	19.5	20.0	10.0	9.5	10.0	6.0	5.0	5.5	4.5	4.0	4.0
11	19.5	17.5	18.0	10.0	9.0	9.5	6.0	5.5	6.0	---	---	---
12	17.0	16.0	16.5	10.0	9.0	9.5	7.5	6.0	6.5	---	---	---
13	16.0	15.5	16.0	9.0	8.5	9.0	8.0	7.5	8.0	---	---	---
14	17.0	16.0	16.5	9.0	8.0	8.5	7.5	6.5	7.0	---	---	---
15	17.0	16.0	16.5	9.5	8.0	9.0	8.0	7.0	7.5	---	---	---
16	16.5	15.5	16.0	11.0	9.0	10.0	8.0	7.0	7.5	---	---	---
17	16.5	15.5	16.0	11.0	10.0	10.5	7.0	6.5	6.5	6.0	5.5	6.0
18	16.5	15.0	16.5	10.0	9.0	9.5	9.0	6.5	8.0	5.5	5.0	5.5
19	15.0	14.5	15.0	9.5	9.0	9.0	---	---	---	5.0	4.5	5.0
20	14.5	13.5	14.0	10.5	9.0	9.5	---	---	---	5.5	5.0	5.5
21	14.5	13.0	14.0	10.0	9.0	9.5	---	---	---	5.5	4.5	5.0
22	14.5	14.5	14.5	11.0	10.0	10.5	---	---	---	4.5	3.5	4.0
23	14.5	14.0	14.5	11.0	10.0	11.0	---	---	---	3.5	3.0	3.5
24	14.5	13.5	14.0	10.5	10.0	10.0	---	---	---	4.0	3.0	3.5
25	14.0	13.0	13.5	11.0	10.0	10.5	---	---	---	3.0	2.5	3.0
26	13.0	12.0	12.5	11.5	10.0	11.0	---	---	---	2.5	2.5	2.5
27	12.5	11.5	12.0	14.0	11.5	13.0	---	---	---	3.0	2.0	2.5
28	12.5	11.5	12.0	14.0	12.5	13.5	---	---	---	4.0	3.0	3.5
29	12.0	11.0	11.5	12.5	10.0	11.5	---	---	---	4.5	3.0	3.5
30	12.0	10.5	11.5	10.0	8.5	9.0	---	---	---	4.5	4.0	4.0
31	13.0	11.0	12.0	---	---	---	---	---	---	4.0	3.0	3.5
MONTH	20.5	10.5	16.0	14.0	8.0	11.0	10.0	5.0	7.0	6.0	.5	4.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	3.0	2.0	2.5	8.5	6.5	7.5	11.5	10.0	10.5	19.5	18.0	19.0
2	4.5	3.0	3.5	11.0	8.5	9.5	12.0	10.0	11.0	19.5	17.0	18.5
3	5.5	4.0	5.0	11.0	8.0	10.0	12.5	10.0	11.5	19.5	17.0	18.5
4	6.5	5.0	5.5	8.0	6.5	7.0	13.0	11.5	12.5	19.0	18.0	18.5
5	8.0	6.5	7.0	7.5	5.5	6.5	15.0	13.0	14.0	18.5	17.0	18.0
6	8.0	7.5	8.0	8.0	7.5	8.0	17.0	13.5	15.0	18.5	17.0	17.5
7	7.5	6.0	6.5	7.5	7.0	7.5	18.0	15.5	16.5	18.5	15.5	17.0
8	6.0	4.5	5.0	7.0	6.5	7.0	18.5	17.0	18.0	19.0	17.0	18.0
9	4.5	4.0	4.5	7.0	5.5	6.5	19.0	17.5	18.0	19.5	18.0	18.5
10	5.5	4.5	5.0	7.0	6.0	6.5	18.0	15.0	16.5	21.5	19.0	20.0
11	5.5	4.5	5.0	8.0	6.0	7.0	15.0	13.0	14.0	22.5	20.0	21.0
12	5.0	4.0	4.5	7.5	6.5	6.5	14.0	13.0	13.5	23.5	21.0	22.0
13	5.0	4.5	4.5	6.5	4.5	5.5	14.0	12.0	13.0	24.5	22.0	23.5
14	5.5	4.0	5.0	5.0	4.5	5.0	14.0	13.0	13.5	25.5	23.0	24.0
15	4.0	2.5	3.0	7.0	5.0	6.0	15.5	14.0	14.5	26.0	23.0	24.5
16	2.5	1.5	2.0	7.5	5.5	6.5	16.0	14.5	15.5	26.0	24.0	25.0
17	3.0	2.0	2.5	8.0	6.5	7.5	16.5	15.5	16.0	26.0	24.0	25.0
18	4.0	3.0	3.5	8.5	8.0	8.5	16.5	15.0	16.0	25.5	23.5	24.0
19	---	---	---	8.5	8.0	8.5	16.0	15.5	15.5	23.5	22.0	23.0
20	---	---	---	9.5	7.5	8.5	15.5	14.0	14.5	23.0	21.5	22.5
21	---	---	---	11.0	9.0	9.5	13.5	12.0	13.0	23.5	21.0	22.5
22	---	---	---	14.0	11.0	12.0	13.0	11.5	12.0	24.5	22.0	23.0
23	---	---	---	16.0	13.5	14.5	13.5	11.5	12.5	25.0	23.0	24.0
24	---	---	---	14.0	12.0	13.0	13.0	12.5	12.5	25.5	23.0	24.5
25	---	---	---	13.5	11.0	12.0	14.5	12.0	13.0	27.0	24.5	25.5
26	---	---	---	12.0	11.0	11.5	16.5	14.0	15.0	26.5	25.5	26.0
27	---	---	---	13.0	11.0	12.0	17.0	15.5	16.5	26.0	24.0	25.0
28	---	---	---	13.5	12.5	13.0	17.5	16.5	17.0	26.0	23.5	24.5
29	---	---	---	13.0	11.0	12.0	19.0	17.0	18.0	26.0	24.5	25.0
30	---	---	---	11.0	10.0	10.5	20.0	18.0	19.0	26.5	24.5	25.5
31	---	---	---	10.5	9.0	10.0	---	---	---	27.0	25.5	26.0
MONTH	8.0	1.5	4.5	16.0	4.5	9.0	20.0	10.0	14.5	27.0	15.5	22.0

SCIOTO RIVER BASIN

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03234500 SCIOTO RIVER AT HIGBY, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	27.5	26.0	27.0	29.5	27.5	28.0	28.5	24.5	26.5	28.5	25.5	27.0
2	27.5	26.0	26.5	30.0	27.5	28.5	29.5	25.5	27.5	28.0	24.0	26.0
3	27.0	25.5	26.0	30.0	28.0	29.0	28.0	26.5	27.5	27.5	25.0	26.0
4	26.0	25.0	25.5	29.5	27.0	28.0	28.5	26.0	27.5	26.5	24.5	25.0
5	25.0	23.0	24.0	28.5	26.0	27.0	27.5	25.5	26.5	25.0	23.5	24.0
6	24.5	22.0	23.0	28.5	26.5	27.5	26.5	24.5	25.5	26.5	23.5	24.5
7	24.0	22.0	23.0	29.5	27.0	28.0	27.0	23.5	25.0	27.0	23.5	25.0
8	24.5	22.0	23.0	29.0	26.0	27.5	27.5	24.5	26.0	26.5	23.0	24.5
9	25.5	22.5	24.0	27.0	25.0	25.5	---	---	---	25.0	23.0	24.5
10	25.5	23.5	24.5	26.0	25.0	25.5	26.0	23.5	25.0	26.0	24.0	25.0
11	25.5	24.0	24.5	27.0	24.5	25.5	27.0	24.0	25.0	27.5	24.5	25.5
12	26.0	24.0	24.5	26.5	25.5	26.0	27.0	24.0	25.5	25.5	24.5	25.0
13	27.0	24.0	25.5	28.0	25.0	26.0	26.0	24.0	24.5	26.5	24.0	25.0
14	27.0	24.5	26.0	28.0	26.0	27.0	26.0	23.0	24.5	26.5	24.5	25.5
15	27.5	25.5	26.5	28.5	25.5	27.0	26.5	23.5	25.0	27.5	25.5	26.5
16	27.5	26.0	26.5	28.5	25.0	26.5	27.0	24.0	25.5	28.0	26.0	27.0
17	27.0	26.0	26.5	29.0	26.0	27.5	25.5	24.5	25.0	28.0	26.0	27.0
18	28.0	26.0	26.5	29.5	26.5	28.0	26.5	24.0	25.0	26.5	24.5	25.5
19	28.5	26.0	27.0	29.5	27.5	28.5	25.5	24.5	25.0	24.0	21.5	23.0
20	29.0	27.0	28.0	30.0	27.5	28.5	24.0	23.0	23.5	22.0	19.5	20.5
21	28.5	26.5	27.5	30.5	27.5	29.0	25.5	22.0	23.5	21.0	17.5	19.0
22	27.5	25.5	26.5	31.0	28.0	29.5	26.0	23.0	24.5	19.5	17.5	18.5
23	25.5	24.0	25.0	31.0	28.5	29.5	27.0	24.0	25.5	21.5	18.5	19.5
24	27.0	24.5	25.5	30.0	27.5	28.5	27.5	25.0	26.0	18.0	13.5	16.0
25	27.0	25.0	26.0	28.0	27.0	27.5	28.5	25.5	27.0	18.5	16.5	17.5
26	27.5	25.5	26.5	28.0	26.0	27.0	28.0	26.0	27.0	18.5	16.5	17.0
27	27.5	25.5	26.5	28.5	25.5	27.0	28.5	25.5	27.0	18.5	15.0	16.5
28	28.0	26.0	27.0	26.5	25.0	25.5	28.0	26.0	27.0	18.0	15.5	16.5
29	28.0	26.5	27.0	26.5	24.5	25.0	29.5	26.5	28.0	18.5	16.0	17.0
30	29.0	26.0	27.5	27.0	25.0	25.5	28.5	27.0	28.0	20.0	16.5	18.0
31	---	---	---	27.5	23.5	25.5	29.0	27.0	27.5	---	---	---
MONTH	29.0	22.0	26.0	31.0	23.5	27.0	29.5	22.0	25.9	28.5	13.5	22.5
YEAR	31.0	.5	16.5									

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	9.2	8.2	8.6	9.9	9.7	9.8	12.3	11.2	11.7	---	---	---
2	9.8	8.3	9.0	9.9	9.6	9.7	12.1	11.2	11.5	---	---	---
3	9.6	8.5	9.1	9.8	9.2	9.4	11.5	11.0	11.2	13.8	12.2	13.1
4	9.2	8.2	8.9	9.9	9.5	9.7	11.0	10.2	10.6	13.6	8.0	11.4
5	8.9	7.8	8.4	9.8	9.3	9.4	11.0	10.0	10.6	12.1	8.5	10.9
6	8.5	7.9	8.2	10.1	9.2	9.6	11.5	10.3	10.8	11.8	10.4	11.2
7	8.8	8.3	8.5	10.2	9.9	10.0	11.8	11.5	11.6	10.8	10.1	10.4
8	8.9	8.5	8.7	10.6	10.0	10.3	11.7	11.4	11.6	---	---	---
9	8.7	8.5	8.6	10.5	10.3	10.4	11.7	11.3	11.6	---	---	---
10	8.7	8.2	8.4	10.8	10.2	10.5	11.8	11.3	11.7	12.8	8.4	10.4
11	8.5	7.5	8.0	11.0	10.5	10.7	11.7	10.2	11.5	---	---	---
12	9.3	8.5	8.9	11.2	10.5	10.8	11.5	11.2	11.4	---	---	---
13	9.4	9.2	9.3	11.5	10.8	11.1	11.2	10.7	10.9	---	---	---
14	9.3	9.2	9.3	11.7	10.9	11.3	12.3	10.8	11.8	---	---	---
15	9.3	9.2	9.3	11.9	11.0	11.4	12.3	11.1	11.8	10.1	8.3	9.4
16	9.7	9.4	9.6	11.4	10.9	11.2	11.1	10.3	11.0	10.7	9.3	10.1
17	9.6	9.5	9.6	11.4	10.4	10.8	11.5	10.8	11.2	10.7	9.8	10.3
18	9.5	9.2	9.3	11.9	10.7	11.2	11.5	9.3	10.4	11.1	10.2	10.6
19	9.8	9.5	9.6	11.5	10.7	11.1	---	---	---	11.6	10.9	11.3
20	9.9	9.6	9.7	12.1	10.8	11.4	---	---	---	11.2	10.2	10.7
21	10.0	9.9	9.9	12.0	11.0	11.5	---	---	---	11.2	10.0	10.7
22	9.8	9.7	9.8	11.7	10.4	10.8	---	---	---	11.6	11.0	11.3
23	9.8	9.6	9.7	11.1	10.3	10.6	---	---	---	11.8	11.1	11.6
24	9.6	9.4	9.5	10.9	10.4	10.6	---	---	---	12.0	11.6	11.9
25	9.9	9.6	9.8	11.4	10.4	10.8	---	---	---	12.2	11.7	11.9
26	10.3	9.9	10.1	11.4	10.5	10.9	---	---	---	12.0	11.8	11.9
27	10.4	10.2	10.3	11.0	10.2	10.6	---	---	---	12.1	11.5	11.9
28	10.3	10.2	10.3	10.4	9.7	9.9	---	---	---	12.1	11.8	12.0
29	10.5	10.2	10.4	11.1	9.9	10.4	---	---	---	12.0	11.8	11.9
30	10.5	10.2	10.4	12.0	10.7	11.2	---	---	---	11.8	11.6	11.8
31	10.2	10.0	10.1	---	---	---	---	---	---	11.9	11.2	11.5
MONTH	10.5	7.5	9.3	12.1	9.2	10.6	12.3	9.3	11.3	13.8	8.0	11.2

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	12.2	11.8	12.0	10.8	10.2	10.6	9.0	8.7	8.8	9.1	8.4	8.6
2	12.1	11.7	11.9	10.2	9.4	9.8	9.4	8.5	8.9	10.4	8.7	9.4
3	11.8	11.5	11.7	9.9	9.4	9.6	9.9	8.7	9.2	11.3	8.8	9.8
4	11.5	11.2	11.4	10.6	10.0	10.3	9.7	9.0	9.2	10.1	9.1	9.7
5	11.2	10.9	11.0	11.1	10.6	10.8	9.2	8.9	9.0	9.6	8.7	9.2
6	11.0	10.1	10.8	10.7	8.8	10.0	9.1	8.7	8.9	9.6	8.4	8.9
7	12.0	9.8	10.5	10.0	8.8	9.4	9.0	8.4	8.8	10.9	9.0	9.8
8	10.7	7.0	9.5	9.6	8.9	9.1	8.9	8.6	8.7	10.9	9.0	9.9
9	11.3	10.1	10.8	10.6	9.6	10.1	9.0	8.6	8.8	11.1	8.8	9.8
10	11.2	10.3	10.7	10.7	10.0	10.5	9.0	8.6	8.9	12.4	9.0	10.0
11	11.1	10.3	10.6	10.7	10.0	10.5	9.4	7.3	8.9	13.8	9.5	11.4
12	12.0	10.7	11.3	10.6	10.2	10.5	10.7	9.5	10.2	15.1	9.6	12.1
13	11.4	10.6	11.0	10.6	8.3	10.2	10.9	10.2	10.5	17.0	10.0	13.1
14	10.7	10.1	10.4	10.2	9.9	10.0	10.7	9.8	10.4	16.1	9.5	12.4
15	11.1	10.0	10.6	10.5	10.0	10.3	10.1	9.4	9.7	15.0	8.7	11.5
16	11.5	10.3	11.0	10.9	9.7	10.3	9.9	9.1	9.7	13.9	8.4	10.8
17	11.7	11.2	11.4	11.0	10.0	10.6	10.0	9.4	9.7	11.9	7.5	9.4
18	11.8	11.0	11.5	10.6	9.2	10.0	10.3	9.6	10.0	9.0	7.1	8.1
19	11.0	7.9	10.1	10.0	8.9	9.4	10.0	8.2	9.0	8.9	7.3	8.1
20	10.3	9.0	9.7	9.9	8.8	9.5	9.0	8.2	8.8	8.7	7.0	7.8
21	---	---	---	9.7	7.8	8.9	9.1	8.8	8.9	9.3	7.2	8.1
22	---	---	---	8.5	7.6	8.1	9.6	9.1	9.3	11.0	7.0	8.6
23	---	---	---	---	---	---	9.5	8.8	9.3	10.3	7.1	8.6
24	---	---	---	6.6	5.2	5.7	9.6	9.0	9.4	11.2	6.8	8.7
25	---	---	---	7.4	6.5	6.9	9.7	8.5	9.3	14.7	7.1	10.2
26	---	---	---	13.1	7.3	10.0	8.8	8.4	8.6	11.8	7.2	9.5
27	---	---	---	15.0	8.3	11.6	8.6	8.2	8.4	8.9	6.7	7.7
28	11.4	10.7	11.2	9.5	8.1	8.6	8.7	8.2	8.4	8.9	6.6	7.7
29	---	---	---	8.5	7.7	8.0	8.4	8.1	8.3	6.3	5.3	5.8
30	---	---	---	8.4	7.7	8.0	8.8	8.1	8.4	6.6	5.6	6.1
31	---	---	---	9.0	8.2	8.6	---	---	---	6.9	5.9	6.4
MONTH	12.2	7.0	10.9	15.0	5.2	9.5	10.9	7.3	9.1	17.0	5.3	9.3
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	6.8	5.7	6.3	12.5	6.3	9.0	10.0	5.0	7.2	8.9	5.5	6.9
2	7.0	5.6	6.2	16.0	6.3	10.3	10.5	4.4	7.1	11.0	5.7	9.7
3	6.9	5.6	6.0	13.6	7.1	10.2	7.5	4.5	6.1	---	---	---
4	6.2	5.4	5.9	8.2	5.0	6.7	9.6	3.7	6.3	---	---	---
5	6.5	6.0	6.3	12.2	5.9	8.3	10.9	4.6	7.5	6.5	4.5	5.1
6	7.9	6.4	7.0	11.7	6.2	8.6	8.5	5.7	7.3	6.3	4.5	5.4
7	9.2	6.3	7.9	13.9	6.4	9.4	13.5	5.4	8.7	7.4	5.6	6.4
8	9.8	7.1	8.2	9.8	5.7	6.7	12.8	6.3	9.3	11.0	5.7	7.3
9	10.5	7.2	8.5	8.6	5.4	6.6	7.9	4.8	6.2	12.2	11.1	11.6
10	11.4	7.1	9.0	7.3	5.7	6.4	8.3	4.3	6.0	11.8	6.6	10.9
11	11.6	7.1	9.1	8.2	5.4	6.6	10.3	5.2	7.3	8.4	5.1	6.6
12	11.8	7.0	9.1	7.1	5.6	6.3	10.9	5.8	8.2	8.4	5.8	7.0
13	11.2	7.6	9.1	7.2	5.0	5.9	8.7	5.7	6.8	7.9	5.7	6.7
14	10.5	6.6	8.2	8.9	5.4	6.8	10.5	5.2	7.4	6.7	5.2	6.1
15	7.8	5.7	6.8	10.7	6.1	7.9	11.0	5.6	7.9	7.1	5.3	6.1
16	9.1	6.0	7.2	11.8	6.5	8.8	11.3	5.8	8.3	6.7	4.9	5.8
17	8.5	6.0	7.2	12.7	6.4	9.4	8.1	5.9	7.1	7.5	5.1	6.2
18	11.9	6.4	8.5	12.9	5.8	9.0	7.5	4.6	6.0	7.7	5.6	6.6
19	10.8	6.9	8.6	9.2	5.4	7.4	6.9	4.8	5.9	8.2	6.0	6.9
20	9.9	6.3	8.0	9.1	4.6	6.8	7.0	5.1	6.0	9.5	6.9	7.8
21	11.2	6.7	8.8	8.9	4.7	6.7	8.2	4.9	6.4	14.5	10.1	13.2
22	9.3	7.1	8.2	8.5	4.5	6.3	8.4	5.5	6.8	13.8	12.5	13.4
23	10.6	5.8	7.8	8.1	4.4	6.2	8.7	5.4	6.9	13.3	11.2	12.8
24	14.3	7.3	10.2	11.2	4.4	7.4	8.4	5.2	6.8	14.0	7.4	10.1
25	14.4	7.1	10.4	10.1	5.7	8.2	9.4	5.1	7.1	8.4	7.0	7.6
26	16.1	7.4	11.1	14.8	6.0	9.9	9.0	5.1	6.9	8.7	7.2	8.0
27	16.3	7.3	11.5	15.2	6.3	10.2	7.8	5.3	6.6	12.1	7.8	9.1
28	15.5	7.7	11.4	10.6	6.6	8.8	7.6	5.4	6.4	14.1	10.6	12.1
29	13.1	7.3	10.3	10.6	5.6	7.7	10.5	5.5	7.6	14.2	13.4	13.8
30	12.3	6.8	9.5	11.2	4.7	7.5	10.5	5.7	8.4	13.7	12.9	13.3
31	---	---	---	11.9	5.6	8.2	6.2	4.1	5.3	---	---	---
MONTH	16.3	5.4	8.4	16.0	4.4	7.9	13.5	3.7	7.0	14.5	4.5	8.7
YEAR	17.0	3.7	9.3									

SCIOTO RIVER BASIN

153

03237041 LITTLE BEAVER CREEK NEAR PIKETON, OHIO

LOCATION.--Lat 39°01'52", long 83°00'16", Pike County, Hydrologic Unit 05060002, on left bank 100 feet downstream from railroad fill, 1.4 mi upstream from confluence with Big Beaver Creek and 2.6 mi south of Piketon.

DRAINAGE AREA.--4.53 mi².

PERIOD OF RECORD.--November 1990 to September 1991.

GAGE.--Water-stage recorder. Altitude of gage is 580 ft from topographic map.

REMARKS.--Estimated daily discharges: Dec. 14 to Jan. 15, Jan. 20-27, and Feb. 5 to Mar. 27. Records fair except for estimated discharge which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 735 ft³/s Apr. 13, 1991, but may have been higher during period of no gage-height record Dec. 14 to Jan. 15; minimum daily, 1.8 ft³/s Sept. 28, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period November to September, 735 ft³/s Apr. 13 but may have been higher during period of no gage-height record Dec. 14 to Jan. 15; minimum daily, 1.8 ft³/s Sept. 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	2.8	12	5.0	2.7	4.3	2.7	2.8	2.5	2.4	2.6
2	---	---	3.7	7.0	4.4	2.7	3.5	2.5	3.0	2.9	2.4	2.1
3	---	---	150	4.5	4.1	7.0	3.2	2.6	2.8	2.8	2.5	2.2
4	---	---	14	3.7	3.7	22	3.2	2.6	2.7	2.5	5.1	4.6
5	---	---	7.3	3.5	3.7	9.0	5.3	2.7	2.6	2.4	2.6	2.7
6	---	---	5.7	31	25	56	4.0	3.1	2.4	2.6	2.6	2.4
7	---	---	4.3	18	150	12	3.6	2.9	2.4	2.6	2.6	3.0
8	---	---	3.4	9.6	13	4.0	7.3	3.0	2.5	4.8	4.5	2.3
9	---	---	3.2	19	3.5	3.5	8.5	3.9	2.4	2.7	10	2.4
10	---	---	3.0	7.0	2.8	3.2	6.4	3.1	2.5	3.6	2.9	2.5
11	---	---	3.5	44	2.5	3.0	4.0	2.8	2.5	2.8	2.5	2.2
12	---	---	3.7	13	5.0	2.8	3.3	2.8	2.5	4.4	2.6	3.8
13	---	---	3.2	5.0	25	49	194	2.8	2.3	2.9	2.7	3.8
14	---	---	2.4	3.8	70	20	24	2.7	2.4	2.6	2.5	3.0
15	---	---	25	6.1	20	7.0	119	2.7	3.1	2.7	2.9	2.8
16	---	3.6	10	9.1	4.0	3.2	10	2.6	3.2	2.7	2.6	3.2
17	---	3.3	3.5	7.6	12	3.5	6.4	2.6	2.6	2.8	3.8	2.6
18	---	2.8	480	5.7	28	25	5.1	2.5	2.6	2.8	32	2.6
19	---	2.9	25	4.8	9.0	14	9.1	2.6	2.9	3.0	3.1	2.3
20	---	2.8	5.4	4.0	3.5	4.0	7.5	2.6	2.7	2.7	2.5	2.1
21	---	2.7	6.0	3.4	3.3	10	5.3	2.5	5.3	2.8	2.3	2.3
22	---	29	25	3.0	3.0	170	4.9	2.8	9.2	2.7	2.3	2.2
23	---	27	130	2.7	2.9	30	4.5	2.6	3.2	3.0	2.3	2.4
24	---	7.9	35	2.5	2.9	8.0	4.3	2.5	2.6	2.7	2.6	7.8
25	---	5.9	8.0	2.4	2.9	5.8	3.5	2.6	2.3	2.7	2.5	4.3
26	---	4.5	5.6	2.3	2.8	100	3.4	2.7	2.3	2.7	2.3	2.1
27	---	4.0	4.5	2.5	2.8	30	3.4	5.1	2.3	2.4	2.4	1.9
28	---	3.9	5.4	7.6	2.7	15	3.3	3.1	2.4	2.4	2.4	1.8
29	---	3.3	56	5.7	---	7.0	3.3	2.7	2.5	5.5	2.7	1.9
30	---	3.0	600	21	---	6.4	3.2	2.7	2.4	2.7	2.6	2.0
31	---	---	30	8.1	---	5.7	---	2.7	---	2.6	3.4	---
TOTAL	---	---	1664.6	279.6	417.5	641.5	470.8	87.8	87.4	91.0	122.6	83.9
MEAN	---	---	53.7	9.02	14.9	20.7	15.7	2.83	2.91	2.94	3.95	2.80
MAX	---	---	600	44	150	170	194	5.1	9.2	5.5	32	7.8
MIN	---	---	2.4	2.3	2.5	2.7	3.2	2.5	2.3	2.4	2.3	1.8

SCIOTO RIVER BASIN

03237060 BIG RUN AT WAKEFIELD, OHIO

LOCATION.--Lat 38°58'19", long 83°01'14", Pike County, Hydrologic Unit 05060002, on left bank upstream side of bridge on Wakefield-Mound Road, 0.4 mi downstream from Salt Creek, 1.9 mi upstream from mouth at Wakefield. Piketon.

DRAINAGE AREA.--8.10 mi².

PERIOD OF RECORD.--December 1990 to September 1991.

GAGE.--Water-stage recorder. Altitude of gage is 550 ft from topographic map.

REMARKS.--Estimated daily discharges: Jan. 19-29 and July 17-Aug. 19. Records fair except for estimated discharge and for discharges below 1.0 ft³/s which are poor. Some regulation by storage ponds at Piketon Nuclear Facility.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,580 ft³/s Dec. 30, 1990, gage height 11.24 ft; minimum daily, no flow many days in water year 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period December to September, 5,580 ft³/s Dec. 30, gage height 11.24 ft; minimum daily, no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	3.4	22	9.2	3.9	8.3	2.1	.17	.03	.00	.00
2	---	---	3.3	13	6.4	4.6	6.6	1.8	1.6	1.5	.00	.00
3	---	---	387	9.1	5.5	9.9	5.5	1.4	2.5	4.6	1.0	.00
4	---	---	33	6.7	4.9	38	4.9	1.4	1.5	1.4	4.0	.01
5	---	---	12	6.4	7.7	25	7.0	1.3	1.1	2.0	2.0	3.4
6	---	---	7.4	56	180	109	6.3	1.3	.12	1.5	.20	2.2
7	---	---	5.7	61	221	33	5.4	1.0	.00	.20	.00	.25
8	---	---	4.2	30	31	14	6.4	.84	.00	2.1	1.0	.00
9	---	---	3.3	40	14	9.2	9.1	4.3	.00	1.1	6.0	.00
10	---	---	2.7	32	11	7.4	13	3.4	.00	.13	2.0	.13
11	---	---	2.4	92	7.8	6.5	6.9	1.1	.00	.77	.20	.01
12	---	---	2.1	31	5.4	6.0	5.2	.70	.00	2.8	1.0	3.1
13	---	---	2.4	16	14	100	480	1.2	.00	1.9	.20	2.3
14	---	---	.85	12	149	29	51	1.0	4.7	.98	1.0	2.1
15	---	---	46	8.9	26	13	294	.41	.23	.68	2.0	.33
16	---	---	11	12	16	9.3	25	.27	1.7	.50	.80	.00
17	---	---	8.4	10	8.7	10	14	1.5	1.6	.10	3.5	.00
18	---	---	1070	8.0	66	56	8.7	3.3	1.1	.00	18	.00
19	---	---	54	6.0	35	20	20	3.3	.14	1.0	7.0	.00
20	---	---	18	5.0	25	12	17	1.7	.00	.20	3.5	.00
21	---	---	18	4.2	14	9.7	10	.76	.00	.00	1.5	.00
22	---	---	30	3.8	10	415	7.7	.20	2.1	.00	.39	.00
23	---	---	235	3.3	7.7	154	6.2	.10	5.8	2.0	.04	3.8
24	---	---	29	3.1	6.6	21	5.8	.07	2.7	.10	.00	4.4
25	---	---	14	2.8	5.6	12	4.5	.05	.07	.10	.00	4.8
26	---	---	9.9	2.6	5.0	209	4.2	.05	.00	.10	.00	2.5
27	---	---	7.8	2.4	4.6	53	3.5	.40	1.4	.00	.00	1.5
28	---	---	9.3	2.2	4.3	40	3.7	4.7	.87	.00	2.6	1.2
29	---	---	60	2.1	---	16	2.9	1.5	.20	4.0	1.5	.05
30	---	---	1210	37	---	12	2.4	.56	.00	2.0	.68	.00
31	---	---	83	15	---	10	---	.26	---	.70	.03	---
TOTAL	---	---	3383.15	555.6	901.4	1467.5	1045.2	41.97	29.60	32.49	60.14	32.08
MEAN	---	---	109	17.9	32.2	47.3	34.8	1.35	.99	1.05	1.94	1.07
MAX	---	---	1210	92	221	415	480	4.7	5.8	4.6	18	4.8
MIN	---	---	.85	2.1	4.3	3.9	2.4	.05	.00	.00	.00	.00

RESERVOIRS IN SCIOTO RIVER BASIN

- 03220500** O'SHAUGHNESSY RESERVOIR NEAR DUBLIN.--Lat 40°09'14", long 83°07'33", Delaware County, Hydrologic Unit 05060001, 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 National Geodetic Vertical Datum of 1929 (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, 18,350 acre-ft Feb. 5, elevation, 849.28 ft; minimum, 10,950 acre-ft Jan. 16, elevation, 839.92 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 National Geodetic Vertical Datum, adjustment of 1929 (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, 6,280 acre-ft Dec. 31, elevation, 760.64 ft; minimum, 4,010 acre-ft Aug. 26, elevation, 754.33 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 National Geodetic Vertical Datum of 1929. 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, 80,850 acre-ft Dec. 31, elevation, 896.58 ft; minimum, 35,690 acre-ft Sept. 30, elevation, 879.75 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

Date	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)
03220500 O'SHAUGHNESSY RESERVOIR				03221500 GRIGGS RESERVOIR			03228400 HOOVER RESERVOIR		
Sept. 30.....	841.23	11,790	--	755.46	4,400	--	888.42	55,900	--
Oct. 31.....	841.10	11,700	-90	755.83	4,520	+120	892.00	65,670	+9,770
Nov. 30.....	840.67	11,420	-280	755.48	4,400	-120	891.10	63,140	-2,530
Dec. 31.....	848.75	17,810	+6,390	759.72	5,940	+1,540	895.58	77,320	+14,180
CAL YR 1990	-	-	+1,210	-	-	+1,220	-	-	+36,620
Jan. 31.....	840.98	11,620	-6,190	755.90	4,550	-1,390	892.60	67,460	-9,860
Feb. 28.....	842.67	12,780	+1,160	756.00	4,580	+30	892.08	65,910	-1,550
Mar. 31.....	845.00	14,500	+1,720	756.12	4,620	+40	892.61	67,490	+1,580
Apr. 30.....	842.53	12,690	-1,810	755.60	4,450	-170	893.80	71,240	+3,750
May. 31.....	846.61	15,810	+3,120	755.37	4,370	-80	890.97	62,780	-8,460
June 30.....	848.77	17,830	+2,020	755.21	4,310	-60	887.27	52,890	-9,890
July 31.....	847.31	16,430	-1,400	754.91	4,210	-100	884.54	45,980	-6,910
Aug. 31.....	844.36	14,020	-2,410	754.87	4,200	-10	881.80	39,760	-6,220
Sept. 30.....	843.64	13,490	-530	754.81	4,180	-20	879.75	35,690	-4,070
WTR YR 1991..	--	--	+1,700			-220			-20,210

UPPER TWIN CREEK BASIN

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 National Geodetic Vertical Datum of 1929 (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: Jan. 21-29. Records poor.

AVERAGE DISCHARGE.--28 years, 13.7 ft³/s., 15.25 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,500 ft³/s Mar. 4, 1964, gage height, 9.7 ft, in gage well, 10.2 ft, from outside highwater mark from rating curve extended above 300 ft³/s on basis of slope-area measurement of peak flow; no flow for many days 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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 18	1815	780	7.80	Mar. 6	1730	670	7.18
Dec. 23	0645	474	6.64	Mar. 23	0030	586	6.95
Dec. 30	1845	*1,260	*8.95	Mar. 26	1645	923	8.20

Minimum daily discharge, 0.00 ft³/s June 28-July 9, July 26-Aug. 7, Aug. 25-Sept. 3, Sept. 17-23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	.34	4.8	46	18	6.3	19	5.2	53	.00	.00	.00
2	.07	.34	4.5	29	15	6.8	16	4.5	28	.00	.00	.00
3	.07	.39	57	19	13	7.0	14	3.9	21	.00	.00	.00
4	.15	.39	22	13	11	15	12	3.5	7.4	.00	.00	.01
5	.34	.42	8.3	11	10	22	17	3.0	2.9	.00	.00	.82
6	.38	.44	5.4	36	82	183	18	2.7	1.4	.00	.00	.84
7	.35	.49	4.4	119	162	81	17	2.2	1.0	.00	.00	.49
8	.35	.50	3.4	51	52	30	16	1.7	.86	.00	.03	.36
9	.32	.51	2.7	49	35	20	16	1.5	.75	.00	2.3	.27
10	.22	1.8	2.4	56	25	15	18	1.5	.67	.10	1.6	.24
11	.23	4.2	2.1	91	18	11	17	1.5	.62	.05	.64	.23
12	.95	4.0	2.0	59	14	9.7	16	1.4	.60	11	.46	.18
13	2.0	2.7	1.9	40	16	55	66	1.3	.54	6.0	.38	.15
14	1.3	1.3	1.6	29	151	44	46	1.3	.49	.83	.34	.10
15	.74	.91	9.3	22	40	25	85	1.2	.46	.57	.31	.05
16	.52	.67	11	20	28	18	51	1.1	.46	.45	.25	.01
17	.46	.71	7.8	16	22	15	28	.98	.46	.36	.29	.00
18	.60	.80	395	14	37	47	22	.98	.45	.30	.36	.00
19	.77	.80	73	12	54	41	22	.98	.40	.24	.26	.00
20	.61	.62	22	12	42	24	21	.97	.33	.18	.26	.00
21	.56	.57	15	9.5	32	19	20	.90	.28	.13	.23	.00
22	5.5	1.1	24	7.4	24	224	18	.83	.28	.11	.17	.00
23	16	44	172	5.5	19	216	16	.80	.25	.08	.12	.00
24	7.1	16	40	4.5	16	54	14	.80	.15	.05	.04	.22
25	3.2	12	25	3.5	13	30	11	.79	.10	.01	.00	1.5
26	1.6	9.3	15	2.9	10	197	10	.74	.05	.00	.00	.78
27	.74	7.8	9.6	2.2	8.8	135	9.0	.75	.01	.00	.00	.50
28	.51	6.9	11	2.6	7.4	125	8.6	.75	.00	.00	.00	.40
29	.46	6.1	42	5.0	---	41	7.6	.72	.00	.00	.00	.29
30	.38	5.3	343	19	---	24	6.6	.75	.00	.00	.00	.23
31	.34	---	143	23	---	21	---	1.4	---	.00	.00	---
TOTAL	46.89	131.40	1480.2	829.1	975.2	1761.8	657.8	50.64	122.91	20.46	8.04	7.67
MEAN	1.51	4.38	47.7	26.7	34.8	56.8	21.9	1.63	4.10	.66	.26	.26
MAX	16	44	395	119	162	224	85	5.2	53	11	2.3	1.5
MIN	.07	.34	1.6	2.2	7.4	6.3	6.6	.72	.00	.00	.00	.00
CFSM	.12	.36	3.91	2.19	2.85	4.66	1.80	.13	.34	.05	.02	.02
IN.	.14	.40	4.51	2.53	2.97	5.37	2.01	.15	.37	.06	.02	.02

CAL YR 1990 TOTAL 6682.27 MEAN 18.3 MAX 395 MIN .07 CFSM 1.50 IN. 20.38
WTR YR 1991 TOTAL 6092.11 MEAN 16.7 MAX 395 MIN .00 CFSM 1.37 IN. 18.58

UPPER TWIN CREEK BASIN

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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.

pH: Maximum recorded, 8.5, units Sept. 6, 1989, July 27, 1990, Mar. 21, 1991; minimum recorded,

5.5 units Sept. 3, 1988.

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, 163 microsiemens Aug. 9; minimum recorded, 67 microsiemens Mar. 26.

pH: Maximum recorded, 8.5 units Mar. 21; minimum recorded, 6.7 units Feb. 16.

WATER TEMPERATURE: Maximum recorded, 34.0°C July 22, 23; minimum recorded 0°C several times during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT 03...	1015	0.08	140	7.6	18.0	11.0	0.20	11.0	103	870	1100
NOV 07...	1045	0.47	127	7.8	6.0	4.0	0.40	10.4	82	K35	110
DEC 10...	1030	2.6	104	7.7	6.0	2.0	1.0	12.2	90	K18	K24
JAN 09...	1045	45	79	7.7	9.0	6.0	4.8	12.0	100	K24	68
FEB 13...	0945	13	90	7.6	8.5	4.0	1.2	10.6	84	K9	K8
MAR 05...	1015	23	90	7.6	10.0	5.5	1.8	11.7	94	24	K15
APR 23...	1015	16	83	7.4	14.5	10.0	0.70	10.8	98	28	K19
MAY 07...	1110	2.2	106	8.1	16.5	15.0	0.40	10.1	100	M0	31
JUN 03...	1130	20	103	7.1	25.5	19.0	3.5	8.8	97	440	5400
JUL 22...	1115	0.12	126	7.3	29.0	26.5	0.50	8.4	106	--	--
AUG 20...	1030	0.24	135	7.4	19.5	21.0	1.5	8.5	97	K8	90
SEP 10...	1130	0.26	138	7.5	26.0	22.5	0.60	8.5	99	23	190

K Results based on colony count outside the acceptable range.

M Presence of material verified but not quantified.

UPPER TWIN CREEK BASIN

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT 03...	52	9.1	7.1	4.9	2.5	32	0	28	30	2.8	<0.10
NOV 07...	48	8.4	6.6	4.0	2.1	27	0	23	33	4.0	<0.10
DEC 10...	37	6.7	5.0	3.0	1.8	19	0	18	32	2.2	0.20
JAN 09...	28	4.6	3.9	2.1	1.5	10	0	9	22	1.5	<0.10
FEB 13...	30	5.0	4.2	2.3	1.4	20	0	16	23	1.5	<0.10
MAR 05...	29	4.7	4.3	2.3	1.5	9	0	8	25	1.2	<0.10
APR 23...	30	4.7	4.5	2.6	1.5	7	0	6	24	1.4	<0.10
MAY 07...	40	6.6	5.6	3.2	1.9	18	0	15	28	1.4	<0.10
JUN 03...	38	6.4	5.3	2.7	2.1	21	0	17	25	3.6	0.20
JUL 22...	48	8.6	6.5	3.7	2.5	25	0	23	39	3.0	0.10
AUG 20...	48	8.4	6.6	3.6	2.6	25	0	21	39	2.9	<0.10
SEP 10...	49	8.4	6.9	3.6	2.7	30	0	25	35	3.1	<0.10

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
OCT 03...	10	86	0.100	<0.010	<0.010	<0.20	0.020	<0.010	<0.010	<10
NOV 07...	9.6	73	0.100	<0.010	0.010	0.20	<0.010	<0.010	<0.010	<10
DEC 10...	9.2	80	0.500	0.030	0.030	0.40	<0.010	<0.010	<0.010	20
JAN 09...	9.5	33	0.400	0.040	0.040	<0.20	0.020	<0.010	<0.010	--
FEB 13...	9.6	57	0.300	<0.010	<0.010	<0.20	0.020	0.020	<0.010	--
MAR 05...	9.1	57	0.240	0.010	<0.010	0.40	0.010	0.010	<0.010	--
APR 23...	11	69	0.240	0.020	0.020	<0.20	<0.010	<0.010	<0.010	10
MAY 07...	9.8	58	0.190	<0.010	0.020	0.20	<0.010	0.010	<0.010	--
JUN 03...	11	79	0.650	<0.010	<0.010	0.20	<0.010	0.010	<0.010	--
JUL 22...	11	73	0.170	<0.010	0.040	0.30	<0.010	<0.010	<0.010	<10
AUG 20...	10	86	0.130	0.020	0.030	<0.20	<0.010	0.050	0.020	--
SEP 10...	10	86	0.160	0.010	<0.010	<0.20	<0.010	<0.010	<0.010	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

[illegible]

UPPER TWIN CREEK BASIN

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	141	138	139	132	131	131	117	114	116	113	100	105
2	141	139	139	135	131	133	118	113	116	---	---	---
3	141	139	140	135	133	134	113	85	98	---	---	---
4	143	124	138	137	133	135	99	92	96	---	---	---
5	145	137	140	137	129	134	103	99	101	---	---	---
6	137	135	136	136	134	135	104	102	103	---	---	---
7	138	135	136	135	128	131	105	103	104	---	---	---
8	138	137	137	130	127	128	106	104	105	---	---	---
9	140	138	139	129	127	128	108	105	106	---	---	---
10	141	138	140	129	125	127	110	107	108	86	84	84
11	140	138	139	127	124	126	111	107	109	84	79	81
12	142	127	137	127	124	125	115	109	111	84	80	82
13	138	133	136	124	122	122	116	110	113	85	84	84
14	140	138	139	123	122	122	113	110	111	88	85	86
15	140	137	139	124	122	123	116	97	106	90	87	88
16	139	136	137	124	122	123	100	96	98	91	89	90
17	138	137	137	123	120	122	101	97	100	92	90	91
18	138	130	135	122	120	121	97	73	79	92	90	91
19	135	133	135	122	120	121	95	83	90	92	91	91
20	135	133	134	123	122	122	102	95	98	92	92	92
21	137	135	136	123	122	122	105	102	104	92	91	92
22	137	126	133	124	115	121	110	105	108	92	91	92
23	127	124	125	111	102	105	110	86	96	95	92	93
24	130	127	128	113	110	112	98	94	96	94	92	93
25	131	129	129	115	113	114	104	98	102	95	92	94
26	130	128	129	117	113	114	112	103	107	96	94	95
27	131	129	129	117	116	116	118	112	115	98	94	95
28	131	129	129	118	115	117	122	118	121	98	93	95
29	131	129	129	118	114	116	123	118	121	97	93	95
30	131	129	130	118	113	115	118	80	105	97	92	94
31	131	129	130	---	---	---	100	85	93	92	90	91
MONTH	145	124	135	137	102	123	123	73	104	113	79	91
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	92	89	91	95	92	94	98	95	97	114	108	113
2	92	91	92	98	92	96	101	97	99	111	107	109
3	93	92	92	98	95	98	105	101	102	111	108	110
4	95	92	94	95	93	94	111	102	105	113	111	112
5	96	95	95	98	91	94	115	100	110	117	113	114
6	95	83	90	92	72	85	115	98	107	117	113	114
7	84	80	82	83	75	79	118	111	114	113	105	110
8	85	84	84	83	79	82	120	105	116	110	105	107
9	86	84	85	84	79	82	118	101	106	110	106	108
10	89	85	87	85	83	84	114	105	110	110	106	109
11	90	88	89	87	84	85	113	107	110	114	108	112
12	92	89	90	90	85	87	117	110	113	115	111	113
13	95	91	92	85	80	82	117	100	104	117	112	115
14	92	75	82	82	80	81	100	94	96	118	113	115
15	129	83	89	84	81	83	93	90	92	119	113	117
16	87	85	86	85	82	84	98	92	94	119	113	117
17	88	86	87	85	82	83	98	94	95	130	116	120
18	92	83	87	83	80	81	100	98	99	148	124	127
19	85	82	84	82	80	81	100	98	100	135	123	126
20	85	83	84	83	80	82	99	98	99	144	123	126
21	89	83	86	85	82	84	101	98	99	131	123	128
22	91	87	89	93	72	81	103	100	101	130	127	129
23	89	85	87	101	75	86	104	98	101	129	125	127
24	91	85	87	102	81	91	102	98	100	136	124	129
25	92	86	89	105	84	93	104	101	102	136	133	135
26	92	86	89	111	67	87	105	103	104	137	135	135
27	92	87	90	85	75	81	108	105	106	137	131	134
28	93	89	91	86	77	82	111	106	109	139	135	137
29	---	---	---	92	85	89	111	108	110	139	137	138
30	---	---	---	95	92	93	131	111	113	139	131	137
31	---	---	---	98	95	96	---	---	---	137	126	133
MONTH	129	75	88	111	67	86	131	90	104	148	105	121

UPPER TWIN CREEK BASIN

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03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	133	85	119	---	---	---	---	---	---	---	---	---
2	134	105	117	---	---	---	---	---	---	---	---	---
3	124	103	112	---	---	---	---	---	---	---	---	---
4	111	106	109	---	---	---	---	---	---	---	---	---
5	113	110	112	---	---	---	---	---	---	---	---	---
6	123	115	118	---	---	---	---	---	---	130	128	129
7	126	120	123	---	---	---	---	---	---	130	126	129
8	128	122	125	---	---	---	---	---	---	130	128	129
9	130	123	127	---	---	---	---	---	---	131	129	130
10	135	124	130	---	---	---	131	130	130	136	130	132
11	136	130	133	---	---	---	131	123	127	135	130	134
12	137	130	134	---	---	---	135	124	129	135	131	134
13	139	131	136	---	---	---	135	130	133	136	131	134
14	139	126	137	137	129	132	137	125	133	137	133	135
15	140	124	131	144	137	138	138	133	136	139	134	137
16	132	126	128	144	138	140	139	135	138	---	---	---
17	134	130	131	148	140	142	139	124	136	---	---	---
18	137	126	129	156	140	142	141	135	138	---	---	---
19	137	128	130	158	139	142	142	138	140	---	---	---
20	141	129	137	144	141	142	142	132	138	---	---	---
21	141	137	139	146	141	143	138	135	137	---	---	---
22	142	138	140	146	139	142	138	135	137	---	---	---
23	141	137	140	144	139	141	139	135	137	---	---	---
24	145	138	141	---	---	---	---	---	---	---	---	---
25	148	142	144	---	---	---	---	---	---	---	---	---
26	148	144	147	---	---	---	---	---	---	129	123	125
27	---	---	---	---	---	---	---	---	---	131	129	130
28	---	---	---	---	---	---	---	---	---	131	128	130
29	---	---	---	---	---	---	---	---	---	131	128	129
30	---	---	---	---	---	---	---	---	---	131	127	129
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	148	85	130	158	129	140	142	123	135	139	123	131
YEAR	158	67	113									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

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

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

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

UPPER TWIN CREEK BASIN

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03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	19.5	14.5	16.5	13.5	9.0	11.0	7.5	4.0	6.0	7.0	6.5	6.5
2	19.5	14.5	16.5	14.0	9.0	11.0	8.5	6.5	7.5	6.5	6.0	6.0
3	20.5	14.5	17.0	14.0	9.0	11.5	10.0	7.5	9.0	6.0	5.5	6.0
4	20.0	15.5	18.0	14.0	10.0	12.0	9.0	6.0	7.5	5.5	5.0	5.5
5	20.0	14.0	16.5	13.5	10.5	12.0	6.5	5.0	5.5	5.0	5.0	5.0
6	20.0	14.0	16.5	11.5	8.5	10.5	6.5	4.5	5.5	5.0	5.0	5.0
7	19.5	14.5	17.0	10.5	7.5	9.0	7.5	4.5	6.0	5.0	5.0	5.0
8	21.0	16.5	18.5	9.0	5.5	7.0	6.5	3.5	4.5	5.5	5.0	5.0
9	21.5	18.5	19.5	9.0	7.0	8.0	6.5	3.5	4.5	5.5	5.5	5.5
10	19.5	16.0	18.0	9.5	7.5	8.5	6.5	3.5	4.5	5.5	5.0	5.5
11	16.5	14.5	15.0	10.0	6.5	8.0	6.0	3.5	4.5	7.0	5.5	6.5
12	15.5	14.0	15.0	10.5	7.5	8.5	7.0	3.5	5.5	7.0	5.5	6.5
13	16.0	15.0	15.5	9.5	6.0	7.5	8.5	5.5	7.0	5.5	4.5	5.0
14	18.5	15.0	16.0	9.5	5.5	7.5	5.5	4.0	5.0	6.0	4.0	5.0
15	17.5	14.5	15.5	11.0	6.0	8.0	7.0	5.5	6.5	6.0	4.0	5.0
16	17.0	12.5	14.5	11.5	7.0	9.0	6.5	6.0	6.5	7.0	6.0	6.5
17	18.0	13.5	15.5	10.0	7.0	8.5	7.0	6.0	6.5	6.0	5.0	5.5
18	16.0	13.0	15.0	8.5	5.5	7.0	9.0	7.5	9.0	5.5	3.5	4.5
19	15.0	11.0	12.5	9.5	6.0	7.5	9.0	8.0	8.5	5.5	2.5	4.0
20	15.0	10.5	12.0	10.5	8.0	9.0	8.5	8.0	8.0	5.5	4.5	5.0
21	16.0	11.0	13.0	10.5	6.5	8.5	8.0	8.0	8.0	4.5	2.0	3.5
22	15.0	13.5	14.0	10.0	8.5	9.5	9.0	8.0	8.5	2.0	.0	1.0
23	14.0	13.0	13.5	10.0	9.0	9.5	9.5	9.0	9.0	2.0	.0	1.0
24	15.0	12.0	13.0	10.5	8.5	9.5	9.0	8.0	8.5	2.5	.5	1.5
25	13.5	11.5	12.5	11.5	9.0	10.0	7.5	6.5	7.0	1.5	.0	.5
26	13.0	10.0	11.0	12.0	9.0	10.5	6.5	6.0	6.0	1.5	.0	.5
27	13.0	9.0	10.5	15.0	11.5	12.5	6.0	5.5	6.0	1.5	.0	.5
28	12.5	10.0	11.0	13.0	10.0	12.0	5.5	5.5	5.5	3.0	.5	1.5
29	12.0	8.0	9.5	10.0	6.5	8.5	5.5	5.5	5.5	3.5	1.0	2.0
30	12.5	8.0	10.0	7.5	5.0	6.0	9.0	5.5	7.0	3.0	2.5	3.0
31	13.0	8.5	10.5	---	---	---	8.0	7.0	7.5	3.0	1.0	2.0
MONTH	21.5	8.0	14.5	15.0	5.0	9.0	10.0	3.5	6.5	7.0	.0	4.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	3.0	.0	1.5	7.5	3.0	5.5	9.0	7.0	8.0	19.0	13.5	16.0
2	4.0	1.0	2.5	11.5	6.5	8.5	9.5	7.0	8.0	20.0	13.0	16.0
3	5.0	1.5	3.0	8.5	5.0	7.0	9.5	6.5	8.0	20.5	13.0	16.0
4	5.5	1.5	3.5	5.5	3.5	4.5	10.5	8.0	9.5	19.0	14.5	16.5
5	5.5	4.0	5.0	7.0	3.0	5.0	11.5	10.0	10.5	18.0	15.0	16.5
6	6.5	5.5	6.0	7.0	5.5	6.0	13.2	9.9	11.4	16.0	14.0	15.5
7	7.0	5.5	6.5	6.5	4.5	5.5	14.0	11.1	12.5	20.0	12.0	15.5
8	5.5	5.0	5.5	6.5	3.5	4.5	14.0	12.6	13.3	20.0	13.0	16.0
9	6.0	4.5	5.0	6.0	3.0	4.5	15.0	12.5	13.5	16.0	15.0	15.5
10	6.5	4.5	5.0	5.5	4.0	4.5	14.0	12.0	13.0	20.5	14.5	17.0
11	5.0	2.5	3.5	7.0	3.0	4.5	12.5	9.5	11.0	22.5	15.5	18.0
12	4.5	1.5	2.5	5.0	4.0	4.5	12.5	10.5	11.5	22.5	16.5	19.0
13	4.5	2.0	3.0	5.5	4.0	5.0	12.0	11.0	11.5	25.0	17.0	20.0
14	5.5	3.5	5.0	5.0	4.5	5.0	12.5	11.5	12.0	25.0	18.0	20.5
15	3.5	.5	2.5	7.0	3.5	5.0	13.0	12.5	12.5	25.0	17.5	20.5
16	2.0	.0	1.0	8.0	3.5	5.5	13.0	11.0	12.5	25.0	18.0	21.0
17	2.5	1.5	2.0	8.5	4.0	6.5	14.0	11.5	13.0	27.0	19.0	22.0
18	4.5	3.0	3.5	7.5	6.5	7.0	14.0	12.5	13.5	21.5	19.5	20.5
19	6.5	4.5	5.5	8.0	6.0	7.0	13.5	13.0	13.0	22.0	18.5	20.0
20	6.5	4.5	5.5	9.0	5.0	7.0	13.0	11.0	12.0	22.0	17.0	19.5
21	6.5	3.5	5.0	11.5	7.5	9.0	11.0	10.0	10.5	27.0	17.5	21.5
22	7.5	4.0	5.5	11.0	9.5	10.0	11.5	9.5	10.5	25.5	19.0	22.0
23	6.0	3.5	4.5	12.0	9.0	10.0	12.0	9.5	10.5	22.5	19.5	21.0
24	6.5	3.0	4.5	10.0	8.5	9.0	15.0	9.5	12.0	27.5	19.0	22.0
25	5.5	4.0	5.0	11.5	7.0	9.0	14.5	9.5	12.0	29.0	20.0	24.0
26	5.0	2.5	3.5	9.5	8.0	8.5	18.0	11.5	14.0	28.0	21.5	24.0
27	4.0	2.5	3.0	11.0	8.5	10.0	16.0	13.0	14.5	24.5	21.5	23.0
28	7.0	2.0	4.0	11.0	9.5	10.5	17.5	14.0	15.5	30.0	21.0	24.5
29	---	---	---	10.0	8.0	9.0	18.5	14.5	16.0	29.0	22.0	25.0
30	---	---	---	8.0	7.0	7.5	21.5	15.0	17.0	29.5	22.0	25.0
31	---	---	---	8.5	6.0	7.5	---	---	---	30.5	22.5	25.0
MONTH	7.5	.0	4.0	12.0	3.0	7.0	21.5	6.5	12.0	30.5	12.0	20.0

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 National Geodetic Vertical Datum of 1929. Prior to Nov. 22, 1940, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 23-27, Apr. 21-May 10. Records good except those for periods of estimated record, which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--60 years, 454 ft³/s, 15.93 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 59,200 ft³/s Mar. 10, 1964; gage height, 27.91 ft, from rating curve extended above 22,000 ft³/s on basis of slope-area measurement at gage heights 22.70 ft, 26.5 ft, and 27.91 ft; no flow Sept. 13-23, 27, 28, 1955 and for part of each day Sept. 17, 18, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 11,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 3	1700	12,200	14.36	Mar. 23	0845	14,000	15.48
Dec. 18	2000	22,600	18.97	Apr. 13	1815	14,000	15.51
Dec. 31	0115	*22,900	*19.05	Apr. 15	1445	13,100	14.95

Minimum daily discharge, 3.1 ft³/s Aug. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	625	119	134	1490	488	229	418	210	126	6.8	3.7	206
2	227	110	128	858	419	242	340	170	118	6.3	3.3	80
3	121	102	5490	640	347	291	288	155	505	5.5	3.1	32
4	3370	94	2560	487	311	663	254	140	236	41	3.8	106
5	1400	94	890	401	321	767	314	130	104	175	3.6	1100
6	512	111	515	1520	3780	1270	300	220	61	56	3.4	236
7	244	129	378	2760	6240	2680	240	230	43	27	3.2	70
8	163	113	292	1530	1880	844	216	160	33	24	3.2	35
9	126	95	238	1400	983	545	915	130	27	271	7.8	26
10	110	371	208	1260	688	433	1870	230	22	157	24	24
11	233	490	188	3360	529	356	534	157	19	86	107	28
12	1370	230	170	2350	410	314	337	119	17	92	44	21
13	1490	164	161	1160	446	3490	6850	100	15	1400	23	15
14	623	133	153	773	4140	2430	3340	89	13	271	15	11
15	322	118	1730	595	1700	956	6020	77	12	103	10	7.3
16	209	110	1440	729	644	608	1960	88	15	54	7.4	5.9
17	153	113	615	689	599	502	995	81	366	34	6.3	5.1
18	1440	119	14000	525	2070	2700	726	69	76	23	27	4.4
19	899	114	7800	427	2530	1320	1020	68	38	17	138	3.8
20	381	105	1490	397	1550	728	1540	72	27	13	59	3.6
21	247	97	1160	492	924	556	900	57	18	11	37	4.2
22	936	238	2400	374	653	3460	800	48	14	8.7	23	4.0
23	2160	2470	4830	250	504	6980	590	43	23	7.2	18	3.8
24	706	737	1940	200	414	1510	430	58	34	7.9	13	8.1
25	398	389	899	170	357	770	350	51	48	7.2	8.9	16
26	284	268	577	150	304	2330	270	37	27	6.1	6.8	17
27	224	215	429	140	273	3120	230	36	18	5.6	5.5	12
28	183	191	425	1130	250	1400	200	688	13	5.2	4.7	8.8
29	160	177	2640	636	---	778	170	200	10	4.8	4.2	6.1
30	140	155	7810	1770	---	592	150	103	8.1	4.4	3.8	4.9
31	128	---	8130	1110	---	510	---	95	---	4.0	3.4	---
TOTAL	19584	7971	69820	29773	33754	43374	32567	4111	2086.1	2934.7	624.1	2105.0
MEAN	632	266	2252	960	1205	1399	1086	133	69.5	94.7	20.1	70.2
MAX	3370	2470	14000	3360	6240	6980	6850	688	505	1400	138	1100
MIN	110	94	128	140	250	229	150	36	8.1	4.0	3.1	3.6
CFSM	1.63	.69	5.82	2.48	3.11	3.62	2.81	.34	.18	.24	.05	.18
IN.	1.88	.77	6.71	2.86	3.24	4.17	3.13	.40	.20	.28	.06	.20

CAL YR 1990 TOTAL 265300.1 MEAN 727 MAX 14000 MIN 7.8 CFSM 1.88 IN. 25.50
WTR YR 1991 TOTAL 248703.9 MEAN 681 MAX 14000 MIN 3.1 CFSM 1.76 IN. 23.91

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 National Geodetic Vertical Datum of 1929. 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: Jan. 23-27, Mar. 7, Mar. 28-Apr. 10. Records good except those below 30 ft³/s and for periods of estimated daily discharges, which are poor. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1970 to 1974. Water supply for city of Georgetown is pumped from gage pool to nearby reservoir. Pumpage from reservoir to water treatment plant during water year 1991 averaged 0.01 ft³/s. Satellite telemeter at this station.

AVERAGE DISCHARGE.--64 years, 259 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,400 ft³/s Mar. 10, 1964; maximum gage height, 20.87 ft May 14, 1933, site and datum then in use; no flow at times in 1930, 1940-41, 1943, 1948, 1951-53, 1959, 1969, 1970, 1976-1978, 1983-1989.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,500 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 4	2100	6,250	6.37	Mar. 23	1000	8,070	6.96
Dec. 3	2030	6,310	6.34	Mar. 27	0400	6,140	6.35
Dec. 18	1900	*11,800	*7.94	Apr. 13	2100	8,449	7.07
Dec. 31	0430	10,700	7.68	Apr. 15	1830	6,480	6.45
Feb. 7	0830	7,940	6.92				

Minimum daily discharge, 1.4 ft³/s, Sept. 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	204	45	61	449	185	69	130	65	93	7.7	1.7	30
2	70	42	56	233	131	71	100	53	52	7.0	1.6	21
3	44	41	3130	178	99	82	84	47	546	8.6	11	13
4	3280	34	2270	128	96	87	74	45	120	8.0	23	87
5	2000	35	327	98	102	116	92	47	59	7.7	4.3	114
6	191	37	156	1190	2120	109	84	64	38	7.7	2.4	54
7	95	43	118	1930	7110	600	72	70	26	8.0	4.5	30
8	70	52	95	760	889	270	62	54	21	394	20	15
9	58	46	82	477	323	138	160	50	17	1100	70	10
10	220	99	73	486	206	106	370	103	15	106	161	8.0
11	340	190	69	2360	148	91	137	73	15	162	65	8.6
12	1300	92	66	1460	110	85	104	57	13	323	27	5.7
13	1360	66	63	415	189	2560	4420	47	12	557	14	4.0
14	250	57	59	217	2970	1500	4030	39	10	104	11	4.1
15	125	52	1220	153	863	345	4270	536	10	52	8.1	4.0
16	84	47	1230	140	197	175	1260	121	10	27	6.8	2.9
17	66	45	303	177	173	153	302	193	10	18	5.8	1.7
18	447	45	8260	156	881	1950	173	131	13	13	86	1.4
19	426	45	6820	111	1750	709	191	99	17	10	81	1.7
20	122	45	521	98	910	249	527	70	22	8.9	48	1.9
21	79	41	276	149	345	161	187	51	17	7.8	32	2.3
22	305	144	710	119	188	2400	133	41	23	6.3	16	1.9
23	1330	1560	2730	70	134	6040	106	41	131	5.6	10	1.9
24	288	352	805	48	107	546	92	59	68	4.9	7.1	2.9
25	132	145	235	43	94	212	88	34	34	4.4	5.2	4.4
26	99	98	127	41	82	1270	77	27	20	4.1	4.8	4.9
27	78	80	89	39	75	2840	71	53	14	4.1	4.1	4.9
28	64	74	98	156	74	606	67	505	11	4.1	3.3	4.9
29	60	74	2120	296	---	370	66	108	9.0	3.3	2.6	4.9
30	53	70	5430	630	---	250	92	59	8.0	2.6	1.7	4.9
31	48	---	6640	1010	---	160	---	55	---	1.8	2.3	---
TOTAL	13288	3796	44239	13817	20551	24320	17621	2997	1454.0	2978.6	741.3	455.9
MEAN	429	127	1427	446	734	785	587	96.7	48.5	96.1	23.9	15.2
MAX	3280	1560	8260	2360	7110	6040	4420	536	546	1100	161	114
MIN	44	34	56	39	74	69	62	27	8.0	1.8	1.6	1.4

CAL YR 1990 TOTAL 165383.6 MEAN 453 MAX 10200 MIN 2.2
WTR YR 1991 TOTAL 146258.8 MEAN 401 MAX 8260 MIN 1.4

LITTLE MIAMI RIVER BASIN

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 National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 20-30 and Feb. 16-18. Records good except for periods of estimated daily discharges, which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1952 to 1958.

AVERAGE DISCHARGE.--39 years, 120 ft³/s, 12.63 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,800 ft³/s Jan. 21, 1959, gage height, 12.20 ft, from rating curve extended above 4,400 ft³/s on basis of slope area measurements of peak flow; minimum, 2.8 ft³/s Sept. 2, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 800 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	0530	2150	7.38	Feb. 7	1415	951	4.95
Dec. 23	2000	1380	5.95	Mar. 23	0130	990	5.05
Dec. 31	0045	*4800	*9.96				

Minimum discharge, 7.7 ft³/s Sept. 20, 24, 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	81	65	596	162	143	164	115	84	38	16	11
2	44	78	63	405	160	143	151	110	155	37	15	8.5
3	41	76	286	332	174	135	142	105	108	35	15	9.3
4	228	74	569	274	181	127	137	105	93	34	18	16
5	260	77	266	250	201	121	143	105	78	34	16	11
6	142	91	190	260	298	131	135	110	70	32	16	11
7	104	83	155	263	794	145	129	102	66	30	16	10
8	86	76	134	235	445	127	127	95	64	44	16	9.0
9	167	76	119	215	303	120	137	93	60	37	18	10
10	608	121	110	200	249	117	142	92	58	38	18	10
11	426	121	101	270	211	112	126	88	58	37	17	10
12	266	99	96	499	189	110	116	86	68	34	15	9.7
13	210	88	92	346	189	168	352	85	64	33	14	11
14	172	82	84	274	318	330	598	83	57	31	15	12
15	144	78	209	252	276	435	547	79	55	29	19	12
16	122	76	292	282	170	311	375	77	56	27	15	12
17	109	75	195	310	160	248	257	86	54	26	14	9.9
18	200	70	1190	260	180	404	210	149	51	25	17	9.6
19	195	69	1620	227	612	312	213	182	48	25	16	9.7
20	146	67	537	200	455	232	234	133	46	24	16	7.9
21	126	64	394	190	305	199	198	112	45	23	14	8.5
22	139	77	552	180	248	452	179	101	71	22	14	8.8
23	193	104	1100	165	211	856	163	93	75	22	14	11
24	157	93	710	150	193	406	159	89	56	21	13	9.5
25	132	83	350	145	177	271	145	84	50	21	10	8.6
26	115	76	263	140	164	286	138	83	46	20	9.9	9.7
27	105	73	216	130	155	378	133	98	44	18	9.9	9.3
28	98	74	198	130	148	288	129	139	42	17	9.9	8.7
29	90	70	316	130	---	229	128	105	41	17	9.9	8.7
30	87	65	2600	200	---	194	122	93	39	16	9.8	8.5
31	84	---	2820	197	---	173	---	84	---	16	10	---
TOTAL	5047	2437	15892	7707	7328	7703	5929	3161	1902	863	446.4	300.9
MEAN	163	81.2	513	249	262	248	198	102	63.4	27.8	14.4	10.0
MAX	608	121	2820	596	794	856	598	182	155	44	19	16
MIN	41	64	63	130	148	110	116	77	39	16	9.8	7.9
CFSM	1.26	.63	3.97	1.93	2.03	1.93	1.53	.79	.49	.22	.11	.08
IN.	1.46	.70	4.58	2.22	2.11	2.22	1.71	.91	.55	.25	.13	.09

CAL YR 1990 TOTAL 85537 MEAN 234 MAX 3540 MIN 36 CFSM 1.82 IN. 24.67
WTR YR 1991 TOTAL 58716.3 MEAN 161 MAX 2820 MIN 7.9 CFSM 1.25 IN. 16.93

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.

REVISIONS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 865.15 ft above National Geodetic Vertical Datum of 1929. Aug. 4, 1972 to Sept. 30, 1979 at site 150 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Jan. 20-30 and Feb. 16-18. Records good except for estimated daily discharges, which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1952 to 1958. Satellite telemeter at station.

AVERAGE DISCHARGE.--39 years, 64.3 ft³/s, 13.82 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,300 ft³/s Jan. 21, 1959, Mar. 4, 1963, gage height, 11.25 ft, from rating curve extended above 3,100 ft³/s; minimum, 0.3 ft³/s Sept. 3-7, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 18	2000	1,220	7.08	Dec. 30	1330	*1,920	*8.48
Dec. 23	0600	864	6.18	Feb. 7	1330	715	5.78

Minimum daily 1.7 ft³/s Sept. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	37	38	323	95	56	75	43	43	14	4.8	3.3
2	16	35	36	189	91	56	66	42	69	15	4.4	2.4
3	14	35	228	152	90	52	59	38	77	18	4.2	3.1
4	143	35	500	124	90	49	56	37	57	15	6.7	6.0
5	140	40	248	114	100	48	57	39	45	14	5.1	3.3
6	80	45	134	125	261	50	54	40	38	13	4.7	2.7
7	54	39	107	133	666	55	52	36	33	11	4.6	2.5
8	41	35	93	114	330	49	51	32	30	18	6.0	2.3
9	107	37	81	103	182	47	56	32	28	15	5.6	2.2
10	427	84	72	94	140	45	56	31	26	17	5.4	2.3
11	339	78	63	147	112	42	49	31	26	16	4.3	2.3
12	170	62	58	291	94	41	45	30	26	13	3.8	2.5
13	131	52	55	177	94	82	142	30	24	13	3.4	3.5
14	106	47	48	135	186	233	299	29	22	11	5.4	5.0
15	88	43	118	120	156	280	296	26	22	9.8	4.6	3.4
16	70	43	149	136	80	155	190	27	22	8.9	4.2	2.4
17	61	41	109	142	74	121	120	37	20	8.2	4.2	2.2
18	100	37	812	121	82	200	92	197	19	8.0	4.4	2.1
19	108	35	969	106	392	151	91	155	18	9.6	4.8	2.2
20	83	34	338	90	257	113	103	81	18	8.2	4.7	2.2
21	69	32	225	84	158	97	82	57	16	7.2	4.0	2.0
22	86	41	322	78	125	142	71	48	116	6.6	3.5	2.3
23	138	60	629	74	102	399	63	43	41	6.9	3.1	3.3
24	101	58	339	70	90	198	64	40	27	7.2	2.8	2.3
25	83	50	161	66	77	124	55	39	22	5.6	2.5	2.0
26	67	43	119	62	69	158	52	38	19	5.2	2.5	2.0
27	59	43	101	61	63	332	49	71	17	4.8	2.5	1.8
28	54	44	93	60	58	182	47	120	16	4.6	2.6	1.8
29	47	42	185	60	---	126	48	75	15	4.8	2.8	1.7
30	44	38	1330	130	---	100	47	57	15	5.1	2.3	1.8
31	41	---	1240	124	---	85	---	49	---	4.9	3.9	---
TOTAL	3090	1345	9000	3805	4314	3868	2587	1650	967	318.6	127.8	78.9
MEAN	99.7	44.8	290	123	154	125	86.2	53.2	32.2	10.3	4.12	2.63
MAX	427	84	1330	323	666	399	299	197	116	18	6.7	6.0
MIN	14	32	36	60	58	41	45	26	15	4.6	2.3	1.7
CFSM	1.58	.71	4.59	1.94	2.44	1.97	1.36	.84	.51	.16	.07	.04
IN.	1.82	.79	5.30	2.24	2.54	2.28	1.52	.97	.57	.19	.08	.05

CAL YR 1990 TOTAL 44791.8 MEAN 123 MAX 1410 MIN 6.5 CFSM 1.94 IN. 26.36
WTR YR 1991 TOTAL 31151.3 MEAN 85.3 MAX 1330 MIN 1.7 CFSM 1.35 IN. 18.34

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 National Geodetic Vertical Datum of 1929. 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. 5, 26-28, Jan. 20-30, and Feb. 16-18. Records good except for periods of estimated daily discharges and discharges greater than 10,000 ft³/s which are 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.

AVERAGE DISCHARGE.--66 years, (1915-17, 1925-36, 1938-91), 1,264 ft³/s, 14.27 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 84,100 ft³/s Jan. 22, 1959, gage height, 27.30 ft present datum, from rating curve extended above 60,000 ft³/s on basis of slope-area measurement of peak flow; minimum observed, 27 ft³/s, Sept. 18, 1954.

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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 15,000 ft³/s and maximum (*).

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 18	1800	30,700	17.33	Mar. 23	0500	22,200	14.96
Dec. 30	1800	*32,300	*17.71	July 8	1700	17,200	13.32
Feb. 7	0400	21,600	14.76				

Minimum daily discharge, 115 ft³/s Sept. 29, 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	555	664	734	9860	2040	1050	1330	791	795	272	147	149
2	606	851	722	4290	1280	1020	1100	721	1240	262	152	135
3	410	654	5470	2560	1170	1140	938	676	1950	502	154	130
4	4950	552	6480	2220	1200	946	874	645	1560	303	278	210
5	4290	620	4900	3150	1320	891	883	691	1480	263	197	505
6	2670	793	3840	4790	6980	1290	915	767	876	249	244	248
7	1360	779	1690	5430	14700	2560	817	877	712	233	220	184
8	791	712	1400	4750	6820	1590	780	686	510	5420	192	157
9	755	687	1270	4380	4650	1420	959	638	446	1910	645	140
10	6910	1920	1200	4250	3900	1080	1220	604	423	1370	397	137
11	5310	1670	973	5970	3300	1010	982	573	402	1080	245	133
12	4020	1300	968	6290	1970	1020	816	535	363	1090	192	129
13	2750	942	938	4100	1670	7910	6140	508	359	648	169	129
14	1770	778	894	2810	5100	8400	8730	541	358	383	169	129
15	1410	729	4240	2410	3680	5210	6740	538	340	294	274	311
16	1470	687	3680	2140	2200	3490	5780	645	550	255	244	208
17	1370	679	2250	2290	1500	2420	3960	1400	539	234	189	169
18	2350	665	23500	2120	2300	5660	2860	2630	436	220	512	147
19	2610	637	13200	1630	5080	3970	2390	2610	386	209	361	143
20	1900	619	7500	1450	4740	2850	2760	1620	358	225	452	131
21	1580	650	4750	1250	2950	1950	1800	2680	332	224	406	123
22	1800	943	6950	1100	2370	5270	1370	2640	503	209	302	121
23	2890	1930	10100	980	1980	14800	1180	1830	951	192	216	135
24	3100	1310	7130	900	1380	5680	1160	1450	635	179	183	135
25	1410	1070	4370	820	1320	3410	1110	870	447	182	165	156
26	1290	962	4200	780	1360	4830	978	790	362	179	155	129
27	944	834	4000	760	1100	5870	917	4230	318	172	143	127
28	874	986	3800	750	1030	4670	863	4390	343	163	136	118
29	671	951	6550	750	---	2650	851	3120	291	156	135	115
30	627	770	18300	2500	---	1950	900	1870	279	157	153	115
31	608	---	14300	3100	---	1480	---	1060	---	152	146	---
TOTAL	64051	27344	170299	90580	89090	107487	62103	43626	18544	17387	7573	4898
MEAN	2066	911	5494	2922	3182	3467	2070	1407	618	561	244	163
MAX	6910	1930	23500	9860	14700	14800	8730	4390	1950	5420	645	505
MIN	410	552	722	750	1030	891	780	508	279	152	135	115
CFSM	1.72	.76	4.57	2.43	2.64	2.88	1.72	1.17	.51	.47	.20	.14
IN.	1.98	.85	5.27	2.80	2.75	3.32	1.92	1.35	.57	.54	.23	.15

CAL YR 1990 TOTAL 873058 MEAN 2392 MAX 23800 MIN 240 CFSM 1.99 IN. 27.00
WTR YR 1991 TOTAL 702982 MEAN 1926 MAX 23500 MIN 115 CFSM 1.60 IN. 21.74

LITTLE MIAMI RIVER BASIN

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1965 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: January 1979 to September 1991 (discontinued).

REMARKS.--Samples collected as part of the National Stream Quality Accounting Network. Water-quality monitor data collected from May 1975 to September 1986.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 4,850 mg/L, Aug. 8, 1984; minimum daily mean, 1 mg/L, several days in 1979, 1980, 1982-84.

SEDIMENT LOADS: Maximum daily, 185,000 tons, Sept. 14, 1979; minimum daily, 0.78 ton, Oct. 17, 1988.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,000 mg/L, Oct. 14; minimum daily mean, 6 mg/L, Nov. 17, 18, 20.

SEDIMENT LOADS: Maximum daily, 52,500 tons, Dec. 18; minimum daily, 6.1 tons, Sept. 14.

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV 27...	0930	987	624	8.5	11.5	7.0	4.5	11.0	93	1300	90
JAN 15...	1030	2780	570	8.2	19.5	7.5	17	12.1	103	250	630
MAR 05...	1420	1020	720	8.5	20.0	8.5	3.4	11.1	97	70	K22
MAY 08...	1035	849	630	8.6	27.0	17.5	2.4	10.4	109	21	65
JUL 09...	1145	1780	282	8.2	28.0	23.0	180	7.4	87	>6000	>6000
SEP 03...	1015	187	920	8.6	26.5	25.0	9.0	7.7	94	240	270

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO3)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
NOV 27...	290	74	25	20	3.3	278	12	247	38	33	0.30
JAN 15...	270	70	23	14	2.7	257	0	210	33	28	0.20
MAR 05...	320	82	28	23	2.5	310	8	261	46	42	0.20
MAY 08...	290	75	26	20	2.7	273	12	242	43	39	0.20
JUL 09...	100	29	6.9	8.4	4.3	83	0	69	20	14	0.20
SEP 03...	310	79	27	65	4.8	267	8	231	62	110	0.40

K Results based on colony count outside the acceptable range.

