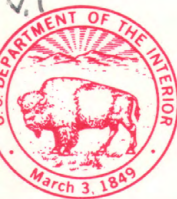
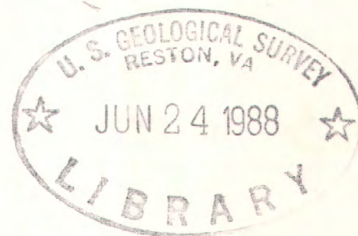


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Water Resources Data Ohio Water Year 1987



Volume 1. Ohio River Basin



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OH-87-1
Prepared in cooperation with the State of Ohio
and with other agencies

CALENDAR FOR WATER YEAR 1987

1986

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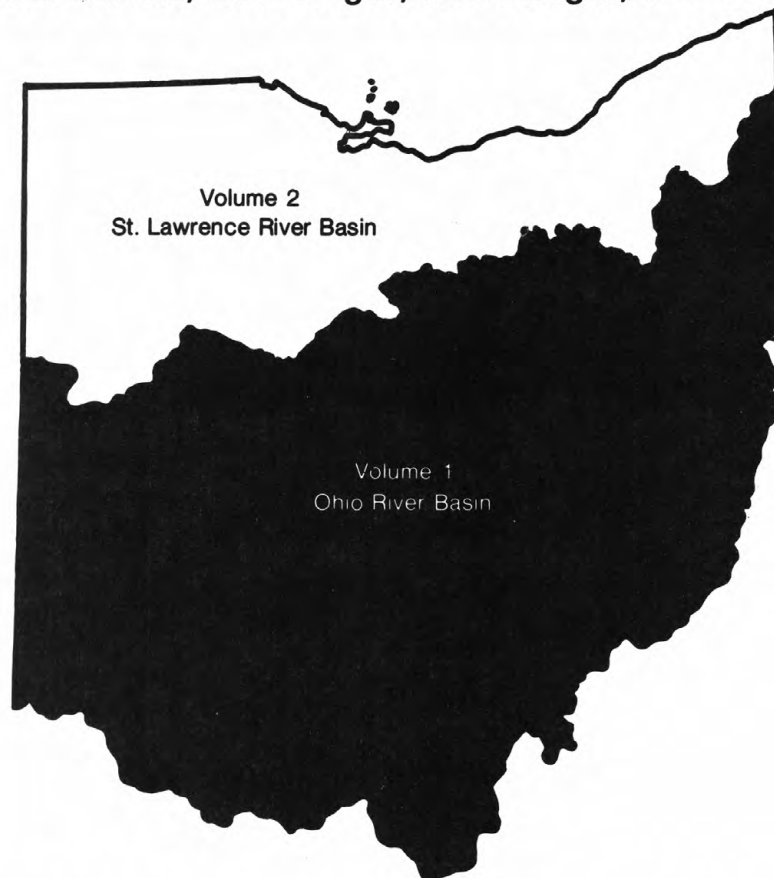
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Water Resources Data Ohio Water Year 1987

Volume 1. Ohio River Basin

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



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OH-87-1
Prepared in cooperation with the State of Ohio
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

DONALD PAUL HODEL, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For information on the water program in Ohio write to

District Chief, Water Resources Division
975 West Third Avenue
Columbus, Ohio 43212

1988

PREFACE

This volume of the annual hydrologic data report of Ohio is one of the 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 2 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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16. Abstract (Limit: 200 words) Water-resources data for the 1987 water year for Ohio consist of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; and water levels and water quality of ground-water wells. This report, in two volumes, contains records for water discharge at 123 gaging stations, stage and contents at 8 lakes and reservoirs; water quality at 25 gaging stations, 196 wells, and 93 partial-record sites; and water levels at 828 observation wells. Also included are data from 31 crest-stage partial-record stations and 89 miscellaneous sites. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Ohio.			
17. Document Analysis a. Descriptors *Ohio, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rates, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperature, Sampling sites, Water levels, Water analyses, Streamflow, Water wells. b. Identifiers/Open-Ended Terms c. COSATI Field/Group			
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(Letter after station name designates type of data: (c) chemical, (d) discharge, (e) contents and (or) elevation, (HBM) hydrologic bench mark, (M) water-quality monitor, (m) micro-biological, (NASQAN) National stream-quality accounting network, (r) radio-chemical, (s) miscellaneous sediment measurements, (S) daily suspended-sediment data, (t) temperature.)

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The following continuous-record streamflow, water quality, or stage stations in Ohio have been discontinued. Daily streamflow, water quality, and stage records were collected and published for the period of record shown for each station. Abbreviations used for characteristics measured are as follows: COND, specific conductance; DIS, discharge; DO, dissolved oxygen; G HT, gage height; PH, pH; and TEMP, temperature. Short term project stations of one or two years not included.

Station number	Station name	Characteristic measured	Period of record
03087000	BEECH CREEK NR BOLTON	TEMP	1943-51
03088000	DEER CREEK AT LIMAVILLE	DIS	1941-51
03088500	MAHONING RIVER NR DEERFIELD	DIS	1923-31
03089000	WILLOW CREEK NR DEERFIELD	DIS	1941-43
03089500	MILL CREEK NR BERLIN CENTER	DIS	1941-71
03092500	W B MAHONING R NR NEWTON FALLS	DIS	1926-81
03093500	DUCK CREEK AT LEAVITTSBURG	DIS	1941-48
03093800	MAHONING R AB DUCK C AT LEAVITTSBURG	TEMP	1968-51
		COND	1968-82
		DO	1968-82
		PH	1968-82
03094500	MAHONING RIVER AT WARREN	TEMP	1946-48
		DIS	1924-35
03096000	MOSQUITO CREEK AT NILES	DIS	1929-51
03096500	MEANDER CREEK AT OHLESTOWN	DIS	1926-29
03097500	MEANDER CREEK AT MINERAL RIDGE	DIS	1929 51
03098000	MAHONING RIVER AT YOUNGSTOWN	TEMP	1952-53
		DIS	1921-82
03098500	MILL CREEK AT YOUNGSTOWN	DIS	1943-71
03099500	MAHONING RIVER AT LOWELLVILLE	TEMP	1953-61
		COND	1963-67
		DO	1963-66
		PH	1963-67
03109000	LISBON CREEK AT LISBON	DIS	1946-62
03109326	STATELINE CREEK NR NEGLEY	DIS	1977-78
		TEMP	1977-78
		COND	1977-78
		DO	1977-78
		PH	1977-78
03109600	OHIO RIVER AT EAST LIVERPOOL	TEMP	1963-64
03110500	YELLOW CREEK AT HAMMONDSVILLE	DIS	1915-35
03110700	OHIO RIVER AT STRATTON	TEMP	1961-70
		COND	1964-70
03110983	CONSOL RUN NR BLOOMINGDALE	DIS	1978-81
		SED	1979-81
03115400	LITTLE MUSKINGUM R AT BLOOMFIELD	DIS	1958-81
03115500	LITTLE MUSKINGUM R AT FAY	DIS	1915-35
03116000	TUSCARAWAS RIVER AT CLINTON	DIS	1926-78
03116200	CHIPPEWA CREEK AT EASTON	DIS	1960-81
03116500	TUSCARAWAS R AT CRYSTAL SPRINGS	DIS	1921-29
03117100	TUSCARAWAS R AT NAVARRE	TEMP	1968-84
		COND	1968-84
		DO	1968-84
		PH	1968-84
03119000	SANDY CREEK AT SANDYVILLE	DIS	1923-47
03121500	INDIAN F BL ATWOOD DAM NR NEW CUMBERLAND	DIS	1960-75
03123000	SUGAR C AB BEACH CITY DAM AT BEACH CITY	DIS	1945-75
03125000	HOME C NR NEW PHILADELPHIA	DIS	1936-79
03127970	CLEAR FORK TRIB NR HANOVER	DIS	1978-81
03130500	TOUBY RUN AT MANSFIELD	DIS	1946-78
03131000	ROCKY FORK NR MANSFIELD	DIS	1925-32
03132000	CLEAR FORK AT BUTLER	DIS	1945-75
03132500	CLEAR FORK AT NEWVILLE	DIS	1934-39
03134000	JEROME FORK AT JEROMEVILLE	DIS	1925-49
03135500	LAKE FORK NR LOUDONVILLE	DIS	1931-39
03136000	MOHICAN RIVER AT GREER	DIS	1921-82
03136400	N B KOKOSING R NR FREDERICKTOWN	DIS	1973-78
03137000	KOKOSING RIVER AT MILLWOOD	DIS	1921-35
03139500	KILLBUCK CREEK AT LAYLAND	DIS	1923-30
03142295	SALT FORK BL SALT F DAM NR CAMBRIDGE	DIS	1970-81
03142500	WILLS CREEK AT BIRDS RUN	DIS	1928-39
03144400	SAND FORK NR WAKATOMIKA	DIS	1978-82
		SED	1978-81
03144450	OPOSSUM RUN TR NR WAKATOMIKA	DIS	1978-82
03145500	RACCOON C AT GRANVILLE	DIS	1939-48
03146000	NORTH FORK LICKING R AT UTICA	TEMP	1970-73
		DIS	1939-48
			1969-82
03147000	LICKING R AT TOBOSO	DIS	1902
			1904-06
			1921-61

DISCONTINUED STATIONS--Continued

IX

Station number	Station name	Characteristic measured	Period of record
03148000	MUSKINGUM R AT ZANESVILLE	DIS	1977-78
03149200	MUSKINGUM R AT PHILO	TEMP	1965-74
		COND	1965-74
		DO	1965-74
		PH	1965-74
03149500	SALT C NR CHANDLERSVILLE	DIS	1935-47
03150250	MEIGS CREEK NR BEVERLY	DIS	1972-75
03150300	MUSKINGUM R NR BEVERLY	TEMP	1963-70
		COND	1964-70
03155900	N B HUNTERS RUN NR HOOKER	SED	1956-62
03156000	HUNTERS RN AT LANCASTER	DIS	1956-80
03156400	HOCKING RN AT LANCASTER	DIS	1956-74
03156500	HOCKING RN NR LANCASTER	DIS	1923-32
03158000	CLEAR FORK NR LOGAN	DIS	1942-47
03159500	HOCKING RIVER AT ATHENS	DIS	1915-76
		TEMP	1954-65
		G HT	1976-77
		COND	1964-65
		SED	1956-65
03159540	SHADE R NR CHESTER	DIS	1965-84
03201600	SANDY R AB BIG FOUR HOLLOW C NR LAKE HOPE	TEMP	1971-78
		COND	1971-78
		PH	1971-78
		DIS	1970-81
03201630	E F BIG FOUR HOLLOW C NR LAKE HOPE	DIS	1978-79
03201660	BIG FOUR HOLLOW C BL E F NR LAKE HOPE	DIS	1978-81
03201700	BIG FOUR HOLLOW C NR LAKE HOPE	TEMP	1971-83
		COND	1971-83
		PH	1971-83
		DIS	1970-83
		SED	1978-83
03201720	HULL HOLLOW C NR LAKE HOPE	DIS	1978-81
03201800	SANDY RUN NR LAKE HOPE	DIS	1957-78
		TEMP	1970-78
		COND	1970-78
		DO	1970-78
		PH	1970-78
03205500	SYMMES C AT GETAWAY	DIS	1938-47
03217500	SCIOTO R AT LARUE	DIS	1926-35
			1938-51
03218000	L SCIOTO R AB MARION	DIS	1938-71
03218500	L SCIOTO R AT STP NR MARION	DIS	1926-35
			1938-39
03219000	L SCIOTO R NR MARION	DIS	1923-25
			1939
03219600	EAGON R NR WARRENSBURG	DIS	1949-62
03222500	OLENTANGY R NR NEW WINCHESTER	DIS	1946-49
03223500	WHETSTONE C NR SHAWTOWN	DIS	1946-55
03224000	SHAW C AT SHAWTOWN	DIS	1946-55
03224500	WHETSTONE C NR ASHLEY	DIS	1954-74
		COND	1964-68
03226000	OLENTANGY R AT DELAWARE	DIS	1921-23
03226500	OLENTANGY R AT STRATFORD	DIS	1934-35
			1938-58
03226800	OLENTANGY R NR WORTHINGTON	DIS	1955-84
		TEMP	1955-68
		SED	1978-81
03226865	RUSH RUN AT WORTHINGTON	DIS	1978-81
		SED	1978-81
03226870	LINWORTH RD C AT COLUMBUS	DIS	1978-81
		SED	1978-81
03226872	UNNAMED TR TO OLENTANGY R AT 315 EXPWY	DIS	1979-81
03226875	BETHEL ROAD C AT COLUMBUS	DIS	1978-81
		SED	1978-81
03226885	OLENTANGY R AT HENDERSON RD AT COL	DIS	1978-81
		SED	1978-81
03228000	SCIOTO BIG RUN AT BRIGGSDALE	DIS	1946-58
03228750	ALUM CR AT KILBOURNE	DIS	1973-82
03228805	ALUM CR AT AFRICA	TEMP	1965-70
		COND	1965-70
03229600	SCIOTO RIVER BL SHADEVILLE	TEMP	1965-80
		COND	1965-80
		DO	1965-80
		PH	1971-80
03230000	SCIOTO RIVER NR CIRCLEVILLE	DIS	1939-56
03230700	SCIOTO RIVER AT CIRCLEVILLE	DIS	1973-79
03230800	DEER C AT MT STERLING	DIS	1966-81

DISCONTINUED STATIONS--Continued

Station number	Station name	Characteristic measured	Period of record
03232000	PAINT C NR GREENFIELD	DIS	1926-35 1939-56 1966-81
03232300	RATTLESNAKE C AT CENTERFIELD	TEMP DIS TEMP	1974-78 1971-81 1974-78
03235000	SALT C AT TARLTON	DIS	1946-61
03235500	TAR HOLLOW C AT TAR HOLLOW STATE PARK	DIS	1946-78
03235995	SALT C NR LONDONDERY	TEMP	1973-74
03236000	SALT C NR LONDONDERY	DIS	1938-50
03236500	L SALT C NR JACKSON	DIS	1925-32
03237100	SCIOTO RIVER AT LUCASVILLE	TEMP COND	1956-74 1965-74
03239000	L MIAMI R NR SELMA	DIS TEMP SED	1952-58 1952-58 1952-58
03239500	N F L MIAMI R NR PITCHIN	DIS TEMP SED	1952-58 1952-58 1952-58
03240500	N F MASSIE C AT CEDARVILLE	DIS TEMP SED	1954-68 1954-68 1954-68
03241000	S F MASSIE C NR CEDARVILLE	DIS TEMP SED	1954-68 1954-68 1954-68
03242000	L MIAMI R AT SPRING VALLEY	DIS	1925-35 1939-51 1968-79
03242150	CAESAR C NR XENIA	DIS	1900 1968-83
03242200	ANDERSON F NR NEW BURLINGTON	DIS	1968-83
03242300	CAESAR C AT HARVEYSBURG	DIS TEMP COND	1960-75 1970-75 1970-75
03242350	CAESAR C NR WELLMAN	DIS	1965-74
03242500	L MIAMI R NR FORT ANCIENT	DIS	1939-51
03243000	TODD FORK NR WILMINGTON	DIS	1923 1942-44
03243500	COWAN C NR WILMINGTON	DIS	1942-50
03244000	TODD FORK NR ROACHESTER	DIS TEMP SED	1952-74 1952-58 1952-58
03245300	L MIAMI R AT MIAMIVILLE	TEMP COND DO PH	1970-75 1970-75 1970-75 1970-75
03245500	L MIAMI R AT MILFORD	TEMP COND DO PH SED	1975-84 1975-84 1975-84 1975-84 1978-84
03246000	E F L MIAMI R NR DODSONVILLE	DIS	1947-48
03246200	E F L MIAMI R NR MARATHON	DIS	1968-83
03246400	E F L MIAMI R NR WILLIAMSBURG	TEMP COND	1970-75 1970-75
03246500	E F L MIAMI R AT WILLIAMSBURG	DIS	1949-53 1960-74
03247000	E F L MIAMI R NR BANTAM	DIS	1948-53
03247400	SHAYLER RUN NR PERINTOWN	DIS	1968-73
03248000	L MIAMI R AT PLAINVILLE	DIS	1965-71
03256000	W F MILL C AT MT HEALTHY	DIS	1949-53
03257000	W F MILL C NR GREENHILLS	DIS	1945-53
03258000	W F MILL C AT LOCKLAND	DIS	1938-57
03260800	STONY C NR DEGRAFF	DIS	1957-75
03261000	G MIAMI R AT QUINCY	DIS	1946-49
03262500	G MIAMI R AT PIQUA	DIS	1914-17
03262745	G MIAMI R AT TIPP CITY	TEMP COND DO PH	1978-80 1978-80 1978-80 1978-80
03263500	GREENVILLE C NR GREENVILLE	DIS	1929-31
03264500	STILLWATER R AT COVINGTON	DIS	1930-35
03267500	MAD R AT TREMONT CITY	DIS	1931-33 1965-74
03267600	CHAPMAN C AT TREMONT CITY	DIS	1967-69
03267700	MOORE RUN NR EAGLE CITY	DIS	1965-72

DISCONTINUED STATIONS--Continued

XI

Station number	Station name	Charac- teristic measured	Period of record
03267800	MAD RIVER AT EAGLE CITY	DIS	1965-71
		TEMP	1965-69
		SED	1965-69
03267950	BUCK C NR NEW MOOREFIELD	DIS	1967-76
		TEMP	1971
		COND	1971
03267960	E F BUCK C NR NEW MOOREFIELD	DIS	1967-76
03268000	BUCK C AT NEW MOOREFIELD	DIS	1942-58
		TEMP	1970-75
		COND	1970-76
03268500	BEAVER C NR SPRINGFIELD	DIS	1942-58
			1972-76
03269000	BUCK C AT SPRINGFIELD	DIS	1914-21
			1924-49
			1973-74
03270800	WOLF C AT TROTWOOD	DIS	1962-84
03271075	G MIAMI R NR STEWART ST AT DAYTON	TEMP	1978-80
		COND	1978-80
		DO	1978-80
		PH	1978-80
03271600	G MIAMI R NR MIAMISBURG	TEMP	1964-78
		COND	1964-78
		DO	1964-78
		PH	1964-78
03272410	G MIAMI R AT ROCKDALE	TEMP	1978-80
		COND	1978-80
		DO	1978-80
		PH	1978-80
03272800	SEVENMILE C AT COLLINSVILLE	DIS	1960-62
03273000	SEVENMILE C AT SEVENMILE	DIS	1914-20
03273500	FOURMILE C NR HAMILTON	DIS	1937-60
03274500	G MIAMI R AT VENICE	DIS	1915-27
			1932-33
03274600	G MIAMI R AT NEW BALTIMORE	TEMP	1966
			1968-82
		COND	1966
			1969-82
		DO	1968-82
		PH	1975-82
03276600	G MIAMI R AT ELIZABETHTOWN	TEMP	1956-74
		COND	1964-74

GROUND-WATER STATIONS FOR WHICH RECORDS ARE PUBLISHED

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

Well number	Local number	Location	Page
ASHLAND COUNTY			
405303082170700	AS-2	Ashland (l)	221
405425082173000	AS-3	Jerome Fork (l)	222
ATHENS COUNTY			
392004082071600	AT-2A	Athens (l)	223
392009082072200	AT-5	Athens (l)	224
AUGLAIZE COUNTY			
403233083574500	AU-3	Southwest of New Hampshire (l)	225
BELMONT COUNTY			
400118081082200	B-3	Mount Olive (l)	226
BUTLER COUNTY			
391805084261800	BU-9	Northwest of Sharonville (l)	227
393202084241500	BU-15	Middletown (l)	228
391904084371800	BU-12	East of Ross (l)	229
392017084345200	BU-7	Fairfield (l)	230
392021084340300	BU-56	Fairfield (l)	231
392048084311400	BU-8	East of Hamilton (l)	232
392445084333000	BU-36	Hamilton (c)	233
392515084322000	BU-5	North of Hamilton (l)	234
392733084293000	BU-16	Southwest of Trenton (l)	235
392939084231700	BU-3	Middletown (l)	236
393103084240900	BU-2	Middletown (l)	237
CARROLL COUNTY			
403709081052800	C-1	North of Carrollton (l)	238
CHAMPAIGN COUNTY			
400638083453900	CH-3	Urbana (l)	239
CLARK COUNTY			
395639084012200	CL-9	New Carlisle (l)	240
395840083495200	CL-7	Northwest of Springfield (l)	241
COSHOCTON COUNTY			
401256081525100	CS-3	North of Conesville (l)	242
DARKE COUNTY			
400514084345700	D-2	East of Greenville (l)	243
DELAWARE COUNTY			
402126083040400	DL-3	Delaware (l)	244
FAIRFIELD COUNTY			
394257082362900	F-6	Lancaster (l)	245
394544082271000	F-1	West Rushville (l)	246
395053082361900	F-5	Baltimore (l)	247
FAYETTE COUNTY			
393153083322000	FA-1	West of Washington Court House (l)	248
FRANKLIN COUNTY			
394956083002700	FR-18	South of Shadeville (l)	249
395118083573300	FR-3	Southwest of Rees (l)	250
395157083003500	FR-109	Columbus (l)	251
400101083021800	FR-10	Columbus (l)	252

Well Number	Local number	Location	Page
GALLIA COUNTY			
383638082103300	G-2	East of Crown City (1)	253
GREENE COUNTY			
394411083561300	GR-1	North of Xenia (1)	254
394425083551100	GR-10	North of Xenia (1)	255
HAMILTON COUNTY			
391003084291500	H-11	Cincinnati (1)	256
391101084172100	H-3	Southeast of Miamiaville (1)	257
391201084281600	H-10	Cincinnati (1)	258
391214084470100	H-1	Southeast of Harrison (1)	259
391324084272500	H-9	Cincinnati (1)	260
391341084275300	H-8	Wyoming (1)	261
391442084262900	H-7	Evendale (1)	262
391608084254400	H-6	Glendale (1)	263
391733084392400	H-2	South of Ross (1)	264
391748084393800	H-19	Southwest of Venice (c)	265
391817084393300	H-4	Southwest of Ross (1)	266
HARDIN COUNTY			
404218083503700	HN-1	Alger (1)	267
HOCKING COUNTY			
393200082235300	HK-1	Logan (1)	268
KNOX COUNTY			
402344082300700	K-1	Mt. Vernon (1)	269
MADISON COUNTY			
395301083272200	M-2	London (1)	270
395352083292100	M-5	Northwest of London (1)	271
395357083304400	M-4	Northwest of London (1)	272
395740083255700	M-3	North of London (1)	273
MAHONING COUNTY			
400042080453800	MA-1	Canfield (1)	274
MARION COUNTY			
403413083170500	MN-4	Southeast of New Bloomington (1)	275
403443083230400	MN-1	LaRue (1)	276
403601083110400	MN-2	West of Marion (1)	277
MEDINA COUNTY			
410120081431800	MD-3	Wadsworth (1)	278
MERCER COUNTY			
402833084375200	MR-2	Coldwater (1)	279
MIAMI COUNTY			
395848084085500	MI-3	Northeast of Tipp City (1)	280
400308084112900	MI-44	Troy (c)	281
MONTGOMERY COUNTY			
393757084173600	MT-928	Miamisburg (c)	282
394012084151700	MT-55	West Carrollton (1)	283
394025084162800	MT-49	West Carrollton (1)	284
394425084113200	MT-3	Dayton (1)	285
394533084113800	MT-6	Dayton (1)	286
MUSKINGUM COUNTY			
395804081593200	MU-1A	Zanesville (1)	287

Well Number	Local number	Location	Page
PICKAWAY COUNTY			
393327082571600	PK-7	South of Circleville (1)	288
393402082572500	PK-4	South of Circleville (1)	289
393638082572300	PK-6	Northwest of Circleville (1)	290
393438083072200	PK-8	Williamsport (1)	291
394742083094800	PK-9	Near Orient (1)	292
PIKE COUNTY			
390359083015100	PI-2	West of Piketon (1)	293
PORTAGE COUNTY			
411401081025000	PO-1	Windham (1)	294
PREBLE COUNTY			
394438084335900	PR-2	East of Eaton (1)	295
RICHLAND COUNTY			
404625082305100	R-4	Mansfield (1)	296
ROSS COUNTY			
391341083172200	RO-7	West of Bainbridge (1)	297
391913082580500	RO-8	Chillicothe (1)	298
SHELBY COUNTY			
401712084103500	SH-4	Sidney (1)	299
STARK COUNTY			
404939081203800	ST-5A	Canton (1)	300
405051081244200	ST-28	Northwest of Canton (1)	301
405211081253500	ST-27	North Canton (1)	302
SUMMIT COUNTY			
410141081315200	SU-4A	Akron (1)	303
TRUMBULL COUNTY			
411604080505600	T-3	Near Warren (1)	304
TUSCARAWAS COUNTY			
403207081293800	TU-3	Dover (1)	305
403557081313600	TU-4	Strasburg (1)	306
403653081321800	TU-1	North of Strasburg (1)	307
403823081324200	TU-5	Near Strasburg (1)	308
UNION COUNTY			
401826083255200	U-4	Southeast of Raymond (1)	309
VINTON COUNTY			
391452082282900	V-1	McArthur (1)	310
WARREN COUNTY			
392712084191700	W-5	East of Monroe (1)	311
WASHINGTON COUNTY			
392553081281600	WA-2	Marietta (1)	312
WAYNE COUNTY			
404655081553200	WN-3	Near Wooster (1)	313
404802081583100	WN-2A	Near Wooster (1)	314
405745081510200	WN-7	Near Sterling (1)	315
405805081462300	WN-6	Rittman (1)	316

VOLUME 1: OHIO RIVER BASIN

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State agencies, obtains a large amount of data pertaining to the water resources in 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 the interested parties outside the Geological Survey, the data are published annually in this report series entitled "Water Resources Data--Ohio."

This report (in two volumes) includes records on both surface and ground water in the State. Specifically, it contains: (1) Discharge records for 123 streamflow-gaging stations, 89 miscellaneous sites, and peak flow information for 31 crest-stage partial-record stations; (2) stage and content records for 8 streams, lakes, and reservoirs; (3) water-quality data for 25 streamflow-gaging stations, 196 wells, and 93 partial-record sites; and (4) water levels for 828 observation wells. Locations of lake- and streamflow-gaging stations, water-quality stations, and crest-stage partial-record stations in the Ohio River basin are shown in figures 8a, 8b 8c, and 8d. Locations of observation wells are shown in figures 8e and 8f.

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 may be consulted in the libraries of the principal cities of the United States, and may 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 Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report OH-87-1." 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 records since 1898. Organizations that assist in collecting data in this report are: Ohio Department of Natural Resources, J. J. Sommer, Director; Ohio Environmental Protection Agency, R. L. Shank, Director; Ohio Department of Transportation, W. J. Smith, Director; Miami Conservancy District, J. L. Rozelle, General Manager and Chief Engineer; City of Columbus Department of Public Service, G. Rosenbaum, Director; City of Canton Water Department, J. D. Williams, Superintendent; Ross County, J. L. Kennard, Commissioner; Seneca County Soil and Water District, Gene Baltes, Chief, Water Quality Laboratory; University of Toledo, R. Gallagher; Geauga County, D. C. Dietrich, Planning Director; City of Fremont, R. W. Lash, Service Director; Lucas County, E. J. Ciecka, Administrator; Wood County, F. G. Schutte, Sanitary Engineer; Sandusky County, K. W. Kerik, Health Commissioner; and City of Akron, R. Kapper and A. Youngblood. Funds or services were provided by the U.S. Army Corps of Engineers in collecting records for 72 hydrologic-data stations in this report. The Miami Conservancy District, U.S. Army Corps of Engineers, and Ohio Department Natural Resources aided in collecting records.