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
NOV 27...	2.6	350	0.020	2.70	0.030	0.040	0.90	0.190	0.160	0.160	10
JAN 15...	7.7	314	0.030	3.30	0.110	0.090	0.70	0.150	0.120	0.110	30
MAR 05...	4.6	401	0.040	3.00	0.020	0.020	1.1	0.170	0.170	0.160	--
MAY 08...	1.1	348	0.030	2.60	<0.010	0.030	0.50	0.220	0.160	0.170	<10
JUL 09...	4.5	157	0.030	1.80	0.060	0.070	1.4	0.270	0.150	0.160	210
SEP 03...	5.2	519	0.020	3.50	0.030	0.030	0.90	0.860	0.670	0.590	--

[illegible][illegible]

LITTLE MIAMI RIVER BASIN

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

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	555	72	107	664	31	54	734	12	25
2	606	71	116	851	22	51	722	8	16
3	410	60	67	654	38	67	5470	444	7560
4	4950	1000	17500	552	30	44	6480	97	1830
5	4290	161	2090	620	33	53	4900	80	1060
6	2670	96	719	793	13	29	3840	62	811
7	1360	42	154	779	22	46	1690	37	174
8	791	54	115	712	10	18	1400	13	51
9	755	67	157	687	10	20	1270	13	44
10	6910	660	13200	1920	47	252	1200	10	31
11	5310	338	5110	1670	55	244	973	8	21
12	4020	72	784	1300	58	204	968	9	24
13	2750	58	441	942	21	56	938	11	27
14	1770	39	186	778	13	26	894	6	15
15	1410	37	141	729	10	19	4240	134	2540
16	1470	38	151	687	9	16	3680	50	523
17	1370	53	197	679	6	11	2250	270	1670
18	2350	215	1670	665	6	12	23500	825	52500
19	2610	96	726	637	13	23	13200	387	14700
20	1900	67	348	619	6	9.7	7500	191	3940
21	1580	43	185	650	7	12	4750	116	1490
22	1800	197	1160	943	18	61	6950	104	1940
23	2890	219	1740	1930	31	164	10100	76	2050
24	3100	75	660	1310	15	53	7130	66	1270
25	1410	29	110	1070	7	20	4370	58	685
26	1290	20	71	962	8	22	4200	46	521
27	944	17	44	834	17	37	4000	30	320
28	874	18	43	986	45	119	3800	30	304
29	671	12	22	951	27	71	6550	108	2370
30	627	11	19	770	17	36	18300	237	17200
31	608	16	26	---	---	---	14300	155	6450
TOTAL	64051	---	48059	27344	---	1849.7	170299	---	122162
JANUARY			FEBRUARY			MARCH			
1	9860	144	3810	2040	30	169	1050	29	81
2	4290	132	1620	1280	20	71	1020	23	63
3	2560	55	384	1170	21	66	1140	32	99.6
4	2220	42	256	1200	23	74	946	27	69
5	3150	56	478	1320	23	83	891	21	52
6	4790	43	547	6980	286	7620	1290	77	390
7	5430	36	526	14700	843	38200	2560	319	2450
8	4750	29	378	6820	105	2030	1590	35	154
9	4380	25	293	4650	58	734	1420	21	79
10	4250	26	293	3900	72	760	1080	12	36
11	5970	319	5860	3300	106	935	1010	19	52
12	6290	128	2310	1970	142	754	1020	59	171
13	4100	52	600	1670	164	756	7910	583	13700
14	2810	23	176	5100	387	5460	8400	301	7920
15	2410	23	151	3680	122	1260	5210	37	525
16	2140	28	160	2200	78	463	3490	70	659
17	2290	28	177	1500	54	218	2420	118	816
18	2120	27	156	2300	45	282	5660	273	4320
19	1630	20	89	5080	259	3570	3970	80	874
20	1450	19	75	4740	101	1330	2850	59	458
21	1250	19	62	2950	29	231	1950	40	211
22	1100	19	55	2370	25	164	5270	401	6560
23	980	22	58	1980	19	104	14800	233	9590
24	900	27	66	1380	19	71	5680	151	2340
25	820	26	58	1320	20	72	3410	162	1480
26	780	25	52	1360	22	80	4830	399	6030
27	760	23	47	1100	19	56	5870	259	4200
28	750	27	55	1030	29	82	4670	192	2470
29	750	55	111	---	---	---	2650	121	866
30	2500	78	527	---	---	---	1950	115	610
31	3100	50	425	---	---	---	1480	84	336
TOTAL	90580	---	19855	89090	---	65695	107487	---	67661.6

LITTLE MIAMI RIVER BASIN

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03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

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	1330	70	253	791	47	101	795	55	118
2	1100	59	177	721	48	93	1240	88	295
3	938	49	123	676	44	81	1950	229	1360
4	874	36	85	645	33	58	1560	144	612
5	883	25	60	691	30	56	1480	150	602
6	915	22	53	767	42	87	876	151	357
7	817	36	79	877	32	77	712	131	254
8	780	29	60	686	22	40	510	74	100
9	959	54	139	638	26	46	446	186	224
10	1220	49	162	604	35	57	423	194	221
11	982	45	121	573	12	18	402	165	179
12	816	42	92	535	49	70	363	176	173
13	6140	418	9450	508	37	51	359	169	164
14	8730	198	4770	541	31	47	358	84	82
15	6740	86	1570	538	90	128	340	54	50
16	5780	87	1360	645	137	249	550	208	515
17	3960	106	1110	1400	189	747	539	158	240
18	2860	133	1030	2630	400	3200	436	72	86
19	2390	114	735	2610	593	4490	386	28	29
20	2760	114	847	1620	245	1080	358	42	41
21	1800	102	500	2680	160	1150	332	38	34
22	1370	84	310	2640	117	833	503	57	87
23	1180	116	368	1830	145	737	951	128	332
24	1160	84	263	1450	369	1440	635	174	301
25	1110	39	117	870	272	638	447	151	181
26	978	34	89	790	245	523	362	140	138
27	917	37	91	4230	416	7200	318	68	58
28	863	59	136	4390	515	6890	343	49	45
29	851	71	162	3120	300	2610	291	67	53
30	900	47	115	1870	89	453	279	27	20
31	---	---	---	1060	61	174	---	---	---
TOTAL	62103	---	24427	43626	---	33424	18544	---	6951
JULY			AUGUST			SEPTEMBER			
1	272	18	13	147	45	18	149	49	20
2	262	35	25	152	34	14	135	51	19
3	502	219	338	154	32	14	130	54	19
4	303	43	36	278	318	260	210	153	115
5	263	35	25	197	68	37	505	605	867
6	249	45	30	244	246	231	248	238	167
7	233	71	45	220	273	166	184	90	45
8	5420	374	11000	192	247	149	157	71	30
9	1910	192	1230	645	728	1550	140	52	20
10	1370	194	820	397	193	209	137	60	22
11	1080	153	488	245	131	86	133	76	27
12	1090	137	437	192	174	90	129	57	20
13	648	108	195	169	159	72	129	30	11
14	383	59	62	169	135	60	129	18	6.1
15	294	49	39	274	63	47	311	322	317
16	255	51	35	244	52	34	208	129	74
17	234	48	31	189	47	24	169	108	49
18	220	45	27	512	307	479	147	110	44
19	209	48	27	361	143	144	143	46	18
20	225	71	43	452	179	254	131	55	19
21	224	148	90	406	125	140	123	48	16
22	209	137	78	302	113	94	121	41	13
23	192	77	40	216	57	34	135	37	13
24	179	131	63	183	51	25	135	36	13
25	182	92	45	165	47	21	156	36	15
26	179	72	35	155	54	22	129	35	12
27	172	71	33	143	92	35	127	34	12
28	163	45	20	136	121	45	118	35	11
29	156	48	20	135	42	15	115	30	9.3
30	157	40	17	153	42	17	115	23	7.1
31	152	53	22	146	45	18	---	---	---
TOTAL	17387	---	15409	7573	---	4404	4898	---	2030.5
YEAR	702982		411928.2						

LITTLE MIAMI RIVER BASIN

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 current year.

GAGE.--Water-stage recorder. Datum of gage is 571.68 ft above National Geodetic Vertical Datum of 1929. Prior to July 17, 1968, nonrecording gage 1,100 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good. 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.

AVERAGE DISCHARGE.--11 years (water years 1966-76), 432 ft³/s, 15 years (water years 1977-91) 425 ft³/s.

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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,980 ft³/s Jan. 7, gage height, 12.06 ft; minimum daily, 30 ft³/s Sept. 25, 27-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	279	104	172	472	1140	88	470	97	396	44	34	36
2	278	75	101	465	858	108	469	91	254	44	34	35
3	195	77	238	463	406	108	464	55	106	44	35	34
4	335	77	1150	1180	282	108	463	55	173	45	46	43
5	872	98	1780	2400	238	108	463	56	249	46	36	65
6	1290	177	1740	3050	795	127	377	79	202	46	45	127
7	1280	179	1440	3500	1310	279	238	127	129	46	40	164
8	1260	108	664	3900	2060	761	160	167	83	244	68	163
9	1010	110	253	3840	3060	824	64	201	71	662	220	175
10	897	173	166	3450	3020	375	63	205	51	1360	204	268
11	1250	231	93	2640	2980	317	103	127	42	1350	291	273
12	1440	256	111	2580	2380	226	164	84	42	817	209	185
13	1670	287	111	2550	1510	569	326	95	42	941	73	63
14	1240	259	107	2530	1930	1300	250	78	42	1260	73	47
15	702	175	165	2500	2430	1870	1350	53	42	1030	67	47
16	696	106	293	1690	1300	1650	3050	53	47	537	67	47
17	543	106	794	651	407	1220	3380	78	47	169	38	47
18	413	101	706	320	466	1420	3020	117	56	47	57	46
19	438	90	952	231	870	1690	1920	147	103	43	76	46
20	443	93	1860	231	1140	1670	1140	180	73	34	85	43
21	210	116	1870	231	1140	1080	833	142	42	34	82	32
22	251	151	1860	230	1130	687	375	85	87	34	77	32
23	756	294	1930	198	767	409	105	55	60	37	77	35
24	1150	441	2420	162	294	748	147	55	62	37	68	42
25	906	441	2900	160	129	1950	168	55	59	34	48	30
26	298	441	3320	153	167	2040	138	55	59	34	44	31
27	148	441	3680	139	167	512	97	402	59	34	43	30
28	148	441	3300	151	133	2000	97	1220	55	33	34	30
29	137	384	2820	272	---	3280	97	1870	44	34	34	30
30	113	267	2070	449	---	2990	97	1130	44	34	36	30
31	113	---	326	817	---	1700	---	394	---	34	36	---
TOTAL	20761	6299	39392	41605	32509	32214	20088	7608	2821	9188	2377	2276
MEAN	670	210	1271	1342	1161	1039	670	245	94.0	296	76.7	75.9
MAX	1670	441	3680	3900	3060	3280	3380	1870	396	1360	291	273
MIN	113	75	93	139	129	88	63	53	42	33	34	30

CAL YR 1990 TOTAL 237615 MEAN 651 MAX 4430 MIN 32
WTR YR 1991 TOTAL 217138 MEAN 595 MAX 3900 MIN 30

LITTLE MIAMI RIVER BASIN

175

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 National Geodetic Vertical Datum of 1929. Prior to Feb. 6, 1940, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 21-28, May 3, 7, and June 7, 16-26. Records good except for period of estimated record and 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.

AVERAGE DISCHARGE.--68 years (1915-17, 1925-91), 556 ft³/s.

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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,700 ft³/s Dec. 18, gage height, 13.79 ft; minimum daily, 32 ft³/s Aug. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	296	148	251	890	1300	142	643	153	514	39	39	44
2	275	98	157	779	1090	179	618	142	414	38	33	42
3	246	93	1930	733	582	174	607	76	153	38	32	42
4	2360	92	1840	1280	438	168	601	74	169	38	68	77
5	959	107	2210	2540	417	161	595	71	270	38	44	129
6	1260	220	2080	3790	3200	323	532	81	254	37	93	112
7	1210	255	1790	4000	3870	616	346	130	150	37	86	158
8	1180	153	970	4110	2360	868	306	195	103	2350	88	158
9	1060	165	389	3990	3360	1040	272	257	94	1010	1090	155
10	1920	546	286	3730	3290	497	311	290	68	1630	264	257
11	1470	375	142	3810	3230	446	178	207	56	1520	312	264
12	1540	319	170	3320	2740	325	242	114	53	1380	275	229
13	1900	338	170	2960	1920	2590	2380	121	52	1010	89	79
14	1410	318	163	2850	3190	2030	1430	119	51	1320	81	54
15	659	244	1220	2800	3000	2240	2150	78	50	1140	81	51
16	638	160	723	2170	1780	1970	3390	77	66	660	77	50
17	553	165	1200	977	587	1470	3620	96	72	256	58	50
18	695	150	8210	545	1100	2560	3340	199	90	72	69	50
19	542	125	2140	377	1500	2150	2360	214	140	65	87	50
20	493	123	2340	360	1560	1970	1460	232	80	54	147	48
21	296	136	2660	320	1370	1430	1020	204	60	49	157	41
22	491	310	2790	280	1310	2850	624	120	120	47	103	37
23	957	538	3370	250	1010	2890	193	209	86	86	91	36
24	1200	539	2790	230	495	1090	227	87	86	73	83	42
25	997	495	3080	210	208	2030	252	72	84	47	61	41
26	389	475	3310	200	255	3850	228	65	82	43	53	37
27	195	472	3680	190	249	1230	164	1390	53	42	51	37
28	193	472	3480	270	228	2380	158	1590	53	40	46	37
29	183	449	4030	433	---	3550	163	2080	45	41	42	37
30	150	336	6270	1280	---	3280	169	1490	41	41	57	37
31	152	---	1510	1070	---	2100	---	495	---	39	53	---
TOTAL	25869	8416	65351	50744	45639	48599	28579	10728	3609	13280	3910	2481
MEAN	834	281	2108	1637	1630	1568	953	346	120	428	126	82.7
MAX	2360	546	8210	4110	3870	3850	3620	2080	514	2350	1090	264
MIN	150	92	142	190	208	142	158	65	41	37	32	36

CAL YR 1990 TOTAL 357673 MEAN 980 MAX 8210 MIN 37
WTR YR 1991 TOTAL 307205 MEAN 842 MAX 8210 MIN 32

MILL CREEK BASIN

03255500 MILL CREEK AT READING, OH

LOCATION.--Lat 39°13'14", long 84°26'49", in sec. 32, R.1, T.4, Hamilton County, Hydrologic Unit 05090203, on right bank at upstream side of Koehler Street Bridge at Reading, 1.0 mi upstream from West Fork Mill Creek, and 13.0 mi upstream from mouth.

DRAINAGE AREA.--73.0 mi².

PERIOD OF RECORD.--October 1938 to April 1939, June 1939 to current year.

REVISED RECORDS.--WSP 1908: Drainage area. WRD OH-83-1: 1980-82 (P).

GAGE.--Water-stage recorder. Datum of gage is 527.00 ft above Ohio River datum. Prior to Oct. 1, 1951, water-stage recorder or nonrecording gage at same site at datum 4.00 ft higher. Oct. 1, 1951, to Apr. 25, 1954, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Jan. 17-29 and July 7 to Aug. 21. Records good except those for estimated periods which are fair. Some diversion and ground water pumpage from Mill Creek and Great Miami River basin by industrial plants of the greater Cincinnati area upstream from station. Water-quality data collected at this site 1965 to 1977.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,780 ft³/s Mar. 6, 1945, gage height, 20.00 ft present datum; no flow for many days in 1940-41, 1944, 1951.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 4	0830	2,030	10.47	Feb. 6	2230	2,960	12.79
Oct. 18	0530	2,050	10.53	Mar. 13	1600	1,720	9.71
Dec. 3	0800	1,890	10.10	Mar. 22	2330	2,820	12.44
Dec. 18	0300	*3,640	*14.45	Apr. 13	0930	1,750	9.78
Dec. 30	1200	3,280	13.58				

Minimum daily 11.0 ft³/s July 7, 27, Aug. 1-3, Sept. 21, 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	30	40	229	76	49	65	37	33	13	11	23
2	24	29	37	171	68	62	58	36	77	14	11	15
3	22	26	890	136	61	37	51	35	41	13	11	16
4	809	24	231	104	62	33	57	33	29	13	240	158
5	126	62	110	105	95	33	70	43	24	12	20	50
6	62	46	84	267	949	179	44	39	22	13	17	20
7	41	27	65	188	1120	109	40	33	21	11	38	15
8	34	24	51	124	258	59	63	31	20	600	19	16
9	315	107	42	108	157	47	173	65	19	63	440	16
10	812	149	41	112	119	40	119	37	22	26	70	15
11	254	56	38	444	96	38	57	30	21	77	21	14
12	121	43	37	238	83	87	46	27	20	275	16	14
13	92	38	36	135	161	1370	892	29	20	42	17	15
14	61	35	31	112	378	382	481	71	19	22	15	14
15	49	41	583	104	143	169	271	42	18	21	21	12
16	38	52	141	144	83	114	149	85	17	21	16	14
17	35	38	194	98	67	264	106	108	21	18	14	21
18	746	27	2520	80	369	448	83	166	19	18	240	16
19	155	30	579	72	229	161	188	48	18	16	40	17
20	90	30	237	63	134	115	92	34	18	17	35	13
21	67	30	275	54	94	98	67	30	18	15	24	11
22	268	196	426	45	80	780	64	52	106	17	19	12
23	151	99	705	40	59	976	60	60	31	16	17	24
24	83	58	213	35	54	218	78	33	20	17	16	15
25	64	45	129	32	48	131	51	27	19	14	14	14
26	49	42	101	28	44	440	49	110	16	15	15	13
27	41	100	86	27	41	280	44	381	17	11	16	13
28	36	102	100	26	38	181	41	88	16	13	22	12
29	34	57	494	25	---	113	51	50	14	16	42	11
30	33	44	1630	277	---	84	43	42	13	25	56	13
31	31	---	565	106	---	69	---	36	---	15	52	---
TOTAL	4771	1687	10711	3729	5166	7166	3653	1938	769	1479	1605	632
MEAN	154	56.2	346	120	184	231	122	62.5	25.6	47.7	51.8	21.1
MAX	812	196	2520	444	1120	1370	892	381	106	600	440	158
MIN	22	24	31	25	38	33	40	27	13	11	11	11

CAL YR 1990 TOTAL 50662.4 MEAN 139 MAX 2520 MIN 9.5
WTR YR 1991 TOTAL 43306 MEAN 119 MAX 2520 MIN 11

MILL CREEK BASIN

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. 24-25, Jan. 4, 20-29, Mar. 11-19. Records good except for periods of estimated discharge which are fair. 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.

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, 4,210 ft³/s Dec. 18, gage height 16.08 ft; minimum daily, 8.1 ft³/s Sept. 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	27	44	795	57	42	58	32	26	15	15	40
2	34	26	31	346	100	131	54	30	72	16	15	14
3	22	25	973	154	43	36	75	30	41	14	28	14
4	878	36	589	120	40	27	66	29	24	14	235	181
5	359	72	156	115	72	27	68	68	19	13	22	73
6	99	59	123	313	1010	203	72	37	17	16	116	60
7	49	37	104	320	1450	117	64	28	19	37	48	46
8	43	32	85	114	676	80	54	25	16	724	90	30
9	330	126	50	93	361	177	205	65	15	247	435	16
10	902	195	48	171	219	39	178	33	19	504	54	14
11	543	96	47	622	78	35	161	24	21	149	21	12
12	239	83	36	396	63	150	101	22	20	304	17	12
13	94	56	33	212	152	1300	980	23	19	206	18	14
14	61	30	28	97	603	580	743	111	19	21	35	11
15	54	32	626	119	225	290	558	72	18	18	27	10
16	39	45	403	138	123	130	464	86	18	16	18	11
17	44	36	290	158	61	250	108	108	22	16	100	23
18	841	23	2490	76	425	430	129	235	19	16	260	15
19	350	28	1040	64	256	260	218	123	19	14	139	17
20	213	28	912	60	304	232	187	30	18	14	92	10
21	78	28	598	53	95	110	64	26	19	12	52	8.8
22	310	239	744	48	76	945	80	58	113	13	20	8.1
23	190	123	1050	44	149	1250	57	89	66	14	17	22
24	161	95	600	39	203	656	102	31	20	13	15	13
25	92	83	250	36	43	130	69	24	19	13	14	10
26	60	65	113	33	39	501	44	248	16	13	15	10
27	50	112	93	31	36	379	38	562	17	10	15	9.3
28	45	116	91	29	33	445	59	216	17	10	17	8.9
29	33	91	665	29	---	329	47	113	15	13	39	8.5
30	30	66	1570	364	---	80	39	37	14	18	57	8.6
31	28	---	949	119	---	62	---	30	---	14	57	---
TOTAL	6329	2110	14831	5308	6992	9423	5142	2645	777	2517	2103	730.2
MEAN	204	70.3	478	171	250	304	171	85.3	25.9	81.2	67.8	24.3
MAX	902	239	2490	795	1450	1300	980	562	113	724	435	181
MIN	22	23	28	29	33	27	38	22	14	10	14	8.1

CAL YR 1990 TOTAL 69685 MEAN 191 MAX 2490 MIN 11
WTR YR 1991 TOTAL 58907.2 MEAN 161 MAX 2490 MIN 8.1

GREAT MIAMI RIVER BASIN

03260700 BOKENGEHALAS CREEK NEAR DE GRAFF, OH

LOCATION.--Lat 40°20'50", long 83°53'28", in E. 1/2 sec. 3, R.14, T.2, Logan County, Hydrologic Unit 05080001, on right bank at downstream side of county road bridge, 2 mi downstream from Bluejacket Creek, 2.8 mi northeast of De Graff, and 4 mi upstream from mouth.

DRAINAGE AREA.--36.3 mi².

PERIOD OF RECORD.--October 1957 to current year. Prior to October 1962, published as Buckongahelas Creek near Degraff.

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,008.76 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 12-31, Feb. 13-17, July 5 to Aug. 8. Records fair except those for periods of estimated record, which are poor. Diurnal fluctuation caused by municipal plant operation in Bellefontaine, 9.8 mi upstream. Since storage capacity is small, daily flows are not affected appreciably. Water-quality data collected at this site 1965 to 1973.

COOPERATION.--Gage-height tapes and 8 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--34 years, 34.0 ft³/s, 12.72 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,780 ft³/s Jan. 21, 1959, gage height, 6.83 ft; minimum daily, 2.2 ft³/s Sept. 29, 30, Oct. 7, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 15	1300	371	3.94	Dec. 30	1745	*809	*6.65
Dec. 18	2145	460	4.50	Feb. 19	0500	301	3.47
Dec. 23	1115	490	4.70				

Minimum daily discharge, 5.4 ft³/s Sept. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	15	17	276	49	50	53	45	32	15	6.7	5.7
2	8.7	15	16	193	53	52	51	42	25	48	6.8	5.4
3	8.4	14	117	152	78	54	48	39	25	38	6.7	20
4	31	14	109	121	99	50	45	36	22	19	6.6	28
5	16	16	56	103	122	48	48	35	21	18	6.8	8.0
6	12	33	46	91	137	47	44	36	20	17	7.0	7.6
7	11	20	39	79	145	77	41	33	19	15	7.1	6.4
8	10	17	33	71	94	55	41	32	18	14	7.2	6.1
9	39	17	29	68	74	49	49	32	18	13	8.0	7.2
10	58	38	27	65	65	49	50	31	18	13	7.6	7.2
11	46	26	25	61	58	46	41	29	30	12	7.2	6.8
12	30	22	24	110	52	44	38	33	62	12	6.8	6.8
13	24	20	23	88	48	44	73	35	27	11	6.8	8.3
14	20	18	21	64	45	47	158	38	22	10	8.0	7.6
15	18	18	172	54	42	56	119	30	20	9.8	8.7	11
16	17	18	92	93	38	68	81	27	19	9.4	7.2	6.8
17	16	17	64	125	45	70	61	29	19	9.0	7.2	8.0
18	37	16	269	90	142	113	53	32	19	8.7	7.6	7.2
19	42	16	225	60	260	86	127	28	19	8.4	7.2	6.8
20	26	16	109	46	169	63	144	26	19	8.1	7.6	7.2
21	21	16	185	40	120	55	99	25	18	7.9	7.2	6.8
22	31	25	288	34	103	64	79	23	21	7.6	7.2	6.4
23	41	30	331	29	80	151	63	23	18	7.6	6.8	14
24	30	22	158	26	66	95	76	22	18	7.5	6.4	7.2
25	24	19	100	23	60	67	61	21	18	7.3	5.7	7.6
26	20	19	79	20	56	110	59	29	18	7.2	5.7	7.2
27	18	18	67	18	52	145	54	24	18	7.1	6.8	6.4
28	17	24	63	16	50	98	51	22	17	7.0	6.8	6.4
29	16	20	183	22	---	72	49	21	16	6.9	7.2	6.1
30	16	18	693	35	---	60	47	21	15	6.8	6.4	7.2
31	16	---	580	51	---	54	---	56	---	6.8	6.4	---
TOTAL	728.5	597	4240	2324	2402	2139	2003	955	651	388.1	217.4	253.4
MEAN	23.5	19.9	137	75.0	85.8	69.0	66.8	30.8	21.7	12.5	7.01	8.45
MAX	58	38	693	276	260	151	158	56	62	48	8.7	28
MIN	8.4	14	16	16	38	44	38	21	15	6.8	5.7	5.4
CFSM	.65	.55	3.77	2.07	2.36	1.90	1.84	.85	.60	.34	.19	.23
IN.	.75	.61	4.35	2.38	2.46	2.19	2.05	.98	.67	.40	.22	.26

CAL YR 1990 TOTAL 19378.2 MEAN 53.1 MAX 693 MIN 8.3 CFSM 1.46 IN. 19.86
WTR YR 1991 TOTAL 16898.4 MEAN 46.3 MAX 693 MIN 5.4 CFSM 1.28 IN. 17.32

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 National Geodetic Vertical Datum of 1929. 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: Jan. 20-29, Feb. 13-15. Records good except those for estimated days which are 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 4.86 ft³/s in 1991 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.

AVERAGE DISCHARGE.--66 years, (1925-91) 484 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,700 ft³/s Mar. 20, 1927, gage height 14.4 ft, from rating curve extended above 8,700 ft³/s on basis of velocity-area studies; maximum gage height, 15.91 ft Jan. 21, 1959; minimum discharge, 1.5 ft³/s Aug. 13, 1963, result of temporary storage behind dam upstream; minimum daily discharge, 8.0 ft³/s Sept. 23, 1935.

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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s and maximum (*).

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 18	2330	5,160	8.32	Dec. 30	1700	*10,400	*14.36
Dec. 23	1230	5,310	8.45				

Minimum daily discharge 30 ft³/s Sept. 3, 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	173	194	197	7570	493	400	480	369	428	67	39	37
2	113	249	182	5480	489	409	492	350	282	225	37	32
3	95	237	1210	3830	886	447	387	341	246	198	36	30
4	142	221	2340	2560	1500	568	348	295	204	139	40	50
5	512	222	1870	1810	2000	389	347	288	211	103	40	74
6	303	276	1280	1280	2300	324	363	297	158	87	40	50
7	188	263	849	887	2830	569	338	284	133	81	39	39
8	154	232	555	700	2170	499	323	255	120	76	42	34
9	305	209	430	610	1580	371	327	236	116	74	46	32
10	2060	316	352	550	1130	361	387	226	112	72	51	35
11	2470	423	427	743	810	341	396	219	122	69	49	34
12	2150	304	441	1670	624	307	314	224	308	67	43	33
13	1590	262	417	1320	560	337	491	242	332	67	38	38
14	1100	206	416	908	500	453	1450	256	182	64	38	51
15	653	177	1810	799	460	619	1890	281	107	62	39	43
16	414	173	2360	1440	436	896	1590	221	129	57	38	36
17	305	213	1620	1910	600	947	1110	214	122	54	40	33
18	1010	214	3290	1440	753	1450	772	296	111	53	42	33
19	1610	157	4540	960	2840	1350	1230	327	97	51	45	31
20	1130	148	3320	700	3290	907	2590	249	93	50	46	30
21	667	142	3140	580	2580	675	2200	198	86	49	46	31
22	604	184	4520	500	1930	733	1630	178	124	47	45	33
23	940	394	4940	440	1410	1910	1050	169	170	47	37	37
24	689	363	4320	380	945	1690	907	174	122	46	35	41
25	499	268	2960	340	705	1100	912	181	98	45	34	38
26	438	229	2050	290	591	1190	720	190	87	42	33	36
27	301	203	1410	270	476	1980	616	276	81	41	31	33
28	248	202	1010	250	419	1650	542	259	75	41	31	32
29	251	296	2100	350	---	1240	490	192	73	40	31	32
30	204	260	9320	592	---	942	415	172	69	39	34	32
31	192	---	9880	670	---	604	---	224	---	40	48	---
TOTAL	21510	7237	73556	41829	35307	25658	25107	7683	4598	2193	1233	1120
MEAN	694	241	2373	1349	1261	828	837	248	153	70.7	39.8	37.3
MAX	2470	423	9880	7570	3290	1980	2590	369	428	225	51	74
MIN	95	142	182	250	419	307	314	169	69	39	31	30

CAL YR 1990 TOTAL 322047 MEAN 882 MAX 9880 MIN 92
WTR YR 1991 TOTAL 247031 MEAN 677 MAX 9880 MIN 30

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). WRD Ohio 1985-1: 1984 (M).

GAGE.--Water-stage recorder. Datum of gage is 926.57 ft above National Geodetic Vertical Datum of 1929. October 1, 1964 to September 30, 1980 water-stage recorder at same site at datum 0.43 ft higher.

REMARKS.--Estimated daily discharges: Dec. 7-12, Jan. 20-29, Feb. 12-16. Records fair, except for period 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 10 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--27 years, 133 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,500 ft³/s Dec. 31, 1990, height, 14.31 ft; minimum daily, 0.10 ft³/s Aug. 15, 16, 1965, Sept. 10-12, 14, 15, 1966.

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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	0630	1,690	10.72	Dec. 31	0100	*6,500	*14.32
Dec. 22	1030	1,660	10.67				

Minimum daily discharge 0.36 ft³/s Sept. 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	31	69	2140	91	60	70	46	261	3.8	2.1	1.5
2	36	28	59	872	109	69	57	38	244	33	1.8	.95
3	23	26	592	399	339	72	48	35	597	30	1.6	.60
4	216	25	1110	239	566	57	42	34	218	22	2.2	6.0
5	245	31	568	167	767	45	55	33	89	15	1.7	3.2
6	123	49	272	128	808	47	53	60	49	7.9	1.6	1.5
7	73	39	170	102	1130	59	48	41	32	4.6	2.1	1.1
8	52	30	130	82	590	53	44	33	24	5.0	2.6	1.1
9	179	28	110	72	320	45	45	29	19	6.8	6.5	.89
10	1170	64	96	61	218	41	36	27	15	4.7	2.3	.85
11	1180	61	80	217	147	39	37	24	14	3.5	1.6	1.0
12	556	49	60	628	100	39	34	23	19	3.2	1.8	.91
13	273	39	48	304	80	57	125	24	21	3.3	1.7	1.1
14	173	32	42	188	66	60	482	25	16	2.9	1.8	1.4
15	117	28	678	170	64	104	372	22	11	2.3	1.8	1.1
16	80	26	904	548	64	299	230	20	18	2.3	1.5	.58
17	59	30	455	582	100	407	146	73	16	2.1	1.7	.36
18	383	25	933	317	224	629	95	112	11	2.1	4.7	.52
19	488	23	1560	194	1170	359	299	88	8.2	2.1	2.0	.59
20	252	22	911	150	1190	214	892	51	6.5	2.0	1.3	.66
21	151	18	701	120	628	144	484	35	5.3	1.9	1.5	.92
22	183	52	1560	96	335	254	265	27	4.9	1.7	1.5	.82
23	225	135	1380	76	204	1220	166	21	5.5	1.8	1.6	2.6
24	157	94	893	60	136	661	241	19	5.1	1.9	1.7	2.6
25	113	69	398	52	104	286	175	17	4.8	1.8	1.4	1.5
26	78	52	217	47	80	415	124	42	16	1.8	1.3	1.5
27	57	43	147	43	64	591	97	89	9.8	1.9	1.5	1.4
28	49	138	124	42	63	305	80	51	5.4	2.2	2.0	1.2
29	41	158	818	41	---	209	68	36	4.5	1.9	2.5	1.0
30	35	94	4700	130	---	122	51	30	4.0	1.9	1.8	.94
31	33	---	5070	126	---	75	---	223	---	2.1	1.7	---
TOTAL	6855	1539	24855	8393	9757	7037	4961	1428	1754.0	179.5	62.9	40.39
MEAN	221	51.3	802	271	348	227	165	46.1	58.5	5.79	2.03	1.35
MAX	1180	158	5070	2140	1190	1220	892	223	597	33	6.5	6.0
MIN	23	18	42	41	63	39	34	17	4.0	1.7	1.3	.36

CAL YR 1990 TOTAL 93947.5 MEAN 257 MAX 5070 MIN 3.1
WTR YR 1991 TOTAL 66861.79 MEAN 183 MAX 5070 MIN .36

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 National Geodetic Vertical Datum of 1929. 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. 25-27, Jan. 2, 3, 20-28, Feb. 12-16, Aug. 21-26. Records good except those for periods of estimated discharge and Aug. 10-30 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 8 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--76 years, 211 ft³/s.

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; minimum daily, 1.3 ft³/s Sept. 12, 21, 22, 1991.

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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,520 ft³/s Dec. 31, gage height, 84.83 ft; minimum daily, 1.3 ft³/s Sept. 12, 21, 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	55	106	5800	166	113	145	90	365	14	7.1	3.0
2	63	47	86	3100	210	121	127	86	272	32	8.4	5.6
3	52	45	1400	950	627	122	110	72	937	51	8.0	9.6
4	223	48	1760	390	1010	111	101	72	332	31	4.9	7.0
5	365	50	841	284	1360	91	111	73	141	27	9.9	14
6	194	68	390	233	1480	92	114	89	81	24	13	6.3
7	118	73	249	193	1820	137	102	84	57	12	8.3	3.4
8	83	57	180	164	1070	111	96	68	44	17	8.0	2.2
9	436	49	137	147	542	99	94	62	43	23	9.5	5.0
10	2160	102	119	135	358	90	99	55	32	22	11	9.8
11	1770	101	110	381	251	86	85	44	33	14	6.5	2.2
12	864	84	100	1180	170	84	79	45	45	17	11	1.3
13	407	74	91	537	140	89	543	49	36	7.6	6.7	4.5
14	253	55	83	317	130	128	1240	49	29	6.8	6.4	4.3
15	178	50	1530	289	120	336	886	44	23	8.1	5.7	10
16	132	50	1430	1030	110	725	428	39	23	5.3	5.7	10
17	98	51	708	1090	177	790	258	77	29	4.6	2.5	8.5
18	793	43	1930	557	487	1230	180	209	33	12	5.5	2.0
19	762	42	2670	324	2040	690	664	185	28	17	14	6.5
20	366	42	1460	250	1940	364	1460	102	24	18	9.0	6.7
21	216	38	1320	190	1080	252	875	73	19	16	7.0	1.3
22	269	95	2610	130	545	467	453	58	21	8.1	4.7	1.3
23	350	227	2370	100	322	1680	280	44	13	6.8	5.0	10
24	235	145	1430	90	228	1140	382	42	14	9.4	5.2	10
25	173	108	500	86	180	466	293	41	19	7.2	4.3	6.8
26	128	87	260	76	148	840	214	42	14	12	4.0	7.0
27	94	77	210	70	127	1170	174	122	20	11	4.5	6.6
28	84	134	193	66	116	890	148	87	20	4.1	5.9	1.6
29	81	226	1470	66	---	390	130	65	15	7.7	6.7	1.5
30	73	136	5190	231	---	242	114	52	10	16	4.9	5.3
31	68	---	6350	224	---	164	---	132	---	14	5.5	---
TOTAL	11188	2459	37283	18680	16954	13310	9985	2352	2772	475.7	218.8	173.3
MEAN	361	82.0	1203	603	605	429	333	75.9	92.4	15.3	7.06	5.78
MAX	2160	227	6350	5800	2040	1680	1460	209	937	51	14	14
MIN	52	38	83	66	110	84	79	39	10	4.1	2.5	1.3

CAL YR 1990 TOTAL 150912 MEAN 413 MAX 6350 MIN 15
WTR YR 1991 TOTAL 115850.8 MEAN 317 MAX 6350 MIN 1.3

GREAT MIAMI RIVER BASIN

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 National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 20-29, Feb. 12-17. 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 6.2 ft³/s in 1991 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 8 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--29 years, 820 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,000 ft³/s Dec. 30, 1990, gage height, 15.49 ft; minimum, 0.50 ft³/s July 12, 13, 1963, result of temporary storage during repair of dam upstream; minimum daily discharge, 4.3 ft³/s July 17, 1977 result of dam closure upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 11, 1958 reached a stage of 16.4 ft, discharge, 21,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 20,000 ft³/s Dec. 30, gage height, 15.49 ft; minimum daily, 32 ft³/s Sept. 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	298	299	410	15200	817	660	787	592	773	116	70	57
2	265	317	329	11000	757	670	743	563	619	162	66	59
3	209	333	2000	5210	1360	667	665	521	1030	306	65	54
4	275	320	4590	3410	2330	747	591	509	671	245	95	73
5	823	318	2940	2420	3240	688	584	479	411	174	70	73
6	698	356	1860	1810	3750	560	579	513	296	146	59	93
7	415	395	1260	1350	5240	696	564	488	231	129	59	66
8	297	347	929	1070	3620	771	534	437	187	134	54	51
9	389	321	720	957	2440	609	536	399	191	110	70	42
10	4000	371	619	874	1740	535	565	373	189	106	67	56
11	4780	584	592	1070	1270	538	593	350	174	101	70	52
12	3290	490	652	3100	900	487	510	333	238	94	70	51
13	2170	415	616	2280	800	530	916	353	461	101	69	50
14	1490	334	591	1520	700	668	2600	401	303	97	61	56
15	1040	282	2910	1260	600	999	3090	405	219	92	60	61
16	712	261	4370	2270	560	1700	2360	350	169	90	59	63
17	538	260	2610	3150	800	1850	1640	319	183	84	52	54
18	1470	317	5250	2350	1040	2630	1170	513	180	83	64	52
19	2580	265	8670	1550	4910	2350	1460	638	151	92	56	46
20	1700	237	5610	1100	5790	1520	4360	463	140	83	67	46
21	1100	222	4320	900	4100	1120	3370	356	136	77	74	38
22	925	270	8440	700	2820	1180	2370	293	149	74	67	32
23	1360	595	8270	600	2000	3510	1610	273	249	64	68	49
24	1130	655	6730	540	1450	3320	1350	245	200	61	62	59
25	820	503	3930	490	1050	1900	1370	255	169	61	60	60
26	705	394	2600	450	918	1880	1090	282	144	61	56	58
27	552	359	1830	400	772	3610	940	343	140	64	54	59
28	418	350	1380	370	687	2780	838	434	113	70	52	56
29	398	564	3100	500	---	1930	761	328	132	66	66	48
30	366	520	15800	856	---	1410	687	273	126	65	59	45
31	315	---	18500	1060	---	1010	---	276	---	70	53	---
TOTAL	35528	11254	122428	69817	56461	43525	39233	12357	8374	3278	1974	1659
MEAN	1146	375	3949	2252	2016	1404	1308	399	279	106	63.7	55.3
MAX	4780	655	18500	15200	5790	3610	4360	638	1030	306	95	93
MIN	209	222	329	370	560	487	510	245	113	61	52	32

CAL YR 1990 TOTAL 515620 MEAN 1413 MAX 18500 MIN 146
WTR YR 1991 TOTAL 405888 MEAN 1112 MAX 18500 MIN 32

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). 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 National Geodetic Vertical Datum of 1929, 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: Jan. 19-30, Feb. 28 to Mar. 13. Records excellent 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.

AVERAGE DISCHARGE.--73 years, 1,010 ft³/s, 11.94 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,400 ft³/s Jan. 22, 1959, gage height, 75.44 ft at site and datum then in use; minimum daily, 25 ft³/s July 18, 1977.

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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25,200 ft³/s Dec. 31, gage height, 27.01 ft; minimum daily, 55 ft³/s Sept. 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	286	403	544	20700	1100	850	1060	782	763	145	97	75
2	327	389	459	15400	1040	840	982	726	816	150	91	82
3	239	460	1820	8420	1510	820	904	678	994	334	84	119
4	331	436	5260	4220	2330	760	817	680	924	303	161	126
5	750	437	3480	2980	3190	730	830	649	567	238	112	109
6	760	469	2260	2300	4030	720	802	688	442	197	93	117
7	492	499	1600	1810	6330	720	779	639	348	179	91	111
8	336	477	1200	1490	4490	700	749	584	301	216	88	82
9	438	442	941	1330	2940	660	854	544	271	178	105	68
10	3200	533	807	1210	2140	620	921	517	261	163	110	63
11	5000	692	731	1480	1640	600	829	489	251	156	105	85
12	3450	658	801	3580	1310	580	732	466	296	142	106	80
13	2390	541	753	2930	1200	740	1290	472	470	153	102	74
14	1730	493	708	2010	1530	1150	3280	531	427	139	94	83
15	1240	430	2420	1670	1610	1610	3710	509	305	134	93	88
16	866	388	5210	2370	1170	2090	2850	509	257	126	87	93
17	636	380	3220	3570	1110	2160	1990	556	258	122	85	89
18	1500	409	5820	2860	1340	3040	1500	1020	245	115	97	75
19	2940	374	11100	1800	5070	2830	1560	1040	227	113	87	74
20	2060	352	7800	1400	6610	1910	4560	777	193	114	91	67
21	1360	331	4810	1200	4960	1470	3730	608	195	108	109	66
22	1120	390	8900	1100	3300	1760	2660	511	221	107	101	55
23	1580	671	10000	980	2340	4020	1910	500	294	100	99	68
24	1400	835	9210	850	1790	3910	1600	454	287	89	91	83
25	1050	679	5160	780	1370	2300	1590	428	235	89	85	90
26	878	552	3320	720	1200	2000	1370	492	205	89	79	88
27	739	513	2350	680	1040	4090	1190	528	205	86	77	84
28	588	502	1890	660	900	3130	1070	610	153	92	78	84
29	542	623	3020	760	---	2230	987	509	169	91	94	78
30	510	648	12300	1000	---	1680	903	433	159	94	93	73
31	451	---	24300	1350	---	1310	---	411	---	95	81	---
TOTAL	39189	15006	142194	93610	68590	52030	48009	18340	10739	4457	2966	2529
MEAN	1264	500	4587	3020	2450	1678	1600	592	358	144	95.7	84.3
MAX	5000	835	24300	20700	6610	4090	4560	1040	994	334	161	126
MIN	239	331	459	660	900	580	732	411	153	86	77	55
CFSM	1.10	.44	3.99	2.63	2.13	1.46	1.39	.51	.31	.13	.08	.07
IN.	1.27	.49	4.60	3.03	2.22	1.68	1.55	.59	.35	.14	.10	.08

CAL YR 1990 TOTAL 651903 MEAN 1786 MAX 24300 MIN 188 CFSM 1.55 IN. 21.11
WTR YR 1991 TOTAL 497659 MEAN 1363 MAX 24300 MIN 55 CFSM 1.19 IN. 16.11

GREAT MIAMI RIVER BASIN

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 National Geodetic Vertical Datum of 1929. 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. 19, 23, 24, 31, Jan. 1, 2, 16, 17, Jan. 26-Feb. 3. Records fair except for estimated daily discharges 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.

AVERAGE DISCHARGE.--61 years, 176 ft³/s, 12.38 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,320 ft³/s May 14, 1933, gage height, 9.2 ft; maximum gage height, 10.31 ft Mar. 5, 1963, from high-water mark in well (ice jam); minimum discharge, 4.8 ft³/s Sept. 17, 1963.

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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	1300	2,230	6.00	Dec. 30	1630	*5,360	*9.46
Dec. 22	1330	1,650	5.13				

Minimum daily discharge 15 ft³/s Sept. 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	116	148	2090	110	174	254	157	213	44	23	20
2	80	113	134	1100	110	177	228	155	246	43	23	20
3	75	108	531	656	200	174	209	144	148	43	23	18
4	139	108	931	495	366	165	199	142	116	45	24	21
5	228	115	427	409	463	156	203	148	95	43	23	22
6	153	144	291	370	687	151	203	197	83	41	23	26
7	123	133	232	334	1060	160	196	187	76	37	23	24
8	111	122	198	301	623	142	186	154	69	54	24	22
9	229	115	175	278	435	139	182	138	69	66	26	19
10	1150	143	162	258	354	134	167	130	66	51	29	17
11	1030	146	156	374	292	130	149	124	64	47	29	17
12	509	132	149	847	244	130	139	115	64	49	26	17
13	340	123	142	502	231	145	297	110	63	51	25	19
14	260	115	128	370	282	227	838	110	61	43	25	23
15	212	112	432	345	264	383	621	104	60	40	24	21
16	176	108	677	550	188	629	413	100	65	38	23	21
17	159	108	379	620	214	759	305	119	61	37	23	20
18	380	105	1070	432	240	1090	247	343	56	34	24	17
19	498	102	2020	340	722	798	291	362	53	32	25	17
20	288	102	1000	314	832	487	473	213	50	33	23	18
21	225	98	808	301	508	380	346	162	47	28	23	19
22	215	110	1540	255	366	488	287	136	58	27	23	18
23	246	159	1130	244	290	1040	245	124	232	25	23	18
24	220	151	700	213	253	681	261	119	102	25	23	23
25	186	131	511	194	228	419	235	109	71	25	23	20
26	161	116	371	180	203	477	209	136	62	24	22	19
27	149	112	301	160	187	763	200	275	56	23	19	20
28	140	137	278	150	177	587	190	180	51	23	19	18
29	126	233	816	140	---	438	184	133	48	23	19	17
30	121	173	4210	130	---	326	171	119	45	23	19	15
31	119	---	3870	120	---	270	---	116	---	23	19	---
TOTAL	8130	3790	23917	13072	10129	12219	8128	4861	2550	1140	720	586
MEAN	262	126	772	422	362	394	271	157	85.0	36.8	23.2	19.5
MAX	1150	233	4210	2090	1060	1090	838	362	246	66	29	26
MIN	75	98	128	120	110	130	139	100	45	23	19	15
CFSM	1.36	.65	4.00	2.18	1.87	2.04	1.40	.81	.44	.19	.12	.10
IN.	1.57	.73	4.61	2.52	1.95	2.36	1.57	.94	.49	.22	.14	.11

CAL YR 1990	TOTAL 117817	MEAN 323	MAX 4210	MIN 47	CFSM 1.67	IN. 22.71
WTR YR 1991	TOTAL 89242	MEAN 244	MAX 4210	MIN 15	CFSM 1.27	IN. 17.20

03265000 STILLWATER RIVER AT PLEASANT HILL, OH

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.

DRAINAGE AREA.--503 mi².

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 National Geodetic Vertical Datum of 1929. Prior to Dec. 23, 1934, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 19-29, Feb. 16-18. 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.

AVERAGE DISCHARGE.--69 years, 449 ft³/s, 12.12 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,400 ft³/s Jan. 14, 1937, from rating curve extended above 14,500 ft³/s on basis of velocity-area study; maximum gage height, 18.46 ft June 29, 1980; minimum discharge observed, 4 ft³/s Oct. 17, 1920, July 12, 22, Aug. 30, 1921.

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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	0300	6,500	10.00	Dec. 30	1900	*20,700	*17.93
Dec. 22	0630	5,630	9.18				

Minimum daily discharge 12 ft³/s Sept. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	200	251	6600	340	313	430	269	324	49	32	23
2	119	189	218	2490	416	330	376	258	432	50	31	23
3	113	178	1990	1460	875	322	337	236	295	52	31	26
4	262	174	2980	1100	1080	290	321	236	225	61	40	34
5	637	182	1030	921	1580	271	335	243	168	58	37	35
6	308	227	631	834	2260	271	318	354	142	48	37	36
7	215	221	470	758	3430	292	296	368	130	41	36	31
8	181	184	388	689	1590	254	285	264	123	52	33	27
9	396	180	333	655	990	237	296	232	120	96	44	24
10	4240	246	298	613	751	230	306	218	112	71	45	22
11	3040	281	275	1010	591	220	263	205	110	60	41	18
12	1250	226	262	2570	467	218	232	195	115	61	36	17
13	759	197	246	1250	445	260	788	193	114	67	30	21
14	545	179	216	807	616	385	2890	191	99	54	30	29
15	417	170	1990	705	579	787	1830	175	97	47	30	23
16	332	165	2550	1690	300	1530	983	163	104	44	30	21
17	288	163	1020	1790	250	2140	632	211	102	42	41	18
18	1180	155	3820	998	400	3170	483	530	91	38	38	14
19	1370	148	5570	640	2890	1920	692	706	82	34	39	13
20	650	148	2450	580	2610	1000	1700	359	77	35	37	12
21	466	142	2260	500	1280	723	838	264	70	33	38	15
22	492	173	5100	420	819	986	614	220	100	29	37	16
23	687	349	4000	350	597	3330	494	196	312	27	36	25
24	505	288	2420	320	496	1750	574	186	174	28	32	21
25	394	226	1160	290	430	839	467	169	104	27	30	25
26	326	191	779	270	379	1150	391	175	88	26	27	23
27	288	177	600	250	347	2200	363	449	72	25	23	24
28	261	235	547	230	324	1480	337	286	64	24	20	25
29	232	542	2590	260	---	918	318	209	58	25	20	24
30	216	313	15300	447	---	607	297	181	53	28	21	22
31	209	---	13800	492	---	468	---	180	---	33	22	---
TOTAL	20510	6449	75544	31989	27132	28891	18486	8121	4157	1365	1024	687
MEAN	662	215	2437	1032	969	932	616	262	139	44.0	33.0	72.9
MAX	4240	542	15300	6600	3430	3330	2890	706	432	96	45	36
MIN	113	142	216	230	250	218	232	163	53	24	20	12
CFSM	1.32	.43	4.84	2.05	1.93	1.85	1.23	.52	.28	.09	.07	.05
IN.	1.52	.48	5.59	2.37	2.01	2.14	1.37	.60	.31	.10	.08	.05

CAL YR 1990 TOTAL 301839 MEAN 827 MAX 15300 MIN 73 CFSM 1.64 IN. 22.32
WTR YR 1991 TOTAL 224355 MEAN 615 MAX 15300 MIN 12 CFSM 1.22 IN. 16.59

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 National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 20-29 and Feb. 16-18. Records good except estimated record and period Dec. 3 to Feb. 1 which are fair. Flood flow regulated by Englewood retarding basin.

COOPERATION.--Gage-height tapes and 8 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--66 years, 586 ft³/s, 12.24 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,980 ft³/s June 15, 1958, gage height, 80.88 ft; minimum, 3.7 ft³/s Sept. 30, Oct. 1, 1944, gage height, 71.36 ft.

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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,720 ft³/s Jan. 1, gage height, 80.12 ft; minimum daily, 25 ft³/s Sept. 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	151	261	315	8610	459	430	587	363	275	94	41	33
2	151	251	285	8250	474	444	527	345	437	90	42	31
3	141	240	1320	7570	864	438	470	321	347	95	41	38
4	199	233	3980	6620	1210	397	446	315	302	89	72	72
5	548	240	2370	5260	1520	374	459	328	232	97	60	49
6	416	260	1110	2340	2430	382	444	357	195	92	53	44
7	274	282	838	866	3860	401	418	472	176	81	53	45
8	226	250	706	746	3150	365	407	361	164	117	50	43
9	254	239	627	675	1480	341	450	313	156	116	57	38
10	3030	285	569	609	1030	330	514	295	151	136	58	37
11	4390	345	529	843	813	318	427	282	147	112	57	33
12	2390	310	503	3020	653	321	367	265	158	101	55	31
13	1040	271	484	2180	602	413	764	256	150	96	50	32
14	715	248	446	1140	769	743	3050	254	143	95	48	42
15	542	234	1360	938	834	1290	3160	243	130	82	47	36
16	428	228	3830	1750	450	2130	1600	233	131	73	45	35
17	361	224	1970	2480	350	2640	925	263	136	68	45	31
18	884	218	3390	1570	430	3420	700	461	127	65	64	31
19	2140	211	5480	955	2510	3050	712	999	115	61	59	29
20	936	206	5450	750	3490	1380	2060	549	105	58	55	26
21	627	202	3970	650	2160	949	1210	376	99	55	51	25
22	577	222	4610	540	1130	1710	827	308	134	53	48	27
23	826	327	5420	450	808	3700	681	274	297	49	46	37
24	688	389	5180	410	666	3200	663	256	305	47	43	35
25	521	311	3220	380	590	1240	640	242	193	43	41	34
26	425	268	1450	360	523	1330	534	250	150	43	39	35
27	367	243	1070	340	478	2870	492	370	135	40	37	35
28	334	248	960	330	446	1870	454	407	120	39	34	34
29	308	465	1870	370	---	1250	429	291	112	39	35	35
30	284	426	5730	508	---	812	403	248	101	43	37	34
31	273	---	8310	609	---	640	---	234	---	43	33	---
TOTAL	24446	8137	77352	62119	34179	39178	24820	10531	5423	2312	1496	1087
MEAN	789	271	2495	2004	1221	1264	827	340	181	74.6	48.3	36.2
MAX	4390	465	8310	8610	3860	3700	3160	999	437	136	72	72
MIN	141	202	285	330	350	318	367	233	99	39	33	25
CFSM	1.21	.42	3.84	3.08	1.88	1.94	1.27	.52	.28	.11	.07	.06
IN.	1.40	.47	4.43	3.56	1.96	2.24	1.42	.60	.31	.13	.09	.06

CAL YR 1990 TOTAL 368307 MEAN 1009 MAX 8310 MIN 127 CFSM 1.55 IN. 21.08
WTR YR 1991 TOTAL 291080 MEAN 797 MAX 8610 MIN 25 CFSM 1.23 IN. 16.66

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 National Geodetic Vertical Datum of 1929. 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: Jan. 19-29, Feb. 13-17. Records fair. Sediment data collected at this site 1970 to 1974.

COOPERATION.--Gage-height tapes, and 9 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--58 years, 148 ft³/s, 12.41 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,000 ft³/s Jan. 22, 1959, gage height 12.05 ft, from rating curve extended above 4,000 ft³/s on basis of estimate of peak flow based on contracted-opening measurement at site 3 mi downstream with drainage area of 235 mi² adjusted to gage site by 0.8 power of the drainage-area ratio; minimum discharge, 2.1 ft³/s Jan. 21, 1963, gage height, 2.33 ft, result of freezeup; minimum daily, 24 ft³/s Feb. 2, 3, 1945, Jan. 13, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft³/s and maximum (*).

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 18	2200	1,680	5.87	Dec. 30	2130	*4,550	*9.31
Dec. 23	1130	1,630	5.79				

Minimum daily discharge 67 ft³/s Aug. 26, 28, 29, Sept. 3, 6-12, 20-22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	110	94	794	246	246	247	257	156	113	80	70
2	97	109	94	648	246	247	240	248	149	134	78	69
3	97	107	295	556	288	236	234	243	146	130	78	67
4	128	107	385	482	317	222	233	240	144	125	82	71
5	134	108	217	438	334	217	234	234	144	118	79	69
6	120	109	188	409	357	236	234	240	138	115	78	67
7	110	105	168	378	492	300	230	231	141	112	76	67
8	110	102	155	353	359	236	226	225	141	110	75	67
9	132	102	148	334	321	220	232	210	138	112	80	67
10	242	122	142	315	302	211	300	207	139	112	80	67
11	208	121	141	373	280	206	240	206	141	112	79	67
12	163	107	144	498	262	202	236	206	154	110	78	67
13	146	105	138	372	260	208	404	209	145	109	77	74
14	138	104	134	340	250	206	776	206	143	107	80	74
15	133	102	425	320	240	225	597	206	139	104	79	71
16	127	102	317	410	240	271	465	205	143	102	77	69
17	126	99	230	425	240	296	386	197	137	100	75	69
18	211	97	989	353	274	470	348	202	130	101	75	69
19	197	97	778	320	746	323	465	201	130	99	75	68
20	163	97	412	300	501	277	534	193	129	97	75	67
21	148	95	415	280	384	259	413	185	129	96	73	67
22	145	97	639	270	340	266	371	187	128	96	73	67
23	156	101	974	260	307	426	334	182	129	96	73	72
24	144	100	555	260	293	312	320	176	125	93	71	70
25	135	98	404	250	277	273	312	171	123	91	68	71
26	128	97	367	250	264	363	302	180	123	89	67	71
27	126	97	332	250	255	410	290	181	119	88	68	69
28	124	98	316	240	250	312	280	174	117	84	67	69
29	121	97	485	240	---	278	275	168	115	84	67	69
30	119	94	2860	278	---	258	266	164	113	82	70	69
31	114	---	1710	267	---	250	---	165	---	80	72	---
TOTAL	4339	3086	14651	11263	8925	8462	10024	6299	4048	3201	2325	2070
MEAN	140	103	473	363	319	273	334	203	135	103	75.0	69.0
MAX	242	122	2860	794	746	470	776	257	156	134	82	74
MIN	97	94	94	240	240	202	226	164	113	80	67	67
CFSM	.86	.63	2.92	2.24	1.97	1.68	2.06	1.25	.83	.64	.46	.43
IN.	1.00	.71	3.36	2.59	2.05	1.94	2.30	1.45	.93	.74	.53	.48

CAL YR 1990 TOTAL 83084 MEAN 228 MAX 2860 MIN 94 CFSM 1.41 IN. 19.08
WTR YR 1991 TOTAL 78693 MEAN 216 MAX 2860 MIN 67 CFSM 1.33 IN. 18.07

GREAT MIAMI RIVER BASIN

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 National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 20-29, June 7-13. Records good except for periods of estimated discharge, which are 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 22.7 ft³/s in 1991, 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.

AVERAGE DISCHARGE.--26 years, 315 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,700 ft³/s June 26, 1971, gage height, 16.00 ft, from rating curve extended above 3,060 ft³/s; minimum daily, 60 ft³/s Jan. 27, 28, 1977 (result of freezeup).

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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 18	1930	4,190	11.88	Dec. 30	1230	*8,980	*16.68
Dec. 23	1030	3,240	10.69				

Minimum daily discharge, 106 ft³/s Sept. 2, 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	205	249	219	1310	418	414	451	409	276	178	134	109
2	204	243	216	1040	423	419	424	395	262	197	133	106
3	201	238	950	904	511	416	406	379	269	195	132	118
4	340	234	836	789	553	395	397	376	253	200	168	134
5	299	252	486	734	586	378	417	375	244	174	130	115
6	251	269	404	704	692	439	395	375	239	170	128	111
7	234	249	356	656	1030	566	380	357	235	167	127	108
8	234	240	327	614	689	440	374	344	230	177	125	106
9	520	241	305	585	591	405	467	337	230	168	136	107
10	682	310	293	555	542	388	627	330	227	166	130	107
11	540	297	280	797	497	372	456	321	240	162	125	107
12	398	277	274	987	454	363	408	315	239	162	123	113
13	352	260	266	712	462	397	873	320	227	160	127	118
14	319	250	254	633	572	441	1530	312	220	153	129	117
15	293	240	959	601	506	552	1080	304	216	150	127	110
16	276	235	667	793	435	635	810	297	233	147	125	108
17	265	231	499	797	441	615	648	297	224	151	156	108
18	726	228	2880	639	682	958	575	340	213	145	131	110
19	530	228	1780	581	1530	654	802	328	208	137	127	110
20	401	225	922	540	958	536	937	301	203	138	125	109
21	352	221	910	510	705	488	697	289	199	139	124	109
22	361	251	1370	470	611	530	626	283	208	134	121	110
23	377	278	2190	440	540	910	568	290	208	136	120	121
24	339	252	1100	420	513	619	562	279	198	134	119	113
25	313	238	802	390	482	522	520	267	192	134	118	114
26	295	229	687	380	458	700	499	298	186	135	117	120
27	283	227	614	360	441	818	477	312	180	136	116	116
28	274	234	590	350	425	636	457	284	177	133	126	113
29	266	231	1010	350	---	544	446	271	173	137	121	113
30	260	222	6000	533	---	495	425	270	172	137	113	111
31	255	---	3180	473	---	460	---	279	---	136	115	---
TOTAL	10645	7379	31626	19647	16747	16505	17734	9934	6581	4788	3948	3371
MEAN	343	246	1020	634	598	532	591	320	219	154	127	112
MAX	726	310	6000	1310	1530	958	1530	409	276	200	168	134
MIN	201	221	216	350	418	363	374	267	172	133	113	106

CAL YR 1990 TOTAL 173071 MEAN 474 MAX 6000 MIN 182
WTR YR 1991 TOTAL 148905 MEAN 408 MAX 6000 MIN 106

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 National Geodetic Vertical Datum of 1929. 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: December 24-27, 29 and Jan. 16-29. Records good except those for periods of estimated record 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.

AVERAGE DISCHARGE.--78 years, (1904-05, 1914-91), 495 ft³/s, 13.72 in/yr, unadjusted.

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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,900 ft³/s Dec. 30 gage height, 11.76 ft; minimum daily, 172 ft³/s Sept. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	335	550	425	2160	798	675	783	698	523	295	190	176
2	342	544	370	1770	800	696	703	703	484	315	222	172
3	338	495	1500	1340	929	671	667	681	579	327	292	233
4	811	450	1410	1320	1010	646	632	684	508	360	425	285
5	562	501	870	1440	1070	621	683	706	456	323	277	250
6	473	513	724	1440	1300	739	627	661	408	361	253	243
7	435	475	648	1380	1850	871	608	564	399	332	218	237
8	427	459	681	1310	1270	700	619	545	389	349	220	233
9	947	486	594	1260	1120	655	768	537	381	311	258	236
10	1400	588	438	1220	1020	631	990	544	379	311	224	211
11	1030	547	416	1600	941	611	717	558	408	300	209	180
12	760	512	404	1980	878	600	650	549	421	309	207	197
13	666	470	398	1470	880	768	1560	555	384	299	206	237
14	720	423	402	1110	1100	934	2290	553	358	286	219	218
15	669	412	1520	1060	921	1070	1750	533	333	282	212	185
16	524	404	1220	1300	789	1150	1460	531	347	280	206	182
17	494	395	1020	1300	783	1100	1130	538	335	283	301	181
18	1350	391	4280	1100	1120	1590	994	769	356	278	234	184
19	926	390	3060	1000	2200	1160	1250	584	347	271	225	202
20	699	383	1740	1000	1660	953	1440	527	341	264	230	200
21	619	377	1640	950	1420	857	1140	504	333	254	227	200
22	696	476	2210	880	1130	1300	1040	488	382	228	224	207
23	705	481	3290	820	1010	1680	953	487	352	226	220	234
24	658	433	1600	780	926	1120	958	478	338	219	215	204
25	665	412	1300	740	822	912	871	455	315	217	209	202
26	632	397	1100	700	786	1180	839	498	308	212	224	209
27	609	396	1000	700	740	1380	811	543	299	211	287	204
28	591	440	856	700	688	1120	784	474	293	210	268	201
29	577	446	1200	680	---	963	774	433	287	202	206	202
30	569	432	7400	1070	---	864	745	460	282	202	183	204
31	560	---	5360	902	---	809	---	487	---	194	185	---
TOTAL	20789	13678	49076	36482	29961	29026	29236	17327	11325	8511	7276	6309
MEAN	671	456	1583	1177	1070	936	975	559	377	275	235	210
MAX	1400	588	7400	2160	2200	1680	2290	769	579	361	425	285
MIN	335	377	370	680	688	600	608	433	282	194	183	172
CFSM	1.37	.93	3.23	2.40	2.18	1.91	1.99	1.14	.77	.56	.48	.43
IN.	1.58	1.04	3.73	2.77	2.27	2.20	2.22	1.32	.86	.65	.55	.48

CAL YR 1990 TOTAL 287716 MEAN 788 MAX 7400 MIN 258 CFSM 1.61 IN. 21.84
WTR YR 1991 TOTAL 258996 MEAN 710 MAX 7400 MIN 172 CFSM 1.45 IN. 19.66

GREAT MIAMI RIVER BASIN

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. WRD-OH-82-1: 1980.

GAGE.--Water-stage recorder. Datum of gage is 777.06 ft above National Geodetic Vertical Datum of 1929. 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. 24-27, 29. Records excellent, except those for period of estimated record which are 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 1972. Also see REMARKS for station 03269500.

COOPERATION.--Gage-height tapes and 8 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--77 years, 635 ft³/s, 13.58 in/yr.

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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,700 ft³/s Dec. 31, gage height, 18.27 ft; minimum daily, 194 ft³/s Sept. 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	399	601	497	3900	986	847	1030	826	636	338	208	211
2	397	588	482	2640	955	858	921	795	561	350	206	200
3	396	567	1660	1870	1060	846	871	779	639	368	283	234
4	894	509	2020	1650	1130	802	816	786	589	400	448	409
5	758	533	1140	1800	1180	766	884	812	560	347	321	284
6	580	586	903	1790	1410	853	813	812	501	354	309	279
7	522	539	788	1720	2770	1050	781	677	483	382	263	273
8	499	521	745	1610	1740	879	766	649	473	434	289	262
9	914	526	767	1540	1460	812	879	637	456	367	286	255
10	1930	642	572	1470	1310	784	1390	629	447	370	280	263
11	1360	625	543	1910	1200	754	988	639	449	350	242	209
12	969	582	525	2740	1120	742	855	630	530	344	228	201
13	815	555	509	1960	1130	1030	1860	632	471	347	225	261
14	758	504	503	1450	1500	1370	3250	627	451	325	231	272
15	809	488	1490	1340	1300	1540	2500	614	411	316	229	217
16	616	478	1650	1550	1050	1470	1890	615	433	317	223	203
17	575	470	1190	1710	1040	1360	1440	665	419	311	247	194
18	1610	462	4040	1440	1240	2050	1230	1270	421	310	370	203
19	1280	460	5690	1340	2910	1580	1400	872	421	302	260	213
20	891	457	2530	1290	2200	1260	1830	703	415	292	270	216
21	750	450	2060	1260	1810	1120	1390	653	406	288	262	216
22	794	533	2920	1170	1430	1780	1250	626	471	262	258	217
23	841	596	4200	1110	1270	2490	1150	603	445	256	249	273
24	745	538	2500	1010	1180	1590	1150	603	420	250	243	237
25	742	505	1800	942	1040	1260	1050	573	393	238	243	224
26	700	480	1500	935	989	1390	1010	624	379	230	243	228
27	671	470	1300	912	944	1870	971	675	370	227	294	230
28	648	492	1170	920	868	1540	929	618	359	227	316	227
29	629	520	1400	876	---	1280	909	549	351	222	263	227
30	620	505	5770	1320	---	1150	875	554	343	225	227	227
31	611	---	9960	1160	---	1060	---	557	---	214	224	---
TOTAL	24723	15782	62824	48335	38222	38183	37078	21304	13703	9563	8240	7165
MEAN	798	526	2027	1559	1365	1232	1236	687	457	308	266	239
MAX	1930	642	9960	3900	2910	2490	3250	1270	639	434	448	409
MIN	396	450	482	876	868	742	766	549	343	214	206	194
CFSM	1.26	.83	3.19	2.46	2.15	1.94	1.95	1.08	.72	.49	.42	.38
IN.	1.45	.92	3.68	2.83	2.24	2.24	2.17	1.25	.80	.56	.48	.42

CAL YR 1990 TOTAL 369690 MEAN 1013 MAX 9960 MIN 316 CFSM 1.60 IN. 21.66
WTR YR 1991 TOTAL 325122 MEAN 891 MAX 9960 MIN 194 CFSM 1.40 IN. 19.05

GREAT MIAMI RIVER BASIN

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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, 5 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 National Geodetic Vertical Datum of 1929 as requested by cooperator (699.71 ft adjustment of 1929). Prior to Oct. 1, 1921, nonrecording gage at Main Street Bridge at datum 23.73 ft higher. Oct. 1, 1921, to July 24, 1931, nonrecording gage at Main Street Bridge at datum 21.00 ft higher.

REMARKS.--Estimated daily discharges: Jan. 20-31. Records good. 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; most of return flow from diversions bypasses station in 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 9 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--62 years (1929-91). 2,199 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 60,900 ft³/s Jan. 22, 1959, gage height, 35.45 ft in gage well, from graph based on gage readings; 36.0 ft, from outside floodmarks; minimum daily, 109 ft³/s Aug. 8, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913 reached a stage of 29.0 ft, site and datum then in use, discharge, 250,000 ft³/s, computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 43,750 ft³/s Dec. 31, gage height 33.15 ft; minimum daily, 220 ft³/s July 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	705	1170	1230	32900	2980	2470	2980	2310	1710	541	228	287
2	779	1120	1110	26500	2780	2470	2710	2150	2100	495	223	271
3	706	1110	4290	19500	3600	2430	2500	2050	2180	663	274	405
4	1600	1050	11700	13900	4980	2330	2310	2010	2210	744	557	748
5	1810	1110	7830	11400	6080	2290	2370	2100	1690	645	449	411
6	1910	1190	4670	7660	8270	2250	2240	2180	1370	588	413	338
7	1330	1160	3360	5090	13700	2490	2160	2080	1200	575	364	325
8	1050	1110	2600	4410	10700	2480	2060	1920	1080	921	447	314
9	1680	1090	2260	4040	6770	2180	2500	1780	981	673	479	295
10	7320	1290	1790	3720	5230	2020	3050	1660	950	647	446	324
11	11400	1490	1580	4540	4310	1950	2470	1600	925	574	350	288
12	7840	1480	1540	9630	3600	1880	2140	1560	1050	538	326	267
13	4940	1270	1520	8160	3370	2710	4160	1510	1130	527	375	330
14	3590	1130	1460	5410	4220	3540	9980	1550	1170	508	343	570
15	2820	1030	4380	4560	4320	4690	10400	1510	943	470	368	407
16	2000	966	11300	5750	3230	5790	7300	1570	914	437	351	330
17	1630	934	7230	8320	3000	6300	5130	1730	918	415	400	258
18	3640	932	13300	6740	3510	8620	3990	4230	858	393	517	292
19	6890	966	21600	5000	10300	8530	4090	3290	825	380	434	310
20	4450	912	17000	4000	13100	5390	8640	2450	761	368	416	306
21	3040	880	11800	3700	10100	4070	7190	1940	684	355	413	285
22	2570	1080	16200	3300	6710	5510	5480	1680	750	380	413	290
23	3220	1370	19800	2900	5140	10300	4370	1530	998	343	410	346
24	3060	1670	18200	2700	4230	10100	3830	1480	1110	301	379	297
25	2380	1440	11700	2500	3510	5800	3760	1350	861	257	355	265
26	1950	1210	7170	2400	3120	4980	3360	1590	753	252	339	254
27	1710	1100	5390	2300	2810	9350	3030	1710	668	240	373	245
28	1480	1110	4420	2250	2580	7340	2830	1920	589	220	416	238
29	1330	1320	5990	2200	---	5540	2660	1610	552	224	386	232
30	1300	1470	23400	2800	---	4250	2510	1480	547	245	357	269
31	1220	---	39700	3300	---	3440	---	1390	---	232	355	---
TOTAL	91350	35160	285520	221580	156250	143490	122200	58920	32477	14151	11956	9797
MEAN	2947	1172	9210	7148	5580	4629	4073	1901	1083	456	386	327
MAX	11400	1670	39700	32900	13700	10300	10400	4230	2210	921	557	748
MIN	705	880	1110	2200	2580	1880	2060	1350	547	220	223	232

CAL YR 1990 TOTAL 1429376 MEAN 3916 MAX 39700 MIN 628
WTR YR 1991 TOTAL 1182851 MEAN 3241 MAX 39700 MIN 220

GREAT MIAMI RIVER BASIN

03271000 WOLF CREEK AT DAYTON, OH

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 RECORES.--WRD Ohio 1990: 1989 (p).

GAGE.--Water-stage recorder. Datum of gage is 739.83 ft above National Geodetic Vertical Datum of 1929. Prior to 1950, recording gage at same location at datum 39.83 ft lower.

REMARKS.--Estimated daily discharges: Dec. 28, Jan. 19-Feb. 5. Records fair.

COOPERATION.--Gage-height tapes and 8 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--17 years (1939-50, 1987-91), 63.0 ft³/s, 12.46 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,950 ft³/s Mar. 19, 1943, gage height, 53.5 ft (at datum then in use), minimum 0.8 ft³/s, Sept. 18, 1948.

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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 3	0845	1,820	5.57	Mar. 22	0815	2,320	6.07
Dec. 18	1515	2,910	6.61	Apr. 9	1915	2,110	5.87
Dec. 23	0630	2,020	5.78	Apr. 13	1430	1,660	5.41
Dec. 30	1100	*7,600	*11.25	May 18	0930	6,550	10.15
Feb. 6	2315	2,540	6.27				

Minimum daily discharge, 6.0 ft³/s Sept. 28, 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	17	22	216	50	49	65	41	29	12	9.1	9.1
2	11	18	21	142	47	56	54	38	33	13	9.4	8.5
3	9.7	18	827	110	58	50	50	34	29	14	10	38
4	137	17	219	84	67	45	52	48	25	12	37	49
5	22	39	96	85	90	41	74	65	23	12	11	12
6	15	26	68	89	572	75	54	49	22	11	12	8.9
7	13	18	53	82	641	57	49	37	21	11	11	8.0
8	12	16	46	71	184	44	54	34	20	83	20	7.5
9	114	31	39	64	122	41	356	34	20	21	14	7.4
10	180	55	35	60	99	40	197	32	19	24	11	8.9
11	78	33	31	437	78	37	90	31	19	17	9.3	8.2
12	45	25	31	331	65	44	66	29	20	19	8.7	7.8
13	32	22	29	145	110	513	767	27	17	15	13	8.6
14	26	21	25	111	274	601	409	27	15	12	14	30
15	22	20	396	103	117	330	343	25	20	11	19	11
16	19	19	128	145	72	177	157	43	24	10	10	8.0
17	18	19	197	138	65	203	105	66	17	9.3	18	7.2
18	305	18	1960	96	162	485	82	2110	15	9.1	13	8.2
19	87	18	469	74	295	156	199	265	14	8.8	14	7.6
20	47	17	181	65	181	107	142	123	14	8.7	10	7.2
21	35	16	315	58	114	90	101	80	13	8.5	9.5	6.6
22	80	73	536	50	89	864	86	112	44	8.4	8.7	9.7
23	64	55	846	45	71	704	75	92	29	10	8.3	16
24	42	34	200	40	64	178	71	58	17	9.4	7.9	8.4
25	33	30	112	36	57	113	58	48	16	8.7	7.4	6.6
26	28	25	82	35	52	264	65	99	14	8.3	7.1	6.1
27	25	24	66	34	50	248	57	63	13	8.9	7.3	6.1
28	23	38	60	33	47	170	52	46	13	9.8	7.8	6.0
29	22	27	508	33	---	109	53	40	12	10	7.8	6.0
30	20	23	3260	86	---	82	46	36	11	10	15	6.4
31	19	---	509	58	---	69	---	32	---	9.3	14	---
TOTAL	1594.7	812	11367	3156	3893	6042	4029	3864	598	434.2	374.3	339.0
MEAN	51.4	27.1	367	102	139	195	134	125	19.9	14.0	12.1	11.3
MAX	305	73	3260	437	641	864	767	2110	44	83	37	49
MIN	9.7	16	21	33	47	37	46	25	11	8.3	7.1	6.0

CAL YR 1990 TOTAL 46275.7 MEAN 127 MAX 3260 MIN 9.7
WTR YR 1991 TOTAL 36503.2 MEAN 100 MAX 3260 MIN 6.0

GREAT MIAMI RIVER BASIN

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03271500 GREAT MIAMI RIVER AT MIAMISBURG, OH

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.

DRAINAGE AREA.--2,711 miA.

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 National Geodetic Vertical Datum of 1929. 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: Nov. 16, 17, Jan. 20-30, June 28-30, July 1-3, 5, 6, 18, 19, 22-24, Aug. 2, 3, 26, 28, 29, Sept. 11 and 26.. Records good except for periods of estimated records Nov. 16, 17 and Jan. 20-30 which are fair and record for period June 28 to Sept. 30 which are poor. Diurnal fluctuation caused by powerplant 0.4 mi upstream 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 15 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--54 years, 2,478 ft³/s, 12.41 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61,800 ft³/s Jan. 21, 22, 1959, gage height, 20.65 ft in gage well, from graph based on gage readings; 21.3 ft, from outside floodmarks; minimum daily, 148 ft³/s Sept. 7, 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 26, 1913 reached a discharge of 257,000 ft³/s, computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 42,600 ft³/s Dec. 31, gage height, 17.03 ft; minimum daily, 365 ft³/s Sept. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	903	1860	1970	35200	3370	2770	3340	2590	1770	700	451	525
2	1010	1700	1760	28200	3090	2800	3050	2440	2250	800	450	419
3	976	1790	5610	21000	3630	2720	2860	2320	2270	900	470	529
4	2310	1710	11500	13700	4910	2570	2680	2280	2410	981	716	1380
5	2060	1750	8420	11100	5950	2580	2820	2370	1940	912	831	632
6	2290	1820	5280	8100	8330	2650	2610	2450	1610	820	643	502
7	1720	1700	4030	5350	14000	2780	2500	2300	1350	900	588	470
8	1360	1680	3330	4650	10800	2750	2430	2170	1290	1280	629	440
9	2450	1600	3000	4310	7020	2510	3110	2010	1190	891	942	449
10	6310	2070	2520	4010	5400	2310	3880	1910	1080	889	646	490
11	10700	2240	2250	5180	4480	2200	2950	1820	1100	864	531	450
12	8040	2160	2240	9270	3800	2170	2500	1780	1200	791	477	432
13	5210	1960	2210	8500	3640	4190	5790	1730	1300	674	518	457
14	3960	1820	2060	5830	4740	4640	10000	1730	1360	689	676	1030
15	3240	1630	4370	4840	4650	5190	10600	1680	1290	523	640	564
16	2550	1500	11000	5500	3610	5720	7670	1720	1290	529	568	430
17	2060	1400	7890	8100	3240	6210	5450	2250	1140	563	588	424
18	4670	1280	15800	7030	3800	8730	4290	8050	1110	550	843	407
19	7020	1470	22300	5280	8910	8580	4440	3860	1090	540	658	382
20	5190	1470	17600	4400	12300	5800	7840	2890	958	561	632	388
21	3780	1410	12000	3900	10000	4400	7370	2270	931	588	619	389
22	3280	1880	15400	3500	6810	6240	5710	1980	1340	560	616	406
23	3730	2190	21000	3300	5270	10600	4660	1880	1450	500	572	589
24	3670	2500	19000	3000	4360	10100	4110	1760	1580	450	532	480
25	2990	2230	12100	2800	3680	6220	3960	1650	1390	419	499	437
26	2620	1920	7360	2700	3340	5630	3610	1970	1350	455	480	410
27	2420	1820	5690	2500	3100	9060	3290	2000	1210	441	499	377
28	2200	1840	4820	2400	2880	7790	3060	2070	1100	414	530	366
29	1890	1790	6030	2500	---	5940	2940	1750	920	462	550	365
30	1920	2190	27100	3000	---	4580	2800	1600	820	463	561	387
31	1850	---	38700	3860	---	3810	---	1510	---	503	525	---
TOTAL	104379	54380	304340	233010	159110	154240	132320	70790	41089	20612	18480	15006
MEAN	3367	1813	9817	7516	5682	4975	4411	2284	1370	665	596	500
MAX	10700	2500	38700	35200	14000	10600	10600	8050	2410	1280	942	1380
MIN	903	1280	1760	2400	2880	2170	2430	1510	820	414	450	365
CFSM	1.24	.67	3.62	2.77	2.10	1.84	1.63	.84	.51	.25	.22	.18
IN.	1.43	.75	4.18	3.20	2.18	2.12	1.82	.97	.56	.28	.25	.21

CAL YR 1990 TOTAL 1585226 MEAN 4343 MAX 38700 MIN 853 CFSM 1.60 IN. 21.75
WTR YR 1991 TOTAL 1307756 MEAN 3583 MAX 38700 MIN 365 CFSM 1.32 IN. 17.94

GREAT MIAMI RIVER BASIN

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. Digital recorder set for one-hour-interval punches. Electronic data logger replaced digital recorder sine 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, 1,410 microsiemens Feb. 12, 1985; minimum 206 microsiemens Feb. 18, 1982.

pH: Maximum, 9.7 units July 5, 1988; 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 1978-1990; minimum, 0.4 mg/L Aug. 27, 1981, Aug. 2, 1982.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,090 microsiemens Sept. 29; minimum, 345 microsiemens May 18.

pH: Maximum, 9.5 units on several days; minimum, 7.7 units Oct. 11.

WATER TEMPERATURES: Maximum, 30.5°C July 1, 2, 22; minimum, 0.0°C Feb. 16.

DISSOLVED OXYGEN: Maximum, 20.0 mg/L June 12; minimum, 5.1 mg/L July 2, 3, Aug. 31.

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 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	838	820	831	824	808	817	---	---	---
2	---	---	---	842	824	834	830	782	814	---	---	---
3	---	---	---	844	824	836	782	364	564	---	---	---
4	---	---	---	844	822	833	558	480	515	432	406	412
5	694	628	673	848	780	823	578	502	535	548	438	491
6	752	684	729	820	772	793	632	578	604	630	556	595
7	760	740	748	816	794	804	684	634	657	668	636	653
8	788	750	773	824	806	814	728	684	703	694	666	680
9	806	502	659	826	778	810	740	728	734	710	690	699
10	580	478	538	814	768	785	772	740	752	744	706	719
11	508	482	496	796	772	782	---	---	---	752	686	717
12	562	506	534	792	770	778	---	---	---	680	568	624
13	606	558	579	806	788	799	---	---	---	586	542	557
14	652	608	624	824	812	817	---	---	---	638	582	605
15	690	652	669	842	824	832	---	---	---	704	640	664
16	726	686	703	838	824	833	---	---	---	720	692	706
17	758	728	743	842	826	833	---	---	---	696	588	634
18	758	404	579	840	822	831	---	---	---	598	576	584
19	638	582	606	838	816	831	---	---	---	652	600	625
20	628	582	608	842	820	835	---	---	---	698	652	673
21	662	618	635	864	830	849	---	---	---	732	690	709
22	698	650	669	858	760	813	---	---	---	756	728	738
23	714	698	704	774	740	759	---	---	---	758	746	752
24	738	714	728	770	752	759	---	---	---	754	738	746
25	748	734	741	794	774	786	---	---	---	770	748	756
26	754	734	744	812	792	801	---	---	---	802	766	780
27	780	754	762	832	814	825	---	---	---	818	792	806
28	794	784	788	830	796	816	---	---	---	866	810	842
29	812	794	803	810	800	806	---	---	---	934	838	860
30	820	802	814	812	792	800	---	---	---	916	788	853
31	826	808	817	---	---	---	---	---	---	792	748	762
MONTH	826	404	684	864	740	812	830	364	669	934	406	687
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	776	754	764	792	760	771	729	706	716	761	729	747
2	782	768	773	786	774	780	753	729	737	761	745	754
3	780	748	767	786	772	776	769	745	755	769	745	757
4	742	668	711	794	770	779	776	753	768	776	745	756
5	660	602	630	790	770	782	769	745	755	761	745	756
6	614	566	587	790	754	776	769	745	756	769	729	747
7	562	494	524	768	740	757	761	745	752	769	753	765
8	548	492	516	762	732	745	769	745	756	792	769	776
9	616	554	583	770	746	757	769	675	743	800	784	790
10	664	618	638	782	770	774	667	573	628	808	784	797
11	688	662	675	782	752	766	729	659	691	816	784	796
12	720	692	703	772	718	759	761	729	744	816	792	800
13	730	720	726	892	678	746	753	471	599	808	776	791
14	780	706	731	740	674	714	573	525	547	808	769	789
15	754	736	742	712	666	680	549	518	533	792	769	780
16	756	738	745	694	664	683	604	557	580	800	690	779
17	760	748	755	662	540	623	659	612	632	776	612	703
18	814	728	763	588	562	574	690	659	672	737	345	468
19	768	522	666	562	536	548	706	643	673	690	455	592
20	508	472	481	630	566	597	659	541	623	737	698	718
21	540	474	503	690	634	656	565	541	546	769	737	744
22	590	544	567	690	478	604	627	565	595	784	769	776
23	640	590	614	573	525	553	667	627	645	800	769	788
24	676	638	653	549	502	518	698	667	680	808	792	801
25	714	674	691	627	533	578	706	690	697	824	792	808
26	738	710	718	651	557	613	714	698	708	816	698	772
27	754	732	741	635	525	587	714	706	710	776	729	751
28	764	748	753	588	525	559	729	706	717	784	761	769
29	---	---	---	635	588	606	745	729	734	808	792	800
30	---	---	---	667	635	648	753	737	742	831	816	825
31	---	---	---	706	667	685	---	---	---	839	824	834
MONTH	814	472	669	892	478	677	776	471	681	839	345	759

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 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	839	808	828	872	851	861	966	950	959	989	959	975
2	816	745	776	888	862	868	989	958	971	988	905	941
3	792	769	772	890	863	878	1000	981	996	955	617	913
4	800	737	768	864	796	837	1020	949	992	866	661	747
5	745	722	733	821	797	807	978	833	896	817	720	775
6	776	745	767	856	808	828	892	840	862	890	822	858
7	816	776	802	861	833	850	920	890	898	893	863	877
8	855	816	842	865	658	784	927	754	891	907	877	890
9	871	839	853	723	642	673	902	793	853	948	910	925
10	863	847	856	834	697	773	871	770	796	972	944	954
11	878	855	864	827	796	808	906	874	886	1000	977	994
12	871	808	842	867	812	836	927	906	913	1010	949	985
13	831	761	800	885	842	868	965	930	944	1020	695	993
14	792	737	761	900	862	879	968	847	943	981	720	870
15	808	761	775	901	859	879	918	822	871	895	851	869
16	831	769	810	---	---	---	928	863	884	923	865	884
17	847	824	835	921	885	905	963	865	933	979	932	966
18	855	831	843	912	880	897	962	871	916	1020	973	997
19	856	831	844	905	873	891	905	814	850	1060	1010	1040
20	870	836	851	905	863	889	931	912	924	1060	1030	1040
21	850	833	843	912	876	895	936	897	917	1070	1050	1060
22	836	629	749	922	871	901	962	933	942	1070	1020	1060
23	834	728	801	920	896	908	976	944	964	1030	994	1010
24	793	765	780	942	893	924	977	959	967	1010	987	996
25	827	766	810	948	930	943	983	965	975	990	958	975
26	858	811	838	1010	952	985	982	954	970	1030	985	1000
27	883	849	863	1000	968	987	982	943	966	1070	1030	1050
28	892	867	878	982	966	975	997	968	983	1080	1050	1070
29	892	871	882	975	948	962	985	951	969	1090	1080	1090
30	893	864	878	971	943	959	972	935	956	1080	1050	1060
31	---	---	---	991	959	979	972	883	952	---	---	---
MONTH	893	629	818	1010	642	881	1020	754	927	1090	617	962
YEAR	1090	345	777									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

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

PH (STANDARD UNITS), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	8.6	8.4	8.5	8.3	8.1	8.2	8.4	8.4	8.4	8.8	8.7	8.7
2	8.6	8.4	8.5	8.2	8.1	8.2	8.4	8.4	8.4	8.8	8.7	8.7
3	8.7	8.4	8.5	8.3	8.2	8.3	8.5	8.4	8.5	8.9	8.7	8.8
4	8.6	8.4	8.5	8.3	8.2	8.3	8.5	8.5	8.5	8.8	8.6	8.7
5	8.6	8.3	8.4	8.4	8.2	8.3	8.6	8.5	8.6	8.7	8.6	8.7
6	8.4	8.2	8.3	8.3	8.1	8.2	8.8	8.6	8.7	8.7	8.6	8.7
7	8.3	8.1	8.3	8.4	8.1	8.3	8.8	8.7	8.7	8.8	8.7	8.7
8	8.3	8.0	8.2	8.5	8.3	8.4	8.7	8.6	8.7	8.9	8.7	8.8
9	8.3	8.1	8.2	8.5	8.3	8.4	8.7	8.5	8.6	8.9	8.7	8.8
10	8.4	8.1	8.2	8.5	8.3	8.4	8.6	8.4	8.5	8.9	8.7	8.8
11	8.4	8.2	8.3	8.6	8.4	8.5	8.5	8.4	8.5	8.9	8.7	8.8
12	8.4	8.2	8.4	8.8	8.5	8.6	8.7	8.5	8.6	8.9	8.7	8.8
13	8.4	8.2	8.3	8.7	8.3	8.5	8.6	8.4	8.5	8.9	8.7	8.8
14	8.4	8.1	8.2	8.4	8.2	8.3	8.4	8.3	8.3	8.9	8.7	8.8
15	8.5	8.1	8.3	8.5	8.2	8.3	8.3	8.3	8.3	8.9	8.7	8.8
16	8.5	8.3	8.4	8.4	8.3	8.3	8.4	8.3	8.3	8.9	8.7	8.8
17	8.4	8.2	8.3	8.4	8.2	8.3	8.4	8.4	8.4	8.7	8.4	8.5
18	8.4	8.2	8.3	8.3	8.1	8.2	8.5	8.4	8.5	8.5	8.2	8.3
19	8.4	8.1	8.2	8.2	8.1	8.2	8.5	8.5	8.5	8.4	8.2	8.3
20	---	---	---	8.3	8.1	8.2	8.5	8.4	8.5	8.5	8.4	8.4
21	---	---	---	8.4	8.2	8.3	8.4	8.4	8.4	8.5	8.4	8.4
22	---	---	---	8.4	8.2	8.3	8.5	8.4	8.4	8.5	8.4	8.4
23	---	---	---	8.3	8.2	8.2	8.5	8.4	8.5	8.5	8.4	8.5
24	---	---	---	8.2	8.2	8.2	8.5	8.5	8.5	8.7	8.4	8.5
25	---	---	---	8.3	8.2	8.2	8.6	8.5	8.6	8.7	8.5	8.6
26	---	---	---	8.3	8.2	8.3	8.6	8.5	8.6	8.7	8.6	8.6
27	---	---	---	8.3	8.2	8.3	8.6	8.5	8.6	8.7	8.5	8.6
28	8.4	8.2	8.3	8.3	8.2	8.2	8.6	8.5	8.6	8.7	8.6	8.6
29	---	---	---	8.4	8.3	8.3	8.6	8.5	8.6	8.7	8.6	8.7
30	---	---	---	8.4	8.3	8.3	8.7	8.6	8.7	8.7	8.6	8.7
31	---	---	---	8.4	8.3	8.3	---	---	---	8.7	8.6	8.7
MONTH	8.7	8.0	8.3	8.8	8.1	8.3	8.8	8.3	8.5	8.9	8.2	8.6
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.8	8.6	8.7	9.4	8.9	9.1	9.4	9.1	9.3	8.8	8.5	8.6
2	8.9	8.7	8.8	9.4	8.9	9.1	9.5	9.1	9.3	9.0	8.6	8.8
3	8.9	8.6	8.7	9.4	8.9	9.1	9.3	9.0	9.2	9.0	8.7	8.8
4	8.7	8.5	8.7	9.3	8.8	9.1	9.2	8.9	9.0	8.7	8.5	8.6
5	8.5	8.5	8.5	9.5	8.8	9.1	8.9	8.6	8.8	8.8	8.3	8.5
6	8.6	8.5	8.5	9.4	8.9	9.1	8.8	8.5	8.6	8.8	8.4	8.6
7	8.7	8.5	8.6	9.3	8.9	9.1	9.0	8.6	8.8	8.8	8.5	8.7
8	8.9	8.6	8.7	9.0	8.5	8.8	9.0	8.7	8.9	8.9	8.5	8.7
9	9.0	8.6	8.8	9.0	8.2	8.6	9.0	8.5	8.7	8.9	8.7	8.8
10	9.1	8.7	8.9	8.9	8.5	8.7	8.8	8.3	8.5	9.0	8.7	8.9
11	9.1	8.7	8.9	8.9	8.4	8.7	9.1	8.5	8.8	9.1	8.7	8.9
12	9.2	8.7	9.0	8.9	8.5	8.7	9.2	8.9	9.1	9.0	8.8	8.9
13	9.3	8.9	9.0	9.0	8.6	8.8	9.2	9.0	9.2	9.1	8.8	9.0
14	9.2	8.8	9.0	9.2	8.7	8.9	9.2	9.0	9.1	9.0	8.5	8.7
15	9.2	8.9	9.0	9.4	8.9	9.1	9.2	8.7	9.0	8.8	8.5	8.6
16	9.2	8.7	8.9	9.4	8.9	9.2	9.3	8.7	9.0	9.0	8.4	8.7
17	9.1	8.6	8.9	9.5	8.9	9.2	9.2	8.9	9.1	9.0	8.6	8.8
18	9.1	8.6	8.9	9.5	9.0	9.2	9.1	8.8	8.9	8.8	8.6	8.7
19	9.2	8.7	8.9	9.5	9.0	9.2	8.9	8.7	8.8	8.7	8.5	8.6
20	9.2	8.7	9.0	9.4	8.9	9.2	8.8	8.6	8.7	8.8	8.5	8.6
21	9.3	8.8	9.0	9.4	8.9	9.2	8.7	8.3	8.5	8.8	8.6	8.7
22	9.0	8.5	8.8	9.3	8.9	9.1	9.0	8.5	8.7	8.9	8.7	8.8
23	8.8	8.5	8.7	9.1	8.8	9.0	9.1	8.7	8.9	9.0	8.6	8.8
24	8.8	8.5	8.7	9.0	8.7	8.9	9.2	8.8	9.0	8.9	8.7	8.8
25	9.0	8.6	8.8	9.0	8.6	8.8	9.2	9.0	9.1	9.0	8.6	8.8
26	9.0	8.6	8.8	9.1	8.7	8.9	9.2	8.9	9.1	9.1	8.8	8.9
27	9.2	8.6	8.9	9.2	8.8	9.0	9.2	9.0	9.1	9.0	8.8	8.9
28	9.2	8.7	9.0	9.4	9.1	9.2	9.1	8.8	9.0	9.0	8.7	8.9
29	9.3	8.8	9.0	9.5	9.2	9.3	9.1	8.7	8.9	8.9	8.8	8.8
30	9.3	8.8	9.1	9.5	9.1	9.3	9.0	8.7	8.9	9.0	8.7	8.9
31	---	---	---	9.4	9.1	9.3	8.8	8.6	8.7	---	---	---
MONTH	9.3	8.5	8.8	9.5	8.2	9.0	9.5	8.3	8.9	9.1	8.3	8.8
YEAR	9.5	7.7	8.6									

GREAT MIAMI RIVER BASIN

03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	13.5	11.5	12.5	7.5	7.0	7.5	---	---	---
2	---	---	---	14.0	12.5	13.0	8.0	7.0	7.5	---	---	---
3	---	---	---	14.5	13.0	13.5	9.0	7.5	8.0	---	---	---
4	---	---	---	15.0	13.5	14.0	8.5	6.0	7.0	2.5	2.0	2.5
5	19.0	18.0	18.5	15.0	13.0	14.5	6.0	4.5	5.0	3.0	2.0	2.5
6	19.0	18.0	18.5	13.0	11.0	12.5	5.0	4.0	4.5	4.0	3.0	3.5
7	19.5	18.5	19.0	11.5	10.0	11.0	5.5	4.5	5.0	4.5	4.0	4.5
8	20.0	18.5	19.5	10.0	9.0	9.5	5.5	4.5	5.0	4.5	4.0	4.0
9	20.0	18.5	19.5	9.5	8.5	9.0	5.5	4.5	5.0	4.5	4.0	4.5
10	18.5	15.5	17.5	9.5	8.5	9.0	6.0	5.0	5.5	4.5	4.5	4.5
11	15.5	14.5	15.0	9.0	8.5	8.5	---	---	---	5.5	4.5	5.0
12	14.5	14.0	14.0	9.0	8.0	8.5	---	---	---	5.5	4.0	5.0
13	14.0	13.5	14.0	9.0	7.5	8.5	---	---	---	4.0	3.5	4.0
14	15.0	13.5	14.0	9.0	7.5	8.5	---	---	---	5.0	3.5	4.0
15	15.0	14.5	15.0	10.0	8.0	9.0	---	---	---	5.5	4.5	5.0
16	15.5	14.5	15.0	11.0	9.0	10.0	---	---	---	6.0	5.5	6.0
17	16.0	14.5	15.5	11.0	9.5	10.0	---	---	---	6.0	4.5	5.5
18	17.0	14.0	15.5	10.0	9.0	9.5	---	---	---	4.5	4.0	4.5
19	14.0	13.0	13.5	9.5	8.5	9.0	---	---	---	4.5	3.5	4.0
20	12.5	11.5	12.0	10.0	8.5	9.5	---	---	---	5.0	4.5	5.0
21	13.5	12.0	12.5	11.0	9.0	10.0	---	---	---	5.0	3.5	4.0
22	13.5	13.5	13.5	12.0	10.5	11.0	---	---	---	3.5	2.0	2.5
23	14.0	13.0	13.5	11.5	10.0	11.0	---	---	---	2.0	1.0	1.5
24	13.5	12.5	13.0	10.0	9.0	9.5	---	---	---	2.0	1.5	2.0
25	13.0	12.0	12.5	10.0	9.0	9.5	---	---	---	2.0	1.0	1.5
26	12.0	11.0	11.5	11.0	9.5	10.5	---	---	---	2.0	1.0	1.5
27	11.5	10.5	11.0	13.5	11.0	12.5	---	---	---	2.0	1.0	1.5
28	11.5	10.0	11.0	14.5	12.5	13.5	---	---	---	2.5	2.0	2.5
29	11.5	10.0	10.5	12.0	9.0	11.0	---	---	---	3.5	2.5	3.0
30	11.5	10.5	11.0	9.0	7.5	8.5	---	---	---	3.5	3.0	3.5
31	12.5	10.5	11.5	---	---	---	---	---	---	3.0	2.0	2.5
MONTH	20.0	10.0	14.5	15.0	7.5	10.5	9.0	4.0	6.0	6.0	1.0	3.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	2.5	1.5	2.0	7.5	5.5	6.5	10.0	8.5	9.0	18.5	17.0	18.0
2	4.0	2.5	3.5	9.5	7.5	8.5	10.5	9.0	10.0	18.0	16.5	17.0
3	5.0	4.0	4.5	9.5	7.0	8.5	11.0	10.0	10.5	18.5	17.0	17.5
4	5.5	4.0	4.5	7.5	6.0	7.0	12.0	11.0	11.5	17.5	17.0	17.5
5	6.0	5.0	5.5	8.0	6.5	7.0	14.0	12.0	13.0	17.0	16.5	17.0
6	6.5	6.0	6.0	8.5	8.0	8.0	16.0	13.5	14.5	17.0	15.0	16.0
7	6.0	4.5	5.0	8.0	7.5	8.0	17.0	15.5	16.5	16.5	14.0	15.0
8	4.5	4.0	4.5	8.0	6.5	7.5	18.0	17.0	17.5	18.0	16.0	17.0
9	4.5	4.0	4.5	7.5	6.5	7.0	18.5	17.0	17.5	19.0	17.0	18.0
10	5.5	4.5	5.0	7.0	6.5	6.5	17.0	13.5	15.0	20.5	18.0	19.0
11	5.5	4.5	5.0	7.5	6.0	6.5	13.5	12.5	13.0	22.5	19.0	20.5
12	4.5	3.5	4.0	7.0	5.0	6.5	12.5	12.0	12.5	23.5	21.0	22.0
13	5.0	4.0	4.0	5.0	3.5	4.5	13.5	12.5	13.0	24.5	22.0	23.0
14	5.0	3.5	4.5	5.5	3.5	4.5	13.5	13.0	13.0	25.0	22.5	23.5
15	3.5	1.5	2.5	6.5	5.0	6.0	14.5	13.5	14.0	25.5	23.0	24.0
16	1.0	.0	.5	7.5	5.5	6.5	15.5	13.5	14.5	25.5	23.5	24.0
17	2.0	1.0	1.5	8.0	6.5	7.0	16.5	14.5	15.5	25.5	23.5	24.0
18	4.0	2.0	3.0	7.5	7.0	7.5	16.5	15.5	16.0	23.5	18.0	20.0
19	4.5	4.0	4.0	7.5	6.5	7.0	15.5	13.5	14.5	20.0	18.5	19.0
20	4.5	4.0	4.0	9.0	7.0	8.0	13.5	11.0	12.5	21.5	19.5	20.5
21	5.0	4.0	4.5	12.0	9.0	10.0	11.0	9.5	10.0	22.5	21.0	22.0
22	6.0	5.0	5.5	13.5	12.0	12.5	10.5	9.0	10.0	23.5	22.0	22.5
23	6.0	5.0	5.5	13.0	12.5	13.0	11.5	10.0	10.5	22.5	22.0	22.5
24	5.5	4.5	5.0	12.5	10.0	11.5	13.5	11.0	12.0	24.5	22.0	23.0
25	5.5	5.0	5.5	11.0	9.5	10.0	14.0	13.0	13.5	25.5	23.0	24.0
26	5.5	4.5	5.0	11.0	10.5	10.5	15.5	14.0	14.5	24.5	24.0	24.5
27	5.0	4.0	4.5	12.5	11.0	11.5	16.0	15.5	15.5	24.5	23.5	24.0
28	5.5	4.0	4.5	12.5	11.5	12.0	16.5	16.0	16.5	25.5	23.5	24.5
29	---	---	---	12.0	10.0	11.0	17.5	16.5	17.0	26.5	25.0	25.5
30	---	---	---	9.5	8.5	9.0	19.0	17.0	18.0	26.5	25.0	25.5
31	---	---	---	9.0	8.0	9.0	---	---	---	27.5	25.5	26.0
MONTH	6.5	.0	4.0	13.5	3.5	8.5	19.0	8.5	13.5	27.5	14.0	21.0

03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	27.5	25.5	26.0	30.5	27.0	28.5	28.0	24.5	26.0	27.0	24.5	25.5
2	27.5	25.5	26.5	30.5	27.5	29.0	29.5	25.5	27.0	26.5	24.0	25.0
3	27.0	25.5	26.5	29.5	27.0	28.5	27.5	26.0	27.0	26.0	24.0	25.0
4	25.5	23.5	25.0	28.5	26.5	27.5	28.5	26.0	27.0	25.0	23.5	24.0
5	23.5	22.0	23.0	28.5	25.5	27.0	26.5	24.5	25.5	25.5	23.0	24.0
6	23.5	21.5	22.0	29.0	25.0	27.0	25.5	23.5	24.0	25.5	22.5	24.0
7	24.0	21.0	22.5	29.0	26.0	27.5	26.0	23.0	24.0	25.5	23.0	24.5
8	25.0	21.5	23.0	28.0	25.0	26.0	25.5	23.5	24.5	25.5	23.5	24.5
9	26.0	21.5	23.5	26.0	24.0	25.0	25.0	23.5	24.0	25.0	24.0	24.5
10	25.5	22.5	24.0	26.0	24.0	25.0	25.5	22.5	24.0	26.0	24.0	25.0
11	25.0	23.0	24.0	26.5	23.5	25.0	25.0	22.0	24.0	26.5	24.0	25.0
12	26.0	22.5	24.0	26.5	24.5	25.5	25.5	23.5	24.5	25.0	24.0	24.5
13	27.0	23.0	25.0	27.5	24.5	26.0	25.0	24.0	24.5	27.0	24.0	25.0
14	27.5	24.0	25.5	27.5	24.5	26.0	25.0	23.5	24.0	26.5	24.5	25.5
15	28.0	25.0	26.5	28.0	24.5	26.0	25.0	22.5	24.0	27.5	25.0	26.0
16	27.5	25.0	26.0	28.0	24.5	26.5	25.5	23.0	24.5	27.5	25.5	26.5
17	27.5	24.5	26.0	28.5	25.0	27.0	25.0	23.5	24.5	27.5	25.0	26.5
18	27.5	24.0	26.0	29.0	26.0	27.5	25.5	24.0	24.5	26.0	23.5	25.0
19	28.0	24.5	26.0	28.5	26.5	27.5	25.5	23.5	24.5	23.5	21.5	23.0
20	28.5	24.5	26.5	29.5	27.0	28.5	24.5	23.5	24.0	21.5	19.5	21.0
21	28.5	25.0	27.0	30.0	27.0	28.5	24.5	22.5	23.5	21.0	18.5	20.0
22	27.0	24.5	25.5	30.5	27.5	29.0	25.5	22.5	24.0	20.0	18.5	19.5
23	25.0	23.5	24.5	29.5	27.5	28.5	27.0	24.0	25.5	21.5	19.0	20.0
24	25.5	22.5	24.0	29.0	26.5	27.5	27.5	25.0	26.0	19.5	18.0	19.0
25	27.0	23.5	25.0	28.0	26.0	27.0	27.5	25.5	26.5	20.0	17.5	19.0
26	27.5	24.0	25.5	27.5	24.5	26.0	27.5	25.5	26.5	19.5	17.5	18.5
27	28.5	24.0	26.0	27.0	24.0	25.5	27.0	25.5	26.5	19.0	16.0	17.5
28	28.0	25.0	26.5	25.5	24.0	24.5	27.0	25.5	26.0	19.0	17.0	18.0
29	29.0	25.5	27.0	26.5	23.5	25.0	27.5	25.5	26.5	19.5	17.0	18.0
30	30.0	26.0	28.0	26.5	24.0	25.0	28.0	26.0	27.0	20.5	18.0	19.0
31	---	---	---	27.0	23.5	25.0	27.5	26.5	27.0	---	---	---
MONTH	30.0	21.0	25.0	30.5	23.5	26.5	29.5	22.0	25.0	27.5	16.0	22.5
YEAR	30.5	.0	16.0									

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	9.9	7.8	9.1	17.5	14.5	15.7	---	---	---
2	---	---	---	10.1	7.7	9.0	15.8	13.8	14.8	---	---	---
3	---	---	---	10.2	7.6	9.0	13.8	9.9	11.4	---	---	---
4	---	---	---	10.1	7.5	8.7	10.7	9.8	10.3	12.5	11.9	12.1
5	9.1	8.2	8.5	8.5	7.2	7.7	11.4	10.8	11.0	12.3	12.0	12.2
6	9.7	7.9	8.5	10.3	9.5	9.9	13.7	11.4	12.5	12.1	11.7	11.9
7	9.1	7.7	8.3	11.3	10.3	10.9	16.3	13.3	14.4	12.5	11.8	12.2
8	9.7	7.6	8.3	12.7	10.4	11.4	16.1	13.5	15.1	18.8	12.0	12.3
9	7.8	7.3	7.5	11.0	9.2	10.2	16.3	13.4	14.9	17.8	12.0	12.1
10	8.1	7.6	7.8	10.2	9.4	9.7	14.0	13.4	13.6	17.6	11.1	11.8
11	8.8	8.1	8.4	11.9	9.5	10.7	---	---	---	16.7	11.1	11.6
12	9.0	8.7	8.8	12.4	10.0	11.0	---	---	---	14.7	11.6	11.8
13	9.0	8.0	8.7	12.9	10.3	11.7	---	---	---	15.0	12.2	12.3
14	9.1	8.2	8.7	13.4	10.3	11.8	---	---	---	15.0	12.1	12.3
15	8.6	8.2	8.4	12.9	8.6	10.8	---	---	---	14.9	10.6	11.6
16	9.3	8.0	8.6	12.1	8.3	9.8	---	---	---	14.1	10.4	10.7
17	8.6	7.1	8.1	13.0	8.6	10.8	---	---	---	14.7	11.5	11.8
18	9.0	6.8	7.8	14.1	10.1	11.6	---	---	---	15.0	12.2	12.3
19	9.4	8.9	9.2	12.5	10.4	11.2	---	---	---	15.2	12.3	12.5
20	9.7	8.0	9.2	13.5	9.0	11.3	---	---	---	15.1	11.9	12.3
21	9.6	8.0	8.7	13.4	8.9	10.5	---	---	---	15.0	11.9	12.2
22	8.0	7.7	7.8	9.3	8.5	8.9	---	---	---	15.4	12.2	12.5
23	9.0	7.7	8.0	10.0	8.4	9.0	---	---	---	11.9	12.2	12.3
24	9.6	8.0	8.9	10.9	9.4	10.0	---	---	---	11.7	12.1	12.2
25	9.7	8.9	9.5	12.0	9.8	10.5	---	---	---	11.8	12.1	12.3
26	11.2	9.7	10.2	11.9	9.6	10.4	---	---	---	11.7	12.2	12.3
27	11.6	9.9	10.3	11.2	9.1	10.0	---	---	---	11.7	12.2	12.3
28	10.4	9.9	10.1	11.6	9.2	9.5	---	---	---	11.5	12.1	12.1
29	12.4	10.1	10.8	15.1	11.4	13.2	---	---	---	11.3	11.9	12.0
30	11.7	9.9	10.7	16.5	14.0	15.1	---	---	---	11.1	11.8	11.9
31	10.4	8.2	9.7	---	---	---	---	---	---	11.8	11.9	12.4
MONTH	12.4	6.8	8.9	16.5	7.2	10.4	17.5	9.8	13.4	18.8	10.4	12.1

03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH--Continued

OXYGEN DISSOLVED (MG/L). WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	11.9	12.5	12.7	12.2	11.0	11.5	18.0	12.1	14.6	16.8	8.5	11.4
2	11.5	12.1	12.4	11.0	10.2	10.6	18.5	12.9	14.6	17.5	9.6	12.7
3	11.2	12.0	12.1	11.1	10.1	10.5	18.3	12.8	13.4	18.3	9.1	13.0
4	11.1	11.9	12.1	14.6	10.7	12.2	13.6	12.2	12.9	13.3	9.6	11.4
5	11.4	11.6	11.8	15.5	11.4	13.4	17.8	11.7	13.4	12.8	9.8	11.1
6	11.3	11.7	11.7	11.5	10.2	10.8	19.5	11.5	14.5	12.9	8.5	10.8
7	11.9	11.7	12.1	15.1	10.2	12.2	19.7	10.9	14.3	18.2	10.5	13.6
8	12.0	12.3	12.4	16.7	11.3	14.3	18.4	9.9	12.2	18.5	10.6	13.5
9	11.8	12.2	12.3	16.7	13.3	14.6	13.0	8.6	10.3	18.8	10.2	13.6
10	11.7	12.0	12.1	16.6	13.0	14.6	11.7	8.3	9.6	19.7	9.9	13.2
11	11.9	12.0	12.2	18.6	13.6	15.7	17.2	10.9	12.3	19.7	8.7	13.5
12	12.2	12.2	12.4	15.9	13.2	14.5	19.2	12.1	14.2	18.6	8.1	11.7
13	11.8	11.8	12.1	13.5	11.1	12.1	12.5	10.9	11.6	19.8	7.8	12.6
14	11.6	11.7	11.9	14.7	11.3	13.2	10.9	10.7	10.8	15.3	7.8	10.6
15	12.6	12.1	12.6	14.4	13.7	14.0	11.0	10.4	10.7	15.4	7.4	11.0
16	13.1	13.1	13.3	14.4	13.5	13.9	10.8	10.3	10.5	14.3	7.8	10.3
17	12.7	12.8	13.0	13.7	12.6	13.3	11.1	10.1	10.5	9.2	6.4	7.7
18	12.3	12.0	12.4	12.6	12.2	12.4	12.0	10.0	10.9	7.8	6.9	7.4
19	11.9	12.0	12.2	13.1	12.5	12.9	10.7	10.1	10.5	8.1	7.4	7.8
20	12.0	12.3	12.4	12.9	12.2	12.7	11.5	10.7	11.0	8.8	7.7	8.1
21	12.0	12.0	12.3	13.0	11.7	12.3	12.4	11.5	12.0	8.5	7.4	7.9
22	11.6	11.7	11.8	12.1	10.7	11.2	12.7	12.3	12.5	8.3	7.2	7.6
23	11.7	11.7	11.9	11.3	10.7	11.0	12.5	11.9	12.2	8.1	7.2	7.6
24	11.9	11.7	11.9	12.1	11.3	11.7	12.8	11.6	12.1	11.9	7.2	8.5
25	11.9	11.6	11.8	12.6	12.1	12.4	12.7	11.5	12.1	13.6	7.2	9.2
26	12.2	11.6	11.9	12.5	12.1	12.3	12.3	10.7	11.5	8.8	7.1	7.8
27	12.2	11.7	11.9	12.2	11.6	12.0	12.0	10.4	11.0	10.0	6.9	8.2
28	12.4	11.6	12.0	12.1	11.6	11.9	12.5	10.0	11.0	11.0	7.2	8.7
29	---	---	---	12.5	11.8	12.1	12.3	9.6	10.8	11.1	7.0	8.5
30	---	---	---	16.2	12.5	13.5	16.4	8.6	11.4	12.5	6.9	8.7
31	---	---	---	18.4	12.3	15.3	---	---	---	13.3	6.8	8.8
MONTH	13.1	11.6	12.2	18.6	10.1	12.7	19.7	8.3	12.0	19.8	6.4	10.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	11.1	6.7	8.5	17.5	5.2	11.6	19.5	7.2	13.7	10.9	5.4	7.6
2	14.2	6.9	9.3	17.3	5.1	11.6	19.9	7.1	13.9	15.1	5.9	9.6
3	11.6	6.4	8.0	17.2	5.1	11.3	15.8	6.6	11.6	14.1	6.1	9.2
4	10.2	6.4	7.8	15.6	5.6	10.1	16.6	5.2	10.1	7.9	6.2	6.9
5	7.8	6.8	7.3	18.0	6.0	11.5	12.1	5.7	8.5	11.9	5.8	8.0
6	8.4	7.1	7.7	17.1	6.3	11.4	10.1	5.4	7.4	13.1	6.1	9.3
7	10.7	7.3	8.5	15.9	6.0	10.9	16.5	6.3	10.6	12.6	6.2	9.5
8	14.6	7.6	10.0	9.0	5.9	7.3	15.9	6.5	9.8	13.8	6.0	9.5
9	17.9	7.5	11.6	13.9	6.0	8.8	8.2	6.1	7.2	12.0	6.3	9.3
10	17.5	7.6	11.3	14.0	6.2	8.6	12.2	5.6	8.1	15.5	6.2	10.0
11	14.7	7.2	10.5	12.8	6.4	9.3	17.4	6.2	11.2	17.3	6.2	10.9
12	20.0	7.3	12.9	12.3	6.2	8.8	18.2	6.8	12.4	12.9	6.2	9.3
13	16.1	7.6	11.4	13.7	6.2	9.6	17.6	6.7	12.2	16.9	6.3	10.7
14	14.6	6.7	10.0	16.7	6.5	11.2	18.0	6.6	11.2	8.1	5.9	7.0
15	14.2	6.1	9.6	18.7	6.9	12.7	17.9	6.2	11.1	10.3	5.3	7.5
16	13.5	5.3	8.7	19.8	6.8	13.1	19.3	6.4	12.6	11.9	5.2	8.1
17	13.0	5.6	8.7	19.8	6.6	13.0	13.2	6.6	10.4	12.2	5.2	8.3
18	12.9	5.5	8.7	19.5	6.2	13.5	13.8	5.7	9.5	7.9	5.4	6.8
19	15.9	5.5	10.1	19.3	6.2	13.1	11.6	5.5	8.1	9.7	5.6	7.4
20	17.5	6.4	11.0	17.9	6.3	12.6	8.8	5.2	7.0	11.4	6.7	8.7
21	16.8	6.1	11.1	16.7	6.2	12.1	9.3	5.5	7.3	13.6	7.7	10.2
22	11.2	5.9	7.6	16.7	5.7	11.4	12.8	6.0	9.2	14.3	8.3	10.8
23	10.4	5.9	8.1	15.9	5.4	10.3	15.8	6.0	10.4	16.6	7.5	11.0
24	10.4	6.7	8.5	14.5	5.3	9.6	17.0	6.1	10.9	14.1	7.7	10.6
25	11.9	6.6	8.8	16.0	5.3	9.8	17.1	6.0	11.1	15.0	7.6	11.1
26	13.0	6.2	9.2	17.2	6.4	11.7	17.5	5.8	11.1	17.6	8.3	12.2
27	16.6	6.1	10.5	17.7	6.9	12.1	16.4	5.5	10.4	17.7	8.6	12.4
28	16.4	5.9	10.9	18.5	8.0	13.6	17.1	5.7	10.2	15.1	8.4	11.5
29	18.3	5.6	11.5	19.4	8.6	14.4	16.3	5.7	10.2	16.9	8.8	11.8
30	18.2	5.7	11.7	18.6	7.1	13.5	13.9	5.3	8.6	17.1	8.4	11.5
31	---	---	---	19.6	7.9	14.0	8.8	5.1	7.0	---	---	---
MONTH	20.0	5.3	9.6	19.8	5.1	11.4	19.9	5.1	10.1	17.7	5.2	9.6
YEAR	20.0	5.1	10.9									

GREAT MIAMI RIVER BASIN

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.--Occasional low-flow measurements water years 1959, 1961-62, October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 815.42 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 27-31, Jan. 1-7, 19-29 and Feb. 16-18. Records good, except those for estimated period which are fair. Sediment data collected at this site 1970 to 1974.

COOPERATION.--Gage-height tapes and 8 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--29 years, 200 ft³/s, 13.79 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,300 ft³/s Mar. 4, 1963, gage height, 14.40 ft, from rating curve extended above 7,000 ft³/s on basis of contracted-opening measurement at gage height 18.8 ft; minimum daily, 2.5 ft³/s Sept. 12-14, 1964.

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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 18	1745	5,460	7.62	Mar. 22	1030	4,950	7.22
Dec. 30	unknown	*14,600	*13.20	May 18	1015	5,880	7.94

Minimum daily discharge, 3.4 ft³/s Sept. 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	69	76	600	128	135	199	115	64	15	5.4	4.5
2	14	65	71	420	158	156	173	107	59	14	5.5	4.1
3	14	61	1490	350	264	144	157	96	56	12	5.8	6.3
4	61	59	947	300	269	126	152	98	51	11	5.8	8.5
5	55	63	356	250	353	113	164	102	46	11	5.3	7.8
6	44	78	236	270	1150	116	145	133	42	10	6.9	5.9
7	32	69	176	250	1390	139	135	104	39	8.7	7.3	5.1
8	27	59	142	219	585	114	130	86	37	24	9.1	4.4
9	143	59	116	199	402	104	288	82	35	28	11	4.1
10	1420	146	102	177	316	99	472	79	33	21	8.9	4.0
11	749	148	88	700	252	91	239	74	32	20	7.4	3.7
12	374	104	83	1130	204	93	185	71	32	20	6.5	4.8
13	246	84	75	535	210	458	1280	69	34	19	9.4	4.7
14	175	75	59	388	424	1010	1260	68	31	16	7.8	5.7
15	131	69	705	387	323	1010	923	64	29	13	6.6	4.7
16	96	67	530	651	190	896	544	59	33	12	6.9	4.6
17	80	66	369	564	180	611	351	65	29	11	7.5	4.1
18	748	60	3770	383	200	1390	269	2310	27	11	6.6	4.0
19	502	58	2090	250	907	605	319	615	24	10	6.2	4.0
20	275	56	723	210	695	392	407	310	22	9.9	6.8	3.8
21	195	53	893	180	423	315	299	213	21	8.4	6.7	3.7
22	253	95	1990	150	316	2490	253	168	22	7.6	6.1	4.2
23	336	224	1910	140	241	2640	217	141	38	7.3	5.8	4.5
24	227	148	753	130	213	742	206	123	38	7.6	5.4	3.8
25	170	110	389	110	184	433	175	106	28	7.5	5.1	3.9
26	133	87	266	100	165	603	167	103	23	6.9	4.8	3.9
27	111	80	200	96	153	746	160	116	21	6.3	4.5	3.9
28	98	86	150	94	140	471	149	92	19	5.9	4.3	3.8
29	85	101	1500	100	---	328	143	80	18	6.1	4.8	3.6
30	77	81	11000	226	---	257	130	76	16	5.7	4.6	3.4
31	74	---	5000	161	---	213	---	72	---	5.6	4.5	---
TOTAL	6960	2580	36255	9720	10435	17040	9691	5997	999	371.5	199.3	137.5
MEAN	225	86.0	1170	314	373	550	323	193	33.3	12.0	6.43	4.58
MAX	1420	224	11000	1130	1390	2640	1280	2310	64	28	11	8.5
MIN	14	53	59	94	128	91	130	59	16	5.6	4.3	3.4
CFSM	1.14	.44	5.94	1.59	1.89	2.79	1.64	.98	.17	.06	.03	.02
IN.	1.31	.49	6.85	1.84	1.97	3.22	1.83	1.13	.19	.07	.04	.03

CAL YR 1990 TOTAL 129963 MEAN 356 MAX 11000 MIN 14 CFSM 1.81 IN. 24.54
WTR YR 1991 TOTAL 100385.3 MEAN 275 MAX 11000 MIN 3.4 CFSM 1.40 IN. 18.96

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 National Geodetic Vertical Datum of 1929. Prior to Dec. 18, 1926, nonrecording gage at site 1 mi downstream at datum 12.49 ft higher.

REMARKS.--Estimated daily discharge: Dec. 20, 21, 24-27, Jan. 20-29 and Feb. 16-18. Records good except for estimated periods which are fair. 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.

AVERAGE DISCHARGE.--73 years (1914-23, 1927-91), 268 ft³/s, 13.23 in/yr.

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; maximum gage height, 29.19 ft Jan. 22, 1959; minimum discharge, 1.5 ft³/s Sept. 25, 1941.

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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,590 ft³/s Dec. 31, gage height 27.76 ft; minimum daily, 4.7 ft³/s Sept. 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	117	110	5380	226	179	285	161	90	23	9.0	12
2	30	110	104	895	241	192	252	151	80	22	9.0	9.7
3	29	104	1790	627	325	187	225	139	76	21	9.1	13
4	303	101	1680	479	345	168	211	139	71	19	10	30
5	161	107	617	428	451	157	232	146	65	18	9.9	21
6	99	128	400	436	1330	175	211	168	59	17	10	16
7	70	119	301	419	2610	202	195	149	57	17	11	13
8	57	102	252	364	1000	179	185	127	53	29	13	11
9	247	98	216	326	627	154	414	121	50	41	17	9.8
10	1900	199	193	300	473	144	837	122	48	37	16	9.5
11	1090	229	176	986	368	139	366	120	46	32	14	8.8
12	521	164	164	1860	295	145	265	107	45	29	12	9.5
13	347	137	154	862	290	1240	1680	105	44	28	11	10
14	257	121	138	591	659	1670	2180	108	43	25	13	10
15	198	109	830	547	508	1540	1550	121	40	21	12	9.2
16	157	101	880	820	270	1260	914	98	43	19	9.2	8.7
17	133	99	519	831	230	872	525	96	43	18	10	8.0
18	1210	96	4030	583	300	1970	383	2710	38	17	13	8.0
19	768	88	4440	445	1250	900	429	1100	35	16	12	7.5
20	404	88	1100	350	1040	549	586	456	32	15	9.9	7.1
21	291	83	1300	300	585	422	411	290	30	14	9.5	6.7
22	354	116	2820	270	413	2570	342	230	33	14	11	6.8
23	480	281	2950	240	314	3940	293	197	57	13	15	8.7
24	339	215	1500	220	272	1200	274	169	52	12	14	7.9
25	261	165	1000	200	241	651	239	146	41	12	14	7.0
26	211	132	700	190	215	1060	222	145	34	11	13	5.6
27	181	120	400	180	201	1450	217	151	31	10	12	5.0
28	162	125	340	170	187	854	204	133	28	9.9	12	5.0
29	143	137	1570	160	---	509	197	112	27	9.8	11	4.9
30	130	123	5280	504	---	378	181	105	25	9.6	11	4.7
31	123	---	7390	284	---	305	---	98	---	9.4	12	---
TOTAL	10687	3914	43344	20247	15266	25361	14505	8220	1416	588.7	364.6	294.1
MEAN	345	130	1398	653	545	818	483	265	47.2	19.0	11.8	9.80
MAX	1900	281	7390	5380	2610	3940	2180	2710	90	41	17	30
MIN	29	83	104	160	187	139	181	96	25	9.4	9.0	4.7
CFSM	1.25	.47	5.08	2.38	1.98	2.97	1.76	.96	.17	.07	.04	.04
IN.	1.45	.53	5.86	2.74	2.07	3.43	1.96	1.11	.19	.08	.05	.04

CAL YR 1990 TOTAL 183572 MEAN 503 MAX 7390 MIN 29 CFSM 1.83 IN. 24.83
WTR YR 1991 TOTAL 144207.4 MEAN 395 MAX 7390 MIN 4.7 CFSM 1.44 IN. 19.51

GREAT MIAMI RIVER BASIN

203

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 National Geodetic Vertical Datum of 1929. (Levels by Miami Conservancy District). Prior to Oct. 1, 1975, at same site at datum 3.02 ft higher.

REMARKS.--Estimated daily discharges: Nov. 29 to Dec. 5, Jan. 19-29, May 28 to June 4. Records good except those for periods of estimated record, which are fair. Water-quality data collected at this site 1972 to 1974.

COOPERATION.--Gage-height tapes, and 9 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--20 years (1972-91), 73.5 ft³/s, 14.47 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,200 ft³/s May 26, 1989, gage height 18.67 ft, present datum; minimum daily, 0.81 ft³/s Sept. 9, 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1500 ft³/s and maximum (*).

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 18	1515	2,310	8.75	Apr. 13	1100	1,790	7.99
Dec. 30	0630	*2,990	*9.59	May 18	0945	2,430	8.92
Mar. 22	2300	1,560	7.61				

Minimum daily discharge, 0.81 ft³/s Sept. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	36	41	91	50	48	79	44	28	5.7	2.2	1.5
2	11	34	38	94	58	59	68	42	25	5.0	2.1	1.3
3	9.7	32	450	98	76	48	61	39	23	4.8	2.0	3.3
4	170	31	300	54	80	43	59	40	21	4.8	2.6	6.4
5	73	36	150	78	109	40	70	42	18	4.6	2.4	2.6
6	41	42	113	102	518	49	59	55	17	4.4	2.6	1.7
7	29	33	87	93	497	50	55	41	16	4.2	3.5	1.2
8	25	29	74	81	214	40	53	35	15	61	3.9	.96
9	248	31	62	73	147	38	164	34	15	26	19	.81
10	729	75	56	66	118	36	202	32	13	17	6.5	.82
11	282	58	51	308	92	34	100	29	14	13	4.1	.95
12	155	46	49	320	76	36	76	28	13	11	3.2	1.0
13	109	39	46	164	84	335	785	27	12	12	2.8	3.3
14	81	36	39	127	132	349	484	38	11	8.4	3.3	2.1
15	63	34	231	126	62	263	367	38	10	6.8	2.6	1.7
16	51	33	162	192	56	233	209	28	18	5.8	2.5	1.3
17	46	32	214	172	72	198	142	28	12	5.8	3.6	1.2
18	501	29	1590	123	109	457	112	1190	10	5.0	4.1	1.0
19	198	28	700	92	286	212	157	305	8.5	4.6	3.4	1.1
20	118	26	322	80	186	142	146	152	7.5	4.3	3.4	.98
21	88	26	395	69	135	116	113	98	7.1	4.0	2.9	.99
22	128	62	648	60	109	673	98	97	13	3.7	2.7	1.2
23	127	96	741	52	86	817	85	70	17	3.2	2.8	2.0
24	93	64	197	46	77	265	78	57	9.6	3.2	2.4	2.0
25	73	51	75	44	65	158	66	47	9.1	2.9	2.1	1.7
26	61	42	65	42	58	319	64	50	8.7	2.9	2.0	1.6
27	54	42	49	41	54	369	63	55	7.9	2.9	1.4	1.5
28	48	45	79	40	49	213	58	46	7.7	2.5	1.9	1.5
29	42	50	480	39	---	137	57	41	6.8	2.4	1.7	1.4
30	39	45	1060	129	---	103	50	35	6.3	2.3	1.7	1.2
31	38	---	134	62	---	86	---	31	---	2.3	1.4	---
TOTAL	3741.7	1263	8698	3158	3655	5966	4180	2894	400.2	246.5	102.8	50.31
MEAN	121	42.1	281	102	131	192	139	93.4	13.3	7.95	3.32	1.68
MAX	729	96	1590	320	518	817	785	1190	28	61	19	6.4
MIN	9.7	26	38	39	49	34	50	27	6.3	2.3	1.4	.81
CFSM	1.75	.61	4.07	1.48	1.89	2.79	2.02	1.35	.19	.12	.05	.02
IN.	2.02	.68	4.69	1.70	1.97	3.22	2.25	1.56	.22	.13	.06	.03

CAL YR 1990 TOTAL 44216.5 MEAN 121 MAX 1590 MIN 7.9 CFSM 1.76 IN. 23.84
WTR YR 1991 TOTAL 34355.51 MEAN 94.1 MAX 1590 MIN .81 CFSM 1.36 IN. 18.52

GREAT MIAMI RIVER BASIN

03274000 GREAT MIAMI RIVER AT HAMILTON, OH

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.

DRAINAGE AREA.--3,630 mi².

PERIOD OF RECORD.--January 1907 to June 1909 (fragmentary), January 1910 to September 1918, April 1927 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at site 0.7 mi upstream since 1911 are contained in reports of National Weather Service. Prior to October 1962, published as Miami River at Hamilton.

REVISED RECORDS.--WSP 803: 1936. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 499.98 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 12, 1927, nonrecording gage at site 0.7 mi upstream at datum 64.65 ft higher.

REMARKS.--Estimated daily discharges: Jan. 26-30. Records good except those for Oct. 2 and Dec. 3 and for estimated discharges which are fair. Some regulation at low flow by industrial plants upstream from station. Flood flow regulated by five retarding basins upstream from station beginning in 1920 (see REMARKS for station numbers 03271500 and 03272000). The Miami and Erie Canal diverted water from the basin 1.7 mi upstream from station until Nov. 1, 1930, when the canal was abandoned; amount of diversion not known. Water-quality data collected at this site for water years 1950, 1951, 1973. Water temperature data collected at this site October 1950 to September 1951, October 1957 to September 1976.

COOPERATION.--Gage-height charts, tapes and 9 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--60 years (1931-90), 3,335 ft³/s, 12.48 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 352,000 ft³/s Mar. 26, 1913, gage height, 38.5 ft, site and datum then in use, computed by Miami Conservancy District; maximum discharge since construction of five retarding basins upstream in 1922, 108,000 ft³/s Jan. 21, 1959, gage height 79.47 ft; minimum daily discharge, 155 ft³/s Sept 27, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 67,300 ft³/s Dec. 30, gage height, 74.73 ft; minimum daily, 382 ft³/s Sept. 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1220	1900	1920	45500	4190	3320	4320	3110	1800	875	540	600
2	1140	1830	1710	32900	3640	3320	3900	2900	2260	789	529	512
3	1170	1710	10200	24900	3760	3280	3600	2790	2380	805	529	451
4	3580	1680	14800	16700	5050	3110	3330	2680	2570	905	534	1070
5	3120	1670	11500	13400	6520	3030	3480	2680	2240	946	768	894
6	2760	1950	7120	11100	12900	3070	3270	2980	1870	924	727	642
7	2280	1760	5270	7550	22000	3580	3070	2730	1640	839	659	555
8	1810	1720	4140	6210	15300	3310	2940	2620	1460	1270	658	523
9	4390	1640	3550	5510	9980	3020	3220	2440	1360	1570	916	490
10	11600	2180	3080	5110	7390	2770	6370	2290	1290	1210	756	481
11	14100	2230	2690	7460	6050	2600	4220	2180	1270	1170	669	496
12	10800	2260	2450	13200	5060	2620	3430	2100	1270	1010	587	485
13	7120	2050	2400	11900	4580	10500	13800	2040	1340	921	555	460
14	5200	1890	2340	8090	6780	11100	17500	2060	1430	839	682	698
15	4180	1750	4890	6470	6550	8840	15600	2290	1360	804	734	704
16	3280	1650	11700	6510	4850	7800	11400	2060	1310	770	640	527
17	2690	1550	9900	9520	4160	8050	7730	2520	1270	714	601	484
18	9320	1440	27700	9120	5370	13700	5910	11200	1200	712	746	443
19	8920	1410	31500	6880	10300	12000	5740	8090	1130	678	764	439
20	6880	1410	22900	5740	15300	8320	8480	4560	1130	673	682	400
21	4860	1380	16100	5300	13000	6050	9340	3320	1060	687	654	389
22	4470	1790	20600	4900	8980	10200	7270	2770	1200	634	650	398
23	4740	2520	28400	4430	6860	21500	5960	2560	1720	654	678	444
24	4670	2440	23800	4100	5600	14600	5270	2330	1550	629	649	535
25	3830	2350	16200	3600	4800	9280	4800	2120	1520	558	608	471
26	3150	2040	10000	3200	4180	8110	4410	2180	1220	533	557	438
27	2740	1980	7480	3100	3840	13200	4060	2630	1060	540	558	437
28	2460	1940	6340	3100	3530	11500	3730	2570	985	496	573	382
29	2210	1880	9280	3000	---	8240	3540	2350	836	496	641	398
30	2040	2060	42900	4800	---	6220	3360	2080	837	516	631	398
31	1980	---	48700	4930	---	5020	---	1920	---	516	617	---
TOTAL	142710	56060	411560	298230	210520	231260	183050	93150	43568	24683	20092	15644
MEAN	4604	1869	13280	9620	7519	7460	6102	3005	1452	796	648	521
MAX	14100	2520	48700	45500	22000	21500	17500	11200	2570	1570	916	1070
MIN	1140	1380	1710	3000	3530	2600	2940	1920	836	496	529	382
CFSM	1.27	.51	3.66	2.65	2.07	2.06	1.68	.83	.40	.22	.18	.14
IN.	1.46	.57	4.22	3.06	2.16	2.37	1.88	.95	.45	.25	.21	.16

CAL YR 1990 TOTAL 2090670 MEAN 5728 MAX 48700 MIN 1130 CFSM 1.58 IN. 21.43
WTR YR 1991 TOTAL 1730527 MEAN 4741 MAX 48700 MIN 382 CFSM 1.31 IN. 17.73

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OH
(National stream-quality accounting network station)

LOCATION.--Lat 39°15'47", long 84°40'04", in N 1/2 sec. 34, R.1, T.2, Hamilton County, Hydrologic Unit 05080002, at Blue Rock Road bridge at New Baltimore, 6.4 mi downstream from Indian Creek, and 14.3 mi downstream from discharge station at Hamilton.

DRAINAGE AREA.--3,814 mi².

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

REMARKS.--Four parameter (Specific conductance, pH, Water temperature, and Dissolved oxygen) water quality monitor at sitae from July 1966 to September 1981. See records of daily discharge for station at Hamilton (station 032740000).

WATER QUALITY DATA, WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	
NOV 27...	1215	2220	590	8.6	15.0	9.0	3.8	11.0	98	550	K37	
JAN 15...	1300	6030	640	8.2	11.5	6.0	31	12.3	101	6700	4900	
MAR 06...	1015	2870	710	8.4	9.5	7.5	4.6	11.4	99	600	75	
MAY 08...	1315	2630	726	8.7	26.5	18.5	6.5	11.7	125	65	K38	
JUL 10...	1030	1280	790	8.7	22.5	24.0	210	7.7	93	>6000	1100	
SEP 03...	1320	453	897	9.1	30.0	27.5	7.0	12.4	158	K29	220	
DATE		HARD- NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
NOV 27...	350	86	32	30	3.5	322	10	280	60	44	0.40	
JAN 15...	290	73	25	16	2.4	281	0	230	42	32	0.20	
MAR 06...	360	88	33	26	2.7	323	7	272	64	45	0.30	
MAY 08...	330	81	31	26	2.9	290	10	253	62	44	0.30	
JUL 10...	230	55	23	37	4.2	200	2	165	67	59	0.40	
SEP 03...	310	66	35	79	5.5	207	25	212	110	110	0.50	
DATE		SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS TOTAL (MG/L AS P)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
NOV 27...	2.3	445	0.020	3.00	0.040	0.050	0.50	0.230	0.180	0.170	<10	
JAN 15...	7.6	334	0.030	3.80	0.170	0.170	0.80	0.180	0.140	0.130	20	
MAR 06...	5.2	458	0.040	3.80	0.080	0.070	1.0	0.160	0.160	0.140	--	
MAY 08...	2.3	414	0.030	2.90	<0.010	<0.010	0.60	0.230	0.090	0.090	<10	
JUL 10...	2.6	383	0.040	1.60	0.060	0.080	2.1	0.350	0.200	0.190	500	
SEP 03...	<0.10	540	0.040	1.50	0.010	0.030	2.2	0.550	0.220	0.180	--	

K Results based on colony count outside the acceptable range.

[illegible]

GROUND-WATER RECORDS

207

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 National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 2.00 ft above land-surface datum.

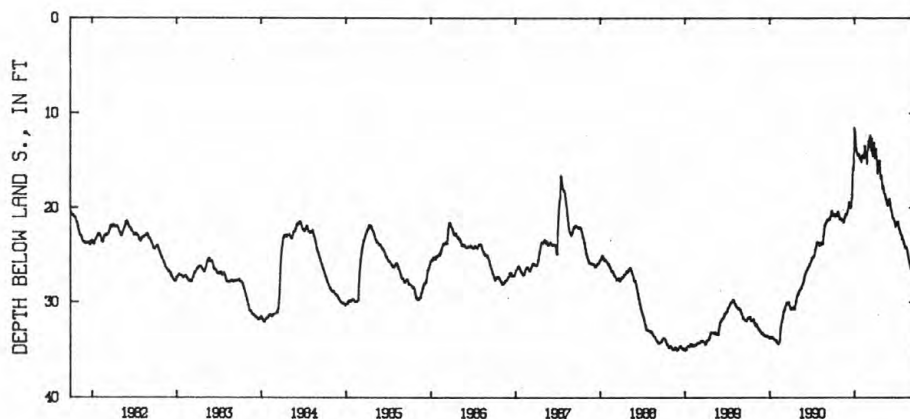
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--March 1964 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 35.12 ft below land-surface datum, Jan. 2, 1989; minimum daily low, 11.56 ft below land-surface datum, Jan. 1, 1991.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.70	21.21	20.57	11.56	15.04	13.54	14.60	17.41	19.16	21.88	23.61	26.35
2	20.87	21.15	20.58	11.59	14.71	12.96	14.40	17.67	19.11	21.79	23.68	26.39
3	20.90	21.10	20.50	11.87	14.60	12.89	14.25	17.96	19.07	21.75	23.78	26.44
4	20.86	21.17	20.22	11.98	14.47	12.82	14.01	18.06	19.34	21.65	23.90	26.46
5	20.87	21.19	20.19	12.00	14.39	13.42	13.79	18.02	19.57	21.58	23.99	26.49
6	20.80	21.35	19.93	12.35	14.39	13.60	13.74	17.66	19.75	21.52	24.08	26.51
7	20.77	21.34	19.76	12.97	14.35	13.57	14.53	17.88	19.91	21.46	24.16	26.52
8	20.74	21.37	19.62	13.22	14.35	12.84	14.95	18.06	20.07	21.49	24.23	26.54
9	20.68	21.31	19.57	13.74	14.41	12.46	15.52	18.24	20.20	21.61	24.23	26.55
10	20.78	21.23	19.46	13.93	14.65	12.34	16.13	18.42	20.29	21.74	24.22	26.56
11	20.96	21.28	19.47	13.90	14.80	12.77	16.35	18.50	20.39	21.88	24.22	26.57
12	20.96	21.28	19.44	13.94	14.82	13.02	16.41	18.49	20.58	21.95	24.19	26.58
13	20.82	21.33	19.78	14.18	14.38	13.31	16.02	18.52	20.74	22.08	24.12	26.56
14	20.75	21.45	19.87	14.41	13.48	13.84	15.69	18.65	20.85	22.20	24.13	26.56
15	20.73	21.47	19.80	14.41	13.45	14.06	15.32	18.82	21.00	22.30	24.27	26.56
16	20.72	21.52	20.04	14.24	13.45	13.81	15.08	18.87	21.11	22.36	24.45	26.65
17	20.63	21.53	20.04	14.45	13.49	13.21	15.04	18.92	21.13	22.45	24.59	26.71
18	20.78	21.43	19.87	14.44	14.08	12.64	15.08	19.08	21.12	22.56	24.65	26.78
19	20.92	21.28	19.90	14.43	14.49	13.68	15.02	19.22	21.13	22.72	24.71	26.84
20	20.92	21.18	19.81	14.27	14.64	14.34	15.09	19.34	21.22	22.78	24.93	26.84
21	20.70	21.09	19.36	14.54	14.60	14.56	15.07	19.44	21.27	22.81	25.09	26.80
22	20.54	21.01	18.96	14.57	14.50	14.41	15.36	19.59	21.37	22.84	25.25	26.77
23	20.38	20.88	18.66	14.52	14.89	13.85	15.90	19.69	21.40	22.87	25.36	26.86
24	20.43	20.75	17.52	14.73	15.22	13.57	16.50	19.77	21.45	22.98	25.45	26.86
25	20.60	20.71	16.54	14.79	15.34	13.55	16.67	19.73	21.61	23.09	25.55	26.80
26	20.72	20.70	15.72	14.71	14.98	13.44	16.89	19.66	21.75	23.19	25.65	26.95
27	20.77	20.63	15.57	14.64	14.34	13.10	16.89	19.55	21.87	23.27	25.77	27.06
28	20.94	20.68	15.94	14.86	13.97	13.30	16.80	19.42	21.99	23.34	25.89	27.11
29	21.02	20.69	15.98	14.90	---	14.07	16.62	19.37	21.99	23.39	26.01	27.18
30	21.08	20.66	15.76	14.90	---	14.68	17.09	19.28	21.91	23.39	26.15	27.19
31	21.17	---	13.36	15.18	---	14.77	---	19.19	---	23.52	26.25	---
MAX	21.17	21.53	20.58	15.18	15.34	14.77	17.09	19.77	21.99	23.52	26.25	27.19

CAL YR 1990 LOW 34.43
WTR YR 1991 LOW 27.19405303082170700 AS-2 ASHLAND WTR DEPT AT WELL FLD ASHLAND OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS
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 National Geodetic Vertical Datum of 1929, 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.

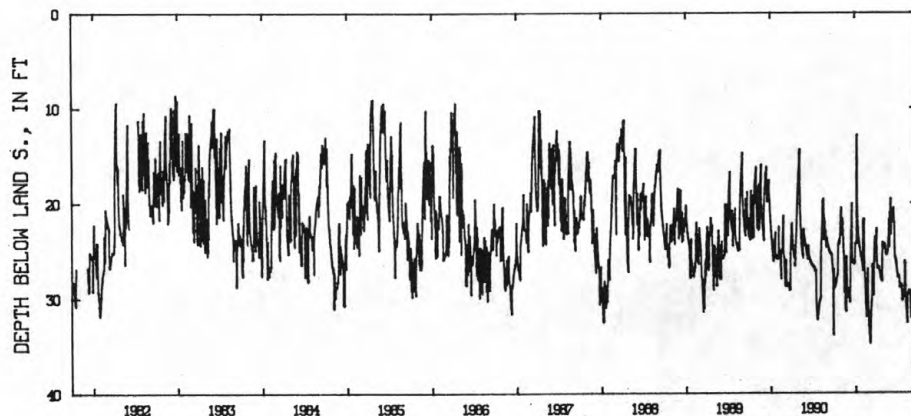
PERIOD OF RECORD.--August 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 34.78 ft below land-surface datum, Mar. 4, 1991; minimum daily low, 3.10 ft, above land-surface, Feb. 23, 1978.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.73	20.48	29.62	24.29	27.19	33.68	23.06	24.79	21.04	27.62	26.14	30.07
2	28.92	23.28	29.88	24.24	22.62	34.30	22.72	24.78	20.15	27.84	26.40	29.56
3	28.92	22.27	29.87	24.38	22.12	34.61	26.20	24.63	19.57	27.86	26.46	29.20
4	28.93	22.00	29.91	24.29	21.90	34.78	26.61	24.47	23.39	27.82	26.37	32.42
5	28.89	21.70	29.98	24.28	21.79	34.57	26.90	24.44	20.84	27.74	28.72	32.87
6	28.76	21.68	30.06	17.35	21.75	34.20	26.90	24.28	21.08	27.68	29.80	30.23
7	28.65	22.16	30.21	15.47	21.75	32.53	26.89	24.40	21.24	27.73	30.40	30.39
8	28.57	23.06	30.43	14.10	21.73	31.89	26.82	24.60	21.44	27.97	30.90	30.45
9	28.44	23.85	30.48	12.87	26.94	31.36	26.71	24.80	21.60	28.42	31.45	30.49
10	28.29	24.65	25.95	20.51	28.06	30.93	26.71	24.99	21.72	28.92	31.89	33.71
11	28.12	25.32	24.64	21.45	28.84	30.48	26.70	25.13	21.85	28.89	32.27	33.81
12	27.96	25.91	23.75	22.06	29.41	30.34	26.74	25.31	22.02	28.74	32.59	33.73
13	27.84	29.47	22.98	22.88	30.00	27.75	27.01	25.46	22.08	28.60	32.66	33.59
14	27.72	26.06	22.42	23.45	30.59	26.78	27.17	25.52	21.37	28.57	29.51	33.45
15	27.60	25.85	21.59	23.79	31.15	26.47	27.38	25.48	20.52	28.60	29.58	33.30
16	27.49	25.67	20.87	24.15	31.59	26.75	27.44	25.38	21.51	28.91	29.64	33.17
17	27.32	30.61	20.09	24.49	31.99	26.96	27.56	25.28	22.13	28.79	29.61	30.31
18	24.39	31.00	25.55	24.67	31.97	27.21	27.63	25.39	22.49	28.64	29.49	30.48
19	24.41	31.23	26.03	24.71	31.95	29.70	27.78	25.32	25.53	28.77	29.40	30.67
20	24.28	31.29	26.17	24.99	31.77	29.74	27.90	25.21	25.65	29.29	29.34	30.86
21	23.99	31.30	26.30	25.26	27.27	29.64	27.95	25.10	25.86	29.75	29.30	31.03
22	23.93	31.43	26.38	25.36	27.53	25.86	28.00	24.57	25.90	30.12	29.24	30.94
23	24.14	26.77	26.40	25.47	26.97	24.90	28.07	23.90	25.97	30.25	29.33	30.50
24	24.44	25.64	26.34	25.66	29.14	24.39	28.17	22.97	26.11	30.08	29.55	30.69
25	24.12	28.00	26.35	25.74	31.14	24.01	28.18	22.32	26.27	29.87	29.46	30.94
26	23.43	29.09	26.50	25.84	32.02	23.64	28.25	21.73	26.28	29.73	31.13	31.05
27	22.86	29.44	26.48	25.98	32.74	23.61	24.18	24.23	26.59	29.60	31.97	30.64
28	22.20	29.77	26.34	26.20	33.28	23.74	24.31	24.68	26.84	29.47	32.11	30.45
29	21.61	29.97	26.40	26.23	---	23.90	24.46	20.99	27.11	29.33	29.66	30.78
30	20.87	29.01	26.25	26.43	---	23.94	24.62	21.06	27.39	29.25	29.86	31.06
31	23.44	---	24.33	26.75	---	23.66	---	21.23	---	29.19	30.06	---
MAX	28.93	31.43	30.48	26.75	33.28	34.78	28.25	25.52	27.39	30.25	32.66	33.81

CAL YR 1990 LOW 33.91
WTR YR 1991 LOW 34.78



405425082173000 AS-3 ASHLAND W D ASHL D BATES WLLFLD NR ASHL D OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

209

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 National Geodetic Vertical Datum of 1929.

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, 21.13 ft below land-surface datum, Oct. 16, 1987; 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	DATE	WATER LEVEL
Oct. 16, 1990	18.29	Apr. 16, 1991	13.87	July 19, 1991	19.13

GROUND WATER RECORDS

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.

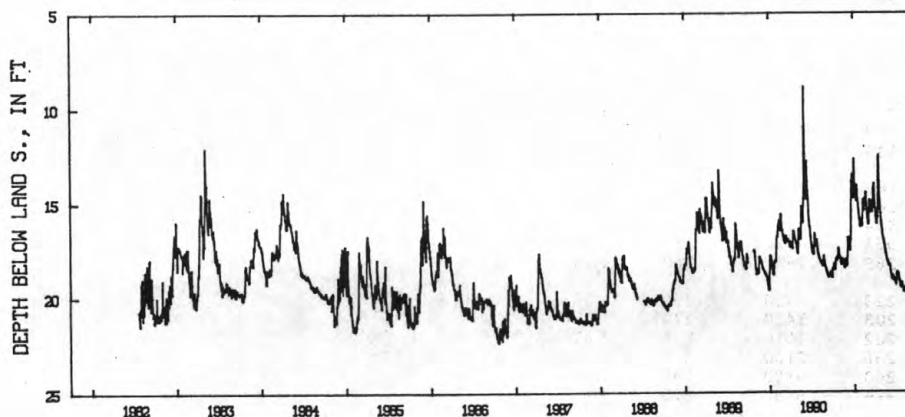
DATUM.--Elevation of land surface datum is 640 ft above National Geodetic Vertical Datum on 1929, from topographic map. Measuring point: Floor of instrument shelter, 4.75 ft above land-surface datum.

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, 22.35 ft below land-surface datum, Oct. 19, 20, 1986;
minimum daily low 8.87 ft below land-surface datum, May 31, 1990.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.58	17.97	18.30	12.70	15.91	15.89	15.10	16.36	18.36	19.37	19.65	19.87
2	18.46	18.02	18.35	12.92	16.03	16.06	15.31	16.47	18.32	19.36	19.67	19.87
3	18.53	18.09	18.35	13.45	16.12	16.12	15.48	16.60	18.31	18.85	19.70	19.88
4	18.58	18.16	17.63	13.80	16.21	16.16	15.65	16.72	18.31	18.79	19.70	19.90
5	18.58	18.22	16.95	14.14	16.25	16.11	15.77	16.82	18.41	18.73	19.71	19.91
6	18.23	18.28	16.86	14.26	16.17	15.99	15.87	16.87	18.50	18.70	19.73	19.90
7	18.28	18.27	16.89	14.22	15.82	15.58	15.98	16.95	18.60	18.85	19.75	19.91
8	18.37	18.28	16.99	14.43	15.01	14.87	16.09	17.01	18.69	18.88	19.76	19.93
9	18.44	18.28	17.08	14.71	14.86	15.04	16.13	17.09	18.76	18.78	19.76	19.97
10	18.54	18.30	17.18	14.92	15.04	15.22	16.02	17.15	18.84	18.80	19.55	19.99
11	18.57	18.08	17.24	14.92	15.24	15.36	15.71	17.21	18.92	18.83	19.50	20.00
12	18.57	17.99	17.33	14.39	15.35	15.50	15.85	17.30	18.98	18.96	19.57	20.01
13	18.30	18.08	17.47	14.08	15.45	15.54	15.86	17.34	19.03	18.99	19.64	20.01
14	18.03	18.14	17.52	14.35	15.43	15.34	14.80	17.45	19.07	19.07	19.68	20.00
15	18.02	18.15	17.56	14.60	14.76	14.91	13.73	17.49	19.09	19.12	19.73	19.99
16	18.01	18.19	17.41	14.78	14.83	14.98	12.83	17.56	19.07	19.18	19.76	19.96
17	17.96	18.23	17.00	14.89	15.02	15.12	12.51	17.64	19.00	19.26	19.77	20.00
18	18.07	18.31	16.96	15.07	15.07	15.09	13.09	17.73	18.88	19.32	19.77	20.02
19	18.07	18.36	15.83	15.19	15.05	15.11	13.56	17.80	18.96	19.38	19.74	20.04
20	17.89	18.42	14.43	15.38	14.52	15.28	13.96	17.86	19.04	19.45	19.71	20.06
21	17.96	18.46	13.85	15.54	14.47	15.42	14.26	17.91	19.10	19.48	19.64	20.07
22	18.01	18.48	13.87	15.67	14.71	15.52	14.84	17.97	19.14	19.51	19.62	20.08
23	17.87	18.46	13.95	15.80	14.93	15.23	14.89	18.03	19.15	19.53	19.66	20.10
24	17.49	18.14	13.51	15.90	15.14	14.23	15.19	18.07	19.05	19.47	19.68	20.10
25	17.43	18.02	13.61	16.04	15.32	14.27	15.38	18.14	19.09	19.27	19.71	20.07
26	17.50	18.06	14.00	16.15	15.49	14.40	15.59	18.18	19.17	19.29	19.75	20.00
27	17.62	18.07	14.25	16.24	15.67	14.25	15.78	18.22	19.20	19.39	19.79	20.01
28	17.77	18.09	14.69	16.28	15.81	14.00	15.93	18.22	19.26	19.47	19.83	20.04
29	17.84	18.15	14.79	16.24	---	14.39	16.07	18.22	19.30	19.51	19.85	20.08
30	17.88	18.19	14.73	16.21	---	14.68	16.20	18.28	19.34	19.57	19.87	20.10
31	17.93	---	13.94	16.04	---	14.89	---	18.34	---	19.61	19.87	---
MAX	18.58	18.48	18.35	16.28	16.25	16.16	16.20	18.34	19.34	19.61	19.87	20.10
CAL YR 1990	LOW 18.98											
WTR YR 1991	LOW 20.10											



392009082072200 AT-5 ATHENS WELL FIELD ATHENS OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND WATER RECORDS

211

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 National Geodetic Vertical Datum of 1929, 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	DATE	WATER LEVEL
Nov. 20, 1990	4.52	Apr. 30, 1991	4.31

GROUND-WATER RECORDS

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 National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter, 1.5 ft. above land-surface datum.

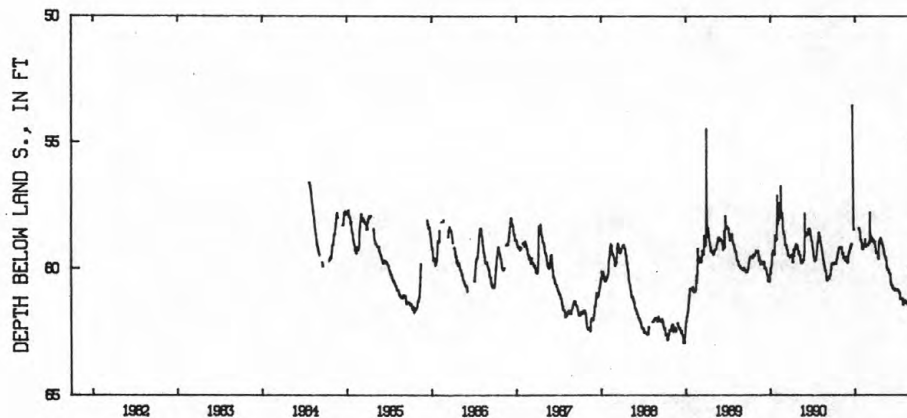
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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, 53.55 ft below land-surface datum, Dec. 21, 1990.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59.82	59.17	59.79	---	59.21	59.09	59.24	59.04	60.20	60.83	61.37	61.61
2	59.82	59.17	59.75	---	59.23	59.02	59.35	59.09	60.22	60.83	61.36	61.65
3	59.83	59.17	59.75	---	59.24	58.94	59.40	59.17	60.25	60.82	61.28	61.67
4	59.83	59.17	59.51	---	59.24	58.94	59.40	59.22	60.37	60.82	61.25	61.67
5	59.77	59.17	59.44	---	59.23	59.01	59.40	59.23	60.49	60.84	61.25	61.75
6	59.78	59.24	59.44	---	59.21	59.01	59.39	59.24	60.57	60.85	61.29	61.89
7	59.79	59.33	59.42	---	59.17	57.80	59.39	59.37	60.61	60.86	61.31	61.96
8	59.81	59.43	59.38	---	59.11	58.45	59.39	59.45	60.63	60.87	61.31	61.96
9	59.81	59.43	59.34	---	59.07	58.68	59.38	59.47	60.67	60.91	61.31	61.96
10	59.80	59.40	59.30	---	59.06	58.82	59.43	59.51	60.70	60.91	61.29	61.96
11	59.81	59.40	59.25	---	59.07	58.86	59.56	59.54	60.70	60.95	61.36	61.90
12	59.81	59.48	59.21	---	59.11	58.86	59.62	59.54	60.70	60.97	61.40	61.88
13	59.76	59.57	59.14	---	59.11	58.86	59.62	59.55	60.78	60.97	61.40	61.82
14	59.68	59.60	59.22	---	58.92	58.74	59.52	59.55	60.80	61.02	61.40	61.75
15	59.63	59.60	59.22	---	58.84	58.87	59.15	59.62	60.80	61.16	61.39	61.75
16	59.62	59.60	59.10	---	59.05	58.95	58.91	59.68	60.80	61.20	61.40	61.75
17	59.62	59.55	59.13	---	59.14	58.95	59.02	59.72	60.80	61.20	61.40	61.74
18	59.57	59.58	59.05	58.42	59.15	58.92	59.04	59.85	60.82	61.20	61.39	61.74
19	59.38	59.58	---	58.46	59.15	58.81	59.04	59.94	60.84	61.19	61.39	61.73
20	59.40	59.66	---	58.46	59.08	58.88	58.96	59.99	60.85	61.19	61.42	61.75
21	59.40	59.70	53.55	58.50	59.06	58.88	58.94	60.01	60.86	61.20	61.47	61.76
22	59.38	59.69	55.18	58.57	59.06	58.90	58.85	60.03	60.84	61.20	61.49	61.76
23	59.27	59.62	55.80	58.59	59.08	58.90	58.80	60.05	60.79	61.20	61.51	61.76
24	59.22	59.53	56.61	58.73	59.08	58.90	58.86	60.06	60.82	61.20	61.54	61.76
25	59.21	59.57	57.50	58.85	59.07	59.01	58.95	60.06	60.84	61.21	61.55	61.74
26	59.19	59.65	58.19	58.86	59.07	59.04	58.96	60.06	60.85	61.29	61.55	61.67
27	59.19	59.66	58.41	58.87	59.07	59.03	58.96	60.10	60.86	61.41	61.55	61.67
28	59.17	59.68	58.47	58.92	59.08	58.95	58.96	60.16	60.86	61.43	61.55	61.73
29	59.17	59.75	58.48	58.97	---	58.94	58.97	60.19	60.86	61.43	61.56	61.75
30	59.17	59.79	58.47	58.97	---	59.13	59.02	60.19	60.86	61.40	61.56	61.75
31	59.17	---	---	59.09	---	59.20	---	60.19	---	61.37	61.56	---
MAX	59.83	59.79	59.79	59.09	59.24	59.20	59.62	60.19	60.86	61.43	61.56	61.96
CAL YR 1990	LOW 60.48											
WTR YR 1991	LOW 61.96											



400118081082200 B-3 VILLAGE OF MT OLIVETT AT MT OLIVETT OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

213

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 National Geodetic Vertical Datum of 1929.

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
Oct. 11, 1990	9.64	Apr. 10, 1991	9.24

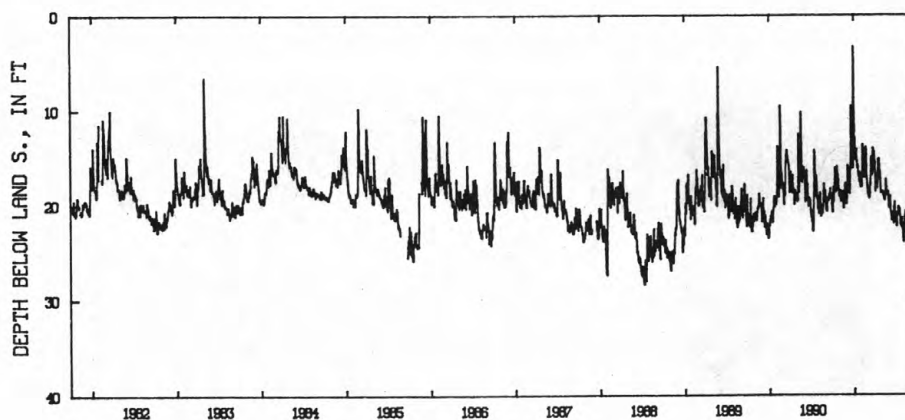
GROUND-WATER RECORDS
BUTLER COUNTY--Continued

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 National Geodetic Vertical Datum of 1929.
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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.75	18.85	19.85	4.00	17.50	18.30	15.50	18.60	20.25	21.85	23.50	21.25
2	20.80	19.10	19.30	6.80	17.30	18.65	15.55	---	20.35	21.75	23.70	21.45
3	20.30	18.45	19.45	10.00	18.00	18.90	16.50	18.60	20.30	21.70	23.95	22.00
4	19.15	18.95	17.95	11.90	18.10	18.95	18.30	18.70	20.20	22.20	23.90	22.30
5	18.15	19.35	15.85	13.05	18.05	18.55	18.60	18.70	20.30	22.30	23.40	22.40
6	18.60	19.65	16.40	13.00	16.95	19.10	17.55	18.75	19.65	22.00	22.90	22.55
7	19.60	19.65	17.30	14.40	15.10	19.25	18.05	18.75	19.10	21.05	22.05	22.65
8	19.70	18.70	17.70	15.25	13.60	19.30	18.05	18.85	19.80	20.90	21.25	22.90
9	18.70	18.85	17.90	15.10	13.85	19.30	17.85	19.00	20.70	20.95	21.40	22.90
10	17.70	18.60	17.95	14.65	15.25	19.05	17.80	19.05	20.85	20.95	21.35	22.80
11	16.10	19.00	17.20	14.65	15.25	18.85	17.20	19.15	20.95	20.95	20.80	23.05
12	16.30	18.60	17.05	14.35	15.75	18.00	17.85	19.35	21.30	20.25	20.70	23.30
13	16.90	18.85	18.25	14.10	16.70	17.95	18.25	19.45	21.65	20.30	21.70	23.40
14	17.00	18.60	18.80	15.40	16.95	17.40	17.05	19.50	21.70	20.80	22.55	23.50
15	16.85	18.75	18.85	15.45	17.00	16.50	15.40	19.50	21.35	21.00	23.00	23.55
16	18.30	19.30	18.05	15.90	17.15	15.30	15.20	19.25	21.20	21.00	22.95	24.00
17	18.65	20.00	16.30	16.10	16.85	14.95	15.45	18.65	20.90	20.55	22.40	24.15
18	18.05	20.35	16.10	16.10	16.30	15.05	15.20	18.85	21.10	20.50	21.75	24.20
19	16.55	20.35	12.20	15.90	16.10	15.35	15.15	18.00	21.30	21.10	20.95	24.30
20	15.95	19.10	9.50	16.75	15.30	15.80	15.55	17.30	21.40	21.75	20.50	23.90
21	16.40	19.05	10.85	17.05	14.20	16.60	15.90	17.80	21.85	22.10	21.05	23.55
22	16.75	19.20	11.05	16.60	13.90	16.90	16.00	18.20	22.00	22.10	22.20	23.80
23	16.95	18.45	10.90	16.60	14.25	15.85	16.40	18.65	20.95	22.30	23.00	23.85
24	16.90	17.95	9.75	17.45	14.75	14.00	16.60	18.70	20.35	22.25	23.35	23.65
25	17.45	17.70	11.00	17.60	16.10	14.50	17.00	19.00	20.35	21.90	23.60	23.50
26	17.35	18.80	13.40	17.00	17.10	15.25	17.30	18.95	19.70	21.40	23.65	23.40
27	17.45	18.90	14.90	16.65	17.40	15.30	18.15	18.60	20.55	22.05	22.75	23.40
28	18.50	19.30	15.85	17.00	17.90	15.25	18.70	18.80	20.95	22.40	21.95	23.20
29	18.85	19.85	16.15	17.85	---	14.35	18.75	18.65	21.65	22.55	21.90	22.80
30	19.15	19.90	15.95	18.10	---	14.85	18.70	19.35	21.80	22.55	21.80	23.00
31	18.80	---	3.30	17.00	---	15.45	---	19.90	---	23.10	21.80	---
MAX	20.80	20.35	19.85	18.10	18.10	19.30	18.75	19.90	22.00	23.10	23.95	24.30

CAL YR 1990 LOW 22.80
WTR YR 1991 LOW 24.30



391904084371800 BU-12 CITY OF CINCINNATI GTMIAMI WFLD NR ROSS OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

215

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 National Geodetic Vertical Datum of 1929.