SUMMARY OF HYDROLOGIC CONDITIONS

Ohio is located in 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 with 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

WATER RESOURCES DATA FOR OHIO, 1987

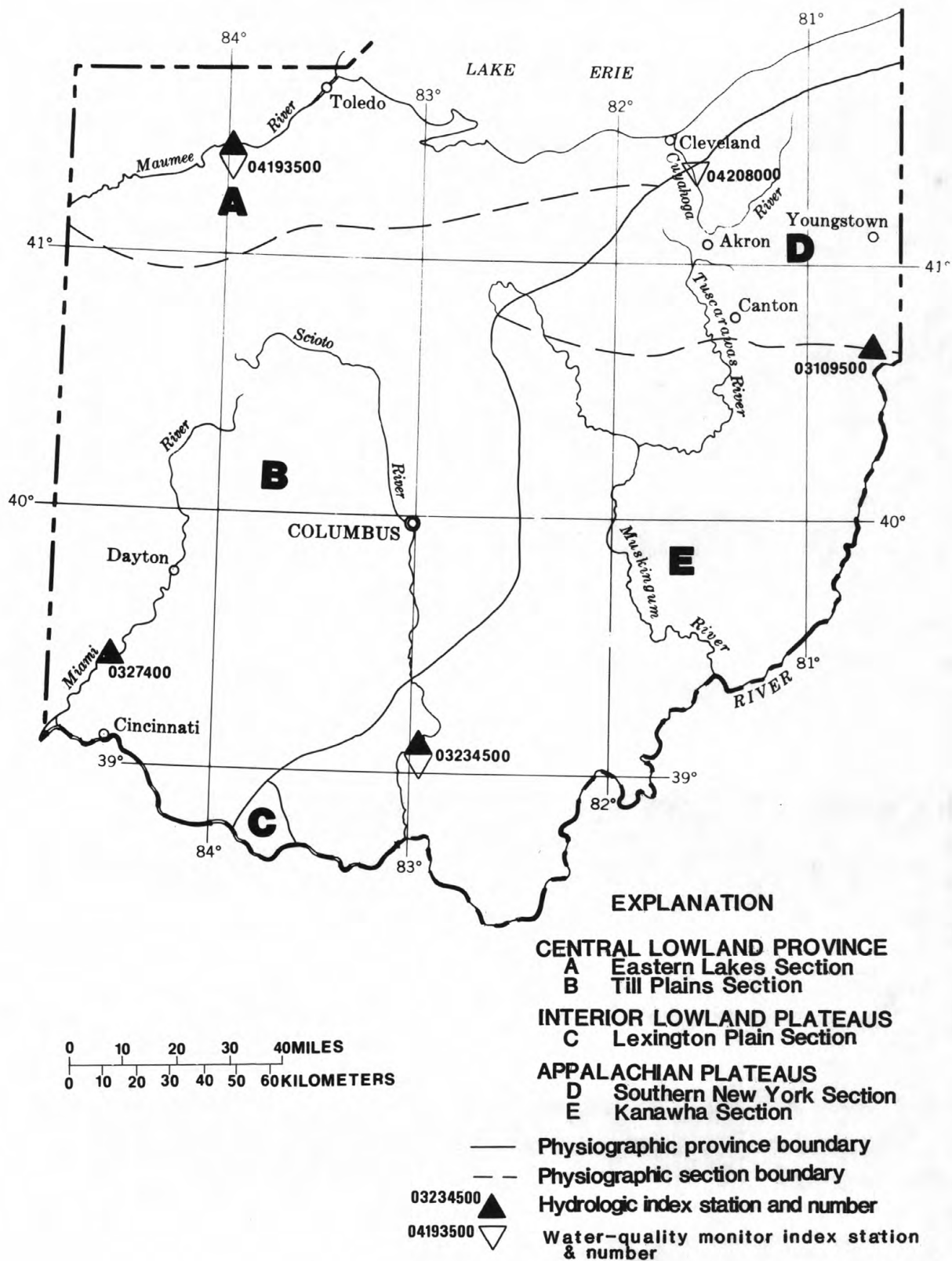


Figure 1.—Physiographic divisions and location of Hydrologic Index Stations.

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 with 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 rainfall decreases from around 42 inches on the southern border to about 32 inches in the northwest. An area of greater precipitation (up to 44 inches) in northeastern Ohio results from air masses that pick up moisture and heat from Lake Erie and subsequently release precipitation over a range of hills stretching northeastward from Cleveland.

Monthly precipitation typically is greatest from May through July and least in October, December, and February. Of the approximate 38 inches of average annual precipitation, about 10 inches runs off immediately, 2 inches is retained at or near the surface and evaporates or 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 is eventually discharged to streams, and the rest is lost by evapotranspiration or 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 reaches 20 inches. The pattern of streamflow differs from the pattern of precipitation because of the contributions of snowmelt to streamflow in the early spring and the reduction in flows by evapotranspiration from June through September.

Surface Water

Streamflow

Streamflow-data-collection stations are distributed irregularly throughout the State, and tend to be concentrated on the main river systems. The stations sample a wide variety of conditions. The drainage areas range from 12 to 7,420 square miles, and cover a wide diversity of land uses, topographic conditions, and other physical conditions. Streamflow ranges from natural to highly regulated.

At the beginning of the 1987 water year, above-average precipitation caused excessive streamflow statewide, except for eastern Ohio where it was in the normal¹ range. Streamflow remained either excessive or normal throughout the State until January. Thereafter, below-average precipitation that persisted through May caused gradual declines, which resulted in deficient streamflow statewide by March. Eastern Ohio received above-average precipitation in April, which caused excessive flows for that month, but flows in the remainder of the State were either in the normal or deficient range. During June and July, above-average precipitation that occurred statewide, except for parts of southern Ohio, caused excessive streamflow throughout much of the State. Major floods occurred in north-central Ohio in early July and caused serious damage to several small communities. The remainder of the water year was characterized by gradual declines, in streamflow statewide, generally to the normal range. The exception to this trend was part of southwestern Ohio where persistent below-average precipitation produced drought conditions and lower than normal flows for many small streams.

Streamflow trends for the 1987 water year are reflected in graphical comparisons of monthly and annual mean discharges for 1987 and the 1951-80 reference period at four Hydrologic Index Stations (fig. 7; station locations are shown in fig. 1).

Water Quality

Trace-element analyses of samples collected at the NASQAN sites indicated that all concentrations of arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver were considerably less than U.S. Environmental Protection Agency recommended limits for domestic water supply. Manganese concentrations exceeding 200 micrograms per liter were detected once in November, May, and July in the Hocking River below Athens.

Selected water-quality-monitor data collected from index stations in three major basins (also NASQAN sites) are shown in figure 2 (station locations are shown in figure 1). The graphs represent annual mean values for pH, specific conductance, dissolved-oxygen concentration, and temperature compared with mean values for 1982-87 (averages of annual means for these 6 years). The data

¹ Normal is defined as flow between the 25th and 75th percentiles as measured during the base period 1951 through 1980

WATER RESOURCES DATA FOR OHIO, 1987

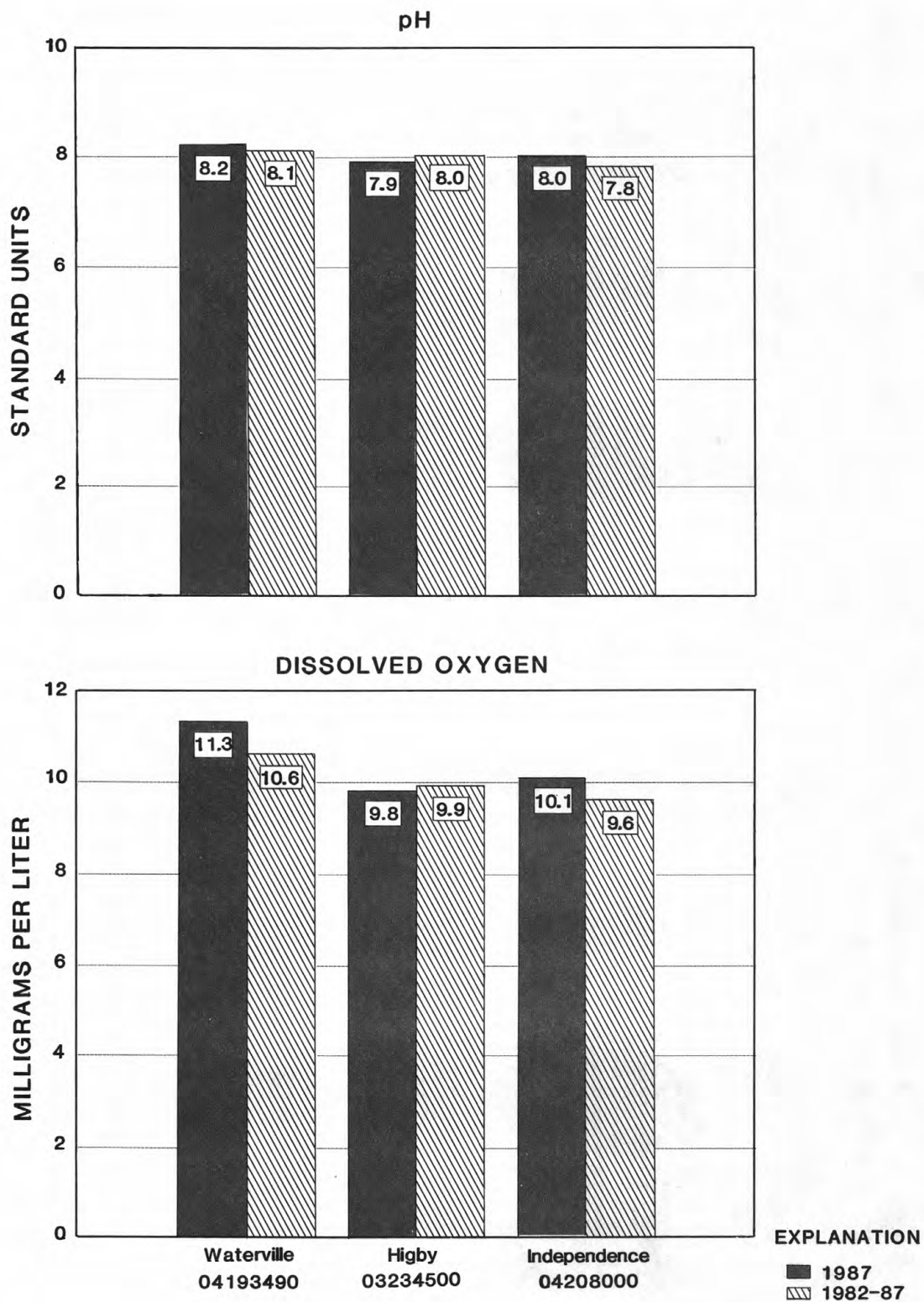


Figure 2.--Comparison of 1987 annual mean values of pH, dissolved oxygen, temperature, and specific conductance with the average of annual mean values for 1982-87 for three water-quality-monitor index stations in Ohio.

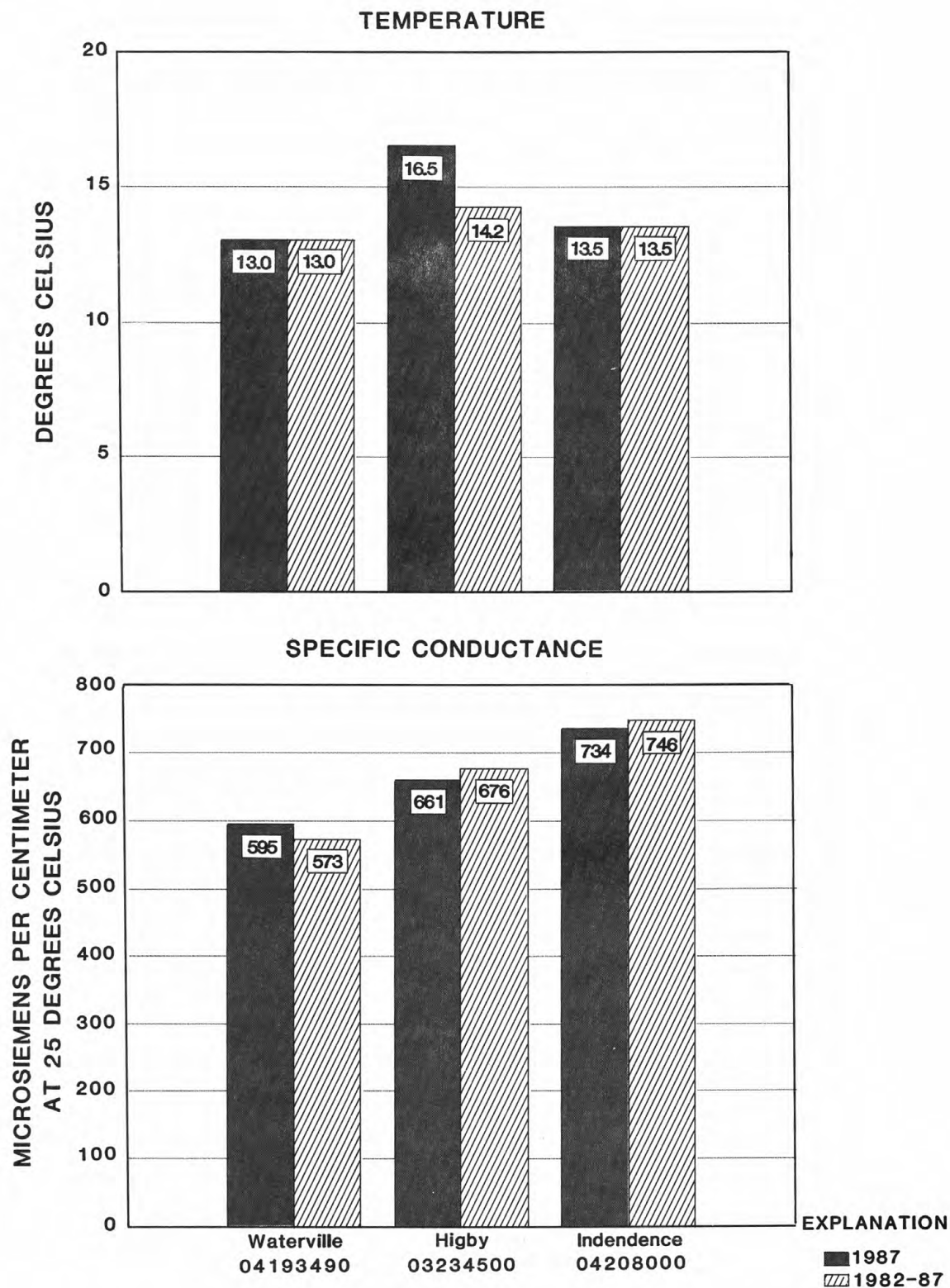


Figure 2.--Comparison of 1987 annual mean values of pH, dissolved oxygen, temperature, and specific conductance with the average of annual mean values for 1982-87 for three water-quality-monitor index stations in Ohio.--Continued

indicate that pH remained about the same at all sites. Specific conductance decreased at Scioto River at Higby (station 03234500) and at Cuyahoga River at Independence (station 04208000), but increased at Maumee River at Waterville (station 04193500). Dissolved-oxygen concentrations increased at Maumee River at Waterville and at Cuyahoga River at Independence. Temperature remained about the same except at Scioto River at Higby, where the increase probably was due to loss of data during the winter period.

Ground Water

Ground water serves the needs of 42 percent of Ohio's population. An estimated 740 million gallons per day (Mgal/d) of ground water 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 present 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. 3) underlie glacial till, are locally under artesian pressure, and are highly productive. Extensive kame-terrace deposits of water-bearing gravel and sand are important 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.

The principal source of water supply for much of the unglaciated upland area of southeastern Ohio is from bedrock aquifers composed of shaly sandstone or thin limestone aquifers. 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 in fractured coal beds. Several sandstone aquifers in northeastern Ohio are of regional extent and are important 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. 3) that yields only small amounts of water to wells. Silurian-age limestone and dolomite and Devonian limestone comprise the carbonate aquifer system (fig. 3) 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 have only very small ground-water yields.

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. Figure 4 shows sample 1-year and 5-year hydrographs of a well completed in an unconfined unconsolidated sand-and-gravel aquifer. The observation-well network also includes some bedrock wells in areas where consolidated aquifers are important water supplies, such as the carbonate-rock region of northwestern Ohio and various sandstone units of eastern Ohio. Figure 5 shows sample 1-year and 5-year hydrographs of a well completed in a confined carbonate-rock aquifer. The yearly low for most wells occurs during the winter months, especially in colder, drier years, or near the end of the growing season. Highs for the year usually occur from March through June, which is the peak of the recharge season. The yearly water-level fluctuation due to climatic conditions in water-table and confined-aquifer wells is commonly 3 to 5 feet.

Ground-water levels rose in response to above-average precipitation statewide at the beginning of the 1987 water year and levels were generally above normal² in northern Ohio and below normal in southern Ohio. These conditions persisted until late November, when heavy precipitation caused above-normal levels throughout much of the State. With the exception of some increases in ground-water levels due to localized heavy precipitation, the remainder of the water year can be characterized as having levels gradually declining into the below-normal ranges for most of the State in response to below-average precipitation.

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.

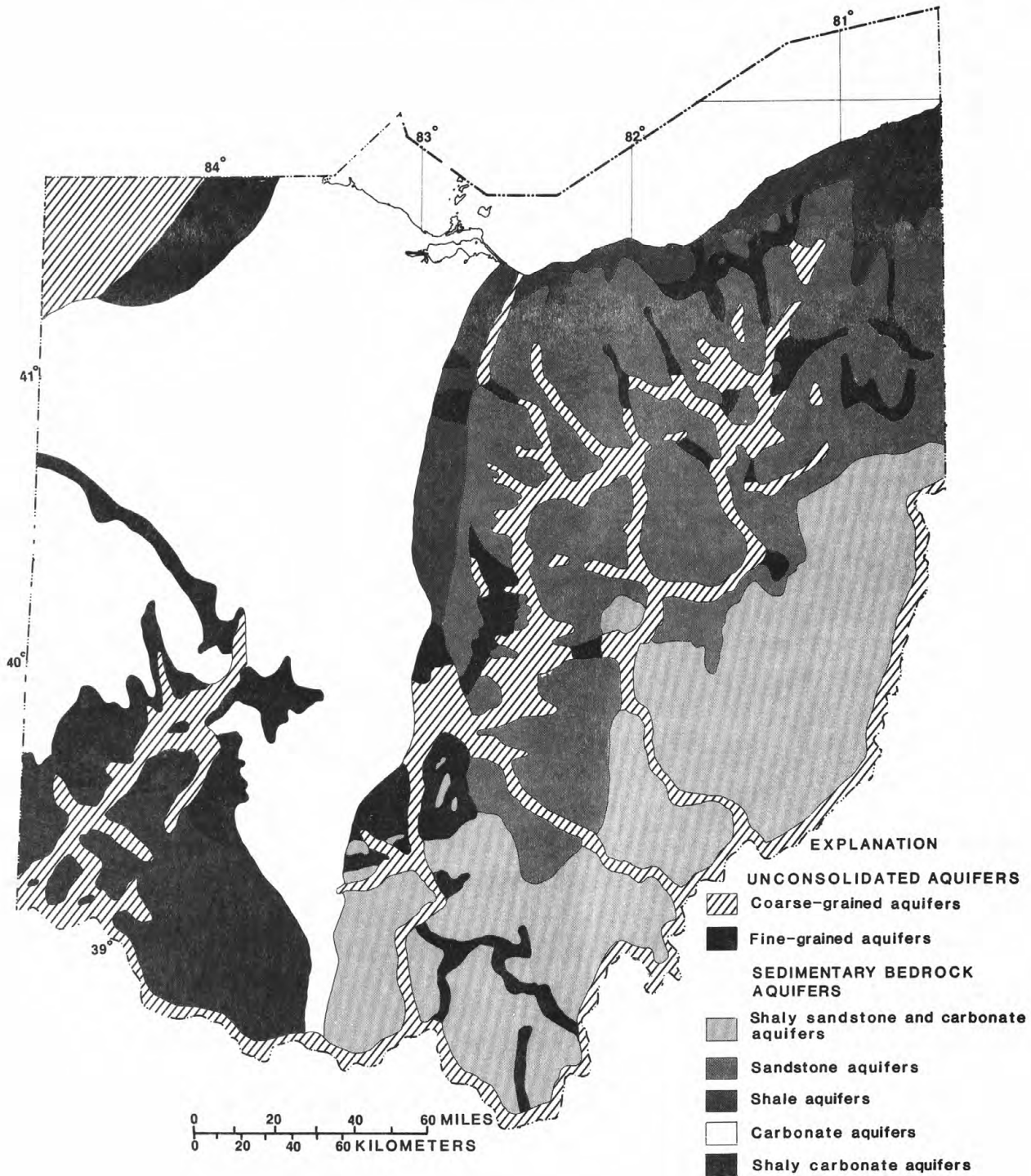


Figure 3.--Geographic distribution of principal aquifers in Ohio.

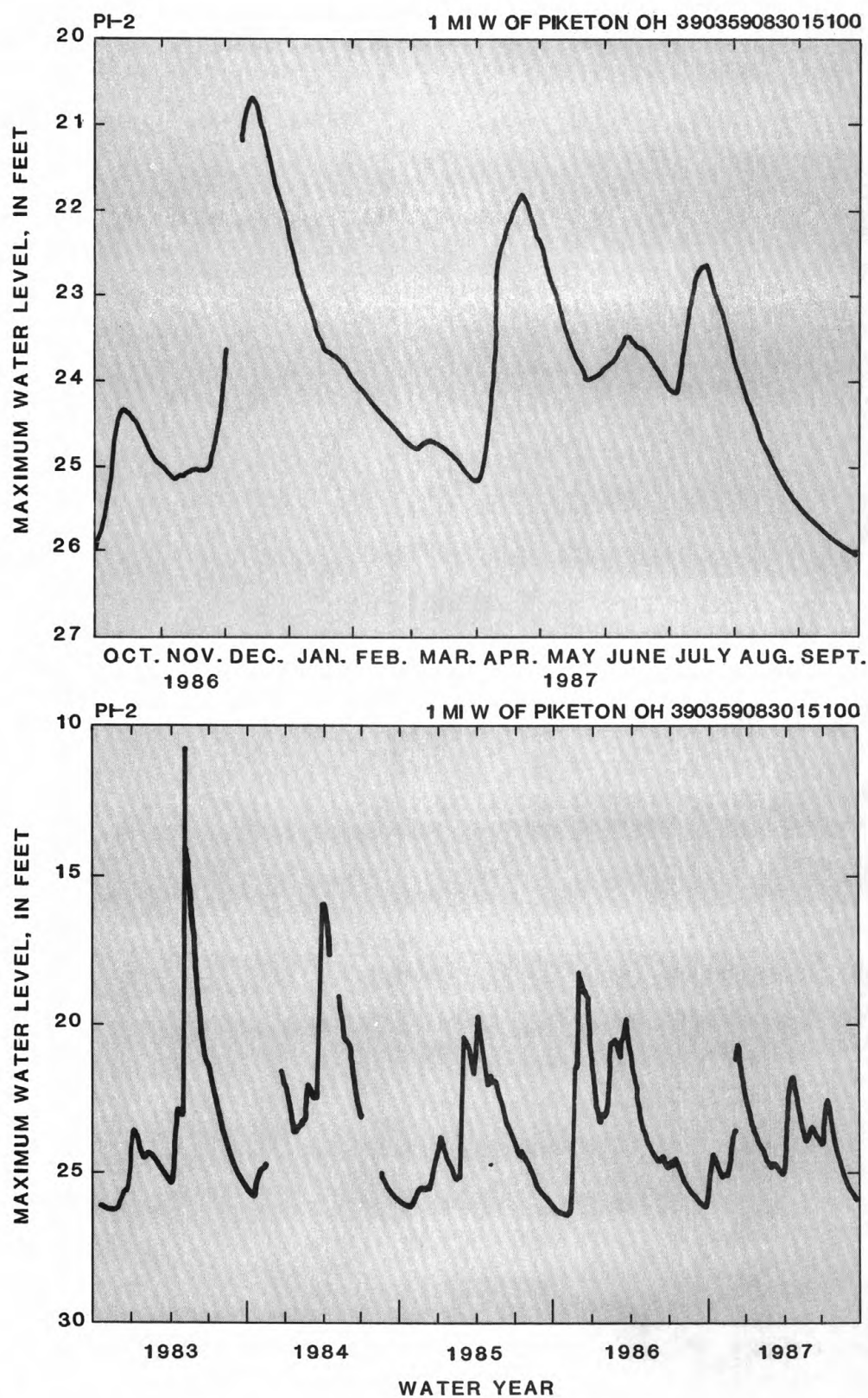


Figure 4.--Sample 1-year and 5-year hydrographs of a well completed in an unconfined unconsolidated aquifer.

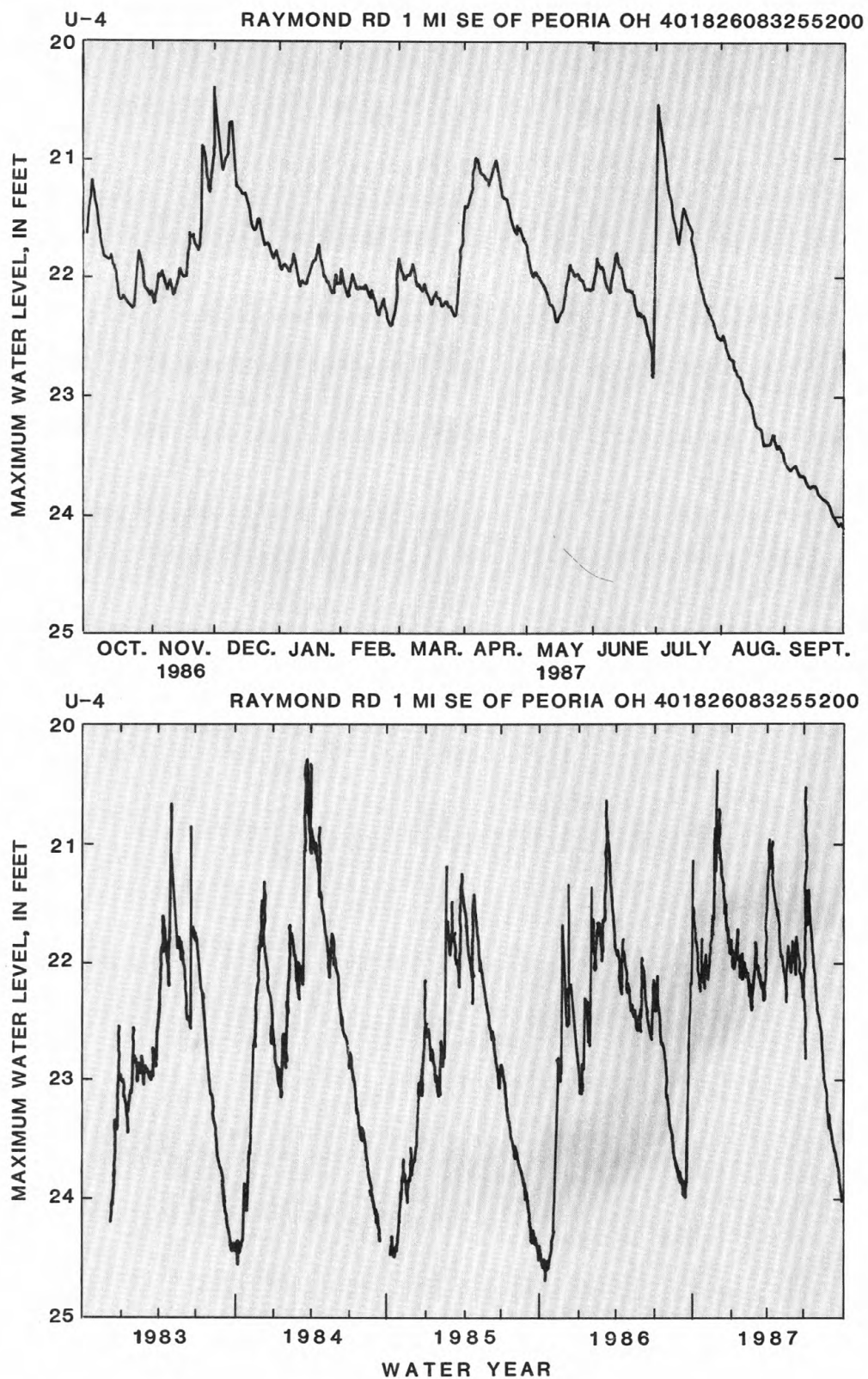


Figure 5.--Sample 1-year and 5-year hydrographs of a well completed in a confined carbonate-rock aquifer.

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 6.)

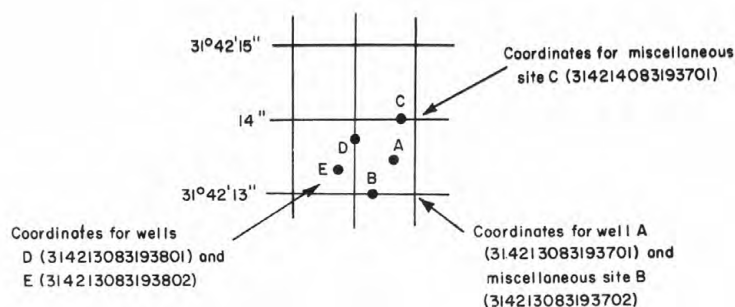


Figure 6. System for numbering wells and miscellaneous sites (latitude and longitude)

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 8.

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 8.

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.

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)
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 8. 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 water levels 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.

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-nymph-adult.

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

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

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

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

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

National 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 (PC, 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 [mg C/(m²/time)] for periphyton and macrophytes and [mg C/(m³/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 [mg O₂/(m²/time)] for periphyton and macrophytes and [mg O₂/(m³/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 drainage 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 (7Q₁₀) is the discharge at the 10-year recurrence interval taken from a frequency curve of annual values of the lowest mean discharge for 7 consecutive days (the 7-day low flow).

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

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

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

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

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

Substrate is the physical surface upon which an organism lives.

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

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrate are basket samplers (made of wire cages filled with clean streamsize rocks) and multiplate samplers (made of hardboard) for benthic-organism collection, and 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:

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

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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.

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."

- 1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
- 2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
- 3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 Pages.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.
- 3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
- 3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.
- 3-A9. *Measurement of time of travel and dispersion in streams by dye tracing*, by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 pages.
- 3-A10. *Discharge ratings at gaging stations*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.
- 3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-A13. *Computation of continuous records of streamflow*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.
- 3-A14. *Use of flumes in measuring discharge*, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.
- 3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.

- 3-C1. *Fluvial sediment concepts* by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. *Field methods for measurement of fluvial sediment*. by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
- 4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
- 4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
- 4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
- 4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
- 4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
- 4-D1. *Computation of rate and volume of stream depletion by wells* by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.
- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments* by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*. by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.
- 5-A3. *Methods for analysis of organic substances in water*, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*. edited by P. E. Greeson, T. A. Ehlike, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.
- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.
- 5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L. C. Friedman and D. E. Erdmann: USGS--TWRI Book 5, Chapter A6. 1982. 181 pages.
- 5-C1. *Laboratory theory and methods for sediment analysis*. by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.
- 7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.
- 7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.
- 7-C3. *A model for simulation of flow in singular and interconnected channels* by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.
- 8-A1. *Methods of measuring water levels in deep wells*. by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-A2. *Installation and service manual for U.S. Geological Survey manometers* by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.
- 8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

WATER RESOURCES DATA FOR OHIO, 1987

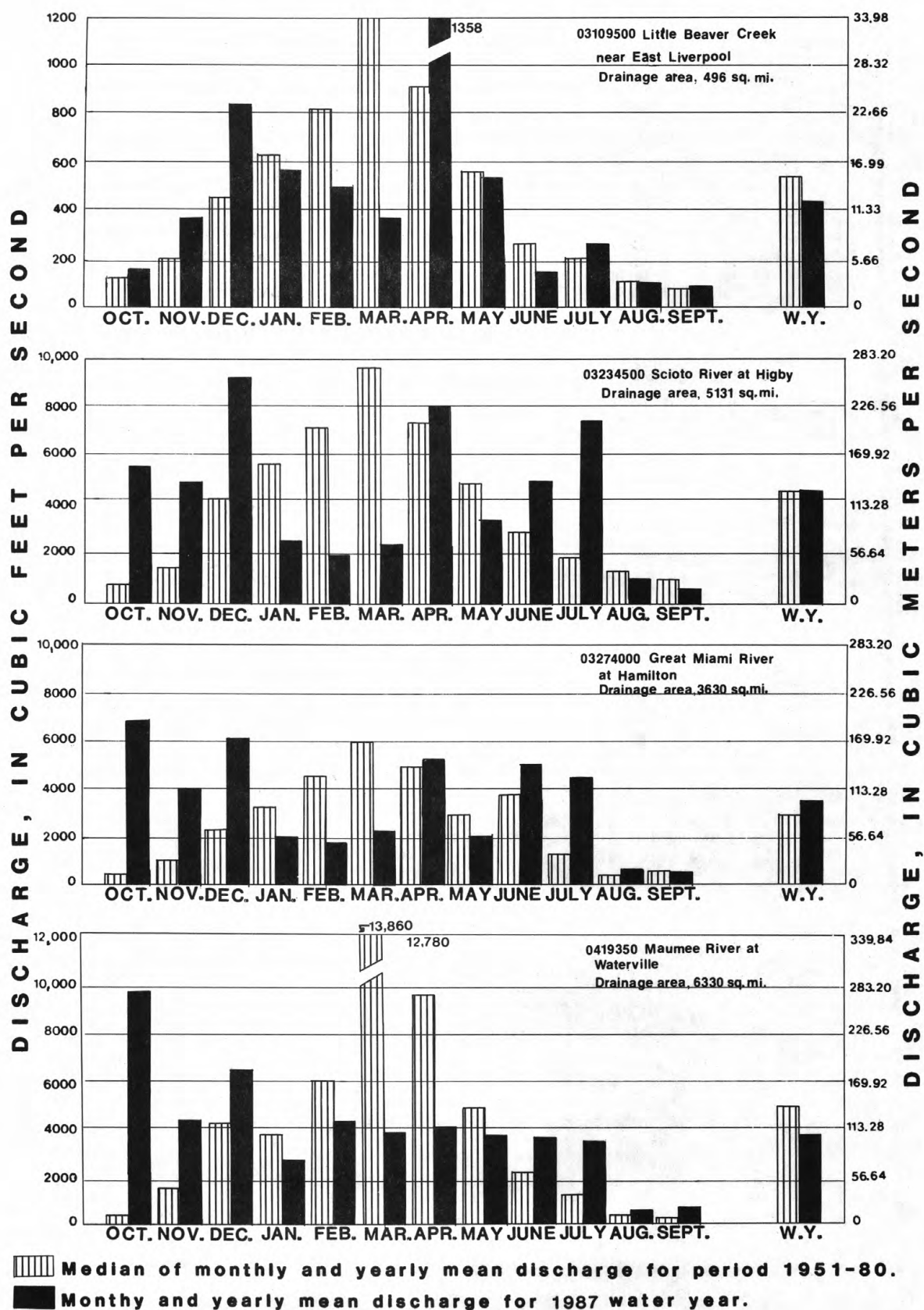


Figure 7. --Runoff during 1987 water year compared with median runoff for period 1951-80 for four representative gaging stations.

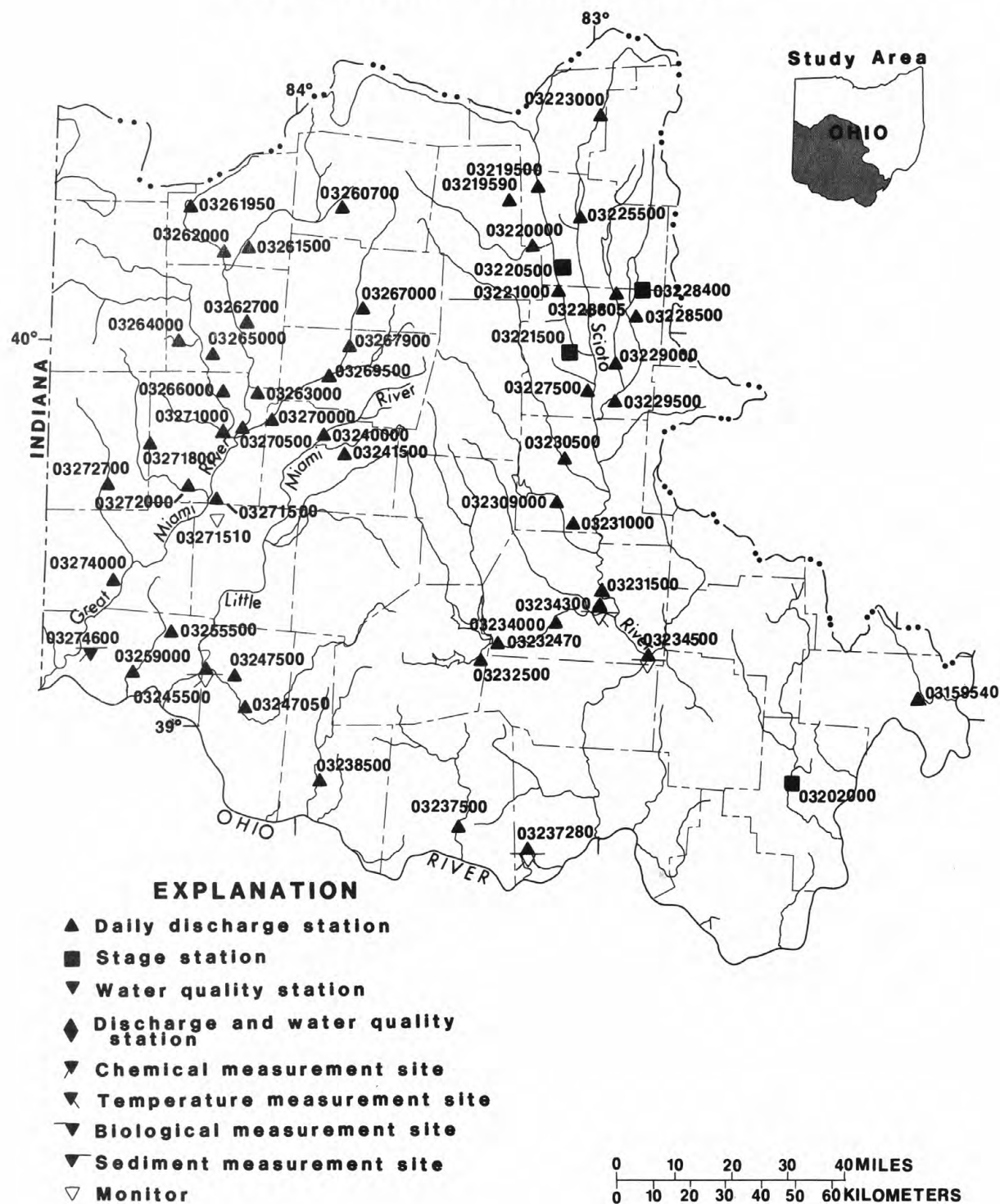


Figure 8a.--Location of data-collection stations excluding crest-stage and low-flow partial record sites.

WATER RESOURCES DATA FOR OHIO, 1987 **EXPLANATION**

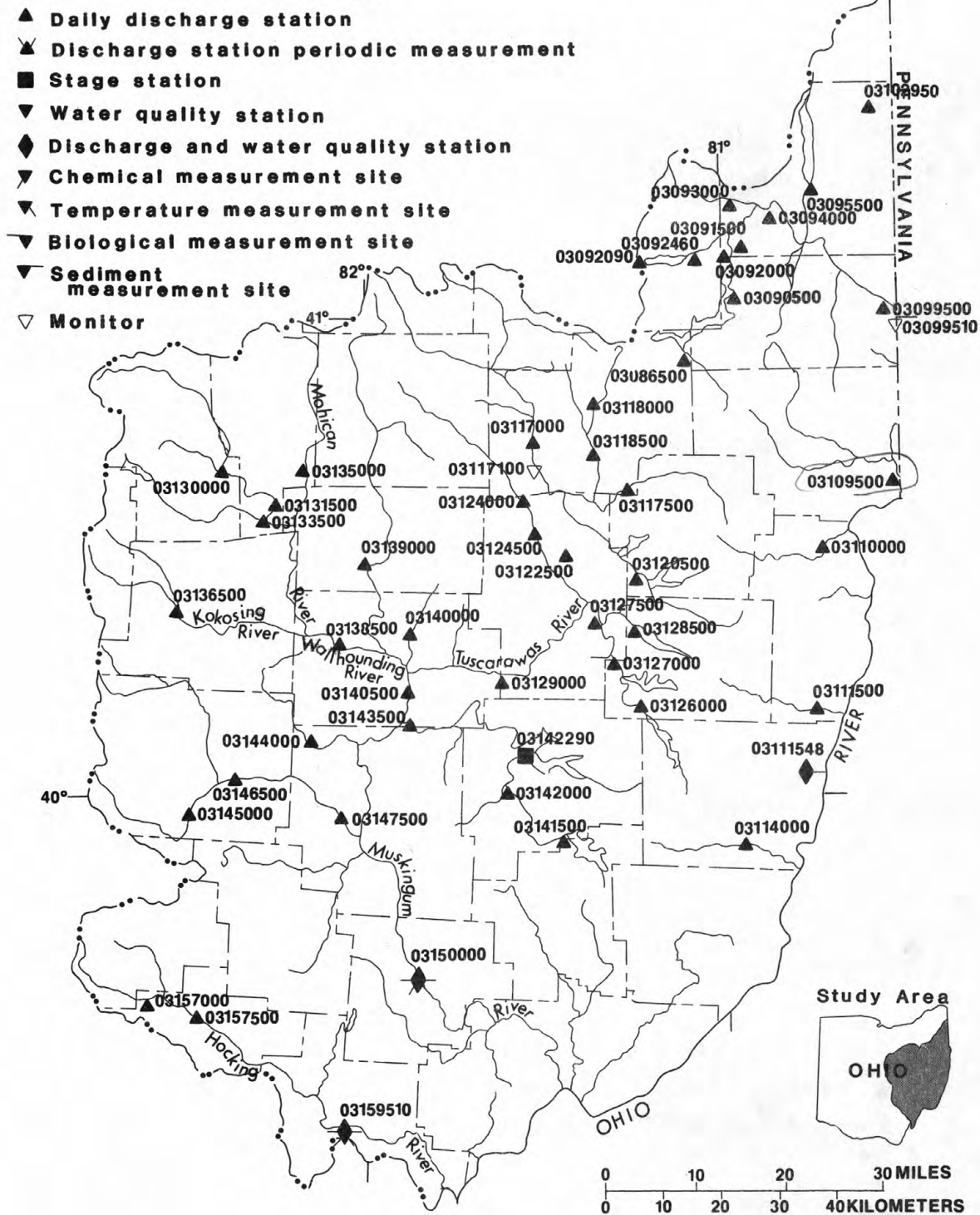


Figure 8b.--Location of data-collection stations excluding crest-stage and low-flow partial record sites and wells.

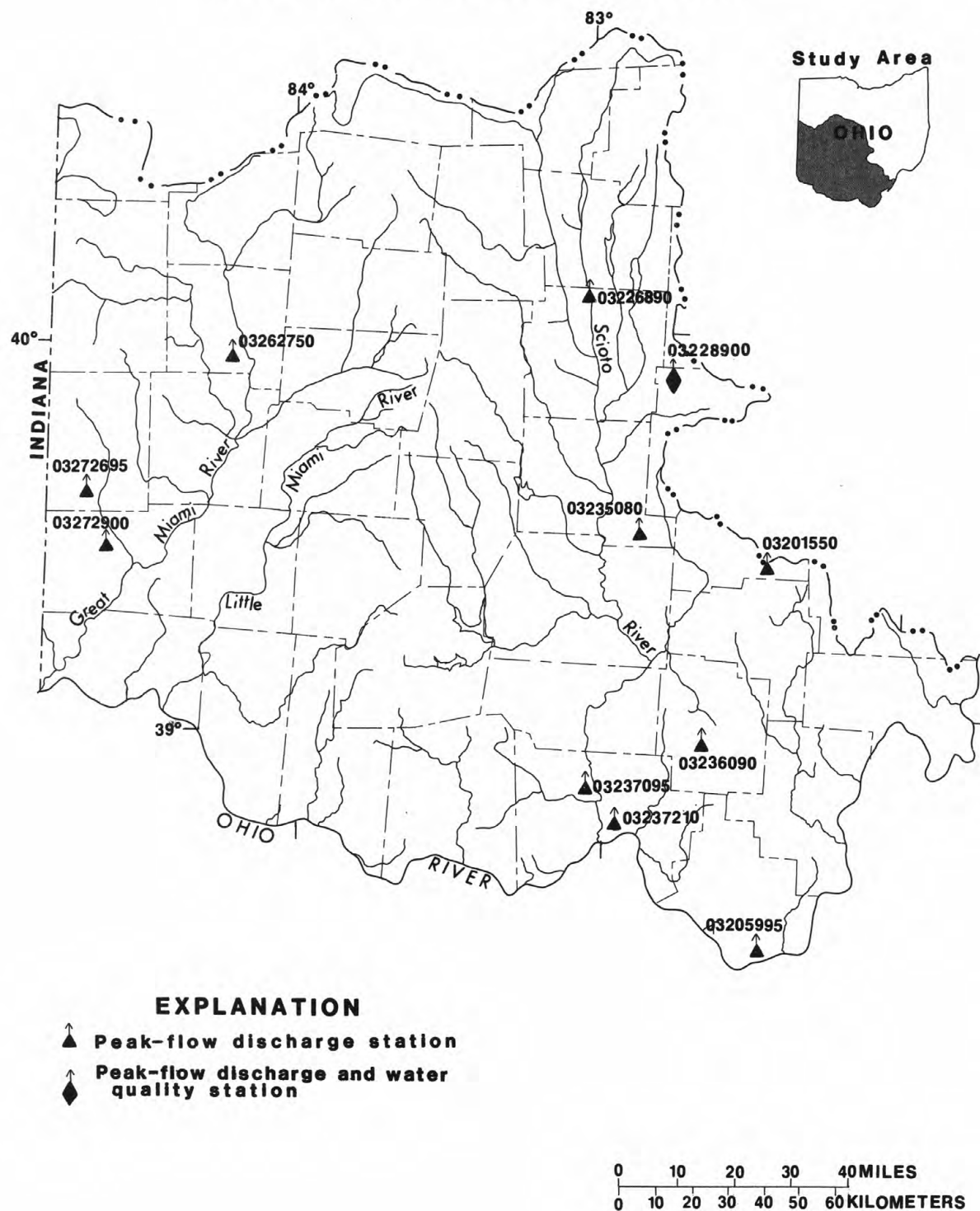


Figure 8c.--Location of crest-stage and low-flow partial record sites.

WATER RESOURCES DATA FOR OHIO, 1987

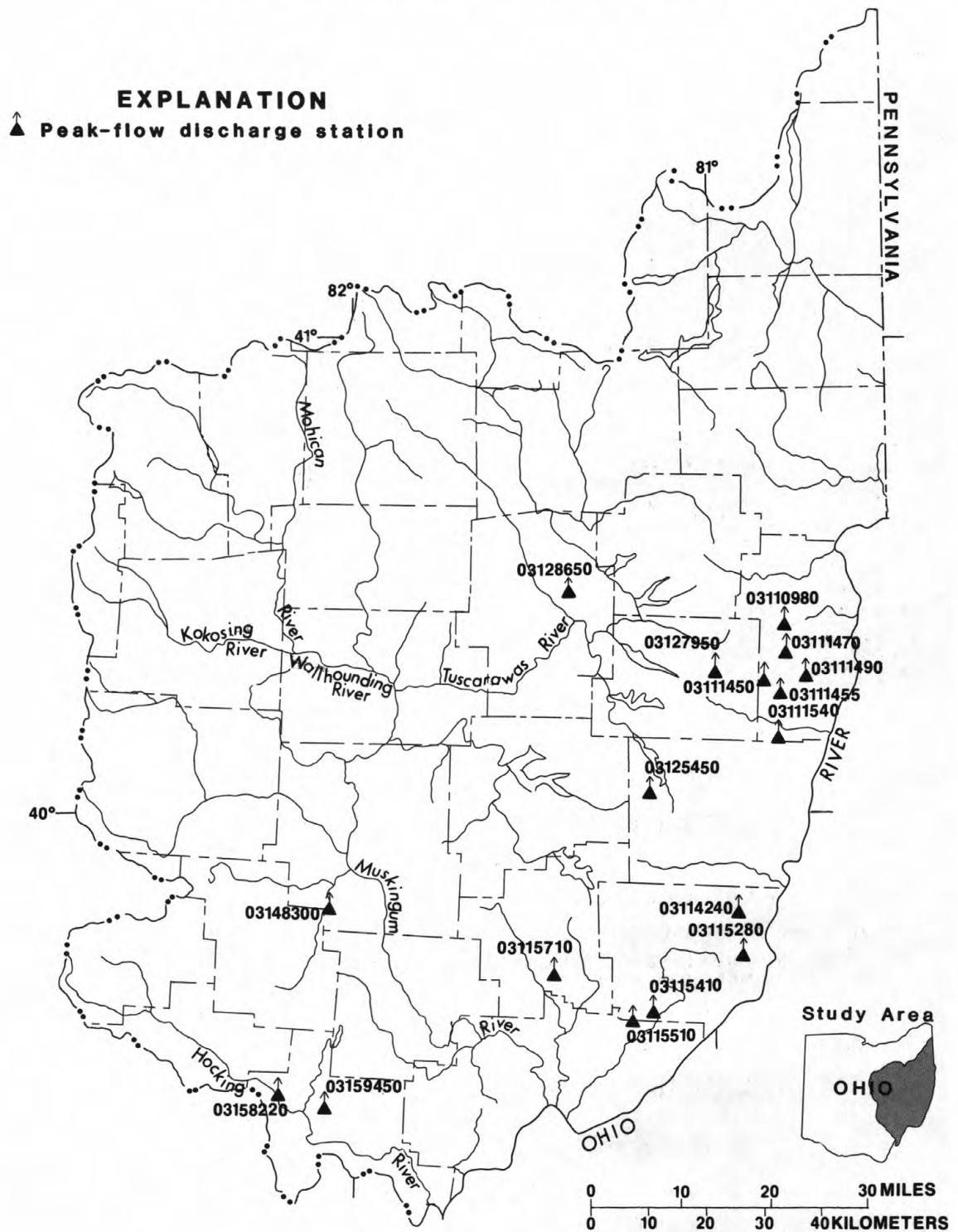


Figure 8d.--Location of crest-stage and low-flow partial record sites.

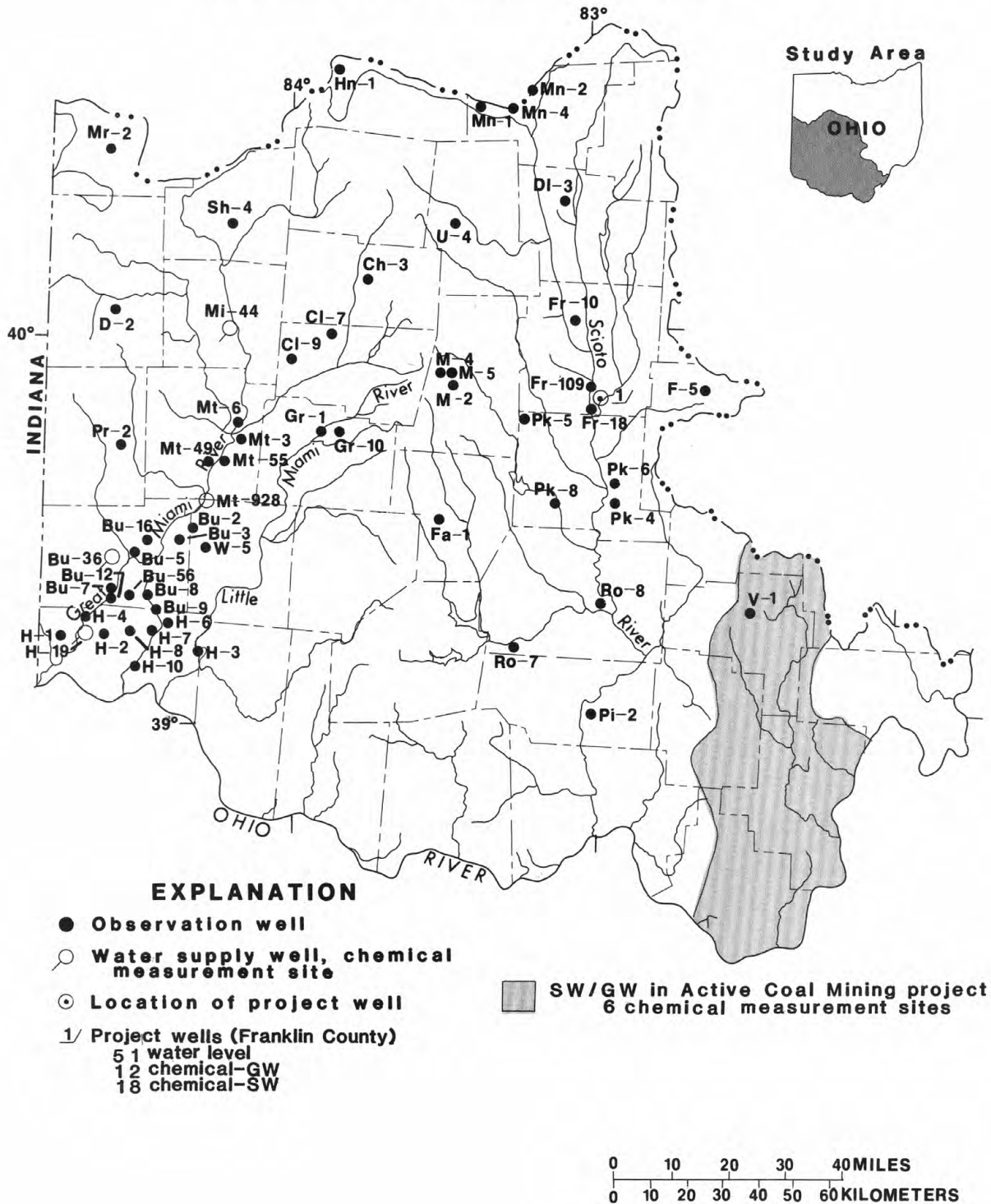


Figure 8e.--Location of wells.

WATER RESOURCES DATA FOR OHIO, 1987

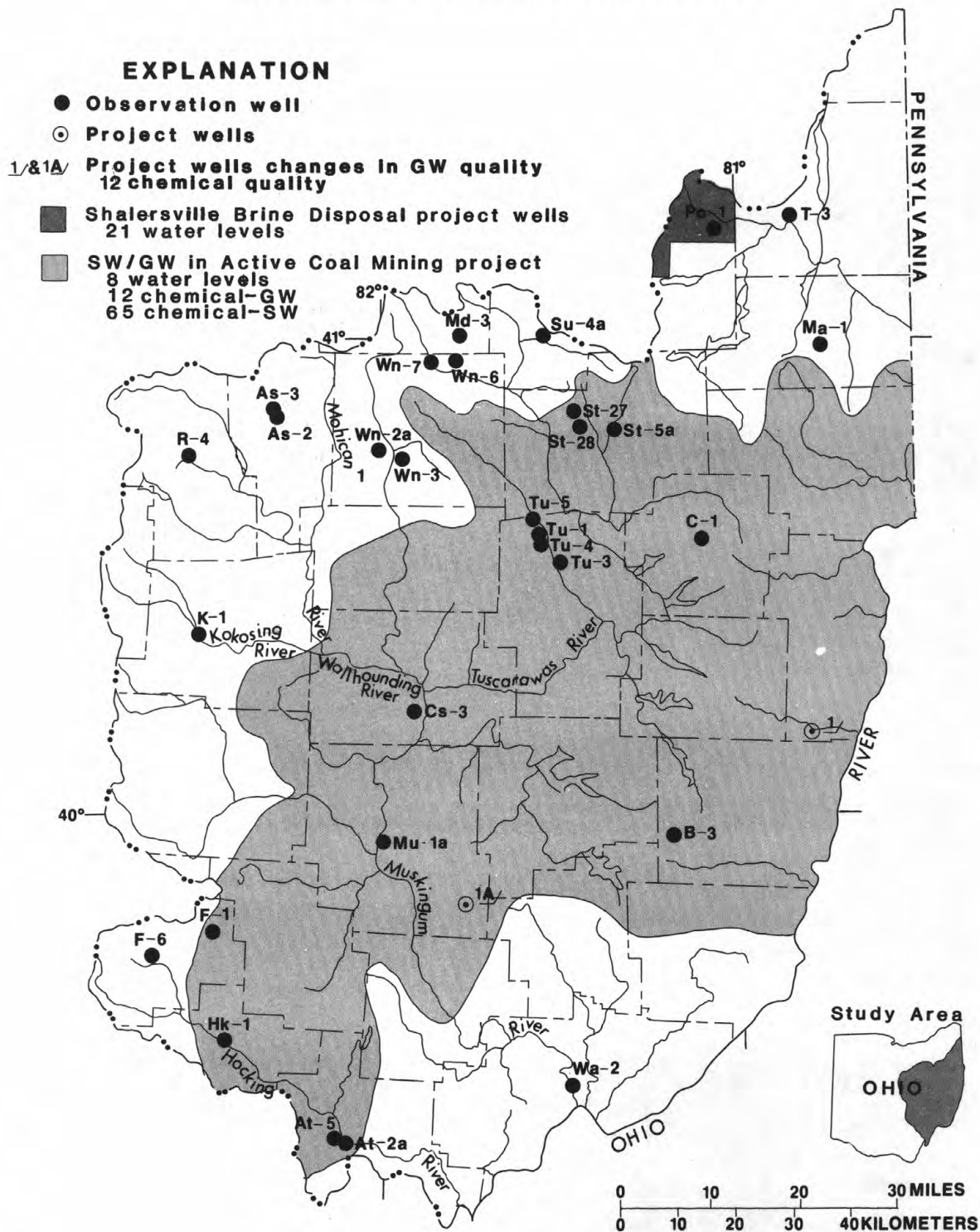


Figure 8f.--Location of wells.