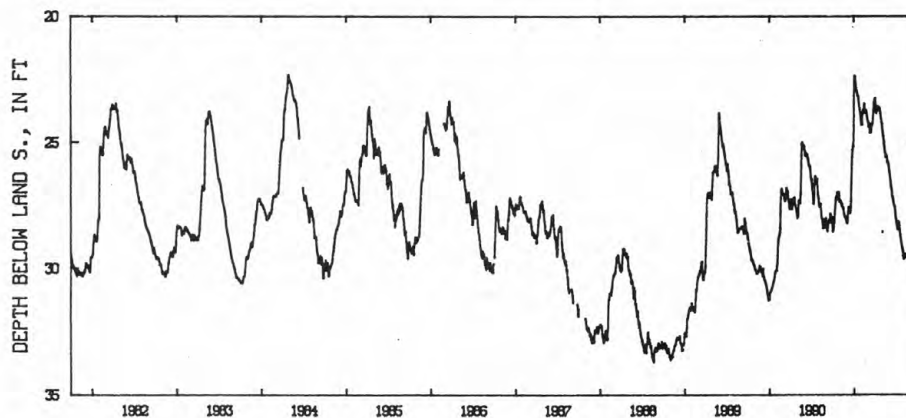
Measuring point: Floor of instrument shelter 1.93 ft above land-surface datum.

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, 33.70 ft below land-surface datum, Aug. 19, 1988;
minimum daily low, 11.45 ft below land-surface datum, June 6, 1947.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.52	27.32	28.13	23.45	24.14	24.08	23.51	24.22	26.09	28.06	29.50	29.94
2	28.53	27.32	28.21	22.74	24.22	24.15	23.31	24.26	26.14	28.18	29.57	30.00
3	28.45	27.35	28.20	22.41	24.28	24.20	23.25	24.40	26.20	28.22	29.61	30.00
4	28.47	27.35	28.11	22.34	24.30	24.32	23.42	24.54	26.27	28.30	29.61	29.99
5	28.37	27.37	27.95	22.41	24.29	24.38	23.55	24.56	26.35	28.37	29.58	29.99
6	28.33	27.39	27.80	22.38	24.27	24.38	23.66	24.66	26.42	28.41	29.52	30.00
7	28.23	27.47	27.74	22.50	24.02	24.30	23.78	24.75	26.50	28.45	29.48	30.03
8	28.20	27.46	27.62	22.57	23.90	24.24	23.86	24.76	26.57	28.47	29.48	30.08
9	28.20	27.44	27.56	22.62	23.77	24.38	23.86	24.90	26.68	28.41	29.46	30.10
10	27.82	27.47	27.59	22.81	23.70	24.54	23.78	24.98	26.77	28.26	29.45	30.15
11	27.70	27.55	27.69	22.82	23.75	24.60	23.57	25.07	26.84	28.18	29.45	30.16
12	27.55	27.56	27.72	22.92	23.80	24.61	23.60	25.18	26.87	28.15	29.46	30.21
13	27.37	27.58	27.73	22.96	23.75	24.60	23.73	25.23	26.98	28.17	29.48	30.21
14	27.18	27.58	27.78	22.98	23.51	24.59	23.73	25.35	27.06	28.23	29.48	30.30
15	27.25	27.59	27.82	23.02	23.45	24.56	23.67	25.40	27.15	28.30	29.51	30.35
16	27.29	27.63	27.81	23.09	23.62	24.50	23.59	25.45	27.16	28.40	29.55	30.43
17	27.29	27.74	27.70	23.12	23.73	24.47	23.59	25.57	27.17	28.48	29.55	30.44
18	27.27	27.80	27.58	23.16	23.83	24.40	23.59	25.57	27.25	28.56	29.54	30.36
19	27.12	27.85	27.31	23.16	---	24.37	23.58	25.53	27.33	28.67	29.54	30.35
20	27.08	27.91	26.80	23.17	---	24.31	23.67	25.52	27.40	28.75	29.53	30.29
21	27.03	27.94	26.46	23.36	23.73	24.27	23.68	25.53	27.50	28.82	29.55	30.34
22	27.00	27.96	26.24	23.44	23.70	24.27	23.64	25.57	---	28.90	29.58	30.42
23	27.00	27.96	25.90	23.45	23.75	24.19	23.69	25.61	---	28.95	29.60	30.46
24	27.00	27.97	25.59	23.62	23.80	24.01	23.79	25.71	---	29.00	29.68	30.46
25	26.97	27.98	25.46	23.67	23.86	23.88	23.82	25.78	27.54	29.06	29.74	30.44
26	27.02	28.05	25.29	23.74	23.93	23.78	23.87	25.81	27.61	29.10	29.78	30.17
27	27.03	28.06	25.24	23.78	24.00	23.57	24.00	25.80	27.70	29.16	29.82	30.33
28	27.05	28.08	25.18	23.90	24.07	23.41	24.05	25.80	27.80	29.21	29.88	30.45
29	27.11	28.03	25.18	23.95	---	23.37	24.10	25.84	27.89	29.28	29.89	30.55
30	27.24	28.15	25.17	24.00	---	23.51	24.19	25.89	27.95	29.33	29.92	30.63
31	27.37	---	24.55	24.10	---	23.52	---	25.98	---	29.39	29.94	---
MAX	28.53	28.15	28.21	24.10	24.30	24.61	24.19	25.98	27.95	29.39	29.94	30.63

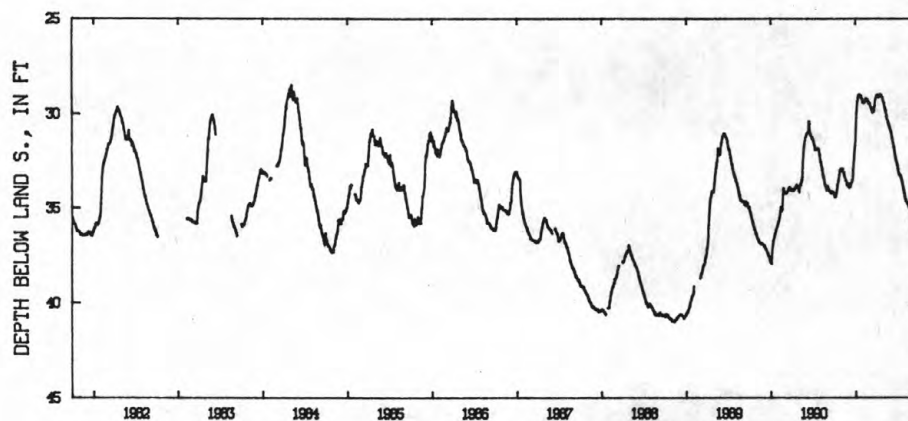
CAL YR 1990 LOW 31.18
WTR YR 1991 LOW 30.63392017084345200 BU-7 C E SCHIERING EAST RIVER RD FAIRFIELD OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS
BUTLER COUNTY--Continued

392021084340300. Local number, BU-56.
LOCATION.--Lat 39°20'21", long 84°34'03", Hydrologic Unit 05080002, 1.3 mi east of the Great Miami River in Fairfield.
Owner: Hamilton Water Department.
WELL CHARACTERISTICS.--Drilled unused water table well, diameter 5 in., depth 58 ft, cased.
INSTRUMENTATION.--Type F continuous recorder.
DATUM.--Elevation of land-surface datum is 583.62 ft above National Geodetic Vertical Datum of 1929. (Levels by Miami Conservancy District.) Measuring point: Floor of instrument shelter, 3.00 ft above land-surface datum.
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.
PERIOD OF RECORD.--November 1969 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 41.00 ft below land-surface datum, Nov. 9, 10, 1988; minimum daily low, 26.81 ft below land-surface datum, Apr. 10, 1975.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34.32	32.95	33.85	31.19	29.40	29.45	29.11	29.30	30.86	32.76	34.36	35.34
2	34.37	32.94	33.88	30.86	29.40	29.46	29.10	29.33	30.90	32.87	34.41	35.36
3	34.38	32.92	33.88	30.57	29.41	29.48	29.10	29.37	30.96	32.92	34.51	35.40
4	34.41	32.90	33.90	30.26	29.41	29.53	29.05	29.41	31.03	32.99	34.52	35.42
5	34.41	32.94	33.90	29.99	29.42	29.55	29.00	29.45	31.11	33.06	34.55	35.44
6	34.37	33.01	33.87	29.76	29.42	29.61	29.01	29.54	31.16	33.12	34.59	35.46
7	34.36	33.06	33.87	29.64	29.43	29.65	29.00	29.61	31.21	33.16	34.62	35.49
8	34.36	33.09	33.86	29.47	29.42	29.68	29.00	29.66	31.27	33.23	34.66	35.51
9	34.34	33.10	33.84	29.35	29.39	29.72	29.05	29.71	31.34	33.24	34.65	35.54
10	34.25	33.15	33.75	29.31	29.35	29.77	29.10	29.77	31.40	33.25	34.66	35.57
11	34.14	33.20	33.72	29.19	29.36	29.81	29.13	29.83	31.45	33.21	34.67	35.61
12	34.02	33.25	33.66	29.10	29.36	29.82	29.15	29.88	31.54	33.23	34.70	35.64
13	33.91	33.30	33.65	29.10	29.29	29.81	29.11	29.94	31.60	33.25	34.73	35.69
14	33.83	33.33	33.66	29.04	29.18	29.86	29.09	30.03	31.66	33.28	34.76	35.72
15	33.74	33.36	33.62	29.04	29.25	29.91	29.03	30.08	31.72	33.34	34.80	35.76
16	33.72	33.40	33.61	29.00	29.26	29.93	29.02	30.15	31.80	33.37	34.82	35.82
17	33.67	33.44	33.60	29.02	29.21	29.92	29.01	30.21	31.88	33.40	34.87	35.85
18	33.60	33.47	33.52	29.03	29.21	29.86	29.00	30.30	31.98	33.45	34.88	35.89
19	33.55	33.52	33.42	29.03	29.25	29.86	28.98	30.30	32.05	33.50	34.90	35.94
20	33.46	33.56	33.28	28.99	29.29	29.88	29.00	30.34	32.11	33.57	34.93	35.97
21	33.34	33.60	33.12	29.05	29.25	29.84	29.00	30.39	32.18	33.62	34.95	35.99
22	33.28	33.62	32.93	29.06	29.31	29.85	28.99	30.43	32.26	33.68	34.99	36.02
23	33.19	33.65	32.76	29.08	29.34	29.77	29.00	30.49	32.32	33.75	35.02	36.07
24	33.14	33.68	32.57	29.14	29.35	29.68	29.07	30.54	32.37	33.81	35.06	36.10
25	33.08	33.74	32.45	29.17	29.37	29.63	29.10	30.57	32.43	33.88	35.09	36.11
26	33.04	33.78	32.27	29.17	29.38	29.54	29.10	30.63	32.49	33.96	35.13	36.14
27	33.00	33.80	32.15	29.17	29.42	29.40	29.11	30.68	32.54	34.02	35.18	36.18
28	32.95	33.82	31.95	29.22	29.45	29.29	29.15	30.72	32.59	34.07	35.23	36.22
29	32.95	33.67	31.80	29.25	---	29.25	29.17	30.73	32.64	34.14	35.26	36.25
30	32.95	33.78	31.65	29.27	---	29.17	29.22	30.75	32.70	34.21	35.29	36.30
31	32.94	---	31.50	29.38	---	29.16	---	30.85	---	34.28	35.32	---
MAX	34.41	33.82	33.90	31.19	29.45	29.93	29.22	30.85	32.70	34.28	35.32	36.30
CAL YR 1990	LOW 37.92											
WTR YR 1991	LOW 36.30											



392021084340300 BU-56 HAMILTON WATER WKS AT FAIRFIELD OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

217

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 National Geodetic Vertical Datum of 1929, 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.

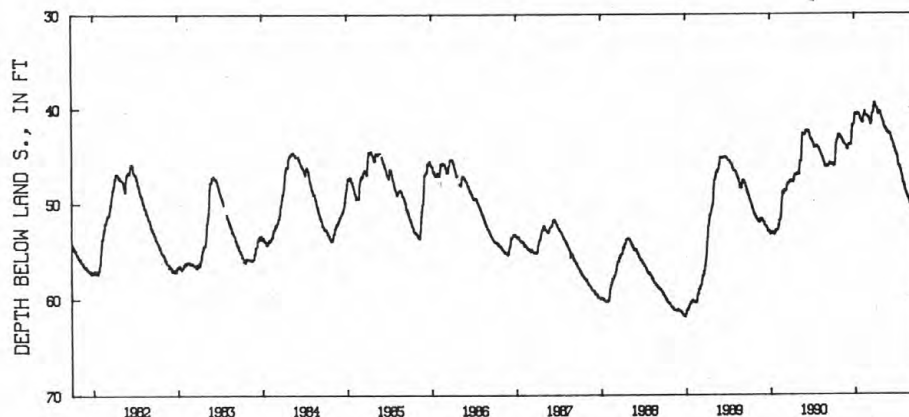
PERIOD OF RECORD.--April 1944 to current year.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46.03	43.01	44.36	41.07	41.48	40.98	39.78	41.20	42.65	44.95	48.15	50.36
2	46.07	43.05	44.38	40.62	41.51	40.95	39.89	41.28	42.68	45.01	48.25	50.43
3	46.10	43.11	44.38	40.56	41.53	40.97	39.96	41.37	42.72	45.12	48.29	50.48
4	46.10	43.13	44.04	40.60	41.54	41.04	40.00	41.45	42.80	45.24	48.40	50.52
5	46.10	43.13	44.05	40.60	41.54	41.15	40.01	41.51	42.92	45.40	48.52	50.57
6	45.98	43.20	43.90	40.62	41.54	41.17	40.04	41.64	43.04	45.62	48.63	50.63
7	45.85	43.33	43.82	40.66	41.50	41.35	40.06	41.80	43.14	45.90	48.72	50.71
8	45.80	43.42	43.81	40.66	41.29	41.50	40.08	41.90	43.20	46.05	48.75	50.75
9	45.75	43.43	43.82	40.70	40.92	41.57	40.11	41.95	43.29	46.09	48.78	50.79
10	45.36	43.44	43.82	40.74	40.72	41.66	40.30	42.00	43.37	46.12	48.86	50.83
11	44.86	43.49	43.82	40.74	40.67	41.72	40.54	42.04	43.42	46.13	48.97	50.89
12	44.23	43.55	43.82	40.50	40.69	41.74	40.65	42.07	43.47	46.13	49.05	50.94
13	43.81	43.63	43.83	40.54	40.60	41.71	40.67	42.08	43.54	46.12	49.10	50.99
14	43.66	43.68	43.88	40.56	40.29	41.49	40.67	42.11	43.63	46.19	49.16	51.05
15	43.52	43.71	43.88	40.58	40.55	41.40	40.40	42.18	43.70	46.32	49.24	51.12
16	43.54	43.73	43.86	40.56	40.72	41.37	40.29	42.24	43.76	46.42	49.30	51.17
17	43.53	43.77	43.87	40.59	40.75	41.14	40.32	42.31	43.89	46.49	49.35	51.27
18	43.39	43.80	43.55	40.68	40.77	40.66	40.34	42.40	44.01	46.55	49.42	51.33
19	43.33	43.83	43.32	40.70	40.78	40.58	40.33	42.45	44.13	46.64	49.48	51.45
20	43.23	43.89	43.01	40.70	40.80	40.59	40.38	42.49	44.21	46.78	49.55	51.53
21	43.04	43.93	42.50	40.75	40.81	40.55	40.41	42.52	44.26	46.90	49.64	51.58
22	42.97	43.94	42.20	40.82	40.81	40.46	40.44	42.56	44.30	47.00	49.71	51.62
23	42.90	43.95	42.00	40.86	40.83	40.25	40.49	42.59	44.39	47.10	49.77	51.68
24	42.83	43.94	41.80	40.96	40.83	39.94	40.61	42.62	44.48	47.25	49.88	51.72
25	42.79	43.97	41.80	41.10	40.85	39.88	40.73	42.64	44.55	47.40	49.96	51.73
26	42.82	44.02	41.79	41.13	40.88	39.88	40.80	42.67	44.62	47.55	50.01	51.78
27	42.83	44.07	41.80	41.13	40.92	39.68	40.90	42.70	44.69	47.70	50.07	51.88
28	42.87	44.14	41.77	41.17	40.95	39.43	41.04	42.72	44.77	47.78	50.14	51.99
29	42.93	44.30	41.74	41.22	---	39.47	41.11	42.73	44.84	47.89	50.20	52.08
30	42.96	44.34	41.67	41.26	---	39.61	41.19	42.72	44.93	47.94	50.22	52.13
31	42.98	---	41.43	41.40	---	39.71	---	42.65	---	48.04	50.26	---
MAX	46.10	44.34	44.38	41.40	41.54	41.74	41.19	42.73	44.93	48.04	50.26	52.13

CAL YR 1990 LOW 53.30

WTR YR 1991 LOW 52.13



— 392048084311400 BU-8 HAMILTON WTR DPT SYMMES RD E OF HAMILTON OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

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 1990 TO SEPTEMBER 1991

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE AIR (DEG C)	TEMPERATURE WATER (DEG C)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE, WATER DIS-IT FIELD (MG/L AS HCO3)
NOV 14...	1040	858	7.5	8.0	15.0	<10	100	32	32	3.7	383
APR 26...	1230	887	7.3	21.0	14.5	<10	110	30	32	3.4	365
AUG 21...	1220	855	7.4	24.5	17.5	<10	110	34	31	3.6	378

DATE	ALKALINITY WAT WH TOT FET FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)
NOV 14...	316	99	64	<0.10	11	528	<0.010	1.90	<1	<1
APR 26...	300	95	62	0.20	10	504	<0.010	2.20	--	--
AUG 21...	309	90	56	0.20	9.9	543	<0.010	2.10	<1	<1

DATE	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGANESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV 14...	10	5	2	<3	<1	<1	3	<10	28	1.0
APR 26...	--	--	--	6	--	--	3	--	--	1.7
AUG 21...	10	1	2	4	2	<1	<1	<10	39	0.8

GROUND-WATER RECORDS

219

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. 11, 1990	9.97	Apr. 10, 1991	9.24

GROUND-WATER RECORDS

BUTLER COUNTY--Continued

392733084293000. Local number, BU-16.

LOCATION.--Lat 39°27'33", long 84°29'30", 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 National Geodetic Vertical Datum of 1929, from
topographic map. Measuring point: Floor of instrument shelter, 4.5 ft above land-surface datum.

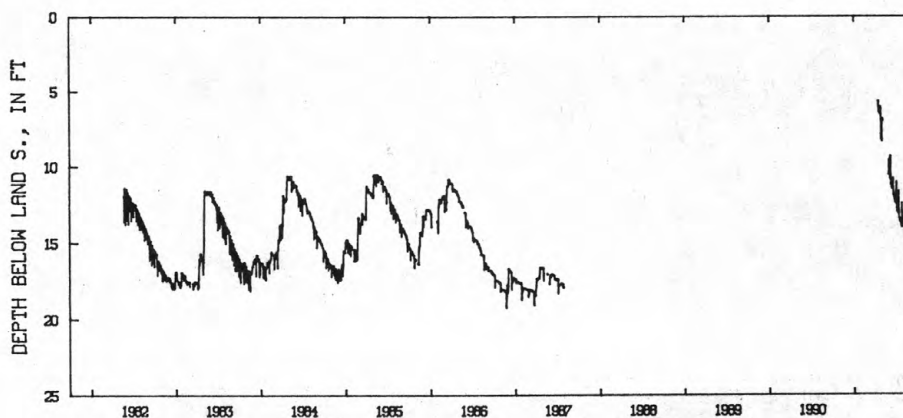
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--May 1982 to July 1987. Reactivated April 17, 1991.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 19.24 ft below land-surface datum, Nov. 24, 1986;
minimum daily low, 5.71 ft below land-surface datum, April. 17, 1991.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	8.25	9.63	12.48	13.38	14.34
2	---	---	---	---	---	---	---	8.29	9.61	11.70	13.45	14.38
3	---	---	---	---	---	---	---	8.37	9.65	11.74	13.47	15.09
4	---	---	---	---	---	---	---	6.97	9.78	11.06	13.72	15.20
5	---	---	---	---	---	---	---	6.85	9.87	12.77	13.75	16.07
6	---	---	---	---	---	---	---	7.05	10.90	12.92	13.66	15.45
7	---	---	---	---	---	---	---	---	9.73	12.94	13.69	15.42
8	---	---	---	---	---	---	---	---	9.32	12.94	13.71	15.15
9	---	---	---	---	---	---	---	---	9.40	13.00	13.04	15.51
10	---	---	---	---	---	---	---	---	11.18	13.02	13.88	15.56
11	---	---	---	---	---	---	---	---	11.25	13.10	13.97	15.64
12	---	---	---	---	---	---	---	---	11.35	13.14	14.03	15.70
13	---	---	---	---	---	---	---	---	11.44	13.15	14.10	15.73
14	---	---	---	---	---	---	---	---	11.47	11.65	14.10	15.42
15	---	---	---	---	---	---	---	---	11.50	13.38	14.77	15.33
16	---	---	---	---	---	---	---	---	11.51	13.46	14.23	15.86
17	---	---	---	---	---	---	5.71	---	11.41	13.48	14.20	15.93
18	---	---	---	---	---	---	6.36	---	10.82	13.51	13.86	16.00
19	---	---	---	---	---	---	6.37	---	10.87	13.64	13.90	16.07
20	---	---	---	---	---	---	6.41	---	11.83	13.67	14.01	16.12
21	---	---	---	---	---	---	6.41	---	11.90	13.68	14.08	15.43
22	---	---	---	---	---	---	6.46	---	11.97	13.70	14.17	16.16
23	---	---	---	---	---	---	6.52	---	12.00	13.81	14.17	16.30
24	---	---	---	---	---	---	6.55	---	12.07	13.88	14.18	16.29
25	---	---	---	---	---	---	6.05	---	12.17	13.95	16.39	16.33
26	---	---	---	---	---	---	6.12	---	12.22	14.01	15.62	16.40
27	---	---	---	---	---	---	6.18	---	12.32	12.45	15.67	16.45
28	---	---	---	---	---	---	6.26	---	12.38	13.04	16.00	16.50
29	---	---	---	---	---	---	8.11	---	12.42	13.14	14.54	16.74
30	---	---	---	---	---	---	8.15	---	12.44	13.17	14.55	16.76
31	---	---	---	---	---	---	---	10.57	---	13.99	14.55	---
MAX	---	---	---	---	---	---	8.15	10.57	12.44	14.01	16.39	16.76

WTR YR 1991 LOW 16.76

392733084293000 BU-16 MILLER BREWING CO NR TRENTON OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

221

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.

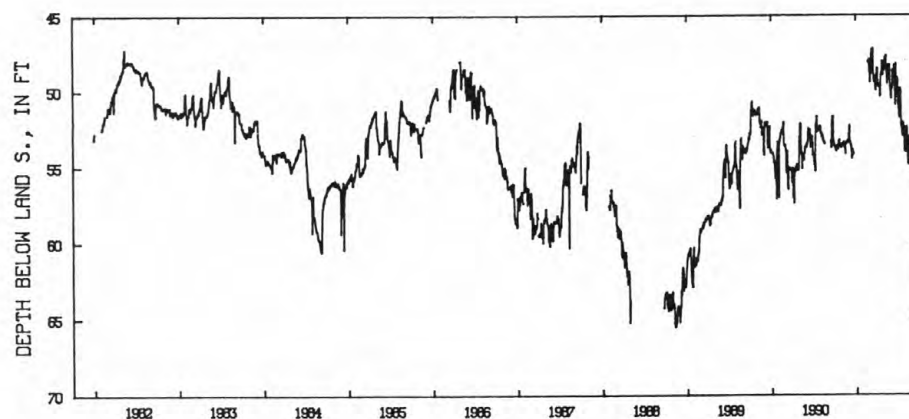
DATUM.--Elevation of land-surface datum is 668 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 1.08 ft above land-surface datum.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53.67	53.54	52.82	---	---	48.74	49.01	48.58	50.14	49.34	53.90	55.12
2	53.70	53.56	52.87	---	---	48.82	48.61	48.57	50.31	50.27	54.05	55.18
3	53.75	53.54	52.77	---	---	49.41	48.47	48.55	50.51	50.93	53.09	55.10
4	53.80	53.44	52.27	---	---	48.85	48.52	48.25	49.69	50.98	53.19	53.49
5	53.90	53.53	53.19	---	---	48.85	49.33	48.19	49.67	51.20	53.31	53.24
6	53.77	53.67	53.36	---	---	48.77	49.30	48.25	49.64	51.20	52.64	53.18
7	53.92	53.61	53.44	---	---	48.85	49.53	48.09	49.84	51.62	52.48	53.17
8	53.98	53.63	53.45	---	---	48.86	49.64	47.91	48.66	51.74	52.39	53.03
9	53.73	53.50	53.52	---	---	47.52	49.76	47.81	48.60	50.41	52.49	54.93
10	53.82	53.35	53.59	---	---	47.55	49.69	47.83	48.96	50.23	52.88	55.31
11	53.72	53.45	53.65	---	---	47.46	49.73	47.75	48.88	49.84	53.03	55.52
12	53.59	53.51	53.82	---	---	47.37	49.74	47.68	48.97	49.90	54.44	55.77
13	53.59	53.52	54.02	---	---	47.22	49.55	48.74	49.05	50.04	54.67	56.04
14	53.61	53.68	54.44	---	---	47.37	49.67	48.98	49.08	50.11	54.77	54.90
15	53.87	53.85	54.08	---	---	47.40	50.22	49.18	48.46	51.07	54.76	54.85
16	53.80	53.97	54.20	---	---	47.36	50.37	49.43	48.28	52.14	54.87	54.84
17	53.62	54.17	54.25	---	---	47.22	50.26	49.54	49.47	52.29	53.35	54.39
18	53.59	53.51	53.88	---	---	48.83	49.64	49.16	49.81	52.37	53.09	54.28
19	53.51	53.47	54.20	---	---	49.21	48.97	49.00	49.96	52.56	53.04	54.33
20	53.33	53.51	54.19	---	---	49.25	48.96	49.10	50.30	52.68	53.05	54.33
21	53.26	53.47	54.12	---	---	49.40	48.85	48.24	50.95	52.81	53.51	54.28
22	53.24	53.39	---	---	48.08	49.40	48.82	48.29	48.48	53.00	53.69	54.23
23	53.50	53.36	---	---	48.07	49.16	48.79	48.33	48.19	52.09	53.81	55.68
24	53.57	53.31	---	---	47.97	49.36	48.39	48.28	48.92	52.17	53.88	55.80
25	53.54	53.44	---	---	47.94	49.80	48.02	48.28	49.07	52.31	53.95	56.06
26	53.67	53.43	---	---	48.09	49.83	48.05	48.30	49.17	52.49	54.43	56.10
27	53.56	53.33	---	---	47.91	49.78	48.39	48.32	49.26	52.43	54.51	56.20
28	53.58	53.39	---	50.79	48.65	49.96	48.66	49.63	49.25	52.41	54.27	56.40
29	53.75	53.36	---	---	---	48.98	48.98	49.80	49.14	53.72	55.09	56.62
30	53.78	53.26	---	---	---	49.06	48.93	49.89	49.24	53.98	55.06	56.64
31	53.55	---	---	---	---	48.95	---	50.13	---	53.92	55.08	---
MAX	53.98	54.17	54.44	50.79	48.65	49.96	50.37	50.13	50.95	53.98	55.09	56.64
CAL YR 1990	LOW 57.38											
WTR YR 1991	LOW 56.64											



— 392939084231700 BU-3 ARMCO STEEL CORP MIDDLETOWN OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929.

Measuring point: Top of platform 14.77 ft below land-surface datum.

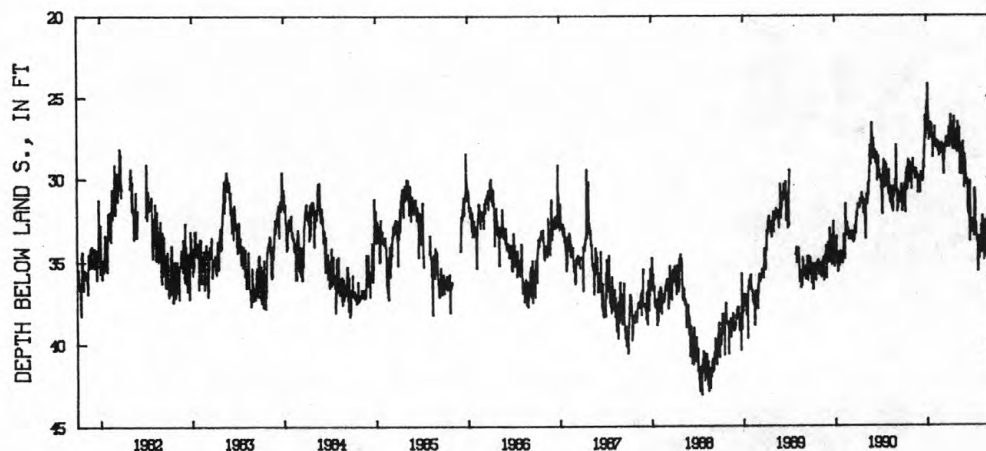
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.98	29.20	30.64	25.67	27.77	28.13	27.34	28.31	29.10	33.15	34.38	33.21
2	31.63	30.66	30.40	25.81	27.55	28.29	27.91	28.43	28.58	33.25	34.51	33.68
3	31.67	30.12	30.69	25.33	26.84	27.83	28.10	28.32	28.90	32.94	34.23	35.28
4	30.96	29.42	30.36	25.34	28.02	28.20	27.48	28.11	29.08	32.96	34.29	34.34
5	30.62	29.52	30.86	25.24	27.91	28.08	27.56	26.55	29.50	32.43	32.79	33.30
6	30.32	29.47	30.59	24.21	27.88	28.07	27.06	27.98	29.80	32.77	33.97	35.06
7	31.24	29.29	29.87	25.63	28.12	28.17	26.14	28.35	30.37	33.47	33.21	34.47
8	31.05	28.85	29.77	26.10	28.15	29.04	27.38	28.39	30.28	33.39	34.16	36.13
9	32.04	29.55	29.84	26.31	27.84	28.65	27.87	28.35	30.20	30.77	32.90	35.18
10	29.70	29.60	29.64	27.70	27.70	29.75	27.72	28.44	30.37	30.69	32.28	35.39
11	29.77	29.38	29.87	27.47	27.83	28.63	27.79	28.19	30.07	31.29	32.50	35.03
12	29.63	29.58	30.00	27.38	27.76	28.94	27.89	26.91	30.22	30.67	32.71	34.86
13	29.72	29.64	30.10	26.96	28.24	28.49	27.41	29.47	31.83	31.22	34.50	35.02
14	29.37	29.47	29.74	26.58	27.80	27.93	26.60	29.76	31.56	31.32	33.98	34.97
15	30.75	29.73	30.18	27.03	27.77	28.44	28.25	29.07	32.13	33.00	32.78	34.49
16	30.47	30.08	30.17	26.58	27.97	28.17	27.89	29.43	30.20	32.73	34.94	36.48
17	30.65	29.96	30.07	27.01	28.41	27.96	28.17	29.59	31.29	32.92	32.59	36.03
18	30.52	29.40	30.00	26.83	28.32	28.07	27.73	29.03	31.46	33.50	32.53	36.21
19	29.20	29.69	29.52	26.70	28.17	28.08	27.87	27.93	32.27	33.80	33.96	35.87
20	28.87	29.45	28.91	26.78	28.64	27.58	28.25	29.80	32.21	33.68	33.54	36.13
21	29.07	30.02	29.32	27.04	28.34	27.49	26.24	29.05	33.79	33.45	33.57	36.67
22	30.04	29.80	29.40	27.59	28.13	27.51	27.28	28.68	32.40	34.89	33.48	35.58
23	30.27	29.95	28.34	27.56	27.89	27.65	27.76	28.86	30.19	35.59	34.32	36.76
24	29.12	29.71	28.19	27.58	27.89	27.51	27.57	28.98	31.90	35.20	34.74	35.82
25	30.03	29.87	27.43	28.05	27.93	28.13	27.48	28.20	33.08	33.81	34.06	35.33
26	29.03	29.91	26.17	28.70	28.14	27.84	27.88	28.45	32.77	33.92	34.41	36.40
27	29.28	30.87	26.63	27.48	28.20	27.94	27.49	27.78	32.89	33.49	34.30	36.15
28	29.21	30.14	26.71	27.73	28.49	27.62	27.03	28.79	32.72	33.86	34.78	36.33
29	29.90	30.46	27.58	27.83	---	27.57	27.73	28.50	32.86	34.82	33.51	36.45
30	29.56	30.45	27.33	27.81	---	27.40	28.22	30.61	32.89	34.06	32.36	36.32
31	29.54	---	26.85	27.82	---	26.90	---	30.35	---	34.22	32.87	---
MAX	32.04	30.87	30.86	28.70	28.64	29.75	28.25	30.61	33.79	35.59	34.94	36.76

CAL YR 1990 LOW 35.62
WTR YR 1991 LOW 36.76393103084240900 BU-2 YMCA IN MIDDLETOWN OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929,

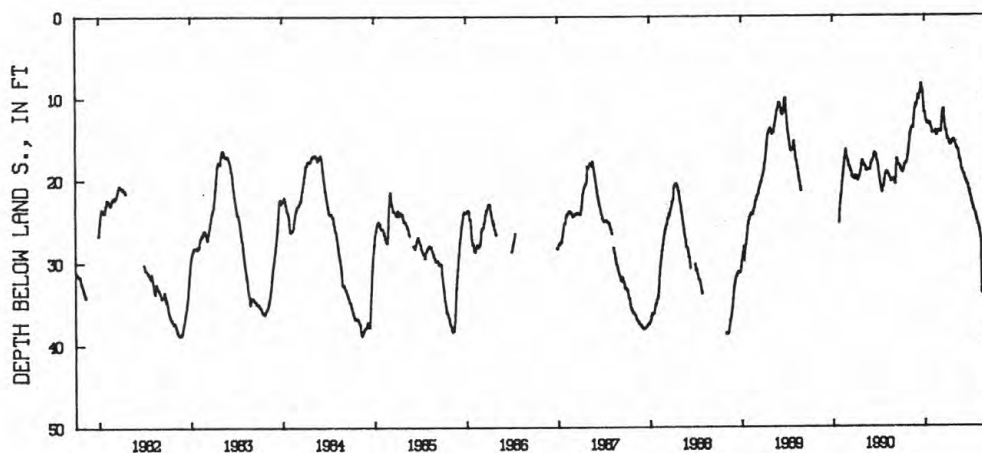
from topographic map. Measuring point: Top of platform 3.0 ft above land-surface datum.

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, 40.70 ft below land-surface datum, Nov. 19, 1957;
minimum daily low, 7.20 ft below land-surface datum, Jan. 10, 1971.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.92	15.45	10.77	11.74	14.37	14.16	14.94	15.57	19.11	21.98	25.53	31.55
2	19.09	15.20	10.78	11.84	14.27	14.05	15.14	15.61	19.23	22.10	25.53	31.61
3	19.01	14.66	10.44	12.04	14.32	14.25	15.18	15.73	19.30	22.21	25.54	31.58
4	19.12	14.48	10.20	12.29	14.31	14.24	15.20	15.85	19.42	22.44	25.82	31.64
5	19.18	14.23	10.07	12.60	14.31	14.29	15.26	15.91	19.34	22.53	25.93	31.71
6	19.03	14.60	9.64	12.91	14.29	14.03	15.29	16.05	19.37	22.73	26.05	31.78
7	19.07	14.08	9.81	12.84	14.33	14.23	15.39	16.14	19.47	22.93	26.36	31.84
8	18.94	13.87	9.89	12.98	14.27	14.12	15.52	16.19	19.57	22.96	26.53	31.99
9	18.76	13.86	10.03	13.18	14.22	13.35	15.58	16.26	19.79	23.05	26.74	32.05
10	18.63	13.90	10.29	13.18	14.24	12.90	15.72	16.30	19.86	23.13	26.99	32.12
11	18.73	13.64	9.94	12.99	14.30	12.53	15.85	16.33	19.94	23.24	27.14	32.18
12	18.43	13.64	9.62	13.22	14.27	12.16	15.84	16.36	20.11	23.28	27.25	32.28
13	18.26	13.77	9.46	13.24	14.00	11.79	15.74	16.42	20.20	23.44	29.06	32.35
14	18.23	13.81	9.56	13.22	14.11	11.68	15.78	16.45	20.20	23.64	31.60	32.46
15	18.22	13.81	9.15	13.17	14.50	11.77	15.76	16.63	20.22	23.74	33.20	32.62
16	18.11	13.72	9.23	13.09	14.59	11.75	15.74	16.73	20.43	23.73	33.77	32.66
17	18.04	13.63	8.86	13.31	14.56	11.54	15.64	16.93	20.53	23.78	33.24	32.73
18	17.98	13.31	8.31	13.24	14.55	11.41	15.58	17.13	20.54	23.86	32.51	32.90
19	18.08	12.75	8.42	13.14	14.46	11.76	15.44	17.36	20.64	23.97	32.18	32.99
20	17.93	12.36	8.40	13.11	14.49	12.54	15.47	17.42	20.63	24.07	32.05	33.10
21	17.92	12.08	8.75	13.37	14.24	12.75	15.31	17.51	20.68	24.16	31.97	33.24
22	17.83	11.76	8.93	13.42	14.23	13.36	15.28	17.67	20.80	24.33	31.90	33.45
23	17.77	11.50	9.13	13.24	14.24	13.57	15.46	17.77	21.08	24.47	31.68	33.54
24	17.68	11.33	9.13	13.56	14.11	13.93	15.45	17.91	21.16	24.61	31.71	33.61
25	17.37	11.24	9.15	13.60	14.16	14.08	15.33	18.14	21.23	24.75	31.57	33.74
26	17.22	11.08	9.55	13.67	14.02	14.05	15.14	18.39	21.22	24.86	31.60	33.87
27	17.05	10.88	10.16	13.77	14.13	14.04	15.20	18.65	21.64	24.99	31.46	33.91
28	16.64	10.76	10.77	13.83	14.15	14.30	15.34	18.78	21.38	25.14	31.37	34.02
29	16.44	11.16	11.13	13.90	---	14.54	15.34	18.86	21.57	25.20	31.26	34.22
30	16.00	11.00	11.39	14.05	---	14.78	15.40	18.88	21.87	25.37	31.27	34.29
31	15.70	---	11.92	14.39	---	14.85	---	19.00	---	25.46	31.42	---
MAX	19.18	15.45	11.92	14.39	14.59	14.85	15.85	19.00	21.87	25.46	33.77	34.29

CAL YR 1990 LOW 25.17
WTR YR 1991 LOW 34.29

403709081052800 C-1 MUNICIPAL WELL FIELD CARROLLTON OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 4.50 ft above land-surface datum.

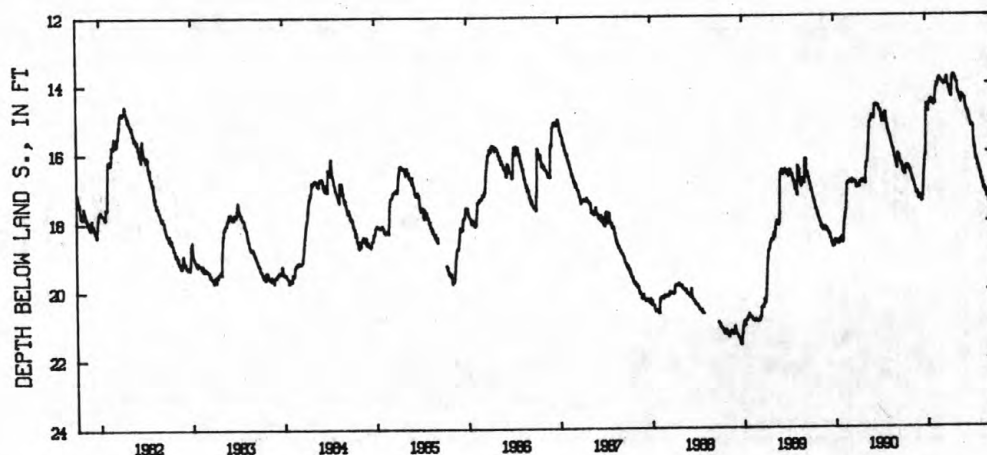
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.59	16.68	17.35	14.77	14.63	13.90	14.08	13.94	14.43	15.25	16.57	17.26
2	16.62	16.67	17.36	14.60	14.58	13.90	14.11	13.95	14.43	15.25	16.62	17.23
3	16.64	16.71	17.37	14.62	14.57	13.92	14.16	13.98	14.42	15.23	16.63	17.32
4	16.64	16.73	17.25	14.66	14.57	13.95	14.18	14.00	14.45	15.21	16.63	17.30
5	16.61	16.76	17.25	14.71	14.59	13.98	14.20	13.99	14.48	15.25	16.68	17.39
6	16.64	16.79	17.30	14.76	14.60	13.98	14.23	14.00	14.52	15.27	16.74	17.45
7	16.58	16.84	17.28	14.78	14.55	13.98	14.26	14.17	14.58	15.28	16.77	17.48
8	16.64	16.84	17.34	14.80	14.33	13.98	14.30	14.26	14.63	15.30	16.79	17.52
9	16.65	16.86	17.32	14.80	14.23	13.95	14.31	14.25	14.68	15.62	16.82	17.55
10	16.44	16.87	17.31	14.84	14.16	13.95	14.33	14.28	14.71	15.73	16.84	17.60
11	16.44	16.90	17.31	14.63	14.13	13.97	14.39	14.30	14.74	15.83	16.82	17.65
12	16.44	16.90	17.34	14.57	14.11	14.04	14.39	14.30	14.77	15.88	16.91	17.70
13	16.46	16.95	17.43	14.58	14.08	14.04	14.39	14.31	14.81	15.92	16.95	17.71
14	16.39	17.00	17.43	14.62	14.00	14.03	14.21	14.35	14.84	15.86	16.91	17.63
15	16.42	17.00	17.42	14.62	14.02	14.02	14.11	14.37	14.87	15.98	17.02	17.61
16	16.48	17.02	17.29	14.57	14.02	14.04	13.93	14.40	14.82	16.08	17.08	17.63
17	16.51	17.08	17.30	14.53	14.00	14.03	13.85	14.44	14.84	16.14	17.09	17.76
18	16.51	17.09	17.28	14.49	14.06	13.99	13.84	14.45	14.87	16.18	17.03	17.83
19	16.39	17.12	17.01	14.49	13.97	14.00	13.81	14.41	14.91	16.24	17.08	17.88
20	16.41	17.16	16.84	14.46	13.93	13.98	13.79	14.49	14.95	16.25	17.11	17.92
21	16.42	17.21	16.70	14.48	13.90	13.96	13.77	14.52	14.99	16.19	17.14	17.95
22	16.44	17.21	16.60	14.50	13.88	13.96	13.75	14.57	15.01	16.26	17.15	17.90
23	16.44	17.15	16.55	14.49	13.90	13.90	13.75	14.40	15.04	16.29	17.17	17.96
24	16.51	17.14	16.41	14.50	13.82	13.84	13.81	14.32	15.08	16.32	17.17	18.02
25	16.49	17.19	16.29	14.52	13.86	13.82	13.83	14.36	15.12	16.36	17.10	18.05
26	16.52	17.23	16.17	14.52	13.86	13.85	13.84	14.38	15.16	16.41	17.16	18.09
27	16.53	17.25	16.14	14.53	13.88	13.94	13.86	14.36	15.19	16.42	17.21	18.13
28	16.55	17.27	16.14	14.59	13.89	14.00	13.85	14.38	15.22	16.42	17.23	18.15
29	16.57	17.34	16.13	14.61	---	14.04	13.86	14.40	15.25	16.48	17.29	18.08
30	16.61	17.35	16.07	14.59	---	14.06	13.90	14.41	15.25	16.52	17.31	18.19
31	16.61	---	15.15	14.63	---	14.06	---	14.42	---	16.55	17.33	---
MAX	16.65	17.35	17.43	14.84	14.63	14.06	14.39	14.57	15.25	16.55	17.33	18.19
CAL YR 1990	LOW 18.65											
WTR YR 1991	LOW 18.19											



400638083453900 CH-3 HOWARD PAPER CO URBANA OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of platform 2.50 ft above land-surface datum.

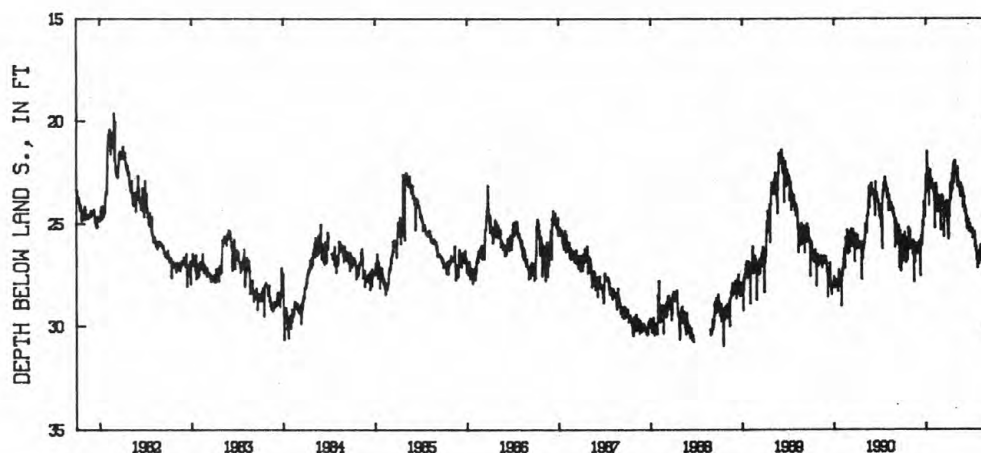
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.95	26.26	26.00	22.63	23.50	25.32	25.75	22.42	23.96	25.26	26.68	26.68
2	26.20	25.83	26.26	22.98	23.46	23.74	25.56	22.45	23.71	25.39	26.96	27.38
3	25.54	25.97	26.04	23.50	23.91	23.89	24.67	22.37	24.22	25.48	26.87	27.10
4	25.66	25.89	26.22	22.42	23.43	23.73	24.38	22.44	24.42	25.24	26.30	26.73
5	25.65	26.12	25.84	21.49	24.95	23.62	24.64	22.66	24.44	25.32	26.66	27.16
6	26.82	25.83	25.90	22.14	25.21	23.81	23.86	23.20	24.14	25.68	26.09	26.68
7	25.60	26.17	26.02	22.56	23.55	23.83	23.98	22.76	24.34	25.70	26.69	26.93
8	25.59	26.27	25.96	22.56	23.48	23.70	23.51	22.25	24.55	25.70	26.47	26.72
9	25.42	26.48	26.89	22.69	23.80	23.72	23.03	23.02	24.38	25.40	26.05	26.93
10	25.93	25.82	27.54	22.66	23.04	24.00	23.25	22.91	24.90	25.41	26.64	27.28
11	26.08	26.21	26.20	22.53	23.35	24.06	23.82	23.17	24.73	25.59	26.72	26.78
12	25.91	25.82	25.58	22.34	23.19	24.12	23.51	23.20	24.64	25.48	26.17	26.57
13	25.67	26.46	25.93	22.79	23.55	25.40	23.47	23.29	25.27	25.60	26.34	26.83
14	26.56	27.22	26.01	24.13	23.64	25.62	23.10	23.22	25.01	25.39	26.81	26.68
15	26.89	27.83	25.73	22.64	23.64	24.23	22.90	23.16	24.95	26.00	26.61	27.11
16	26.17	26.29	26.09	23.31	24.35	24.65	22.60	23.27	24.91	26.14	26.77	26.96
17	26.02	26.31	25.68	22.88	24.46	24.13	22.91	23.45	24.78	25.83	26.45	27.16
18	26.18	26.05	25.46	22.57	23.89	24.20	23.37	23.67	25.12	26.12	26.97	26.99
19	26.09	26.90	24.86	22.40	23.91	24.11	22.56	23.02	24.77	26.35	27.13	27.09
20	26.77	26.33	25.02	22.97	23.96	24.01	22.10	23.44	25.19	26.31	26.74	27.21
21	26.55	26.35	25.14	23.05	24.00	24.56	22.32	23.07	25.36	26.12	27.11	27.03
22	26.30	26.34	25.08	23.05	23.95	24.20	22.53	23.71	25.15	26.75	26.58	27.34
23	25.21	25.93	24.63	22.86	23.65	23.94	23.04	23.47	25.01	26.38	26.92	27.35
24	25.17	25.99	23.92	22.85	23.99	23.92	22.16	23.34	25.19	26.62	26.95	27.67
25	25.30	26.31	24.19	23.14	23.96	24.14	21.99	23.47	25.23	27.03	26.68	27.54
26	25.88	26.21	24.22	23.22	24.03	23.88	22.33	23.26	25.03	27.15	26.79	27.48
27	25.38	26.05	24.44	23.35	24.14	25.00	21.95	23.43	25.32	26.52	27.23	27.21
28	25.31	26.46	24.09	23.22	24.90	24.74	22.36	23.56	25.42	26.61	26.91	27.61
29	25.36	26.23	24.69	23.06	---	25.33	22.27	24.22	25.29	26.40	27.19	27.43
30	25.58	26.03	23.64	23.16	---	25.51	22.54	23.53	25.26	26.65	26.81	27.22
31	26.17	---	23.00	23.22	---	25.46	---	24.16	---	26.65	26.94	---
MAX	26.89	27.83	27.54	24.13	25.21	25.62	25.75	24.22	25.42	27.15	27.23	27.67

CAL YR 1990 LOW 29.00
WTR YR 1991 LOW 27.83395639084012200 CL-9 CITY OF NEW CARLISLE AT NEW CARLISLE OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

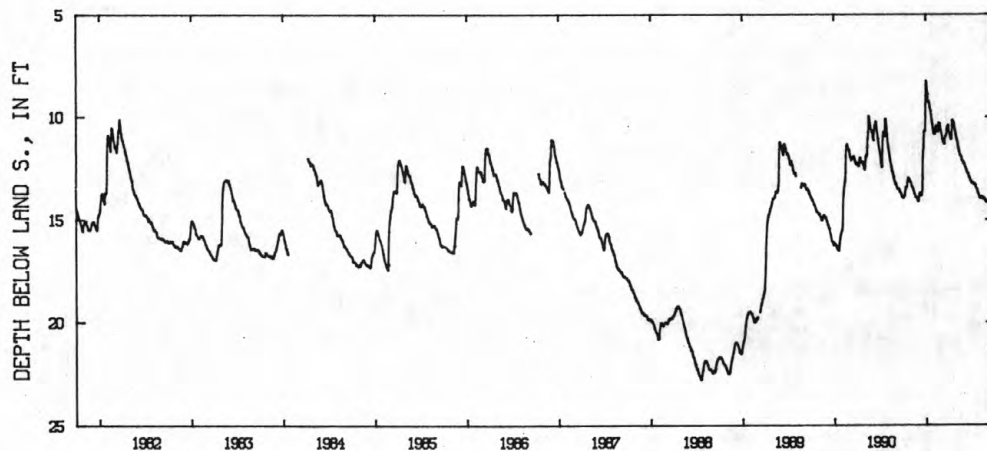
GROUND-WATER RECORDS
CLARK COUNTY--Continued

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.91	13.19	14.09	8.49	10.75	10.67	10.62	10.95	12.30	13.19	13.87	14.17
2	13.94	13.24	14.12	8.24	10.82	10.75	10.70	10.99	12.31	13.23	13.91	14.16
3	13.95	13.29	14.12	8.34	10.82	10.78	10.74	11.06	12.32	13.24	13.96	14.15
4	13.94	13.32	14.00	8.48	10.85	10.88	10.79	11.12	12.35	13.25	13.96	14.16
5	13.92	13.35	13.88	8.59	10.87	10.92	10.87	11.14	12.41	13.25	13.94	14.17
6	13.88	13.39	13.78	8.75	10.87	11.01	10.91	11.23	12.45	13.24	13.94	14.20
7	13.86	13.44	13.74	8.89	10.84	11.08	10.94	11.29	12.47	13.25	13.94	14.20
8	13.87	13.47	13.72	9.02	10.63	11.11	10.98	11.36	12.51	13.26	13.91	14.21
9	13.85	13.47	13.72	9.20	10.48	11.16	11.03	11.45	12.55	13.27	13.91	14.21
10	13.74	13.52	13.71	9.29	10.43	11.23	11.04	11.51	12.56	13.26	13.91	14.24
11	13.65	13.54	13.71	9.31	10.49	11.24	11.09	11.56	12.60	13.27	13.91	14.25
12	13.53	13.56	13.73	9.30	10.52	11.26	11.11	11.61	12.66	13.27	13.92	14.26
13	13.46	13.58	13.81	9.23	10.49	11.29	11.10	11.66	12.70	13.27	13.93	14.26
14	13.43	13.63	13.83	9.32	10.55	11.34	10.93	11.71	12.73	13.28	13.94	14.25
15	13.43	13.68	13.83	9.36	10.69	11.34	10.43	11.77	12.76	13.28	13.97	14.24
16	13.43	13.72	13.76	9.48	10.71	11.33	10.23	11.84	12.77	13.29	14.00	14.26
17	13.44	13.76	13.68	9.56	10.73	11.23	10.17	11.89	12.77	13.33	14.00	14.28
18	13.43	13.79	13.54	9.64	10.73	11.06	10.20	11.91	12.79	13.36	13.99	14.28
19	13.28	13.84	12.97	9.66	10.70	11.03	10.25	11.89	12.83	13.43	13.95	14.32
20	13.15	13.87	12.09	9.73	10.48	10.95	10.29	11.93	12.86	13.47	13.96	14.33
21	13.08	13.89	11.78	9.87	10.30	10.90	10.29	11.96	12.91	13.49	13.96	14.33
22	13.04	13.92	11.63	9.95	10.28	10.92	10.33	11.98	12.96	13.50	13.97	14.31
23	12.98	13.92	11.45	10.07	10.29	10.85	10.41	12.05	12.96	13.54	14.00	14.31
24	12.99	13.91	11.06	10.19	10.32	10.70	10.52	12.10	12.96	13.59	14.01	14.31
25	13.03	13.94	10.82	10.29	10.39	10.62	10.56	12.14	13.00	13.65	14.02	14.30
26	13.04	13.94	10.71	10.36	10.47	10.56	10.62	12.18	13.05	13.69	14.04	14.33
27	13.05	13.96	10.71	10.41	10.54	10.49	10.68	12.20	13.10	13.72	14.07	14.35
28	13.12	14.03	10.69	10.52	10.63	10.47	10.72	12.19	13.12	13.73	14.08	14.37
29	13.13	14.06	10.71	10.61	---	10.42	10.78	12.21	13.14	13.75	14.10	14.41
30	13.14	14.07	10.68	10.65	---	10.51	10.87	12.24	13.16	13.79	14.13	14.42
31	13.16	---	9.12	10.71	---	10.52	---	12.29	---	13.84	14.17	---
MAX	13.95	14.07	14.12	10.71	10.87	11.34	11.11	12.29	13.16	13.84	14.17	14.42

CAL YR 1990 LOW 16.51
WTR YR 1991 LOW 14.42



— 395840083495200 CL-7 OH DIV WTR EAGLE CITY RD NR SPRINGFIELD OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

227

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.

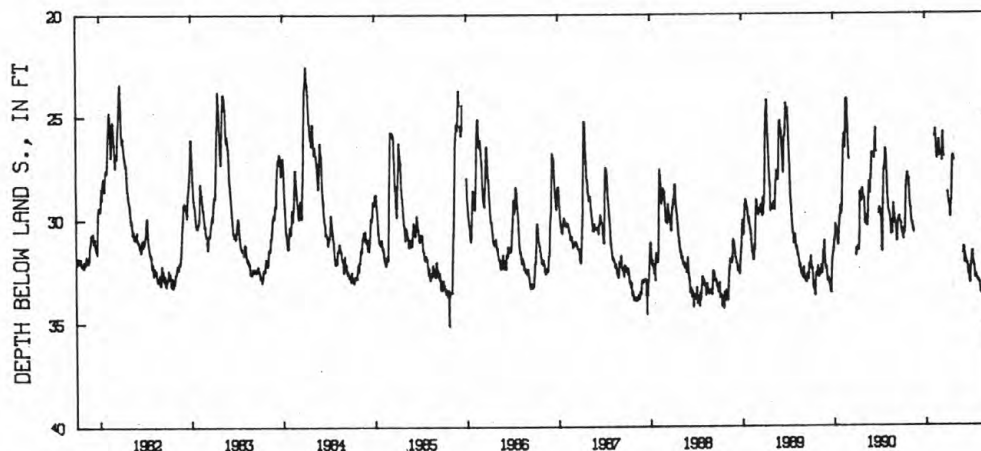
DATUM.--Elevation of land-surface datum is 745 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 2.80 ft above land-surface datum.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.62	29.44	28.56	---	---	---	28.95	---	31.63	32.25	33.06	33.21
2	30.77	29.46	---	---	---	---	29.13	---	31.36	32.14	33.08	33.18
3	30.92	29.50	---	---	---	---	29.16	---	31.42	31.94	33.08	33.40
4	30.97	29.79	---	---	---	---	29.23	---	31.50	31.77	33.09	33.48
5	30.96	30.03	---	---	---	---	29.32	---	32.15	31.68	33.28	33.49
6	30.82	30.17	---	---	---	---	29.32	---	31.68	31.61	33.38	33.39
7	30.47	30.22	---	---	---	---	29.30	---	31.76	31.58	33.46	33.18
8	30.47	30.21	---	---	26.00	27.18	29.45	---	31.83	31.81	33.53	33.04
9	30.62	30.17	---	---	25.87	26.72	29.80	---	31.86	31.99	33.58	33.21
10	30.65	30.31	---	---	25.67	26.16	29.90	---	31.94	32.10	33.60	33.25
11	30.45	30.40	---	---	26.02	25.83	29.78	---	32.04	32.16	33.52	33.26
12	30.09	30.50	---	---	26.32	25.82	29.33	---	32.10	32.20	33.63	33.26
13	29.67	30.56	---	---	26.58	26.31	29.16	---	32.15	32.25	33.65	33.30
14	29.08	30.59	---	---	26.89	26.65	29.13	---	32.20	32.31	33.47	33.21
15	28.59	30.65	---	---	27.04	26.92	29.13	---	32.16	32.48	33.49	33.25
16	28.40	---	---	---	27.05	27.00	28.57	---	32.16	32.69	33.51	33.41
17	28.21	---	---	---	27.10	---	27.97	---	32.31	32.79	33.48	33.54
18	28.05	---	---	---	---	---	27.47	---	32.44	32.86	33.39	33.66
19	28.00	---	---	---	---	---	27.16	---	32.62	32.87	33.32	33.72
20	27.94	---	---	---	---	---	27.04	---	32.67	32.87	33.31	33.75
21	27.79	---	---	---	26.96	---	26.95	---	32.72	32.68	33.24	33.71
22	28.00	---	---	---	26.66	---	27.19	---	32.73	32.77	33.16	33.65
23	28.07	---	---	---	26.46	---	27.01	---	32.78	32.88	33.13	33.74
24	28.09	---	---	---	26.18	---	27.10	---	32.92	32.92	33.12	33.75
25	28.04	---	---	---	26.22	---	27.19	---	33.00	32.94	33.08	33.77
26	28.15	---	---	---	26.44	---	---	---	33.06	32.95	33.19	33.78
27	28.10	---	---	---	26.72	---	---	---	33.09	32.94	33.22	33.78
28	28.47	---	---	---	26.97	---	---	---	32.87	32.93	33.26	33.71
29	28.72	---	---	---	---	28.74	---	---	32.55	32.98	33.31	33.52
30	28.96	---	---	---	---	28.72	---	---	32.36	33.01	33.33	33.43
31	29.25	---	---	---	---	28.77	---	31.65	---	33.04	33.29	---
MAX	30.97	30.65	28.56	---	27.10	28.77	29.90	31.65	33.09	33.04	33.65	33.78

CAL YR 1990 LOW 31.74
WTR YR 1991 LOW 33.78401256081525100 CS-3
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929, 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.

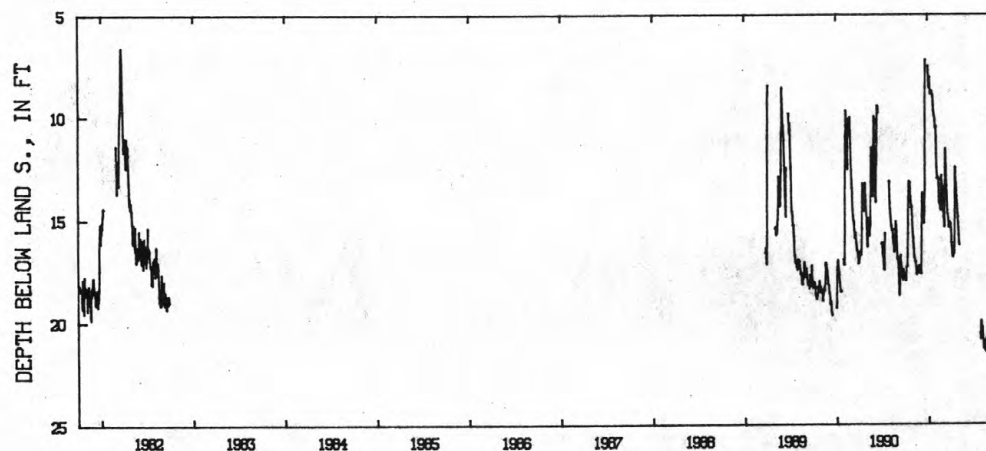
PERIOD OF RECORD.--May 1949 to September 1982. Reactivated March 24, 1989.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.72	15.89	17.62	---	10.49	14.63	15.55	15.46	---	---	20.82	21.24
2	17.98	15.89	17.50	7.53	11.02	14.88	15.90	15.74	---	---	20.80	20.97
3	17.99	16.13	17.67	8.26	11.92	14.88	16.13	15.97	---	---	20.26	20.79
4	17.98	16.40	17.67	8.58	12.50	15.07	16.32	16.21	---	---	20.71	21.03
5	17.99	16.40	16.30	8.59	12.79	15.31	16.47	16.26	---	---	20.72	21.06
6	17.83	16.78	14.89	8.35	13.03	15.39	16.57	---	---	---	20.92	20.93
7	17.33	16.84	14.15	8.05	13.06	15.32	16.67	---	---	---	21.22	20.59
8	17.33	16.92	13.83	8.08	13.04	13.53	16.77	---	---	---	21.32	20.37
9	17.34	16.99	13.74	8.52	12.96	12.54	16.83	---	---	---	21.24	20.22
10	17.29	17.07	14.02	8.82	13.02	11.68	16.84	---	---	---	21.12	20.16
11	16.73	17.10	14.33	8.91	13.35	11.60	16.64	---	---	---	21.08	20.23
12	15.78	17.05	14.63	8.83	13.94	12.00	16.71	---	---	---	20.95	20.43
13	14.65	17.29	14.92	8.90	14.14	12.43	16.66	---	---	---	21.19	20.72
14	13.99	17.35	15.20	8.85	14.25	12.91	16.53	---	---	---	21.40	20.73
15	13.66	17.65	15.21	8.73	14.30	13.38	16.31	---	---	---	21.47	20.38
16	13.18	17.71	15.18	8.83	14.18	13.70	14.94	---	---	---	21.27	20.53
17	13.35	17.64	14.71	8.87	14.12	13.91	13.01	---	---	---	20.99	20.63
18	13.50	17.52	14.61	8.89	14.47	14.35	12.48	---	---	---	20.93	20.54
19	13.48	17.38	13.36	8.92	14.56	14.75	12.53	---	---	---	20.80	20.49
20	13.22	17.64	10.10	8.99	14.52	14.83	13.07	---	---	---	20.96	20.84
21	13.57	17.64	8.59	9.07	14.08	14.92	13.33	---	---	---	20.96	20.88
22	13.92	17.40	7.77	9.47	13.15	15.39	13.33	---	---	---	20.76	20.50
23	13.90	17.50	7.23	9.76	12.90	15.42	13.64	---	---	---	20.75	20.64
24	14.10	17.50	---	9.89	13.21	15.31	13.91	---	---	---	20.75	20.81
25	14.31	17.27	---	9.95	13.35	15.11	14.11	---	---	20.56	20.76	20.96
26	14.46	17.35	---	10.03	13.45	15.27	14.29	---	---	20.85	20.89	20.96
27	14.43	17.37	---	10.04	13.75	15.37	14.51	---	---	20.85	21.19	20.74
28	14.39	17.42	---	10.22	14.12	15.41	14.74	---	---	20.23	21.24	20.70
29	14.77	17.57	---	10.54	---	15.43	14.96	---	---	19.96	21.19	20.88
30	15.26	17.65	---	10.59	---	15.35	15.18	---	---	20.12	21.14	20.80
31	15.65	---	---	10.52	---	15.20	---	---	---	20.44	21.22	---
MAX	17.99	17.71	17.67	10.59	14.56	15.43	16.84	16.26	---	20.85	21.47	21.24

CAL YR 1990 LOW 19.32

WTR YR 1991 LOW 21.47

401735081523800 CS-2
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

229

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 National Geodetic Vertical Datum of 1929, from

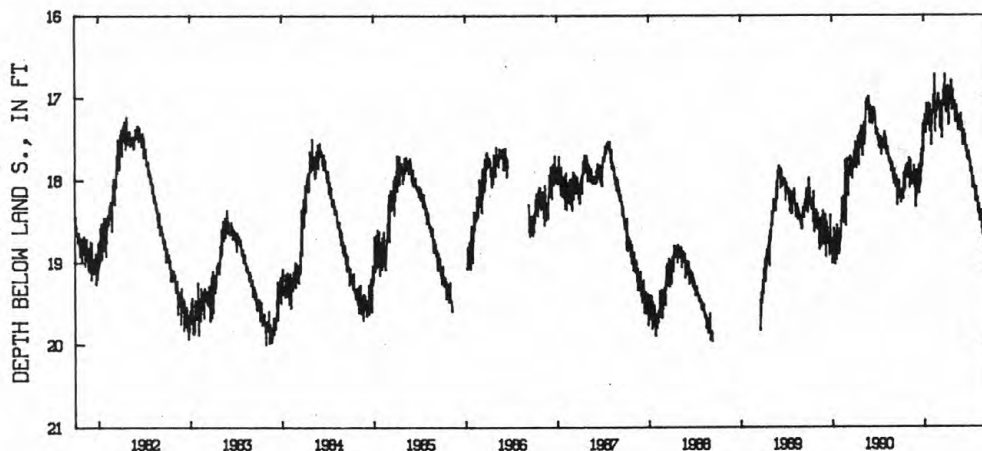
topographic map. Measuring point: Floor of instrument shelter 4.00 ft above land-surface datum.

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, 20.43 ft below land-surface datum, Nov. 29, 1977;
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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.19	17.83	18.10	17.45	17.47	16.96	17.09	17.06	17.32	17.69	18.22	18.76
2	18.27	17.81	18.20	17.29	17.33	17.02	17.19	17.12	17.30	17.73	18.27	18.73
3	18.15	17.87	17.88	17.40	17.31	17.07	17.10	17.14	17.34	17.77	18.22	18.68
4	18.20	17.74	18.18	17.38	17.20	17.08	16.99	17.06	17.48	17.78	18.32	18.68
5	18.21	17.80	18.16	17.21	17.19	17.13	16.95	17.05	17.53	17.80	18.37	18.74
6	18.14	18.10	17.96	17.36	17.17	17.12	16.93	17.20	17.58	17.83	18.40	18.81
7	18.18	17.97	17.98	17.39	17.19	17.33	16.93	17.30	17.55	17.90	18.37	18.80
8	18.23	17.99	17.98	17.30	17.16	17.37	16.86	17.30	17.45	17.88	18.29	18.77
9	18.11	17.76	18.00	17.43	16.98	17.25	16.97	17.19	17.52	17.91	18.31	18.75
10	18.16	17.89	17.97	17.43	17.05	17.38	17.28	17.24	17.45	17.86	18.41	18.77
11	18.23	17.99	17.97	17.07	17.14	17.33	17.33	17.21	17.40	17.93	18.49	18.82
12	18.03	18.06	17.82	17.25	17.14	17.18	17.27	17.10	17.49	17.88	18.43	18.81
13	17.92	18.05	18.16	17.29	16.72	17.05	16.99	17.10	17.58	17.99	18.38	18.78
14	17.92	17.98	18.16	17.20	16.96	17.39	16.96	17.16	17.53	18.06	18.38	18.82
15	18.14	17.93	17.88	17.23	17.41	17.49	17.03	17.24	17.45	18.10	18.44	18.88
16	18.11	17.92	18.09	17.18	17.42	17.40	17.08	17.21	17.53	18.09	18.45	18.84
17	17.90	18.04	17.95	17.33	17.18	17.21	17.00	17.30	17.60	17.98	18.37	18.97
18	18.07	17.95	17.80	17.31	17.14	17.04	16.98	17.40	17.61	17.97	18.44	18.95
19	18.11	17.94	18.06	17.17	17.16	17.07	16.87	17.34	17.66	18.04	18.47	19.03
20	17.95	18.05	17.99	17.07	17.26	17.07	17.04	17.29	17.64	18.11	18.56	19.04
21	17.86	17.95	17.69	17.34	17.08	16.92	16.96	17.29	17.59	18.08	18.58	18.96
22	17.86	17.83	17.91	17.28	17.14	16.97	16.79	17.26	17.66	18.09	18.59	18.93
23	17.83	17.83	17.63	17.23	17.17	16.85	16.86	17.28	17.74	18.08	18.64	18.99
24	17.82	17.91	17.72	17.38	17.07	17.10	17.15	17.23	17.74	18.11	18.67	18.99
25	17.89	18.06	17.71	17.41	17.05	17.10	17.15	17.22	17.72	18.17	18.64	18.82
26	17.91	18.09	17.84	17.23	17.00	16.99	16.96	17.24	17.73	18.26	18.60	19.07
27	17.84	17.98	17.70	17.09	17.03	16.72	16.91	17.32	17.76	18.23	18.61	19.12
28	17.95	18.32	17.46	17.28	17.03	17.02	16.98	17.41	17.75	18.19	18.64	19.16
29	17.98	18.32	17.33	17.28	---	16.96	16.91	17.36	17.69	18.09	18.63	19.12
30	17.80	18.23	17.50	17.26	---	17.18	17.10	17.20	17.66	18.24	18.58	19.08
31	17.83	---	17.66	17.58	---	17.12	---	17.35	---	18.25	18.73	---
MAX	18.27	18.32	18.20	17.58	17.47	17.49	17.33	17.41	17.76	18.26	18.73	19.16
CAL YR 1990	LOW 19.02											
WTR YR 1991	LOW 19.16											



400514084345700 D-2
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 Olentangy River at toe of Delaware dam.

Owner: U.S. Army Corps of Engineers.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in., depth 135 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 900 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 2.60 ft above land-surface datum.

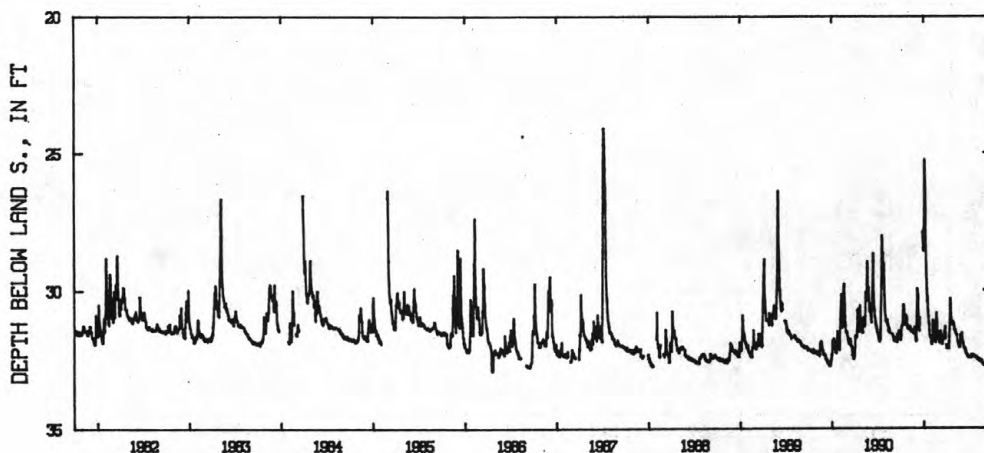
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31.80	31.40	31.80	28.31	31.96	31.78	31.99	31.23	31.68	32.43	32.45	32.76
2	31.74	31.36	31.85	27.77	31.93	31.82	32.10	31.32	31.58	32.41	32.45	32.77
3	31.71	31.36	31.82	27.50	31.93	31.85	32.12	31.41	31.55	32.40	32.46	32.78
4	31.62	31.33	31.01	25.65	31.90	31.90	32.12	31.45	31.70	32.40	32.48	32.76
5	31.38	31.30	30.82	25.25	31.68	31.92	32.11	31.45	31.80	32.41	32.51	32.77
6	31.34	31.39	30.00	25.60	31.28	31.85	32.11	31.46	31.88	32.43	32.53	32.80
7	31.31	31.43	29.95	25.99	31.10	31.87	32.11	31.51	31.90	32.45	32.53	32.81
8	31.28	31.44	30.07	26.31	31.11	31.50	32.10	31.55	31.92	32.45	32.52	32.80
9	31.23	31.35	30.15	27.03	31.16	31.49	32.06	31.53	31.97	32.46	32.50	32.80
10	30.97	31.38	30.26	28.40	31.67	31.51	32.12	31.60	32.04	32.44	32.55	32.78
11	30.75	31.45	30.92	29.20	31.75	31.80	32.12	31.63	32.07	32.38	32.56	32.78
12	30.54	31.49	31.07	29.45	31.77	31.80	31.90	31.60	32.10	32.35	32.57	32.78
13	30.60	31.52	31.26	29.68	31.70	31.77	31.69	31.60	32.16	32.34	32.57	32.77
14	30.60	31.51	31.45	29.97	31.57	31.88	31.43	31.62	32.16	32.39	32.60	32.77
15	30.72	31.47	31.48	30.42	31.85	31.95	31.07	31.79	32.13	32.41	32.55	32.78
16	30.91	31.45	31.28	30.43	31.88	31.96	30.58	31.85	32.11	32.41	32.57	32.79
17	31.05	31.48	31.00	30.25	31.88	31.91	30.30	31.89	32.21	32.39	32.56	32.80
18	31.02	31.49	---	30.78	31.88	31.71	30.48	31.91	32.25	32.37	32.56	32.81
19	31.27	31.50	---	30.83	31.71	31.63	30.51	31.92	32.29	32.40	32.57	32.81
20	31.23	31.56	---	30.95	31.12	31.65	30.98	31.98	32.32	32.42	32.59	32.84
21	30.88	31.56	---	31.15	30.83	31.72	31.01	32.01	32.32	32.42	32.62	32.85
22	31.00	31.53	---	31.22	31.05	31.80	31.15	32.04	32.32	32.42	32.63	32.84
23	31.03	31.47	---	31.44	31.12	31.65	31.19	32.06	32.35	32.39	32.66	32.83
24	30.95	31.38	---	31.64	31.20	31.48	31.15	32.07	32.38	32.40	32.69	32.82
25	30.98	31.45	---	31.71	31.62	31.70	31.26	32.08	32.39	32.43	32.70	32.83
26	31.04	31.48	---	31.72	31.71	31.69	31.13	32.08	32.42	32.45	32.70	32.77
27	31.25	31.33	---	31.72	31.75	31.43	31.16	31.92	32.44	32.46	32.69	32.78
28	31.28	31.63	27.88	31.75	31.77	31.32	31.21	31.68	32.44	32.45	32.70	32.83
29	31.36	31.71	28.05	---	---	31.58	31.18	31.63	32.43	32.42	32.70	32.86
30	31.40	31.72	28.45	31.85	---	31.77	31.23	31.67	32.42	32.44	32.69	32.86
31	31.39	---	28.57	31.96	---	---	---	31.69	---	32.45	32.73	---
MAX	31.80	31.72	31.85	31.96	31.96	31.96	32.12	32.08	32.44	32.46	32.73	32.86

CAL YR 1990 LOW 32.50
WTR YR 1991 LOW 32.86402126083040400 DL-3
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 0.60 ft above land-surface datum.