HYDROLOGIC-DATA STATION RECORDS

35

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, Feb. 17-28. Records fair except those for periods of estimated record and Jan. 15 to May 7, 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.

AVERAGE DISCHARGE.--46 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)
Dec. 3	0700	1,250	3.70	Apr. 7	0100	*1,270	*3.73

Minimum daily discharge, 4.4 ft³/s July 31, Aug. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	75	20	110	99	88	170	394	99	83	83	4.9	9.4	
2	74	20	442	87	109	278	456	88	64	383	9.6	8.9	
3	107	21	1120	71	196	174	323	103	47	743	27	9.2	
4	180	21	579	62	140	129	181	180	26	275	13	7.9	
5	137	25	213	55	110	104	455	99	16	82	8.0	7.7	
6	84	30	148	56	109	102	1100	78	15	47	7.1	7.0	
7	55	31	120	67	109	95	1120	59	13	37	7.4	7.9	
8	40	40	121	91	110	86	612	48	14	29	14	11	
9	38	45	178	85	92	77	259	48	23	24	36	11	
10	43	38	246	77	86	57	178	46	22	23	85	8.2	
11	44	42	147	88	82	51	140	45	18	21	28	8.1	
12	41	72	112	78	76	44	123	40	19	18	16	10	
13	50	55	96	71	89	36	118	39	18	16	13	13	
14	63	39	82	82	77	35	109	39	16	18	9.8	12	
15	56	29	78	229	56	46	107	71	15	14	8.4	10	
16	45	28	72	190	47	60	111	56	13	11	8.0	11	
17	33	26	73	107	46	68	124	41	11	9.8	5.8	15	
18	23	45	96	97	45	69	113	49	9.8	9.2	6.0	27	
19	22	235	108	182	44	62	103	152	10	7.6	5.7	28	
20	21	122	90	469	44	54	88	91	15	7.0	5.0	23	
21	20	231	78	175	43	49	84	75	14	6.6	4.4	14	
22	22	120	74	117	41	42	84	59	15	6.5	8.2	10	
23	22	77	69	80	40	37	83	48	38	6.3	10	9.6	
24	20	56	73	62	38	35	216	56	20	6.4	6.6	8.0	
25	21	44	178	52	36	29	352	59	14	5.5	5.1	7.5	
26	35	187	175	45	36	32	157	55	9.2	6.2	8.7	8.1	
27	38	422	122	41	36	30	124	49	8.8	6.4	11	7.5	
28	33	202	112	38	36	29	149	47	9.0	5.8	12	8.0	
29	19	141	104	36	---	29	132	51	8.4	5.4	12	8.3	
30	19	122	96	75	---	56	110	45	18	4.8	8.1	19	
31	18	---	91	103	---	519	---	75	---	4.4	8.9	---	
TOTAL	1498	2586	5403	3167	2061	2684	7705	2090	622.2	1921.9	412.7	345.3	
MEAN	48.3	86.2	174	102	73.6	86.6	257	67.4	20.7	62.0	13.3	11.5	
MAX	180	422	1120	469	196	519	1120	180	83	743	85	28	
MIN	18	20	69	36	36	29	83	39	8.4	4.4	4.4	7.0	
CFSM	.54	.97	1.95	1.14	.83	.97	2.88	.76	.23	.70	.15	.13	
IN.	.62	1.08	2.25	1.32	.86	1.12	3.21	.87	.26	.80	.17	.14	
CAL YR 1986	TOTAL	33115.2		MEAN	90.7	MAX	1160	MIN	3.8	CFSM	1.02	IN.	13.81
WTR YR 1987	TOTAL	30496.1		MEAN	83.6	MAX	1120	MIN	4.4	CFSM	.94	IN.	12.72

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 current year. 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 fair. 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.

COOPERATION.--Gage-height records, May 6 to Sept. 30, provided by U.S. Army Corps of Engineers.

AVERAGE DISCHARGE.--57 years, 239 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, 1,450 ft³/s Apr. 8, gage height, 3.92 ft; minimum daily discharge, 22 ft³/s Feb. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	409	108	701	457	153	25	25	487	155	97	152	140
2	402	108	409	306	152	24	26	417	155	60	152	140
3	407	108	161	149	154	24	25	348	155	47	152	140
4	410	95	375	149	154	23	90	348	155	47	152	140
5	540	100	645	128	157	23	145	348	155	47	152	143
6	664	100	779	103	155	23	157	348	155	64	152	143
7	662	100	964	102	155	23	771	217	155	97	152	143
8	659	100	1110	102	153	23	1360	146	155	129	152	146
9	658	100	597	102	157	23	1010	93	155	146	152	146
10	655	100	630	68	155	23	436	80	155	146	140	146
11	652	101	1110	46	156	23	176	102	155	146	129	146
12	647	138	1100	45	112	23	176	116	155	149	143	146
13	642	182	1090	46	54	23	176	122	155	152	152	146
14	557	196	943	46	43	23	198	114	155	138	152	146
15	421	196	471	47	43	23	217	112	152	129	152	146
16	244	192	143	111	43	23	217	112	146	143	152	146
17	146	192	143	155	43	23	217	112	146	152	152	146
18	128	206	143	155	43	23	217	112	165	152	152	146
19	110	324	368	156	43	24	217	59	180	152	152	146
20	110	431	508	158	43	23	199	29	180	152	155	146
21	110	476	507	281	43	23	131	47	138	152	152	146
22	110	522	632	372	43	23	101	114	122	152	152	146
23	110	520	703	365	43	23	100	127	83	152	152	146
24	110	519	698	365	43	24	100	127	104	149	152	146
25	110	516	696	365	31	24	200	127	132	149	152	146
26	110	337	700	365	23	23	410	140	143	149	152	146
27	110	152	697	236	22	23	492	152	152	149	152	176
28	110	341	557	153	23	23	493	152	152	152	152	232
29	109	621	462	150	---	23	490	155	138	152	152	196
30	108	703	461	150	---	24	487	155	129	152	152	146
31	108	---	459	153	---	29	---	155	---	152	114	---
TOTAL	10328	7884	18962	5586	2439	727	9059	5273	4432	4005	4633	4513
MEAN	333	263	612	180	87.1	23.5	302	170	148	129	149	150
MAX	664	703	1110	457	157	29	1360	487	180	152	155	232
MIN	108	95	143	45	22	23	25	29	83	47	114	140
CAL YR 1986	TOTAL	87706	MEAN	240	MAX	1110	MIN	13				
WTR YR 1987	TOTAL	77841	MEAN	213	MAX	1360	MIN	22				

BEAVER RIVER BASIN

37

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.

COOPERATION.--One discharge measurement furnished by U.S. Army Corps of Engineers.

AVERAGE DISCHARGE.--58 years, 262 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, 954 ft³/s Dec. 14, gage height, 4.56 ft; minimum daily discharge, 21 ft³/s Feb. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	431	93	660	433	165	107	148	446	150	117	139	129
2	419	92	750	397	168	133	232	436	149	316	146	126
3	447	91	746	169	184	79	139	392	152	148	161	125
4	757	85	452	167	177	57	125	360	150	57	143	124
5	536	84	519	157	178	43	443	344	147	47	150	124
6	614	86	622	96	172	41	550	334	147	46	141	125
7	636	86	692	100	172	41	554	304	147	71	140	126
8	632	92	819	111	172	42	758	165	150	99	142	132
9	625	92	883	104	259	39	869	104	150	140	162	126
10	620	88	770	91	168	39	848	67	147	141	175	126
11	615	90	777	61	164	49	693	76	145	142	116	124
12	611	122	857	55	148	24	396	103	148	143	121	131
13	613	192	917	53	68	24	201	105	150	151	139	140
14	604	214	949	64	48	26	210	103	145	150	138	128
15	458	212	908	149	68	27	237	99	143	116	138	127
16	311	211	731	127	42	30	240	94	135	125	138	126
17	146	210	341	185	56	35	242	93	135	142	138	131
18	135	252	197	183	54	43	238	109	141	142	138	182
19	94	422	255	248	56	43	235	133	172	142	138	153
20	93	447	446	302	53	37	228	56	177	142	138	136
21	92	504	477	251	50	32	156	33	153	142	138	130
22	92	523	494	375	40	29	86	88	104	142	143	132
23	92	511	584	365	39	28	88	115	89	142	138	130
24	91	501	627	457	39	28	142	115	71	142	138	127
25	92	492	682	591	36	28	162	115	111	142	138	86
26	104	567	708	569	22	30	323	113	121	142	138	108
27	100	435	695	512	21	29	397	135	146	123	139	125
28	98	273	683	260	23	27	451	147	147	144	139	171
29	95	527	601	197	---	27	456	146	135	137	137	217
30	93	631	566	177	---	55	450	146	120	148	136	189
31	93	---	467	168	---	332	---	159	---	140	119	---
TOTAL	10439	8225	19875	7174	2842	1604	10297	5235	4177	4121	4344	4056
MEAN	337	274	641	231	102	51.7	343	169	139	133	140	135
MAX	757	631	949	591	259	332	869	446	177	316	175	217
MIN	91	84	197	53	21	24	86	33	71	46	116	86
CAL YR 1986	TOTAL	103133		MEAN	283	MAX	949	MIN	29			
WTR YR 1987	TOTAL	82389		MEAN	226	MAX	949	MIN	21			

BEAVER RIVER BASIN

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 county line 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. 22-29, Feb. 16-22. Records fair except those for periods of estimated discharge, which are poor. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--47 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.

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)
Oct. 4	1330	539	4.45	Dec. 3	0100	*693	*5.01
Nov. 27	0030	581	4.61	Apr. 6	0230	about 570	unknown

Minimum daily discharge, 0.02 ft³/s May 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	8.9	9.5	9.9	7.1	3.3	67	106	3.8	.10	2.0	.04	13	
2	23	8.4	256	7.2	4.0	134	152	2.6	.14	199	.04	13	
3	22	8.2	510	7.7	11	58	100	2.4	.12	131	2.8	11	
4	372	8.1	116	6.9	14	33	50	6.7	.18	17	3.2	11	
5	61	7.9	34	5.6	9.7	18	298	4.4	.18	3.6	1.5	11	
6	18	8.3	18	4.5	8.8	16	494	2.3	.14	1.1	.44	9.7	
7	7.8	8.4	13	5.4	9.0	15	222	1.5	.13	.44	.15	8.8	
8	5.1	11	28	14	11	15	61	1.1	.25	.29	.09	12	
9	4.3	23	58	13	9.3	13	29	.81	.68	.32	.14	15	
10	3.7	20	114	9.9	7.7	8.4	19	.65	.74	.73	18	13	
11	3.8	16	38	11	6.4	5.3	13	.51	.77	1.1	7.1	10	
12	7.5	24	16	10	7.7	4.5	10	.42	1.4	.74	1.7	20	
13	10	28	10	8.5	17	4.3	11	.43	3.2	18	.72	25	
14	16	21	7.2	13	11	4.5	9.3	.36	3.3	5.8	.35	17	
15	20	19	5.9	95	7.0	5.3	8.1	.28	1.8	3.3	.20	10	
16	15	15	5.7	57	3.0	7.9	8.1	.18	.99	1.6	.25	7.8	
17	11	14	5.9	18	2.0	13	9.2	.11	.52	.87	.37	5.8	
18	8.7	24	14	11	1.8	28	8.6	.08	.23	.52	.33	9.5	
19	8.1	149	27	36	1.6	31	6.9	.43	.08	.28	.22	37	
20	6.8	43	15	98	1.5	24	5.9	8.0	.22	.25	.18	40	
21	6.6	87	10	34	1.4	15	4.5	1.7	1.1	.24	.18	22	
22	6.5	37	7.4	8.0	1.3	9.6	3.8	.47	1.1	.23	.34	10	
23	8.0	18	5.1	6.0	1.9	8.1	3.3	.13	1.0	.15	.88	6.1	
24	8.3	12	4.9	4.5	2.0	7.0	13	.04	.75	.12	1.5	4.2	
25	8.8	8.7	84	3.4	2.0	6.7	31	.02	.16	.09	2.3	3.8	
26	9.2	174	64	2.8	2.1	16	9.5	.02	.04	.07	3.2	2.7	
27	21	365	25	2.3	2.1	15	5.5	.05	.03	.07	5.4	1.7	
28	21	55	16	1.9	2.4	11	31	.27	.44	.06	8.1	3.0	
29	19	25	11	1.7	---	8.2	19	.60	.22	.04	9.8	4.7	
30	15	15	8.5	2.0	---	16	6.6	.40	.25	.04	9.8	17	
31	11	---	7.5	2.8	---	299	---	.07	---	.03	11	---	
TOTAL	767.1	1262.5	1545.0	508.2	162.0	916.8	1748.3	83.40	20.26	389.08	90.32	374.8	
MEAN	24.7	42.1	49.8	16.4	5.79	29.6	58.3	2.69	.68	12.6	2.91	12.5	
MAX	372	365	510	98	17	299	494	43	3.3	199	18	40	
MIN	3.7	7.9	4.9	1.7	1.3	4.3	3.3	.02	.03	.03	.04	1.7	
CFSM	1.13	1.92	2.27	.75	.26	1.35	2.66	.12	.03	.58	.13	.57	
IN.	1.30	2.14	2.62	.86	.28	1.56	2.97	.14	.03	.66	.15	.64	
CAL YR 1986	TOTAL	9667.73		MEAN	26.5	MAX	602	MIN	.05	CFSM	1.21	IN.	16.42
WTR YR 1987	TOTAL	7867.76		MEAN	21.6	MAX	510	MIN	.02	CFSM	.99	IN.	13.36

BEAVER RIVER BASIN

39

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. 22-29, Feb. 9-11, 15-21. Records fair except those for periods of estimated records, which are poor. Water-quality data collected at this site 1966 to 1978.

AVERAGE DISCHARGE.--22 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, 0.12 ft³/s Sept. 30, 1986.

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)
July 2	0900	*658	*5.28	No other peaks above base.			
Minimum daily discharge, 0.11 ft ³ /s Sept. 24, 25.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	69	.18	20	15	13	195	70	10	5.9	45	3.6	5.5	
2	62	.19	170	18	16	158	130	10	4.7	439	4.8	4.2	
3	101	.16	240	18	19	73	94	13	4.6	107	9.7	2.3	
4	210	.13	101	16	20	46	60	13	4.8	32	7.3	1.9	
5	59	.13	47	13	17	33	273	10	3.7	16	4.9	1.4	
6	23	.18	28	11	16	34	400	8.1	3.0	11	3.7	1.5	
7	9.2	.14	24	16	21	35	262	6.8	2.5	8.5	3.3	1.9	
8	2.8	.17	47	23	26	31	104	5.7	5.8	8.1	2.8	5.1	
9	.63	.18	89	18	21	26	52	4.9	13	9.1	5.7	2.2	
10	.29	.13	131	18	18	18	34	4.1	6.4	7.3	9.2	2.2	
11	.18	1.0	52	21	16	14	26	4.0	4.3	5.5	5.2	17	
12	.14	.43	30	19	25	12	24	3.5	4.9	5.0	3.2	15	
13	1.4	.22	22	17	26	12	24	2.6	9.2	5.8	2.5	8.5	
14	16	.15	19	23	21	11	20	2.5	5.8	5.6	2.1	4.2	
15	12	.13	17	97	9.4	14	20	6.7	3.7	4.2	1.7	2.6	
16	2.6	.12	16	65	7.4	18	21	5.5	2.8	3.7	1.4	3.4	
17	.63	.25	18	32	6.6	22	24	4.0	2.0	3.0	1.4	26	
18	.25	11	52	26	6.0	28	21	34	1.5	2.0	1.4	62	
19	.16	66	52	43	5.6	35	21	41	1.5	1.4	1.1	35	
20	.13	46	31	47	5.4	30	14	24	28	1.1	.99	39	
21	.12	88	22	27	5.2	23	13	13	46	.94	.88	13	
22	.13	44	18	17	10	18	9.8	9.3	131	.79	7.5	8.4	
23	.12	23	16	10	16	16	10	7.6	28	.64	8.2	5.7	
24	.11	16	14	8.2	15	14	20	5.5	13	.53	3.9	3.5	
25	.11	11	89	7.2	19	14	17	4.6	12	.53	2.0	2.6	
26	8.4	202	64	6.6	20	16	12	4.5	6.4	.69	2.4	1.8	
27	13	199	36	6.2	20	14	12	4.6	6.6	1.2	3.4	1.4	
28	5.0	71	26	5.8	26	12	17	12	14	.79	10	1.3	
29	1.2	43	20	5.4	---	10	15	35	8.6	.65	7.1	2.3	
30	.41	29	18	9.8	---	22	12	14	9.5	.98	3.2	4.3	
31	.22	---	16	12	---	104	---	8.5	---	1.6	6.5	---	
TOTAL	599.23	852.89	1545	671.2	446.6	1108	1831.8	332.0	393.2	729.64	131.07	285.2	
MEAN	19.3	28.4	49.8	21.7	15.9	35.7	61.1	10.7	13.1	23.5	4.23	9.51	
MAX	210	202	240	97	26	195	400	41	131	439	10	62	
MIN	.11	.12	14	5.4	5.2	10	9.8	2.5	1.5	.53	.88	1.3	
CFSM	.89	1.30	2.28	1.00	.73	1.64	2.80	.49	.60	1.08	.19	.44	
IN.	1.02	1.46	2.64	1.15	.76	1.89	3.13	.57	.67	1.25	.22	.49	
CAL YR 1986	TOTAL	9834.53		MEAN	26.9	MAX	310	MIN	.11	CFSM	1.23	IN.	16.78
WTR YR 1987	TOTAL	8925.83		MEAN	24.5	MAX	439	MIN	.11	CFSM	1.12	IN.	15.23

BEAVER RIVER BASIN

03092460 WEST BRANCH MAHONING RIVER BELOW MICHAEL J. KIRWAN DAM, AT WAYLAND, OH

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.

DRAINAGE AREA.--81.7 mi².

PERIOD OF RECORD.--October 1968 to current year. Prior to October 1969 published as "West Branch Mahoning River below West Branch Dam, at Wayland."

GAGE.--Water-stage recorder. Datum of gage is 926.44 ft above National Geodetic Vertical Datum of 1929, (levels by U.S. Army Corps of Engineers). Prior to October 1971 at datum 0.89 ft higher.

REMARKS.--No estimated daily discharges. Records fair. Flow completely regulated by Michael J. Kirwan Reservoir. Water-quality data collected at this site 1969 to 1977.

AVERAGE DISCHARGE.--19 years, 105 ft³/s.

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, 471 ft³/s Dec. 9, gage height, 7.15 ft; minimum daily, 18 ft³/s Nov. 14-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	272	234	71	41	32	36	26	60	49	81	74
2	153	271	156	71	42	30	44	26	60	73	81	74
3	161	271	30	71	41	28	35	27	61	36	52	74
4	152	268	47	71	41	27	29	27	61	34	28	74
5	150	267	140	71	41	27	51	26	61	34	48	74
6	205	264	244	71	41	27	44	26	69	34	71	74
7	248	208	344	71	41	27	31	26	78	34	77	74
8	246	130	427	64	41	27	27	26	79	32	77	75
9	246	104	455	55	41	27	26	26	81	32	78	75
10	246	85	454	47	41	27	26	26	81	34	63	75
11	245	70	443	41	41	26	26	35	81	34	64	75
12	244	51	437	40	42	22	26	51	82	34	76	76
13	245	27	433	39	41	21	26	58	82	33	76	76
14	248	18	432	44	41	21	26	58	82	32	75	76
15	246	18	362	49	41	21	24	58	82	32	75	70
16	244	18	265	48	41	23	26	58	83	32	75	76
17	244	18	162	47	40	30	26	58	83	40	75	76
18	245	20	75	47	40	32	26	61	83	45	75	77
19	246	39	104	50	40	32	26	41	84	45	75	77
20	246	70	125	48	40	32	26	25	89	57	75	77
21	247	94	125	44	40	32	26	44	72	65	75	76
22	247	128	124	43	40	32	26	58	53	64	76	76
23	249	126	117	42	41	32	26	58	41	64	75	76
24	255	126	125	49	33	32	27	58	43	64	75	66
25	258	125	144	43	26	32	27	58	53	64	75	55
26	265	103	153	42	26	33	26	68	62	64	75	55
27	268	26	151	41	26	32	26	73	71	63	75	55
28	273	110	150	41	27	32	27	77	73	73	75	55
29	274	237	150	41	---	32	26	78	58	81	75	56
30	275	236	150	41	---	36	26	77	48	81	74	57
31	275	---	119	41	---	46	---	69	---	81	75	---
TOTAL	7293	3800	6877	1584	1077	910	870	1483	2096	1540	2222	2126
MEAN	235	127	222	51.1	38.5	29.4	29.0	47.8	69.9	49.7	71.7	70.9
MAX	275	272	455	71	42	46	51	78	89	81	81	77
MIN	147	18	30	39	26	21	24	25	41	32	28	55
CAL YR 1986	TOTAL	38202		MEAN	105	MAX	455	MIN	16			
WTR YR 1987	TOTAL	31878		MEAN	87.3	MAX	455	MIN	18			

BEAVER RIVER BASIN

41

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. 5, 6, 23-29, Feb. 9-11, 15-21. Records fair. Low flow slightly regulated by mill several miles upstream from station. Water-quality data collected at this site 1965 to 1977.

COOPERATION.--One discharge measurement furnished by the U.S. Army Corps of Engineers during this year.

AVERAGE DISCHARGE.--58 years, 112 ft³/s, 15.59 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)
Nov. 27	1400	1,460	10.15	Apr. 6	1400	2,100	11.16
Dec. 3	1530	1,490	10.21	July 3	0500	*2,950	*11.96

Minimum daily 16 ft³/s Aug. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	25	90	69	62	333	486	53	32	178	19	35
2	228	24	283	71	64	896	388	50	28	717	22	29
3	135	23	1170	75	82	580	555	52	27	2170	148	24
4	796	23	880	67	94	279	331	61	31	435	50	22
5	728	28	300	60	80	171	751	55	29	114	28	20
6	160	35	152	54	76	163	1940	48	24	70	24	19
7	76	30	117	60	88	167	1530	44	23	55	22	19
8	49	28	168	82	114	158	810	41	22	48	21	22
9	39	28	267	76	100	127	338	38	24	47	22	26
10	33	27	480	68	86	91	187	35	24	43	40	22
11	29	24	338	79	76	67	133	33	29	99	32	20
12	25	27	150	75	87	62	116	31	35	62	25	36
13	28	31	108	67	102	59	133	31	35	43	22	30
14	62	27	87	71	86	57	115	30	32	39	20	25
15	75	27	85	228	58	57	96	31	25	35	19	22
16	42	27	76	316	49	66	92	34	22	33	18	24
17	33	29	78	138	42	81	104	30	19	32	18	26
18	30	39	144	97	39	102	106	30	18	28	18	60
19	26	244	245	116	36	111	86	140	18	26	18	122
20	25	174	140	186	35	106	73	70	45	25	17	64
21	24	252	102	120	34	86	66	48	171	24	16	50
22	22	231	83	80	44	71	60	37	242	23	41	35
23	21	125	68	62	53	64	56	32	198	22	80	34
24	20	89	66	52	51	59	74	29	69	21	32	30
25	21	69	252	46	56	56	88	27	44	21	23	27
26	25	291	390	43	60	82	66	27	34	22	21	25
27	56	1160	183	39	59	81	58	27	29	22	23	23
28	42	589	118	36	61	67	71	27	94	21	85	22
29	35	199	94	35	---	60	74	246	65	19	61	21
30	31	125	82	50	---	65	61	99	58	18	34	27
31	27	---	74	60	---	420	---	41	---	19	27	---
TOTAL	3029	4050	6870	2678	1874	4844	9044	1577	1546	4531	1046	961
MEAN	97.7	135	222	86.4	66.9	156	301	50.9	51.5	146	33.7	32.0
MAX	796	1160	1170	316	114	896	1940	246	242	2170	148	122
MIN	20	23	66	35	34	56	56	27	18	18	16	19
CFSM	1.00	1.38	2.27	.89	.69	1.60	3.08	.52	.53	1.50	.35	.33
IN.	1.15	1.54	2.62	1.02	.71	1.85	3.45	.60	.59	1.73	.40	.37
CAL YR 1986	TOTAL	44604	MEAN	122	MAX	1310	MIN	10	CFSM	1.25	IN.	17.00
WTR YR 1987	TOTAL	42050	MEAN	115	MAX	2170	MIN	16	CFSM	1.18	IN.	16.03

BEAVER RIVER BASIN

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: Jan. 22-30. Records good except for periods of estimated record, and July 3 to Sept. 30 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.

COOPERATION.--One discharge measurement furnished by U.S. Army Corps of Engineers this year.

AVERAGE DISCHARGE.--47 years, 587 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, 4,950 ft³/s Apr. 6, gage height 11.30 ft; minimum daily, 129 ft³/s Feb. 19-21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	697	413	1060	668	334	483	1500	589	255	403	312	249
2	935	412	1700	644	353	1380	1220	575	246	2060	392	250
3	913	407	3760	490	429	1160	1490	555	244	3450	754	238
4	2190	403	2820	393	463	649	896	537	253	1190	407	231
5	2240	394	1280	351	428	424	2060	507	239	363	269	227
6	1100	413	1080	311	415	361	4590	473	225	232	265	227
7	997	408	1140	315	429	353	4120	449	234	191	265	227
8	948	362	1370	379	468	355	2500	344	237	197	266	263
9	912	312	1740	370	410	329	1680	239	257	250	290	258
10	895	292	2150	338	423	244	1330	168	245	267	389	242
11	880	270	1870	311	401	187	1110	151	237	329	286	231
12	868	277	1520	284	405	158	841	190	260	319	238	265
13	878	332	1480	262	386	135	529	221	266	320	247	304
14	913	351	1450	274	312	135	460	227	260	311	246	268
15	896	343	1440	621	224	143	448	233	242	271	237	253
16	720	344	1230	771	152	180	451	224	228	238	229	247
17	531	341	897	542	173	232	482	217	218	247	228	260
18	455	392	555	453	152	309	482	265	210	254	225	379
19	420	894	674	525	129	342	441	563	221	254	222	488
20	397	930	760	904	129	320	416	440	356	253	218	432
21	393	1010	771	608	129	267	369	239	487	274	217	343
22	390	1060	743	520	138	217	252	222	397	279	296	287
23	386	906	769	440	157	188	230	258	434	275	323	283
24	382	821	823	390	162	171	341	248	208	274	266	267
25	385	776	1250	340	151	165	465	238	178	285	244	242
26	408	1220	1630	300	141	225	462	236	179	296	242	196
27	443	2870	1250	280	132	248	534	278	226	290	250	229
28	447	1720	1080	260	147	206	653	296	395	270	295	257
29	437	1050	973	240	---	176	693	436	356	313	313	311
30	426	1070	860	300	---	228	626	423	256	304	267	404
31	417	---	819	325	---	1330	---	294	---	315	259	---
TOTAL	23299	20793	40944	13209	7772	11300	31671	10335	8049	14574	8957	8358
MEAN	752	693	1321	426	278	365	1056	333	268	470	289	279
MAX	2240	2870	3760	904	468	1380	4590	589	487	3450	754	488
MIN	382	270	555	240	129	135	230	151	178	191	217	196
CAL YR 1986	TOTAL	236767		MEAN	649	MAX	3760	MIN	157			
WTR YR 1987	TOTAL	199261		MEAN	546	MAX	4590	MIN	129			

BEAVER RIVER BASIN

43

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 current year.

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.--Estimated daily discharges: June 15-23, July 20 to Aug. 27, and Sept. 15-30. Records fair except those for periods of estimated record which are poor. 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.

AVERAGE DISCHARGE.--47 years, 88.4 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, 462 ft³/s Oct. 6, gage height, 2.83 ft, minimum daily 0.88 ft³/s June 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	31	25	330	23	8.2	8.2	11	30	61	192	110
2	129	31	13	330	23	8.2	8.2	11	32	44	192	110
3	162	31	5.1	330	23	8.2	8.2	11	29	29	162	109
4	115	32	18	329	15	8.3	7.5	11	9.8	29	137	109
5	197	32	86	327	9.3	8.4	8.2	11	19	59	137	109
6	400	31	169	325	9.3	8.2	7.9	11	20	145	137	109
7	450	31	161	222	9.3	8.6	8.6	11	26	202	137	109
8	450	31	169	152	9.3	8.7	8.7	11	16	202	137	99
9	448	31	167	151	9.3	10	8.7	11	.88	204	137	84
10	447	31	170	150	9.3	8.4	8.7	11	3.3	201	115	80
11	444	31	245	150	8.4	8.0	8.7	12	3.6	203	100	80
12	444	31	336	150	9.3	8.2	8.7	19	43	205	100	80
13	444	15	336	149	9.9	8.2	8.7	23	53	206	100	77
14	445	4.5	335	158	10	8.2	9.8	23	52	209	105	74
15	445	4.4	334	155	10	8.2	9.9	22	46	209	109	75
16	445	4.4	333	152	11	9.5	9.9	22	46	211	109	75
17	446	4.1	333	152	11	9.3	9.9	23	34	199	109	75
18	444	4.1	332	153	11	9.2	9.9	23	31	192	109	75
19	443	4.0	333	152	11	8.7	9.9	21	31	194	109	75
20	447	4.0	330	152	11	8.7	9.9	21	31	179	109	75
21	448	4.0	329	152	11	8.7	9.9	22	31	192	107	75
22	451	4.0	328	152	9.7	8.7	11	22	31	192	105	75
23	288	4.0	302	152	11	9.0	11	22	31	192	103	75
24	91	4.0	334	111	9.5	8.7	11	22	40	192	103	75
25	92	4.0	339	81	9.2	8.7	11	23	45	192	100	75
26	92	4.0	337	54	9.8	8.6	11	32	55	192	100	75
27	55	4.0	335	22	8.8	8.2	11	37	61	192	107	75
28	29	15	334	23	8.3	8.2	11	36	61	192	107	75
29	31	25	334	23	---	8.2	11	32	61	192	106	75
30	31	25	332	22	---	8.2	11	30	62	192	109	75
31	31	---	331	23	---	8.2	---	29	---	192	110	---
TOTAL	8924	511.5	7865.1	4984	319.7	264.8	287.1	626	1034.58	5295	3699	2539
MEAN	288	17.1	254	161	11.4	8.54	9.57	20.2	34.5	171	119	84.6
MAX	451	32	339	330	23	10	11	37	62	211	192	110
MIN	29	4.0	5.1	22	8.3	8.0	7.5	11	.88	29	100	74
(+)	20.7	19.5	19.8	19.9	20.6	20.1	20.3	21.9	24.0	24.2	24.3	21.6

CAL YR 1986	TOTAL	35858.8	MEAN	98.2	MAX	1000	MIN	2.1	(+)	21.3
WTR YR 1987	TOTAL	36349.78	MEAN	99.6	MAX	451	MIN	.88	(+)	21.4

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

BEAVER RIVER BASIN

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 except those for May 20 to Aug. 5 which are fair. 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.

AVERAGE DISCHARGE.--45 years, 1,125 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, 9,170 ft³/s Apr. 7, gage height, 8.88 ft; minimum daily, 317 ft³/s, Feb. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1180	539	1410	1370	637	743	3530	904	775	1320	689	691
2	1370	533	4290	1290	690	2090	3310	844	730	5410	1530	640
3	2290	533	6890	1270	901	2230	3540	875	691	6060	3570	622
4	5760	532	5630	1040	966	1450	2750	941	786	4020	1390	602
5	4270	536	2930	944	893	974	4300	854	765	1380	826	590
6	2560	558	1820	888	817	778	7820	745	684	783	650	593
7	1820	556	1790	921	816	740	8690	678	660	729	611	598
8	1770	604	2070	1010	872	736	5680	624	761	681	603	801
9	1700	558	2650	958	819	725	3290	501	914	669	1370	759
10	1640	483	3390	881	729	617	2300	416	784	709	1550	635
11	1600	484	3210	883	710	483	1850	346	751	845	833	585
12	1570	506	2610	822	726	412	1500	347	830	747	639	576
13	1640	501	2360	742	787	374	1150	376	843	721	568	802
14	1700	502	2250	733	720	353	897	437	828	935	558	729
15	1670	491	2220	1230	584	429	813	656	817	778	553	615
16	1480	481	2100	1800	459	446	832	545	801	694	552	602
17	1270	479	1830	1440	434	498	895	470	777	619	552	757
18	1070	737	1590	1120	426	553	880	623	768	605	549	1360
19	1020	1750	1550	1680	394	625	795	1180	783	596	553	1630
20	970	1880	1540	2690	373	625	703	1290	1350	592	556	1500
21	961	1990	1520	2070	366	561	654	846	1550	586	553	1070
22	947	1800	1420	1400	366	483	573	586	1600	608	1070	1010
23	934	1470	1360	1250	385	431	477	542	1320	622	1010	981
24	902	1260	1400	950	369	399	988	537	1030	622	788	848
25	761	1160	2570	860	350	383	1330	514	753	624	620	775
26	696	2110	3170	870	332	401	1080	522	722	693	604	707
27	722	4050	2700	774	322	443	1010	574	732	645	630	653
28	697	3480	2160	678	317	446	1370	623	1130	630	764	666
29	618	1780	1890	546	---	394	1300	832	1120	625	735	869
30	582	1540	1670	631	---	501	1050	979	957	674	691	1350
31	557	---	1530	692	---	2690	---	969	---	665	678	---
TOTAL	46727	33883	75520	34433	16560	23013	65357	21176	27012	35887	26845	24616
MEAN	1507	1129	2436	1111	591	742	2179	683	900	1158	866	821
MAX	5760	4050	6890	2690	966	2690	8690	1290	1600	6060	3570	1630
MIN	557	479	1360	546	317	353	477	346	660	586	549	576
CAL YR 1986	TOTAL	478403		MEAN	1311	MAX	8290	MIN	373			
WTR YR 1987	TOTAL	431029		MEAN	1181	MAX	8690	MIN	317			

BEAVER RIVER BASIN

45

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

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 current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1967 to current year.

pH: January 1967 to current year.

WATER TEMPERATURES: January 1967 to current year.

DISSOLVED OXYGEN: January 1967 to current year.

INSTRUMENTATION.--Water-quality monitor.

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, 14.2 mg/L Mar. 25, 1970; minimum, 0.0 mg/L June 1, 1975, June 17, 1977.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1160 microsiemens Dec. 14; minimum, 266 microsiemens Dec. 4.

pH: Maximum, 8.2 units Jan. 31; minimum, 7.0 units Nov. 14, Sept. 11.

WATER TEMPERATURES: Maximum, 30.5°C July 5; minimum, 1.5°C Jan. 24, 25.

DISSOLVED OXYGEN: Maximum, 13.7 mg/L Jan. 28; minimum, 1.2 mg/L July 3.

BEAVER RIVER BASIN

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

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	536	404	501	---	---	---	582	422	499	354	344	349
2	512	476	496	---	---	---	644	398	509	454	352	377
3	496	304	455	546	536	539	392	306	346	528	406	441
4	404	352	374	550	532	542	302	266	277	524	406	441
5	358	334	345	568	528	543	404	282	331	470	406	438
6	388	332	355	554	526	538	770	366	481	484	466	472
7	434	390	412	548	536	541	438	390	416	510	482	495
8	440	430	434	548	512	532	448	436	442	510	502	506
9	440	430	434	540	508	537	442	426	433	514	490	507
10	440	432	436	---	---	---	426	400	410	578	474	499
11	446	430	437	---	---	---	584	392	432	470	432	446
12	442	432	437	582	572	575	800	408	569	520	466	488
13	444	426	434	598	584	594	1130	434	789	494	480	490
14	442	430	438	650	598	622	1160	400	466	496	468	480
15	450	432	439	622	610	615	398	282	340	492	460	476
16	450	438	443	626	614	618	308	290	296	458	396	429
17	452	438	445	624	610	614	330	310	317	396	376	382
18	450	432	440	650	560	630	422	328	356	628	356	379
19	436	424	429	664	554	614	376	350	361	490	356	391
20	428	410	419	546	482	520	376	366	372	452	402	419
21	428	414	420	506	474	490	382	358	366	404	394	399
22	426	408	416	478	464	470	412	384	398	470	388	421
23	424	408	414	478	468	472	420	408	412	498	464	485
24	424	408	417	510	472	491	436	408	415	---	---	---
25	440	414	423	536	510	522	430	398	412	---	---	---
26	482	436	455	538	466	505	398	316	371	---	---	---
27	504	484	493	462	374	408	312	292	299	---	---	---
28	500	356	464	372	308	329	306	296	300	552	550	550
29	---	---	---	348	310	331	362	306	332	582	554	566
30	542	530	539	416	346	375	350	340	345	1030	588	696
31	548	538	546	---	---	---	360	344	349	1020	576	691
MONTH	548	304	440	664	308	522	1160	266	401	1030	344	471
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	624	574	597	704	654	682	540	466	513	552	494	522
2	692	510	562	664	480	578	474	458	466	536	524	531
3	542	518	528	490	398	442	458	434	444	542	524	532
4	540	514	523	408	396	401	526	428	446	610	532	557
5	542	490	512	436	400	412	526	430	482	1090	538	622
6	572	538	554	458	436	444	426	404	414	1120	550	646
7	560	536	547	488	462	474	---	---	---	572	554	562
8	602	546	571	494	478	485	---	---	---	854	568	620
9	608	586	599	504	484	491	394	334	353	1090	580	664
10	616	466	546	524	454	493	456	398	424	606	592	601
11	470	430	455	532	496	517	488	456	472	632	604	623
12	558	418	455	574	498	546	506	488	495	666	632	653
13	496	460	471	612	540	591	544	510	522	666	646	658
14	486	464	472	614	610	612	554	528	538	682	660	672
15	492	468	481	---	---	---	566	554	559	682	558	629
16	582	484	528	---	---	---	564	550	559	646	626	634
17	652	508	575	---	---	---	570	554	559	660	638	649
18	674	508	599	---	---	---	570	550	559	660	530	635
19	700	676	688	---	---	---	558	544	552	588	526	556
20	710	636	693	---	---	---	566	554	558	544	480	519
21	714	654	690	652	636	639	582	564	570	534	506	516
22	694	678	687	650	640	646	590	578	582	534	524	530
23	712	660	681	854	636	666	606	534	573	570	538	554
24	672	650	664	660	646	653	588	534	560	590	558	579
25	688	650	675	676	656	666	606	562	586	610	594	606
26	690	614	648	676	658	669	572	392	540	636	606	618
27	692	642	674	676	656	667	530	388	433	622	582	603
28	698	680	692	660	646	653	518	394	494	596	582	590
29	---	---	---	648	618	639	526	496	508	608	564	585
30	---	---	---	630	586	621	528	504	516	570	460	514
31	---	---	---	---	---	---	---	---	---	554	528	538
MONTH	714	418	585	854	396	570	606	334	510	1120	460	591

BEAVER RIVER BASIN

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

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	552	502	530	530	468	502	530	506	516	560	524	539
2	524	502	507	476	388	405	526	468	515	574	556	563
3	556	528	544	---	---	---	---	---	---	568	554	558
4	566	546	557	---	---	---	---	---	---	580	568	573
5	572	548	562	---	---	---	460	412	442	582	560	571
6	554	528	539	460	424	432	528	442	501	576	554	567
7	594	546	575	500	460	472	538	520	526	572	554	563
8	592	552	582	508	500	503	546	532	539	572	514	542
9	592	530	565	508	490	498	566	532	549	554	536	541
10	598	574	585	508	480	496	498	470	481	558	524	542
11	582	554	569	---	---	---	532	442	503	584	548	569
12	576	550	568	---	---	---	568	530	545	598	586	593
13	582	552	565	514	498	504	578	568	571	606	558	580
14	566	540	551	514	494	499	580	568	574	576	534	557
15	556	546	550	---	---	---	586	574	581	574	542	561
16	574	548	562	496	478	487	596	582	589	586	574	579
17	574	544	558	526	500	512	600	296	574	600	530	586
18	570	556	564	532	498	516	592	572	580	550	440	503
19	586	562	578	528	502	516	580	566	572	528	448	499
20	602	398	543	534	506	515	576	558	567	516	452	491
21	532	388	489	548	512	525	582	556	568	544	518	524
22	494	378	447	528	514	520	572	458	525	552	522	541
23	492	448	472	536	518	528	500	434	482	570	526	549
24	528	486	500	540	516	527	498	436	463	576	550	566
25	516	510	513	536	518	526	534	502	516	580	556	572
26	538	514	524	532	506	517	556	538	546	596	584	589
27	552	524	540	524	506	512	560	534	543	620	590	604
28	572	512	535	542	506	518	558	532	546	602	586	593
29	536	476	509	574	508	535	566	542	551	598	488	589
30	538	512	526	556	502	523	552	530	538	510	436	489
31	---	---	---	528	512	519	560	546	553	---	---	---
MONTH	602	378	540	574	388	504	600	296	536	620	436	556
YEAR	1160	266	518									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.36	7.19	7.28	---	---	---	7.69	7.57	7.63	7.71	7.56	7.67
2	7.43	7.30	7.37	---	---	---	7.84	7.61	7.74	7.88	7.67	7.72
3	7.67	7.38	7.42	7.49	7.46	7.47	7.78	7.57	7.67	7.77	7.71	7.74
4	7.59	7.42	7.53	7.47	7.41	7.44	7.56	7.40	7.46	7.82	7.72	7.76
5	7.47	7.31	7.40	7.46	7.42	7.44	7.67	7.47	7.56	7.74	7.55	7.68
6	7.44	7.28	7.37	7.44	7.39	7.41	8.01	7.58	7.67	7.66	7.55	7.61
7	7.50	7.42	7.46	7.47	7.34	7.42	7.82	7.64	7.70	7.57	7.46	7.54
8	7.59	7.50	7.55	7.61	7.37	7.45	7.74	7.66	7.70	7.62	7.46	7.56
9	7.61	7.51	7.58	7.50	7.41	7.47	7.72	7.65	7.69	7.61	7.51	7.56
10	7.62	7.55	7.59	---	---	---	7.72	7.65	7.68	7.60	7.50	7.56
11	7.67	7.41	7.60	---	---	---	7.71	7.62	7.66	7.76	7.60	7.67
12	7.78	7.59	7.66	7.49	7.42	7.47	7.66	7.61	7.64	7.67	7.60	7.64
13	7.63	7.55	7.59	7.50	7.39	7.46	7.71	7.60	7.67	7.62	7.56	7.58
14	7.59	7.46	7.54	7.51	7.03	7.36	7.77	7.68	7.72	7.65	7.32	7.56
15	7.65	7.55	7.58	7.57	7.44	7.48	7.74	7.66	7.70	7.65	7.55	7.59
16	7.64	7.54	7.60	7.62	7.51	7.57	7.69	7.61	7.67	7.77	7.62	7.68
17	7.64	7.32	7.55	7.59	7.42	7.51	7.67	7.63	7.65	7.82	7.69	7.74
18	7.60	7.22	7.55	7.66	7.43	7.49	7.68	7.63	7.65	7.80	7.44	7.74
19	7.72	7.51	7.60	7.74	7.62	7.70	7.70	7.63	7.66	7.77	7.52	7.67
20	7.58	7.49	7.55	7.77	7.70	7.74	7.82	7.64	7.69	7.87	7.77	7.81
21	7.72	7.50	7.55	7.77	7.67	7.71	7.69	7.56	7.66	7.86	7.77	7.82
22	7.52	7.46	7.48	7.75	7.68	7.72	7.71	7.52	7.63	7.99	7.71	7.78
23	7.50	7.40	7.45	7.91	7.73	7.79	7.65	7.53	7.61	7.75	7.65	7.70
24	7.45	7.37	7.41	7.87	7.71	7.74	7.83	7.61	7.66	7.81	7.33	7.67
25	7.51	7.32	7.41	7.74	7.60	7.69	7.71	7.66	7.69	7.77	7.68	7.73
26	7.57	7.41	7.48	7.77	7.63	7.70	7.65	7.63	7.64	---	---	---
27	7.46	7.37	7.44	7.75	7.58	7.67	7.65	7.62	7.63	---	---	---
28	7.49	7.40	7.45	7.58	7.42	7.47	7.68	7.62	7.65	7.83	7.64	7.78
29	7.45	7.45	7.45	7.54	7.37	7.47	7.76	7.65	7.69	7.66	7.57	7.62
30	7.44	7.40	7.42	7.58	7.41	7.52	7.71	7.64	7.68	7.64	7.57	7.61
31	7.57	7.45	7.54	---	---	---	7.78	7.60	7.68	8.17	7.61	7.76
MONTH	7.78	7.19	7.50	7.91	7.03	7.55	8.01	7.40	7.66	8.17	7.32	7.67

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

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	7.89	7.70	7.74	7.57	7.41	7.47	7.76	7.60	7.69	7.59	7.44	7.55
2	7.71	7.62	7.67	7.75	7.58	7.66	7.76	7.61	7.69	7.57	7.45	7.52
3	7.73	7.61	7.69	7.68	7.53	7.63	7.78	7.62	7.74	7.61	7.40	7.51
4	7.66	7.62	7.64	7.65	7.56	7.59	7.69	7.41	7.63	7.63	7.53	7.58
5	7.68	7.62	7.65	7.64	7.58	7.61	7.89	7.61	7.73	7.62	7.51	7.55
6	7.63	7.54	7.59	7.63	7.37	7.53	7.73	7.67	7.72	7.52	7.44	7.50
7	7.65	7.53	7.59	7.80	7.55	7.65	---	---	---	7.52	7.44	7.48
8	7.64	7.55	7.60	7.72	7.59	7.65	---	---	---	7.49	7.32	7.44
9	7.62	7.56	7.59	7.60	7.52	7.56	7.75	7.67	7.72	7.51	7.45	7.48
10	7.63	7.55	7.58	7.55	7.51	7.53	7.79	7.64	7.70	7.50	7.46	7.49
11	7.60	7.52	7.56	7.67	7.51	7.57	7.92	7.53	7.73	7.50	7.32	7.45
12	7.61	7.49	7.58	7.55	7.47	7.50	7.85	7.57	7.75	7.55	7.30	7.41
13	7.65	7.50	7.60	7.53	7.45	7.48	7.86	7.46	7.70	7.52	7.37	7.44
14	7.66	7.57	7.63	7.46	7.35	7.42	7.71	7.65	7.68	7.52	7.35	7.42
15	7.81	7.68	7.74	7.57	7.47	7.52	7.67	7.54	7.60	7.59	7.42	7.48
16	7.78	7.62	7.70	7.62	7.37	7.46	7.59	7.40	7.51	7.63	7.47	7.55
17	7.73	7.61	7.65	7.50	7.42	7.48	8.08	7.48	7.62	7.58	7.42	7.49
18	7.81	7.55	7.64	7.54	7.38	7.46	7.72	7.54	7.63	7.48	7.31	7.44
19	7.54	7.46	7.49	7.60	7.45	7.51	7.90	7.58	7.72	7.42	7.23	7.38
20	7.51	7.37	7.45	7.71	7.47	7.56	7.82	7.14	7.63	7.48	7.39	7.43
21	7.86	7.27	7.51	7.69	7.52	7.58	7.85	7.42	7.63	7.46	7.34	7.43
22	7.56	7.35	7.44	7.63	7.49	7.56	7.86	7.50	7.65	7.41	7.35	7.38
23	7.58	7.42	7.51	7.56	7.44	7.51	7.57	7.41	7.47	7.42	7.32	7.37
24	7.48	7.39	7.44	7.52	7.42	7.47	7.55	7.38	7.46	7.41	7.36	7.38
25	7.43	7.38	7.41	7.50	7.37	7.41	7.71	7.51	7.61	7.46	7.38	7.41
26	7.52	7.40	7.47	7.42	7.35	7.37	7.73	7.63	7.68	7.38	7.34	7.36
27	7.46	7.31	7.37	7.43	7.35	7.38	7.62	7.54	7.58	7.34	7.26	7.31
28	7.44	7.38	7.40	7.37	7.33	7.35	7.69	7.54	7.63	7.39	7.29	7.32
29	---	---	---	7.36	7.22	7.30	7.65	7.55	7.60	7.37	7.29	7.33
30	---	---	---	7.44	7.32	7.35	7.65	7.57	7.60	7.30	7.14	7.23
31	---	---	---	7.73	7.39	7.61	---	---	---	7.51	7.28	7.35
MONTH	7.89	7.27	7.57	7.80	7.22	7.51	8.08	7.14	7.65	7.63	7.14	7.43
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.35	7.05	7.28	7.51	7.35	7.42	7.35	7.25	7.29	7.39	7.22	7.31
2	7.25	7.19	7.22	7.73	7.52	7.60	7.44	7.28	7.35	7.38	7.32	7.35
3	7.38	7.18	7.30	---	---	---	7.60	7.49	7.50	7.39	7.26	7.31
4	7.43	7.30	7.36	---	---	---	---	---	---	7.39	7.26	7.31
5	7.46	7.30	7.37	---	---	---	7.41	7.29	7.36	7.32	7.23	7.28
6	7.39	7.20	7.31	7.50	7.44	7.48	7.35	7.24	7.29	7.32	7.26	7.29
7	7.80	7.34	7.48	7.57	7.39	7.47	7.38	7.22	7.28	7.35	7.23	7.28
8	7.63	7.40	7.46	7.64	7.42	7.50	7.34	7.22	7.28	7.33	7.26	7.30
9	7.53	7.34	7.42	7.58	7.47	7.52	7.43	7.12	7.29	7.41	7.27	7.33
10	7.44	7.34	7.40	7.64	7.42	7.51	7.48	7.41	7.47	7.32	7.26	7.29
11	7.41	7.29	7.35	---	---	---	7.52	7.30	7.39	7.30	7.05	7.25
12	7.40	7.25	7.32	---	---	---	7.40	7.27	7.32	7.34	7.24	7.28
13	7.46	7.26	7.37	7.68	7.52	7.65	7.39	7.25	7.31	7.36	7.22	7.30
14	7.57	7.39	7.46	7.52	7.46	7.50	7.43	7.24	7.32	7.35	7.23	7.30
15	7.43	7.35	7.37	---	---	---	7.46	7.25	7.34	7.30	7.23	7.26
16	7.45	7.14	7.35	7.65	7.50	7.50	7.45	7.27	7.35	7.30	7.24	7.27
17	7.52	7.36	7.43	7.53	7.37	7.47	7.76	7.27	7.37	7.93	7.25	7.35
18	7.60	7.35	7.44	7.55	7.28	7.41	7.46	7.27	7.35	7.74	7.32	7.46
19	7.50	7.35	7.41	7.82	7.44	7.57	7.40	7.25	7.32	7.45	7.33	7.38
20	7.40	7.26	7.34	7.52	7.23	7.45	7.38	7.24	7.30	7.68	7.30	7.42
21	7.60	7.34	7.41	7.55	7.36	7.45	7.32	7.25	7.28	7.42	7.35	7.39
22	7.43	7.30	7.38	7.50	7.27	7.36	7.86	7.22	7.34	7.37	7.27	7.33
23	7.43	7.35	7.39	7.56	7.27	7.39	7.40	7.28	7.35	7.40	7.30	7.34
24	7.45	7.15	7.36	7.45	7.23	7.35	7.29	7.14	7.25	7.36	7.26	7.32
25	7.47	7.33	7.39	7.61	7.29	7.44	7.31	7.24	7.27	7.37	7.24	7.30
26	7.45	7.32	7.37	7.50	7.32	7.40	7.28	7.24	7.26	7.39	7.28	7.33
27	7.43	7.27	7.37	7.50	7.30	7.38	7.32	7.23	7.27	7.33	7.25	7.29
28	7.73	7.39	7.50	7.37	7.26	7.31	7.32	7.23	7.28	7.38	7.32	7.35
29	7.46	7.37	7.42	7.45	7.20	7.32	7.36	7.25	7.30	7.35	7.26	7.31
30	7.45	7.35	7.39	7.42	7.27	7.32	7.40	7.22	7.30	7.53	7.22	7.44
31	---	---	---	7.36	7.26	7.30	7.32	7.19	7.27	---	---	---
MONTH	7.80	7.05	7.38	7.82	7.20	7.44	7.86	7.12	7.32	7.93	7.05	7.32
YEAR	8.17	7.03	7.50									

BEAVER RIVER BASIN

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

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

BEAVER RIVER BASIN

D03099510 MAHONING RIVER AT OHIO-PENNSYLVANIA STATE LINE, BELOW LOWELLVILLE, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	26.0	24.5	25.0	24.0	23.5	23.5	28.0	27.0	27.5	22.5	21.0	21.5
2	27.0	24.5	26.0	26.5	22.0	24.0	28.5	26.5	27.5	21.5	20.5	21.0
3	27.5	26.0	26.5	29.5	22.5	25.5	26.5	26.5	26.5	22.0	20.0	21.0
4	27.5	25.5	26.5	28.0	22.5	25.5	---	---	---	22.0	20.0	21.0
5	27.0	25.0	26.0	30.5	21.5	26.0	26.0	25.0	25.0	22.0	21.0	21.5
6	25.0	24.0	25.0	28.5	23.5	26.0	27.0	24.5	25.5	22.0	21.0	21.5
7	26.5	23.5	25.0	26.5	24.0	25.0	27.5	25.5	26.5	21.5	20.5	21.0
8	26.0	24.5	25.0	28.0	25.5	26.5	27.0	26.0	26.5	22.5	21.0	21.5
9	24.5	23.0	24.0	28.0	26.5	27.5	26.0	26.0	26.0	25.5	22.5	24.0
10	24.5	21.5	23.0	28.5	27.0	27.5	25.0	25.0	25.0	25.0	23.5	24.5
11	24.0	21.5	23.0	---	---	---	25.0	23.0	24.0	25.0	24.0	24.5
12	23.0	22.5	23.0	---	---	---	26.0	24.0	25.0	25.5	24.5	25.0
13	25.0	22.5	23.5	29.0	27.5	28.0	26.5	24.5	25.5	26.0	24.5	25.5
14	26.5	23.5	25.0	28.5	27.0	27.5	28.0	25.5	27.0	25.5	24.0	25.0
15	27.0	24.5	26.0	---	---	---	29.0	26.5	27.5	24.0	23.0	23.0
16	27.0	24.5	26.0	25.5	24.0	24.5	29.0	26.5	27.5	24.0	23.0	23.5
17	27.5	25.0	26.0	26.0	24.0	25.0	28.5	27.0	28.0	25.0	24.0	24.5
18	27.0	25.0	26.0	27.0	24.5	26.0	28.5	26.5	27.5	24.0	23.0	23.5
19	28.0	25.5	26.5	27.5	25.5	26.5	28.0	26.0	27.0	23.0	22.5	23.0
20	27.5	25.0	26.5	27.5	25.0	26.5	27.5	25.5	26.5	22.5	21.0	22.0
21	28.0	25.5	27.5	29.5	26.0	27.5	26.0	24.5	25.5	22.0	20.5	21.5
22	25.5	24.5	25.0	30.0	27.5	29.0	26.0	24.5	25.0	21.5	21.0	21.5
23	26.0	24.5	25.0	30.0	28.5	29.0	25.0	22.5	24.0	22.0	21.0	21.5
24	26.5	24.5	25.5	30.0	28.0	29.0	23.0	21.0	22.0	22.0	20.5	21.5
25	27.0	24.5	25.5	29.5	28.0	29.0	22.5	21.0	22.0	21.5	20.0	21.0
26	27.0	25.5	26.0	29.0	28.0	28.5	23.0	22.0	22.5	21.5	20.0	20.5
27	25.5	23.5	24.5	28.5	27.0	28.0	22.5	21.0	22.0	22.0	20.0	21.0
28	26.0	23.0	24.5	28.0	26.0	27.0	23.0	22.5	22.5	22.5	20.5	21.5
29	25.0	23.5	24.0	28.0	26.0	27.0	23.0	22.5	22.5	22.0	20.5	21.0
30	24.5	23.0	23.5	28.0	26.0	27.0	23.5	21.5	22.5	22.0	21.0	21.5
31	---	---	---	29.0	27.0	27.5	22.5	21.5	22.0	---	---	---
MONTH	28.0	21.5	25.0	30.5	21.5	27.5	29.0	21.0	25.0	26.0	20.5	22.5
YEAR	30.5	1.5	15.5									