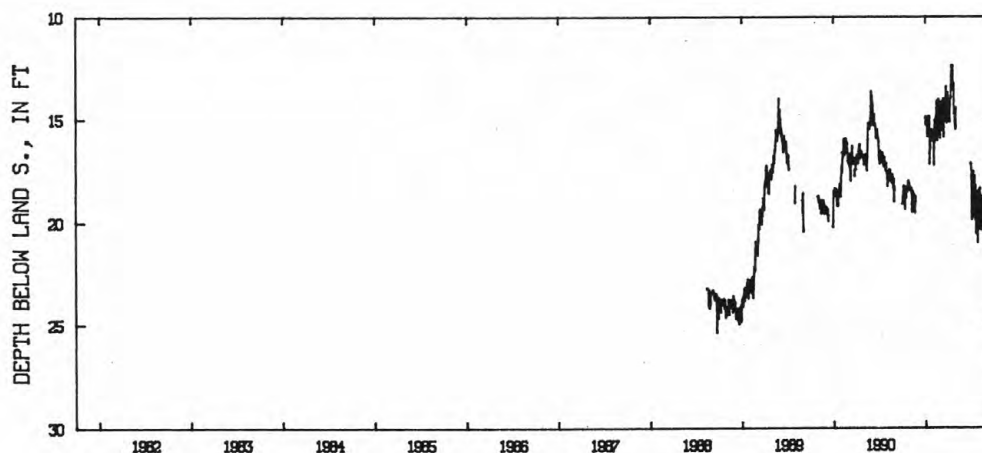
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.09	18.42	---	14.98	15.63	15.94	14.50	15.50	---	17.18	20.10	18.82
2	19.07	18.37	---	14.88	15.58	14.95	14.49	15.35	---	17.18	18.50	18.77
3	18.76	18.38	---	15.05	15.53	14.55	14.43	14.45	---	17.80	19.35	19.05
4	18.54	18.37	---	15.18	17.24	14.42	14.25	---	---	19.49	20.22	19.85
5	18.26	18.32	---	15.20	16.45	14.50	14.44	---	---	19.87	18.72	---
6	18.25	18.43	---	15.22	15.75	14.45	14.35	---	---	18.16	18.40	20.20
7	18.25	18.53	---	15.32	15.05	14.15	15.05	---	---	17.75	18.35	---
8	18.33	19.50	---	15.70	16.15	15.58	15.15	---	---	17.55	20.08	---
9	18.33	18.83	---	15.85	15.95	15.18	15.11	---	---	17.65	19.55	19.22
10	18.34	18.54	---	15.59	15.45	14.83	14.30	---	---	17.55	20.30	21.12
11	19.33	18.50	---	15.35	15.25	14.90	14.00	---	---	19.76	20.40	20.80
12	19.33	18.57	---	14.88	14.92	14.56	14.00	---	---	18.57	18.70	21.31
13	18.38	18.62	---	14.91	14.90	14.31	13.94	---	---	18.35	20.24	19.36
14	18.27	18.63	---	14.94	14.50	14.00	13.40	---	---	18.10	19.72	18.95
15	18.73	18.64	---	14.98	14.15	15.88	12.88	---	---	18.31	19.63	21.14
16	18.83	18.64	---	14.88	14.32	15.40	12.45	---	---	17.85	20.30	20.10
17	18.53	18.67	---	15.00	15.80	14.57	12.38	---	---	17.77	19.54	19.11
18	18.45	18.82	---	17.19	16.05	14.09	12.45	---	---	19.45	19.78	18.96
19	18.48	19.51	---	16.62	14.59	---	12.45	---	---	19.87	20.15	18.96
20	18.38	19.50	---	16.38	14.20	---	12.69	---	---	18.22	20.28	19.13
21	18.30	19.15	---	15.70	14.06	---	13.31	---	---	20.56	18.94	19.03
22	18.53	18.99	---	15.52	14.07	---	13.22	---	---	19.47	18.70	19.16
23	18.21	18.74	---	15.59	14.04	13.98	13.32	---	---	19.75	20.79	19.13
24	18.00	---	---	15.50	15.25	13.42	13.39	---	---	20.56	20.79	19.05
25	18.00	---	---	15.56	15.81	14.83	13.57	---	---	19.50	18.95	18.92
26	18.06	---	---	15.56	14.55	15.20	14.80	---	---	20.35	18.71	18.96
27	18.11	---	---	---	14.36	14.40	---	---	---	19.67	19.30	19.04
28	18.18	---	---	---	14.36	15.17	14.50	---	---	21.01	20.26	19.08
29	18.30	---	---	16.06	---	14.95	15.28	---	---	19.60	20.17	19.15
30	18.27	---	---	15.71	---	13.69	14.65	---	---	18.48	---	19.15
31	18.47	---	---	15.72	---	13.72	---	---	---	20.34	19.06	---
MAX	19.33	19.51	---	17.19	17.24	15.94	15.28	15.50	---	21.01	20.79	21.31
CAL YR 1990	LOW 19.51											
WTR YR 1991	LOW 21.31											



393450082403600 F-7 P65 WTR CO NR AMANDA OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT), DEPTH TO WATER BL. LSD

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 National Geodetic Vertical Datum of 1929, 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 27.45 ft below land-surface datum, Aug. 17, 1988;

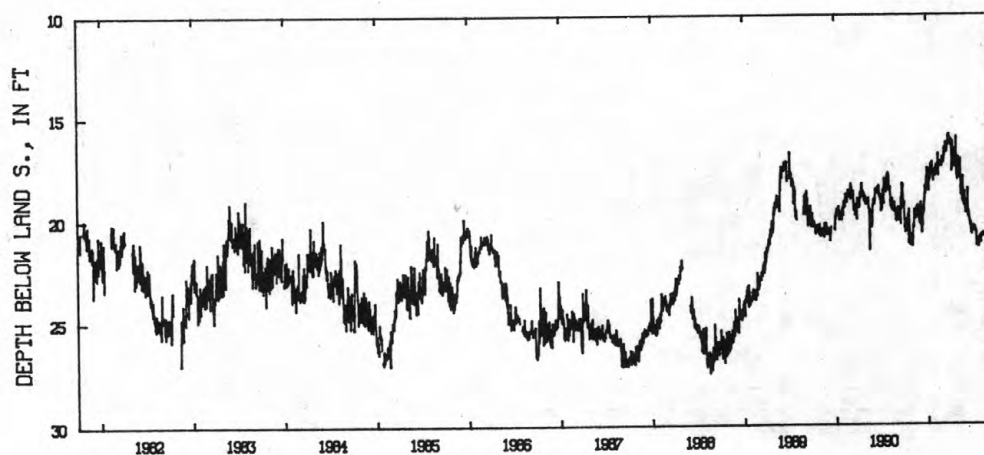
minimum daily low, 15.90 ft below land-surface datum, Mar. 30, 1991.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.33	21.20	20.20	17.55	17.70	17.45	16.05	17.90	19.20	---	21.10	20.55
2	19.20	21.20	20.10	17.55	17.70	17.30	16.30	17.70	19.30	---	21.15	20.50
3	20.45	21.30	20.00	17.65	17.90	17.10	16.10	18.10	19.50	---	21.10	20.60
4	20.30	20.80	20.00	18.40	17.90	17.00	16.30	17.75	19.45	---	20.95	20.65
5	20.40	21.00	19.30	17.95	17.50	17.20	16.25	17.80	19.70	20.35	20.90	20.65
6	20.65	20.35	20.30	17.65	17.75	17.10	16.20	17.00	19.55	20.50	20.80	20.60
7	20.50	20.30	19.20	17.90	17.40	17.30	16.40	17.95	19.60	20.45	20.80	20.65
8	20.45	20.35	19.80	18.65	17.70	17.20	16.40	17.95	19.65	20.55	20.75	20.65
9	20.05	20.40	19.60	18.20	17.60	17.10	16.15	18.00	19.55	20.60	20.85	20.55
10	20.10	19.80	20.65	18.10	17.60	17.05	16.45	18.00	19.45	20.40	20.85	20.70
11	20.15	19.55	20.65	17.65	17.70	16.55	17.70	17.60	19.75	20.60	20.75	20.75
12	20.05	19.85	20.00	17.60	17.60	16.95	17.55	17.90	19.60	20.50	20.70	20.65
13	20.05	19.85	20.35	18.10	17.50	16.75	16.40	17.55	18.55	20.55	20.75	20.65
14	20.00	19.95	20.30	17.60	16.85	16.80	16.25	18.00	19.85	20.60	20.70	20.90
15	20.60	20.00	19.80	17.60	17.90	16.75	17.50	17.10	19.90	20.60	20.85	20.75
16	20.50	19.95	19.80	17.45	17.30	16.70	16.95	18.55	19.65	20.65	20.80	20.70
17	19.95	19.90	19.40	17.35	17.30	16.30	17.10	18.75	19.75	21.00	20.85	20.80
18	19.75	19.50	19.65	17.80	17.50	16.30	17.05	18.85	19.90	21.20	20.70	20.85
19	21.20	19.70	19.65	17.50	17.35	16.35	17.05	18.85	20.05	21.30	20.70	20.90
20	19.80	19.75	19.55	17.50	17.20	16.70	17.05	18.55	20.10	21.30	20.75	20.95
21	19.55	19.75	19.15	17.25	17.40	16.75	16.60	18.85	20.15	21.20	20.75	20.90
22	19.90	19.75	19.00	17.85	17.40	16.60	16.65	18.95	20.30	21.30	20.75	20.90
23	20.55	19.40	18.85	17.60	17.30	16.35	17.10	19.05	20.35	21.30	20.75	20.75
24	21.00	19.35	18.45	17.65	---	16.35	17.50	19.20	20.20	21.30	20.75	20.80
25	21.10	19.50	18.40	17.90	---	16.45	16.70	17.95	20.45	21.35	20.80	20.80
26	21.20	19.45	18.80	18.15	---	16.40	17.15	19.15	20.55	21.15	20.70	21.10
27	21.25	19.45	---	17.85	---	16.00	17.15	19.10	20.70	21.20	20.80	20.80
28	21.15	20.00	18.65	17.65	---	16.05	17.35	19.10	20.70	21.15	20.80	20.70
29	21.10	19.80	18.20	17.75	---	16.00	16.00	19.35	20.75	20.95	21.00	20.75
30	21.30	19.95	18.05	17.80	---	15.90	17.70	19.20	---	20.90	20.75	21.10
31	20.75	---	17.90	17.80	---	16.10	---	18.70	---	20.85	20.50	---
MAX	21.30	21.30	20.65	18.65	17.90	17.45	17.70	19.35	20.75	21.35	21.15	21.10

CAL YR 1990 LOW 21.50

WTR YR 1991 LOW 21.35

394257082362900 F-6
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929, from

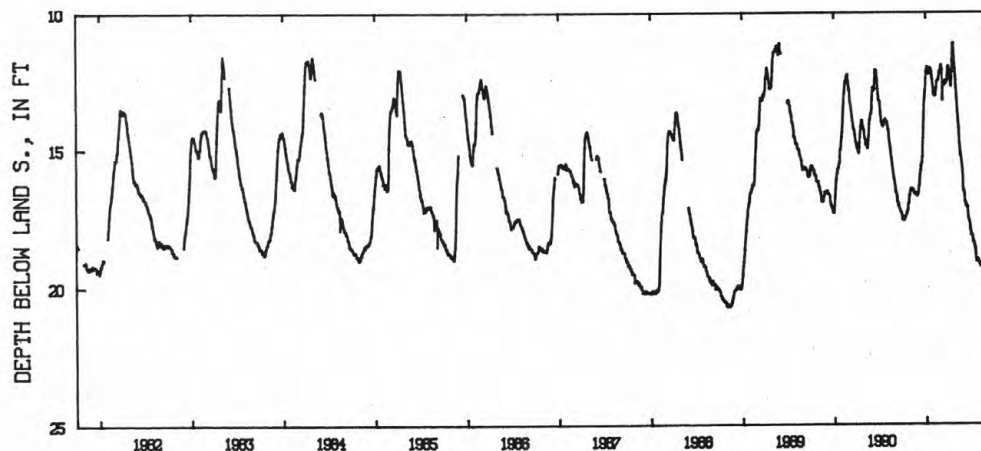
topographic map. Measuring point: Floor of instrument shelter 8.02 ft above land-surface datum.

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, 20.70 ft below land-surface datum, Oct. 31, Nov. 1, 11-12, 1988;
minimum daily low, 7.27 ft below land-surface datum, May 5-6, 1962.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.55	16.50	16.60	12.45	12.98	12.09	11.98	12.73	16.54	18.10	19.14	19.70
2	17.55	16.50	16.57	12.24	13.00	11.98	12.06	12.86	16.56	18.09	19.15	19.70
3	17.57	16.45	16.56	12.13	13.02	11.94	12.09	13.03	16.58	18.13	19.15	19.70
4	17.57	16.47	16.39	12.14	13.05	12.04	12.11	13.13	16.61	18.13	19.15	19.70
5	17.55	16.43	16.38	12.06	13.06	12.10	12.21	13.23	16.70	18.17	19.23	19.70
6	17.55	16.48	16.34	12.01	13.06	12.10	12.39	13.50	16.92	18.24	19.23	19.74
7	17.54	16.48	16.25	12.09	13.05	12.09	12.41	13.66	16.92	18.25	19.22	19.81
8	17.54	16.51	16.07	12.09	13.06	13.22	12.48	13.74	16.95	18.28	19.22	19.81
9	17.53	16.51	15.96	12.15	13.06	13.22	12.52	13.95	16.97	18.38	19.21	19.80
10	17.48	16.48	15.87	12.19	12.90	12.68	12.65	14.02	17.06	18.38	19.19	19.80
11	17.47	16.46	15.82	12.27	12.80	12.59	12.71	14.11	17.07	18.39	19.20	19.78
12	17.46	16.52	15.78	12.28	12.77	12.59	12.72	14.25	17.05	18.40	19.22	19.80
13	17.44	16.54	15.63	12.26	12.72	12.58	12.68	14.48	17.07	18.48	19.33	19.80
14	17.39	16.55	15.60	12.19	12.55	12.56	12.50	14.57	17.09	18.49	19.33	19.85
15	17.38	16.60	15.58	12.15	12.51	12.70	12.17	14.84	17.11	18.56	19.33	19.85
16	17.38	16.61	15.53	12.05	12.52	12.69	11.80	14.90	17.11	18.59	19.34	19.88
17	17.35	16.61	15.50	12.04	12.52	12.67	11.51	15.00	17.27	18.61	19.34	19.88
18	17.29	16.61	15.35	12.10	12.50	12.52	11.36	15.14	17.36	18.71	19.33	19.89
19	17.27	16.62	15.29	12.10	12.50	12.51	11.18	15.20	17.47	18.80	19.31	19.97
20	17.25	16.65	14.79	12.07	12.49	12.58	11.13	15.24	17.49	18.93	19.34	19.97
21	17.18	16.65	14.63	12.10	12.44	12.58	11.16	15.25	17.58	19.00	19.35	19.98
22	17.15	16.66	14.24	12.14	12.36	12.58	11.35	15.33	17.60	19.08	19.37	19.98
23	17.07	16.65	14.02	12.17	12.35	12.63	11.47	15.41	17.63	19.08	19.40	19.97
24	17.01	16.61	13.72	12.35	12.25	12.57	11.61	15.50	17.66	19.06	19.46	19.97
25	16.98	16.61	13.50	12.39	12.18	12.52	11.77	15.60	17.69	18.98	19.46	19.97
26	16.95	16.70	13.30	12.46	12.18	12.52	11.92	15.68	17.79	18.98	19.49	19.97
27	16.83	16.70	13.20	12.51	12.18	12.38	12.06	15.80	17.90	19.02	19.51	19.98
28	16.68	16.68	13.04	12.62	12.15	12.18	12.20	15.95	17.93	19.03	19.60	20.00
29	16.67	16.68	12.96	12.65	---	12.08	12.36	16.13	17.97	19.06	19.63	20.05
30	16.66	16.65	12.84	12.79	---	12.00	12.52	16.43	18.05	19.06	19.64	20.13
31	16.50	---	12.70	12.94	---	12.00	---	16.50	---	19.13	19.68	---
MAX	17.57	16.70	16.60	12.94	13.06	13.22	12.72	16.50	18.05	19.13	19.68	20.13

CAL YR 1990 LOW 17.57
WTR YR 1991 LOW 20.13394544082271000 F-1
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929, 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.

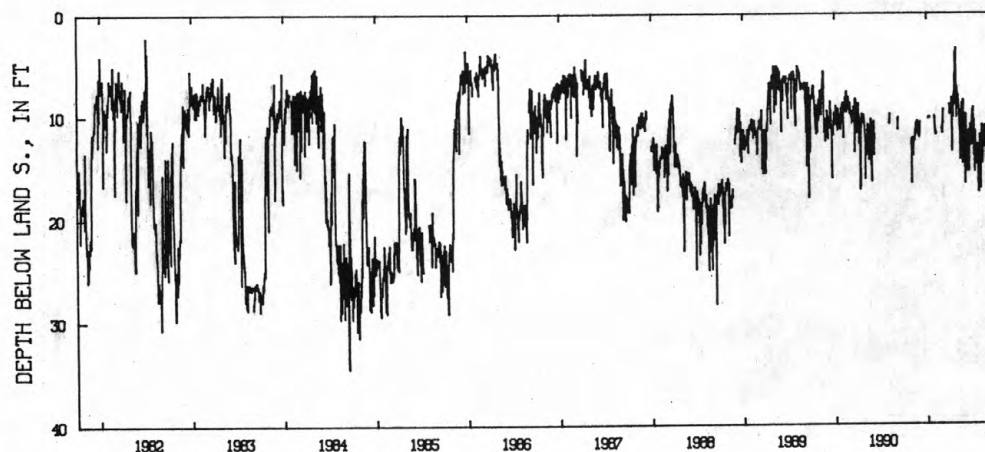
PERIOD OF RECORD.--June 1971 to current year.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	12.30	11.00	---	10.20	11.40	9.00	7.20	15.15	10.35	13.25	14.35
2	---	16.60	12.20	11.70	11.20	11.30	10.00	7.40	14.15	10.00	15.70	12.90
3	---	12.60	11.60	---	11.50	11.80	9.70	8.00	16.65	9.55	12.25	12.45
4	---	12.50	11.80	---	11.90	11.10	9.80	8.35	14.80	9.70	14.50	15.00
5	---	12.20	10.70	---	11.60	10.70	9.20	8.25	9.90	9.30	17.15	13.15
6	---	12.60	10.70	---	11.60	10.80	9.80	8.10	10.50	12.60	12.40	15.00
7	---	13.80	---	10.30	11.90	9.60	9.90	8.60	10.00	14.00	11.50	12.65
8	---	13.90	---	10.30	---	9.50	9.55	8.70	12.10	10.45	11.15	12.70
9	---	12.90	---	10.30	---	---	9.50	9.20	14.20	11.70	11.00	15.85
10	---	12.70	---	10.30	---	---	8.35	10.00	11.90	15.20	11.90	15.85
11	---	12.40	---	10.20	---	---	13.15	11.05	13.25	14.50	13.70	13.60
12	---	12.20	---	10.30	---	---	13.50	11.30	15.40	15.50	13.00	15.20
13	---	12.50	---	---	---	---	9.90	12.55	15.45	14.40	14.70	18.30
14	---	12.50	---	10.10	---	---	9.55	14.30	12.85	11.60	11.50	13.70
15	---	12.10	---	---	---	---	8.55	11.25	15.50	14.00	11.75	13.65
16	---	11.40	---	---	---	---	8.60	10.15	15.00	13.25	12.65	15.95
17	---	12.00	---	---	---	---	10.25	9.60	11.50	13.70	11.30	16.15
18	---	11.20	---	---	---	---	8.40	10.20	13.75	13.70	11.35	16.95
19	---	10.90	---	---	---	---	8.00	10.05	14.30	14.80	12.50	16.45
20	---	11.40	---	---	---	---	8.25	10.35	15.45	13.50	11.20	16.20
21	---	11.00	---	---	---	---	7.85	8.90	13.50	12.85	11.05	16.95
22	---	10.70	---	---	---	---	6.00	9.30	11.10	14.80	13.15	13.60
23	---	10.70	---	---	---	---	6.70	14.70	10.95	14.20	11.60	15.60
24	---	10.60	---	---	---	---	3.85	8.90	11.40	16.60	14.35	16.95
25	---	10.70	---	---	---	---	4.20	8.90	12.55	16.25	11.85	13.70
26	---	11.80	---	---	---	---	9.05	8.70	11.45	16.65	14.95	13.25
27	---	11.30	---	---	---	---	3.60	8.55	11.80	17.45	12.75	13.35
28	---	12.00	---	---	---	---	3.50	8.80	13.00	17.10	12.90	12.35
29	---	11.40	---	---	---	---	8.40	14.25	10.80	13.60	12.50	12.10
30	---	11.80	---	---	---	---	10.30	13.90	10.20	11.95	15.45	15.45
31	12.90	---	---	---	---	---	---	13.80	---	13.50	16.95	---
MAX	12.90	16.60	12.20	11.70	11.90	11.80	13.50	14.70	16.65	17.45	17.15	18.30

CAL YR 1990 LOW 17.20
WTR YR 1991 LOW 18.30



395053082361900 F-5
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.30 ft above land-surface datum.

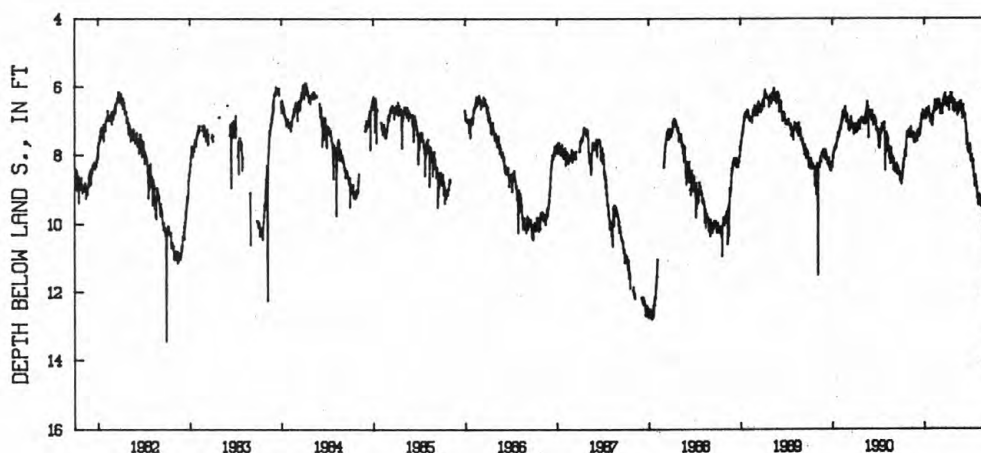
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.55	7.30	7.45	6.95	7.05	6.65	6.40	6.45	6.60	7.85	9.20	10.10
2	8.70	7.40	7.55	6.80	7.10	6.45	6.40	6.50	6.75	7.80	9.25	10.15
3	8.85	7.30	7.40	6.75	7.15	6.40	6.60	6.75	6.95	7.90	9.25	10.00
4	8.70	7.35	7.40	6.95	7.00	6.60	6.35	6.55	6.80	7.70	9.15	10.00
5	8.55	7.40	7.60	6.75	6.90	6.60	6.35	6.40	6.55	7.85	9.45	9.85
6	8.70	7.30	7.35	6.75	7.00	6.50	6.55	6.60	6.70	8.10	9.20	10.00
7	8.60	7.25	7.30	6.95	6.75	6.80	6.35	6.50	6.55	8.20	9.40	10.20
8	8.45	7.50	7.50	6.75	6.75	6.65	6.50	6.50	6.55	8.00	9.45	10.15
9	8.55	7.20	7.30	6.80	6.80	6.55	6.60	6.70	6.80	8.05	9.15	10.10
10	8.25	7.20	7.30	6.95	6.65	6.80	6.45	6.55	6.90	8.05	9.15	10.25
11	8.40	7.45	7.45	6.70	6.60	6.65	6.45	6.50	6.90	8.00	9.30	10.10
12	8.35	7.35	7.25	6.65	6.75	6.60	6.70	6.70	6.90	8.15	9.20	10.30
13	8.15	7.35	7.35	6.80	6.50	6.70	6.40	6.65	6.80	8.15	9.25	10.45
14	8.15	7.50	7.45	6.75	6.40	6.60	6.30	6.65	6.85	8.20	9.40	10.30
15	8.10	7.50	7.35	6.70	6.50	6.60	6.45	6.85	7.05	8.40	9.25	10.30
16	8.05	7.40	7.35	6.75	6.50	6.80	6.35	6.70	7.05	8.30	9.40	10.50
17	7.90	7.50	7.40	6.70	6.40	6.55	6.30	6.60	7.10	8.15	9.50	11.30
18	8.00	7.35	7.10	6.70	6.70	6.40	6.50	6.80	7.25	8.40	9.35	11.10
19	7.90	7.35	7.10	6.85	6.55	6.60	6.20	6.50	7.50	8.60	9.30	10.75
20	7.85	7.55	7.25	6.60	6.70	6.35	6.20	6.50	7.70	8.60	9.45	10.55
21	8.05	7.50	7.00	6.70	6.45	6.35	6.40	6.75	7.70	8.60	9.35	10.50
22	7.75	7.60	6.85	6.90	6.40	6.50	6.20	6.55	7.40	8.90	9.40	10.65
23	7.50	7.65	6.95	6.80	6.65	6.25	6.20	6.60	7.40	8.70	9.60	10.60
24	7.40	7.40	6.80	6.90	6.45	6.40	6.45	6.70	7.90	8.65	9.70	10.50
25	7.35	7.60	6.80	7.05	6.45	6.55	6.35	6.45	7.85	8.60	9.70	10.65
26	7.40	7.65	6.95	6.90	6.60	6.35	6.35	6.60	7.80	8.65	9.80	10.60
27	7.50	7.40	6.90	6.85	6.40	6.20	6.70	6.70	7.90	8.85	9.75	10.70
28	7.40	7.45	6.70	7.00	6.40	6.50	6.45	6.45	7.80	8.80	9.70	10.95
29	7.45	7.55	6.85	6.95	---	6.35	6.45	6.45	7.95	8.80	10.05	10.70
30	7.50	7.50	6.80	6.85	---	6.35	6.65	6.60	7.95	9.00	9.80	10.80
31	7.40	---	6.85	7.10	---	6.55	---	6.55	---	8.95	9.90	---
MAX	8.85	7.65	7.60	7.10	7.15	6.80	6.70	6.85	7.95	9.00	10.05	11.30

CAL YR 1990 LOW 8.85
WTR YR 1991 LOW 11.30393153083322000 FA-1
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929, from

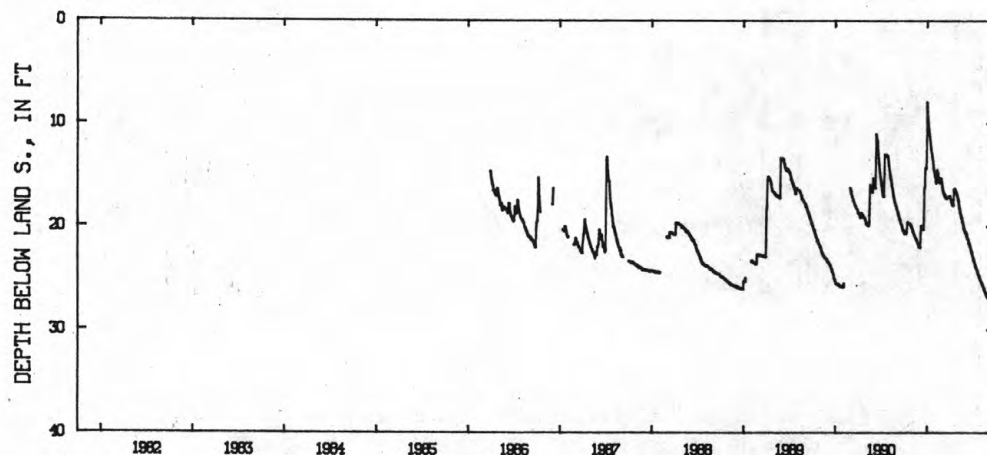
topographic map. Measuring point: Floor of instrument shelter 3.80 ft above land-surface datum.

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, 28.35 ft below land-surface datum, Sept. 30, 1991;
minimum daily low, 7.91 ft below land-surface datum, Jan. 1, 1991.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.53	20.12	21.94	7.91	15.20	15.99	17.10	17.09	20.53	22.87	25.20	26.89
2	20.60	20.20	21.99	8.35	15.35	16.13	17.15	17.21	20.60	22.93	25.24	26.94
3	20.66	20.28	22.03	8.84	15.50	16.28	17.21	17.32	20.54	23.00	25.29	26.99
4	20.68	20.36	22.04	9.27	15.63	16.44	17.29	17.45	20.61	23.08	25.35	27.00
5	20.55	20.44	21.40	9.62	15.76	16.58	17.37	17.58	20.69	23.16	25.40	27.01
6	20.57	20.51	20.50	9.96	15.81	16.71	17.45	17.72	20.76	23.25	25.45	27.07
7	20.60	20.58	20.14	10.28	15.81	16.78	17.54	17.86	20.84	23.34	25.51	27.14
8	20.62	20.65	19.91	10.57	15.06	16.84	17.64	18.01	20.91	23.42	25.57	27.19
9	20.64	20.72	19.91	10.84	14.51	16.87	17.73	18.15	21.00	23.51	25.63	27.25
10	20.65	20.76	19.93	11.07	14.59	16.90	17.76	18.29	21.09	23.59	25.68	27.28
11	20.45	20.84	19.97	11.30	14.69	16.93	17.84	18.42	21.18	23.67	25.75	27.32
12	20.13	20.90	20.02	11.53	14.82	16.99	17.91	18.55	21.22	23.74	25.81	27.38
13	19.89	20.96	20.09	11.76	14.92	17.05	17.95	18.67	21.31	23.81	25.88	27.43
14	19.64	21.01	20.16	11.95	15.14	17.11	17.95	18.78	21.40	23.89	25.94	27.48
15	19.60	21.07	20.23	12.14	15.27	17.15	17.95	18.89	21.48	23.96	26.00	27.48
16	19.59	21.13	20.27	12.35	15.42	17.21	17.34	19.01	21.57	24.03	26.07	27.48
17	19.61	21.19	20.30	12.54	15.56	17.26	16.60	19.12	21.65	24.10	26.13	27.54
18	19.64	21.25	20.30	12.67	15.71	17.27	16.40	19.16	21.72	24.18	26.19	27.60
19	19.68	21.30	19.20	12.81	15.77	17.27	16.38	19.26	21.80	24.26	26.24	27.67
20	19.70	21.37	16.47	12.93	15.77	17.25	16.39	19.37	21.88	24.35	26.30	27.73
21	19.72	21.42	16.33	13.10	15.74	17.22	16.41	19.47	21.97	24.43	26.35	27.80
22	19.73	21.48	16.33	13.32	15.50	17.20	16.46	19.57	22.05	24.51	26.40	27.86
23	19.74	21.53	16.10	13.53	15.37	17.19	16.51	19.68	22.13	24.59	26.44	27.93
24	19.75	21.58	14.85	13.75	15.29	17.17	16.58	19.80	22.22	24.67	26.50	27.98
25	19.76	21.63	14.35	13.98	15.44	17.16	16.64	19.92	22.30	24.73	26.54	28.03
26	19.78	21.69	14.33	14.19	15.53	17.15	16.70	20.04	22.40	24.80	26.58	28.09
27	19.81	21.74	14.35	14.39	15.66	17.13	16.76	20.15	22.48	24.86	26.63	28.15
28	19.85	21.79	14.38	14.58	15.81	17.12	16.83	20.21	22.55	24.92	26.67	28.20
29	19.90	21.85	14.41	14.78	---	17.10	16.90	20.29	22.64	24.99	26.75	28.25
30	19.96	21.90	14.42	14.86	---	17.07	16.99	20.39	22.73	25.05	26.79	28.35
31	20.05	---	9.60	15.05	---	17.08	---	20.46	---	25.15	26.84	---
MAX	20.68	21.90	22.04	15.05	15.81	17.27	17.95	20.46	22.73	25.15	26.84	28.35
CAL YR 1990	LOW 25.84											
WTR YR 1991	LOW 28.35											



394956083002700 FR-18 CITY OF COLS S OF RT 665 AT SHADEVILLE OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT), DEPTH TO WATER BL. LSD

GROUND-WATER RECORDS

237

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 National Geodetic Vertical Datum of 1929.

Measuring point: Floor of instrument shelter 3.43 ft above land-surface datum.

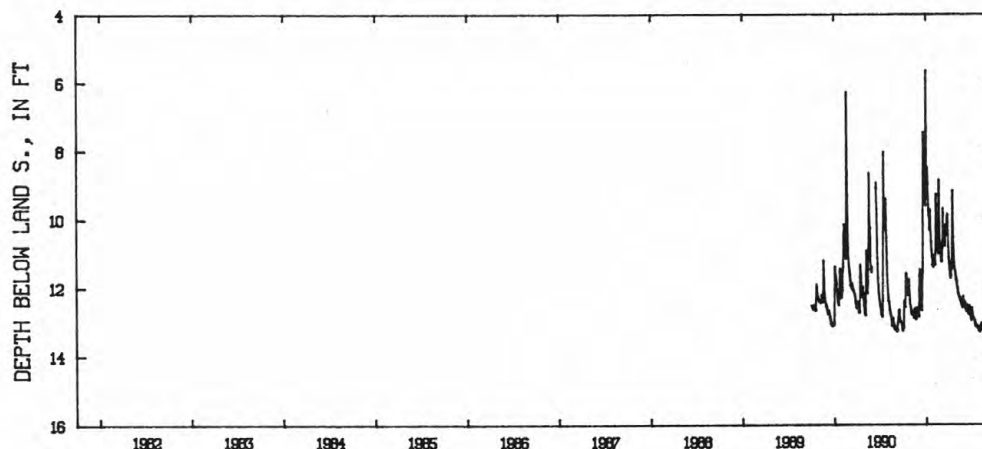
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.13	12.64	12.82	5.65	11.17	11.12	11.13	11.78	12.51	12.96	13.26	13.41
2	13.20	12.70	12.85	7.57	11.23	11.18	11.29	11.80	12.57	12.95	13.27	13.42
3	13.18	12.74	12.85	8.66	11.26	11.24	11.41	11.85	12.50	12.59	13.28	13.42
4	13.12	12.77	12.06	8.77	11.29	11.24	11.50	11.92	12.40	12.70	13.29	13.42
5	12.45	12.79	11.66	8.61	11.34	11.09	11.51	11.99	12.49	12.77	13.14	13.38
6	12.39	12.75	11.65	8.49	11.34	10.98	11.55	12.00	12.56	12.83	13.11	13.35
7	12.49	12.75	11.47	8.77	11.03	10.82	11.65	12.09	12.60	12.88	13.15	13.39
8	12.55	12.79	11.83	8.98	9.55	9.68	11.71	12.15	12.65	12.91	13.19	13.42
9	12.57	12.80	12.11	9.39	9.28	9.88	11.72	12.18	12.67	12.90	13.20	13.44
10	12.57	12.81	12.30	9.77	9.87	10.26	11.65	12.22	12.67	12.90	13.05	13.44
11	11.62	12.68	12.43	9.90	10.15	10.47	11.22	12.23	12.70	12.93	13.05	13.25
12	11.61	12.81	12.53	9.83	10.34	10.69	11.41	12.24	12.69	12.93	13.12	13.19
13	11.58	12.87	12.62	10.05	10.63	10.78	11.47	12.26	12.50	12.96	13.17	13.25
14	11.66	12.89	12.67	10.29	10.67	10.75	10.73	12.28	12.58	13.00	13.20	13.26
15	11.90	12.69	12.67	10.32	10.65	10.66	10.05	12.32	12.65	13.02	13.23	13.16
16	12.07	12.61	12.24	9.80	10.86	10.69	9.17	12.35	12.67	13.04	13.25	13.24
17	12.18	12.73	11.70	9.73	10.95	10.79	9.65	12.37	12.73	13.07	13.26	13.31
18	12.22	12.79	11.56	9.95	11.01	10.80	10.18	12.37	12.76	13.10	13.27	13.32
19	12.00	12.85	8.70	10.39	10.88	10.49	10.53	12.37	12.77	13.12	13.15	13.27
20	12.02	12.90	7.45	10.64	9.20	10.17	10.77	12.43	12.79	13.15	13.15	13.33
21	12.15	12.92	8.21	10.81	8.86	10.27	10.96	12.46	12.79	13.15	13.19	13.35
22	12.20	12.93	8.22	10.95	9.36	10.44	11.11	12.49	12.79	13.16	13.22	13.38
23	12.00	12.80	7.85	11.05	10.03	10.20	11.29	12.50	12.53	13.17	13.27	13.40
24	11.75	12.59	7.87	11.08	10.44	9.97	11.38	12.53	12.57	13.18	13.30	13.41
25	11.93	12.71	8.56	11.13	10.69	9.88	11.46	12.56	12.67	13.12	13.31	13.32
26	12.07	12.78	8.93	11.23	10.84	9.95	11.51	12.59	12.75	13.16	13.34	13.28
27	12.22	12.78	9.11	11.33	10.98	9.86	11.55	12.60	12.82	13.19	13.36	13.35
28	12.38	12.75	9.34	11.36	11.07	10.12	11.62	12.25	12.86	13.21	13.38	13.40
29	12.48	12.77	9.58	11.38	---	10.35	11.67	12.37	12.89	13.23	13.40	13.43
30	12.52	12.78	9.61	11.40	---	10.75	11.72	12.47	12.92	13.25	13.41	13.47
31	12.58	---	5.95	11.04	---	10.96	---	12.48	---	13.26	13.41	---
MAX	13.20	12.93	12.85	11.40	11.34	11.24	11.72	12.60	12.92	13.26	13.41	13.47

CAL YR 1990 LOW 13.28
WTR YR 1991 LOW 13.47395118082573300 FR-3
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

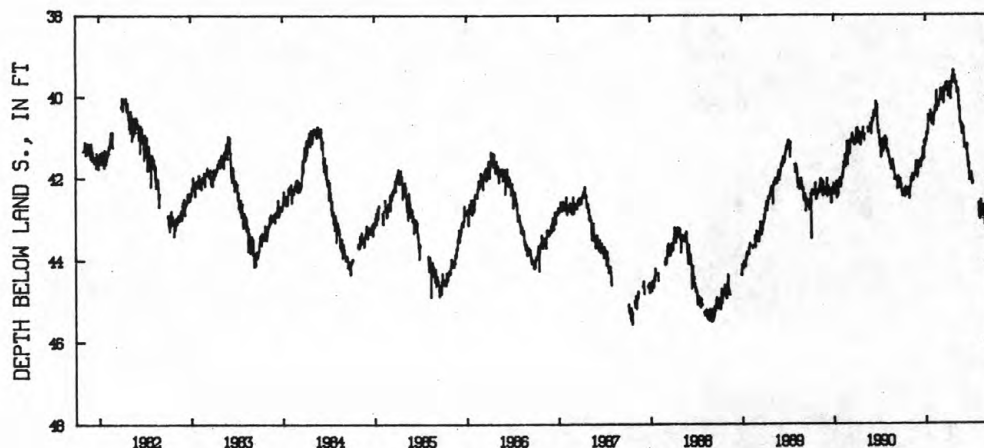
GROUND-WATER RECORDS
FRANKLIN COUNTY--Continued

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 National Geodetic Vertical Datum of 1929, 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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42.43	42.21	41.87	41.09	40.71	40.03	39.89	39.62	40.77	---	42.83	43.17
2	42.44	42.16	41.90	41.04	40.62	39.82	40.00	39.67	40.82	41.88	42.95	43.23
3	42.45	42.14	41.60	41.07	40.60	39.84	40.00	39.73	40.94	41.94	42.75	43.13
4	42.32	42.01	41.78	41.07	40.51	39.92	39.90	39.67	41.05	42.07	42.73	43.00
5	42.33	42.01	41.77	40.90	40.45	39.92	39.85	39.65	41.16	42.01	42.73	43.02
6	42.34	42.02	41.64	40.93	40.41	39.85	39.85	39.81	41.27	42.16	43.01	43.11
7	42.38	42.09	41.64	40.95	40.43	40.03	39.80	39.91	41.26	42.12	42.85	43.12
8	42.38	42.08	41.68	40.92	40.40	40.06	39.75	39.91	41.25	42.11	42.90	43.09
9	42.27	41.90	41.68	40.92	40.27	40.06	39.67	39.90	41.22	---	42.55	43.14
10	42.40	41.97	41.68	40.92	40.25	40.11	40.00	39.93	41.23	---	42.59	43.10
11	42.47	42.00	41.65	40.82	40.33	40.11	40.05	39.89	41.25	---	42.76	43.12
12	42.28	42.03	41.55	40.46	40.33	40.02	40.06	39.81	41.25	---	42.85	42.98
13	42.23	42.07	41.74	40.62	39.92	39.80	39.82	39.88	41.32	---	42.77	42.95
14	42.30	42.07	41.74	40.60	39.88	40.11	39.78	40.00	41.25	---	42.88	43.06
15	42.42	42.03	41.62	40.55	40.28	40.16	39.63	40.13	41.21	---	42.83	43.06
16	42.42	41.92	41.63	40.54	40.35	40.16	39.68	40.33	41.18	---	42.93	43.07
17	42.32	41.95	41.52	40.51	40.21	39.99	39.63	40.29	41.48	---	42.93	43.08
18	42.33	41.93	41.50	40.57	40.16	39.77	39.62	40.27	41.45	---	42.75	43.07
19	42.40	41.90	41.60	40.57	40.18	39.86	39.53	40.35	41.53	---	42.74	43.15
20	42.40	41.92	41.53	40.46	40.25	39.88	39.55	40.58	41.62	---	42.66	43.23
21	42.34	41.89	41.39	40.36	40.17	---	39.51	40.64	41.73	---	42.85	43.17
22	42.32	41.77	41.26	40.49	40.18	---	39.38	40.66	41.75	---	42.89	43.07
23	42.25	41.66	41.27	40.52	40.25	39.70	39.37	40.66	41.65	---	43.04	43.07
24	42.26	41.60	41.42	40.47	40.14	39.83	39.60	40.76	41.89	---	43.04	43.09
25	42.31	41.72	41.42	40.63	40.11	39.86	39.67	40.69	42.05	---	43.14	42.87
26	42.34	41.75	41.55	40.68	40.11	39.85	39.63	40.93	42.05	---	43.14	42.90
27	42.38	41.70	41.51	40.54	40.10	39.66	39.55	40.68	42.01	---	43.09	43.02
28	42.43	41.90	41.27	40.44	40.10	---	39.55	40.72	41.95	---	43.16	43.07
29	42.50	42.00	41.08	40.50	---	---	39.50	40.77	42.00	---	43.16	43.08
30	42.33	41.93	41.14	40.45	---	---	39.65	40.79	---	---	43.22	43.17
31	42.25	---	41.22	40.70	---	---	---	40.75	---	42.62	43.05	---
MAX	42.50	42.21	41.90	41.09	40.71	40.16	40.06	40.93	42.05	42.62	43.22	43.23

CAL YR 1990 LOW 42.50
WTR YR 1991 LOW 43.23



400101083021800 FR-10
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929, 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
Nov. 16, 1990	30.13	Apr. 26, 1991	25.33

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 National Geodetic Vertical Datum of 1929,

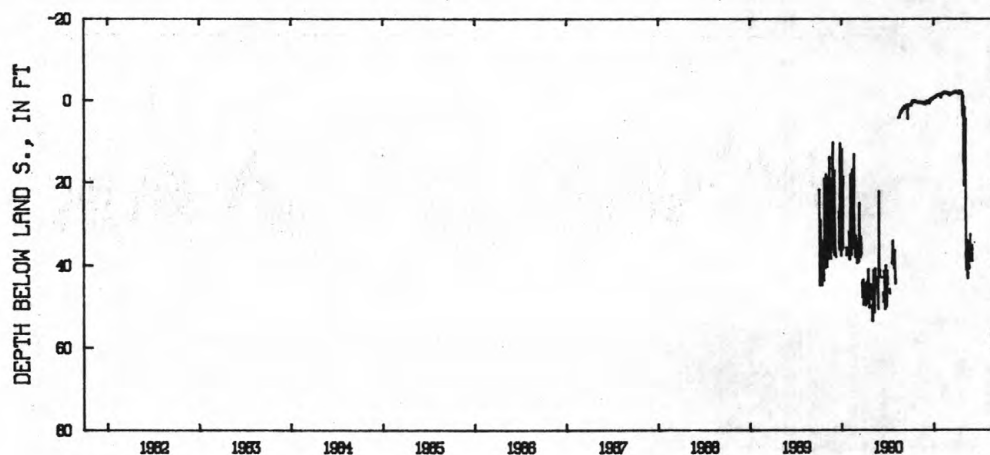
from topographic map. Measuring point: Floor of instrument shelter 4.00 ft above land-surface datum.

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, 60.60 ft below land-surface datum, Sept. 20, 1991;
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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.20	.50	.80	-.60	-1.30	-1.40	-2.00	5.40	36.20	---	---	---
2	1.20	.50	.80	-.60	-1.40	-1.80	-1.90	20.90	35.60	---	---	---
3	1.20	.60	.70	-.60	-1.40	-1.70	-1.90	11.90	35.10	---	---	---
4	1.10	.60	.30	-.60	-1.40	-1.60	-1.90	5.30	36.00	---	---	---
5	.60	.50	.30	-.70	-1.50	-1.20	-1.90	1.70	39.00	---	---	---
6	.70	.50	.30	-.80	-1.50	-1.60	-1.90	---	---	---	---	---
7	.70	.60	.40	-.80	-1.80	-1.60	-1.80	5.70	---	---	---	---
8	.80	.60	.40	-.80	-1.80	-1.60	-1.80	4.60	---	---	---	---
9	.80	.70	.40	-.80	-1.80	-1.60	-2.00	37.20	---	---	---	---
10	.30	.50	.50	-.80	-1.90	-1.50	-2.00	40.00	---	---	---	---
11	.20	.50	.50	-1.00	-1.80	-1.50	-1.80	41.00	---	---	---	---
12	.20	.50	.50	-1.10	-1.80	-1.50	-1.70	---	---	---	---	---
13	.20	.60	.60	-1.10	-1.90	---	-1.70	34.00	---	---	---	---
14	.30	.60	.60	-1.10	-2.00	---	-2.00	36.70	---	---	---	---
15	.40	.60	.60	-1.20	-1.90	---	-2.10	39.50	---	---	---	---
16	.40	.60	.40	-1.20	-1.80	---	-2.10	42.40	---	---	---	---
17	.44	.60	.40	-1.20	-1.80	---	-2.10	43.10	---	---	---	---
18	.40	.60	-.10	---	-1.80	---	-2.10	41.80	---	---	---	---
19	.30	.70	-.10	---	-1.90	---	-2.10	---	---	---	---	60.40
20	.30	.80	-.10	---	-2.00	---	-2.10	34.20	---	---	---	60.60
21	.40	.80	-.20	---	-1.86	---	-2.10	36.90	---	---	---	58.50
22	.40	.70	-.30	-1.28	-1.90	-1.88	-2.10	38.50	---	---	---	53.60
23	.30	.50	-.40	-1.40	-1.80	-2.10	-2.00	40.90	---	49.60	56.80	54.80
24	.30	.50	-.30	-1.30	-1.80	-2.00	-1.90	39.80	---	---	57.70	57.30
25	.40	.60	-.30	-1.10	-1.80	-2.00	-1.20	39.10	---	---	---	58.90
26	.40	.60	-.20	-1.30	-1.80	-2.00	3.80	36.90	---	---	---	58.90
27	.40	.60	-.20	-1.30	-1.80	-2.10	.01	32.50	---	---	---	58.40
28	.50	.90	-.30	-1.40	-1.70	-2.10	-1.10	---	---	---	---	58.50
29	.50	.90	-.40	-1.30	---	-2.10	1.50	27.20	---	---	---	51.60
30	.50	.90	-.50	-.70	---	-2.00	15.20	---	---	---	---	53.90
31	.50	---	-.60	-1.30	---	-2.00	---	---	---	---	---	---
MAX	1.20	.90	.80	-.60	-1.30	-1.20	15.20	43.10	39.00	49.60	57.70	60.60

CAL YR 1990 LOW 53.50
WTR YR 1991 LOW 60.60394330083531400 GR-11 C S UNIV NR WILBERFORCE OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

241

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 National Geodetic Vertical Datum of 1929.

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;

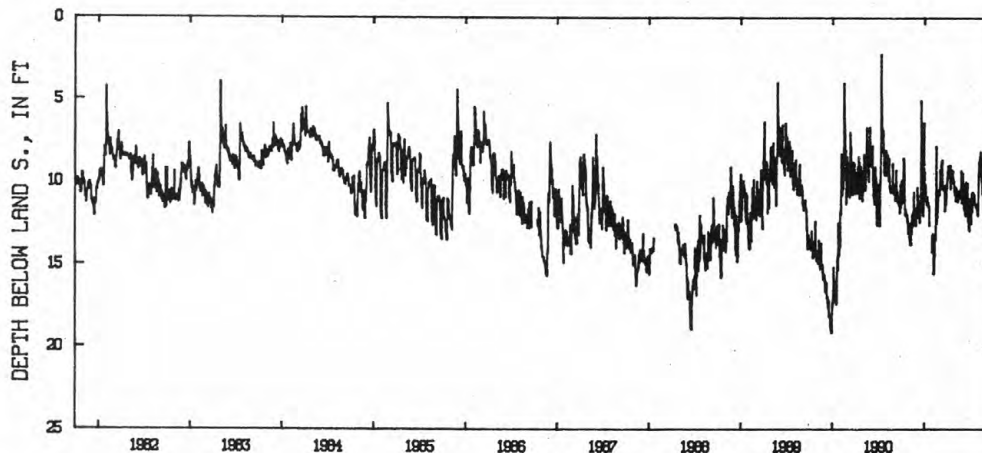
minimum daily low, 0.70 ft above land-surface datum, above land surface Aug. 3, 1958.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.04	13.11	12.13	9.40	13.22	10.55	10.44	10.60	10.88	12.38	11.81	11.91
2	9.92	13.30	11.99	9.53	13.70	10.80	9.88	10.58	10.52	11.01	11.99	12.19
3	10.96	13.42	12.00	9.42	13.38	10.55	9.79	10.83	11.00	12.07	12.03	13.31
4	11.31	13.47	10.34	10.79	13.16	9.28	9.37	10.59	9.50	12.31	11.75	13.32
5	9.93	13.57	10.80	10.89	13.25	9.38	9.49	10.34	10.73	12.08	10.09	13.08
6	10.82	13.69	10.81	10.21	13.73	9.39	9.35	11.16	11.02	12.53	9.62	13.35
7	10.89	13.77	11.21	10.62	15.53	9.62	9.04	11.16	11.22	12.54	9.49	13.21
8	10.71	13.78	11.29	11.04	15.54	10.10	9.21	10.40	11.38	12.27	8.80	12.78
9	10.81	12.46	11.27	11.14	15.08	9.01	9.49	10.81	11.49	10.68	9.12	13.06
10	8.57	12.71	11.98	11.30	14.36	8.95	9.22	10.99	11.70	11.70	8.78	12.37
11	8.65	13.13	12.06	11.39	14.46	9.04	9.17	11.00	10.13	11.37	8.52	12.46
12	8.87	13.04	12.16	10.91	13.30	8.82	9.14	10.93	11.71	11.84	8.67	12.53
13	9.24	11.99	12.29	11.12	13.50	8.70	9.02	10.78	11.93	10.70	8.20	12.76
14	9.71	12.10	12.45	11.36	13.41	9.62	10.20	11.19	12.03	10.63	8.73	12.45
15	11.11	12.68	12.25	11.33	13.48	10.49	10.45	11.19	12.06	10.74	9.13	13.05
16	11.89	12.69	11.84	11.27	10.71	10.26	10.32	11.09	10.03	10.82	8.89	13.72
17	11.94	12.21	11.51	11.35	7.84	10.29	9.95	10.64	11.79	10.99	8.63	12.92
18	12.03	11.88	9.28	11.46	7.94	10.42	9.57	10.61	11.82	11.09	9.70	13.32
19	11.68	12.04	5.06	11.46	11.89	10.42	9.27	10.54	11.65	11.20	9.93	13.94
20	11.82	10.63	6.50	11.52	12.53	10.37	9.64	10.62	11.98	10.79	10.67	13.92
21	11.96	11.97	8.10	12.64	12.16	10.25	9.78	10.67	11.67	11.02	10.69	13.47
22	12.01	11.81	7.91	---	12.10	10.37	9.44	10.72	10.32	11.30	10.32	13.60
23	11.98	11.65	8.35	---	11.75	11.68	9.34	10.75	10.09	11.39	10.66	13.53
24	11.99	11.74	9.06	---	11.41	11.75	9.39	10.92	12.17	11.32	10.73	13.66
25	12.14	11.59	10.85	---	11.13	10.92	9.80	10.98	12.40	11.53	10.99	13.64
26	12.37	12.12	11.58	---	10.64	10.66	9.80	10.90	12.39	11.43	11.50	13.69
27	12.42	12.63	11.98	---	10.59	11.41	9.91	10.62	12.61	11.40	11.64	13.97
28	12.53	12.65	12.06	---	10.53	11.10	10.03	9.36	12.81	11.39	11.83	13.60
29	12.93	12.59	11.59	10.51	---	10.93	10.00	11.26	12.88	11.50	11.99	13.50
30	13.13	12.00	10.82	---	---	10.44	10.39	11.29	12.93	11.61	11.99	13.83
31	13.14	---	6.42	14.21	---	10.12	---	10.96	---	11.78	11.91	---
MAX	13.14	13.78	12.45	14.21	15.54	11.75	10.45	11.29	12.93	12.54	12.03	13.97

CAL YR 1990 LOW 17.61

WTR YR 1991 LOW 15.54



394411083561300 GR-1
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929, from

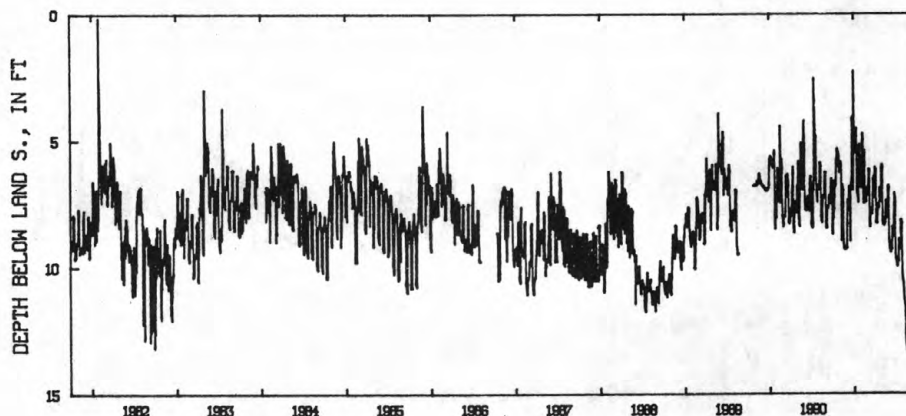
topographic map. Measuring point: Floor of instrument shelter at land-surface datum.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.55	5.85	9.25	3.42	6.86	7.08	6.06	5.96	6.90	9.64	10.56	11.22
2	8.65	5.86	9.24	4.48	6.88	7.17	6.13	5.98	8.89	9.70	10.60	9.91
3	8.69	5.88	8.28	4.86	6.88	7.00	7.31	6.05	8.97	9.71	10.64	9.83
4	8.16	5.88	7.35	5.18	5.99	6.15	6.18	6.06	9.07	9.80	10.82	9.69
5	8.01	5.89	7.43	5.49	5.90	6.16	6.18	8.06	9.17	9.83	11.02	9.54
6	8.08	5.90	7.58	5.49	5.81	6.17	6.21	8.18	9.30	9.86	11.26	9.54
7	7.73	5.96	7.67	4.59	5.09	6.16	8.17	8.28	9.27	9.97	11.37	9.50
8	7.72	7.17	7.74	4.67	4.74	6.18	8.24	8.33	9.30	9.96	11.38	11.44
9	7.72	8.97	7.74	4.85	4.98	6.24	8.18	8.27	9.41	9.83	11.49	11.57
10	7.22	7.58	6.82	4.87	7.09	8.25	8.25	8.28	9.40	9.78	11.52	11.60
11	6.59	7.60	6.87	4.87	7.34	8.40	8.27	8.27	9.36	9.71	12.65	11.61
12	6.84	6.74	6.90	4.53	7.45	8.40	8.26	8.36	9.29	9.77	12.87	11.68
13	6.84	6.82	6.97	6.67	7.48	8.27	7.96	8.32	9.25	9.78	13.05	11.63
14	6.82	6.87	7.05	6.96	7.30	7.87	7.64	8.33	9.29	8.88	13.06	11.58
15	6.73	6.88	7.05	7.08	6.88	7.71	7.50	8.31	9.29	8.97	13.18	11.62
16	5.81	6.97	8.95	7.08	5.39	7.85	7.57	8.31	8.40	9.07	13.29	11.62
17	5.88	6.98	8.97	7.08	7.27	7.87	7.60	8.27	8.44	9.16	13.31	11.60
18	5.76	9.07	8.24	7.18	7.46	7.77	7.63	8.06	8.58	9.22	12.18	11.58
19	5.68	9.18	6.85	7.26	7.08	7.86	7.59	7.38	8.63	9.28	12.17	11.47
20	5.32	9.27	6.68	7.45	6.98	7.87	7.68	7.58	8.75	9.28	12.17	11.50
21	5.41	9.29	6.84	7.44	7.28	7.91	6.87	7.74	8.80	9.29	12.19	11.50
22	5.87	9.27	6.66	5.42	7.42	7.78	6.97	7.85	8.64	8.18	12.17	11.37
23	5.74	9.23	5.80	5.29	7.44	7.23	7.08	7.95	8.07	8.15	12.29	10.76
24	5.69	9.25	4.09	5.19	7.38	6.51	7.18	8.01	7.08	8.16	12.29	10.81
25	5.46	9.28	4.26	5.17	6.87	6.78	7.22	8.06	7.17	8.18	11.46	10.84
26	5.88	9.28	4.49	5.17	6.96	6.67	7.22	8.06	7.27	8.23	11.46	10.90
27	5.56	9.28	4.66	6.38	7.01	6.41	7.18	6.92	7.31	8.28	11.44	10.97
28	5.64	9.17	6.97	6.73	7.08	6.61	7.18	6.80	7.40	10.26	11.38	10.98
29	6.28	9.23	6.98	6.80	---	6.81	6.06	6.79	7.44	10.40	11.37	10.42
30	6.27	9.23	6.84	6.39	---	6.97	7.45	6.85	9.48	10.46	11.31	9.87
31	5.82	---	2.27	6.77	---	6.97	---	6.88	---	10.51	11.94	---
MAX	8.69	9.29	9.25	7.45	7.48	8.40	8.27	8.36	9.48	10.51	13.31	11.68

CAL YR 1990 LOW 9.29
WTR YR 1991 LOW 13.31394425083551100 GR-10
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

243

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 National Geodetic Vertical Datum of 1929, 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, 63.55 ft below land-surface datum, Apr. 10, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 11, 1990	64.87	Apr. 10, 1991	63.55

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 National Geodetic Vertical Datum of 1929.

Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

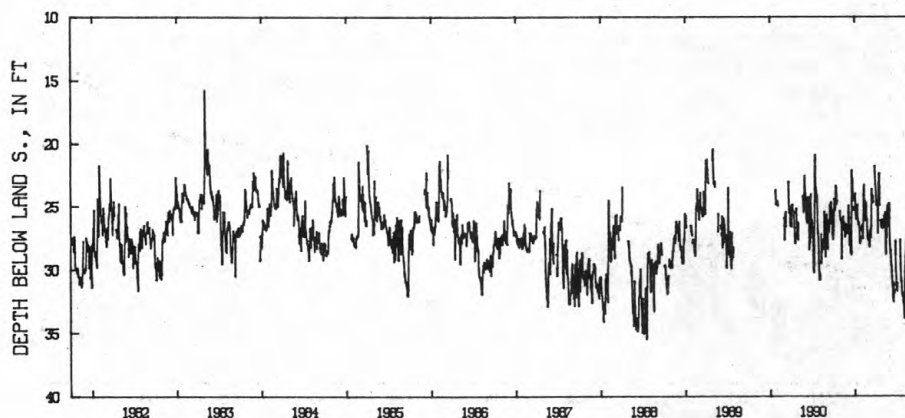
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--August 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 35.75 ft below land-surface datum, Aug. 29, 1955;
minimum daily low, 15.60 ft below land-surface datum, Feb. 28, 1962.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.51	26.12	27.16	---	26.81	27.25	23.44	26.76	27.65	31.52	33.24	---
2	27.37	26.08	27.14	---	26.96	27.29	23.85	26.46	28.36	31.60	33.52	---
3	26.86	26.27	27.01	24.00	27.08	27.57	24.82	26.57	28.78	31.74	33.85	---
4	26.37	26.24	25.43	25.60	27.56	27.35	24.96	26.65	28.45	31.39	33.13	---
5	24.42	26.70	25.01	25.61	27.55	28.07	---	26.48	28.53	31.11	31.36	---
6	24.40	29.18	24.95	26.05	27.55	28.21	---	26.48	28.95	---	30.20	---
7	24.38	27.08	25.57	25.42	25.45	27.43	---	26.70	29.56	---	29.70	28.21
8	25.38	26.81	25.94	25.17	24.14	26.83	---	25.71	29.70	---	29.02	29.68
9	25.39	26.90	28.13	24.98	24.05	26.96	24.53	25.90	29.72	---	28.74	31.33
10	25.04	26.78	26.42	25.33	23.25	27.13	26.22	25.72	30.20	---	27.99	---
11	23.37	25.96	27.55	---	24.97	27.43	27.13	25.65	30.63	---	27.51	---
12	23.39	25.84	27.67	---	26.15	27.47	25.18	25.47	31.03	---	27.50	30.76
13	23.49	26.20	28.33	24.89	26.14	26.59	24.70	26.22	31.32	---	28.11	30.92
14	24.08	26.63	28.62	26.02	24.89	24.37	23.08	28.10	32.14	---	28.38	30.98
15	24.04	26.37	28.60	26.24	24.60	23.61	23.19	28.73	32.44	---	28.40	30.95
16	24.86	26.33	28.80	26.27	24.87	24.05	22.45	28.82	32.20	27.69	28.28	---
17	24.55	26.42	28.72	26.47	25.24	24.53	22.38	26.35	32.55	28.96	28.78	31.37
18	---	26.32	28.78	26.30	25.55	24.75	23.00	26.37	31.11	29.59	27.21	31.84
19	---	27.14	22.12	26.48	25.23	24.76	23.68	27.30	---	30.21	28.85	---
20	---	27.43	23.33	26.79	24.74	24.14	24.92	27.50	---	30.74	28.18	---
21	---	27.41	23.71	26.93	26.06	24.29	---	25.48	31.67	31.01	28.81	31.57
22	---	27.37	23.22	27.70	26.18	24.64	---	25.07	31.89	30.96	28.92	32.00
23	---	27.12	22.79	27.89	25.99	---	26.14	24.94	---	31.85	28.85	32.30
24	---	26.71	23.34	27.94	27.00	---	26.45	25.59	---	32.11	---	32.37
25	---	26.45	24.26	27.43	27.45	---	26.68	26.29	28.83	---	---	---
26	---	26.52	24.54	27.79	27.56	---	26.36	26.47	27.74	---	31.18	---
27	---	26.66	---	---	27.68	---	26.72	26.59	30.01	31.91	31.68	---
28	---	26.67	25.06	---	27.42	21.81	26.06	25.80	30.28	32.54	32.24	---
29	25.38	26.75	25.33	---	---	22.35	---	24.76	30.55	32.66	32.75	---
30	25.95	26.93	---	26.91	---	22.83	26.57	24.78	31.29	32.47	32.81	31.98
31	26.12	---	---	26.50	---	23.30	---	25.30	---	32.83	---	---
MAX	27.51	29.18	28.80	27.94	27.68	28.21	27.13	28.82	32.55	32.83	33.85	32.37
CAL YR 1990 LOW 30.83												
WTR YR 1991 LOW 33.85												



— 391101084172100 H-3
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

245

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 National Geodetic Vertical Datum of 1929.

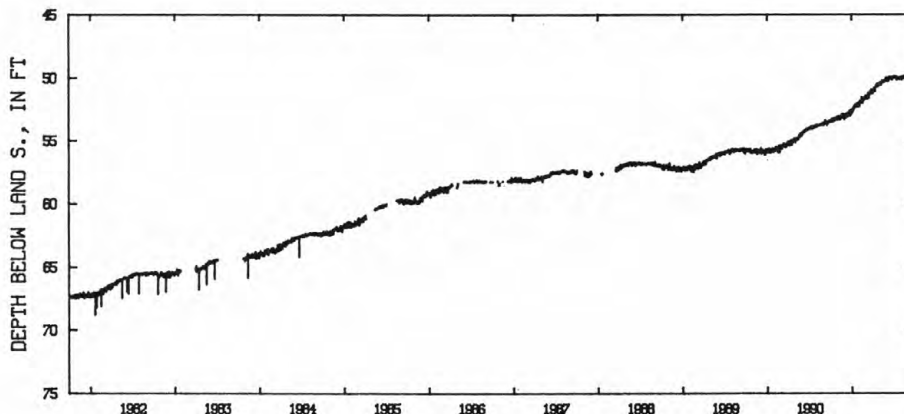
Measuring point: Floor of instrument shelter 8.13 ft above land-surface datum.

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, 49.67 ft below land-surface datum, Sept. 25, 1991.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53.46	53.18	53.12	52.77	52.30	51.48	51.16	50.49	50.08	49.92	50.03	49.97
2	53.50	53.14	53.15	52.58	52.17	51.42	51.25	50.54	50.03	49.96	49.98	49.97
3	53.43	53.18	52.89	52.67	52.12	51.42	51.16	50.51	50.02	49.94	49.96	49.90
4	53.43	53.05	53.16	52.66	52.01	51.43	51.06	50.40	50.15	49.89	50.03	49.82
5	53.47	53.10	53.15	52.48	51.92	51.47	50.94	50.38	50.21	49.89	50.08	49.86
6	53.39	53.29	52.94	52.50	51.88	51.44	50.91	50.51	50.27	49.94	50.14	49.93
7	53.39	53.30	52.99	52.53	51.97	51.60	50.86	50.57	50.26	49.94	50.11	49.98
8	53.41	53.31	52.99	52.43	51.94	51.67	50.78	50.58	50.18	49.99	50.02	49.91
9	53.26	53.10	53.04	52.52	51.79	51.59	50.83	50.47	50.18	50.00	49.91	49.85
10	53.38	53.10	52.95	52.52	51.80	51.65	51.02	50.47	50.11	49.94	50.03	49.81
11	53.47	53.22	52.93	52.20	51.86	51.61	51.07	50.43	50.02	49.98	50.07	49.84
12	53.32	53.26	52.81	52.28	51.86	51.45	51.06	50.30	50.02	49.94	50.05	49.83
13	53.23	53.29	53.06	52.33	51.52	51.19	50.82	50.25	50.06	49.98	49.97	49.79
14	53.24	53.25	53.08	52.21	51.60	51.46	50.71	50.25	50.05	50.08	49.95	49.80
15	53.39	53.20	52.88	52.22	51.99	51.56	50.74	50.28	49.97	50.15	49.97	49.84
16	53.43	53.08	53.03	52.17	52.03	51.59	50.77	50.24	49.96	50.14	49.97	49.81
17	53.27	53.16	52.92	52.30	51.78	51.42	50.67	50.27	50.01	50.05	49.89	49.87
18	53.36	53.10	52.77	52.33	51.71	51.25	50.64	50.37	50.02	50.01	49.87	49.87
19	53.42	53.01	53.01	52.20	51.73	51.26	50.56	50.35	50.06	50.04	49.89	49.99
20	53.35	53.09	52.98	52.06	51.84	51.29	50.65	50.34	50.06	50.08	49.96	50.03
21	53.26	53.03	52.80	52.24	51.74	51.14	50.59	50.31	50.00	50.07	50.00	49.97
22	53.20	52.89	52.69	52.24	51.74	51.15	50.45	50.27	49.98	50.04	49.97	49.88
23	53.18	52.86	52.73	52.12	51.77	51.09	50.49	50.25	50.08	49.98	50.01	49.87
24	53.17	52.88	52.89	52.26	51.63	51.24	50.69	50.22	50.11	50.01	50.07	49.87
25	53.23	52.98	52.88	52.32	51.63	51.26	50.69	50.17	50.09	50.04	50.05	49.67
26	53.27	53.02	53.00	52.16	51.58	51.16	50.54	50.15	50.11	50.10	50.00	49.81
27	53.26	52.94	52.91	52.01	51.55	50.93	50.46	50.19	50.11	50.14	49.96	49.90
28	53.29	53.24	52.67	52.05	51.53	51.15	50.47	50.24	50.08	50.09	49.96	49.98
29	53.34	53.28	52.53	52.05	---	51.05	50.43	50.14	50.01	49.97	49.93	49.99
30	53.23	53.27	52.72	52.06	---	51.24	50.55	50.04	49.93	50.03	49.88	49.97
31	53.18	---	52.87	52.29	---	51.23	---	50.08	---	50.06	49.89	---
MAX	53.50	53.31	53.16	52.77	52.30	51.67	51.25	50.58	50.27	50.15	50.14	50.03
CAL YR 1990	LOW 55.99											
WTR YR 1991	LOW 53.50											



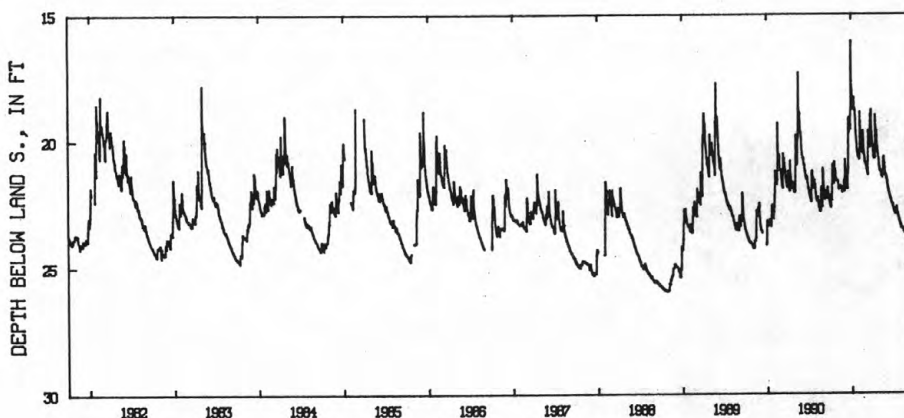
391201084281600 H-10
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929, 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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.57	21.60	21.95	17.75	20.60	20.89	20.02	21.02	21.51	22.73	23.40	23.85
2	22.62	21.64	22.02	17.92	20.71	20.90	20.16	21.08	21.51	22.80	23.43	23.88
3	22.65	21.65	22.02	18.04	20.75	20.95	20.25	21.15	21.54	22.82	23.46	23.90
4	22.65	21.66	20.76	18.30	20.75	20.95	20.42	21.20	21.64	22.84	23.46	23.90
5	22.15	21.81	21.05	18.47	20.72	21.00	20.48	21.21	21.75	22.87	23.49	23.62
6	22.26	21.91	21.18	18.51	20.65	21.02	20.58	21.22	21.81	22.88	23.50	23.69
7	22.33	21.95	21.27	18.57	18.88	21.08	20.66	21.22	21.87	22.92	23.49	23.74
8	22.37	21.88	21.35	18.61	19.31	21.16	20.72	21.26	21.92	22.94	23.51	23.78
9	22.37	21.89	21.40	18.73	19.50	21.21	20.63	21.31	21.95	22.90	23.51	23.82
10	21.25	21.88	21.56	18.77	19.64	21.25	20.45	21.35	22.00	22.85	23.50	23.85
11	20.96	21.83	21.66	18.77	19.75	21.32	20.49	21.39	22.04	22.78	23.53	23.88
12	21.04	21.88	21.79	18.30	20.05	21.36	20.71	21.42	22.10	22.78	23.56	23.90
13	21.36	21.91	21.88	18.57	20.19	21.32	20.71	21.46	22.15	22.73	23.59	23.93
14	21.49	21.82	21.93	18.74	20.19	19.60	19.00	21.48	22.19	22.64	23.61	23.95
15	21.58	21.81	21.93	18.79	20.31	19.79	19.26	21.33	22.21	22.70	23.63	23.95
16	21.61	21.83	21.33	18.82	20.46	19.95	19.53	21.32	22.26	22.81	23.65	23.99
17	21.71	21.84	21.31	18.83	20.50	20.04	19.67	21.35	22.30	22.86	23.66	23.99
18	21.71	21.85	21.14	19.06	20.51	19.85	19.60	21.35	22.32	22.90	23.62	23.90
19	20.85	21.86	19.13	19.20	19.75	19.87	19.61	20.70	22.35	22.96	23.65	23.90
20	21.20	21.99	19.67	19.65	19.62	20.12	19.64	20.90	22.40	23.01	23.60	23.92
21	21.35	22.06	19.72	19.85	19.80	20.29	19.85	20.65	22.45	23.04	23.63	23.95
22	21.35	22.07	19.57	20.00	19.95	20.30	20.13	20.88	22.48	23.06	23.66	23.96
23	21.15	21.88	19.10	20.12	20.27	19.00	20.28	20.92	22.48	23.10	23.69	23.98
24	21.30	21.87	---	20.30	20.43	19.25	20.40	21.10	22.49	23.14	23.72	23.99
25	21.45	21.95	---	20.44	20.53	19.58	20.48	21.23	22.52	23.18	23.75	24.00
26	21.53	21.99	---	20.49	20.63	19.63	20.57	21.34	22.55	23.22	23.77	24.03
27	21.57	22.01	---	20.52	20.76	18.79	20.68	21.33	22.58	23.25	23.79	24.05
28	21.61	21.90	19.40	20.60	20.85	19.07	20.74	21.35	22.61	23.26	23.82	24.07
29	21.58	21.55	19.58	20.65	---	19.45	20.78	21.41	22.66	23.29	23.84	24.08
30	21.58	21.75	18.33	20.65	---	19.72	20.89	21.40	22.70	23.32	23.84	24.10
31	21.57	---	16.05	20.42	---	19.85	---	21.44	---	23.36	23.83	---
MAX	22.65	22.07	22.02	20.65	20.85	21.36	20.89	21.48	22.70	23.36	23.84	24.10
CAL YR 1990	LOW 23.40											
WTR YR 1991	LOW 24.10											



— 391214084470100 H-1
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

247

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 National Geodetic Vertical Datum of 1929. 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, 42.96 ft below land-surface datum, Apr. 10, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 11, 1990	46.52	Apr. 26, 1991	42.96

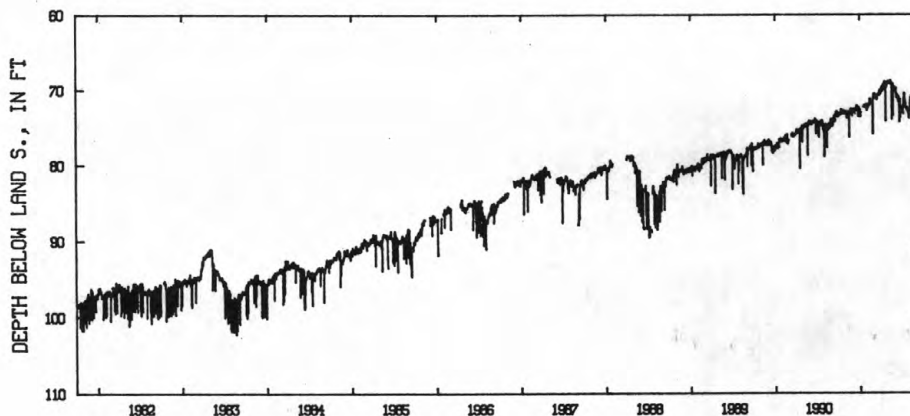
GROUND-WATER RECORDS
HAMILTON COUNTY-Continued

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 National Geodetic Vertical Datum of 1929.
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, 68.75 ft below land-surface datum, May 14, 1991.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73.35	72.85	73.00	72.75	72.70	71.00	70.60	68.90	69.85	72.30	73.50	70.70
2	73.50	72.80	73.00	72.60	72.65	70.60	70.40	68.90	70.10	72.40	73.70	70.95
3	73.40	73.20	72.70	73.55	72.55	70.55	70.50	68.90	69.90	72.45	73.75	70.85
4	73.25	72.95	72.70	73.50	72.50	70.70	70.10	68.90	70.20	72.50	73.60	70.50
5	73.25	73.10	72.70	73.50	72.30	70.70	69.90	68.85	70.10	72.70	72.75	70.30
6	73.25	73.40	72.50	72.95	72.00	70.50	69.80	68.95	69.85	72.65	72.40	70.25
7	73.35	73.70	72.60	73.00	72.25	70.85	69.70	69.15	69.75	73.10	71.85	70.50
8	73.25	73.70	72.65	---	72.05	70.90	69.65	69.20	70.75	73.15	71.45	70.70
9	73.00	73.50	72.65	---	71.90	71.00	69.50	69.00	71.10	71.85	71.00	70.45
10	73.15	73.35	72.60	---	72.00	71.15	69.80	69.00	71.00	71.30	71.00	70.25
11	73.20	73.45	73.15	---	72.10	71.10	70.20	68.95	70.60	70.95	71.10	70.55
12	72.90	73.45	72.50	---	72.00	70.90	69.90	68.95	70.75	70.60	71.00	70.30
13	72.60	72.95	72.75	---	71.20	70.70	69.55	68.85	71.15	70.45	70.90	70.40
14	73.05	72.90	72.75	---	71.20	71.05	69.25	68.75	71.20	70.75	70.80	70.80
15	73.20	72.85	72.45	---	71.95	71.20	69.40	68.85	71.45	71.25	70.70	71.40
16	73.20	73.05	72.60	---	71.90	71.30	69.30	68.85	71.60	71.40	70.70	71.10
17	72.95	73.10	72.55	72.25	71.80	71.20	69.30	69.30	71.20	71.40	70.45	70.75
18	73.05	76.25	72.10	72.20	71.60	70.75	69.20	69.10	70.85	71.65	70.35	70.75
19	73.05	73.10	72.60	72.20	71.65	70.70	68.90	69.55	71.20	71.90	70.15	70.65
20	73.00	73.10	72.55	72.00	71.80	70.80	69.10	73.95	72.10	72.25	70.20	70.50
21	72.95	72.90	72.30	72.20	71.55	70.60	69.05	73.60	72.40	72.55	70.20	70.50
22	72.80	72.95	72.20	72.20	71.65	70.55	69.30	70.30	74.20	72.65	70.25	70.50
23	72.75	72.70	72.30	72.05	71.60	70.45	69.15	69.90	71.25	72.30	70.40	70.25
24	72.75	72.50	72.75	72.40	71.60	70.65	74.15	69.25	71.20	72.50	70.85	70.10
25	72.85	72.75	72.75	72.40	71.55	70.75	69.85	69.20	71.40	72.50	71.00	69.65
26	73.00	72.80	73.50	72.30	71.45	70.55	69.65	73.45	73.70	72.65	75.25	69.80
27	72.80	72.70	73.05	72.10	75.85	70.10	69.50	69.55	72.25	72.85	74.80	70.05
28	73.15	73.15	72.60	72.10	75.70	70.20	69.55	69.95	72.20	73.05	71.00	70.45
29	73.15	73.20	72.30	72.10	---	70.10	69.35	69.85	72.40	73.00	70.75	70.70
30	72.95	73.50	72.50	71.90	---	70.50	---	69.65	72.55	73.15	70.55	70.70
31	72.95	---	73.20	72.28	---	70.50	---	69.65	---	73.20	---	---
MAX	73.50	76.25	73.50	73.55	75.85	71.30	74.15	73.95	74.20	73.20	75.25	71.40

CAL YR 1990 LOW 80.45
WTR YR 1991 LOW 76.25



— 391341084275300 H-8
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

249

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 National Geodetic Vertical Datum of 1929.

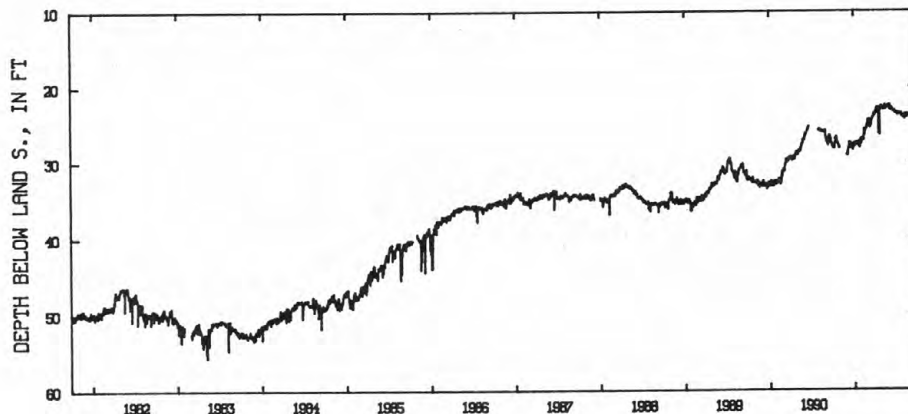
Measuring point: Floor of instrument shelter 7.78 ft above land-surface datum.

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, 22.46 ft below land-surface datum, May 14, 30, 1991.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.01	---	29.02	28.06	27.63	24.81	23.62	22.64	22.59	23.51	24.02	23.93
2	28.06	---	29.08	27.73	27.46	24.40	23.71	22.73	22.47	23.51	24.02	23.87
3	28.05	---	28.91	27.81	27.31	24.50	23.64	22.90	22.47	23.55	24.00	23.75
4	28.02	---	29.05	27.83	27.13	24.50	23.51	22.84	22.75	23.60	24.03	23.58
5	28.15	---	29.12	27.64	26.95	24.57	23.36	22.79	22.93	23.65	24.20	23.62
6	28.12	---	28.75	27.52	26.79	24.34	23.31	22.74	23.05	23.63	24.30	23.77
7	28.15	---	28.44	27.54	27.06	24.76	23.14	22.90	23.10	23.55	24.23	23.85
8	28.22	---	28.25	27.43	27.10	25.08	23.01	22.99	23.00	23.53	24.05	23.79
9	28.02	---	28.10	27.74	27.04	25.21	22.81	22.96	22.87	23.72	23.65	23.70
10	27.60	---	27.90	27.81	27.01	25.46	23.20	23.03	22.78	23.71	23.73	23.65
11	27.48	---	27.77	27.52	27.10	25.48	23.35	23.02	22.73	23.75	23.78	23.65
12	27.35	---	27.42	27.42	27.06	25.37	23.40	22.84	22.82	23.73	23.75	23.78
13	27.01	---	27.56	27.55	26.40	24.91	23.20	22.61	23.01	23.52	23.80	23.92
14	26.82	---	27.65	27.47	25.65	24.93	22.91	22.46	23.12	23.58	23.84	24.02
15	26.83	---	27.50	27.51	26.20	25.15	22.74	22.61	23.10	23.61	24.00	24.02
16	26.85	---	28.00	27.34	26.35	25.17	22.79	22.64	23.08	23.65	24.11	23.97
17	26.68	---	28.00	27.68	26.04	25.00	22.36	22.72	23.16	23.64	23.93	24.10
18	26.95	---	27.65	27.77	25.93	24.40	26.28	22.94	23.17	23.60	23.70	24.10
19	27.36	---	28.26	27.73	25.68	24.42	23.05	22.94	23.21	23.58	23.60	24.20
20	27.47	---	28.28	27.37	25.76	24.43	22.89	22.86	23.23	23.70	23.70	24.28
21	27.49	---	28.15	27.75	25.69	24.26	22.86	22.78	23.18	23.71	23.76	24.20
22	27.50	---	27.90	27.82	25.58	24.11	22.75	22.78	23.25	23.66	23.72	24.06
23	27.48	---	27.92	27.66	25.69	24.02	22.60	22.83	23.38	23.58	23.80	24.01
24	27.53	---	28.23	28.00	25.49	24.12	23.19	22.80	23.34	23.70	23.91	24.06
25	27.68	---	28.23	28.11	25.32	24.15	23.10	22.67	23.20	23.80	23.89	23.89
26	27.83	---	28.37	27.96	25.22	24.08	22.89	22.53	23.30	23.98	23.81	23.92
27	27.91	---	28.37	27.54	25.01	23.70	22.70	22.53	23.45	24.00	23.74	24.11
28	28.05	---	27.93	27.17	24.94	23.61	22.63	22.58	23.51	23.88	23.72	24.23
29	28.20	---	27.76	27.18	---	23.53	22.56	22.57	23.48	23.77	23.79	24.24
30	28.14	---	27.55	27.00	---	23.81	22.60	22.46	23.42	23.86	23.81	24.21
31	---	---	28.10	27.63	---	23.82	---	22.55	---	24.01	23.83	---
MAX	28.22	---	29.12	28.11	27.63	25.48	26.40	23.03	23.51	24.01	24.30	24.28

CAL YR 1990 LOW 33.18
WTR YR 1991 LOW 29.12391442084262900 H-7
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929.