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	5.3	3.3	4.4	---	---	---	11.3	10.8	11.1	13.3	12.7	13.0
2	6.5	5.4	5.8	---	---	---	12.2	11.1	11.6	13.1	12.7	12.9
3	6.7	5.6	6.2	6.8	5.8	6.1	12.0	11.5	11.7	13.3	12.5	12.9
4	7.1	6.4	6.9	7.5	6.1	7.0	11.7	11.5	11.6	13.1	12.5	12.8
5	7.5	6.9	7.2	7.3	5.9	6.6	12.1	11.7	12.0	12.4	11.6	12.1
6	8.3	7.6	8.0	7.6	5.5	6.6	12.2	11.9	12.1	12.0	11.7	11.9
7	8.3	7.9	8.0	9.4	6.5	8.4	11.9	11.5	11.8	11.7	11.5	11.6
8	8.8	8.0	8.4	9.0	6.3	7.7	11.8	11.4	11.5	11.9	11.6	11.7
9	8.6	8.2	8.4	8.9	8.1	8.4	11.5	11.3	11.4	11.9	11.5	11.7
10	9.1	8.2	8.7	---	---	---	11.5	11.2	11.4	11.6	11.4	11.5
11	9.2	8.4	8.8	---	---	---	11.7	11.5	11.7	11.7	11.3	11.5
12	9.1	8.5	8.8	7.1	6.2	6.5	12.0	11.8	11.9	11.5	11.3	11.4
13	8.6	7.8	8.3	7.8	6.1	6.8	12.4	12.1	12.3	11.4	11.2	11.3
14	8.4	7.8	8.1	8.0	6.8	7.4	12.7	12.4	12.6	11.3	11.1	11.2
15	9.0	8.1	8.5	7.8	6.9	7.4	12.8	12.7	12.8	11.7	11.1	11.4
16	9.2	8.5	8.9	7.9	6.9	7.4	12.7	12.3	12.6	12.2	11.6	12.0
17	9.3	8.5	8.9	7.9	6.9	7.5	12.3	11.8	12.1	12.5	12.0	12.3
18	9.3	8.4	8.8	8.1	6.6	7.1	11.7	11.4	11.6	12.1	11.5	12.0
19	9.4	8.2	8.8	10.3	8.6	9.9	11.6	11.4	11.5	12.0	11.6	11.8
20	9.3	8.2	8.7	11.2	10.4	10.9	11.8	11.4	11.6	12.4	12.0	12.2
21	8.8	8.0	8.4	11.5	11.1	11.3	11.9	11.6	11.7	12.7	12.2	12.4
22	8.4	7.6	8.0	11.7	11.3	11.5	12.3	11.5	11.9	12.6	11.1	11.9
23	8.1	7.1	7.6	11.6	11.2	11.5	12.1	11.6	11.8	11.3	11.0	11.2
24	7.8	6.9	7.2	11.3	10.6	11.0	11.6	10.9	11.5	11.6	11.2	11.4
25	8.4	6.1	7.7	10.8	10.1	10.5	11.7	11.0	11.5	11.5	11.2	11.4
26	8.6	7.3	7.7	11.0	9.9	10.2	12.0	11.6	11.9	---	---	---
27	8.6	7.5	8.0	11.0	10.4	10.8	12.1	11.8	12.0	---	---	---
28	8.3	7.1	7.9	11.5	10.9	11.1	12.0	11.8	11.9	13.7	11.7	12.6
29	---	---	---	11.1	10.6	10.9	12.1	11.7	11.9	11.3	10.1	10.5
30	8.1	7.6	7.8	11.1	10.6	10.9	11.9	11.7	11.8	10.0	8.7	9.4
31	7.6	7.2	7.3	---	---	---	12.9	11.7	12.0	10.4	8.5	9.4
MONTH	9.4	3.3	7.9	11.7	5.5	8.9	12.9	10.8	11.8	13.7	8.5	11.7

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OXYGEN, DISSOLVED (DO), MG/L. WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	9.6	9.0	9.3	9.3	6.9	7.9	11.8	10.4	11.2	8.9	7.7	8.3
2	10.3	9.3	9.7	11.8	9.5	10.6	11.9	11.7	11.8	8.5	7.5	7.9
3	11.3	9.8	10.5	12.3	11.9	12.1	11.9	11.7	11.8	7.9	6.8	7.3
4	11.9	10.2	11.1	12.4	12.0	12.3	11.8	11.6	11.6	8.7	6.8	7.6
5	12.6	9.4	11.0	12.0	11.1	11.8	11.8	11.6	11.7	7.4	6.3	6.8
6	12.2	10.2	11.0	11.2	10.3	11.0	11.7	11.6	11.6	7.2	6.1	6.6
7	11.9	9.8	10.7	10.6	9.8	10.2	---	---	---	7.0	5.7	6.3
8	13.2	10.2	11.1	9.8	9.1	9.5	---	---	---	7.0	5.8	6.3
9	12.7	12.1	12.4	9.3	8.8	9.0	11.4	11.1	11.3	7.2	5.6	6.3
10	12.3	11.9	12.3	9.8	8.9	9.3	11.3	10.8	11.1	6.4	5.1	5.7
11	11.9	11.4	11.7	9.2	8.4	8.8	10.8	10.4	10.6	5.8	4.1	4.9
12	11.3	10.8	11.0	8.7	8.0	8.3	10.4	9.5	10.1	6.3	3.8	4.9
13	11.4	10.9	11.2	8.3	7.2	7.7	10.4	8.8	9.6	5.9	4.1	4.8
14	11.4	11.1	11.2	8.0	6.6	7.3	9.1	7.6	8.6	5.3	3.6	4.4
15	11.8	11.0	11.5	8.2	7.5	7.8	9.0	7.3	8.2	5.1	3.8	4.4
16	11.7	11.4	11.5	8.0	6.9	7.6	8.6	7.9	8.2	5.5	4.2	4.7
17	11.4	10.6	10.8	8.8	7.0	7.9	9.1	7.8	8.4	4.9	3.8	4.3
18	11.6	10.0	10.8	8.5	7.0	7.8	9.4	8.0	8.7	4.4	3.8	4.1
19	10.0	9.5	9.7	9.2	7.4	8.2	9.9	7.8	8.6	4.8	3.7	4.4
20	9.7	8.9	9.2	9.4	7.5	8.4	10.1	7.1	8.4	5.6	4.3	5.0
21	9.4	8.5	8.8	9.4	7.4	8.3	9.7	6.8	8.0	5.6	4.7	5.2
22	9.3	8.2	8.8	8.8	7.0	7.9	9.7	5.8	7.5	4.9	3.8	4.4
23	9.1	8.4	8.8	7.9	6.6	7.3	6.8	5.2	6.2	4.9	3.5	4.2
24	9.2	7.8	8.3	7.5	5.6	6.5	7.0	4.8	5.9	4.8	2.4	3.5
25	8.3	7.5	7.8	6.3	4.8	5.7	8.0	6.6	7.2	5.5	4.1	4.7
26	8.1	7.5	7.8	6.4	4.9	5.8	8.4	7.0	7.7	5.2	3.6	4.2
27	7.9	7.6	7.7	7.2	5.5	6.4	8.6	7.0	7.8	5.1	3.2	4.1
28	7.9	7.3	7.5	6.7	5.1	5.8	8.4	6.8	7.6	5.1	3.2	4.0
29	---	---	---	6.5	5.0	5.8	8.2	7.1	7.7	5.0	3.0	3.9
30	---	---	---	5.7	4.9	5.2	9.4	7.0	8.2	4.7	3.2	3.9
31	---	---	---	10.3	5.7	8.6	---	---	---	5.0	3.3	4.0
MONTH	13.2	7.3	10.1	12.4	4.8	8.3	11.9	4.8	9.1	8.9	2.4	5.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	3.9	3.3	3.6	4.6	3.2	3.8	3.9	2.3	2.9	5.8	3.1	4.7
2	3.4	2.7	3.1	6.1	1.4	3.9	3.8	2.0	2.8	5.7	4.5	5.1
3	4.3	2.6	3.3	4.1	1.2	2.0	2.6	1.4	2.1	6.3	4.3	5.2
4	4.6	2.6	3.5	5.9	1.5	3.0	---	---	---	6.1	4.1	5.0
5	5.2	2.9	3.9	3.8	1.4	2.1	5.4	4.3	4.8	5.2	3.6	4.6
6	5.2	3.2	4.1	5.6	1.6	4.3	5.3	2.4	4.2	5.0	3.9	4.5
7	5.3	3.5	4.3	5.0	2.9	4.1	5.2	2.0	3.6	5.2	4.4	4.8
8	5.5	3.6	4.3	5.2	2.8	3.9	4.7	3.0	3.8	5.4	4.0	4.7
9	5.7	2.8	4.1	5.6	2.8	4.1	4.3	2.9	3.6	5.5	3.9	4.6
10	5.9	3.3	4.6	5.7	3.1	4.3	5.4	2.0	4.8	5.3	3.9	4.5
11	5.9	3.6	4.7	---	---	---	5.9	2.0	4.5	4.8	3.5	4.2
12	4.8	3.5	4.0	---	---	---	5.8	3.9	4.7	4.7	3.1	3.8
13	5.2	3.6	4.3	5.6	3.5	4.5	5.6	3.4	4.4	4.7	3.1	3.7
14	5.5	3.4	4.3	3.5	2.9	3.3	5.9	3.1	4.4	4.6	2.6	3.4
15	5.5	3.4	4.1	---	---	---	5.7	2.9	4.1	3.9	3.2	3.6
16	5.7	3.2	4.3	5.8	4.4	5.1	5.4	2.9	4.0	3.8	3.1	3.4
17	5.9	3.2	4.4	5.7	3.5	4.4	5.9	3.0	4.2	4.3	3.0	3.5
18	6.4	2.8	4.4	5.8	3.3	4.4	5.8	2.7	4.1	4.5	3.3	3.9
19	6.3	2.5	4.2	6.1	3.2	4.5	5.6	2.8	4.1	5.6	4.6	5.0
20	3.4	2.5	2.8	6.0	3.3	4.4	5.2	2.8	3.9	6.0	4.7	5.3
21	3.9	2.9	3.3	6.7	2.6	4.4	4.5	3.0	3.9	5.5	4.6	5.0
22	5.2	3.1	4.1	6.0	2.6	4.1	3.9	3.1	3.6	4.9	4.0	4.5
23	5.0	3.2	4.1	6.2	2.5	4.2	4.6	3.8	4.2	5.3	3.8	4.5
24	5.4	3.6	4.4	5.9	2.5	4.0	5.2	4.2	4.8	4.8	3.6	4.2
25	5.6	2.8	4.1	5.4	2.6	3.7	4.6	3.6	4.0	4.9	3.6	4.3
26	5.1	2.7	3.8	5.1	2.7	3.6	3.8	2.9	3.3	5.0	3.7	4.3
27	4.7	2.8	4.0	5.6	3.0	4.1	5.0	3.0	4.0	4.5	3.6	4.1
28	5.4	3.1	4.2	5.2	2.6	3.7	4.8	3.3	4.1	4.8	3.7	4.2
29	5.6	3.5	4.5	6.0	2.7	4.0	5.3	3.8	4.5	4.5	3.0	3.8
30	5.4	3.5	4.3	5.1	2.5	3.6	5.6	4.2	4.8	4.8	2.3	3.6
31	---	---	---	4.3	2.4	3.2	5.0	3.6	4.3	---	---	---
MONTH	6.4	2.5	4.0	6.7	1.2	3.9	5.9	1.4	4.0	6.3	2.3	4.3
YEAR	13.7	1.2	7.4									

BEAVER RIVER BASIN

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. 5-7, 22-30, Feb. 15-28. Records good, except for periods of estimated record, which are poor. Water-quality data collected at this site 1966 to 1977.

AVERAGE DISCHARGE.--22 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 discharge, 0.10 ft³/s Aug. 8, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10.13 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 27	0200	771	10.30	Apr. 7	0300	1,160	10.96
Dec. 3	1400	842	10.46	July 4	0300	*1,410	*11.29

Minimum daily discharge, 1.9 ft³/s July 24, 25

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	229	43	248	95	43	193	464	37	17	115	3.1	231	
2	283	38	291	88	46	595	553	33	13	606	8.6	136	
3	259	33	787	83	56	667	604	31	12	1240	174	76	
4	520	29	751	78	65	551	498	35	12	1340	132	50	
5	449	27	628	62	64	396	614	33	12	946	106	36	
6	344	27	458	52	62	287	977	28	12	633	58	27	
7	245	28	322	46	70	224	1120	24	11	405	31	23	
8	142	28	248	82	83	207	900	21	11	251	20	23	
9	79	33	263	84	83	195	654	18	13	130	17	24	
10	48	28	395	80	87	153	430	16	16	72	68	25	
11	33	27	381	86	77	107	262	14	14	56	59	22	
12	24	33	339	84	72	79	149	16	22	41	37	29	
13	27	36	260	80	66	62	108	17	28	28	24	93	
14	61	33	192	79	58	53	91	16	23	24	16	153	
15	92	32	116	178	44	50	78	17	18	29	8.5	198	
16	88	34	93	253	36	54	69	18	15	36	4.4	214	
17	69	35	87	235	31	63	73	18	12	29	2.7	204	
18	52	61	136	202	28	70	69	17	11	21	2.9	265	
19	40	147	201	154	27	74	59	22	15	17	2.8	370	
20	35	139	206	142	25	72	50	27	20	13	2.7	380	
21	32	192	180	125	25	66	43	25	47	6.3	3.1	344	
22	28	181	136	82	24	58	36	16	154	3.3	31	295	
23	26	146	105	60	25	53	33	13	179	2.2	94	247	
24	26	121	84	46	27	48	55	12	110	1.9	110	178	
25	27	95	243	38	29	45	66	9.6	58	1.9	123	124	
26	32	356	377	32	32	52	49	7.9	33	2.9	78	84	
27	40	731	383	29	35	66	38	6.1	20	3.3	52	58	
28	49	650	343	28	42	74	56	6.2	16	3.5	194	42	
29	55	522	243	27	---	66	60	11	15	3.7	250	34	
30	59	373	158	26	---	81	49	15	34	3.3	278	52	
31	53	---	114	40	---	340	---	19	---	3.0	286	---	
TOTAL	3546	4258	8768	2776	1362	5101	8307	598.8	973	6067.3	2276.8	4037	
MEAN	114	142	283	89.5	48.6	165	277	19.3	32.4	196	73.4	135	
MAX	520	731	787	253	87	667	1120	37	179	1340	286	380	
MIN	24	27	84	26	24	45	33	6.1	11	1.9	2.7	22	
CFSM	1.18	1.47	2.93	.93	.50	1.71	2.86	.20	.34	2.03	.76	1.40	
IN.	1.36	1.64	3.37	1.07	.52	1.96	3.20	.23	.37	2.33	.88	1.55	
CAL YR 1986	TOTAL	56478.1		MEAN	155	MAX	1860	MIN	3.7	CFSM	1.60	IN.	21.73
WTR YR 1987	TOTAL	48070.9		MEAN	132	MAX	1340	MIN	1.9	CFSM	1.37	IN.	18.49

LITTLE BEAVER CREEK BASIN

53

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 Griggs 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. 23 to Feb. 6, Feb. 16-21. Records good except for periods of estimated records, which are poor. Water-quality data collected at this site 1964-1978. Sediment data collected at this site 1969 to 1974.

AVERAGE DISCHARGE.--72 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. 2	2400	*5,760	*9.24	No other peaks above base.			
Minimum discharge, 46 ft ³ /s Aug. 21.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	112	109	386	360	600	299	1820	716	261	279	52	82	
2	200	110	2960	382	820	571	1710	660	214	1650	53	76	
3	293	107	4680	379	1300	511	1540	809	194	2220	183	75	
4	565	109	2550	325	1100	417	1310	1330	192	858	220	70	
5	630	115	1300	691	900	352	2130	969	166	435	130	65	
6	368	134	919	878	760	326	3440	789	149	297	116	62	
7	211	144	754	779	561	317	3810	682	140	237	89	67	
8	158	152	722	609	507	318	2490	613	132	201	75	153	
9	129	185	828	414	435	324	1650	537	198	173	87	173	
10	114	172	1170	351	538	286	1250	479	211	155	352	127	
11	103	158	882	398	405	247	1030	429	154	145	295	96	
12	95	198	682	379	405	242	906	419	147	149	147	83	
13	104	205	563	344	417	232	837	372	208	125	104	79	
14	136	170	442	348	374	234	714	332	213	143	85	77	
15	150	150	473	621	314	260	649	530	158	160	71	70	
16	128	143	408	823	310	295	708	550	130	136	64	67	
17	120	142	387	560	290	313	957	375	117	119	60	71	
18	112	148	440	487	280	332	816	499	106	105	55	91	
19	103	508	483	826	260	353	670	1040	98	94	51	139	
20	98	523	409	1870	250	347	584	699	98	86	49	143	
21	96	699	360	1070	240	315	526	541	111	81	46	147	
22	96	557	318	802	234	287	480	422	139	76	80	113	
23	97	392	284	640	230	269	492	366	166	72	160	102	
24	96	319	319	500	224	257	2080	317	172	68	129	92	
25	98	270	624	420	210	259	2390	280	124	64	80	82	
26	117	782	771	360	202	278	1380	258	107	62	73	75	
27	125	1840	557	320	201	271	1050	261	95	61	95	68	
28	133	905	481	290	203	255	1360	249	118	57	116	65	
29	120	599	429	270	---	238	1100	243	110	54	110	69	
30	116	468	398	420	---	331	874	228	154	51	96	141	
31	107	---	374	700	---	1900	---	285	---	54	81	---	
TOTAL	5130	10513	26353	17616	12570	11236	40753	16279	4582	8467	3404	2820	
MEAN	165	350	850	568	449	362	1358	525	153	273	110	94.0	
MAX	630	1840	4680	1870	1300	1900	3810	1330	261	2220	352	173	
MIN	95	107	284	270	201	232	480	228	95	51	46	62	
CFSM	.33	.71	1.71	1.15	.91	.73	2.74	1.06	.31	.55	.22	.19	
IN.	.38	.79	1.98	1.32	.94	.84	3.06	1.22	.34	.64	.26	.21	
CAL YR 1986	TOTAL	152635		MEAN	418	MAX	4680	MIN	35	CFSM	.84	IN.	11.45
WTR YR 1987	TOTAL	159723		MEAN	438	MAX	4680	MIN	46	CFSM	.88	IN.	11.98

YELLOW CREEK BASIN

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. 22 to Feb. 1, Feb. 17-24. Records fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--47 years, 161 ft³/s, 14.87 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. 2	2330	*2,500	*6.55	Apr. 8	0100	2,040	5.98

Minimum daily discharge, 7.5 ft³/s Aug. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	18	136	122	160	83	548	199	45	147	8.1	20
2	90	18	1170	126	225	123	541	251	43	957	8.1	19
3	66	16	1700	117	370	101	465	437	56	482	21	15
4	108	19	817	91	298	87	428	837	61	213	43	13
5	226	27	452	83	238	80	495	564	46	130	120	12
6	101	48	292	122	209	77	783	417	37	95	61	12
7	54	54	227	101	191	73	1660	318	36	78	28	15
8	39	53	209	95	177	75	1550	252	33	64	20	154
9	31	106	210	88	146	75	838	204	57	54	18	104
10	26	74	373	89	137	68	558	173	63	46	28	45
11	23	60	297	106	126	60	414	147	38	41	27	29
12	20	93	246	99	136	65	335	131	39	37	19	23
13	20	80	198	93	137	60	278	114	67	32	15	21
14	27	58	153	93	117	60	225	100	43	37	13	20
15	48	48	151	127	97	70	209	92	34	49	11	18
16	111	46	127	149	86	74	218	81	32	35	9.7	16
17	89	43	119	125	80	64	258	74	28	30	9.7	17
18	67	39	128	131	75	61	219	70	25	25	12	50
19	26	45	125	222	70	61	190	94	22	22	11	111
20	18	56	105	506	70	59	169	496	24	19	8.5	74
21	16	211	93	340	65	56	155	355	66	17	7.5	41
22	15	164	79	200	65	54	142	173	56	15	12	30
23	15	117	75	140	60	52	145	123	58	14	77	28
24	14	95	91	110	60	51	702	97	39	13	28	25
25	14	78	333	90	61	51	805	83	30	13	17	22
26	18	340	295	85	58	54	504	79	27	12	18	19
27	28	765	233	80	58	51	361	82	26	11	85	17
28	25	346	194	80	56	49	363	65	25	13	41	15
29	26	230	163	75	---	46	282	59	27	12	52	17
30	23	171	152	100	---	62	239	50	157	9.9	32	80
31	20	---	135	180	---	686	---	52	---	8.8	22	---
TOTAL	1425	3518	9078	4165	3628	2688	14079	6269	1340	2731.7	882.6	1082
MEAN	46.0	117	293	134	130	86.7	469	202	44.7	88.1	28.5	36.1
MAX	226	765	1700	506	370	686	1660	837	157	957	120	154
MIN	14	16	75	75	56	46	142	50	22	8.8	7.5	12
CFSM	.31	.80	1.99	.91	.88	.59	3.19	1.37	.30	.60	.19	.25
IN.	.36	.89	2.30	1.05	.92	.68	3.56	1.59	.34	.69	.22	.27
CAL YR 1986	TOTAL	49531.0	MEAN	136	MAX	1700	MIN	5.2	CFSM	.93	IN.	12.53
WTR YR 1987	TOTAL	50886.3	MEAN	139	MAX	1700	MIN	7.5	CFSM	.95	IN.	12.88

SHORT CREEK BASIN

55

03111500 SHORT CREEK NEAR DILLONVALE, OH

LOCATION.--Lat 40°11'36", long 80°44'04", in sec. 30, T.4 N., R.2 W., Jefferson County, Hydrologic Unit 05030106, on right bank at downstream side of 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 676.1 ft above State of Ohio bench mark. Prior to Oct. 21, 1941, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 22 to Feb. 2, Feb. 15-28. Records 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.--46 years, 130 ft³/s, 14.35 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,500 ft³/s Mar. 6, 1945, gage height, 8.77 ft; maximum gage height, 10.15 ft Mar. 5, 1963, from graph based on gage readings; 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)
Dec. 2	1700	*1,550	*5.21	No other peaks above base.			
Minimum daily discharge, 23 ft ³ /s Aug. 21.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	25	383	86	130	200	125	79	28	38	28	21
2	24	27	372	84	211	170	121	73	25	113	29	22
3	22	55	300	84	199	150	114	69	23	70	29	21
4	22	560	269	82	575	130	115	67	23	42	26	20
5	21	739	248	80	871	120	113	65	26	34	24	21
6	21	221	240	80	576	120	136	64	47	30	24	20
7	20	136	225	78	559	110	126	79	81	28	39	18
8	19	111	213	78	452	110	112	71	44	27	36	19
9	18	92	200	76	361	171	109	63	31	115	30	17
10	18	246	192	76	317	212	116	62	26	96	33	17
11	18	804	329	76	290	263	120	55	36	236	100	16
12	20	658	621	76	263	220	111	54	67	700	45	17
13	19	456	378	74	220	253	106	52	50	294	33	18
14	22	336	318	74	190	270	103	53	35	183	30	18
15	30	300	263	74	170	339	106	52	33	121	28	17
16	27	2600	220	72	160	276	103	51	30	94	29	17
17	22	1500	200	72	140	241	118	49	37	89	27	16
18	19	561	180	132	433	221	112	46	27	78	27	20
19	19	419	170	219	375	255	105	41	24	67	25	60
20	22	334	160	979	385	232	104	61	28	79	24	31
21	45	277	150	380	410	201	159	56	28	68	24	25
22	31	254	140	289	388	190	155	44	23	55	24	23
23	25	230	130	249	324	185	132	41	22	46	23	22
24	29	206	120	212	288	172	109	39	21	41	27	27
25	73	192	110	190	262	167	100	35	18	39	25	194
26	38	548	110	170	240	168	94	33	18	42	22	96
27	28	1080	100	160	235	157	87	39	20	38	22	75
28	25	1320	100	150	209	148	83	43	81	34	23	87
29	24	696	96	140	---	140	78	33	83	33	22	56
30	23	473	92	130	---	137	73	30	46	32	22	41
31	25	---	88	130	---	130	---	31	---	30	22	---
TOTAL	788	15456	6717	4852	9233	5858	3345	1630	1081	2992	922	1072
MEAN	25.4	515	217	157	330	189	112	52.6	36.0	96.5	29.7	35.7
MAX	73	2600	621	979	871	339	159	79	83	700	100	194
MIN	18	25	88	72	130	110	73	30	18	27	22	16
CFSM	.21	4.19	1.76	1.28	2.68	1.54	.91	.43	.29	.78	.24	.29
IN.	.24	4.67	2.03	1.47	2.79	1.77	1.01	.49	.33	.90	.28	.32
CAL YR 1985	TOTAL	48759	MEAN	134	MAX	2600	MIN	18	CFSM	1.09	IN.	14.75
WTR YR 1986	TOTAL	53946	MEAN	148	MAX	2600	MIN	16	CFSM	1.20	IN.	16.32

SHORT CREEK BASIN

03111500 SHORT CREEK NEAR DILLONVALE, OH--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	33	86	111	160	101	269	157	71	55	25	48
2	141	33	809	112	190	113	263	166	79	247	24	40
3	88	33	619	110	246	97	230	203	77	204	122	36
4	175	44	304	103	191	85	229	287	77	106	57	33
5	200	58	210	94	167	82	360	209	67	76	86	32
6	103	78	181	115	158	79	738	182	59	66	80	32
7	69	69	148	107	143	76	989	170	58	62	46	34
8	59	121	144	98	136	75	606	162	55	76	37	104
9	50	142	203	99	128	77	384	152	96	62	44	84
10	44	98	285	94	133	74	309	146	78	54	60	54
11	40	91	198	107	120	66	264	142	61	48	40	43
12	38	102	168	101	142	67	260	139	96	43	34	42
13	40	79	144	97	141	64	236	133	121	41	31	38
14	51	63	137	93	120	67	205	130	78	38	28	34
15	48	62	119	100	100	63	198	132	66	37	26	32
16	40	61	110	97	95	61	200	124	70	37	25	31
17	37	57	111	89	90	68	198	119	59	36	24	30
18	35	54	124	89	85	67	178	119	52	33	29	34
19	33	53	118	238	80	62	162	184	48	29	26	39
20	33	56	104	284	75	58	152	142	102	29	24	44
21	32	154	94	173	70	55	144	120	128	27	23	36
22	31	100	87	140	70	56	135	108	86	27	187	32
23	32	83	95	120	65	56	151	102	74	27	283	32
24	32	73	122	100	65	52	397	96	66	27	73	30
25	34	64	360	95	65	63	306	91	57	27	49	30
26	43	298	220	90	60	77	228	92	53	27	47	30
27	40	319	176	80	60	61	203	108	49	27	76	28
28	41	158	152	80	60	57	221	88	47	27	150	31
29	40	122	136	80	---	54	187	79	44	26	149	32
30	37	100	124	110	---	104	170	72	50	25	74	88
31	34	---	115	200	---	431	---	78	---	25	56	---
TOTAL	1787	2858	6003	3606	3215	2568	8572	4232	2124	1671	2035	1233
MEAN	57.6	95.3	194	116	115	82.8	286	137	70.8	53.9	65.6	41.1
MAX	200	319	809	284	246	431	989	287	128	247	283	104
MIN	31	33	86	80	60	52	135	72	44	25	23	28
CFSM	.47	.77	1.58	.94	.93	.67	2.33	1.11	.58	.44	.53	.33
IN.	.54	.86	1.82	1.09	.97	.78	2.59	1.28	.64	.51	.62	.37
CAL YR 1986	TOTAL	41633	MEAN	114	MAX	979	MIN	16	CFSM	.93	IN.	12.59
WTR YR 1987	TOTAL	39904	MEAN	109	MAX	989	MIN	23	CFSM	.89	IN.	12.07

WHEELING CREEK BASIN

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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 current year (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 700.11 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 23-30. Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,740 ft³/s Nov. 16, 1985, gage height, 6.94 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)
Jan. 30	2115	*1,320	*3.93	No other peak greater than base discharge.			

Minimum daily discharge, 8.5 ft³/s Aug. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	191	19	58	76	598	100	210	119	74	57	16	18	
2	145	19	684	75	465	103	198	119	81	150	17	15	
3	94	19	412	75	176	84	176	162	75	121	52	13	
4	489	27	194	67	142	73	173	193	71	71	32	11	
5	149	37	136	62	121	69	238	140	62	55	77	11	
6	72	58	112	76	114	67	671	124	55	50	52	10	
7	49	38	103	70	107	66	1080	116	52	61	28	11	
8	35	158	99	74	103	65	616	112	48	52	22	53	
9	32	160	159	67	97	64	361	106	97	48	26	27	
10	27	79	186	66	95	58	271	103	73	45	29	19	
11	25	86	123	71	86	54	228	100	55	40	22	14	
12	25	89	106	66	124	55	229	98	152	37	18	14	
13	26	63	93	62	116	54	199	95	134	34	16	14	
14	36	49	88	59	94	54	175	92	81	33	13	15	
15	32	44	85	60	84	53	167	92	66	33	12	13	
16	27	43	78	61	83	53	168	88	57	37	11	13	
17	29	40	76	58	84	50	167	85	52	34	12	13	
18	25	37	83	57	75	48	149	99	48	33	15	19	
19	25	37	82	213	69	48	135	187	46	29	10	20	
20	24	43	72	189	66	48	127	157	115	27	9.3	25	
21	24	103	67	112	64	47	119	108	95	26	8.5	20	
22	22	63	59	98	64	45	114	107	67	25	110	19	
23	23	48	64	88	73	44	138	128	76	23	142	21	
24	22	45	120	84	67	42	410	88	57	23	34	21	
25	23	40	240	78	62	56	238	76	50	23	22	20	
26	31	419	129	74	58	72	184	74	49	21	22	20	
27	29	283	103	72	56	54	162	404	43	21	24	20	
28	27	113	93	68	58	50	159	139	38	21	47	20	
29	24	83	85	66	---	47	143	100	43	20	44	23	
30	23	68	83	220	---	110	128	85	91	18	25	47	
31	21	---	78	897	---	421	---	84	---	17	19	---	
TOTAL	1826	2410	4150	3461	3401	2254	7533	3780	2103	1285	986.8	579	
MEAN	58.9	80.3	134	112	121	72.7	251	122	70.1	41.5	31.8	19.3	
MAX	489	419	684	897	598	421	1080	404	152	150	142	53	
MIN	21	19	58	57	56	42	114	74	38	17	8.5	10	
CFSM	.60	.82	1.37	1.15	1.24	.74	2.57	1.25	.72	.42	.33	.20	
IN.	.70	.92	1.58	1.32	1.29	.86	2.87	1.44	.80	.49	.38	.22	
CAL YR 1986	TOTAL	32487.6		MEAN	89.0	MAX	756	MIN	8.1	CFSM	.91	IN.	12.37
WTR YR 1987	TOTAL	33768.8		MEAN	92.5	MAX	1080	MIN	8.5	CFSM	.95	IN.	12.86

WHEELING CREEK BASIN

03111548 WHEELING CREEK BELOW BLAINE, OH--Continued

SEDIMENT ANALYSIS

PERIOD OF RECORD.--December 1982 to current year (discontinued).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 4,640 mg/L May 22, 1983; minimum daily mean 9 mg/L July 25, 1985.
SEDIMENT LOADS: Maximum daily 14,600 tons May 22, 1983; minimum daily, 0.53 tons Sept. 13, 16, 1987.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,050 mg/L Aug. 6; minimum daily mean, 14 mg/L Sept. 13.
SEDIMENT LOADS: Maximum daily, 1,890 tons Nov. 26; minimum daily, 0.53 tons Sept. 13, 16.

WHEELING CREEK BASIN

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03111548 WHEELING CREEK BELOW BLAINE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

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	13	49	1.7	18	94	4.6	229	69	43
2	18	49	2.4	18	84	4.1	219	69	41
3	13	21	.74	29	91	7.1	162	72	31
4	13	32	1.1	522	2400	6460	148	76	30
5	18	44	2.1	511	1170	2220	132	79	28
6	17	45	2.1	128	110	38	129	68	24
7	14	46	1.7	86	81	19	114	100	31
8	13	20	.70	73	92	18	104	43	12
9	13	17	.60	70	94	18	96	44	11
10	14	23	.87	215	128	72	94	44	11
11	18	27	1.3	913	531	1550	250	70	51
12	20	32	1.7	616	411	750	437	126	189
13	22	34	2.0	419	181	209	230	66	41
14	26	26	1.8	268	126	91	189	34	17
15	26	16	1.1	246	100	66	146	32	13
16	25	17	1.1	2640	1430	11900	130	32	11
17	22	17	1.0	969	744	2700	121	30	9.8
18	22	35	2.1	332	81	73	112	42	13
19	22	35	2.1	230	78	48	102	41	11
20	35	128	8.7	175	73	34	102	42	12
21	59	174	28	139	72	27	100	46	12
22	31	49	4.1	125	67	23	88	47	11
23	23	109	6.8	122	63	21	80	61	13
24	21	116	6.6	101	57	16	72	38	7.4
25	21	80	4.5	89	53	13	66	50	8.9
26	20	46	2.5	403	216	463	62	63	11
27	18	68	3.3	774	353	870	58	60	9.4
28	16	94	4.1	1080	399	1210	54	53	7.7
29	15	82	3.3	453	127	176	52	44	6.2
30	15	63	2.6	291	70	55	49	43	5.7
31	16	77	3.3	---	---	---	47	42	5.3
TOTAL	639	---	106.01	12055	---	29155.8	3974	---	727.4
JANUARY			FEBRUARY			MARCH			
1	45	45	5.5	120	85	28	130	47	16
2	44	51	6.1	154	125	52	124	60	20
3	42	50	5.7	135	102	37	122	63	21
4	41	49	5.4	657	837	1480	123	70	23
5	40	53	5.7	756	941	1920	115	82	25
6	40	60	6.5	446	606	730	116	105	33
7	39	57	6.0	449	609	738	109	98	29
8	39	53	5.6	320	381	329	97	91	24
9	47	56	7.1	241	246	160	118	81	26
10	74	53	11	197	182	97	148	100	42
11	70	50	9.5	174	150	70	207	332	209
12	60	56	9.1	150	36	15	142	141	54
13	56	55	8.3	140	45	17	183	162	80
14	54	55	8.0	152	57	23	190	172	88
15	50	54	7.3	116	72	23	291	329	258
16	58	68	11	105	54	15	211	201	115
17	62	56	9.4	275	228	233	174	42	20
18	68	57	10	313	155	145	157	57	24
19	177	155	74	310	254	258	208	200	112
20	618	796	1330	285	201	165	168	142	64
21	204	192	106	415	389	506	139	62	23
22	228	227	140	315	137	123	131	42	15
23	179	157	76	245	54	36	127	47	16
24	141	109	41	210	71	40	120	57	18
25	127	93	32	187	46	23	113	54	16
26	123	88	29	170	54	25	108	49	14
27	121	87	28	166	51	23	103	72	20
28	126	92	31	142	43	16	96	45	12
29	130	96	34	---	---	---	92	48	12
30	182	161	79	---	---	---	89	52	12
31	132	99	35	---	---	---	87	58	14
TOTAL	3417	---	2172.2	7345	---	7327	4338	---	1455

WHEELING CREEK BASIN

03111548 WHEELING CREEK BELOW BLAINE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

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	87	102	24	65	56	9.8	44	52	6.2
2	82	92	20	63	56	9.5	41	52	5.8
3	79	67	14	59	56	8.9	40	51	5.5
4	79	56	12	58	55	8.6	38	51	5.2
5	78	62	13	57	55	8.5	43	52	6.0
6	84	68	15	58	55	8.6	53	54	7.7
7	83	75	17	66	57	10	77	58	12
8	77	71	15	64	56	9.7	84	59	13
9	76	62	13	58	55	8.6	49	53	7.0
10	75	72	15	57	55	8.5	42	52	5.9
11	75	73	15	53	54	7.7	47	53	6.7
12	70	74	14	52	54	7.6	74	58	12
13	66	70	12	56	55	8.3	73	58	11
14	66	60	11	58	55	8.6	54	54	7.9
15	65	57	10	55	55	8.2	49	54	7.1
16	63	56	9.5	56	55	8.3	48	53	6.9
17	71	57	11	51	54	7.4	61	56	9.2
18	66	57	10	47	53	6.7	49	53	7.0
19	62	56	9.4	46	53	6.6	45	53	6.4
20	62	56	9.4	55	55	8.2	48	53	6.9
21	100	65	18	56	55	8.3	45	53	6.4
22	99	61	16	45	53	6.4	42	52	5.9
23	81	59	13	42	52	5.9	48	53	6.9
24	72	58	11	45	53	6.4	43	52	6.0
25	70	57	11	44	52	6.2	38	51	5.2
26	68	57	10	42	52	5.9	37	51	5.1
27	67	57	10	48	53	6.9	40	51	5.5
28	67	57	10	49	54	7.1	76	58	12
29	63	56	9.5	47	53	6.7	64	56	9.7
30	63	56	9.5	44	52	6.2	44	52	6.2
31	---	---	---	40	51	5.5	---	---	---
TOTAL	2216	---	387.3	1636	---	239.8	1536	---	224.3
JULY			AUGUST			SEPTEMBER			
1	41	52	5.8	22	46	2.7	11	40	1.2
2	65	56	9.8	19	45	2.3	11	40	1.2
3	59	55	8.8	17	44	2.0	11	40	1.2
4	41	52	5.8	15	43	1.7	10	39	1.1
5	36	50	4.9	14	42	1.6	10	39	1.1
6	33	49	4.4	14	42	1.6	10	39	1.1
7	30	49	4.0	26	47	3.3	9.3	39	.98
8	29	48	3.8	20	45	2.4	9.3	39	.98
9	122	88	29	17	43	2.0	8.7	38	.89
10	77	58	12	20	45	2.4	8.4	38	.86
11	47	53	6.7	60	56	9.1	8.1	38	.83
12	136	103	38	30	39	3.2	8.1	38	.83
13	79	59	13	18	48	2.3	8.7	38	.89
14	68	57	10	15	24	.97	8.9	39	.94
15	47	53	6.7	14	36	1.4	8.6	38	.88
16	40	51	5.5	14	48	1.8	8.6	38	.88
17	79	59	13	14	48	1.8	8.3	38	.85
18	58	55	8.6	13	49	1.7	8.6	38	.88
19	54	55	8.0	12	38	1.2	105	70	20
20	66	57	10	12	27	.87	100	65	18
21	57	55	8.5	12	27	.87	94	61	15
22	41	52	5.8	12	100	3.2	89	60	14
23	31	49	4.1	11	44	1.3	88	141	34
24	30	49	4.0	12	155	5.0	102	189	52
25	29	48	3.8	14	190	7.2	165	139	62
26	40	51	5.5	12	171	5.5	146	115	45
27	39	51	5.4	11	40	1.2	122	88	29
28	34	50	4.6	11	40	1.2	119	84	27
29	31	49	4.1	11	40	1.2	108	72	21
30	27	48	3.5	11	40	1.2	105	70	20
31	24	47	3.0	11	40	1.2	---	---	---
TOTAL	1590	---	260.1	514	---	75.41	1509.6	---	374.59
YEAR	40769.6		42504.91						

WHEELING CREEK BASIN

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03111548 WHEELING CREEK BELOW BLAINE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

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	191	140	72	19	30	1.5	58	45	7.0
2	145	68	27	19	25	1.3	684	509	1240
3	94	45	11	19	20	1.0	412	136	151
4	489	1020	1460	27	18	1.3	194	60	31
5	149	250	101	37	20	2.0	136	55	20
6	72	80	16	58	35	5.5	112	50	15
7	49	50	6.6	38	30	3.1	103	45	13
8	35	40	3.8	158	125	53	99	40	11
9	32	38	3.3	160	75	32	159	60	26
10	27	38	2.8	79	35	7.5	186	64	32
11	25	36	2.4	86	30	7.0	123	43	14
12	25	40	2.7	89	30	7.2	106	33	9.4
13	26	36	2.5	63	27	4.6	93	26	6.5
14	36	38	3.7	49	27	3.6	88	34	8.1
15	32	40	3.5	44	25	3.0	85	45	10
16	27	28	2.0	43	30	3.5	78	30	6.3
17	29	28	2.2	40	36	3.9	76	46	9.4
18	25	28	1.9	37	30	3.0	83	44	9.9
19	25	28	1.9	37	30	3.0	82	45	10
20	24	28	1.8	43	60	7.0	72	27	5.2
21	24	28	1.8	103	45	13	67	28	5.1
22	22	25	1.5	63	40	6.8	59	39	6.2
23	23	27	1.7	48	40	5.2	64	52	9.0
24	22	30	1.8	45	35	4.3	120	48	16
25	23	35	2.2	40	35	3.8	240	116	75
26	31	50	4.2	419	1240	1890	129	22	7.7
27	29	42	3.3	283	450	344	103	50	14
28	27	39	2.8	113	200	61	93	54	14
29	24	42	2.7	83	100	22	85	39	9.0
30	23	40	2.5	68	50	9.2	83	20	4.5
31	21	35	2.0	---	---	---	78	32	6.7
TOTAL	1826	---	1754.6	2410	---	2513.3	4150	---	1802.0
JANUARY			FEBRUARY			MARCH			
1	76	24	4.9	598	80	129	100	230	62
2	75	26	5.3	465	124	156	103	120	33
3	75	23	4.7	176	51	24	84	35	7.9
4	67	23	4.2	142	39	15	73	40	7.9
5	62	32	5.4	121	345	113	69	120	22
6	76	37	7.6	114	505	155	67	70	13
7	70	28	5.3	107	220	64	66	30	5.3
8	74	25	5.0	103	42	12	65	30	5.3
9	67	32	5.8	97	56	15	64	40	6.9
10	66	28	5.0	95	46	12	58	70	11
11	71	20	3.8	86	35	8.1	54	55	8.0
12	66	39	6.9	124	294	98	55	77	11
13	62	31	5.2	116	45	14	54	48	7.0
14	59	22	3.5	94	34	8.6	54	52	7.6
15	60	350	57	84	35	7.9	53	50	7.2
16	61	430	71	83	37	8.3	53	51	7.3
17	58	115	18	84	82	19	50	44	5.9
18	57	52	8.0	75	710	144	48	56	7.3
19	213	473	419	69	1020	190	48	58	7.5
20	189	630	321	66	950	169	48	41	5.3
21	112	220	67	64	900	156	47	35	4.4
22	98	182	48	64	280	48	45	51	6.2
23	88	90	21	73	180	35	44	48	5.7
24	84	80	18	67	240	43	42	56	6.4
25	78	75	16	62	250	42	56	100	15
26	74	75	15	58	500	78	72	90	17
27	72	70	14	56	240	36	54	60	8.7
28	68	65	12	58	220	34	50	59	8.0
29	66	60	11	---	---	---	47	41	5.2
30	220	60	36	---	---	---	110	153	70
31	897	76	184	---	---	---	421	486	736
TOTAL	3461	---	1408.6	3401	---	1833.9	2254	---	1131.0

WHEELING CREEK BASIN

03111548 WHEELING CREEK BELOW BLAINE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

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	210	120	68	119	36	12	74	65	13
2	198	95	51	119	38	12	81	81	18
3	176	75	36	162	83	44	75	86	17
4	173	95	44	193	93	48	71	70	13
5	238	120	77	140	32	12	62	42	7.0
6	671	431	844	124	22	7.4	55	44	6.5
7	1080	475	1400	116	22	6.9	52	62	8.7
8	616	195	324	112	26	7.9	48	45	5.8
9	361	92	90	106	24	6.9	97	137	37
10	271	58	42	103	21	5.8	73	65	13
11	228	52	32	100	34	9.2	55	48	7.1
12	229	78	48	98	28	7.4	152	405	262
13	199	40	21	95	39	10	134	254	107
14	175	33	16	92	36	8.9	81	105	23
15	167	33	15	92	42	10	66	37	6.6
16	168	58	26	88	29	6.9	57	48	7.4
17	167	33	15	85	26	6.0	52	58	8.1
18	149	35	14	99	48	13	48	55	7.1
19	135	40	15	187	228	123	46	51	6.3
20	127	47	16	157	212	99	115	390	204
21	119	55	18	108	80	23	95	150	38
22	114	62	19	107	125	36	67	70	13
23	138	70	30	128	308	106	76	101	21
24	410	245	275	88	120	29	57	52	8.0
25	238	57	37	76	102	21	50	52	7.0
26	184	46	23	74	102	20	49	62	8.2
27	162	57	25	404	740	954	43	37	4.3
28	159	42	18	139	130	49	38	34	3.5
29	143	38	15	100	68	18	43	80	9.3
30	128	36	12	85	86	20	91	245	67
31	---	---	---	84	96	22	---	---	---
TOTAL	7533	---	3666	3780	---	1754.3	2103	---	956.9
JULY			AUGUST			SEPTEMBER			
1	57	60	9.2	16	31	1.3	18	68	3.3
2	150	405	233	17	42	1.9	15	28	1.1
3	121	288	113	52	155	24	13	40	1.4
4	71	80	15	32	53	4.6	11	24	.71
5	55	75	11	77	974	420	11	28	.83
6	50	72	9.7	52	2050	359	10	30	.81
7	61	98	16	28	250	19	11	39	1.2
8	52	74	10	22	150	8.9	53	108	19
9	48	67	8.7	26	76	5.3	27	43	3.1
10	45	56	6.8	29	71	5.6	19	39	2.0
11	40	70	7.6	22	62	3.7	14	38	1.4
12	37	42	4.2	18	50	2.4	14	31	1.2
13	34	42	3.9	16	51	2.2	14	14	.53
14	33	34	3.0	13	38	1.3	15	15	.61
15	33	23	2.0	12	40	1.3	13	16	.56
16	37	40	4.0	11	42	1.2	13	15	.53
17	34	58	5.3	12	19	.62	13	30	1.1
18	33	42	3.7	15	30	1.2	19	52	2.7
19	29	40	3.1	10	38	1.0	20	26	1.4
20	27	36	2.6	9.3	26	.65	25	30	2.0
21	26	33	2.3	8.5	27	.62	20	22	1.2
22	25	40	2.7	110	750	538	19	24	1.2
23	23	47	2.9	142	810	482	21	20	1.1
24	23	40	2.5	34	100	9.2	21	19	1.1
25	23	34	2.1	22	66	3.9	20	18	.97
26	21	34	1.9	22	106	6.3	20	17	.92
27	21	35	2.0	24	76	4.9	20	15	.81
28	21	33	1.9	47	146	19	20	16	.86
29	20	33	1.8	44	102	12	23	24	1.5
30	18	30	1.5	25	60	4.1	47	85	11
31	17	33	1.5	19	60	3.1	---	---	---
TOTAL	1285	---	494.9	986.8	---	1948.29	579	---	66.14
YEAR	33768.8		19329.93						

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. 16-21. 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.--38 years, 163 ft³/s, 16.52 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.

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)
Nov. 26	1730	3,340	7.61	Apr. 7	2000	3,720	8.03
Dec. 2	1500	3,240	7.50	May 22	2300	*5,170	*9.42

Minimum discharge, 3.1 ft³/s July 29-Aug. 2, Aug. 21, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	65	14	143	94	297	250	547	111	82	26	3.1	21	
2	183	13	1660	104	890	286	515	105	96	98	3.1	17	
3	51	13	1150	94	810	191	419	123	73	105	10	14	
4	544	23	547	82	238	142	395	192	66	44	13	11	
5	500	68	337	70	177	116	463	125	47	28	92	9.7	
6	130	166	242	103	155	106	1130	102	36	22	52	10	
7	69	97	199	95	149	95	2450	89	29	20	15	12	
8	47	675	175	109	131	91	620	79	25	18	10	37	
9	35	669	356	98	110	88	810	66	37	18	7.6	27	
10	29	278	573	105	116	74	497	58	32	17	8.5	18	
11	24	378	338	114	99	67	359	53	23	15	7.3	14	
12	21	347	258	100	127	66	344	50	1180	14	5.3	13	
13	22	200	184	90	127	58	297	44	732	12	4.2	14	
14	36	124	152	87	104	53	230	39	285	12	4.0	14	
15	38	103	138	91	90	56	219	91	165	11	3.9	13	
16	24	91	119	88	66	57	226	54	302	9.3	3.7	12	
17	20	78	111	74	44	48	213	41	103	9.0	3.5	12	
18	18	68	119	77	30	45	175	118	65	7.6	4.3	40	
19	15	75	104	428	25	44	143	589	48	6.3	4.5	22	
20	13	69	89	456	22	42	121	184	60	5.7	4.0	16	
21	12	221	79	271	40	38	109	109	349	5.4	3.3	14	
22	13	143	68	212	65	37	98	576	182	4.7	458	13	
23	12	113	69	150	78	36	148	1280	356	4.1	450	14	
24	12	98	94	120	65	34	794	441	134	3.7	44	14	
25	14	82	381	100	57	42	402	263	75	3.6	20	11	
26	18	1170	242	88	52	163	262	196	70	3.7	16	9.7	
27	22	917	183	76	52	90	203	165	47	3.6	15	8.8	
28	20	404	150	68	55	73	219	148	39	3.4	129	7.6	
29	20	261	124	64	---	60	164	271	28	3.2	163	6.6	
30	16	188	116	292	---	177	132	111	24	3.1	44	16	
31	16	---	104	442	---	1080	---	104	---	3.1	24	---	
TOTAL	2059	7146	8604	4442	4271	3805	13704	5977	4790	539.5	1625.3	461.4	
MEAN	66.4	238	278	143	153	123	457	193	160	17.4	52.4	15.4	
MAX	544	1170	1660	456	890	1080	2450	1280	1180	105	458	40	
MIN	12	13	68	64	22	34	98	39	23	3.1	3.1	6.6	
CFSM	.50	1.78	2.07	1.07	1.14	.92	3.41	1.44	1.19	.13	.39	.11	
IN.	.57	1.98	2.39	1.23	1.19	1.06	3.80	1.66	1.33	.15	.45	.13	
CAL YR 1986	TOTAL	51681.5		MEAN	142	MAX	2330	MIN	1.6	CFSM	1.06	IN.	14.35
WTR YR 1987	TOTAL	57424.2		MEAN	157	MAX	2450	MIN	3.1	CFSM	1.17	IN.	15.94

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, Feb. 13-19. Records 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.

AVERAGE DISCHARGE.--50 years, 444 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,700 ft³/s July 5, 1969, gage height, 16.43 ft; minimum daily, 57 ft³/s Oct. 13, 14, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,210 ft³/s Apr. 7, gage height, 9.94 ft; minimum daily, 76 ft³/s Aug. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	222	138	418	315	264	382	1110	268	210	492	76	239
2	552	138	1040	324	287	1140	1580	252	164	2870	116	199
3	467	136	2400	348	534	877	1970	341	176	3350	210	164
4	1190	130	2270	325	404	639	1440	428	177	2530	172	149
5	1110	123	1340	295	322	449	1390	309	158	1210	118	132
6	532	131	701	287	301	384	2870	244	137	606	95	120
7	287	132	510	301	311	360	4120	209	124	443	88	124
8	214	127	560	362	343	339	3840	185	142	343	81	124
9	181	124	773	358	290	332	2830	165	440	282	149	128
10	151	118	1490	335	325	287	1630	151	316	277	416	130
11	154	129	1110	359	313	243	985	146	189	232	256	127
12	172	142	694	336	350	224	735	141	164	185	169	277
13	212	137	470	316	500	209	657	125	228	166	142	271
14	330	116	361	322	370	212	552	106	207	197	120	220
15	333	111	345	697	290	258	530	109	152	244	99	192
16	281	106	319	837	260	320	531	124	129	187	91	179
17	238	128	312	543	300	320	496	96	114	161	95	184
18	173	172	368	461	250	302	452	159	98	144	86	199
19	143	499	428	612	210	293	404	451	89	130	81	252
20	137	464	341	778	188	277	367	345	100	127	79	225
21	139	642	298	560	182	249	332	322	247	129	77	194
22	136	518	275	470	181	216	307	246	199	126	220	181
23	130	353	258	260	194	197	305	192	188	123	295	178
24	126	283	251	210	198	197	432	135	155	118	177	158
25	126	261	745	190	191	200	443	112	118	102	135	135
26	199	777	853	180	192	205	325	126	96	92	171	119
27	235	2130	555	170	187	199	288	155	91	95	222	104
28	187	1630	451	170	189	186	439	145	78	94	245	103
29	159	813	398	170	---	172	405	145	121	91	227	106
30	134	529	386	252	---	229	339	159	208	87	182	122
31	130	---	352	310	---	970	---	249	---	87	179	---
TOTAL	8780	11237	21072	11453	7926	10867	32104	6340	5015	15320	4869	5035
MEAN	283	375	680	369	283	351	1070	205	167	494	157	168
MAX	1190	2130	2400	837	534	1140	4120	451	440	3350	416	277
MIN	126	106	251	170	181	172	288	96	78	87	76	103
CAL YR 1986	TOTAL	153495		MEAN	421	MAX	3610	MIN	61			
WTR YR 1987	TOTAL	140018		MEAN	384	MAX	4120	MIN	76			

MUSKINGUM RIVER BASIN

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03117100 TUSCARAWAS RIVER AT NAVARRE, OH

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 1987.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1968 to September 1986, August 1987 to September 1987.

pH: March 1968 to September 1986, August 1987 to September 1987.

WATER TEMPERATURES: March 1968 to September 1986, August 1987 to September 1987.

DISSOLVED OXYGEN: March 1968 to September 1986, August 1987 to September 1987.

INSTRUMENTATION.--Water-quality monitor.

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 winter periods.

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 recorded, 2,170 microsiemens Sept. 12; minimum recorded, 865 microsiemens Sept. 13.

pH: Maximum recorded, 8.9 units Aug. 16, 17; minimum recorded, 7.7 units Aug. 19, Sept. 13, 17, 18.

WATER TEMPERATURES: Maximum recorded, 26.0°C Aug. 16; minimum recorded, 15.0°C on Sept. 26.

DISSOLVED OXYGEN: Maximum recorded, 15.4 mg/L Aug. 18; minimum recorded, 4.8 mg/L Sept. 13.