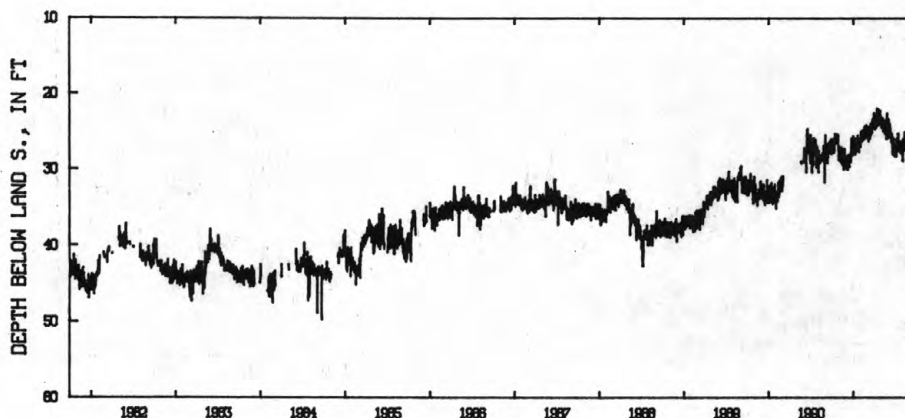
Measuring point: Floor of instrument shelter 4.05 ft above land-surface datum.

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, 22.00 ft below land-surface datum, Apr. 14, 1991.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.20	28.60	29.30	25.60	27.00	25.80	23.70	23.80	25.80	27.40	28.00	26.10
2	27.10	28.60	29.30	27.00	26.70	25.50	24.40	24.40	23.30	28.00	28.80	24.60
3	27.20	28.40	28.50	27.70	25.40	24.40	24.60	24.50	23.60	28.20	28.90	26.30
4	27.20	27.00	29.40	28.00	25.00	24.40	24.70	24.20	24.30	28.30	27.80	27.00
5	27.90	27.80	29.50	27.50	25.80	25.10	24.60	24.20	24.30	27.80	26.00	27.40
6	27.80	28.80	29.70	25.90	26.00	25.00	24.50	23.20	25.10	28.20	26.60	27.40
7	26.00	28.80	30.00	25.90	26.00	25.60	23.80	24.00	25.50	27.10	26.90	27.20
8	26.30	29.10	30.00	26.40	26.20	26.30	23.60	24.40	25.50	26.10	26.90	25.50
9	26.80	28.90	28.10	26.50	26.30	26.00	24.30	24.70	24.00	25.90	27.20	26.00
10	27.70	29.00	28.80	28.00	25.20	24.40	24.60	25.00	24.70	26.20	25.90	27.00
11	27.70	27.10	29.40	27.60	24.90	25.00	24.30	24.70	25.20	26.40	25.10	27.40
12	27.80	28.30	29.20	27.10	25.30	25.60	24.10	24.60	25.70	26.30	25.60	27.60
13	27.40	28.90	29.70	26.70	25.20	25.60	23.50	23.50	26.00	26.10	26.20	28.30
14	25.30	29.40	29.60	26.80	25.60	25.90	22.00	24.30	26.40	25.30	26.40	28.20
15	26.00	29.40	28.90	27.20	26.10	25.60	22.90	24.60	26.50	25.30	26.60	27.50
16	26.30	29.20	28.70	27.60	25.70	25.40	23.60	25.00	26.30	26.50	27.50	27.50
17	26.30	27.30	28.00	27.50	25.00	24.00	24.00	25.00	25.30	27.00	27.10	27.90
18	26.40	28.50	28.60	27.30	24.40	24.50	24.20	25.30	26.00	27.40	25.20	28.00
19	26.60	28.70	28.80	27.20	25.20	25.30	24.20	24.70	27.60	27.60	25.60	27.80
20	26.50	29.90	28.80	25.50	25.10	25.40	24.10	23.50	27.90	27.00	26.40	27.90
21	25.40	30.00	29.00	26.20	25.10	25.00	22.10	24.00	28.00	26.30	26.70	27.70
22	25.80	30.00	29.00	26.80	25.60	25.10	23.00	24.50	28.00	26.30	27.00	25.50
23	26.20	28.20	27.80	26.80	25.90	24.60	23.70	25.30	25.90	27.10	26.90	26.60
24	26.50	28.60	27.20	26.90	24.90	23.40	24.20	26.00	26.00	27.70	26.80	27.10
25	26.50	27.30	25.90	27.60	24.20	23.90	24.10	25.40	26.60	27.80	25.80	27.10
26	26.40	28.40	27.30	27.70	24.70	24.60	23.80	24.30	26.90	27.80	25.80	27.40
27	26.00	28.80	27.90	27.00	25.00	24.50	23.50	22.60	28.20	27.90	26.80	27.20
28	25.50	29.70	28.10	26.10	25.50	24.60	22.30	23.90	28.20	27.40	27.10	27.00
29	27.40	29.60	28.20	26.30	---	24.50	22.90	24.40	28.20	26.30	27.20	25.40
30	28.20	29.60	27.10	26.80	---	23.70	23.20	25.50	28.20	26.60	27.40	26.60
31	28.80	---	26.90	27.00	---	22.60	---	25.90	---	27.10	27.30	---
MAX	28.80	30.00	30.00	28.00	27.00	26.30	24.70	26.00	28.20	28.30	28.90	28.30
CAL YR 1990	LOW 35.20											
WTR YR 1991	LOW 30.00											



391608084254400 H-6
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

251

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 National Geodetic Vertical Datum of 1929.

Measuring point: Floor of instrument shelter 8.97 ft above land-surface datum.

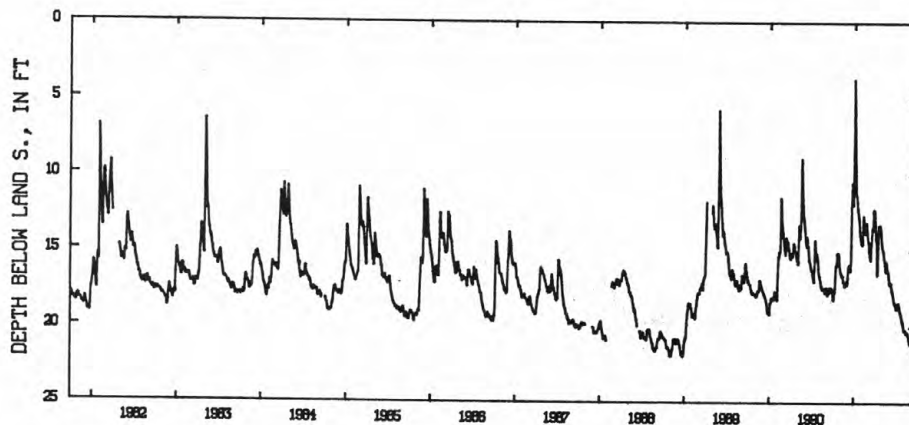
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.86	16.23	17.16	3.71	14.52	14.16	13.02	14.59	16.88	18.74	19.88	21.10
2	18.04	16.36	17.19	4.40	14.54	14.35	13.25	14.72	17.04	18.82	19.96	21.07
3	18.15	16.42	17.19	5.12	14.55	14.46	13.60	14.80	17.14	18.82	20.05	20.96
4	18.21	16.43	17.10	6.01	14.56	14.66	13.94	14.87	17.21	18.81	20.10	20.96
5	18.19	16.48	16.75	6.93	14.57	14.85	14.19	14.93	17.21	18.71	20.16	20.96
6	18.04	16.53	16.30	7.71	14.57	15.03	14.27	15.00	17.20	18.56	20.18	21.01
7	17.85	16.56	16.09	8.55	14.40	15.10	14.35	15.05	17.18	18.47	20.23	21.01
8	17.70	16.62	15.98	9.36	13.72	15.15	14.78	15.12	17.13	18.45	20.25	21.03
9	17.67	16.65	15.93	10.16	13.00	15.33	15.73	15.25	17.09	18.45	20.25	21.08
10	17.65	16.65	15.90	10.79	12.68	15.40	16.32	15.46	17.11	18.42	20.24	21.16
11	17.45	16.65	15.94	11.27	12.87	15.50	16.57	15.55	17.27	18.43	20.19	21.24
12	17.05	16.58	16.08	11.35	13.02	15.57	16.50	15.61	17.43	18.49	20.25	21.34
13	16.58	16.68	16.27	11.35	13.24	15.57	16.00	15.73	17.57	18.51	20.31	21.43
14	16.21	16.84	16.33	11.50	13.48	15.45	15.45	15.93	17.67	18.62	20.36	21.51
15	16.01	16.97	16.33	11.81	13.57	14.93	14.50	16.06	17.71	18.68	20.40	21.52
16	15.92	17.03	16.33	12.13	13.60	14.60	13.75	16.20	17.75	18.77	20.40	21.57
17	15.90	17.05	16.16	12.28	13.70	14.39	13.35	16.30	17.80	18.86	20.40	21.62
18	15.92	17.05	15.84	12.39	13.86	14.14	13.35	16.35	17.90	18.95	20.40	21.65
19	15.75	17.08	15.32	12.50	13.87	13.92	13.46	16.29	17.98	19.03	20.35	21.67
20	15.47	17.20	13.39	12.66	13.87	13.64	13.46	15.88	18.10	19.09	20.36	21.67
21	15.23	17.29	12.17	12.84	13.62	13.46	13.46	15.70	18.22	19.10	20.41	21.62
22	15.13	17.32	11.80	12.97	13.32	13.59	13.29	15.87	18.32	19.16	20.45	21.49
23	15.13	17.32	11.51	13.23	13.14	13.55	13.30	16.05	18.37	19.25	20.53	21.38
24	15.13	17.22	10.98	13.52	13.21	13.05	13.43	16.20	18.38	19.34	20.59	21.29
25	15.13	17.11	10.51	13.74	13.38	12.51	13.51	16.31	18.43	19.43	20.66	21.21
26	15.17	17.05	10.59	13.90	13.58	12.38	13.63	16.33	18.47	19.52	20.71	21.18
27	15.24	16.98	11.03	14.00	13.87	12.38	13.75	16.33	18.54	19.57	20.79	21.15
28	15.37	17.12	11.58	14.13	14.05	12.30	13.90	16.35	18.60	19.58	20.90	21.12
29	15.50	17.18	11.93	14.23	---	12.33	14.07	16.45	18.63	19.63	20.99	21.10
30	15.75	17.19	12.00	14.32	---	12.52	14.31	16.58	18.68	19.70	21.07	21.05
31	16.03	---	9.00	14.48	---	12.77	---	16.75	---	19.78	21.10	---
MAX	18.21	17.32	17.19	14.48	14.57	15.57	16.57	16.75	18.68	19.78	21.10	21.67

CAL YR 1990 LOW 18.98
WTR YR 1991 LOW 21.67391733084392400 H-2
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 1990 TO SEPTEMBER 1991

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3
NOV 14...	0915	690	7.7	1.5	15.0	<10	75	26	28	3.8	286
APR 26...	1100	647	7.6	20.0	14.5	25	78	24	23	3.1	283
AUG 21...	1035	709	7.6	22.5	17.5	<10	74	26	32	3.8	274

DATE	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)
NOV 14...	237	66	49	0.20	8.4	405	0.030	2.20	<1	<1
APR 26...	232	64	45	0.30	7.6	385	0.020	2.90	--	--
AUG 21...	225	75	62	0.30	7.6	437	0.020	1.00	<1	<1

DATE	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV 14...	<1	18	1	9	4	<1	240	70	14	1.5
APR 26...	--	--	--	11	--	--	240	--	--	1.3
AUG 21...	<1	2	2	10	2	<1	250	<10	11	1.4

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 National Geodetic Vertical Datum of 1929.

(Levels by Miami Conservancy District.) Measuring point: Floor of instrument shelter 3.00 ft

above land-surface datum.

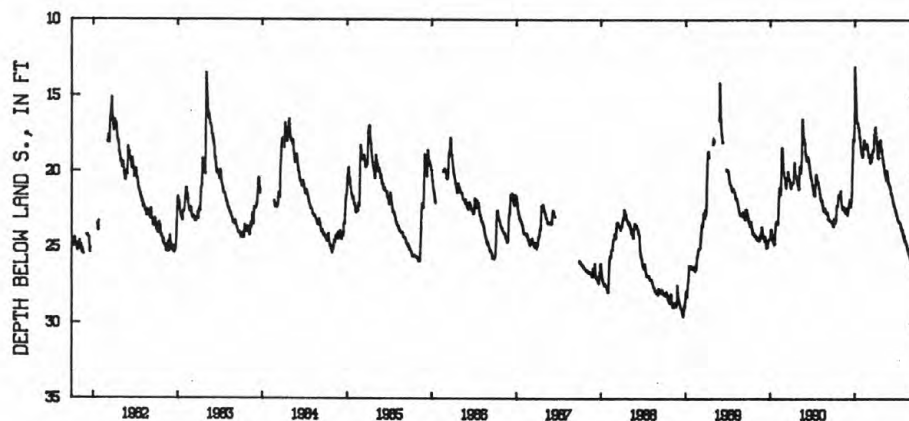
PERIOD OF RECORD.--December 1954 to current year.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.60	21.27	22.86	13.12	18.88	18.91	17.43	19.01	21.03	22.83	24.36	26.04
2	23.17	21.62	22.66	13.05	18.97	19.04	17.72	19.17	21.10	22.89	24.42	26.09
3	23.12	21.88	22.58	13.50	19.00	19.06	17.71	19.29	21.15	23.02	24.48	26.10
4	23.32	22.04	22.58	13.86	18.95	18.86	17.65	19.41	21.20	23.12	24.51	26.10
5	23.38	22.14	22.46	14.48	18.98	18.84	17.91	19.51	21.30	23.18	24.57	26.10
6	23.43	22.25	22.27	14.82	18.98	19.11	18.15	19.61	21.38	23.19	24.61	26.12
7	23.31	22.34	22.18	15.36	18.78	19.29	18.26	19.69	21.48	23.23	24.64	26.19
8	23.29	22.39	22.14	15.80	18.29	19.39	18.53	19.77	21.52	23.28	24.68	26.23
9	23.32	22.44	21.82	16.22	17.99	19.40	18.80	19.86	21.49	23.29	24.69	26.26
10	23.30	22.48	21.92	16.50	17.88	18.91	18.91	19.96	21.56	23.27	24.77	26.31
11	23.15	22.50	22.01	16.71	17.93	18.85	18.99	20.07	21.65	23.27	24.80	26.35
12	22.80	22.53	22.07	16.74	18.05	19.13	19.09	20.18	21.75	23.31	24.83	26.40
13	22.45	22.53	22.17	16.73	18.15	19.30	19.12	20.24	21.84	23.36	24.89	26.45
14	22.21	22.36	22.28	16.77	18.24	19.29	19.00	20.31	21.93	23.37	24.96	26.52
15	22.21	22.34	22.31	16.85	18.35	19.12	18.53	20.38	22.01	23.39	25.03	26.58
16	22.25	22.54	22.15	17.04	18.41	19.08	18.17	20.46	22.10	23.44	25.11	26.62
17	22.30	22.61	22.05	17.13	18.45	19.01	17.99	20.56	22.16	23.48	25.19	26.65
18	22.31	22.51	21.96	17.16	18.32	18.77	18.01	20.58	22.21	23.55	25.26	26.70
19	22.20	22.45	21.63	17.04	18.39	18.70	18.13	20.45	22.25	23.65	25.27	26.77
20	22.00	22.52	20.67	17.30	18.39	18.60	18.16	19.91	22.31	23.71	25.29	26.83
21	21.59	22.68	20.10	17.56	18.24	18.60	17.94	20.05	22.37	23.79	25.34	26.86
22	21.53	22.73	19.83	17.71	18.14	18.64	17.88	20.20	22.41	23.82	25.39	26.85
23	21.55	22.65	19.29	17.79	18.14	18.55	18.04	20.31	22.45	23.86	25.44	26.75
24	21.55	22.54	18.58	18.04	18.23	17.95	18.19	20.43	22.48	23.90	25.50	26.81
25	21.56	22.39	18.08	18.22	18.35	17.53	18.32	20.57	22.54	23.95	25.59	26.85
26	21.60	22.55	17.82	18.39	18.47	17.60	18.43	20.71	22.60	24.01	25.62	26.87
27	21.66	22.66	17.80	18.51	18.62	17.60	18.53	20.79	22.67	24.08	25.66	26.91
28	21.71	22.73	17.94	18.63	18.80	17.48	18.51	20.80	22.73	24.18	25.73	26.98
29	21.68	22.79	17.96	18.74	---	17.43	18.70	20.85	22.83	24.21	25.80	27.02
30	21.55	22.85	17.97	18.80	---	17.18	18.85	20.91	22.89	24.26	25.85	27.03
31	21.37	---	16.30	18.83	---	17.04	---	20.97	---	24.30	25.95	---
MAX	23.60	22.85	22.86	18.83	19.00	19.40	19.12	20.97	22.89	24.30	25.95	27.03
CAL YR 1990	LOW 24.81											
WTR YR 1991	LOW 27.03											



391817084393300 H-4
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929, 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.

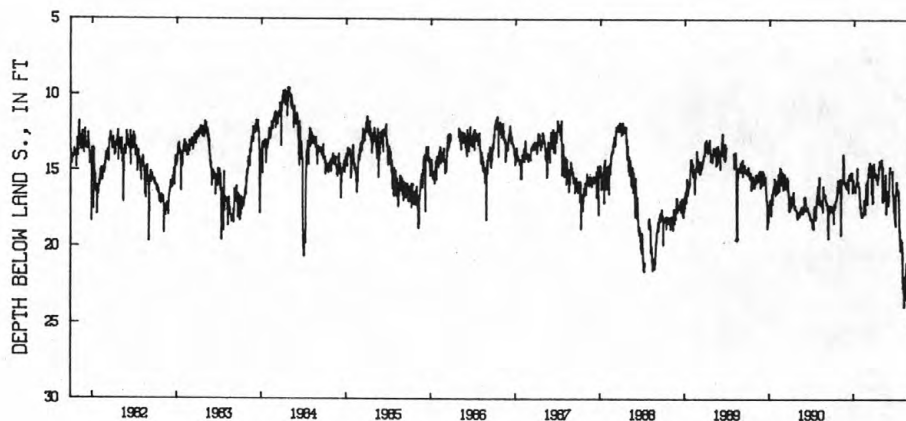
PERIOD OF RECORD.--April 1946 to current year.

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.

LATITUDE 404218 LONGITUDE 0835037 WELL DEPTH 40.0 GEOLOGIC UNIT 351BILD DATUM 975.00 STATE 39 COU

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.45	16.20	16.00	16.20	17.85	17.20	15.15	14.25	16.70	16.65	22.20	20.55
2	17.75	15.50	16.20	16.20	17.90	16.20	15.10	14.80	17.00	16.40	22.65	20.90
3	17.60	16.05	15.80	16.10	17.95	15.15	15.10	15.65	15.45	15.85	22.65	21.30
4	17.45	15.65	15.70	16.25	18.00	15.30	15.30	17.00	15.00	15.70	22.35	20.10
5	17.35	16.65	15.75	16.15	18.00	15.10	15.15	14.70	15.10	15.85	22.90	19.70
6	18.10	19.25	15.50	16.30	18.00	14.70	15.55	14.80	14.75	16.25	22.95	19.50
7	18.45	17.50	15.70	16.30	17.90	15.10	15.35	17.05	---	16.25	23.90	19.90
8	17.15	16.05	15.60	16.40	17.90	14.70	15.20	16.90	---	16.20	23.85	20.80
9	17.40	16.80	16.45	16.00	17.80	15.05	15.30	15.80	---	16.45	21.90	20.80
10	17.45	15.55	15.35	15.90	17.75	14.45	15.40	15.95	---	16.55	23.35	19.30
11	17.55	15.80	15.30	15.95	17.80	15.35	15.55	16.50	---	16.45	22.35	19.45
12	17.35	15.80	15.20	15.80	17.80	14.85	15.55	16.40	---	16.40	22.15	20.00
13	17.40	15.65	15.45	15.70	17.10	14.60	15.85	16.90	---	16.35	21.90	19.15
14	17.00	15.60	15.60	15.90	16.90	14.90	15.55	16.20	---	16.85	21.85	20.35
15	16.95	14.20	15.30	14.80	17.55	14.80	15.60	16.30	15.40	17.65	21.40	21.45
16	16.95	13.90	15.50	14.80	17.70	15.20	15.40	16.70	15.00	18.55	21.20	21.15
17	16.90	14.15	15.45	15.90	17.80	14.60	15.45	16.65	16.30	18.90	21.00	21.40
18	16.95	14.25	15.10	15.85	17.80	16.50	15.15	15.20	16.50	19.00	23.15	20.90
19	16.60	14.70	15.35	15.80	17.50	16.00	14.70	15.75	16.55	19.55	23.45	21.40
20	16.85	15.75	15.30	15.70	17.50	15.95	14.85	17.75	16.65	19.80	21.15	20.85
21	16.00	15.80	15.20	16.05	16.70	16.10	14.65	17.80	17.20	20.25	---	21.30
22	16.60	15.90	15.10	16.00	15.80	17.10	14.35	17.55	17.70	20.05	---	21.20
23	15.70	15.70	15.15	16.10	16.35	16.95	14.45	17.15	---	19.50	---	20.75
24	15.60	15.75	15.10	16.10	16.10	17.05	14.45	16.95	17.60	---	---	20.90
25	15.65	15.70	15.50	16.40	16.20	15.00	14.65	16.80	18.05	---	---	20.65
26	16.45	16.05	16.35	16.75	16.10	14.85	14.40	16.35	18.15	19.65	21.05	20.70
27	15.60	16.00	16.45	16.85	16.55	14.50	14.30	16.30	18.40	19.65	21.00	21.20
28	15.85	15.95	16.40	17.20	15.60	14.70	14.60	16.85	18.25	20.10	21.30	20.90
29	15.75	16.10	16.20	17.35	---	14.85	14.40	17.30	18.45	20.30	21.50	21.10
30	16.00	15.80	15.55	17.50	---	15.10	14.65	17.25	18.60	20.80	21.35	20.90
31	16.05	---	16.10	17.75	---	15.35	---	16.50	---	21.90	20.35	---
MAX	18.45	19.25	16.45	17.75	18.00	17.20	15.85	17.80	18.60	21.90	23.90	21.45
CAL YR 1990	LOW 19.45											
WTR YR 1991	LOW 23.90											



404218083503700 HN-1
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929, 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. 11, 1990	17.50	Apr. 26, 1991	14.82

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.

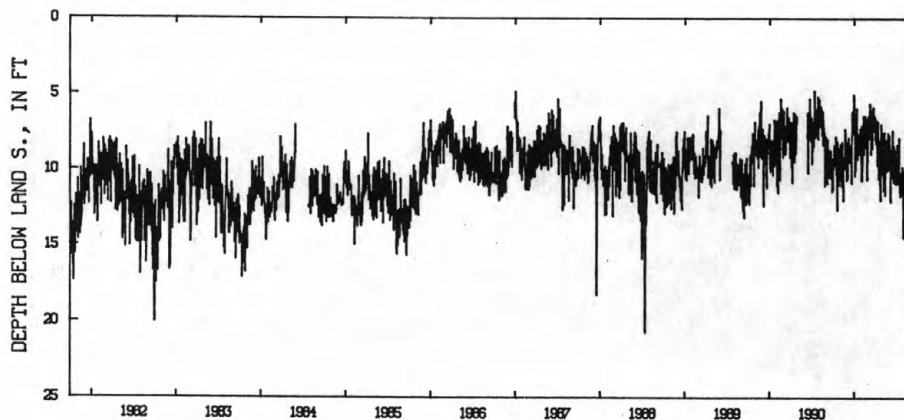
DATUM.--Elevation of land-surface datum is 1,000 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.50 ft above land-surface datum.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.28	10.63	9.76	5.36	10.69	8.82	6.72	9.85	8.60	10.46	13.98	10.74
2	11.31	9.69	8.20	6.60	8.22	7.87	7.94	10.29	7.70	10.93	14.49	10.30
3	9.72	8.31	9.17	7.19	7.06	6.42	7.94	8.62	8.42	9.30	11.76	11.64
4	9.95	8.77	10.64	10.41	10.73	7.34	8.27	8.62	9.84	9.25	10.03	12.31
5	9.70	9.27	10.43	9.48	9.85	7.59	7.61	7.55	8.67	8.83	11.96	12.29
6	9.71	10.48	9.27	6.64	9.73	7.56	6.93	9.26	11.87	8.34	10.61	12.32
7	8.39	10.90	9.39	7.31	9.34	6.80	6.71	9.55	12.11	8.79	13.70	12.16
8	9.32	11.07	8.33	10.04	7.84	7.94	8.20	11.37	10.07	9.08	12.77	11.36
9	9.52	10.59	7.85	8.66	7.43	6.25	8.29	9.63	9.14	9.32	12.43	12.11
10	9.48	8.93	9.22	7.97	6.41	5.63	8.31	8.47	10.03	9.45	11.05	15.07
11	9.40	8.14	9.36	7.95	7.39	7.01	9.69	8.34	10.52	10.94	10.25	15.17
12	9.46	9.35	9.43	7.47	8.93	7.20	8.37	7.50	8.98	9.77	10.63	11.28
13	8.47	9.46	9.48	5.92	8.98	7.10	7.38	11.03	9.07	9.49	12.01	10.79
14	7.80	9.89	9.34	8.62	7.33	8.90	6.82	11.67	8.57	7.89	10.80	10.67
15	10.33	12.05	9.34	7.78	7.51	8.94	9.03	11.06	8.59	10.77	10.61	10.20
16	9.23	11.40	8.40	7.75	7.84	6.63	10.59	9.61	7.40	11.04	11.79	13.53
17	9.26	9.21	8.90	9.32	6.42	6.70	9.92	10.10	9.44	11.45	11.43	12.17
18	10.52	9.42	8.91	7.61	8.51	7.10	9.93	8.21	10.10	11.41	9.92	13.65
19	12.25	9.53	8.34	7.71	7.26	6.08	9.74	8.04	10.83	11.75	10.82	11.38
20	12.64	9.60	8.49	7.71	7.50	7.41	8.05	8.40	10.63	10.18	11.50	12.34
21	8.12	9.92	10.89	8.75	7.53	8.59	8.05	9.95	10.73	10.22	10.30	12.38
22	10.58	8.66	8.92	7.86	7.66	7.00	10.93	9.90	8.39	10.34	10.54	10.72
23	9.64	7.29	6.25	8.84	7.62	6.15	11.13	10.01	9.75	11.49	10.66	11.04
24	9.44	7.66	6.84	8.95	6.60	5.88	11.96	10.12	8.70	10.78	10.60	12.15
25	9.41	8.05	6.13	8.60	10.24	5.90	12.00	8.03	10.41	11.21	9.64	11.36
26	10.87	9.01	7.01	7.74	10.63	7.01	8.80	8.24	10.85	11.48	12.01	11.03
27	11.03	9.33	7.62	7.23	8.70	6.56	7.85	7.56	10.85	10.56	12.18	11.04
28	8.54	9.25	6.61	8.82	9.42	7.41	6.98	7.98	10.89	9.79	11.86	10.99
29	9.38	10.72	6.54	8.92	---	6.55	9.58	8.87	10.82	11.64	12.07	10.63
30	9.35	9.82	6.40	8.99	---	6.46	9.71	9.81	9.19	11.61	12.90	11.12
31	10.51	---	5.03	9.18	---	6.51	---	9.97	---	13.46	11.79	---
MAX	12.64	12.05	10.89	10.41	10.73	8.94	12.00	11.67	12.11	13.46	14.49	15.17
CAL YR 1990	LOW 12.64											
WTR YR 1991	LOW 15.17											



402344082300700 K-1
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

257

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.

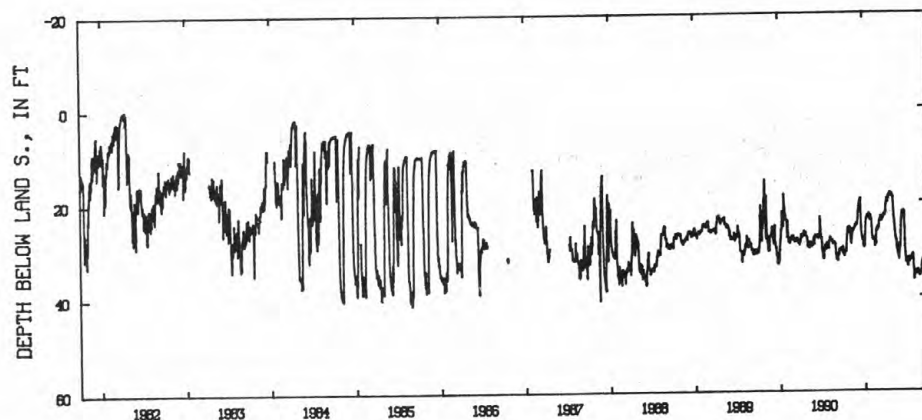
DATUM.--Elevation of land-surface datum is 1035 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 1.00 ft above land-surface datum.

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, 41.29 ft below land-surface datum, Aug. 29, 1985;
minimum daily low, 0.55 ft above land-surface, Apr. 13, 1980.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29.71	26.64	25.00	29.07	23.80	25.46	22.43	18.73	32.11	32.88	32.57	35.59
2	30.68	27.57	24.61	29.15	25.38	25.36	22.36	18.95	30.78	32.96	34.59	34.92
3	31.11	28.00	24.26	29.38	26.74	25.59	21.37	19.16	29.90	33.02	36.14	35.08
4	31.13	28.40	22.95	28.11	27.36	25.63	20.92	19.16	29.57	33.11	36.50	35.09
5	30.87	28.66	22.29	26.71	27.76	25.42	20.77	19.11	29.74	33.18	36.15	33.69
6	30.87	29.00	21.61	25.39	27.93	24.33	20.32	20.73	29.80	32.62	36.09	32.84
7	31.44	28.15	21.28	24.72	28.18	24.24	19.82	22.38	26.99	33.56	35.57	32.91
8	31.64	27.50	21.23	24.24	28.18	24.13	19.40	23.22	25.31	33.80	35.12	32.87
9	31.16	27.10	20.75	23.90	28.17	23.91	19.85	23.78	24.45	32.87	35.30	32.63
10	30.78	26.70	20.26	23.84	28.20	23.72	20.23	24.20	23.99	31.89	34.94	32.71
11	30.91	26.41	20.15	23.58	28.27	23.69	20.24	24.42	23.45	32.25	35.03	32.43
12	30.81	26.18	19.85	23.26	28.28	23.53	20.07	25.35	22.81	32.36	34.79	32.33
13	30.64	26.04	19.79	23.16	28.08	23.28	19.68	26.13	22.35	32.35	34.88	32.21
14	30.59	25.90	19.81	22.97	27.86	23.31	19.45	26.59	22.20	32.03	35.05	32.17
15	30.14	25.96	19.64	23.19	28.19	23.43	19.30	27.45	22.20	31.88	34.78	32.13
16	30.26	26.17	19.42	23.23	29.57	23.91	19.02	28.01	22.26	32.73	34.84	31.98
17	28.95	26.23	21.22	23.18	28.75	24.24	18.72	27.89	22.23	32.93	35.20	31.85
18	27.78	26.07	24.76	23.13	28.27	24.02	18.76	28.14	22.12	32.25	35.48	31.76
19	27.24	25.76	26.34	22.97	29.23	23.35	18.81	28.26	22.07	32.37	35.15	31.81
20	26.84	25.57	26.89	22.63	28.90	23.32	18.93	28.62	22.34	32.37	34.50	31.83
21	26.21	25.46	27.19	22.61	27.43	23.66	18.84	29.58	22.51	32.35	34.65	31.78
22	25.73	25.59	27.48	22.88	26.49	23.71	18.41	30.22	22.52	31.98	34.88	31.69
23	25.61	25.38	27.72	23.78	26.19	23.36	18.18	30.24	22.36	32.02	35.04	31.61
24	25.75	25.13	28.09	24.04	26.34	22.96	18.73	30.54	25.52	32.06	35.29	31.64
25	25.95	25.09	28.13	24.04	26.04	22.81	18.87	31.11	28.43	31.82	35.42	31.47
26	26.07	24.98	28.28	23.98	25.79	22.83	18.98	31.47	29.86	31.61	35.50	31.09
27	26.07	25.08	28.28	23.43	26.08	22.84	18.94	30.73	30.87	31.48	35.65	31.36
28	25.60	24.71	29.27	23.09	26.10	23.19	18.72	29.18	31.82	31.31	35.87	31.52
29	25.45	24.99	29.29	23.71	---	23.20	18.54	30.46	32.64	31.16	35.65	31.58
30	25.62	25.01	29.64	23.75	---	22.88	18.48	31.59	32.89	31.70	35.32	31.63
31	25.64	---	29.72	23.79	---	22.76	---	32.24	---	32.50	35.51	---
MAX	31.64	29.00	29.72	29.38	29.57	25.63	22.43	32.24	32.89	33.80	36.50	35.59

CAL YR 1990 LOW 32.60
WTR YR 1991 LOW 36.50395301083272200 M-2
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.50 ft above land-surface datum.

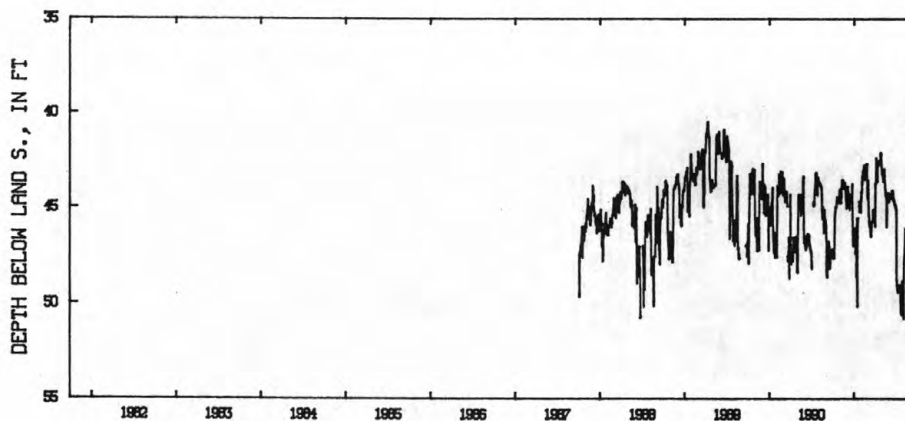
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--October 1, 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 51.84 ft below land-surface datum, Sept. 21, 1991; minimum daily low, 40.47 ft below land-surface datum, Apr. 11, 1989.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47.28	44.03	44.89	46.93	44.56	44.55	45.93	43.02	44.70	45.06	50.00	47.88
2	47.60	44.39	44.62	46.08	44.19	44.43	46.00	43.15	44.55	45.10	50.45	47.58
3	47.63	44.55	44.32	46.88	44.20	43.54	43.83	43.21	44.36	48.30	50.73	49.88
4	47.65	44.57	44.07	46.70	44.19	45.25	43.76	43.26	44.46	48.80	50.77	50.35
5	47.66	44.62	44.01	46.65	43.71	45.43	43.70	43.26	44.55	49.04	47.84	50.85
6	47.65	44.76	43.88	46.65	43.54	45.64	43.10	43.43	44.54	49.14	47.50	51.18
7	47.65	44.76	44.50	47.42	43.37	45.84	42.38	43.62	44.52	49.27	47.23	51.29
8	47.65	44.42	44.65	46.75	43.27	45.92	42.83	43.63	44.43	49.35	46.73	50.66
9	47.62	43.93	44.67	46.59	43.11	45.98	43.09	43.60	44.42	49.42	46.29	50.60
10	45.52	43.65	44.72	46.54	42.99	46.02	43.41	43.30	44.36	49.41	46.12	51.22
11	45.33	43.62	44.70	46.72	42.99	45.89	43.59	43.09	44.30	49.13	46.09	51.43
12	45.25	43.58	44.27	48.57	42.97	46.17	43.62	42.96	44.22	49.07	46.60	51.52
13	45.06	43.56	45.13	48.62	42.76	46.22	43.10	43.30	44.20	49.06	47.17	51.58
14	45.00	43.54	44.68	45.55	42.99	46.43	42.72	43.65	44.12	49.08	47.42	51.65
15	45.00	43.67	44.55	50.14	43.35	46.51	42.59	43.94	44.10	49.12	47.48	51.37
16	45.00	43.75	44.56	50.14	43.47	46.20	42.64	44.07	44.10	49.05	46.04	51.27
17	44.96	43.95	44.40	45.84	43.53	46.04	42.69	44.22	44.16	49.05	46.95	51.46
18	44.78	43.98	44.50	45.56	43.08	45.77	42.68	44.35	44.25	49.05	47.22	51.55
19	44.44	43.98	44.74	---	42.93	45.72	42.64	44.42	44.50	49.11	47.39	51.78
20	44.47	43.85	44.74	---	42.97	45.77	42.64	44.23	44.60	49.85	47.42	51.81
21	44.47	43.78	44.74	---	42.92	45.71	42.60	45.51	44.65	50.18	47.29	51.84
22	44.49	43.68	44.67	44.68	42.80	45.71	42.53	46.02	44.68	50.35	46.85	51.58
23	44.57	43.82	44.53	44.91	42.80	45.30	42.53	45.28	44.77	50.45	46.90	---
24	44.59	43.95	44.13	45.12	42.74	45.10	42.66	44.33	44.84	50.55	46.94	---
25	44.64	44.11	43.75	45.20	42.72	45.36	42.70	44.42	44.90	50.56	46.95	51.54
26	44.67	44.47	46.20	45.20	42.68	45.37	42.35	44.50	44.83	50.38	47.55	51.62
27	44.70	44.67	46.69	45.17	44.31	45.30	42.10	44.50	44.89	50.39	47.84	---
28	44.76	44.90	46.88	45.26	44.52	45.33	42.20	44.49	44.94	48.82	47.95	---
29	44.76	45.05	47.01	45.26	---	45.41	42.66	44.23	44.98	49.20	48.02	---
30	44.33	45.05	47.00	45.25	---	45.53	42.83	44.49	45.03	49.53	48.07	---
31	44.15	---	46.40	44.65	---	45.54	---	44.65	---	49.68	48.11	---
MAX	47.66	45.05	47.01	50.14	44.56	46.51	46.00	46.02	45.03	50.56	50.77	51.84

CAL YR 1990 LOW 48.72
WTR YR 1991 LOW 51.84395352083292100 M-5 ST OF OH AT LONDON COR INST NR LONDON OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT), DEPTH TO WATER BL. LSD

GROUND-WATER RECORDS

259

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.

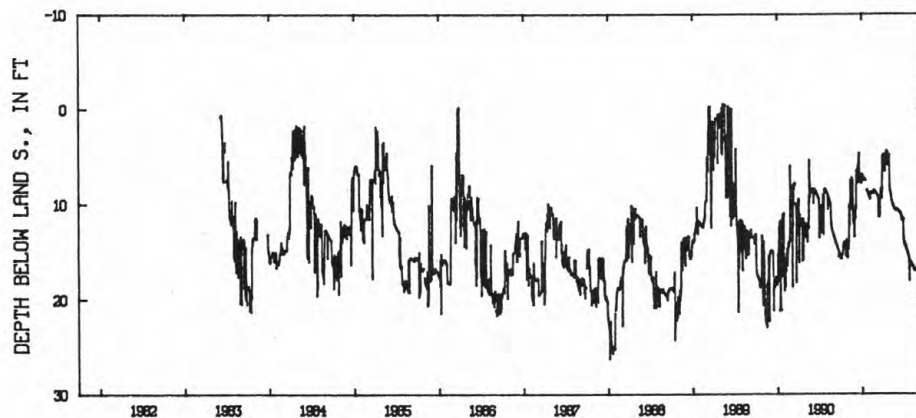
DATUM.--Elevation of land-surface datum is 1,112 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 4.00 ft above land-surface datum.

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, 26.30 ft below land-surface datum, Jan. 7, 1988;
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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.60	14.75	11.50	6.90	9.20	8.80	4.85	8.55	10.65	13.80	16.20	17.45
2	15.70	13.95	11.50	7.00	9.20	8.90	5.30	8.70	10.70	14.35	16.25	17.50
3	15.70	14.00	11.40	7.10	9.20	8.90	4.85	8.85	10.65	14.00	16.30	17.55
4	15.70	13.95	10.60	7.20	9.50	9.00	5.30	8.95	10.60	14.10	16.35	17.60
5	15.50	14.70	10.50	7.20	9.40	9.00	4.80	9.00	10.65	14.20	16.45	18.20
6	15.25	10.15	10.30	7.30	9.25	9.00	4.85	9.05	10.75	14.30	16.50	19.50
7	15.30	12.20	7.10	7.35	8.95	9.10	4.85	9.60	10.75	14.35	16.55	19.85
8	15.30	12.30	6.65	7.40	8.80	9.15	4.85	9.70	10.80	14.45	16.60	19.80
9	15.30	10.45	6.50	7.55	8.75	9.15	6.55	9.75	10.85	14.55	16.60	19.90
10	15.20	10.50	7.05	7.55	8.80	9.25	6.65	9.85	10.85	14.60	16.65	20.00
11	14.75	8.20	7.90	7.45	8.85	9.25	5.55	9.90	10.85	14.70	16.75	20.00
12	14.45	7.85	7.75	7.40	8.85	10.70	5.50	9.95	10.85	14.75	16.80	20.15
13	14.20	7.70	7.80	7.45	8.75	11.05	5.05	10.00	10.95	14.80	16.80	20.20
14	14.10	7.60	6.30	7.50	8.75	11.30	4.80	10.10	10.95	14.95	16.85	20.20
15	14.10	8.35	6.00	7.55	8.90	11.40	5.00	10.20	11.00	15.05	16.90	20.30
16	14.45	7.50	5.95	7.55	8.90	9.70	4.50	10.20	11.05	15.10	17.00	20.35
17	14.50	7.35	5.80	---	8.90	9.25	4.50	10.30	11.10	15.20	17.00	20.40
18	14.10	7.30	5.35	---	8.90	10.50	4.50	10.40	11.20	15.25	16.85	20.50
19	14.05	10.40	4.80	---	8.70	11.15	4.50	10.40	11.70	15.35	16.75	20.65
20	14.00	10.55	4.70	---	8.70	9.10	4.55	10.50	11.30	15.40	16.75	20.70
21	13.95	7.50	7.50	---	8.55	9.05	4.55	10.55	11.35	15.50	16.85	20.75
22	13.95	10.15	7.70	8.56	8.65	9.05	6.00	10.55	11.40	15.65	16.90	20.75
23	15.50	11.90	7.65	8.65	8.65	8.45	4.65	10.60	11.50	16.85	17.00	20.85
24	15.25	11.50	7.60	8.80	8.70	8.55	4.85	10.60	11.55	18.05	17.00	20.90
25	15.25	11.10	7.65	8.85	8.70	8.55	4.85	10.65	11.60	15.90	17.05	20.95
26	14.40	11.15	7.80	8.80	8.75	8.50	4.85	10.70	11.60	15.95	17.05	21.10
27	13.75	12.00	7.75	8.85	8.85	9.45	4.85	10.70	11.70	16.00	17.10	21.15
28	13.80	13.35	7.85	9.00	8.80	8.45	4.90	10.55	12.50	16.05	17.15	21.25
29	15.50	13.45	7.70	9.00	---	5.05	4.90	10.55	13.50	16.15	17.20	21.35
30	13.80	11.60	7.60	9.10	---	4.95	8.10	10.55	13.75	16.15	17.25	21.40
31	15.65	---	6.90	9.20	---	4.90	---	10.60	---	16.20	17.40	---
MAX	15.70	14.75	11.50	9.20	9.50	11.40	8.10	10.70	13.75	18.05	17.40	21.40
CAL YR 1990	LOW 21.10											
WTR YR 1991	LOW 21.40											



— 395357083304400 M-4 LONDON ST FISH HATCHERY 3 MI NW OF LONDON OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929, 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, 10.35 ft below land-surface datum, Dec. 30, 1987;
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. 16, 1990	5.31	Jan. 22, 1991	5.32	Apr. 19, 1991	4.60
Nov. 16, 1990	5.18	Feb. 21, 1991	5.40	July 22, 1991	8.02

GROUND-WATER RECORDS

261

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 National Geodetic Vertical Datum of 1929, 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, 29.70 ft below land-surface datum, Apr. 2, 1990.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

DATE	WATER LEVEL	DATE	WATER LEVEL
Nov. 1, 1990	29.76	May 1, 1991	30.12

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 National Geodetic Vertical Datum of 1929.

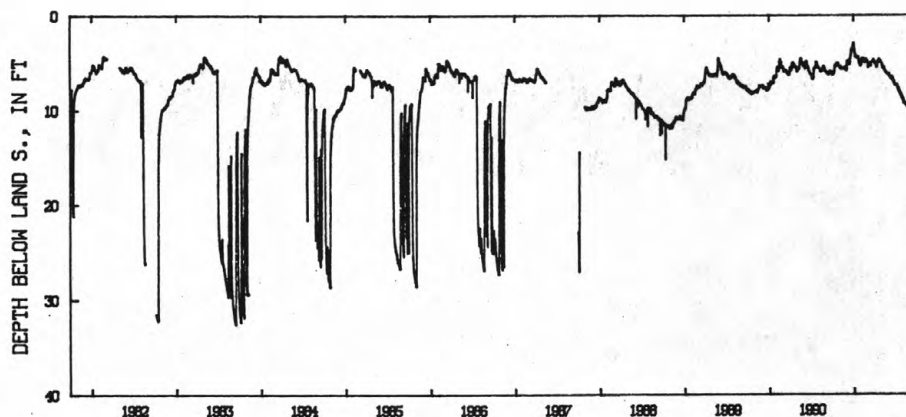
Measuring point: Floor of shelter 3.00 ft above land-surface datum.

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, 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.22	5.44	5.76	2.94	5.31	4.89	4.95	5.04	6.22	7.34	8.85	10.11
2	6.29	5.50	5.77	3.24	5.28	4.88	5.08	5.13	6.23	7.37	8.91	10.14
3	6.28	5.51	5.68	3.49	5.29	4.93	5.11	5.21	6.28	7.34	8.98	10.15
4	6.20	5.50	5.32	3.57	5.20	4.99	5.09	5.23	6.33	7.38	9.10	10.05
5	6.24	5.46	5.11	3.70	5.08	5.51	5.08	5.23	6.42	7.40	9.20	10.08
6	6.17	5.61	4.86	3.96	4.95	5.03	5.09	5.34	6.50	7.39	9.27	10.12
7	6.17	5.64	4.88	4.10	4.74	5.11	5.13	5.46	6.54	7.42	9.30	10.15
8	6.16	5.69	4.90	4.13	4.67	5.17	5.13	5.53	6.54	7.51	9.28	10.15
9	6.08	5.58	4.92	4.38	4.53	5.16	5.12	5.51	6.57	7.60	9.24	10.15
10	5.98	5.54	4.99	4.42	4.61	5.18	5.35	5.58	6.63	7.64	9.31	10.16
11	5.87	5.59	4.97	4.34	4.72	5.22	5.46	5.60	6.64	7.72	9.37	10.18
12	5.63	5.61	4.92	4.37	4.72	5.20	5.50	5.57	6.61	7.69	9.38	10.21
13	5.32	5.68	5.21	4.36	4.60	5.09	5.39	5.58	6.59	7.76	9.36	10.16
14	5.30	5.67	5.22	4.43	4.59	5.12	5.29	5.65	6.67	7.91	9.36	10.19
15	5.42	5.64	5.11	4.45	4.91	5.33	5.08	5.76	6.62	7.98	9.41	10.25
16	5.45	5.59	5.02	4.39	4.98	5.35	4.91	5.79	6.57	8.01	9.46	10.30
17	5.40	5.64	4.93	4.41	5.01	5.29	4.88	5.85	6.62	8.01	9.44	10.36
18	5.35	5.65	4.56	4.40	5.01	5.04	4.87	5.97	6.71	8.04	9.51	10.40
19	5.37	5.64	4.54	4.40	4.98	5.01	4.81	5.98	6.79	8.13	9.53	10.52
20	5.32	5.70	4.39	4.39	4.88	5.02	4.85	6.00	6.88	8.21	9.55	10.58
21	5.22	5.70	4.19	4.56	4.60	4.98	4.81	6.02	6.93	8.32	9.61	10.59
22	5.22	5.62	4.12	4.62	4.66	4.96	4.67	6.07	6.97	8.34	9.60	10.57
23	5.13	5.56	3.80	4.68	4.69	4.98	4.72	6.13	6.99	8.34	9.67	10.64
24	5.09	5.51	3.52	4.86	4.73	4.86	4.92	6.14	7.08	8.43	9.73	10.64
25	5.12	5.59	---	4.94	4.77	4.91	4.94	6.17	7.15	8.49	9.75	10.52
26	5.17	5.64	---	4.90	4.77	4.94	4.89	6.17	7.17	8.59	9.75	10.62
27	5.20	5.59	---	4.89	4.88	4.77	4.88	6.20	7.20	8.66	9.77	10.74
28	5.32	5.76	---	5.08	4.88	4.70	4.94	6.25	7.30	8.67	9.83	10.79
29	5.38	5.83	---	5.08	---	4.69	4.91	6.24	7.34	8.63	9.86	10.83
30	5.35	5.82	---	5.10	---	4.88	5.03	6.22	7.35	8.74	9.89	10.84
31	5.40	---	3.25	5.29	---	4.90	---	6.19	---	8.80	10.03	---
MAX	6.29	5.83	5.77	5.29	5.31	5.51	5.50	6.25	7.35	8.80	10.03	10.84
CAL YR 1990	LOW	7.76										
WTR YR 1991	LOW	10.84										



403413083170500 MN-4
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929, 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.

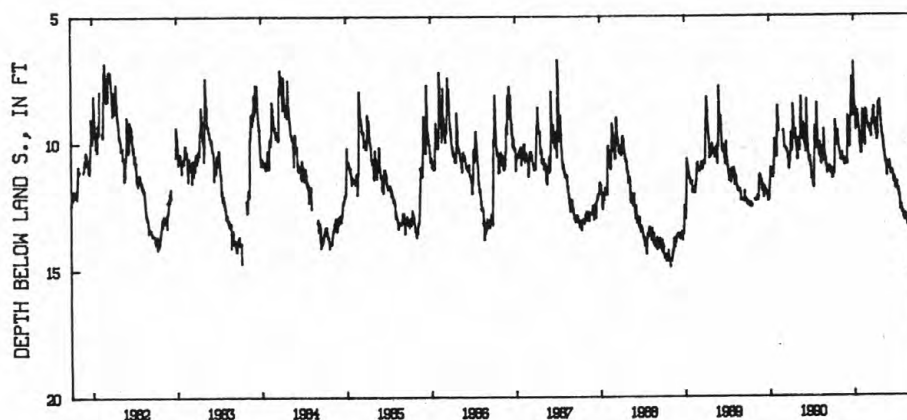
PERIOD OF RECORD.--March 1946 to current year.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.41	10.42	10.81	7.30	10.43	9.29	9.30	9.45	10.85	11.80	12.99	13.58
2	11.41	10.44	10.86	7.67	10.42	9.25	9.31	9.60	10.87	11.77	12.96	13.63
3	11.30	10.62	10.86	8.04	10.26	9.36	9.40	9.75	10.77	11.59	12.90	13.52
4	11.26	10.69	9.67	8.40	10.02	9.43	9.54	9.77	10.78	11.57	13.04	13.45
5	11.26	10.69	8.96	8.68	9.74	9.50	9.57	9.82	10.88	11.58	13.02	13.37
6	11.04	10.68	9.11	8.90	9.21	9.45	9.10	9.85	10.97	11.77	12.98	13.30
7	11.15	10.63	9.26	8.98	8.85	9.34	9.67	9.93	11.09	11.84	13.08	13.43
8	11.25	10.72	9.41	9.22	8.73	9.33	9.71	10.02	11.20	11.92	12.97	13.45
9	11.20	10.55	9.55	9.38	8.88	9.45	9.71	10.17	11.19	11.85	12.84	13.50
10	10.87	10.52	9.80	9.50	9.19	9.51	9.70	10.25	11.28	11.82	12.86	13.48
11	9.98	10.40	9.88	9.50	9.32	9.60	9.90	10.37	11.23	11.95	12.97	13.50
12	9.15	10.53	9.91	9.22	9.40	9.59	9.85	10.39	11.12	11.90	13.02	13.51
13	9.36	10.67	10.12	9.06	9.40	9.52	9.75	10.37	11.14	12.10	12.98	13.45
14	9.40	10.70	10.18	9.21	9.46	9.66	9.67	10.55	11.18	12.04	13.10	13.42
15	9.89	10.70	10.14	9.28	9.71	9.65	8.82	10.65	11.20	12.12	13.10	13.53
16	10.07	10.62	9.63	9.20	9.90	9.74	8.45	10.78	11.15	12.15	13.03	13.58
17	10.13	10.75	9.07	8.75	10.08	9.80	8.68	10.79	11.29	12.18	13.20	13.60
18	10.12	10.78	9.02	8.90	10.12	9.34	8.82	10.77	11.32	12.27	13.28	13.65
19	9.80	10.82	8.50	9.06	10.00	9.38	8.88	10.70	11.36	12.68	13.10	13.68
20	9.57	10.88	8.24	9.02	9.10	9.11	8.77	10.75	11.51	12.65	13.01	13.78
21	9.78	10.91	8.28	9.35	8.70	9.14	8.48	10.98	11.60	12.50	13.23	13.67
22	9.79	10.83	8.19	9.42	9.00	9.22	8.36	11.25	11.60	12.58	13.23	13.81
23	9.53	10.82	7.43	9.45	8.92	9.15	8.55	11.33	11.36	12.50	13.07	13.67
24	9.60	10.64	7.50	9.65	8.75	8.75	8.72	11.24	11.50	12.48	13.20	13.97
25	9.81	10.75	7.99	9.80	8.81	8.81	8.70	10.98	11.45	12.62	13.18	13.72
26	9.92	10.80	8.50	10.00	8.96	8.89	8.75	11.07	11.58	12.66	13.25	13.54
27	9.92	10.75	8.68	10.03	9.05	8.81	8.97	10.89	11.72	12.77	13.32	13.71
28	10.15	10.86	8.98	10.13	9.25	8.61	9.12	10.90	11.75	12.80	13.27	13.75
29	10.25	10.88	8.85	10.19	---	8.66	9.20	11.05	11.84	12.72	13.31	13.80
30	10.30	10.78	8.30	10.25	---	9.15	9.44	10.99	11.80	12.73	13.42	13.80
31	10.40	---	6.84	10.40	---	9.40	---	10.96	---	12.92	13.43	---
MAX	11.41	10.91	10.86	10.40	10.43	9.80	9.90	11.33	11.84	12.92	13.43	13.97

CAL YR 1990 LOW 11.80

WTR YR 1991 LOW 13.97



403443083230400 MN-1
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929, 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.

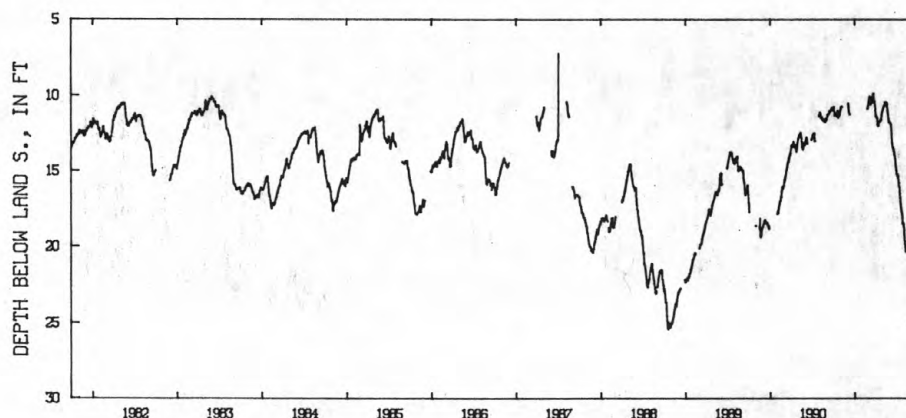
PERIOD OF RECORD.--May 1959 to current year.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.89	10.95	---	---	---	10.62	11.14	11.08	11.78	15.15	18.91	20.34
2	10.91	10.87	---	---	---	10.40	11.29	11.01	11.82	15.20	19.20	20.35
3	10.90	10.80	---	---	---	10.35	11.33	10.97	11.83	15.20	19.40	20.50
4	10.77	10.77	---	---	---	10.23	11.35	10.90	11.85	15.24	19.60	20.55
5	10.75	---	10.54	---	---	10.21	11.39	10.85	11.86	15.27	19.79	20.45
6	11.11	10.75	10.80	---	---	10.12	11.40	10.74	11.89	15.34	19.93	20.34
7	11.30	10.75	11.00	---	---	10.07	11.44	10.75	11.90	15.36	20.13	20.22
8	11.30	10.72	11.12	---	---	10.23	11.45	10.76	12.02	15.55	20.27	20.13
9	11.27	---	---	---	---	10.30	11.55	10.71	12.25	15.65	20.36	19.89
10	11.15	---	11.23	---	---	10.49	11.81	10.67	12.55	15.80	20.27	19.84
11	11.18	---	11.23	---	---	10.60	11.95	10.63	12.88	15.93	20.34	19.82
12	11.17	---	---	---	---	10.60	11.99	10.58	13.15	16.01	20.35	19.80
13	11.16	---	---	---	---	10.50	11.96	10.49	13.36	16.12	20.35	19.78
14	11.22	---	---	---	---	10.37	11.88	10.42	13.42	16.34	20.34	20.05
15	11.30	---	---	---	---	10.49	11.75	10.43	13.47	16.55	20.23	20.22
16	11.34	---	---	---	---	10.50	11.71	10.43	13.51	16.78	20.19	20.35
17	11.35	---	---	---	---	10.50	11.71	10.46	13.55	17.01	20.17	20.53
18	11.22	---	---	---	---	10.35	11.74	10.52	13.60	17.17	20.14	20.57
19	11.00	---	11.75	---	---	10.08	11.67	10.51	13.66	17.35	20.30	20.64
20	11.29	---	---	---	---	10.06	11.67	10.50	13.76	17.48	20.35	21.15
21	11.37	---	---	---	---	10.05	11.72	10.61	13.87	17.60	20.35	21.49
22	11.43	---	---	---	---	9.89	11.68	10.75	13.94	17.70	20.21	21.73
23	11.44	---	---	---	---	9.93	11.63	10.91	14.03	17.80	20.12	22.08
24	11.42	---	---	---	---	9.87	11.60	11.06	14.15	17.92	20.07	22.33
25	11.32	---	---	---	10.86	10.29	11.60	11.19	14.18	18.08	20.02	22.55
26	11.30	---	---	---	10.86	10.44	11.51	11.33	14.40	18.45	20.10	22.77
27	11.31	---	11.76	---	10.80	10.47	11.41	11.47	14.60	18.51	20.14	23.03
28	11.29	---	---	---	10.74	10.37	11.31	11.61	14.76	18.45	20.25	23.25
29	11.19	---	---	---	---	10.59	11.23	11.66	14.90	18.46	20.31	23.44
30	11.19	10.42	---	---	---	10.66	11.13	11.71	15.00	18.57	20.35	23.63
31	11.00	---	---	---	---	10.80	---	11.76	---	18.69	20.35	---
MAX	11.44	10.95	11.76	---	10.86	10.80	11.99	11.76	15.00	18.69	20.36	23.63

CAL YR 1990 LOW 17.83
WTR YR 1991 LOW 23.63403601083110400 MN-2
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

265

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 National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 1.00 ft above land-surface datum.

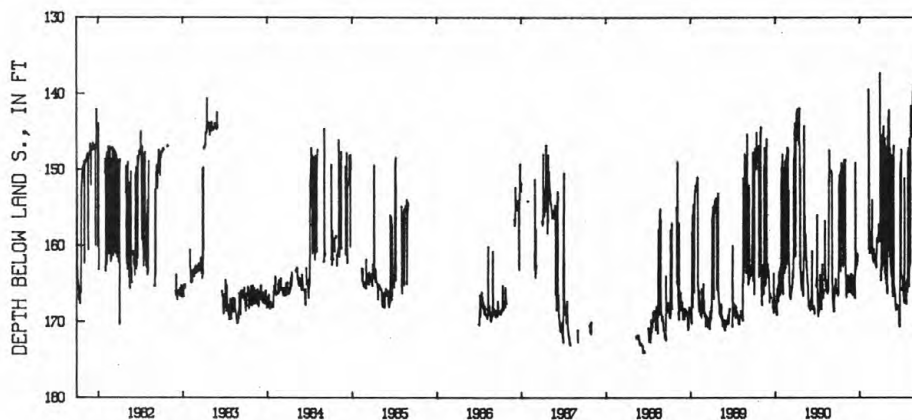
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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, 137.30 ft below land-surface datum, Mar. 30, 1991.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	166.00	163.00	166.50	---	---	162.20	163.20	166.30	165.70	---	163.90	---
2	166.30	164.90	---	---	---	160.40	164.10	145.60	166.70	---	165.30	---
3	152.60	166.10	164.00	---	---	161.30	164.60	146.00	166.40	165.60	165.40	160.40
4	151.80	166.70	166.10	---	---	161.20	146.10	145.80	167.50	165.90	146.00	161.10
5	151.40	166.80	164.10	---	---	161.80	145.60	143.20	168.00	164.10	145.90	161.00
6	150.80	166.20	165.10	---	---	161.70	153.00	144.50	168.40	164.00	162.80	158.00
7	150.90	165.50	166.50	---	---	161.70	163.30	144.70	168.50	165.30	149.00	162.10
8	150.70	165.40	164.30	---	160.40	162.40	151.00	142.20	168.30	165.90	162.40	159.80
9	150.60	164.10	164.60	---	139.40	162.50	145.90	160.70	168.00	166.50	144.90	163.90
10	150.30	164.20	166.50	---	160.10	161.70	145.40	144.70	167.90	166.70	141.80	162.20
11	163.40	164.10	166.80	---	161.00	162.20	145.70	161.50	167.80	167.40	141.60	162.30
12	150.10	163.90	166.90	---	160.40	162.30	145.80	147.20	168.10	167.50	144.70	162.60
13	149.70	166.20	149.10	---	159.40	162.90	145.30	162.20	168.20	151.10	145.20	162.80
14	149.10	165.20	163.40	---	158.80	161.10	144.30	162.90	168.30	166.40	144.60	163.50
15	149.80	164.50	161.60	---	160.30	161.00	160.50	159.00	168.20	166.60	144.60	163.80
16	149.80	164.40	163.00	---	158.20	159.00	162.70	163.30	168.10	167.20	145.70	165.20
17	149.60	164.40	162.10	---	160.10	159.70	155.00	164.00	168.40	167.30	144.00	165.80
18	149.40	164.20	162.30	---	160.30	159.40	163.60	148.00	168.40	167.40	141.00	165.00
19	149.60	164.40	162.60	---	160.90	159.40	147.10	163.30	168.50	167.50	139.80	164.10
20	149.30	164.60	162.50	---	160.70	159.60	145.80	163.40	170.10	167.60	142.80	165.70
21	162.80	164.70	162.10	---	160.40	158.60	161.00	165.00	170.40	167.70	142.80	161.60
22	162.60	166.10	161.00	---	161.10	159.30	164.40	165.40	170.60	167.20	139.10	164.80
23	162.50	166.20	162.10	---	154.00	157.20	164.40	166.20	170.60	165.40	138.80	163.50
24	149.40	163.80	161.30	---	160.60	158.50	146.90	166.70	150.60	164.80	156.60	163.70
25	149.30	163.70	---	---	161.40	159.40	165.10	166.00	150.20	164.60	158.10	163.20
26	149.20	165.70	---	---	161.80	159.50	153.00	165.50	149.50	166.10	158.50	163.00
27	148.70	165.80	---	---	161.50	159.00	163.50	147.40	149.00	147.60	143.90	163.30
28	148.90	164.30	---	---	162.10	158.40	164.20	146.80	164.40	162.50	144.10	144.80
29	148.90	164.70	---	---	---	157.90	165.00	164.60	150.60	163.40	160.70	163.30
30	148.90	166.40	---	---	---	137.30	166.10	165.50	147.40	147.10	162.10	163.50
31	148.70	---	---	---	---	---	---	166.50	---	162.20	163.80	---
MAX	166.30	166.80	166.90	---	162.10	162.90	166.10	166.70	170.60	167.70	165.40	165.80
CAL YR 1990	LOW 169.30											
WTR YR 1991	LOW 170.60											



410120081431800 MD-3
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929, 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.

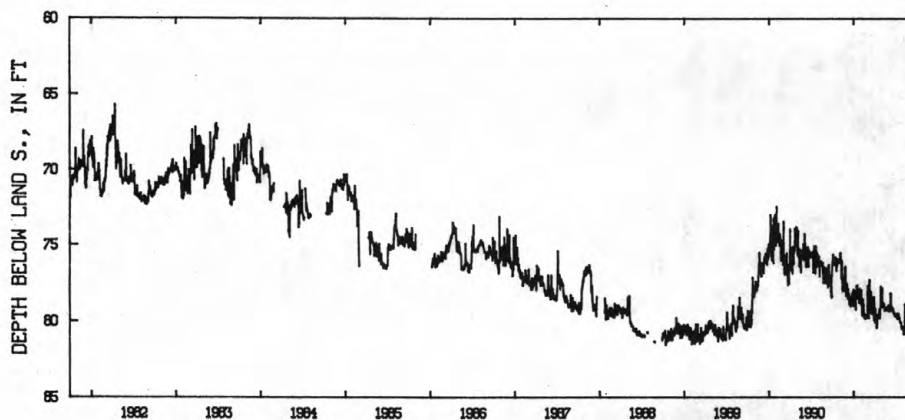
PERIOD OF RECORD.--February 1967 to current year.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76.07	76.00	78.04	77.91	78.91	78.30	79.77	78.14	78.97	79.53	80.48	79.84
2	76.12	76.17	77.88	78.05	78.45	77.66	80.07	78.12	79.01	79.58	80.51	79.63
3	75.91	76.16	77.54	78.45	78.55	77.97	80.10	78.09	78.97	79.56	80.56	79.72
4	75.63	75.62	78.34	78.53	77.94	79.17	79.84	77.87	79.22	79.63	80.71	79.83
5	76.20	75.52	78.40	78.53	79.25	79.12	79.94	77.87	79.36	79.72	80.81	79.77
6	76.24	76.02	78.51	78.30	79.44	79.11	79.17	79.09	79.37	79.78	80.87	79.75
7	76.01	76.11	78.54	78.28	79.64	79.77	79.93	79.11	79.27	79.52	80.87	79.33
8	75.93	77.05	78.41	78.23	79.65	79.81	79.98	79.09	79.28	79.85	80.80	78.87
9	76.07	77.23	77.89	78.63	79.19	78.74	80.12	79.10	78.91	79.88	80.47	79.21
10	76.22	76.11	78.28	79.24	78.93	77.30	80.35	79.06	78.18	79.71	78.86	79.44
11	76.35	76.01	78.21	79.25	78.55	79.17	80.44	79.11	78.18	79.66	80.04	79.49
12	76.16	77.42	78.34	77.97	79.06	79.23	80.20	78.83	79.20	79.58	79.51	79.54
13	76.02	77.86	78.93	78.22	79.04	79.27	80.08	78.87	79.33	79.70	80.21	79.58
14	75.80	78.04	78.69	77.73	78.93	79.29	79.66	79.17	79.33	79.50	79.40	79.52
15	76.30	77.79	78.62	77.76	79.77	78.62	79.60	79.28	79.30	79.71	79.30	79.33
16	76.10	77.68	78.55	77.65	79.78	78.64	79.69	79.32	79.06	79.76	79.15	78.47
17	75.86	77.80	78.47	78.30	79.54	78.07	79.76	79.31	79.17	79.76	79.15	79.53
18	76.73	77.82	78.51	78.43	79.63	78.22	79.78	79.22	79.32	79.83	78.78	79.84
19	76.22	77.85	79.02	78.43	79.84	79.53	79.66	79.18	79.37	79.96	78.82	79.95
20	75.96	77.95	79.02	78.35	79.86	78.97	79.77	79.15	79.37	80.07	78.91	79.83
21	76.47	78.02	78.91	78.53	79.84	78.41	79.44	79.18	79.19	80.11	78.78	79.57
22	75.91	77.80	78.77	78.55	79.82	78.57	79.20	79.22	79.42	80.13	78.80	79.34
23	75.92	76.88	78.68	78.56	79.62	78.45	79.37	79.22	79.53	80.07	78.56	79.54
24	75.95	76.57	78.65	78.75	79.63	78.52	79.83	79.18	79.41	80.13	78.63	79.28
25	76.23	76.44	78.22	78.80	79.68	78.56	79.73	79.09	79.48	80.35	78.80	78.11
26	76.20	76.52	78.98	78.79	79.74	78.56	79.57	79.07	79.60	80.49	79.82	78.56
27	75.92	76.52	78.98	77.88	79.77	79.60	79.17	79.05	79.55	80.53	79.81	78.86
28	75.96	78.31	78.81	78.45	79.77	79.95	77.74	79.31	79.63	80.48	79.93	79.01
29	76.00	78.38	78.07	78.48	---	79.92	77.86	79.31	79.68	80.37	80.00	79.11
30	76.03	78.05	78.05	78.27	---	79.59	78.05	79.23	79.58	80.36	79.98	79.76
31	76.07	---	79.02	78.89	---	78.42	---	79.35	---	80.42	80.11	---
MAX	76.73	78.38	79.02	79.25	79.86	79.95	80.44	79.35	79.68	80.53	80.87	79.95

CAL YR 1990 LOW 79.02

WTR YR 1991 LOW 80.87



— 402833084375200 MR-2
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

267

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 National Geodetic Vertical Datum of 1929.

(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. 25, 1990	10.50	Apr. 18, 1991	9.35

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 1990 TO SEPTEMBER 1991

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3
NOV 13...	1030	679	7.8	4.0	15.0	<10	80	32	18	1.9	383
APR 25...	1045	758	7.7	14.5	13.5	<10	86	31	18	1.7	357
AUG 22...	0915	716	7.8	17.0	14.5	<10	85	34	18	2.1	372

DATE	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)
NOV 13...	311	65	29	0.80	13	430	<0.010	<0.100	1	2
APR 25...	294	70	33	0.80	13	421	<0.010	0.130	--	--
AUG 22...	303	69	30	0.80	12	431	<0.010	<0.050	<1	<1

DATE	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV 13...	<1	5	<1	1300	3	<1	56	70	13	1.0
APR 25...	--	--	--	1100	--	--	52	--	--	1.0
AUG 22...	<1	3	<1	710	4	<1	47	20	15	1.1

GROUND-WATER RECORDS

269

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 1990 TO SEPTEMBER 1991

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3
NOV 13...	1230	791	7.6	7.0	15.0	<10	89	30	38	3.4	381
APR 25...	1245	890	7.5	21.0	14.5	<10	99	31	37	3.3	379
AUG 22...	1210	905	7.6	28.5	16.0	<10	98	34	48	3.7	377

DATE	ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)
NOV 13...	310	62	64	0.20	9.0	487	0.020	2.00	1	2
APR 25...	310	59	73	0.30	8.7	482	0.020	2.30	--	--
AUG 22...	311	64	85	0.30	8.5	533	0.020	1.50	<1	<1

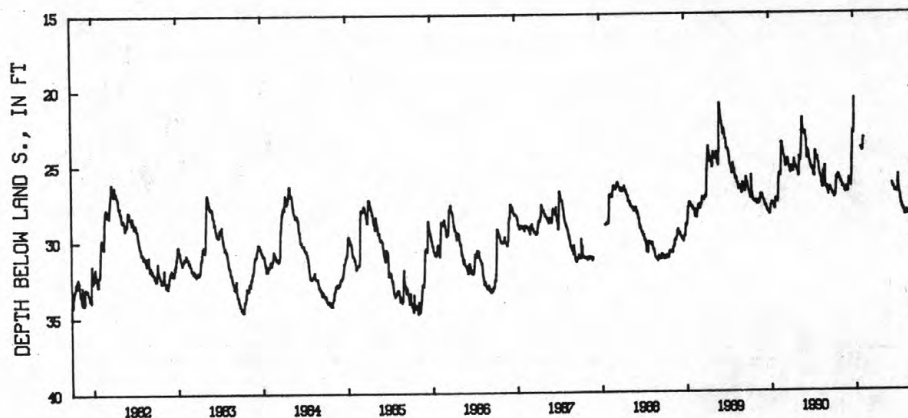
DATE	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV 13...	<1	36	7	7	30	<1	150	1100	12	1.2
APR 25...	--	--	--	11	--	--	180	--	--	1.1
AUG 22...	1	5	4	3	3	<1	180	<10	7	1.1

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.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled unused water table well, diameter 12 in., depth 84 ft, cased.
INSTRUMENTATION.--Digital recorder -- 60-minute punch.
DATUM.--Elevation of land-surface datum is 717.6 ft above National Geodetic Vertical Datum of 1929.
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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.07	26.27	26.85	20.69	24.04	---	---	---	---	26.84	28.35	28.50
2	27.12	26.28	26.87	---	24.13	---	---	---	---	26.92	28.43	28.50
3	27.24	26.27	26.78	---	24.16	---	---	---	---	26.93	28.44	28.63
4	27.27	26.17	26.58	---	24.15	---	---	---	---	26.93	28.34	28.58
5	27.13	26.32	26.36	---	24.10	---	---	---	---	26.28	28.35	28.43
6	27.10	26.38	26.05	---	24.06	---	---	---	---	25.99	28.35	28.46
7	26.97	26.52	25.97	---	23.84	---	---	---	---	25.76	28.38	28.46
8	27.11	26.53	26.02	---	23.53	---	---	---	---	26.36	28.41	28.36
9	27.14	26.60	26.15	---	23.29	---	---	---	---	26.61	28.40	28.42
10	26.97	26.52	26.20	---	23.32	---	---	---	---	26.78	28.21	28.48
11	26.75	26.43	26.28	---	---	---	---	---	26.35	26.94	28.15	28.53
12	26.33	26.50	26.35	---	---	---	---	---	26.44	27.06	28.29	28.55
13	25.97	26.52	26.42	---	---	---	---	---	26.54	27.07	28.36	28.56
14	25.89	26.57	26.52	---	---	---	---	---	26.59	27.12	28.36	28.54
15	25.88	26.65	26.53	---	---	---	---	---	26.60	27.28	28.32	28.40
16	26.03	26.69	26.45	---	---	---	---	---	26.53	27.41	28.30	28.53
17	26.09	26.75	26.26	---	---	---	---	---	26.60	27.51	28.25	28.60
18	26.09	26.78	25.98	---	---	---	---	---	26.66	27.66	28.21	28.65
19	26.00	26.87	25.57	---	---	---	---	---	26.75	27.77	28.27	28.69
20	25.87	26.91	24.84	---	---	---	---	---	26.82	27.78	28.31	28.69
21	25.79	26.94	24.35	---	---	---	---	---	26.89	27.73	28.37	28.61
22	25.72	26.85	24.11	---	---	---	---	---	26.90	27.88	28.42	28.61
23	25.77	26.72	23.84	---	---	---	---	---	26.75	27.97	28.42	28.52
24	25.78	26.65	23.26	---	---	---	---	---	26.76	28.01	28.37	28.37
25	25.83	26.56	22.86	---	---	---	---	---	26.82	28.04	28.37	28.32
26	25.89	26.68	22.84	---	---	---	---	---	26.88	28.10	28.48	28.36
27	25.93	26.73	22.98	---	---	---	---	---	26.94	28.10	28.53	28.56
28	25.95	26.77	23.02	---	---	---	---	---	26.94	27.99	28.56	28.61
29	26.03	26.88	23.04	23.93	---	---	---	---	26.84	28.11	28.62	28.61
30	26.09	26.91	23.02	23.99	---	---	---	---	26.82	28.20	28.63	28.67
31	26.23	---	22.14	24.03	---	---	---	---	---	28.27	28.55	---
MAX	27.27	26.94	26.87	24.03	24.16	---	---	---	26.94	28.27	28.63	28.69
CAL YR 1990 LOW 27.98												
WTR YR 1991 LOW 28.69												



— 394012084151700 MT-55
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929.

(Levels by Miami Conservancy District.) Measuring point: Floor of shelter 2.50 ft above land-surface datum.

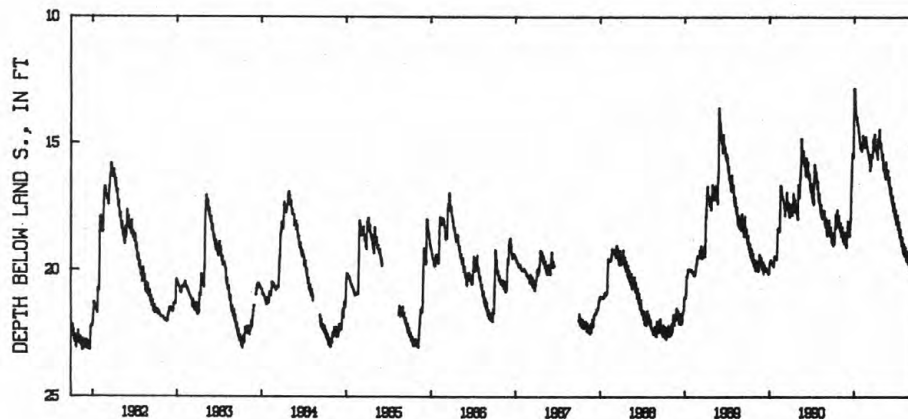
PERIOD OF RECORD.--November 1947 to current year.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.92	18.43	18.75	13.17	15.25	15.31	15.02	15.55	16.45	18.01	19.31	19.55
2	18.98	18.48	18.66	12.87	15.28	15.38	15.15	15.63	16.32	18.11	19.34	19.51
3	19.02	18.24	18.73	12.83	15.29	15.39	15.20	15.65	16.67	18.18	19.11	19.84
4	18.99	18.12	18.37	12.92	15.27	15.48	15.26	15.46	16.78	17.96	18.96	19.67
5	18.97	18.50	18.06	13.07	15.25	15.52	15.31	15.41	16.87	17.86	19.24	19.72
6	18.67	18.58	18.33	13.33	15.17	15.58	15.17	15.80	16.97	17.84	19.37	19.79
7	18.52	18.65	18.44	13.54	14.95	15.62	15.08	15.89	17.02	17.84	19.41	19.59
8	18.92	18.66	18.16	13.72	14.69	15.69	15.40	15.96	16.81	18.15	19.39	19.46
9	18.95	18.66	18.09	13.92	14.69	15.70	15.42	16.04	16.73	18.23	19.44	19.75
10	18.69	18.40	18.50	14.00	14.77	15.76	15.47	16.10	17.12	18.29	19.22	19.85
11	18.37	18.29	18.53	14.03	14.88	16.06	15.53	15.88	17.18	18.37	19.10	19.92
12	18.23	18.66	18.56	14.00	14.92	15.97	15.62	15.82	17.27	18.40	19.47	19.96
13	17.91	18.74	18.66	13.96	14.89	15.88	15.38	16.18	17.34	18.18	19.55	19.98
14	17.80	18.80	18.63	14.12	14.92	15.89	14.96	16.22	17.40	18.10	19.57	19.72
15	18.23	18.84	18.36	14.18	15.04	15.86	14.81	16.30	17.16	18.50	19.62	19.60
16	18.27	18.88	18.12	14.25	15.08	15.65	14.81	16.36	17.07	18.55	19.64	19.95
17	18.32	18.65	18.13	14.24	15.15	15.43	14.86	16.39	17.43	18.63	19.43	20.03
18	18.20	18.50	17.99	14.28	15.15	15.48	14.89	16.20	17.55	18.67	19.25	20.11
19	18.06	18.87	17.34	14.33	15.13	15.44	14.91	15.72	17.62	18.72	19.56	20.12
20	17.76	18.95	16.79	14.45	14.89	15.49	14.70	16.04	17.65	18.48	19.64	20.18
21	17.64	18.96	16.69	14.56	14.74	15.57	14.45	16.14	17.70	18.39	19.69	19.96
22	17.99	18.70	16.32	14.62	14.85	15.52	14.81	16.23	17.49	18.78	19.71	19.82
23	18.05	18.88	15.93	14.75	14.90	15.14	14.94	16.29	17.35	18.84	19.75	20.16
24	18.06	18.62	15.52	14.85	14.99	14.84	15.06	16.35	17.70	18.91	19.56	20.19
25	18.15	18.51	15.39	14.94	15.08	15.16	15.12	16.15	17.77	18.99	19.42	20.25
26	18.18	18.77	15.49	14.99	15.13	15.15	15.18	16.06	17.85	19.03	19.74	20.29
27	17.92	18.92	15.52	15.04	15.22	14.87	15.00	16.06	17.91	18.82	19.75	20.34
28	17.85	19.05	15.58	15.15	15.28	14.84	14.98	16.42	17.95	18.69	19.84	20.14
29	18.25	19.09	15.58	15.17	---	14.88	15.34	16.49	17.75	19.05	19.87	19.99
30	18.32	18.99	15.43	15.17	---	14.70	15.45	16.56	17.63	19.16	19.86	20.32
31	18.35	---	14.17	15.22	---	14.63	---	16.65	---	19.24	19.66	---
MAX	19.02	19.09	18.75	15.22	15.29	16.06	15.62	16.65	17.95	19.24	19.87	20.34
CAL YR 1990	LOW 19.84											
WTR YR 1991	LOW 20.34											



394025084162800 MT-49
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

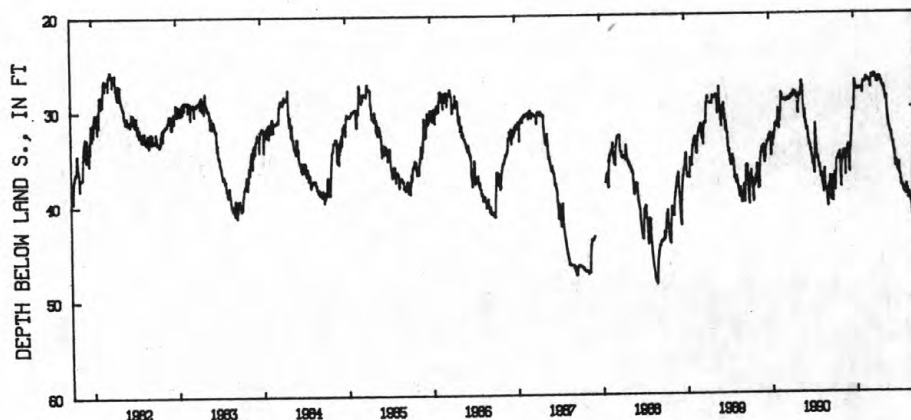
GROUND-WATER RECORDS
MONTGOMERY COUNTY--Continued

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 National Geodetic Vertical Datum of 1929, 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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37.84	38.17	34.09	27.51	28.07	27.17	26.78	27.72	32.32	36.11	38.77	40.96
2	37.48	38.32	34.03	27.23	28.06	27.30	26.90	27.76	32.50	36.61	38.91	41.31
3	37.29	37.41	33.89	27.41	28.06	27.30	27.04	27.81	32.64	36.40	38.59	41.38
4	37.19	36.49	34.65	27.58	28.03	27.31	27.12	27.83	32.69	36.47	38.89	40.80
5	37.11	36.03	35.28	27.68	28.51	27.31	27.19	27.83	32.61	36.63	38.94	39.35
6	36.97	35.84	35.96	27.86	28.06	27.36	27.21	27.85	32.63	36.69	39.22	37.73
7	36.86	35.64	36.30	28.03	27.80	27.38	27.26	27.95	32.78	36.82	38.71	36.33
8	37.93	35.36	36.53	28.05	27.52	27.41	27.40	28.03	33.10	36.92	38.86	35.35
9	38.76	35.11	36.70	28.22	27.37	27.34	27.46	28.10	33.31	36.31	38.38	34.49
10	38.14	34.94	36.79	28.23	27.44	27.39	27.46	28.19	33.40	35.84	38.15	34.45
11	36.99	34.74	35.61	28.16	27.48	27.42	27.42	28.38	33.59	36.45	38.51	34.10
12	35.93	34.56	34.61	28.14	27.48	27.97	27.42	28.53	33.60	37.14	38.97	33.84
13	35.51	34.53	34.18	28.01	27.37	27.25	27.39	28.76	33.69	37.03	39.07	33.87
14	35.42	34.51	34.02	28.11	27.35	27.09	27.16	28.94	33.62	37.14	38.62	34.56
15	35.40	34.54	33.70	28.17	27.40	27.09	26.86	28.99	33.96	37.18	39.25	35.27
16	35.40	35.42	33.51	28.16	27.40	27.06	26.92	29.10	34.15	37.72	39.66	35.34
17	35.47	35.45	32.92	28.16	27.36	26.91	27.08	29.24	34.42	38.03	39.08	35.17
18	35.47	34.72	32.76	28.10	27.36	26.69	27.09	29.24	34.44	37.73	39.32	34.37
19	35.45	35.02	32.13	28.03	27.34	26.69	27.09	28.79	34.51	38.22	39.52	34.05
20	35.14	36.59	31.81	27.96	27.11	26.78	27.08	28.94	35.01	38.11	39.52	33.60
21	35.03	37.13	31.36	28.04	26.92	26.94	26.90	29.94	34.66	38.23	38.98	33.17
22	35.01	36.64	31.26	28.05	27.08	26.96	26.88	30.33	35.71	38.23	39.06	32.87
23	35.01	35.45	30.78	28.07	27.08	26.79	27.01	30.64	36.11	38.31	39.23	32.69
24	34.98	34.94	30.27	28.14	27.12	26.61	27.20	31.04	36.25	38.41	39.50	32.47
25	34.87	34.59	30.20	28.15	27.12	26.73	27.23	31.29	35.75	38.58	39.59	32.20
26	34.82	34.53	30.34	28.14	27.05	26.73	27.29	31.51	36.15	38.64	39.65	31.97
27	34.67	34.51	30.34	28.05	27.03	26.65	27.36	31.74	35.59	38.66	39.90	32.64
28	34.71	34.52	30.25	28.09	27.14	26.71	27.42	31.99	36.06	38.76	39.92	33.48
29	35.61	34.47	30.35	28.09	---	26.59	27.54	32.05	35.84	38.93	40.07	34.19
30	36.93	34.27	30.30	28.01	---	26.68	27.64	32.10	36.00	38.98	40.15	34.30
31	37.62	---	29.10	28.10	---	26.68	---	32.17	---	38.44	40.33	---
MAX	38.76	38.32	36.79	28.23	28.51	27.97	27.64	32.17	36.25	38.98	40.33	41.38

CAL YR 1990 LOW 40.39
WTR YR 1991 LOW 41.38



— 394425084113200 MT-3
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

273

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.

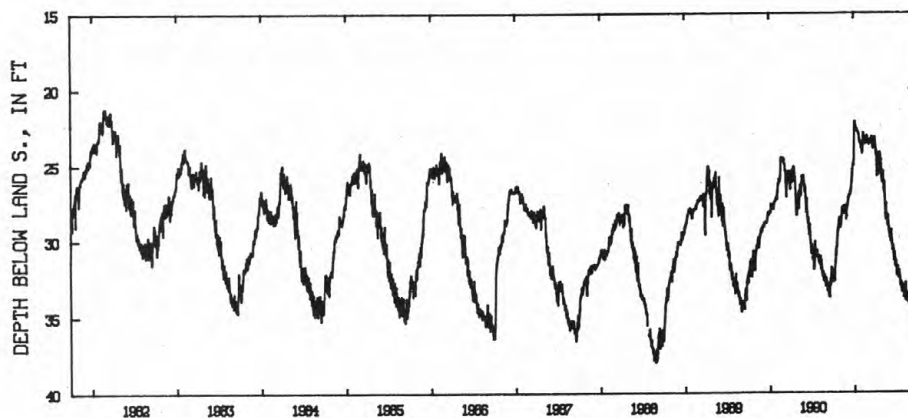
DATUM.--Elevation of land-surface datum is 740 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 13.00 ft below land-surface datum.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31.92	28.99	27.74	23.79	23.88	23.56	23.33	26.18	29.62	31.75	33.42	34.30
2	31.94	29.16	27.68	22.76	23.89	23.58	23.45	25.76	29.53	32.28	33.75	34.17
3	32.37	29.07	27.78	22.41	23.87	23.44	23.72	25.93	29.82	32.08	33.70	34.37
4	32.26	28.91	27.79	22.20	24.09	23.49	23.99	25.76	29.87	31.97	33.34	34.51
5	32.74	28.98	27.52	22.16	24.22	23.64	24.27	25.39	29.84	32.03	33.39	34.58
6	31.99	28.75	27.33	22.28	24.10	23.66	24.34	25.42	30.07	31.99	33.49	34.44
7	32.02	28.52	27.23	22.34	23.91	23.53	24.05	25.44	29.69	31.73	33.64	34.22
8	32.41	28.33	27.16	22.38	23.71	23.45	24.88	26.40	29.93	32.10	33.79	34.12
9	32.36	28.16	27.12	22.58	23.12	23.47	25.75	26.59	29.31	32.33	33.94	34.17
10	32.65	27.98	27.07	22.60	22.89	23.49	24.74	26.80	29.86	32.15	33.12	34.75
11	31.70	27.90	27.03	22.69	23.16	23.47	24.77	26.35	30.09	32.48	32.78	34.85
12	31.32	27.84	27.04	22.63	23.25	23.43	24.69	26.10	30.36	32.42	33.44	34.91
13	30.96	27.85	27.06	22.60	23.20	23.29	24.70	27.16	30.30	32.34	33.54	34.91
14	30.62	27.97	27.00	22.73	23.31	23.40	24.34	27.58	30.66	31.98	33.78	34.88
15	30.99	28.22	26.85	22.81	23.33	23.57	25.46	28.21	30.63	32.33	33.98	34.67
16	30.47	28.26	26.86	22.79	23.29	23.47	25.68	28.51	30.40	32.47	34.02	34.89
17	30.52	28.13	26.75	22.82	23.25	23.19	25.48	28.64	30.39	32.74	33.87	34.76
18	30.29	27.93	26.65	22.80	23.45	23.13	25.22	28.52	30.62	32.92	33.47	35.07
19	29.96	27.73	26.57	22.82	23.61	23.22	25.34	27.58	30.96	32.98	33.60	34.23
20	29.71	27.96	26.33	22.93	23.42	23.39	24.70	28.42	31.18	32.94	33.74	33.96
21	29.48	28.13	26.22	23.02	23.42	23.57	24.29	28.41	31.36	32.73	33.69	33.69
22	29.31	27.95	26.09	23.05	23.33	23.92	24.17	28.46	31.29	32.79	34.08	33.36
23	29.34	27.85	25.83	23.21	23.21	23.76	24.33	28.86	30.79	33.35	34.14	33.24
24	29.29	27.76	25.60	23.34	23.10	23.26	24.52	28.97	31.14	33.39	33.99	33.15
25	29.10	27.71	25.27	23.40	23.10	23.57	24.66	29.02	31.29	33.19	33.87	33.03
26	28.92	27.97	25.28	23.43	23.08	23.49	25.40	28.34	31.64	33.31	34.16	32.98
27	28.73	28.64	25.03	23.47	23.12	23.83	24.79	28.40	31.56	33.23	34.29	32.79
28	28.63	28.38	24.94	23.58	23.31	23.71	24.63	28.81	31.76	32.92	34.55	32.63
29	28.52	28.47	25.04	23.62	---	23.44	25.64	29.08	31.71	32.94	34.63	32.41
30	28.72	27.97	24.98	23.68	---	23.26	25.91	29.33	31.38	33.25	34.79	33.08
31	28.84	---	24.72	23.76	---	23.15	---	29.41	---	33.30	34.70	---
MAX	32.74	29.16	27.79	23.79	24.22	23.92	25.91	29.41	31.76	33.39	34.79	35.07

CAL YR 1990 LOW 33.73
WTR YR 1991 LOW 35.07394533084113800 MT-6
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929, from

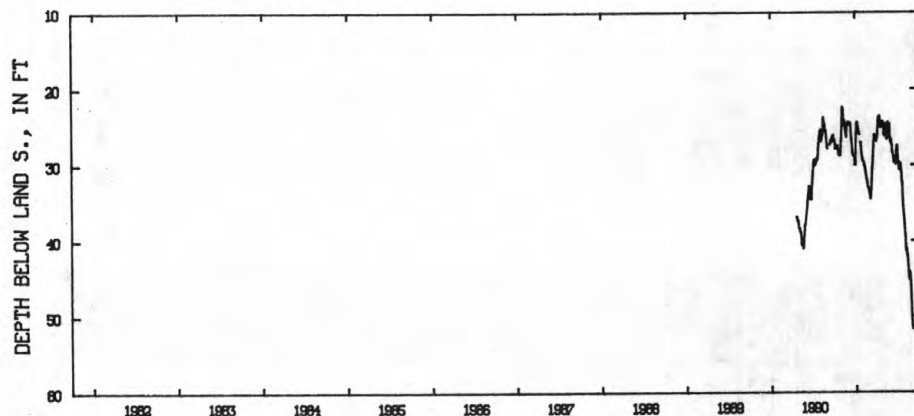
topographic map. Measuring point: Floor of instrument shelter 4.0 ft above land-surface datum.

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, 54.73 ft below land-surface datum, Sept. 30, 1991;
minimum daily low, 22.41 ft below land-surface datum, Nov. 5, 1990.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.71	25.15	24.70	28.80	29.35	33.75	26.66	25.05	27.02	27.97	39.19	51.33
2	26.70	24.47	24.68	26.83	29.47	33.86	26.15	25.85	27.00	28.73	39.40	51.24
3	27.11	23.83	24.40	25.76	29.55	33.90	26.35	26.11	26.75	29.49	40.50	51.72
4	27.51	23.05	24.42	24.83	29.64	34.17	26.37	26.15	26.63	29.57	40.92	---
5	27.76	22.41	24.49	24.49	29.78	34.31	25.91	25.87	27.13	29.83	41.00	---
6	27.80	22.47	24.62	24.49	29.90	34.41	25.54	25.59	27.28	30.12	41.35	---
7	27.80	22.72	24.65	24.38	30.01	33.85	24.83	25.12	27.46	30.35	41.38	---
8	27.80	23.22	24.66	24.60	30.07	33.52	24.19	25.10	28.15	30.63	41.20	---
9	27.73	23.44	24.42	24.82	30.15	33.25	24.11	24.53	28.37	30.63	41.70	---
10	27.59	24.04	25.00	24.87	30.39	32.65	23.72	24.54	28.34	30.30	41.91	---
11	27.52	24.14	25.53	24.93	30.69	31.79	23.83	24.95	28.66	30.00	42.03	---
12	27.47	24.07	25.93	25.27	30.87	30.99	23.86	24.97	28.86	29.83	42.60	---
13	27.42	24.40	26.43	25.47	31.09	30.61	23.56	25.23	29.01	29.75	43.15	---
14	27.41	24.84	26.73	25.63	31.28	30.31	23.55	25.95	29.40	29.79	43.63	---
15	27.76	24.95	27.10	25.70	31.61	30.00	23.85	26.35	29.65	30.13	44.19	---
16	27.93	24.72	27.50	25.78	31.83	29.62	24.33	26.58	29.60	30.68	44.63	---
17	27.97	25.10	27.85	25.92	31.92	29.10	24.46	26.55	29.20	30.81	45.12	---
18	28.32	25.47	28.32	---	31.91	28.30	24.88	26.25	28.85	31.60	45.11	---
19	28.59	25.74	28.60	---	32.10	27.55	25.08	24.95	29.02	32.17	44.18	53.79
20	28.59	26.09	28.66	---	32.45	26.80	25.10	24.40	29.36	32.25	44.13	53.93
21	28.51	26.30	28.60	---	32.75	26.31	24.95	24.32	29.61	32.80	44.35	54.08
22	28.58	26.30	28.78	27.00	32.90	26.00	24.54	24.55	29.85	33.60	44.58	54.22
23	28.67	25.45	28.83	27.36	33.01	26.00	24.81	24.65	29.90	34.80	45.03	54.24
24	28.77	24.97	28.87	27.38	33.04	26.02	24.83	24.65	29.42	35.50	45.50	54.38
25	28.78	24.68	28.81	27.99	33.11	26.38	24.95	24.59	28.80	35.85	45.96	54.69
26	28.78	24.55	29.01	28.45	33.17	26.57	24.96	24.60	28.33	36.35	46.80	54.70
27	28.69	24.36	29.33	28.81	33.26	26.55	24.75	24.55	28.07	36.74	47.53	54.70
28	28.25	24.34	29.58	28.85	33.43	26.41	24.19	24.55	27.78	37.15	48.35	54.69
29	27.65	24.46	29.73	29.22	---	26.35	24.45	25.40	27.43	37.77	49.35	54.70
30	26.90	24.58	29.96	29.38	---	26.82	24.47	26.32	27.51	38.39	50.37	54.73
31	26.00	---	29.96	29.35	---	26.85	---	26.80	---	39.00	51.10	---
MAX	28.78	26.30	29.96	29.38	33.43	34.41	26.66	26.80	29.90	39.00	51.10	54.73

CAL YR 1990 LOW 40.97
WTR YR 1991 LOW 54.73394811084095000 MT-74 CTYOFDAYTONDAYTON
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

275

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 National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 4.48 ft above land-surface datum.

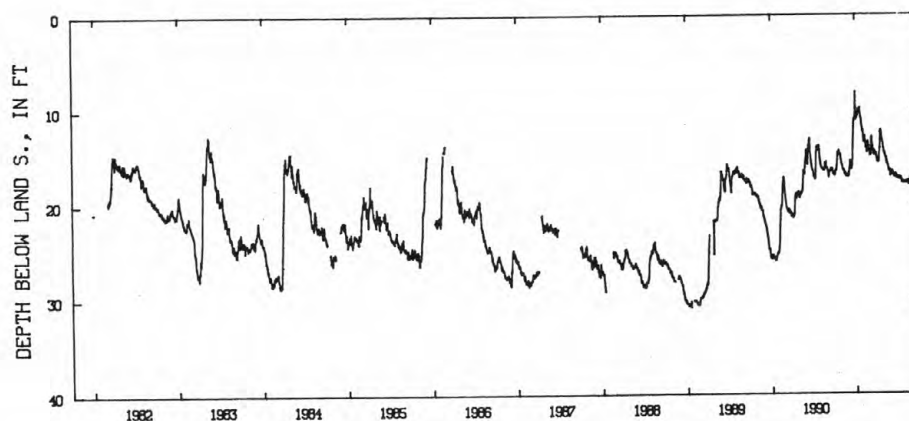
REMARKS.--Water level affected by nearby municipal wells and by stage of the Muskingum River. Prior to water year 1978, well depth reported as 132 ft.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.72	15.66	17.15	8.22	12.34	14.41	14.87	14.17	17.08	17.35	17.80	---
2	16.87	15.75	17.09	9.75	12.26	14.51	15.10	14.15	17.07	17.39	17.88	---
3	17.00	15.84	17.01	10.73	12.63	14.56	15.30	14.49	16.85	17.31	17.90	---
4	17.00	15.86	17.05	11.18	13.10	14.87	15.44	14.57	16.86	17.15	17.82	---
5	17.03	15.97	16.69	10.88	13.37	14.92	15.51	14.59	16.65	17.15	17.72	---
6	16.79	16.26	16.25	11.01	13.52	14.78	15.56	14.65	16.50	17.29	17.73	---
7	16.53	16.36	16.01	10.47	13.52	14.85	15.46	14.75	16.61	17.22	17.74	---
8	16.42	16.37	15.68	10.40	13.53	14.77	15.54	14.87	16.61	17.22	17.78	---
9	16.47	16.35	15.43	10.64	13.02	13.74	15.59	14.94	16.54	17.36	17.82	---
10	16.54	16.43	15.53	10.80	12.91	13.25	15.59	15.06	16.61	17.34	17.74	---
11	16.46	16.54	15.76	10.60	13.30	12.95	15.44	15.06	16.80	17.40	17.56	---
12	16.14	16.49	16.05	10.69	13.43	13.07	15.40	15.06	16.80	17.46	17.60	---
13	16.03	16.52	16.23	10.32	13.62	13.08	15.07	15.23	16.88	17.46	17.67	---
14	15.39	16.61	16.39	10.01	13.92	13.54	14.67	15.33	17.01	17.22	17.80	---
15	14.97	16.78	16.33	10.08	14.11	13.88	14.41	15.51	17.09	17.29	17.88	---
16	14.86	16.87	16.23	10.33	14.08	14.02	14.08	15.65	17.09	17.35	18.00	---
17	14.66	16.83	16.11	10.37	14.10	13.91	13.31	15.73	17.11	17.41	17.98	---
18	14.70	16.77	15.90	10.15	14.31	14.28	12.41	15.74	17.14	17.46	17.98	---
19	14.67	16.94	15.91	9.96	14.60	14.51	12.35	15.79	17.09	17.62	17.59	---
20	14.49	17.02	15.28	9.87	14.52	14.73	12.22	15.89	17.23	17.72	17.59	---
21	14.39	17.09	14.00	10.20	14.23	14.77	12.24	15.91	17.25	17.72	17.58	---
22	14.66	17.14	13.36	10.49	14.01	14.85	12.54	16.11	17.25	17.71	17.58	---
23	14.67	16.99	12.69	10.79	13.70	14.68	12.71	16.28	17.08	17.78	17.58	---
24	14.73	16.99	11.88	10.88	13.41	14.41	13.02	16.34	16.86	17.85	17.54	---
25	14.73	16.90	11.57	11.07	13.61	14.52	13.28	16.41	17.12	17.86	17.54	---
26	14.80	17.02	11.22	11.09	13.93	14.71	13.28	16.55	17.20	17.82	17.26	---
27	14.80	17.00	11.10	11.29	14.06	14.65	13.29	16.56	17.11	17.82	17.12	---
28	14.82	17.04	11.12	11.83	14.26	14.77	13.51	16.41	17.27	17.72	---	---
29	15.01	17.16	10.91	11.96	---	14.78	13.74	16.49	17.32	17.69	---	---
30	15.29	17.09	10.95	11.97	---	14.76	14.10	16.72	17.30	17.69	---	---
31	15.46	---	9.86	12.24	---	14.64	---	16.97	---	17.70	---	---
MAX	17.03	17.16	17.15	12.24	14.60	14.92	15.59	16.97	17.32	17.86	18.00	---

CAL YR 1990 LOW 26.01
WTR YR 1991 LOW 18.00395804081593200 MU-1A ZANESV WTR 1 MI N OF ZANESVILLE OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter, 3.00 ft above land-surface datum.

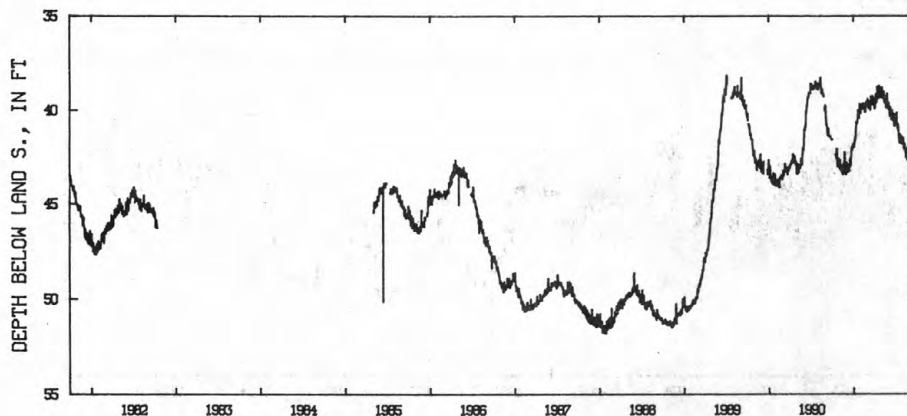
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41.58	43.08	43.36	41.81	40.19	39.86	39.52	39.22	39.95	40.42	41.76	42.23
2	---	43.12	43.00	41.80	40.18	39.75	39.83	39.33	39.60	40.64	41.82	42.01
3	---	43.12	42.80	41.95	39.79	39.39	39.94	39.35	39.59	40.73	41.83	42.28
4	---	42.66	43.20	41.98	39.70	39.46	39.90	39.22	39.79	40.74	41.47	42.50
5	---	42.67	43.25	41.98	39.85	39.66	39.82	38.78	40.00	40.38	41.76	42.62
6	---	43.08	43.25	41.71	39.87	39.66	39.68	38.96	40.15	40.23	41.95	42.75
7	---	43.13	43.31	41.54	39.92	39.78	39.31	39.25	40.31	40.14	42.01	42.78
8	---	43.22	43.31	41.58	39.93	39.91	39.14	39.31	40.31	40.39	42.05	42.78
9	---	43.22	42.93	41.59	39.96	39.91	39.27	39.31	39.85	40.69	42.09	42.85
10	---	43.13	42.90	41.59	39.64	39.56	39.48	39.38	39.90	40.84	42.09	42.88
11	---	42.95	43.03	41.44	39.73	39.58	39.59	39.38	40.18	40.94	41.79	42.89
12	---	43.08	43.10	41.14	39.88	39.67	39.59	39.03	40.30	41.00	42.05	42.93
13	---	43.28	43.24	40.92	39.87	39.67	39.22	39.00	40.45	41.01	42.15	42.90
14	---	43.31	---	40.61	39.83	39.81	38.75	39.27	40.48	40.77	42.30	42.84
15	---	43.34	43.25	40.70	39.91	39.98	38.81	39.50	40.47	41.09	42.50	42.80
16	---	43.34	42.78	40.65	39.90	40.00	39.20	39.59	40.05	41.34	42.54	42.97
17	42.37	43.44	42.59	40.69	39.66	39.60	39.37	39.63	40.00	41.47	42.50	43.03
18	42.45	43.12	42.65	40.69	39.78	39.26	39.39	39.63	40.23	41.61	42.10	43.06
19	42.58	42.86	42.98	40.65	39.96	39.55	39.38	39.29	40.32	41.74	42.04	43.20
20	42.58	43.22	43.00	40.07	40.10	39.70	39.26	39.25	40.41	41.65	42.35	43.26
21	42.27	43.29	42.93	39.99	40.10	39.71	39.03	39.59	40.54	41.30	42.50	43.26
22	42.06	43.29	42.83	40.16	40.09	39.71	38.70	39.86	40.59	41.30	42.63	42.94
23	42.32	42.55	42.45	40.16	40.09	39.63	39.01	39.86	40.27	41.51	42.68	42.86
24	43.05	42.25	42.10	40.34	39.73	39.33	39.23	39.85	40.18	41.52	42.63	43.01
25	42.68	42.40	42.08	40.44	39.55	39.26	39.33	39.73	40.51	41.61	42.25	43.08
26	42.81	42.76	41.94	40.44	39.69	39.40	39.30	39.39	40.74	41.75	42.15	43.26
27	42.83	43.16	42.02	39.97	39.74	39.46	39.27	39.11	40.83	41.80	42.45	43.36
28	42.65	43.35	42.12	39.65	39.78	39.52	38.85	39.50	40.86	41.40	42.51	43.36
29	42.58	43.43	42.12	39.94	---	39.56	38.78	39.72	40.82	41.39	42.55	43.34
30	42.77	43.43	41.97	39.94	---	39.75	39.22	39.80	40.50	41.65	42.57	43.35
31	42.98	---	41.81	40.15	---	39.62	---	39.95	---	41.74	42.57	---
MAX	43.05	43.44	43.36	41.98	40.19	40.00	39.94	39.95	40.86	41.80	42.68	43.36
CAL YR 1990	LOW 44.10											
WTR YR 1991	LOW 43.44											



— 393327082571600 PK-7 ST OF OH DUPONT RD S OF CIRCLEVILLE OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

277

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.

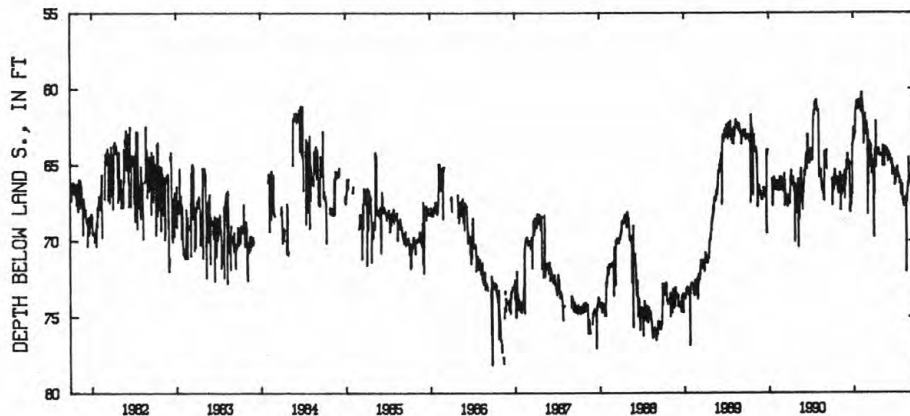
DATUM.--Elevation of land-surface datum is 707 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.50 ft above land-surface datum.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66.00	65.90	66.05	63.10	60.85	62.90	66.90	64.30	64.75	65.70	66.30	66.25
2	65.90	66.15	65.95	62.55	61.20	62.20	66.95	64.30	64.65	65.70	67.35	66.20
3	67.65	66.10	64.75	63.30	61.35	62.90	66.85	64.45	64.15	66.20	67.35	66.20
4	67.45	65.85	65.30	63.40	61.50	68.25	64.75	64.40	64.40	65.55	67.15	65.80
5	66.00	65.50	65.35	63.30	61.55	62.90	64.00	64.35	64.40	65.80	67.55	65.70
6	66.10	66.00	65.10	63.15	60.40	62.75	64.20	64.45	64.30	65.80	67.70	65.80
7	66.55	66.05	65.05	63.10	61.25	66.35	64.40	64.50	64.45	65.80	67.70	65.70
8	66.30	68.00	64.30	63.10	60.25	64.55	64.05	65.10	64.40	65.20	67.75	65.85
9	66.05	66.10	65.00	62.90	60.70	64.60	62.15	64.10	64.45	65.50	67.35	65.75
10	66.70	65.70	64.90	63.00	60.90	65.20	62.35	63.75	64.65	65.55	67.50	65.90
11	66.45	65.80	65.00	61.95	60.95	63.60	65.20	64.10	64.60	65.15	67.50	65.85
12	65.85	66.75	64.90	61.35	61.90	63.45	64.35	64.00	64.70	65.50	67.30	65.65
13	65.70	67.00	64.75	61.40	61.20	63.50	64.25	64.00	64.95	65.55	67.20	65.75
14	65.35	66.90	65.00	61.20	62.25	63.80	64.25	64.80	64.80	65.65	67.20	66.30
15	65.60	66.60	64.85	61.30	62.80	63.90	64.15	65.00	64.65	65.80	67.65	65.90
16	66.35	66.70	64.90	60.85	63.65	63.80	64.10	65.10	64.90	65.65	67.75	65.95
17	65.90	66.70	68.00	61.20	63.00	63.65	64.15	65.05	64.65	65.80	72.05	65.95
18	65.90	66.55	67.80	61.25	63.00	63.75	64.30	64.20	65.70	65.85	67.35	66.45
19	66.10	66.80	68.10	61.05	63.00	63.85	64.20	63.85	65.20	65.95	67.00	66.15
20	66.20	66.75	67.55	60.80	62.85	63.75	64.35	63.90	65.05	66.25	67.00	67.10
21	65.90	66.70	67.25	61.20	62.35	65.60	63.95	63.85	65.20	66.20	67.20	67.00
22	65.95	65.80	67.50	61.35	61.65	64.40	63.95	64.20	65.40	66.20	67.45	66.60
23	65.80	65.70	67.70	61.00	62.35	65.45	64.05	64.45	65.25	66.05	66.75	67.05
24	66.05	65.60	67.55	61.25	62.20	64.95	64.20	64.20	65.30	66.15	66.50	---
25	66.50	65.40	67.20	61.30	62.40	65.15	64.40	64.15	65.40	66.90	66.20	---
26	66.65	67.25	66.85	60.95	62.35	65.15	64.30	64.20	65.55	66.90	66.40	---
27	66.65	66.25	66.90	60.75	63.00	64.70	64.45	63.95	65.55	67.05	66.40	---
28	66.55	66.45	66.95	60.80	62.70	65.45	64.35	64.10	65.40	67.00	64.55	---
29	66.90	66.40	63.65	60.80	---	66.50	64.40	64.20	66.35	67.00	64.55	---
30	66.35	66.00	63.70	61.10	---	69.75	64.40	64.60	65.55	66.80	66.25	67.10
31	66.30	---	63.65	60.90	---	66.90	---	64.80	---	66.80	66.15	---
MAX	67.65	68.00	68.10	63.40	63.65	69.75	66.95	65.10	66.35	67.05	72.05	67.10
CAL YR 1990	LOW 70.40											
WTR YR 1991	LOW 72.05											



393402082572500 PK-4
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS
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 National Geodetic Vertical Datum of 1929, 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.

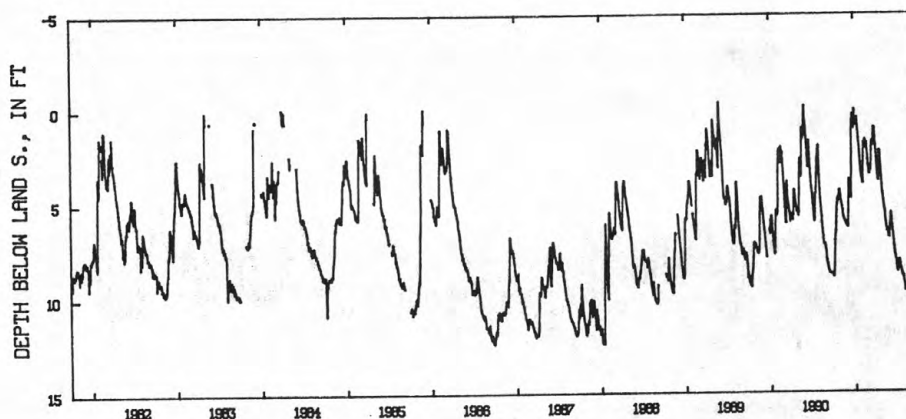
PERIOD OF RECORD.--April 1980 to current year.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.89	4.65	6.26	.04	3.66	3.01	1.73	4.49	6.30	8.50	9.23	10.04
2	8.90	4.75	6.29	.22	3.72	3.14	1.95	4.61	6.21	8.54	9.30	9.89
3	8.91	4.86	6.31	.55	3.79	3.27	2.18	4.73	6.20	8.61	9.38	9.86
4	8.91	4.96	6.19	.78	3.87	3.38	2.41	4.83	6.00	8.64	9.48	9.88
5	8.73	5.03	5.48	.88	3.94	3.46	2.62	4.92	5.66	8.64	9.57	9.88
6	8.35	5.13	4.61	.90	3.98	3.49	2.83	5.07	5.56	8.45	9.65	9.86
7	7.75	5.21	4.00	.86	3.98	3.48	3.03	5.20	5.62	8.22	9.66	9.85
8	7.25	5.29	3.76	.75	2.85	3.21	3.23	5.29	5.69	8.07	9.67	9.92
9	6.97	5.36	3.85	.72	2.05	3.07	3.40	5.37	5.84	8.06	9.68	10.00
10	6.67	5.41	3.98	.75	1.79	3.08	3.54	5.44	6.00	8.06	9.63	10.05
11	6.57	5.50	4.08	.75	1.83	3.17	3.67	5.53	6.14	8.05	9.54	10.05
12	6.48	5.62	4.19	.47	1.94	3.26	3.78	5.65	6.25	8.07	9.53	9.80
13	6.10	5.70	4.34	.46	2.05	3.30	3.83	5.80	6.39	8.10	9.58	9.37
14	5.82	5.77	4.48	.61	2.08	3.14	3.83	5.96	6.54	8.20	9.59	8.98
15	5.48	5.85	4.61	.79	1.80	2.24	3.57	6.07	6.69	8.30	9.55	8.67
16	5.25	5.90	4.69	.98	1.65	1.85	2.80	6.16	6.85	8.42	9.46	8.59
17	5.11	5.92	4.77	1.17	1.87	1.83	2.30	6.29	7.04	8.49	9.40	8.67
18	5.00	5.94	4.78	1.38	2.08	1.84	2.24	6.34	7.19	8.51	9.40	8.73
19	4.85	5.95	3.10	1.58	2.13	1.71	2.31	6.39	7.34	8.58	9.58	8.81
20	4.75	5.98	1.00	1.80	2.12	1.74	2.40	6.44	7.50	8.60	9.78	8.86
21	4.85	6.00	.62	2.02	1.95	1.86	2.54	6.52	7.64	8.68	9.96	8.88
22	4.92	6.02	.63	2.23	1.80	1.97	2.69	6.53	7.75	8.71	10.06	8.88
23	4.95	6.06	.55	2.45	1.93	1.95	2.81	6.52	7.81	8.80	10.07	8.92
24	4.88	6.09	.31	2.64	2.09	1.00	3.01	6.55	7.87	8.88	10.07	8.98
25	4.68	6.12	.45	2.84	2.26	1.04	3.20	6.62	7.90	8.90	10.05	9.02
26	4.50	6.13	.70	3.00	2.45	1.13	3.35	6.74	7.99	8.88	10.17	9.09
27	4.39	6.17	.89	3.17	2.61	1.09	3.58	6.79	8.04	8.85	10.30	9.15
28	4.35	6.16	1.00	3.32	2.78	1.02	3.87	6.83	8.11	8.88	10.38	9.20
29	4.40	6.21	1.06	3.46	---	1.12	4.09	6.86	8.18	8.97	10.42	9.26
30	4.47	6.23	1.02	3.56	---	1.31	4.35	6.86	8.29	9.05	10.39	9.40
31	4.54	---	.70	3.61	---	1.51	---	6.50	---	9.16	10.25	---
MAX	8.91	6.23	6.31	3.61	3.98	3.49	4.35	6.86	8.29	9.16	10.42	10.05

CAL YR 1990 LOW 8.91
WTR YR 1991 LOW 10.42



393438083072200 PK-8 AT WELL FIELD NR WILLIAMSPORT OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

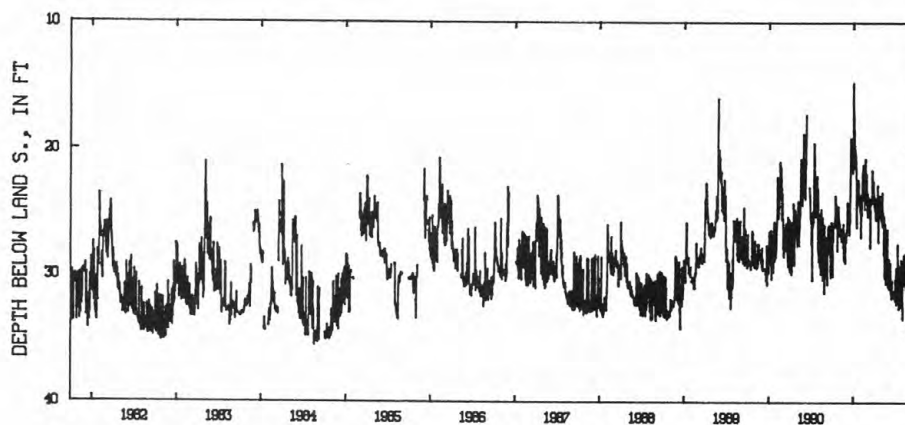
GROUND-WATER RECORDS
PICKAWAY COUNTY--Continued

279

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 National Geodetic Vertical Datum of 1929, 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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.15	26.90	27.35	16.30	24.65	24.85	24.10	25.65	29.30	32.05	32.60	32.15
2	26.85	26.00	26.80	14.70	27.00	25.00	24.50	24.90	30.70	30.40	33.45	33.65
3	28.65	25.90	26.80	17.60	25.25	25.35	24.85	25.75	31.05	29.95	30.20	33.75
4	30.05	26.70	26.40	19.10	24.00	23.50	24.80	24.80	28.70	29.40	29.30	30.80
5	28.85	26.70	25.00	18.40	24.50	24.10	23.80	26.15	30.05	32.30	29.20	31.75
6	27.00	26.60	24.20	19.60	25.20	24.90	25.40	23.40	30.80	32.05	28.40	33.50
7	27.30	26.35	25.80	19.70	23.70	25.05	24.20	26.00	29.00	32.05	28.95	32.50
8	26.05	26.30	25.60	21.45	22.85	24.70	25.60	25.05	30.65	31.30	30.70	33.15
9	26.20	27.10	24.50	20.00	21.70	23.80	25.60	25.00	30.20	31.85	30.45	31.30
10	26.15	27.30	26.30	21.50	23.50	24.30	24.05	25.95	29.00	31.00	28.30	33.45
11	26.05	26.60	24.70	20.30	21.40	24.70	24.30	26.05	31.30	27.50	29.25	28.90
12	25.70	26.30	25.30	21.05	21.20	25.10	25.35	28.45	31.40	31.35	28.90	33.25
13	26.05	26.50	26.35	21.70	23.80	24.90	25.60	25.30	31.35	30.55	30.50	32.90
14	25.85	26.70	26.30	25.60	23.00	27.80	24.60	29.80	31.80	29.20	31.10	29.30
15	23.65	26.35	26.80	26.20	24.00	27.55	23.65	30.10	30.65	30.75	28.90	32.30
16	23.90	26.35	24.90	22.70	---	25.00	22.85	30.20	30.40	32.65	30.00	31.40
17	24.85	26.40	25.80	22.70	---	23.90	26.00	30.20	31.20	32.60	29.05	32.25
18	26.20	27.75	23.30	22.85	24.75	24.00	27.25	25.90	31.45	32.05	28.90	32.70
19	24.35	25.90	21.90	22.85	22.75	24.25	27.35	27.00	31.45	32.10	30.40	31.65
20	25.45	28.20	20.50	23.20	22.70	24.15	24.25	30.60	31.30	31.90	29.35	31.70
21	25.45	28.80	19.10	22.40	23.20	24.30	24.00	30.65	31.60	32.35	28.20	31.60
22	25.45	27.75	21.15	22.80	20.70	21.65	24.10	30.25	31.75	32.20	33.10	32.15
23	26.25	27.40	---	22.60	23.85	21.65	24.70	30.60	31.20	32.45	33.25	33.85
24	28.05	26.65	---	24.20	23.20	23.80	23.65	30.10	31.50	30.10	30.20	32.50
25	25.55	27.65	---	23.60	23.00	23.10	24.80	27.00	31.55	28.75	32.25	29.35
26	26.40	29.00	---	24.40	24.30	22.60	25.00	29.10	31.30	31.75	34.40	29.65
27	26.25	28.05	---	24.40	21.90	23.60	24.00	27.30	31.75	31.80	33.00	29.65
28	26.55	27.25	21.75	23.60	24.00	22.50	24.40	26.35	31.70	32.15	32.05	28.85
29	24.50	26.80	19.70	24.95	---	23.90	25.35	30.50	31.80	29.15	33.50	32.00
30	25.65	26.65	21.85	23.75	---	23.40	24.20	30.90	30.30	31.20	33.40	34.30
31	25.70	---	20.20	25.00	---	24.50	---	30.55	---	32.40	29.80	---
MAX	30.05	29.00	27.35	26.20	27.00	27.80	27.35	30.90	31.80	32.65	34.40	34.30
CAL YR 1990	LOW 31.35											
WTR YR 1991	LOW 34.40											



393638082572300 PK-6
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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.

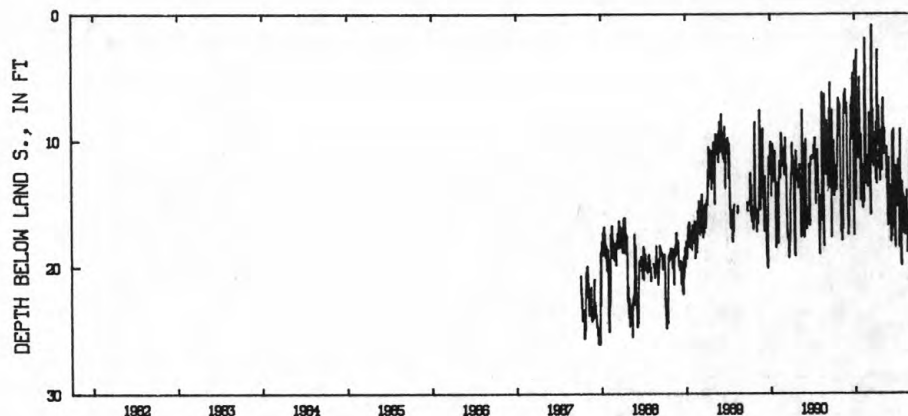
DATUM.--Elevation of land-surface datum is 770 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 4.00 ft above land-surface datum.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.65	17.00	16.00	3.65	14.20	11.75	12.65	7.40	13.55	13.65	16.10	15.30
2	10.05	17.20	16.20	4.95	11.90	11.95	13.10	10.20	14.00	12.30	14.50	17.30
3	10.00	15.20	17.40	4.20	13.70	10.45	8.55	10.15	15.60	12.50	17.45	15.80
4	11.00	15.00	17.40	3.70	14.90	7.80	10.90	6.65	16.50	12.30	16.00	10.85
5	11.70	14.25	16.70	10.70	15.30	10.25	12.60	8.35	17.00	12.80	15.30	14.85
6	12.05	17.48	16.80	12.50	15.30	11.35	13.40	9.80	18.00	15.25	15.40	13.50
7	14.40	17.90	16.10	14.70	14.25	11.85	8.55	11.05	16.20	12.05	16.60	11.30
8	13.95	15.80	14.00	7.80	14.25	13.25	5.45	10.00	17.10	11.50	17.00	9.65
9	13.80	16.75	14.40	4.00	14.85	13.95	2.80	9.75	17.20	11.50	17.45	10.20
10	13.20	16.60	14.80	2.85	14.70	15.85	9.50	9.00	17.55	18.00	17.45	8.10
11	12.00	17.00	15.20	8.15	14.85	15.80	10.10	10.15	12.75	18.45	17.15	11.90
12	13.95	15.20	13.00	9.10	6.75	10.85	9.65	11.00	9.30	15.75	16.05	15.70
13	13.70	12.80	10.30	10.00	5.00	10.05	9.75	10.80	11.80	16.65	13.95	14.35
14	12.65	10.00	9.50	11.00	3.00	4.40	8.80	10.85	15.10	17.60	16.40	14.80
15	13.65	7.55	8.00	11.00	1.90	2.65	7.30	10.95	15.60	18.15	18.85	15.05
16	13.90	7.90	7.20	9.95	4.85	1.50	9.15	11.05	10.80	9.10	18.50	14.20
17	12.90	7.15	9.35	11.40	4.05	.90	11.85	11.05	9.10	13.20	16.50	14.35
18	10.75	6.30	9.90	11.40	7.90	2.40	12.30	12.90	9.55	17.00	16.75	12.30
19	9.60	6.95	9.10	11.20	11.90	9.95	10.70	13.00	14.50	19.10	17.80	13.45
20	8.90	6.25	6.55	9.00	12.65	8.05	11.80	10.50	16.15	19.75	17.50	13.65
21	7.55	7.10	7.35	6.00	13.10	7.55	13.15	13.65	16.80	19.85	16.00	10.70
22	6.90	5.95	7.55	5.00	13.45	12.05	12.40	15.90	17.95	13.90	16.30	11.75
23	6.65	7.40	6.35	6.40	12.65	9.80	10.05	16.45	18.00	16.35	16.00	9.90
24	6.90	7.40	5.00	10.30	13.50	11.80	9.30	16.70	18.30	13.25	15.60	10.25
25	7.65	7.80	4.65	12.10	11.20	10.80	9.20	15.90	18.40	14.10	15.75	12.00
26	8.60	7.90	5.80	14.60	13.20	9.35	10.05	14.55	18.35	16.30	13.40	13.15
27	9.40	7.40	13.25	14.75	13.64	11.05	9.10	11.85	12.00	16.55	11.05	11.30
28	7.80	7.05	16.40	13.50	13.60	11.10	9.35	11.35	12.10	14.20	12.85	10.90
29	7.05	12.00	17.45	9.50	---	11.60	9.35	14.85	12.60	17.00	12.60	11.30
30	7.25	13.15	8.40	10.60	---	9.50	12.35	15.25	12.05	17.35	12.50	11.60
31	12.50	---	5.55	13.70	---	11.10	---	14.20	---	16.10	10.90	---
MAX	14.40	17.90	17.45	14.75	15.30	15.85	13.40	16.70	18.40	19.85	18.85	17.30

CAL YR 1990 LOW 19.25
WTR YR 1991 LOW 19.85394742083094800 PK-9 ST OF OH AT PICKAWAY COR INST NR ORIENT OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT), DEPTH TO WATER BL. LSD

GROUND-WATER RECORDS

281

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.

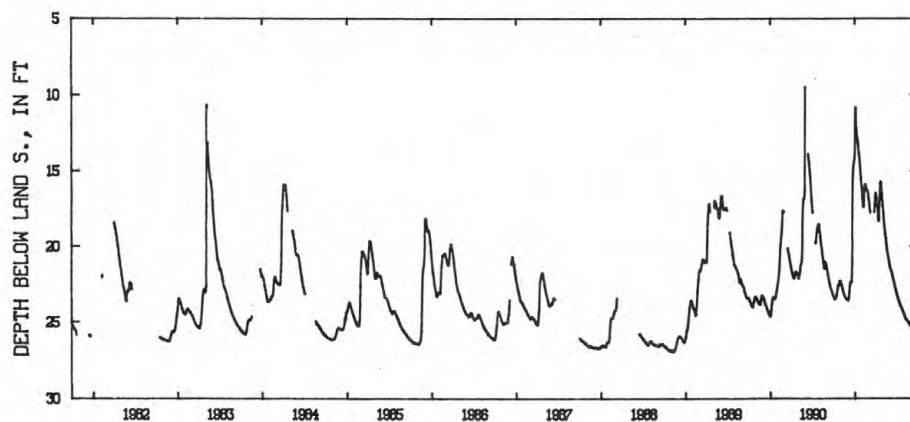
INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 550 ft above National Geodetic Vertical Datum of 1929, 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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.38	22.37	23.58	13.65	16.64	16.87	16.55	17.35	21.41	23.21	24.54	25.31
2	23.42	22.42	23.59	12.02	16.80	17.04	16.67	17.57	21.44	23.27	24.58	---
3	23.45	22.47	23.60	11.32	16.97	17.20	16.79	17.78	21.49	23.32	24.62	---
4	23.48	22.51	23.47	10.83	17.13	17.37	16.93	17.99	21.54	23.38	24.65	---
5	23.51	22.57	23.47	11.24	17.30	17.54	17.08	18.16	21.60	23.44	24.69	---
6	23.52	22.67	23.42	11.81	17.37	17.63	17.25	18.36	21.64	23.48	24.73	---
7	23.52	22.74	23.29	12.15	17.39	17.76	17.42	18.54	21.69	23.53	24.77	---
8	23.48	22.80	23.12	12.36	17.39	---	17.59	18.71	21.73	23.58	24.80	---
9	23.44	22.85	22.92	12.59	17.00	---	17.75	18.86	21.79	23.62	24.82	---
10	23.40	22.93	22.73	12.73	16.44	---	18.02	19.01	21.84	23.67	24.82	---
11	23.38	22.99	22.58	12.73	16.16	---	18.19	19.15	21.91	23.72	24.85	---
12	23.37	23.06	22.47	12.84	16.04	---	18.31	19.28	21.98	23.76	24.87	---
13	23.30	23.12	22.39	12.98	15.96	---	18.33	19.41	22.05	23.80	24.89	---
14	23.24	23.17	22.37	13.10	15.88	---	18.30	19.55	22.12	23.85	24.91	---
15	23.15	23.20	22.36	13.21	15.98	---	18.18	19.69	22.18	23.89	24.94	---
16	23.06	23.23	22.36	13.36	16.02	---	17.42	19.82	22.25	23.93	24.96	---
17	22.93	23.28	22.37	13.57	16.05	---	16.85	19.95	22.32	23.96	24.98	---
18	22.82	23.31	22.33	13.75	16.11	---	16.37	20.09	22.39	23.99	25.01	---
19	22.75	23.34	22.00	13.87	16.22	---	16.02	20.22	22.45	24.04	25.03	---
20	22.70	23.39	21.14	14.03	16.32	---	15.81	20.33	22.51	24.08	25.05	---
21	22.65	23.42	17.81	14.26	16.33	---	15.74	20.45	22.57	24.11	25.07	---
22	22.60	23.45	16.44	14.46	16.31	---	15.76	20.54	22.63	24.16	25.09	---
23	22.55	23.46	15.78	14.64	16.28	---	15.88	20.65	22.70	24.19	25.12	---
24	22.51	23.49	15.34	14.88	16.27	17.73	16.06	20.74	22.77	24.23	25.14	---
25	22.48	23.51	15.00	15.11	16.35	17.48	16.22	20.84	22.83	24.26	25.16	---
26	22.42	23.52	14.68	15.31	16.45	17.26	16.38	20.94	22.90	24.30	25.18	---
27	22.38	23.52	14.53	15.52	16.59	17.00	16.56	21.05	22.96	24.35	25.20	---
28	22.32	23.53	14.44	15.77	16.73	16.78	16.75	21.14	23.03	24.39	25.22	---
29	22.30	23.55	14.38	15.99	---	16.62	16.94	21.23	23.09	24.43	25.24	---
30	22.30	23.56	14.33	16.19	---	16.49	17.15	21.30	23.15	24.47	25.26	---
31	22.32	---	14.05	16.44	---	16.48	---	21.36	---	24.50	25.29	---
MAX	23.52	23.56	23.60	16.44	17.39	17.76	18.33	21.36	23.15	24.50	25.29	25.31
CAL YR 1990	LOW 24.58											
WTR YR 1991	LOW 25.31											



390359083015100 PI-2
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 0.60 ft above land-surface datum.

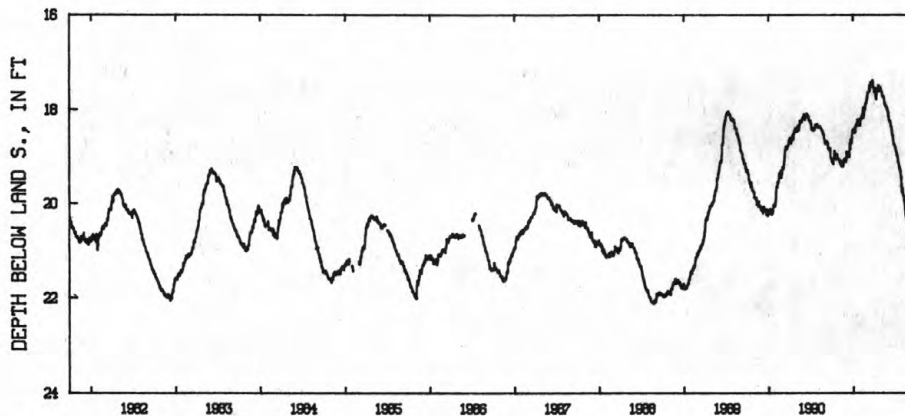
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORDED.--May 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 23.08 ft below land-surface datum, Feb. 22, 1954; minimum daily low, 14.59 ft below land-surface datum, June 24, 1947.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.06	19.08	19.06	18.45	18.33	17.83	17.53	17.53	18.06	18.77	19.67	20.65
2	19.11	19.10	19.11	18.42	18.28	17.75	17.60	17.55	18.06	18.80	19.67	20.65
3	19.12	19.10	19.06	18.46	18.25	17.79	17.64	17.61	18.08	18.82	19.70	20.75
4	19.09	19.09	18.90	18.47	18.23	17.72	17.60	17.60	18.15	18.83	19.74	20.78
5	19.07	19.07	18.95	18.46	18.20	17.75	17.54	17.60	18.18	18.87	19.79	20.83
6	19.11	19.14	18.92	18.46	18.20	17.65	17.55	17.63	18.21	18.88	19.83	20.88
7	19.12	19.14	18.92	18.49	18.16	17.64	17.55	17.68	18.24	18.90	19.84	20.84
8	19.15	19.17	18.95	18.48	18.16	17.65	17.55	17.72	18.24	18.92	19.84	20.77
9	19.15	19.15	18.95	18.47	18.12	17.64	17.55	17.70	18.26	18.95	19.92	20.80
10	19.00	19.09	18.97	18.49	18.11	17.62	17.70	17.73	18.26	18.95	19.93	20.82
11	19.02	19.14	18.96	18.44	18.15	17.62	17.77	17.73	18.26	18.99	19.95	20.85
12	19.01	19.16	18.90	18.35	18.15	17.58	17.78	17.70	18.30	18.98	20.04	20.89
13	18.87	19.21	19.01	18.38	18.06	17.49	17.70	17.71	18.36	19.02	20.13	20.88
14	18.89	19.21	19.02	18.35	17.96	17.54	17.68	17.73	18.36	19.08	20.19	20.88
15	18.98	19.19	18.95	18.37	18.12	17.59	17.64	17.76	18.35	19.10	20.24	20.88
16	19.01	19.16	18.98	18.32	18.18	17.61	17.62	17.77	18.37	19.13	20.30	20.96
17	18.98	19.19	18.98	18.30	18.12	17.55	17.62	17.82	18.43	19.13	20.28	21.07
18	18.95	19.20	18.81	18.30	18.12	17.42	17.62	17.86	18.45	19.16	20.22	21.14
19	19.05	19.17	18.71	18.30	18.05	17.45	17.59	17.87	18.50	19.19	20.32	21.21
20	19.06	19.20	18.84	18.21	17.98	17.50	17.54	17.90	18.53	19.24	20.37	21.27
21	19.04	19.20	18.80	18.31	17.96	17.46	17.53	17.91	18.54	19.27	20.41	21.27
22	19.03	19.13	18.69	18.32	17.96	17.47	17.48	17.92	18.57	19.28	20.43	21.17
23	19.00	19.08	18.63	18.27	18.00	17.42	17.51	17.94	18.62	19.29	20.50	21.30
24	18.94	19.05	18.67	18.33	17.92	17.46	17.60	17.93	18.65	19.28	20.50	21.30
25	18.96	19.09	18.67	18.34	17.89	17.50	17.61	17.93	18.67	19.35	20.46	21.20
26	18.99	19.10	18.72	18.32	17.87	17.50	17.58	17.94	18.70	19.40	20.56	21.28
27	19.01	19.04	18.71	18.24	17.85	17.38	17.53	17.96	18.73	19.43	20.59	21.41
28	19.04	19.09	18.62	18.26	17.87	17.42	17.53	18.00	18.75	19.44	20.66	21.41
29	19.07	19.10	18.59	18.27	---	17.43	17.52	17.96	18.74	19.62	20.69	21.33
30	19.05	19.09	18.49	18.20	---	17.55	17.53	18.00	18.74	19.76	20.71	21.34
31	19.04	---	18.45	18.32	---	17.55	---	18.03	---	19.75	20.68	---
MAX	19.15	19.21	19.11	18.49	18.33	17.83	17.78	18.03	18.75	19.76	20.71	21.41
CAL YR 1990	LOW 20.24											
WTR YR 1991	LOW 21.41											



411401081025000 PO-1
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

283

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.

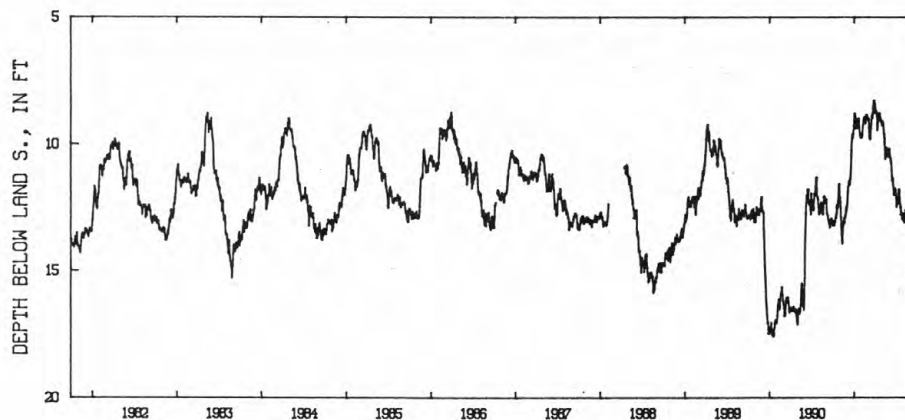
DATUM.--Elevation of land-surface datum is 900 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 1.50 ft above land-surface datum.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.22	12.12	12.51	9.00	9.60	8.97	8.42	9.26	10.23	11.98	12.79	13.46
2	13.18	12.09	12.38	8.82	9.65	9.04	8.77	9.10	10.24	12.21	12.86	13.39
3	13.18	12.30	12.27	8.78	9.64	8.98	8.62	9.17	10.17	12.49	12.80	13.52
4	13.10	12.49	12.12	8.85	9.74	8.99	8.70	9.11	10.31	12.44	12.91	13.27
5	13.13	12.87	11.98	8.88	9.64	9.01	8.72	9.11	10.38	12.39	13.11	13.21
6	13.10	13.20	11.87	8.88	9.64	9.38	8.77	9.16	10.50	12.30	12.96	13.21
7	13.16	13.35	11.69	8.96	9.48	9.56	8.71	9.24	10.57	12.33	12.87	13.09
8	13.21	13.61	11.70	8.97	9.38	9.71	8.80	9.39	10.63	12.37	12.87	12.97
9	13.19	13.65	11.61	9.35	9.18	9.72	8.80	9.56	10.67	12.24	12.91	12.95
10	13.03	13.83	11.44	9.40	9.04	9.79	9.21	9.60	10.76	12.21	12.83	13.02
11	13.10	13.93	11.54	9.39	8.98	9.79	9.43	9.60	10.72	12.07	12.60	12.87
12	12.95	13.80	11.64	9.32	9.06	9.79	9.45	9.73	11.02	12.24	12.83	12.87
13	12.92	13.60	11.56	9.38	8.92	9.65	9.30	9.98	11.26	11.89	12.83	13.05
14	12.86	13.44	11.55	9.32	9.05	9.40	9.11	10.19	11.45	11.79	12.87	13.09
15	12.79	13.26	11.45	9.29	9.10	9.40	9.01	10.50	11.37	11.79	13.11	12.94
16	12.92	13.15	11.36	9.25	9.15	9.28	9.03	10.58	11.32	11.85	13.14	12.89
17	12.79	13.05	11.35	9.07	9.18	9.19	9.06	10.54	11.34	12.09	13.17	12.91
18	12.42	13.09	11.09	9.08	9.20	8.95	9.07	10.35	11.47	12.31	13.19	13.26
19	12.74	12.94	10.95	9.02	9.18	8.90	8.84	10.17	11.61	12.39	13.19	13.33
20	12.45	13.13	10.48	8.97	9.13	8.88	8.80	10.11	11.78	12.54	13.18	13.42
21	12.37	13.14	10.28	9.01	8.90	8.78	8.80	10.19	11.95	12.47	13.24	13.37
22	12.49	12.93	9.98	9.04	8.87	8.97	8.76	10.17	12.02	12.77	13.21	13.35
23	12.53	12.79	9.83	9.28	8.88	8.60	8.92	10.16	11.83	12.79	13.22	13.30
24	12.37	12.91	9.60	9.51	8.83	8.49	8.99	10.35	11.78	12.78	13.32	13.30
25	12.04	12.79	9.60	9.66	8.87	8.53	8.98	10.39	11.85	12.74	13.32	13.28
26	11.94	12.89	9.64	9.66	8.88	8.45	9.12	10.39	11.83	12.89	13.31	13.20
27	11.79	12.48	9.79	9.62	8.95	8.28	9.06	10.42	11.73	12.98	13.44	13.04
28	11.66	12.68	9.65	9.66	8.97	8.27	9.04	10.51	11.82	12.93	13.43	13.01
29	11.64	12.65	9.60	9.75	---	8.50	9.10	10.48	11.82	12.74	13.56	12.98
30	11.56	12.65	9.45	9.71	---	8.56	9.16	10.36	11.79	12.98	13.56	13.03
31	12.13	---	9.26	9.59	---	8.38	---	10.34	---	13.03	13.41	---
MAX	13.22	13.93	12.51	9.75	9.74	9.79	9.45	10.58	12.02	13.03	13.56	13.52
CAL YR 1990	LOW 17.58											
WTR YR 1991	LOW 13.93											



394438084335900 PR-2
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of platform 5.00 ft above land-surface datum.

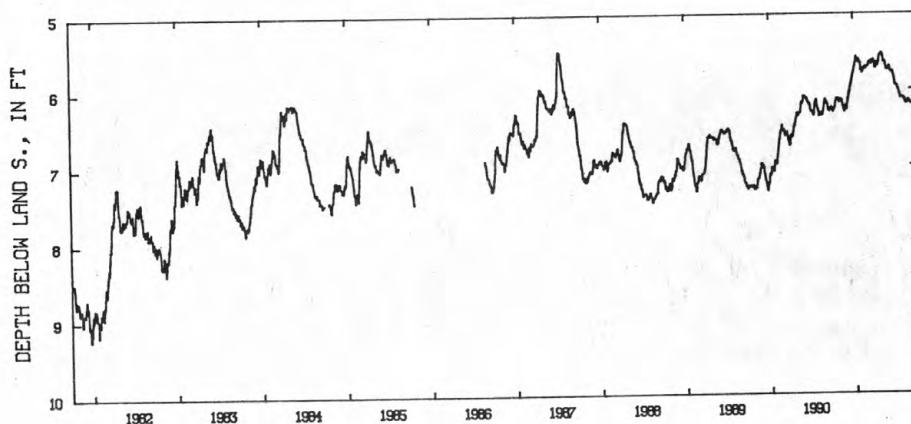
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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, 5.48 ft below land-surface datum, July 9-10, 1987.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.28	6.17	6.25	5.77	5.71	5.71	5.65	5.53	5.73	5.95	6.12	6.18
2	6.29	6.17	6.26	5.76	5.74	5.70	5.67	5.53	5.72	5.95	6.12	6.18
3	6.29	6.17	6.27	5.74	5.75	5.70	5.69	5.54	5.72	5.95	6.13	6.20
4	6.29	6.17	6.23	5.73	5.75	5.70	5.71	5.55	5.70	5.95	6.13	6.20
5	6.29	6.16	6.20	5.71	5.76	5.69	5.71	5.56	5.70	5.96	6.12	6.20
6	6.28	6.13	6.19	5.70	5.76	5.69	5.72	5.56	5.72	5.96	6.13	6.19
7	6.28	6.14	6.16	5.68	5.77	5.65	5.72	5.56	5.74	5.96	6.14	6.19
8	6.28	6.15	6.14	5.67	5.78	5.65	5.72	5.58	5.75	5.97	6.16	6.19
9	6.28	6.15	6.12	5.65	5.78	5.64	5.66	5.60	5.76	5.98	6.16	6.20
10	6.26	6.15	6.10	5.63	5.77	5.64	5.65	5.62	5.76	5.99	6.16	6.20
11	6.24	6.14	6.09	5.61	5.76	5.65	5.65	5.64	5.76	5.99	6.16	6.20
12	6.24	6.14	6.07	5.59	5.74	5.66	5.68	5.64	5.76	6.00	6.16	6.20
13	6.23	6.17	6.06	5.57	5.73	5.67	5.69	5.64	5.76	6.01	6.19	6.20
14	6.20	6.20	6.04	5.65	5.74	5.65	5.69	5.64	5.77	6.01	6.19	6.20
15	6.18	6.22	6.03	5.64	5.74	5.64	5.69	5.64	5.77	6.03	6.19	6.20
16	6.16	6.22	6.01	5.64	5.72	5.63	5.68	5.65	5.77	6.05	6.19	6.20
17	6.16	6.25	6.00	5.63	5.72	5.64	5.67	5.65	5.77	6.06	6.19	6.20
18	6.15	6.26	5.98	5.62	5.72	5.65	5.66	5.66	5.77	6.08	6.19	6.20
19	6.13	6.27	5.97	5.62	5.71	5.67	5.65	5.68	5.79	6.09	6.18	6.20
20	6.13	6.28	5.95	5.62	5.71	5.66	5.64	5.69	5.80	6.10	6.17	6.22
21	6.13	6.29	5.94	5.61	5.70	5.66	5.62	5.70	5.81	6.11	6.16	6.25
22	6.13	6.29	5.92	5.61	5.72	5.66	5.60	5.72	5.83	6.12	6.15	6.26
23	6.13	6.29	5.91	5.61	5.73	5.64	5.57	5.73	5.83	6.12	6.15	6.27
24	6.12	6.26	5.89	5.61	5.71	5.64	5.56	5.74	5.85	6.11	6.15	6.27
25	6.12	6.23	5.88	5.63	5.72	5.63	5.55	5.74	5.87	6.11	6.16	6.28
26	6.13	6.22	5.86	5.65	5.72	5.61	5.55	5.74	5.88	6.11	6.16	6.28
27	6.13	6.22	5.85	5.65	5.71	5.63	5.55	5.74	5.90	6.12	6.16	6.28
28	6.14	6.21	5.83	5.65	5.71	5.64	5.55	5.74	5.92	6.12	6.16	6.28
29	6.16	6.22	5.82	5.66	---	5.65	5.55	5.74	5.93	6.12	6.18	6.29
30	6.17	6.24	5.80	5.66	---	5.64	5.55	5.74	5.95	6.12	6.18	6.32
31	6.17	---	5.79	5.66	---	5.64	---	5.74	---	6.12	6.18	---
MAX	6.29	6.29	6.27	5.77	5.78	5.71	5.72	5.74	5.95	6.12	6.19	6.32

CAL YR 1990 LOW 7.16
WTR YR 1991 LOW 6.32404625082305100 R-4
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

285

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 National Geodetic Vertical Datum of 1929, 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.

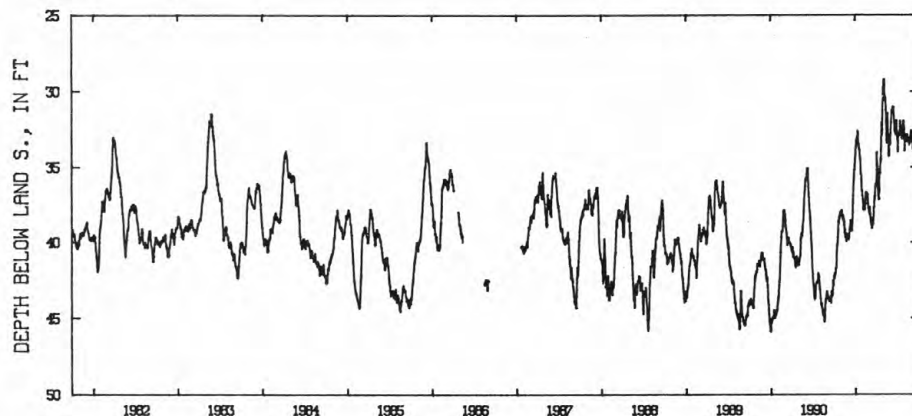
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 45.88 ft below land-surface datum, Dec. 31, 1989; minimum daily low, 20.93 ft below land-surface datum, Feb. 28, 1971.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42.42	38.08	39.79	34.26	37.12	37.91	36.25	30.13	33.51	33.22	33.92	32.64
2	42.07	37.88	39.68	33.55	37.33	38.16	34.43	29.84	32.90	32.93	33.89	32.91
3	42.44	38.16	39.84	33.74	37.84	38.21	34.01	29.71	32.60	34.02	32.94	33.03
4	42.30	38.26	39.60	33.22	37.84	37.66	34.63	29.21	31.91	33.83	32.91	33.33
5	42.16	38.28	39.71	33.24	37.66	38.11	34.95	29.30	32.10	33.22	33.05	33.43
6	42.05	38.45	39.28	33.22	37.32	38.46	35.43	29.21	31.32	32.72	33.23	33.83
7	41.97	38.50	39.10	33.24	37.83	38.50	36.03	29.52	31.26	32.82	32.84	33.70
8	41.73	38.48	39.03	33.04	37.85	38.75	36.38	30.13	31.25	32.91	33.05	33.16
9	41.68	38.22	39.07	32.96	37.64	38.43	36.74	30.31	31.32	32.83	33.31	33.47
10	41.66	38.44	38.54	---	37.87	38.92	36.96	30.45	31.25	32.92	33.06	33.39
11	40.76	38.54	38.96	32.64	37.43	38.71	37.06	30.66	31.24	32.64	33.03	33.67
12	40.65	38.91	38.83	32.77	37.52	39.08	37.17	30.39	31.02	32.48	33.08	33.71
13	40.35	38.59	39.27	33.26	37.02	38.68	36.48	31.20	31.09	31.93	32.85	33.74
14	40.19	38.85	39.11	33.42	36.87	38.91	36.69	32.04	31.07	32.08	33.03	33.89
15	40.15	39.22	38.67	33.62	36.69	38.64	35.11	33.24	31.05	32.62	33.27	34.26
16	39.85	39.45	39.09	33.55	36.81	38.83	35.14	33.41	31.44	32.51	33.19	34.19
17	39.68	39.18	39.24	33.79	36.71	38.85	35.30	32.86	31.68	32.50	33.37	34.45
18	39.36	39.62	38.88	33.89	36.94	38.77	35.42	32.93	32.28	32.68	33.29	34.12
19	38.65	39.73	38.57	33.91	37.04	38.40	34.95	32.11	32.66	33.08	33.22	33.69
20	38.69	39.75	38.07	34.30	37.06	38.20	34.59	32.24	32.68	33.04	33.10	33.57
21	38.47	39.45	37.39	34.45	36.91	37.68	34.43	31.43	32.29	33.08	33.11	34.78
22	38.77	39.94	36.93	34.58	37.14	37.73	34.44	32.08	32.29	33.13	33.54	34.03
23	38.44	39.71	36.58	35.22	36.77	37.04	33.20	33.33	32.53	33.09	33.16	34.09
24	38.31	39.61	36.03	35.49	37.30	36.91	32.05	34.23	32.88	32.29	33.07	33.45
25	38.23	39.63	35.84	35.43	37.45	37.21	32.75	34.22	32.88	32.26	33.43	33.31
26	38.15	39.66	35.57	35.65	37.84	36.92	32.90	34.29	32.11	32.29	33.32	33.71
27	38.01	39.78	35.22	35.91	37.69	36.30	32.65	34.24	32.28	31.94	32.89	33.59
28	38.11	39.48	35.19	36.57	38.04	36.29	31.85	33.51	31.91	32.11	32.83	33.09
29	38.12	39.57	34.85	36.61	---	36.10	30.94	32.91	31.94	32.28	32.66	33.18
30	38.05	39.51	34.83	36.92	---	36.19	30.62	33.21	32.43	32.33	32.62	32.97
31	38.02	---	34.41	36.91	---	36.19	---	33.31	---	32.44	32.61	---
MAX	42.44	39.94	39.84	36.92	38.04	39.08	37.17	34.29	33.51	34.02	33.92	34.78

CAL YR 1990 LOW 45.79

WTR YR 1991 LOW 42.44

391341083172200 RO-7
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929.

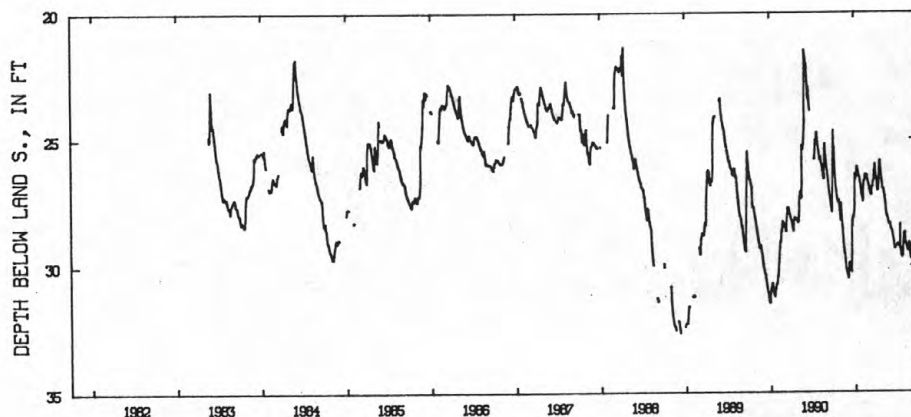
Measuring point: Floor of instrument shelter 3.30 ft above land-surface datum.

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, 21.35 ft below land-surface datum, April 12, 1988.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.68	28.23	30.42	26.39	27.26	26.78	26.39	26.95	28.33	29.21	28.79	29.72
2	25.01	27.98	30.47	26.44	27.27	26.85	26.51	26.99	28.38	29.21	28.74	29.58
3	25.30	27.55	30.50	26.56	27.31	26.87	26.57	27.00	28.44	29.17	28.71	29.39
4	25.38	27.72	30.42	26.61	27.38	26.95	26.58	27.00	28.53	29.16	28.71	29.25
5	25.40	27.97	30.19	26.58	27.44	27.02	26.65	27.03	28.56	29.15	28.75	29.17
6	25.64	28.15	29.97	26.52	27.48	27.06	26.78	27.09	28.59	29.15	28.96	29.12
7	25.93	28.33	29.94	26.52	27.40	27.06	26.89	27.16	28.60	29.19	29.08	29.10
8	26.23	28.44	29.93	26.48	26.84	27.02	26.96	27.22	28.60	29.20	29.14	29.09
9	26.48	28.56	29.88	26.39	26.70	27.14	27.02	27.27	28.59	29.19	29.14	29.09
10	26.74	28.72	29.91	26.13	26.66	27.18	27.05	27.30	28.60	29.20	29.16	29.09
11	26.91	28.85	29.92	26.12	26.67	27.19	27.04	27.41	28.69	29.23	29.20	29.11
12	27.02	28.99	29.96	26.17	26.67	27.23	27.02	27.51	28.76	29.29	29.26	29.14
13	27.00	29.11	30.05	26.22	26.63	27.23	26.98	27.58	28.84	29.31	29.33	29.16
14	27.09	29.23	30.13	26.27	26.56	27.19	26.77	27.71	28.91	29.35	29.37	29.16
15	27.24	29.32	30.21	26.32	26.47	27.02	26.47	27.81	28.95	28.38	29.39	29.16
16	27.28	29.40	30.23	26.39	26.41	26.93	26.22	27.89	29.01	29.40	29.41	29.10
17	27.33	29.46	30.25	26.44	26.46	26.88	26.04	27.96	29.08	29.43	29.40	28.97
18	27.39	29.52	30.25	26.49	26.50	26.88	25.98	28.01	29.14	29.44	29.33	28.53
19	27.41	29.60	29.49	26.49	26.50	26.88	25.92	28.06	29.23	29.55	29.30	28.11
20	27.46	29.74	28.22	26.48	26.48	26.89	25.87	28.07	29.33	29.60	29.26	27.79
21	27.46	29.90	28.42	26.55	26.43	26.71	25.91	28.07	29.34	29.63	29.31	27.50
22	27.51	30.04	28.46	26.59	26.44	26.67	26.06	28.13	29.34	29.64	29.22	27.22
23	27.51	30.13	28.37	26.64	26.48	26.65	26.21	28.17	29.34	29.66	29.09	27.00
24	27.43	30.13	28.06	26.71	26.57	26.32	26.34	28.21	29.28	29.65	29.21	26.79
25	27.57	30.19	28.14	26.80	26.61	26.32	26.43	28.29	29.26	29.64	29.32	26.57
26	27.68	30.24	28.16	26.85	26.64	26.31	26.48	28.36	29.24	29.57	29.44	26.41
27	27.74	30.26	28.15	26.96	26.68	26.21	26.61	28.39	29.24	29.38	29.57	26.32
28	27.86	30.29	28.05	27.08	26.75	26.08	26.72	28.39	29.24	29.19	29.65	26.81
29	27.93	30.32	28.01	27.14	---	26.01	26.78	28.40	29.22	29.04	29.69	27.32
30	28.06	30.36	27.97	27.21	---	26.12	26.82	28.40	29.20	28.95	29.72	27.63
31	28.21	---	27.68	27.26	---	26.25	---	28.34	---	28.85	29.72	---
MAX	28.21	30.36	30.50	27.26	27.48	27.23	27.05	28.40	29.34	29.66	29.72	29.72
CAL YR 1990	LOW 31.21											
WTR YR 1991	LOW 30.50											



— 391913082580500 RO-8 MEAD PAPER CORP AT CHILLICOTHE OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

287

SHELBY COUNTY

401712084103500. Local number, SH-4.

LOCATION.--Lat 40°17'12", long 84°10'35", Hydrologic Unit 05080001, State Route 47 in Sidney.

Owner: Stolle Corporation.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., depth 280 ft, cased to 136 ft.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 1,033.72 ft above National Geodetic Vertical Datum of 1929.

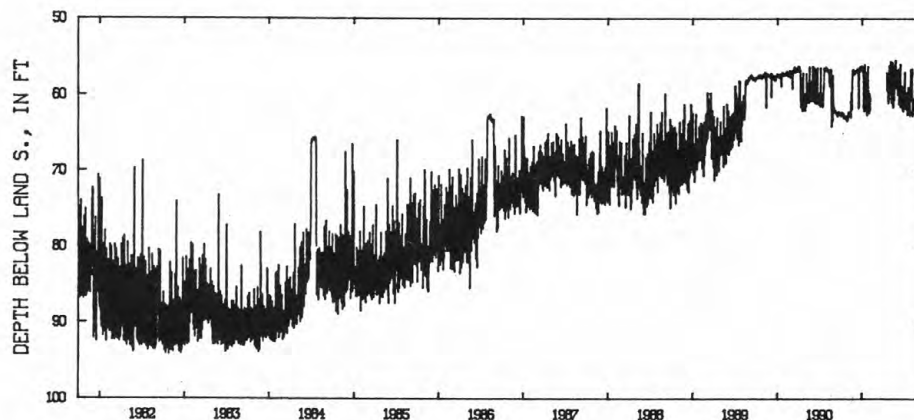
Measuring point: Top of platform 4.50 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 94.19 ft below land-surface datum, Oct. 26, 1982;
minimum daily low, 55.43 ft below land-surface datum, May 26, 1991.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62.46	62.84	57.11	56.64	62.38	---	---	58.85	56.92	61.71	56.66	57.20
2	62.74	62.73	57.13	56.44	61.28	---	---	59.53	59.18	60.76	60.74	59.86
3	62.57	62.60	57.04	56.59	59.80	---	---	58.06	58.43	61.75	56.98	61.63
4	62.35	62.49	56.88	56.62	62.12	---	---	57.36	59.94	58.29	56.56	62.55
5	62.38	62.22	56.96	56.53	61.75	---	---	55.56	58.09	57.02	56.68	62.55
6	62.33	62.49	56.82	56.42	60.44	---	---	56.66	57.30	59.52	62.09	62.63
7	62.29	62.57	56.87	61.74	---	---	---	59.62	59.91	60.59	62.71	59.12
8	62.46	62.68	56.88	61.56	---	---	---	60.97	56.53	61.11	62.63	59.25
9	62.38	62.52	56.92	61.19	---	---	---	60.56	60.86	61.57	62.45	61.61
10	62.48	62.33	56.82	62.19	---	---	---	60.44	61.21	61.73	61.21	62.54
11	62.87	62.38	56.81	60.86	---	---	---	59.41	60.19	61.90	60.53	62.72
12	62.78	62.68	56.54	56.26	---	---	---	55.69	58.71	61.68	61.47	63.09
13	62.74	62.76	56.82	56.01	---	---	---	60.36	60.79	59.87	62.01	62.66
14	62.50	62.88	56.88	59.86	---	---	---	60.87	61.47	59.75	61.14	57.41
15	62.81	60.78	56.74	61.82	---	---	---	61.61	58.79	62.10	61.75	61.00
16	63.04	61.52	56.74	61.21	---	---	---	61.41	55.94	62.60	61.88	61.58
17	62.85	59.67	61.76	61.06	---	---	---	60.95	60.89	62.30	59.56	62.25
18	62.74	61.08	61.03	62.09	---	---	57.10	58.25	61.58	62.22	57.18	62.21
19	63.03	61.87	60.85	57.20	---	---	59.39	56.05	60.74	61.79	61.40	61.56
20	63.03	57.86	61.50	57.00	---	---	57.62	57.29	60.95	58.98	61.93	61.47
21	62.77	57.32	57.02	61.99	---	---	59.50	60.62	61.12	61.27	62.41	58.75
22	62.97	57.04	56.39	62.71	---	---	58.81	58.51	60.97	61.48	62.46	58.01
23	62.95	56.82	56.30	62.38	---	---	58.81	57.39	58.82	62.28	61.90	60.47
24	62.95	56.66	56.59	61.52	---	---	60.10	57.14	61.10	62.50	57.55	60.82
25	62.91	56.75	56.60	61.10	---	---	61.08	56.33	61.92	62.48	60.94	60.60
26	63.01	56.85	56.82	58.05	---	---	60.34	55.43	61.25	62.69	62.27	59.70
27	62.94	56.80	56.82	56.23	---	---	59.08	59.12	61.36	59.26	62.31	57.68
28	63.21	57.03	56.62	59.09	---	---	58.30	57.65	62.17	60.14	63.05	57.32
29	63.37	57.31	56.45	60.03	---	---	56.07	57.31	60.17	56.95	63.01	57.14
30	63.28	57.31	56.17	60.36	---	---	57.48	56.75	59.75	56.66	62.58	59.07
31	62.94	---	56.63	61.60	---	---	---	58.16	---	56.71	61.67	---
MAX	63.37	62.88	61.76	62.71	62.38	---	61.08	61.61	62.17	62.69	63.05	63.09
CAL YR 1990	LOW 64.16											
WTR YR 1991	LOW 63.37											



401712084103500 SH-4 STOLLE CORP SIDNEY OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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.

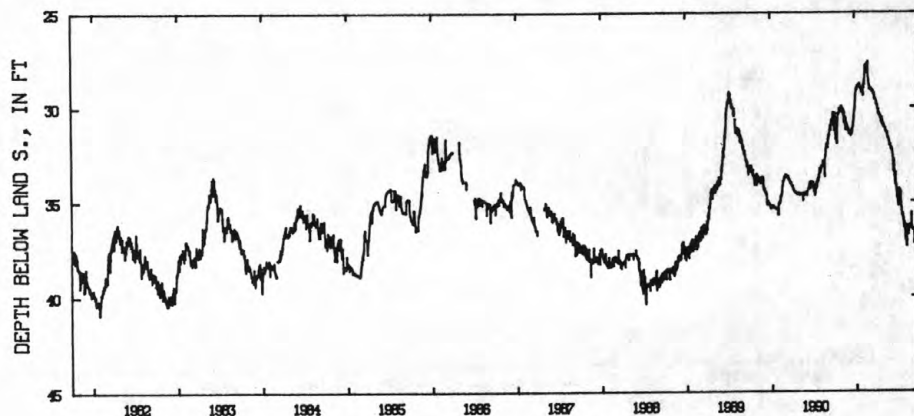
DATUM.--Elevation of land-surface datum is 1060 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 1.00 ft above land-surface datum.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.98	30.28	31.12	30.00	29.19	28.61	29.70	30.85	31.96	34.60	36.76	36.39
2	31.27	30.08	31.18	29.74	29.21	28.82	29.76	30.90	31.99	35.08	37.04	36.43
3	30.84	29.98	31.18	29.47	29.23	28.84	29.90	30.91	32.19	35.20	37.00	36.50
4	30.57	30.13	31.35	29.27	29.25	28.92	29.91	31.05	32.21	35.24	36.23	36.46
5	30.33	30.19	31.29	29.19	29.28	28.98	29.88	31.07	32.18	34.48	36.58	36.54
6	30.38	30.29	31.38	29.08	29.40	29.00	29.93	31.02	32.14	34.43	37.00	36.53
7	30.55	30.30	31.41	29.02	28.80	29.07	29.95	31.06	32.29	34.34	37.18	36.48
8	31.42	30.08	31.31	28.98	28.99	29.07	30.08	31.09	32.33	34.37	37.38	36.49
9	31.67	30.10	31.32	29.10	29.00	29.07	30.12	31.13	32.25	34.40	37.10	37.23
10	31.74	30.30	31.35	29.10	28.56	29.06	30.13	31.15	32.45	34.81	36.55	37.00
11	31.74	30.40	31.35	28.97	28.85	29.06	30.36	31.13	32.44	34.43	36.58	36.73
12	31.67	30.45	31.36	28.86	28.29	29.06	30.35	31.27	33.02	34.46	36.39	36.70
13	31.72	30.78	31.50	28.88	27.91	29.03	30.31	31.30	33.40	34.46	36.32	36.73
14	31.78	30.85	31.50	28.85	27.78	29.13	30.31	31.34	32.85	34.48	36.32	36.72
15	31.92	30.23	31.43	28.83	27.91	29.14	30.36	31.30	32.83	34.55	36.43	36.69
16	31.37	30.51	31.44	28.91	27.90	29.16	30.46	31.31	32.76	35.21	36.78	36.74
17	30.96	30.55	31.18	28.92	27.79	29.15	30.48	31.35	32.87	35.35	36.60	36.71
18	30.76	30.62	31.30	28.85	27.87	29.12	30.42	31.38	33.65	35.56	36.39	36.73
19	30.35	30.89	31.34	28.95	27.84	29.16	30.54	31.42	33.68	35.62	36.44	36.69
20	30.40	31.22	31.32	28.76	27.90	29.28	30.61	31.54	33.93	35.80	36.40	36.91
21	30.40	30.56	31.20	28.84	28.20	29.25	30.50	31.65	34.07	35.71	36.26	36.75
22	30.37	30.77	31.10	28.86	27.70	29.30	30.57	31.63	34.09	35.65	36.40	36.78
23	30.34	30.86	31.03	28.95	28.20	29.30	30.58	31.61	33.46	35.85	36.39	36.75
24	30.31	30.92	30.88	29.07	27.75	29.38	30.83	31.69	34.20	36.01	36.42	36.80
25	30.12	30.93	30.79	29.07	27.65	29.41	30.56	31.70	34.12	35.93	36.44	36.80
26	30.09	30.91	30.69	28.94	27.61	29.58	30.73	31.74	34.33	36.25	36.45	36.81
27	30.15	31.03	30.54	28.95	28.11	29.58	30.69	31.80	34.55	36.40	36.45	36.79
28	30.21	31.00	30.39	29.01	28.54	29.61	30.71	31.94	34.73	36.12	35.79	36.81
29	30.24	31.13	30.28	29.24	---	29.65	30.97	32.00	34.80	36.27	35.62	36.83
30	30.28	31.24	30.22	29.16	---	29.67	30.82	32.02	34.86	36.47	36.43	36.90
31	30.25	---	30.11	29.24	---	29.64	---	32.00	---	36.45	36.50	---
MAX	31.92	31.24	31.50	30.00	29.40	29.67	30.97	32.02	34.86	36.47	37.38	37.23

CAL YR 1990 LOW 35.71
WTR YR 1991 LOW 37.38404939081203800 ST-5A
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

289

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.

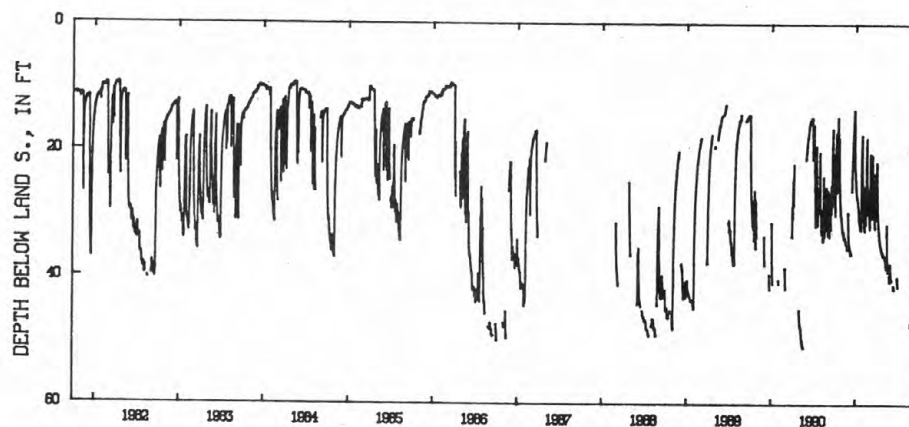
DATUM.--Elevation of land-surface datum is 1060 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 2.50 ft above land-surface datum.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.50	31.40	34.30	24.70	28.05	31.90	24.30	---	39.85	41.45	---	47.55
2	25.65	31.75	34.70	25.80	29.30	32.30	21.80	---	40.25	---	---	47.75
3	28.00	32.20	34.95	26.35	30.20	31.70	22.30	---	40.30	---	---	47.75
4	29.35	32.70	35.30	27.00	30.90	23.50	26.10	36.55	40.35	---	---	47.55
5	30.20	32.95	35.50	27.20	31.45	21.20	28.45	36.70	---	---	---	47.80
6	29.20	32.95	35.55	27.35	31.95	20.45	29.90	36.95	---	---	---	47.95
7	22.00	32.75	35.65	27.50	32.35	25.00	30.85	37.10	---	---	---	48.10
8	19.70	32.80	35.70	27.80	32.60	27.60	31.65	37.30	---	---	---	48.20
9	18.30	33.30	35.90	28.00	29.00	29.05	32.20	37.50	---	---	---	48.25
10	17.15	33.60	36.30	28.60	25.50	29.90	32.70	38.10	---	---	---	48.25
11	23.15	33.75	36.30	28.80	29.00	30.50	33.20	38.50	---	---	---	48.25
12	26.20	33.75	36.25	29.40	30.95	30.60	33.60	38.55	41.20	---	---	42.30
13	26.45	---	---	30.00	31.65	23.40	33.95	---	41.65	---	---	37.75
14	20.20	33.65	---	30.55	28.50	20.60	34.30	33.45	41.80	---	---	35.20
15	17.50	33.80	26.30	30.90	22.60	22.30	34.60	31.70	---	---	---	33.50
16	15.90	34.05	24.15	31.20	20.55	25.70	34.75	34.70	---	---	---	32.20
17	14.70	34.20	22.75	31.50	19.10	27.65	35.00	36.80	---	---	---	31.10
18	17.40	34.60	21.50	31.75	18.00	29.10	35.15	38.05	---	---	---	30.25
19	22.40	---	20.40	31.90	22.00	30.00	35.30	38.80	---	---	---	29.45
20	23.05	---	19.40	32.10	25.65	30.65	35.50	39.05	---	---	---	28.80
21	18.00	---	18.40	32.30	27.80	30.80	35.60	39.05	---	---	---	28.15
22	18.00	34.85	17.60	32.45	29.05	31.30	35.70	---	---	---	---	27.60
23	22.70	35.25	16.70	32.50	30.00	31.90	35.85	---	---	---	---	27.05
24	25.30	35.55	15.70	25.35	29.85	32.30	35.95	---	---	---	---	27.15
25	26.90	---	14.80	23.60	26.15	29.50	36.05	39.60	---	---	---	26.95
26	28.30	---	14.10	21.00	28.75	23.55	36.20	40.20	---	---	47.60	26.10
27	29.10	---	13.55	18.90	30.25	23.80	36.35	40.60	---	---	47.60	25.60
28	29.80	29.80	16.45	17.50	31.20	27.15	36.45	40.65	40.00	---	47.10	25.25
29	30.25	32.20	20.70	17.55	---	29.30	36.60	37.80	40.20	---	47.10	24.90
30	30.40	33.55	22.85	23.50	---	30.65	36.45	38.35	40.75	44.80	47.15	24.55
31	30.60	---	24.20	26.10	---	30.80	---	39.15	---	---	47.25	---
MAX	30.60	35.55	36.30	32.50	32.60	32.30	36.60	40.65	41.80	44.80	47.60	48.25

CAL YR 1990 LOW 51.10
WTR YR 1991 LOW 48.25405211081253500 ST-27
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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.

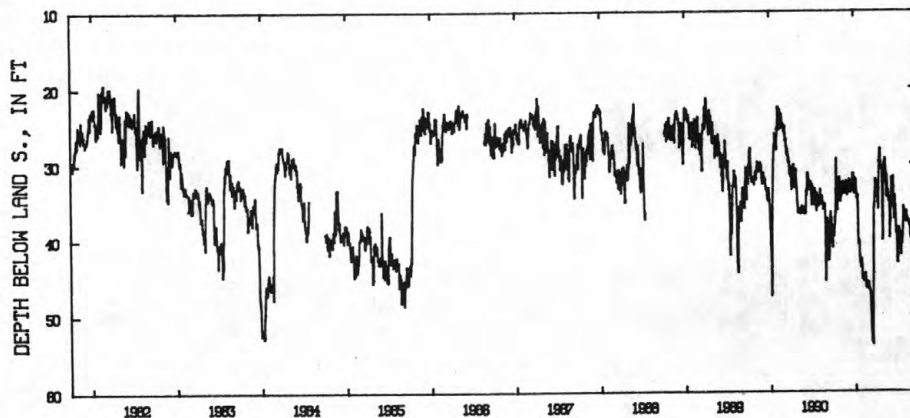
DATUM.--Elevation of land-surface datum is 890 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38.36	35.07	33.63	32.43	45.36	45.73	32.33	40.13	39.47	40.03	36.55	39.40
2	38.48	34.71	33.29	32.92	45.02	46.31	32.61	38.91	38.13	42.41	37.12	38.51
3	39.04	34.09	32.99	33.07	44.58	46.53	32.29	37.25	37.78	43.07	36.78	38.52
4	39.61	33.25	32.85	32.70	45.00	46.73	33.12	34.41	37.44	43.03	36.46	45.88
5	39.67	33.17	32.71	32.36	45.15	46.79	33.54	31.92	35.68	42.38	36.48	47.67
6	38.55	34.26	32.74	32.08	45.27	46.76	33.58	30.40	35.80	41.28	37.05	47.96
7	37.09	34.26	33.04	32.62	45.58	46.85	33.67	29.96	35.70	40.38	37.64	47.36
8	38.11	33.90	33.01	33.51	45.22	47.35	34.20	29.84	33.85	40.24	37.77	47.19
9	37.65	33.94	32.10	34.45	45.04	48.06	35.33	30.37	31.87	39.22	37.33	45.92
10	36.62	33.39	32.85	34.65	44.89	48.77	35.16	30.76	31.97	38.53	37.35	45.31
11	33.73	32.44	33.10	34.62	45.31	51.55	35.24	30.36	32.20	38.94	36.31	45.48
12	31.23	32.86	33.86	34.20	45.63	52.11	36.05	29.40	32.14	39.42	36.51	45.55
13	30.62	33.33	33.69	34.14	45.39	52.25	35.44	29.69	32.95	38.94	37.22	43.84
14	29.42	33.67	33.86	35.20	44.47	52.93	33.46	30.62	32.34	39.64	37.73	42.42
15	32.11	33.80	33.41	38.06	44.79	53.48	31.34	31.12	32.12	40.93	37.84	42.73
16	34.51	33.81	32.63	40.37	45.61	53.53	30.43	31.77	31.75	39.48	37.80	44.98
17	35.73	34.01	33.69	40.68	46.28	53.53	29.78	34.14	33.14	41.29	37.77	44.83
18	36.22	33.87	33.67	40.58	46.44	53.72	29.59	34.51	37.41	41.92	37.45	44.11
19	36.19	32.88	33.13	40.18	46.07	53.80	29.35	32.85	36.51	42.09	37.70	44.03
20	35.10	32.88	33.64	40.29	45.85	49.32	28.80	31.46	36.91	40.91	37.65	43.92
21	33.31	33.65	33.64	42.23	45.65	44.22	28.12	32.20	37.15	39.42	37.62	44.03
22	33.66	33.49	32.68	43.12	46.16	40.30	29.71	32.78	36.51	40.58	37.73	43.26
23	33.50	32.68	32.09	42.87	46.54	37.89	29.78	33.68	34.25	40.68	38.33	42.73
24	33.27	32.52	31.33	42.86	46.14	35.79	30.35	33.56	35.80	40.11	38.21	42.28
25	32.69	32.31	31.41	43.62	45.86	35.90	30.36	33.92	35.74	40.02	37.98	41.80
26	32.90	32.68	31.55	43.75	46.23	35.47	30.73	34.63	36.89	39.70	38.22	42.29
27	32.43	33.51	31.92	43.23	46.22	34.45	30.74	34.94	38.46	38.56	39.37	42.30
28	31.81	34.01	32.84	42.59	45.88	34.06	30.59	34.92	39.28	36.83	39.68	41.15
29	32.58	34.21	33.96	42.72	---	33.42	31.94	34.43	38.98	35.73	39.71	40.75
30	33.71	34.04	33.05	42.66	---	32.75	36.94	34.53	38.51	36.00	39.77	40.74
31	34.42	---	31.90	43.29	---	32.09	---	39.87	---	36.58	39.65	---
MAX	39.67	35.07	33.96	43.75	46.54	53.80	36.94	40.13	39.47	43.07	39.77	47.96
CAL YR 1990	LOW 47.42											
WTR YR 1991	LOW 53.80											



411604080505600 T-3
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929, 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	DATE	WATER LEVEL
Oct. 31, 1990	7.90	Jan. 31, 1991	5.90	Apr. 30, 1991	7.16	July 31, 1991	10.75
Nov. 30, 1990	9.02	Feb. 28, 1991	6.18	May 30, 1991	8.69	Aug. 30, 1991	11.86
Dec. 31, 1990	5.56	Apr. 1, 1991	7.02	July 1, 1991	10.71	Sept. 30, 1991	12.22

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.

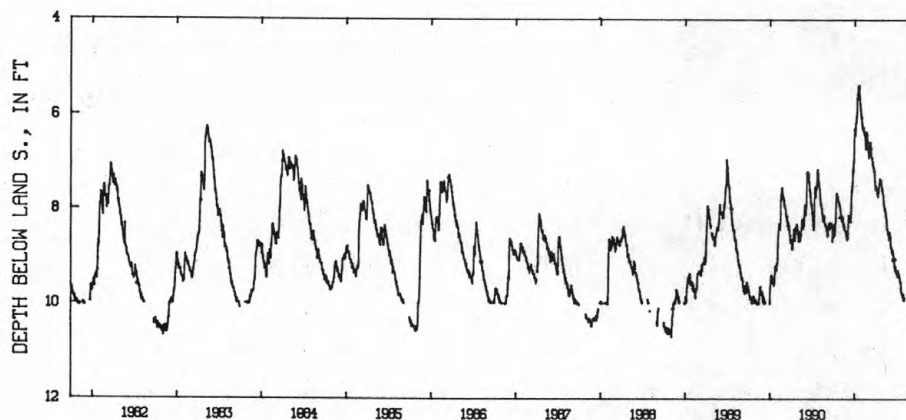
DATUM.--Elevation of land-surface datum is 920 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.50 ft above land-surface datum.

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, 10.71 ft below land-surface datum, Nov. 3, 1988;
minimum daily low, 4.05 ft below land-surface datum, July 13, 1969.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.60	8.04	8.59	6.31	6.18	6.80	7.58	7.58	8.49	9.34	9.93	10.28
2	8.60	8.04	8.61	6.42	6.16	6.72	7.57	7.65	8.53	9.37	9.86	10.31
3	8.56	8.17	8.61	6.34	6.22	6.92	7.51	7.67	8.58	9.40	9.87	10.27
4	8.57	8.15	8.35	6.43	6.25	6.77	7.50	7.70	8.58	9.43	9.90	10.31
5	8.34	8.18	8.22	6.29	6.30	6.85	7.53	7.73	8.62	9.29	---	10.20
6	8.31	8.26	8.13	6.18	6.30	6.85	7.54	7.80	8.80	9.36	---	10.32
7	8.32	8.13	8.13	6.17	6.30	6.67	7.56	7.90	8.77	9.35	---	10.33
8	8.55	8.21	8.17	6.12	6.34	6.62	7.57	7.92	8.82	9.41	---	10.34
9	8.55	8.21	8.15	6.04	6.26	6.57	7.70	7.97	8.83	9.34	---	10.30
10	8.40	8.21	8.20	6.00	6.39	6.56	7.60	8.00	8.90	9.38	---	10.36
11	8.28	8.22	8.25	5.94	6.33	6.61	7.73	8.02	8.92	9.39	---	10.33
12	8.12	8.23	8.16	5.65	6.42	6.67	7.62	8.06	8.84	9.43	---	10.25
13	7.89	8.35	8.26	5.67	6.42	6.70	7.65	7.97	8.95	9.43	---	10.36
14	7.80	8.30	8.27	5.64	6.46	6.72	7.65	8.04	8.87	9.46	---	10.39
15	7.70	8.37	8.27	5.56	6.50	6.88	7.65	8.09	8.92	9.50	---	10.40
16	7.65	8.42	8.10	5.53	6.60	6.90	7.54	8.15	8.95	9.51	---	10.41
17	7.66	8.33	8.03	5.39	6.65	6.96	7.44	8.17	8.98	9.55	---	10.43
18	7.70	8.37	7.95	5.41	6.72	6.90	7.45	8.21	9.04	9.55	---	10.32
19	7.71	8.42	7.61	5.40	6.62	7.05	7.43	8.25	9.07	9.56	---	10.42
20	7.74	8.45	7.63	5.37	6.44	6.98	7.34	8.30	9.07	9.69	---	10.43
21	7.74	8.45	7.56	5.43	6.39	7.02	7.38	8.41	9.19	9.75	---	10.44
22	7.84	8.45	7.50	5.64	6.35	7.09	7.37	8.42	9.24	9.75	9.92	10.46
23	7.80	8.45	7.48	5.58	6.40	7.09	7.38	8.46	9.24	9.79	9.94	10.46
24	7.80	8.52	7.23	5.78	6.43	7.12	7.43	8.51	9.31	9.79	9.96	10.47
25	7.83	8.52	7.22	5.75	6.52	7.16	7.46	8.54	9.20	9.78	10.00	10.45
26	7.84	8.56	7.14	5.85	6.54	7.17	7.38	8.54	9.23	9.84	---	10.47
27	7.87	8.58	7.17	5.89	6.67	7.20	7.49	8.56	9.30	9.85	---	10.49
28	7.93	8.58	7.02	5.97	6.72	7.27	7.53	8.57	9.30	9.80	---	10.49
29	7.90	8.65	7.02	6.00	---	7.40	7.60	8.62	9.33	9.88	10.23	10.50
30	7.94	8.57	6.95	6.05	---	7.50	7.54	8.65	9.35	9.80	10.26	10.53
31	7.99	---	6.28	6.05	---	7.55	---	8.48	---	9.89	10.26	---
MAX	8.60	8.65	8.61	6.43	6.72	7.55	7.73	8.65	9.35	9.89	10.26	10.53
CAL YR 1990	LOW 9.68											
WTR YR 1991	LOW 10.53											



403557081313600 TU-4
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

293

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 National Geodetic Vertical Datum of 1929.

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.

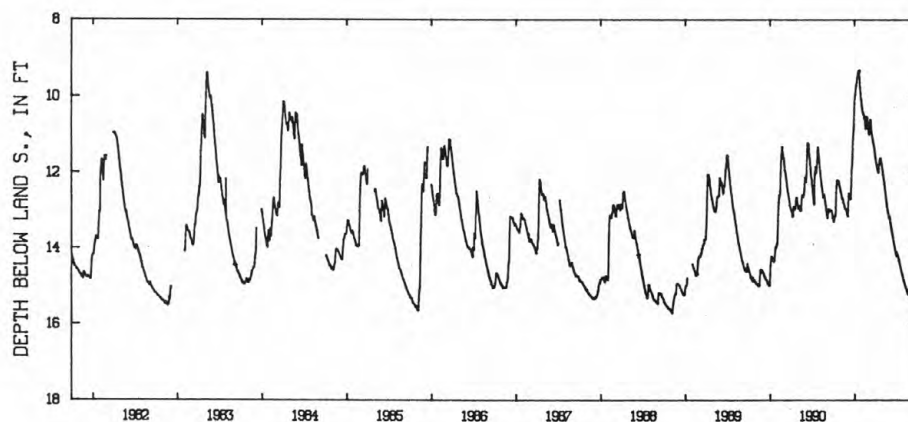
PERIOD OF RECORD.--July 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 15.71 ft below land-surface datum, Nov. 3-4, 1988;

minimum daily low, 6.64 ft below land-surface datum, July 14, 1969.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.22	12.47	13.13	10.10	10.23	10.82	11.61	11.90	13.14	14.13	14.88	15.32
2	13.26	12.51	13.15	10.06	10.29	10.89	11.68	11.95	13.18	14.10	14.89	15.34
3	13.28	12.54	13.15	9.97	10.33	10.92	11.72	12.01	13.23	14.15	14.91	15.35
4	13.28	12.56	13.00	9.96	10.37	10.97	11.75	12.05	13.28	14.18	14.94	15.35
5	13.20	12.60	12.83	9.89	10.41	11.00	11.78	12.08	13.34	14.19	14.97	15.35
6	13.15	12.63	12.65	9.82	10.43	10.99	11.80	12.12	13.37	14.16	14.99	15.36
7	13.13	12.65	12.57	9.78	10.45	10.92	11.84	12.17	13.41	14.20	15.00	15.37
8	13.15	12.67	12.55	9.74	10.45	10.78	11.87	12.20	13.45	14.24	15.02	15.39
9	13.17	12.68	12.55	9.68	10.46	10.68	11.90	12.24	13.49	14.26	15.04	15.41
10	13.15	12.69	12.58	9.68	10.50	10.60	11.93	12.29	13.53	14.30	15.05	15.41
11	13.09	12.71	12.58	9.63	10.55	10.63	11.96	12.33	13.56	14.33	15.08	15.41
12	12.98	12.73	12.60	9.51	10.58	10.66	11.97	12.38	13.60	14.34	15.10	15.41
13	12.73	12.78	12.68	9.50	10.58	10.70	11.99	12.44	13.63	14.37	15.12	15.43
14	12.55	12.79	12.70	9.45	10.62	10.81	12.00	12.50	13.66	14.40	15.15	15.44
15	12.41	12.81	12.69	9.44	10.72	10.89	11.99	12.55	13.70	14.43	15.16	15.45
16	12.34	12.83	12.57	9.39	10.77	10.95	11.90	12.60	13.74	14.46	15.18	15.47
17	12.23	12.86	12.48	9.38	10.82	10.96	11.79	12.67	13.78	14.49	15.21	15.48
18	12.20	12.88	12.37	9.38	10.85	11.01	11.74	12.72	13.82	14.51	15.22	15.49
19	12.22	12.90	12.14	9.36	10.85	11.07	11.69	12.78	13.86	14.54	15.23	15.50
20	12.21	12.94	11.92	9.34	10.80	11.10	11.67	12.82	13.89	14.57	15.24	15.50
21	12.22	12.95	11.85	9.46	10.66	11.13	11.64	12.87	13.92	14.60	15.16	15.52
22	12.23	12.96	11.78	9.53	10.53	11.22	11.61	12.92	13.95	14.63	15.10	15.53
23	12.23	12.96	11.67	9.63	10.54	11.22	11.62	12.98	14.00	14.65	15.10	15.54
24	12.21	12.95	11.37	9.75	10.56	11.26	11.68	13.01	14.03	14.67	15.15	15.54
25	12.22	12.99	11.22	9.83	10.61	11.31	11.70	13.06	14.07	14.70	15.18	15.54
26	12.25	13.00	11.11	9.89	10.66	11.33	11.71	13.07	14.10	14.72	15.20	15.55
27	12.27	13.01	11.04	9.95	10.74	11.36	11.74	13.10	14.13	14.75	15.23	15.56
28	12.32	13.05	10.93	10.05	10.80	11.40	11.77	13.14	14.16	14.78	15.25	15.57
29	12.35	13.08	10.89	10.09	---	11.49	11.80	13.17	14.19	14.80	15.28	15.58
30	12.38	13.11	10.78	10.10	---	11.55	11.86	13.20	14.22	14.83	15.29	15.60
31	12.42	---	10.17	10.17	---	11.57	---	13.20	---	14.85	15.30	---
MAX	13.28	13.11	13.15	10.17	10.85	11.57	12.00	13.20	14.22	14.85	15.30	15.60

CAL YR 1990 LOW 14.73
WTR YR 1991 LOW 15.60403653081321800 TU-1
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929.

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.

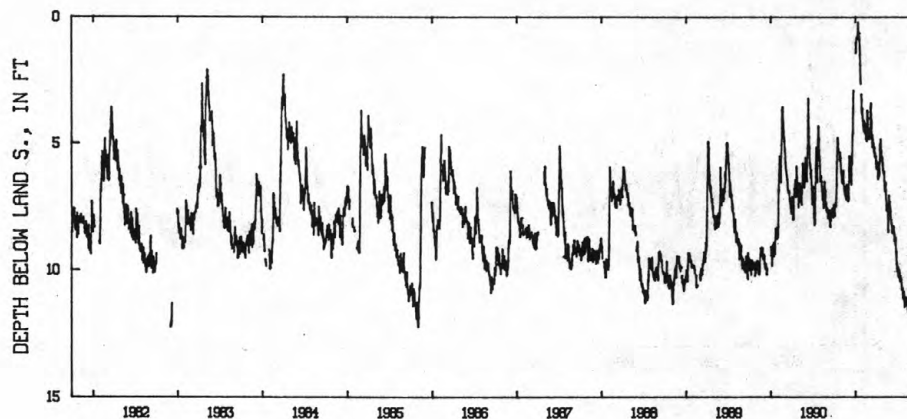
PERIOD OF RECORD.--June 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 12.68 ft below land-surface datum, Feb. 14, 24, 1977;

minimum daily low, 0.20 ft below land-surface datum, Jan. 13, 1991.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.56	6.20	7.28	---	3.86	4.64	5.80	6.04	7.58	10.07	11.45	11.10
2	7.84	6.18	6.95	1.01	4.06	4.82	5.92	6.16	7.67	9.93	11.45	11.26
3	7.90	6.51	7.22	1.44	4.30	4.74	6.00	6.13	8.00	9.87	11.22	11.28
4	7.83	6.54	7.20	1.41	4.25	4.55	5.97	6.18	8.03	10.25	11.28	11.20
5	7.86	6.35	6.14	1.07	4.47	4.77	5.99	6.10	8.13	10.22	11.38	11.01
6	7.50	6.58	5.49	.81	4.13	4.78	5.93	6.48	8.17	9.95	11.32	11.59
7	7.43	6.46	5.58	.81	4.47	4.45	5.75	6.63	8.27	9.99	11.07	11.67
8	7.37	6.41	5.91	.80	4.10	3.75	6.31	6.82	8.53	10.32	11.30	11.74
9	7.50	6.44	5.95	.86	4.57	3.54	6.32	6.87	8.55	10.00	11.32	11.62
10	7.49	6.40	6.14	.75	4.26	3.41	6.40	6.90	8.51	10.08	11.12	11.33
11	7.17	6.07	5.93	.80	4.23	3.86	6.21	6.78	8.43	10.37	11.12	11.73
12	6.70	6.55	6.42	.48	4.61	4.11	6.15	6.54	8.31	10.45	11.09	11.76
13	6.08	6.75	6.39	.20	4.58	4.25	6.28	7.05	8.34	10.21	11.41	11.46
14	5.78	---	6.52	.51	4.62	4.99	6.11	7.23	8.43	10.33	11.55	11.72
15	5.28	6.80	6.62	.65	4.67	5.15	6.18	7.60	8.28	10.34	11.53	11.85
16	4.80	6.99	6.25	.67	4.85	4.67	5.81	7.66	8.65	10.39	11.37	11.81
17	4.79	6.83	5.44	.76	4.67	4.80	5.04	7.59	8.49	10.37	11.69	11.75
18	4.95	7.06	5.84	.80	4.80	4.87	5.15	7.57	8.87	10.43	11.13	11.77
19	5.01	6.68	5.80	.93	4.91	5.01	5.30	7.36	8.81	10.51	11.21	11.61
20	5.24	6.96	4.64	1.16	4.71	5.00	5.27	7.61	8.90	10.75	11.28	11.55
21	5.25	6.96	4.66	1.50	3.82	5.13	4.85	7.55	8.85	10.80	10.96	11.77
22	5.37	7.22	4.57	1.89	3.70	5.25	5.23	8.44	9.01	10.71	10.57	11.68
23	5.37	6.84	3.77	2.41	3.77	5.37	5.27	8.52	8.84	10.70	10.81	11.70
24	5.38	6.64	3.00	2.64	3.96	5.14	5.32	7.81	8.73	11.10	11.00	11.53
25	5.35	6.62	2.90	---	4.01	5.37	5.62	7.48	9.28	11.09	11.01	10.97
26	5.70	6.80	---	---	4.58	5.52	5.67	7.48	9.44	11.14	11.56	11.06
27	5.37	7.02	---	3.05	4.61	5.38	5.55	7.05	9.25	11.00	11.48	10.85
28	5.35	7.00	---	3.25	4.84	5.55	5.59	7.81	9.75	11.00	11.27	10.89
29	5.48	7.05	---	3.83	---	5.48	5.74	7.65	9.77	10.85	11.52	10.88
30	5.59	7.20	---	3.62	---	5.52	5.85	7.29	10.00	11.13	11.25	10.58
31	6.04	---	---	3.64	---	5.68	---	7.50	---	11.31	11.04	---
MAX	7.90	7.22	7.28	3.83	4.91	5.68	6.40	8.52	10.00	11.31	11.69	11.85

CAL YR 1990 LOW 9.84
WTR YR 1991 LOW 11.85403823081324200 TU-5
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

295

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.

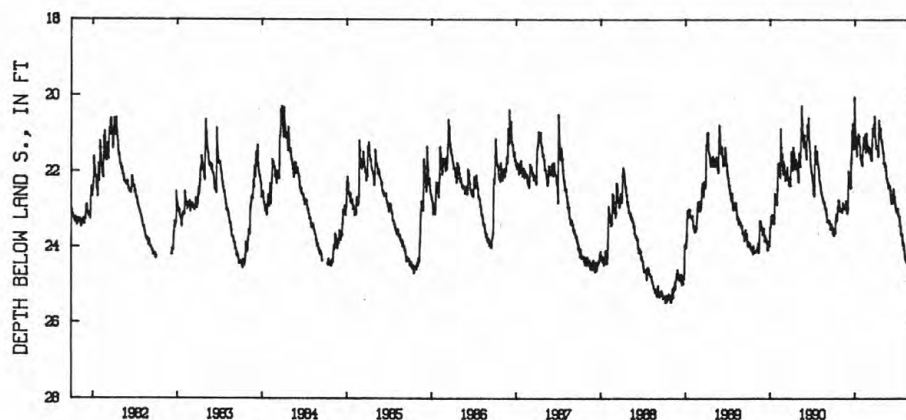
INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 1,040 ft above National Geodetic Vertical Datum of 1929, 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, 25.47 ft below land-surface datum, Oct. 6, 1988;
minimum daily low, 19.32 ft below land-surface datum, Feb. 24, 1975.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.66	23.04	22.99	20.45	21.83	21.48	21.24	21.34	22.45	23.08	24.02	24.89
2	23.70	23.04	23.03	20.65	21.81	21.33	21.36	21.42	22.48	23.04	24.08	24.92
3	23.69	23.07	22.94	20.90	21.84	21.43	21.40	21.48	22.48	23.01	24.08	24.91
4	23.55	23.05	21.99	21.06	21.59	21.48	21.38	21.52	22.60	22.97	24.15	24.89
5	23.53	22.97	22.05	21.11	21.43	21.54	21.33	21.51	22.69	22.99	24.25	24.94
6	23.53	23.02	22.05	21.26	21.32	21.44	21.35	21.60	22.74	23.06	24.30	24.96
7	23.61	23.05	22.10	21.36	21.10	21.38	21.37	21.73	22.78	23.14	24.34	25.01
8	23.65	23.09	22.17	21.40	21.09	21.47	21.34	21.79	22.80	23.13	24.27	25.04
9	23.60	23.01	22.27	21.45	21.10	21.52	21.32	21.77	22.85	23.19	24.22	25.04
10	23.34	22.83	22.29	21.60	21.17	21.65	21.42	21.83	22.82	23.16	24.29	25.00
11	23.24	22.85	22.28	21.57	21.31	21.66	21.57	21.88	22.78	23.22	24.37	25.05
12	23.18	22.93	22.22	21.09	21.37	21.64	21.61	21.83	22.72	23.19	24.40	25.08
13	23.13	22.98	22.27	21.10	21.27	21.47	21.52	21.83	22.81	23.25	24.40	25.03
14	23.17	22.97	22.45	21.12	21.02	21.64	21.06	21.86	22.81	23.33	24.38	25.06
15	23.29	22.96	22.41	21.22	21.31	21.71	20.65	21.96	22.82	23.44	24.40	25.13
16	23.31	22.91	21.70	21.12	21.47	21.59	20.77	21.99	22.59	23.45	24.46	25.16
17	23.27	22.97	21.80	21.01	21.48	21.31	20.87	22.06	22.46	23.45	24.44	25.21
18	23.16	22.99	21.66	21.10	21.50	20.86	20.94	22.17	22.55	23.48	24.44	25.20
19	22.94	22.95	20.92	21.15	21.14	20.89	20.87	22.18	22.59	23.65	24.43	25.31
20	22.95	23.00	21.24	21.07	20.99	21.00	20.86	22.20	22.66	23.69	24.47	25.35
21	22.92	23.01	21.26	21.26	21.02	21.00	20.85	22.28	22.71	23.65	24.53	25.35
22	22.92	22.91	21.12	21.33	21.18	21.02	20.85	22.26	22.66	23.67	24.55	25.31
23	22.76	22.81	20.79	21.33	21.27	20.76	20.91	22.29	22.79	23.66	24.63	25.34
24	22.76	22.77	20.74	21.54	21.31	20.95	21.14	22.29	22.85	23.70	24.70	25.35
25	22.81	22.86	20.98	21.63	21.38	21.07	21.19	22.43	22.90	23.79	24.73	25.23
26	22.87	22.92	21.30	21.66	21.37	21.07	21.16	22.33	23.00	23.86	24.75	25.28
27	22.92	22.88	21.40	21.60	21.45	20.54	21.16	22.39	23.00	23.92	24.72	25.33
28	23.03	23.02	21.37	21.68	21.48	20.69	21.24	22.43	23.02	23.95	24.82	25.41
29	23.06	23.11	21.41	21.74	---	20.84	21.21	22.41	23.07	23.90	24.87	25.43
30	23.02	23.07	21.00	21.67	---	21.10	21.32	22.36	23.07	23.94	24.79	25.46
31	23.04	---	20.04	21.78	---	21.16	---	22.40	---	23.98	24.82	---
MAX	23.70	23.11	23.03	21.78	21.84	21.71	21.61	22.43	23.07	23.98	24.87	25.46
CAL YR 1990	LOW 23.70											
WTR YR 1991	LOW 25.46											



401826083255200 U-4
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

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 National Geodetic Vertical Datum of 1929, from

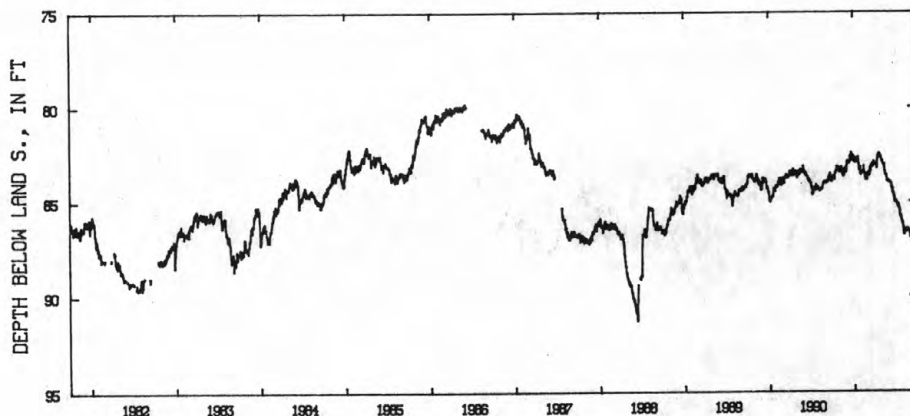
topographic map. Measuring Point: Top of platform 2.50 ft below land-surface datum.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83.72	83.45	83.31	82.65	83.57	83.84	82.96	82.78	84.00	85.00	86.29	86.89
2	83.71	83.45	83.33	82.63	83.51	83.58	83.04	82.86	83.99	84.98	86.37	86.91
3	83.72	83.44	83.14	82.81	83.57	83.60	83.06	82.91	83.94	85.05	86.48	86.94
4	83.63	83.45	82.89	82.88	83.47	83.53	83.05	82.87	83.92	85.05	86.52	86.89
5	83.72	83.24	82.98	82.90	83.47	83.59	82.99	82.82	83.94	85.06	86.64	86.82
6	83.76	83.31	82.86	82.91	83.46	83.45	82.99	82.90	83.97	85.12	86.74	86.88
7	83.74	83.35	82.88	82.90	83.45	83.53	82.96	83.02	84.00	85.18	86.79	86.87
8	83.69	83.42	82.91	82.87	83.46	83.63	82.95	83.03	83.97	85.18	86.71	86.82
9	83.79	83.28	82.99	82.94	83.46	83.63	82.95	83.01	84.03	85.27	86.60	86.75
10	83.80	83.15	82.91	82.94	83.41	83.55	83.10	83.04	83.99	85.24	86.66	86.68
11	83.84	83.30	82.89	82.83	83.49	83.55	83.22	83.05	84.07	85.25	86.66	86.65
12	83.75	83.37	82.83	82.70	83.49	83.43	83.22	83.04	84.10	85.22	86.55	86.64
13	83.51	83.50	82.99	82.72	83.41	83.20	83.07	83.05	84.23	85.15	86.47	86.58
14	83.44	83.50	83.00	82.81	83.12	83.24	82.79	83.18	84.29	85.32	86.50	86.54
15	83.53	83.55	82.87	82.82	83.39	83.37	82.62	83.40	84.34	85.35	86.56	86.58
16	83.53	83.57	82.84	82.73	83.49	83.42	82.66	83.46	84.37	85.36	86.64	86.56
17	83.43	83.64	82.85	82.87	83.50	83.40	82.63	83.55	84.42	85.42	86.57	86.62
18	83.31	83.65	82.57	82.89	83.53	83.10	82.62	83.58	84.53	85.47	86.60	86.62
19	83.40	83.60	82.67	82.90	83.59	83.17	82.51	83.60	84.53	85.60	86.49	86.70
20	83.42	83.63	82.70	82.64	83.74	83.20	82.54	83.60	84.59	85.74	86.45	86.77
21	83.30	83.61	82.61	82.79	83.69	83.12	82.52	83.58	84.60	85.84	86.48	86.75
22	83.27	83.52	82.48	82.98	83.75	83.09	82.46	83.58	84.60	85.82	86.46	86.66
23	83.15	83.30	82.42	82.98	83.76	82.98	82.48	83.74	84.73	85.79	86.54	86.66
24	83.19	83.28	82.54	83.25	83.78	83.12	82.62	83.79	84.73	85.85	86.60	86.67
25	83.19	83.29	82.67	83.35	83.82	83.17	82.67	83.87	84.77	85.93	86.61	86.47
26	83.22	83.30	82.84	83.34	83.82	83.17	82.61	83.94	84.89	86.05	86.58	86.42
27	83.19	83.23	82.84	83.26	83.82	83.05	82.59	83.95	84.94	86.10	86.57	86.47
28	83.22	83.33	82.65	83.15	83.82	82.95	82.63	83.95	85.00	86.15	86.61	86.52
29	83.28	83.45	82.61	83.15	---	82.88	82.62	83.94	84.99	86.11	86.66	86.58
30	83.31	83.45	82.54	83.20	---	83.06	82.75	83.88	85.05	86.14	86.64	86.54
31	83.42	---	82.61	83.53	---	83.06	---	83.95	---	86.21	86.75	---
MAX	83.84	83.65	83.33	83.53	83.82	83.84	83.22	83.95	85.05	86.21	86.79	86.94

CAL YR 1990 LOW 85.00
WTR YR 1991 LOW 86.94391452082282900 V-1
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

297

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.

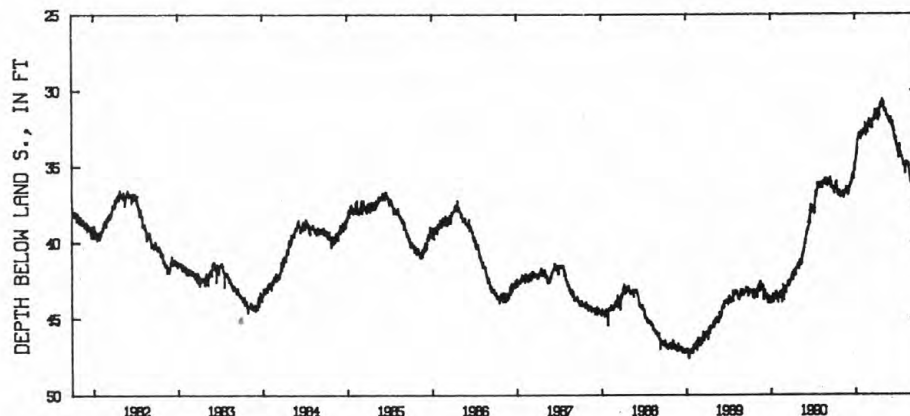
DATUM.--Elevation of land-surface datum is 660 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.50 ft above land-surface datum.

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, 47.60 ft below land-surface datum, Jan. 13, 1989;
minimum daily low, 17.70 ft below land-surface datum, Apr. 30, 1975.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36.60	36.85	36.70	34.80	33.00	32.15	31.90	30.75	32.20	33.75	35.00	36.00
2	36.80	37.00	36.90	34.65	33.00	31.90	31.80	30.80	32.05	33.95	35.15	36.30
3	36.50	37.00	36.35	34.65	32.90	32.05	31.75	31.15	32.25	34.05	35.20	36.30
4	36.50	36.75	36.65	34.60	32.80	32.20	31.55	30.90	31.80	34.05	35.50	35.70
5	36.50	36.70	36.70	34.25	32.80	32.15	31.45	30.85	32.15	34.25	35.30	35.90
6	36.45	36.95	36.35	34.35	32.60	32.05	31.45	31.30	32.10	34.20	35.15	36.25
7	36.45	37.05	36.45	34.20	32.75	32.30	31.45	31.35	32.25	34.40	34.95	36.35
8	36.40	37.00	36.40	33.80	32.75	32.40	31.35	31.40	32.25	34.45	34.85	36.30
9	36.10	36.65	36.25	34.10	32.60	32.40	31.25	31.30	32.30	33.85	34.70	36.30
10	36.25	36.80	36.30	33.90	32.65	32.50	32.00	31.30	32.35	33.60	34.80	36.25
11	36.30	36.90	36.10	33.25	32.80	32.50	31.90	31.35	32.05	33.70	34.90	36.50
12	36.00	37.10	36.10	33.30	32.65	32.20	31.75	31.25	32.40	33.55	34.85	36.40
13	36.30	36.95	36.25	33.30	32.15	31.95	31.75	31.45	32.55	33.65	34.80	36.50
14	36.50	37.00	36.15	33.20	32.45	32.30	31.55	31.35	32.60	34.00	34.75	36.70
15	36.80	36.85	35.80	33.10	32.90	32.45	31.65	31.55	32.70	34.20	34.85	36.85
16	36.80	36.65	36.10	32.85	33.00	32.50	31.75	31.65	32.50	34.15	35.00	36.70
17	36.60	36.80	35.75	33.20	32.80	32.05	31.35	31.65	32.75	34.10	34.90	36.80
18	36.70	36.70	35.55	33.20	32.55	31.95	31.20	31.65	33.10	34.35	35.10	36.85
19	36.95	36.60	35.95	33.00	32.55	32.00	31.00	31.70	33.10	34.35	34.90	37.00
20	36.85	36.70	35.85	32.80	32.75	31.95	31.20	31.70	33.10	34.40	34.80	37.15
21	36.80	36.60	35.60	33.15	32.50	31.90	30.95	31.65	33.30	34.45	35.20	37.00
22	36.70	36.60	35.50	33.00	32.45	31.80	30.85	31.70	33.00	34.40	35.40	37.05
23	36.70	36.35	35.45	32.90	32.70	31.70	30.90	31.85	33.25	34.65	35.65	37.00
24	36.60	36.40	35.80	33.10	32.60	32.00	31.15	31.90	33.10	34.55	35.70	37.00
25	36.70	36.70	35.55	33.25	32.40	32.00	31.15	31.90	33.15	34.65	35.85	36.85
26	36.85	36.60	35.85	32.80	32.25	31.65	31.05	31.90	33.35	34.80	35.90	37.15
27	36.80	36.50	35.40	32.70	32.30	31.30	30.85	32.00	33.45	34.95	36.00	37.40
28	37.05	36.80	35.05	32.85	32.15	31.50	30.80	32.10	33.65	34.75	36.05	37.50
29	37.05	36.90	34.85	32.75	---	31.40	30.60	32.00	33.60	34.80	36.15	37.70
30	36.85	36.75	34.95	32.75	---	31.90	30.80	32.00	33.65	35.00	36.00	37.65
31	36.90	---	35.30	33.05	---	31.80	---	32.05	---	35.00	35.95	---
MAX	37.05	37.10	36.90	34.80	33.00	32.50	32.00	32.10	33.65	35.00	36.15	37.70
CAL YR 1990	LOW 44.00											
WTR YR 1991	LOW 37.70											



392712084191700 W-5
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

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 National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

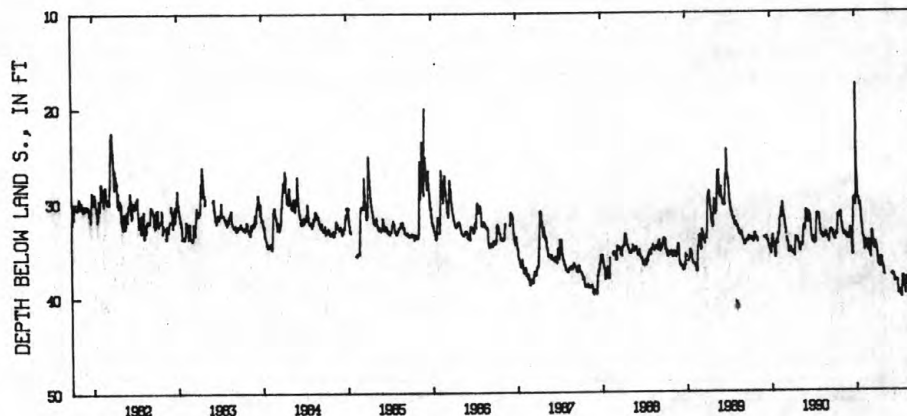
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--August 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 40.90 ft below land-surface datum, Sept. 13, 14, 1991; minimum daily low, 17.60 ft below land-surface datum, Jan. 2, 1991.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34.02	32.55	34.00	24.40	33.90	35.50	35.25	37.75	---	39.65	39.80	40.70
2	34.00	32.75	34.05	17.60	33.85	35.65	35.50	37.85	---	39.80	39.80	40.40
3	34.10	32.95	34.00	22.40	34.10	35.70	35.90	37.85	37.80	39.80	39.40	40.40
4	34.10	33.00	33.90	25.15	34.35	35.90	36.25	---	37.80	39.80	38.40	40.50
5	33.70	33.15	33.40	27.15	34.80	36.00	36.70	---	37.70	39.80	38.10	40.55
6	33.50	33.30	32.95	27.95	35.00	35.45	36.70	---	37.65	39.40	38.35	40.60
7	33.30	33.40	32.85	28.15	35.20	34.90	36.50	---	37.80	39.40	38.60	40.50
8	33.60	33.50	33.00	28.75	35.15	34.25	36.50	---	37.85	39.50	38.35	40.50
9	33.65	33.60	33.05	29.25	34.65	33.45	36.60	---	37.85	39.75	38.60	40.60
10	33.50	33.60	33.20	29.75	34.25	33.20	36.55	---	37.80	39.85	38.40	40.80
11	33.55	33.50	33.50	29.70	34.10	33.20	36.90	---	38.00	39.90	38.30	40.80
12	33.50	33.30	34.00	29.80	34.25	33.35	36.95	---	38.00	39.95	38.25	40.80
13	32.70	33.30	34.65	29.65	34.40	33.50	37.00	---	38.10	40.05	38.35	40.90
14	31.60	33.30	35.00	30.00	34.70	33.80	37.00	---	38.30	40.10	38.65	40.90
15	31.40	33.40	35.40	30.40	34.75	34.10	36.60	---	38.45	40.15	39.00	40.60
16	31.60	33.55	35.65	30.50	34.40	34.25	36.20	---	38.50	39.80	39.45	40.50
17	31.80	33.70	35.65	30.50	34.55	34.20	36.05	---	38.50	39.05	39.55	40.65
18	31.80	33.75	35.55	30.10	34.65	34.60	36.10	---	38.30	38.60	39.60	40.75
19	31.75	33.80	35.00	30.15	35.00	34.80	36.00	---	38.35	38.25	39.80	40.60
20	31.60	33.85	31.90	30.25	35.25	35.10	36.05	---	38.40	38.00	39.90	40.60
21	31.35	33.90	29.90	30.95	35.30	35.15	36.10	---	38.50	38.05	40.00	40.65
22	31.50	34.00	29.70	31.15	34.75	35.15	36.25	---	38.50	37.95	40.05	40.55
23	31.60	33.90	30.15	31.80	34.45	35.10	36.55	---	38.50	38.05	40.05	40.50
24	31.60	33.70	30.00	32.05	34.15	34.60	36.90	---	38.35	38.70	40.05	40.60
25	31.30	33.55	29.80	32.40	34.20	34.35	36.95	---	38.45	38.85	40.00	40.70
26	31.20	33.65	29.60	32.50	34.60	34.50	36.90	---	38.45	39.00	40.05	40.70
27	31.40	33.80	30.30	32.70	35.15	34.60	37.00	---	38.45	39.10	40.15	40.60
28	31.50	33.80	30.30	33.00	35.45	34.65	37.00	---	38.40	39.25	40.35	40.65
29	31.30	33.90	30.40	33.50	---	34.80	37.10	---	39.00	39.40	40.45	40.30
30	32.15	34.00	30.50	33.70	---	34.85	37.30	---	39.40	39.50	40.45	40.15
31	32.40	---	30.20	33.90	---	35.00	---	---	---	39.70	40.70	---
MAX	34.10	34.00	35.65	33.90	35.45	36.00	37.30	37.85	39.40	40.15	40.70	40.90

CAL YR 1990 LOW 35.90
WTR YR 1991 LOW 40.90392553081281600 WA-2
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

299

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 National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.50 ft above land-surface datum.

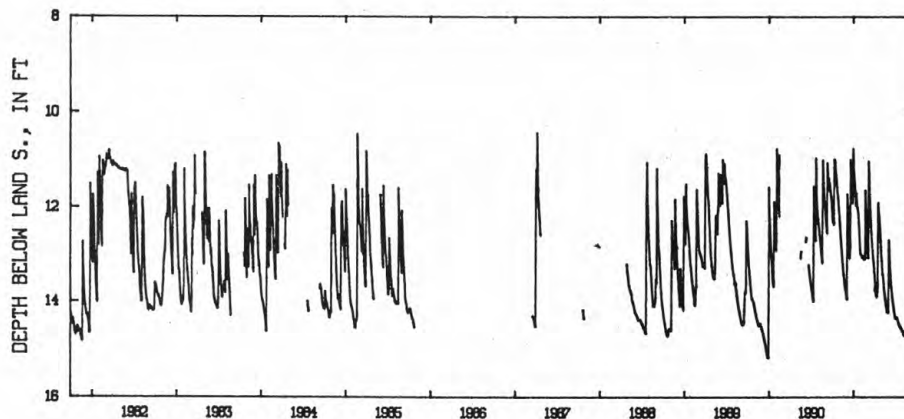
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.12	12.24	13.89	10.99	12.99	12.85	13.46	13.05	12.95	14.35	14.65	14.48
2	12.20	12.32	13.94	11.07	13.00	12.96	13.54	13.14	12.71	14.35	14.66	14.46
3	12.28	12.40	13.95	11.25	13.02	13.05	13.61	13.23	12.79	14.35	14.67	14.44
4	12.33	12.48	12.60	11.33	13.03	13.08	13.68	13.32	12.90	14.34	14.68	14.43
5	12.28	12.56	11.71	11.39	13.05	13.08	13.74	13.41	13.03	14.34	14.68	12.24
6	12.24	12.63	11.85	11.46	13.07	13.07	13.79	13.43	13.16	14.35	14.69	12.23
7	12.27	12.70	11.99	11.53	13.08	11.03	13.83	13.44	13.28	14.36	14.70	12.43
8	12.32	12.78	12.13	11.61	13.07	11.17	13.87	13.49	13.37	14.37	14.72	12.63
9	12.37	12.85	12.29	11.69	13.05	11.28	13.90	13.55	13.45	14.38	14.72	12.82
10	10.99	12.91	12.45	11.79	13.04	11.44	13.90	13.62	13.54	14.39	14.70	12.99
11	10.99	12.97	12.60	11.98	13.05	11.58	13.89	13.68	13.61	14.41	14.67	13.15
12	11.05	13.03	12.74	11.87	13.07	11.72	13.83	13.74	13.67	14.43	14.65	13.29
13	11.01	13.10	12.88	11.69	13.10	11.85	13.80	13.79	13.72	14.44	14.63	13.40
14	11.05	13.16	13.01	11.79	13.11	11.98	13.79	13.83	13.77	14.46	14.62	13.49
15	11.13	13.22	13.09	11.89	13.10	12.12	13.69	13.87	13.82	14.47	14.62	13.59
16	11.21	13.29	13.08	11.94	13.08	12.26	12.25	13.91	13.88	14.49	14.61	13.66
17	11.29	13.34	12.94	11.98	13.09	12.40	11.91	13.95	13.93	14.50	14.61	13.73
18	11.34	13.40	12.88	12.02	13.10	12.50	12.00	13.98	13.97	14.51	14.61	13.78
19	11.39	13.45	11.00	12.06	13.10	12.59	12.11	14.02	14.02	14.52	14.60	13.83
20	11.46	13.50	11.15	12.11	11.63	12.68	12.15	14.06	14.06	14.53	14.57	13.88
21	11.53	13.56	11.41	12.17	11.74	12.77	12.18	14.09	14.10	14.54	14.52	13.94
22	11.59	13.61	11.48	12.25	11.88	12.86	12.22	14.12	14.13	14.55	14.48	13.99
23	11.65	13.64	11.48	12.34	12.02	12.91	12.31	14.15	14.16	14.56	14.46	14.04
24	11.70	13.67	11.02	12.44	12.16	12.96	12.39	14.18	14.19	14.56	14.44	14.07
25	11.75	13.69	11.19	12.55	12.30	13.03	12.47	14.20	14.22	14.57	14.44	14.09
26	11.79	13.73	11.52	12.66	12.44	13.10	12.58	14.22	14.25	14.58	14.45	14.10
27	11.86	13.76	11.75	12.77	12.59	13.15	12.67	14.22	14.28	14.59	14.46	14.13
28	11.92	13.79	11.88	12.87	12.73	13.20	12.76	14.22	14.30	14.60	14.47	14.14
29	12.00	13.83	11.92	12.95	---	13.26	12.85	14.23	14.33	14.61	14.48	14.17
30	12.08	13.86	11.59	12.99	---	13.32	12.95	14.23	14.35	14.62	14.49	14.19
31	12.15	---	10.77	12.99	---	13.40	---	14.23	---	14.64	14.49	---
MAX	12.37	13.86	13.95	12.99	13.11	13.40	13.90	14.23	14.35	14.64	14.72	14.48
CAL YR 1990	LOW 13.99											
WTR YR 1991	LOW 14.72											



404655081553200 WN-3
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929, from topographic

map. Measuring point: Floor of instrument shelter 6.00 ft above land-surface datum.

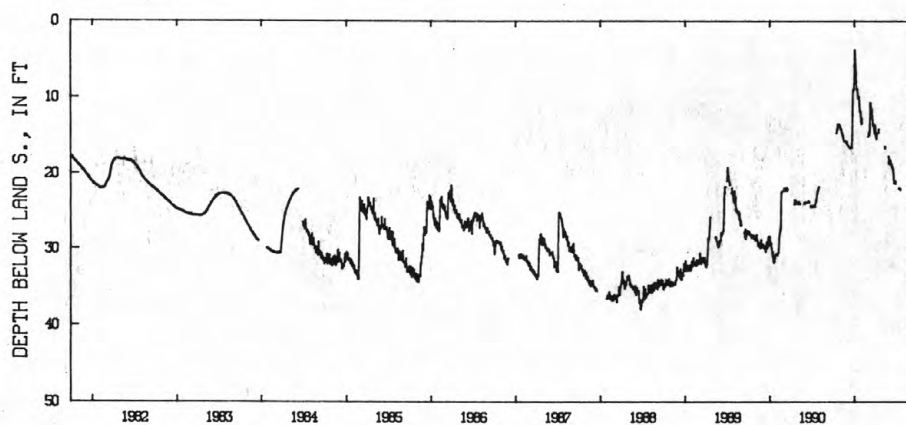
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	14.07	16.20	6.04	13.52	15.09	14.01	---	18.61	---	23.81	---
2	---	14.19	16.23	3.96	13.41	15.09	14.57	---	18.54	---	---	---
3	---	14.21	16.28	3.78	12.75	14.55	15.12	---	18.15	---	---	23.61
4	---	14.24	16.32	4.27	---	14.72	15.14	---	18.17	---	---	23.58
5	---	14.26	16.37	4.73	---	15.01	15.39	---	18.31	---	---	23.53
6	---	14.41	16.41	5.01	---	15.01	15.36	---	18.52	---	---	23.48
7	---	14.57	16.49	5.74	---	14.63	14.92	---	18.84	---	---	23.51
8	---	14.74	16.52	6.70	---	14.02	14.68	---	18.86	---	---	23.49
9	---	14.89	16.52	7.94	---	12.69	14.80	---	18.71	---	---	23.61
10	---	14.96	16.50	8.73	---	11.20	---	---	18.79	---	---	23.75
11	---	14.98	16.51	8.96	---	10.70	---	---	19.13	---	---	23.91
12	---	15.01	16.56	8.96	---	11.08	---	16.68	19.11	21.97	---	24.01
13	---	15.19	16.60	8.88	---	11.10	---	16.45	19.14	21.97	---	24.04
14	---	15.42	16.67	8.92	---	11.63	14.65	---	19.34	21.94	---	24.04
15	---	15.52	---	9.56	---	11.88	14.19	---	19.49	21.90	---	23.96
16	14.68	15.60	---	9.70	---	11.88	---	---	19.48	22.00	---	---
17	14.37	15.64	---	10.04	---	11.87	---	---	19.82	22.19	---	---
18	14.22	15.65	---	10.17	---	11.54	---	---	20.24	---	---	---
19	14.14	15.72	---	10.21	---	12.36	---	---	20.70	---	23.81	---
20	14.12	15.81	16.61	9.97	---	12.86	---	---	20.87	---	23.72	---
21	13.99	15.86	16.05	9.91	---	13.60	---	---	21.25	---	23.63	---
22	13.80	15.86	14.99	10.71	---	13.74	---	---	21.29	---	23.68	---
23	13.62	15.84	13.89	11.04	---	13.66	---	---	21.17	---	23.69	23.69
24	13.60	15.81	12.24	11.62	---	13.64	---	---	20.98	---	23.69	23.79
25	13.64	15.81	10.70	11.84	---	13.81	---	---	21.06	---	23.65	23.79
26	13.68	15.80	9.04	11.98	---	14.44	---	---	21.35	---	23.70	23.73
27	13.69	15.86	8.93	11.81	---	14.44	---	---	---	---	---	23.73
28	13.68	15.93	9.01	12.13	---	14.80	---	17.73	---	---	---	23.72
29	13.70	16.06	9.08	12.84	---	14.74	---	18.55	---	---	---	23.65
30	13.82	16.16	9.08	13.09	---	14.13	---	18.73	---	---	---	23.52
31	13.91	---	8.14	13.33	---	13.66	---	18.77	---	---	---	---
MAX	14.68	16.16	16.67	13.33	13.52	15.09	15.39	18.77	21.35	22.19	23.81	24.04
CAL YR 1990	LOW 31.83											
WTR YR 1991	LOW 24.04											



404802081583100 WN-2A
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

301

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.

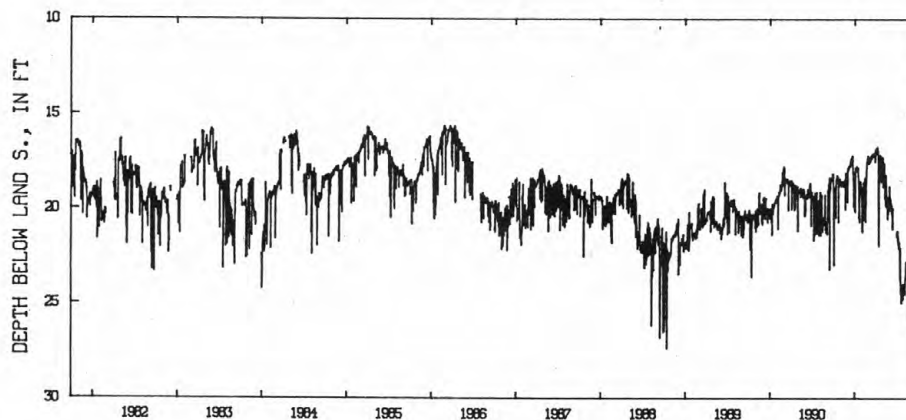
DATUM.--Elevation of land-surface datum is 965 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 5.00 ft above land-surface datum.

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, 27.40 ft below land-surface datum, Oct. 14, 1988;
minimum daily low, 5.38 ft below land-surface datum, Jan. 17, 1980.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.30	18.55	18.05	19.65	21.00	17.55	17.20	17.40	19.60	---	24.45	25.20
2	20.35	18.60	19.65	19.80	21.10	17.60	16.90	17.30	19.30	21.35	24.45	23.55
3	20.55	18.75	17.80	18.05	21.25	17.50	17.10	17.35	19.50	21.50	24.00	23.55
4	23.00	18.80	17.95	20.20	20.95	17.50	17.00	18.80	19.45	21.20	24.00	23.40
5	23.00	18.55	17.90	17.80	20.25	17.55	16.80	18.85	19.55	21.30	24.35	25.20
6	19.60	18.70	17.90	18.00	18.85	17.30	17.00	18.75	19.75	21.50	24.35	23.40
7	19.40	18.70	17.80	18.00	19.90	17.40	16.85	17.60	19.70	21.65	24.55	23.35
8	19.45	18.55	17.80	17.85	18.60	17.40	16.90	17.65	19.85	21.80	23.70	22.85
9	19.10	18.55	17.75	18.00	20.60	17.40	16.75	17.60	19.90	21.80	23.35	25.10
10	18.85	18.55	17.75	18.00	20.15	17.30	16.85	17.70	20.15	22.00	23.20	24.90
11	18.80	18.60	17.75	17.75	18.65	17.50	17.00	19.45	20.35	22.15	22.85	25.40
12	20.50	18.65	17.65	17.85	18.60	17.30	16.95	19.20	20.15	21.80	23.40	24.90
13	18.45	18.70	17.75	17.90	18.60	17.20	19.40	19.65	21.10	21.85	23.55	23.30
14	18.45	18.80	17.65	17.90	18.50	17.20	21.55	19.85	20.05	22.10	23.45	25.45
15	18.50	18.80	17.50	17.95	18.35	17.20	22.00	19.70	20.00	22.55	23.50	23.25
16	18.50	18.65	17.50	17.85	20.45	17.35	18.05	19.75	---	23.80	23.70	26.70
17	18.35	18.75	17.35	18.20	20.70	17.30	17.80	18.20	---	22.10	23.55	25.95
18	18.25	18.60	17.35	18.35	20.00	17.15	17.70	19.45	---	24.35	22.50	24.15
19	18.30	18.55	17.45	20.50	19.60	17.20	17.35	19.55	---	24.50	23.70	23.80
20	18.45	18.50	17.40	20.25	19.75	17.25	17.40	19.95	---	24.05	23.60	25.40
21	18.40	18.45	17.35	20.75	17.95	17.25	17.15	19.85	---	24.85	23.50	23.40
22	18.45	20.05	17.35	18.90	17.85	17.05	17.25	20.30	---	25.00	23.30	23.00
23	18.40	18.10	17.20	18.95	17.55	17.15	17.30	20.55	---	24.80	23.35	23.45
24	20.75	18.20	17.50	18.75	17.55	17.10	17.25	20.15	---	24.20	23.35	22.15
25	18.45	18.15	18.20	18.60	17.40	17.20	17.25	20.25	---	24.10	23.00	22.10
26	18.50	18.20	18.05	18.55	17.30	17.15	18.60	19.35	---	24.25	23.45	25.75
27	18.50	18.20	19.80	18.70	17.25	17.05	17.30	19.50	---	24.30	25.25	22.35
28	18.40	18.20	19.90	18.90	17.20	17.15	17.35	19.55	---	24.00	26.00	22.25
29	18.45	18.30	19.90	18.95	---	17.15	17.25	19.90	---	24.80	25.55	22.25
30	18.60	18.15	19.30	18.95	---	17.50	17.45	20.10	---	24.25	25.75	22.60
31	18.60	---	20.10	19.15	---	17.50	---	18.80	---	24.20	25.30	---
MAX	23.00	20.05	20.10	20.75	21.25	17.60	22.00	20.55	21.10	25.00	26.00	26.70

CAL YR 1990 LOW 23.25
WTR YR 1991 LOW 26.70405745081510200 WN-7
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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 National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 2.30 ft above land-surface datum.

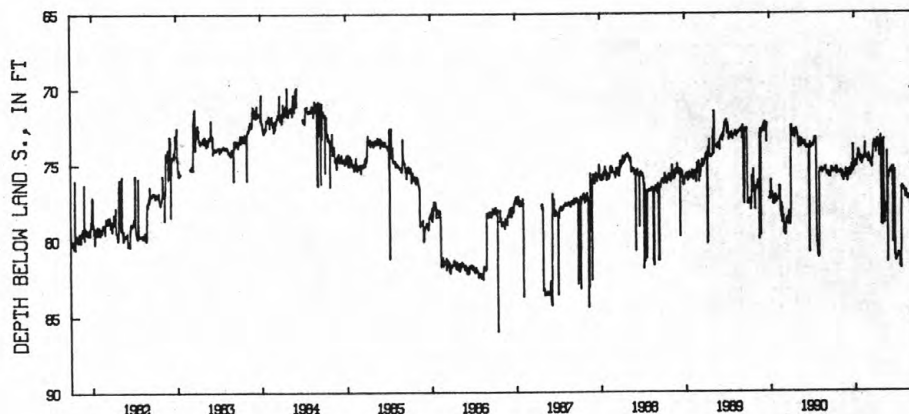
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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 1990 TO SEPTEMBER 1991
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75.55	75.44	75.90	75.28	75.03	74.86	73.93	79.08	75.59	81.09	76.74	77.98
2	75.57	75.48	76.12	75.01	74.91	74.32	74.19	73.45	75.61	81.07	76.79	77.97
3	75.57	75.58	75.95	75.08	74.87	74.46	74.25	73.49	75.59	81.15	76.72	77.97
4	75.36	75.53	75.74	74.89	74.76	74.54	74.03	73.41	75.36	81.18	76.96	77.67
5	75.43	75.53	75.86	74.77	74.76	74.69	73.76	73.37	75.46	81.12	77.17	77.65
6	75.38	75.84	75.40	74.98	74.77	74.54	73.63	73.35	75.53	81.13	77.26	77.71
7	75.45	75.88	75.42	75.19	74.73	74.80	73.52	77.54	75.54	80.86	77.22	77.79
8	75.52	75.97	75.47	75.19	74.72	74.96	73.43	77.71	75.39	80.93	77.09	77.70
9	75.40	75.78	75.49	75.11	74.53	74.90	73.32	78.95	75.43	81.07	76.77	77.61
10	75.37	75.51	75.62	75.20	74.42	75.02	73.57	78.82	75.33	81.03	76.94	77.45
11	75.56	75.70	75.61	74.90	74.63	75.09	73.82	78.86	75.23	80.97	77.15	77.48
12	75.48	75.77	75.31	74.40	74.67	75.05	73.91	78.25	80.20	80.95	77.20	77.46
13	75.21	76.05	75.66	74.52	74.25	74.78	73.65	78.02	78.91	80.91	77.07	77.40
14	75.21	76.12	75.80	74.36	73.61	74.88	73.44	77.71	78.47	81.74	77.14	77.36
15	75.62	75.95	75.46	74.42	74.38	75.22	74.21	77.82	75.20	81.36	77.32	77.39
16	75.71	75.74	75.69	74.06	74.64	75.25	74.42	77.82	75.21	81.40	77.40	77.39
17	75.58	75.82	75.65	74.34	74.64	75.16	74.43	77.72	75.36	81.70	77.20	77.30
18	75.30	75.92	75.03	74.38	74.64	74.64	74.51	77.87	75.40	81.80	77.27	77.28
19	75.56	75.85	75.64	74.38	74.41	74.68	74.41	77.87	75.85	81.89	77.30	77.40
20	75.59	75.94	75.65	74.17	74.61	74.62	74.32	74.17	81.08	76.56	77.37	77.51
21	75.57	75.89	75.41	74.61	74.56	73.67	74.30	79.32	75.43	76.64	77.27	77.54
22	75.56	75.64	75.19	74.73	74.56	73.79	74.10	81.48	75.42	76.64	77.23	77.40
23	75.53	75.45	75.17	74.52	74.71	73.68	73.13	79.92	75.60	76.48	77.13	77.46
24	75.53	75.34	73.74	74.80	74.58	73.88	78.64	75.91	81.20	76.50	77.37	77.47
25	75.51	75.62	73.74	74.90	74.62	73.94	78.98	75.85	81.32	76.61	77.39	77.08
26	75.57	75.76	75.49	74.75	74.73	73.95	79.03	75.91	81.40	76.73	77.39	77.20
27	75.60	75.65	75.49	74.44	74.85	73.59	78.42	75.98	81.39	76.76	77.27	77.40
28	75.61	75.91	75.10	74.90	74.90	73.52	78.27	75.71	81.28	76.75	77.71	77.54
29	75.69	76.11	74.89	74.79	---	73.56	78.72	75.68	81.16	76.59	77.77	77.55
30	75.54	76.15	74.88	74.54	---	73.88	79.06	75.50	81.06	76.74	77.73	77.55
31	75.43	---	75.28	74.97	---	73.89	---	75.56	---	76.81	77.84	---
MAX	75.71	76.15	76.12	75.28	75.03	75.25	79.06	81.48	81.40	81.89	77.84	77.98

CAL YR 1990 LOW 81.15
WTR YR 1991 LOW 81.89405805081462300 WN-6
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI).

Multiply inch-pound units	By	To obtain SI units
<i>Length</i>		
inches (in)	2.54×10^1	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^0	kilometers (km)
<i>Area</i>		
acres	4.047×10^3	square meters (m ²)
	4.047×10^{-1}	square hectometers (hm ²)
	4.047×10^{-3}	square kilometers (km ²)
square miles (mi ²)	2.590×10^0	square kilometers (km ²)
<i>Volume</i>		
gallons (gal)	3.785×10^0	liters (L)
	3.785×10^0	cubic decimeters (dm ³)
	3.785×10^{-3}	cubic meters (m ³)
million gallons	3.785×10^3	cubic meters (m ³)
	3.785×10^{-3}	cubic hectometers (hm ³)
cubic feet (ft ³)	2.832×10^1	cubic decimeters (dm ³)
	2.832×10^{-2}	cubic meters (m ³)
cfs-days	2.447×10^3	cubic meters (m ³)
	2.447×10^{-3}	cubic hectometers (hm ³)
acre-feet (acre-ft)	1.233×10^3	cubic meters (m ³)
	1.233×10^{-3}	cubic hectometers (hm ³)
	1.233×10^{-6}	cubic kilometers (km ³)
<i>Flow</i>		
cubic feet per second (ft ³ /s)	2.832×10^1	liters per second (L/s)
	2.832×10^1	cubic decimeters per second (dm ³ /s)
	2.832×10^{-2}	cubic meters per second (m ³ /s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm ³ /s)
	6.309×10^{-5}	cubic meters per second (m ³ /s)
million gallons per day	4.381×10^1	cubic decimeters per second (dm ³ /s)
	4.381×10^{-2}	cubic meters per second (m ³ /s)
<i>Mass</i>		
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

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