MUSKINGUM RIVER BASIN

03117100 TUSCARAWAS RIVER AT NAVARRE, OH--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1							---	---	---	1550	1180	1310
2							---	---	---	1580	1130	1290
3							---	---	---	1320	1100	1190
4							---	---	---	1480	1280	1350
5							---	---	---	1490	1410	1450
6							---	---	---	1530	1450	1490
7							---	---	---	1550	1420	1500
8							---	---	---	1710	1550	1630
9							---	---	---	1810	1610	1690
10							---	---	---	1850	1700	1800
11							---	---	---	1900	1820	1860
12							---	---	---	2170	1760	1890
13							---	---	---	1630	865	1090
14							1210	1110	1150	1280	1100	1220
15							1270	1180	1220	1380	1280	1330
16							1380	1210	1290	1470	1390	1430
17							1450	1340	1390	1490	1320	1450
18							1530	1390	1460	1410	1260	1320
19							1500	1410	1460	1630	1400	1540
20							1450	1350	1390	1550	1170	1290
21							1480	1320	1410	1390	1200	1320
22							1460	1130	1320	1340	1230	1280
23							1970	1180	1610	1380	1270	1320
24							1140	973	1020	1450	1320	1390
25							1150	1000	1060	1600	1440	1510
26							1180	1100	1150	1590	1470	1520
27							1560	1110	1330	1690	1510	1600
28							1590	1160	1350	1840	1630	1690
29							1310	1180	1230	1920	1730	1780
30							1250	1130	1180	1800	1580	1690
31							1260	1180	1230	---	---	---
MONTH							1970	973	1290	2170	865	1470
YEAR	2170	865	1410									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1							---	---	---	8.00	7.82	7.90
2							---	---	---	7.92	7.78	7.86
3							---	---	---	8.04	7.77	7.90
4							---	---	---	8.07	7.83	7.94
5							---	---	---	8.13	7.83	7.97
6							---	---	---	8.10	7.88	7.97
7							---	---	---	7.99	7.82	7.92
8							---	---	---	8.10	7.85	7.97
9							---	---	---	8.11	7.86	8.00
10							---	---	---	8.17	7.85	8.02
11							---	---	---	8.13	7.91	8.01
12							---	---	---	8.03	7.79	7.90
13							---	---	---	7.96	7.70	7.81
14							8.83	7.87	8.32	8.03	7.75	7.88
15							8.79	7.99	8.31	7.98	7.79	7.88
16							8.90	7.92	8.34	7.96	7.77	7.86
17							8.93	7.77	8.27	7.96	7.73	7.83
18							8.84	7.77	8.23	7.93	7.66	7.79
19							8.84	7.70	8.21	7.87	7.76	7.81
20							8.81	7.77	8.22	7.97	7.77	7.85
21							8.62	7.77	8.17	7.98	7.81	7.88
22							8.20	7.87	7.96	7.99	7.83	7.90
23							8.55	7.86	8.10	8.00	7.84	7.91
24							8.22	7.86	8.03	7.96	7.81	7.90
25							8.38	7.83	8.08	7.98	7.82	7.91
26							8.31	7.93	8.09	7.97	7.87	7.93
27							8.03	7.84	7.93	7.97	7.84	7.91
28							7.86	7.80	7.84	7.97	7.83	7.91
29							7.94	7.77	7.85	7.95	7.83	7.90
30							8.04	7.79	7.91	7.92	7.79	7.87
31							7.94	7.81	7.87	---	---	---
MONTH							8.93	7.70	8.10	8.17	7.66	7.90
YEAR	8.93	7.66	7.98									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

MUSKINGUM RIVER BASIN

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03117100 TUSCARAWAS RIVER AT NAVARRE, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

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

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1							---	---	---	8.3	6.9	7.5
2							---	---	---	7.8	6.8	7.3
3							---	---	---	8.7	6.9	7.7
4							---	---	---	9.4	7.0	8.2
5							---	---	---	9.3	7.0	8.1
6							---	---	---	8.6	7.0	7.8
7							---	---	---	8.2	6.6	7.4
8							---	---	---	8.9	6.7	7.8
9							---	---	---	9.1	6.8	8.0
10							---	---	---	9.4	6.7	8.1
11							---	---	---	8.5	6.8	7.7
12							---	---	---	7.6	5.8	6.5
13							---	---	---	7.2	4.8	5.8
14							13.1	5.7	9.3	7.9	5.4	6.5
15							13.2	6.3	9.9	7.7	5.8	6.7
16							14.8	6.8	10.7	7.6	5.7	6.6
17							14.6	6.9	10.9	7.5	5.6	6.5
18							15.4	7.1	11.4	7.2	5.6	6.3
19							15.1	7.8	11.6	6.3	5.3	5.8
20							15.0	7.4	11.5	7.3	5.4	6.2
21							13.2	8.2	11.1	7.6	5.9	6.6
22							11.0	6.0	7.3	7.7	6.1	6.8
23							10.8	5.4	7.2	7.9	6.4	7.1
24							8.3	5.4	6.7	7.7	6.3	7.0
25							11.2	5.9	8.5	7.7	6.3	7.0
26							10.4	8.2	9.3	7.8	6.5	7.1
27							9.4	8.0	8.6	7.7	6.4	7.0
28							7.9	6.4	7.1	7.8	6.3	7.0
29							8.0	6.4	7.0	7.3	6.1	6.8
30							8.7	6.6	7.5	6.9	5.5	6.2
31							8.0	6.8	7.3	---	---	---
MONTH							15.4	5.4	9.1	9.4	4.8	7.0
YEAR	15.4	4.8	7.8									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

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: Jan. 23-30. 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.

AVERAGE DISCHARGE.--49 years, 271 ft³/s, 14.55 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. 3	0500	2,090	5.14	July 3	0130	*2,490	*5.71
Apr. 7	0630	2,080	5.12				

Minimum discharge, 36 ft³/s Aug. 20, 21, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	109	67	223	192	264	255	670	273	202	270	64	62	
2	128	63	926	198	315	402	762	269	151	1520	66	56	
3	211	67	1950	196	499	311	635	361	140	1610	130	51	
4	260	80	1570	174	387	251	542	553	119	727	88	45	
5	234	79	918	151	300	211	736	490	101	432	82	43	
6	171	95	582	153	265	200	1490	396	90	289	70	43	
7	120	93	413	165	252	193	2020	317	85	239	63	45	
8	98	96	393	197	249	191	1740	272	81	201	56	49	
9	83	117	449	183	211	190	1210	234	238	172	66	52	
10	68	112	559	178	205	168	796	204	167	155	81	47	
11	61	119	442	201	196	149	551	185	110	143	70	46	
12	57	172	364	190	225	146	449	172	101	131	60	47	
13	66	147	312	175	254	140	400	156	220	124	53	58	
14	86	111	251	183	213	138	340	141	160	132	49	50	
15	89	96	239	339	170	162	316	134	111	127	45	47	
16	87	89	224	371	145	200	313	123	95	121	43	47	
17	77	96	213	284	149	191	330	112	82	113	43	53	
18	70	112	254	260	143	171	290	143	73	103	40	99	
19	65	320	271	395	134	160	244	308	69	95	40	116	
20	66	252	224	753	125	152	216	510	66	92	38	94	
21	70	433	200	559	120	142	199	583	67	90	37	76	
22	70	318	179	432	123	135	183	390	77	86	67	67	
23	65	229	159	320	131	130	183	249	98	84	85	66	
24	65	199	163	260	127	130	517	195	78	80	58	63	
25	63	179	316	220	119	128	678	164	66	78	48	58	
26	75	344	355	190	113	136	505	148	61	76	61	55	
27	81	706	277	170	110	133	388	146	57	75	86	51	
28	84	503	248	160	113	123	454	129	59	71	80	47	
29	82	375	222	150	---	117	393	183	78	71	79	50	
30	79	281	207	200	---	135	314	157	148	69	67	85	
31	75	---	196	303	---	655	---	332	---	66	60	---	
TOTAL	3015	5950	13299	7902	5657	5945	17864	8029	3250	7642	1975	1768	
MEAN	97.3	198	429	255	202	192	595	259	108	247	63.7	58.9	
MAX	260	706	1950	753	499	655	2020	583	238	1610	130	116	
MIN	57	63	159	150	110	117	183	112	57	66	37	43	
CFSM	.38	.78	1.70	1.01	.80	.76	2.35	1.02	.43	.98	.25	.23	
IN.	.44	.87	1.96	1.16	.83	.87	2.63	1.18	.48	1.12	.29	.26	
CAL YR 1986	TOTAL	86580		MEAN	237	MAX	1960	MIN	31	CFSM	.94	IN.	12.73
WTR YR 1987	TOTAL	82296		MEAN	225	MAX	2020	MIN	37	CFSM	.89	IN.	12.10

MUSKINGUM RIVER BASIN

69

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: Jan. 23-30, Feb. 20-28, and May 26 to July 24. Records fair except for estimated daily discharges which are poor. Part of municipal water supply for city of Canton is pumped from its northeast well field; a portion of pumpage is believed to be derived from creek as recharge to aquifer supplying well field about 1 mi downstream from gage. Mean pumpage for water year 1987, 12.3 ft³/s. At times low flow regulated by small pools above station. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--46 years, 36.2 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)
Apr. 7	0700	*499	*4.75	No other peaks above base.			
Minimum daily discharge, 4.3 ft ³ /s Sept. 28.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	11	28	23	22	26	82	28	27	130	7.4	7.8
2	13	10	122	24	23	63	115	29	23	290	8.6	7.3
3	16	10	274	24	47	53	110	39	20	150	14	7.1
4	28	11	168	23	38	41	75	36	17	52	11	6.6
5	36	11	86	22	29	32	85	30	14	30	9.4	6.3
6	28	12	54	21	25	27	277	26	12	22	8.5	6.3
7	19	11	43	22	24	26	452	25	11	20	7.5	6.2
8	15	12	44	25	24	26	250	23	15	17	7.6	6.1
9	13	12	60	25	22	26	128	22	32	18	9.0	5.6
10	12	12	97	25	21	23	87	22	22	16	13	5.3
11	11	14	71	25	20	19	66	20	16	14	14	5.2
12	11	14	47	24	22	18	56	19	14	12	11	6.7
13	11	15	36	23	30	17	49	18	29	13	8.7	9.2
14	13	15	30	23	27	17	43	18	21	14	7.6	7.9
15	13	14	27	51	23	19	43	19	16	13	7.1	6.7
16	13	13	25	64	21	19	43	17	13	13	6.7	6.4
17	12	12	24	43	18	20	42	16	11	11	6.2	6.3
18	11	16	27	34	17	22	38	18	10	10	5.9	7.0
19	10	40	29	48	16	23	34	24	9.4	9.4	5.8	8.0
20	10	43	27	105	14	22	31	81	9.4	10	5.7	8.5
21	9.8	56	25	63	13	20	28	118	9.6	9.6	5.7	7.3
22	9.5	46	23	40	12	19	26	55	12	9.4	8.2	6.6
23	9.5	34	22	32	14	17	29	33	14	9.2	8.6	6.4
24	9.4	27	22	28	13	16	60	24	12	9.0	7.2	5.6
25	10	23	36	26	13	17	55	20	10	8.9	6.5	5.1
26	13	60	46	23	12	17	39	18	9.0	8.8	7.6	4.8
27	14	159	37	22	12	17	39	24	10	8.3	9.0	4.4
28	14	84	31	20	12	16	49	19	9.4	7.7	9.3	4.3
29	13	48	28	19	---	15	40	25	12	7.5	8.7	4.9
30	12	36	26	19	---	18	31	25	25	7.5	7.4	6.2
31	12	---	24	25	---	69	---	40	---	7.4	7.4	---
TOTAL	434.2	881	1639	991	584	780	2502	931	464.8	957.7	260.3	192.1
MEAN	14.0	29.4	52.9	32.0	20.9	25.2	83.4	30.0	15.5	30.9	8.40	6.40
MAX	36	159	274	105	47	69	452	118	32	290	14	9.2
MIN	9.4	10	22	19	12	15	26	16	9.0	7.4	5.7	4.3
CAL YR 1986	TOTAL	11556.1		MEAN	31.7	MAX	301	MIN	5.6			
WTR YR 1987	TOTAL	10617.1		MEAN	29.1	MAX	452	MIN	4.3			

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 just downstream from railroad bridge, 1 mi southeast of North Industry, and 3 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 970.77 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 13, 1923, nonrecording gage at site 1 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Jan. 24-29, Feb. 24 to Mar. 1. 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 1987 water year, 15.3 ft³/s. See REMARKS for station 03124500. Water-quality data collected at this site 1964 to 1969, 1975, 1977.

AVERAGE DISCHARGE.--66 years, 187 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)
Dec. 2	1900	2,110	5.29	July 2	0800	*3,650	*7.16
Apr. 7	0400	2,470	5.78	Aug. 2	2400	2,110	5.29

Minimum daily, 79 ft³/s Sept. 27

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	278	84	151	139	143	400	364	160	228	710	96	108
2	145	80	1400	158	220	292	581	196	167	2750	263	99
3	473	83	1390	160	274	232	403	323	192	921	364	95
4	292	93	597	146	195	189	297	271	147	343	126	89
5	253	94	314	134	166	163	621	192	128	225	114	84
6	151	103	231	136	159	152	1620	172	122	197	99	80
7	117	91	203	161	153	149	2100	160	113	180	95	84
8	108	108	251	172	154	148	979	151	160	159	90	90
9	103	93	353	159	143	148	495	141	430	151	330	90
10	98	89	403	167	142	134	347	132	160	153	161	86
11	93	142	265	168	142	124	277	133	130	139	114	87
12	89	128	210	158	167	123	257	133	137	128	101	197
13	132	109	177	153	181	124	235	129	178	130	96	130
14	165	100	156	162	164	137	218	131	136	142	91	100
15	114	96	153	289	136	163	237	136	123	128	87	93
16	103	93	150	277	115	155	238	128	119	130	84	93
17	97	94	149	210	120	147	227	124	113	120	87	133
18	93	247	191	193	117	148	201	348	110	116	87	167
19	89	314	175	506	114	144	185	222	109	109	84	135
20	92	259	155	474	113	141	179	344	110	112	84	106
21	93	288	144	250	111	134	175	367	147	115	83	96
22	91	193	139	194	108	127	167	205	166	111	345	96
23	90	155	136	167	116	127	196	160	119	110	119	94
24	88	140	147	130	110	125	441	137	111	105	95	90
25	91	129	280	120	110	127	299	127	106	103	89	88
26	147	675	218	110	100	120	205	165	104	101	188	84
27	102	578	181	110	95	115	235	181	123	102	128	79
28	99	285	164	100	95	111	270	141	111	100	147	83
29	93	202	156	100	---	108	207	264	240	99	105	112
30	89	168	153	224	---	188	178	268	385	99	92	131
31	87	---	144	170	---	590	---	364	---	98	130	---
TOTAL	4155	5313	8936	5797	3963	5285	12434	6105	4724	8186	4174	3099
MEAN	134	177	288	187	142	170	414	197	157	264	135	103
MAX	473	675	1400	506	274	590	2100	367	430	2750	364	197
MIN	87	80	136	100	95	108	167	124	104	98	83	79
CAL YR 1986	TOTAL	71474	MEAN	196	MAX	1700	MIN	68				
WTR YR 1987	TOTAL	72171	MEAN	198	MAX	2750	MIN	79				

MUSKINGUM RIVER BASIN

71

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 current year. 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.--No estimated daily discharges. Records good. Flow regulated by Leesville Lake. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--49 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, 258 ft³/s Dec. 15, gage height, 4.44 ft; minimum daily, 0.98 ft³/s Dec. 27, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	6.0	144	54	5.6	1.8	1.9	77	29	43	3.0	12
2	8.1	5.9	123	54	2.5	1.7	2.1	63	22	74	2.8	9.1
3	7.5	89	26	54	1.9	1.8	2.0	80	23	81	4.3	8.1
4	24	136	3.1	54	1.6	1.9	2.7	156	19	73	4.3	7.1
5	45	135	51	19	1.6	1.9	3.0	192	13	62	4.5	6.6
6	35	110	217	2.0	1.7	1.9	2.6	187	10	52	4.6	6.3
7	22	61	249	1.9	1.7	1.9	3.1	172	9.1	40	4.1	6.1
8	15	30	246	1.9	1.7	1.6	71	88	8.6	31	3.8	6.6
9	12	30	243	1.9	1.7	1.6	107	59	27	21	3.9	6.6
10	8.5	50	244	1.9	1.7	1.9	113	57	24	16	4.5	6.3
11	7.0	61	250	1.8	1.9	1.9	149	53	17	13	3.9	6.1
12	6.7	61	253	28	2.0	1.9	170	49	23	9.4	3.4	6.2
13	7.3	79	250	56	1.8	1.8	168	43	26	8.5	3.0	7.5
14	10	89	247	63	1.6	1.8	146	39	20	11	2.6	7.4
15	9.8	89	253	76	1.6	1.8	77	35	17	9.5	2.3	6.8
16	8.7	89	253	76	1.7	1.8	64	30	16	11	2.0	6.6
17	8.2	97	249	46	1.7	1.8	65	26	10	9.2	2.5	6.9
18	7.6	111	254	46	2.2	1.7	63	24	8.7	8.2	2.1	8.1
19	7.1	116	215	46	2.2	1.7	60	33	8.1	7.5	1.5	12
20	6.7	130	144	97	2.1	1.7	56	30	13	6.9	2.6	15
21	6.4	150	143	145	2.0	1.7	52	26	21	6.5	2.8	12
22	6.2	150	50	151	2.0	1.5	48	22	28	6.1	5.7	11
23	6.0	149	2.0	112	2.0	1.6	48	20	25	5.8	10	10
24	5.9	148	1.5	53	1.9	1.7	83	17	20	5.6	8.0	8.8
25	6.1	148	1.0	53	1.9	1.6	111	14	15	5.1	6.6	7.9
26	6.6	146	1.0	53	1.9	1.6	114	18	9.7	4.7	12	7.1
27	6.8	147	.98	34	1.9	1.5	152	20	8.5	4.2	24	6.5
28	6.9	146	.98	5.7	1.9	1.2	168	17	7.9	3.7	29	6.1
29	6.7	146	88	5.6	---	1.4	161	14	9.4	3.2	28	6.6
30	6.5	145	144	5.6	---	1.7	149	17	36	2.7	19	13
31	6.3	---	112	5.6	---	1.8	---	36	---	2.8	15	---
TOTAL	333.7	3049.9	4458.56	1403.9	56.0	53.2	2412.4	1714	524.0	637.6	225.8	246.4
MEAN	10.8	102	144	45.3	2.00	1.72	80.4	55.3	17.5	20.6	7.28	8.21
MAX	45	150	254	151	5.6	1.9	170	192	36	81	29	15
MIN	5.9	5.9	.98	1.8	1.6	1.2	1.9	14	7.9	2.7	1.5	6.1
CAL YR 1986	TOTAL	17820.66		MEAN	48.8	MAX	254	MIN	.98			
WTR YR 1987	TOTAL	15115.46		MEAN	41.4	MAX	254	MIN	.98			

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 current year. 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.--Estimated daily discharges: Jan. 23-30, June 19-20. Records good except for estimated daily discharges, which are fair. 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 1987 water year, 15.3 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.

AVERAGE DISCHARGE.--64 years, 1,434 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, 5,610 ft³/s Apr. 13, gage height, 7.13 ft; minimum daily, 276 ft³/s Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	738	417	1650	1220	1490	935	2740	1500	1110	1480	382	560
2	1110	415	2810	1190	1280	2020	2940	1370	785	3400	385	541
3	1250	413	5070	1220	1970	2090	3660	1620	729	4810	840	474
4	1640	692	5370	1150	1930	1690	3190	2400	718	4990	599	419
5	2170	775	5140	1040	1610	1350	2880	2440	634	4940	499	386
6	1590	810	3940	968	1440	1160	4530	2150	570	4730	437	355
7	906	783	3420	995	1300	1090	5080	1810	539	2300	412	341
8	625	740	2960	1110	1300	1040	5310	1540	508	1160	366	356
9	514	768	3000	1150	1260	1010	5400	1280	1110	914	376	371
10	441	746	3540	1110	1130	954	5520	1140	1180	809	778	378
11	385	773	3500	1160	1160	852	5470	1050	752	741	736	365
12	380	958	2450	1180	1150	799	5450	994	632	649	519	435
13	432	946	1970	1170	1360	771	5330	928	742	583	436	702
14	629	857	1630	1130	1340	748	4810	853	872	585	398	538
15	719	789	1500	1470	1170	836	2520	800	661	673	370	448
16	621	766	1530	2220	1040	916	1940	786	585	647	346	411
17	543	748	1460	1820	937	952	1810	730	532	576	342	403
18	467	809	1530	1500	877	905	1690	699	491	526	347	546
19	386	1440	1710	1700	823	868	1500	1280	470	485	337	715
20	355	1710	1470	2960	758	847	1350	1230	470	451	330	647
21	358	1970	1270	2810	739	796	1260	1580	520	446	327	508
22	363	2080	1170	2320	733	748	1170	1390	760	435	488	448
23	361	1630	1000	1600	731	704	1130	1040	780	426	1040	441
24	350	1390	928	1200	746	685	1570	836	620	421	718	410
25	352	1290	1300	1000	713	689	2560	708	540	409	467	371
26	449	1620	2160	940	686	714	2240	662	490	393	499	333
27	559	3710	1730	900	676	700	1870	774	460	385	793	302
28	540	3990	1450	870	676	674	2130	725	440	387	700	276
29	493	2800	1310	840	---	641	2090	744	430	386	722	286
30	461	1990	1400	1400	---	646	1730	742	927	382	614	398
31	424	---	1370	2170	---	1700	---	1150	---	376	505	---
TOTAL	20611	38825	70738	43513	31025	30530	90870	36951	20057	39895	16108	13164
MEAN	665	1294	2282	1404	1108	985	3029	1192	669	1287	520	439
MAX	2170	3990	5370	2960	1970	2090	5520	2440	1180	4990	1040	715
MIN	350	413	928	840	676	641	1130	662	430	376	327	276
CAL YR 1986	TOTAL	495616		MEAN	1358	MAX	5370	MIN	260			
WTR YR 1987	TOTAL	452287		MEAN	1239	MAX	5520	MIN	276			

MUSKINGUM RIVER BASIN

73

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 current year. 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.

AVERAGE DISCHARGE.--49 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, 1,960 ft³/s Apr. 7, gage height, 6.36 ft; minimum daily, 17 ft³/s Aug. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	45	228	189	280	169	372	154	811	409	28	52
2	217	42	552	198	248	476	578	162	589	988	30	53
3	229	41	1550	201	386	397	836	265	263	1310	44	41
4	370	44	1640	181	315	288	591	423	193	1370	56	36
5	428	57	1770	145	233	226	490	347	131	1340	41	32
6	318	62	741	133	205	196	1020	251	101	1260	42	30
7	173	64	404	182	195	180	1180	204	91	747	35	29
8	113	62	353	217	195	173	1070	176	81	287	29	30
9	84	81	396	219	161	166	1560	156	283	190	32	31
10	69	73	647	207	142	144	1760	140	421	155	45	29
11	60	69	566	233	170	128	1730	125	199	131	44	30
12	54	132	382	219	177	125	1640	114	135	112	35	34
13	58	124	299	197	213	117	784	104	238	98	28	104
14	88	96	212	192	194	113	401	95	219	94	25	99
15	104	81	213	318	154	124	329	91	130	100	23	54
16	78	77	187	465	100	128	320	86	113	86	21	41
17	62	73	175	326	132	121	293	77	92	79	20	38
18	54	72	190	260	125	110	266	75	72	66	19	71
19	48	161	207	318	108	106	230	214	63	59	20	104
20	44	207	180	845	101	103	199	198	66	55	18	115
21	44	331	161	613	100	96	178	128	75	51	17	85
22	43	295	145	398	102	90	164	103	98	47	34	57
23	42	199	130	160	103	86	160	92	92	43	168	56
24	40	159	134	130	98	84	224	78	72	41	84	55
25	41	135	376	100	91	83	290	69	59	39	41	46
26	55	253	602	92	87	88	223	66	51	37	45	39
27	88	1010	404	86	85	82	184	101	48	35	205	35
28	71	842	316	82	87	76	218	113	52	34	121	34
29	62	442	263	80	---	73	219	78	51	32	95	34
30	57	301	233	175	---	77	180	75	122	31	67	42
31	50	---	209	380	---	268	---	512	---	29	49	---
TOTAL	3331	5630	13865	7541	4587	4693	17689	4872	5011	9355	1561	1536
MEAN	107	188	447	243	164	151	590	157	167	302	50.4	51.2
MAX	428	1010	1770	845	386	476	1760	512	811	1370	205	115
MIN	40	41	130	80	85	73	160	66	48	29	17	29
CAL YR 1986	TOTAL	86144	MEAN	236	MAX	1830	MIN	11				
WTR YR 1987	TOTAL	79671	MEAN	218	MAX	1770	MIN	17				

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. 23-29. 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 1987, 15.3 ft³/s. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--30 years (1931-32, 1935-38, 1961-87), 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, 2,180 ft³/s Apr. 7, gage height, 5.66 ft; minimum daily, 20 ft³/s Aug. 20, 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	48	234	210	337	156	373	169	926	440	29	52
2	188	44	549	213	281	485	544	170	727	1200	32	58
3	188	43	1750	219	429	431	849	279	317	1520	41	46
4	384	43	1850	201	367	310	648	459	229	1590	57	40
5	420	55	2050	163	273	240	503	400	154	1520	45	35
6	396	59	861	141	234	206	1050	292	114	1410	42	33
7	211	62	445	197	221	187	1370	235	102	856	39	32
8	126	61	376	230	219	180	1100	204	95	312	32	32
9	92	76	416	244	188	168	1670	182	280	199	34	33
10	76	72	671	231	153	147	1930	165	504	161	43	32
11	67	67	616	253	192	127	1890	151	242	133	48	32
12	58	118	415	248	193	121	1790	138	158	112	39	37
13	58	123	324	221	231	115	898	126	252	97	33	97
14	82	96	228	213	220	107	458	116	265	91	29	114
15	106	81	228	331	174	115	374	111	157	96	26	64
16	85	77	200	523	109	125	359	106	128	85	24	47
17	67	73	186	374	139	117	334	98	108	79	23	43
18	58	71	197	295	136	106	305	94	87	68	22	66
19	52	139	221	346	116	103	265	220	76	61	21	112
20	48	209	195	917	108	99	228	235	75	55	20	119
21	48	317	173	708	104	92	203	148	84	52	20	97
22	46	309	156	460	104	88	186	113	102	48	36	67
23	45	205	138	160	104	84	179	101	102	44	160	60
24	43	160	139	130	103	81	243	87	83	42	97	62
25	43	132	364	110	97	80	328	80	69	39	48	54
26	52	225	659	96	91	82	263	75	58	38	47	47
27	87	1030	449	92	89	79	210	100	54	36	202	43
28	75	909	346	88	91	74	225	125	59	35	135	40
29	64	476	292	84	---	71	241	90	60	33	99	37
30	58	313	257	193	---	72	197	84	119	31	75	39
31	54	---	232	424	---	232	---	527	---	31	54	---
TOTAL	3439	5693	15217	8315	5103	4680	19213	5480	5786	10514	1652	1670
MEAN	111	190	491	268	182	151	640	177	193	339	53.3	55.7
MAX	420	1030	2050	917	429	485	1930	527	926	1590	202	119
MIN	43	43	138	84	89	71	179	75	54	31	20	32
CAL YR 1986	TOTAL	90860	MEAN	249	MAX	2060	MIN	13				
WTR YR 1987	TOTAL	86762	MEAN	238	MAX	2050	MIN	20				

MUSKINGUM RIVER BASIN

75

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 current year. Prior to February 1939 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WRD-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. 23-29, Feb. 9-11. Records 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.--49 years, 138 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, 749 ft³/s Dec. 2, gage height, 7.43 ft; minimum daily, 9.5 ft³/s Aug. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	33	430	163	82	44	94	109	100	54	11	54
2	91	30	588	128	79	47	77	115	114	340	11	44
3	83	29	403	57	69	37	68	135	103	304	20	39
4	198	39	257	55	54	30	63	166	98	179	16	34
5	197	47	468	49	44	27	135	215	85	129	18	32
6	243	57	541	50	40	26	278	217	77	120	22	29
7	280	54	596	56	38	25	454	144	69	138	19	29
8	280	81	637	138	37	25	457	112	57	120	17	44
9	255	112	620	142	30	23	295	108	97	108	23	42
10	130	98	588	121	26	20	397	104	84	95	25	36
11	84	104	583	123	24	19	524	102	64	86	19	32
12	78	108	696	118	39	18	514	99	133	76	17	31
13	76	96	730	116	43	17	519	96	173	68	15	33
14	78	90	731	117	33	17	519	94	117	61	14	29
15	71	84	597	118	29	19	388	94	100	51	13	26
16	61	81	229	95	23	18	249	89	93	49	12	25
17	52	183	165	66	25	16	187	84	84	43	11	24
18	48	239	163	67	24	16	162	84	75	38	13	24
19	45	249	127	126	22	15	156	128	67	34	12	23
20	42	280	111	269	20	15	117	124	68	29	10	23
21	40	321	108	281	21	14	100	118	75	25	9.5	20
22	41	291	105	263	21	15	99	114	75	21	28	20
23	39	280	68	100	26	14	106	117	72	19	77	19
24	37	322	62	65	23	14	208	121	61	17	67	17
25	40	347	101	60	21	13	187	124	53	16	63	16
26	42	377	87	50	20	14	158	219	55	15	62	14
27	42	283	77	48	19	13	224	294	44	15	62	13
28	42	330	72	44	21	13	261	300	39	14	84	13
29	40	370	206	42	---	13	224	248	38	13	104	15
30	37	357	261	105	---	15	153	97	55	13	76	30
31	35	---	211	110	---	123	---	92	---	12	63	---
TOTAL	2911	5372	10618	3342	953	735	7373	4263	2425	2302	1013.5	830
MEAN	93.9	179	343	108	34.0	23.7	246	138	80.8	74.3	32.7	27.7
MAX	280	377	731	281	82	123	524	300	173	340	104	54
MIN	35	29	62	42	19	13	63	84	38	12	9.5	13
CAL YR 1986	TOTAL	47381.8		MEAN	130	MAX	731	MIN	5.6			
WTR YR 1987	TOTAL	42137.5		MEAN	115	MAX	731	MIN	9.5			

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 current year. 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. 23-29, Feb. 9-11, Records fair. Flow regulated by Clendening Lake on Brushy Fork, 1.9 mi upstream, and Piedmont Lake, 16 mi upstream. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--49 years, 322 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, 1,930 ft³/s Apr. 8, gage height, 13.95 ft; minimum daily, 16 ft³/s Aug. 2, 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	67	824	288	271	135	442	268	139	155	17	89
2	276	62	1290	281	250	219	320	259	186	716	16	73
3	219	56	1790	195	272	171	267	303	173	1310	27	61
4	425	63	1630	163	223	133	225	532	173	956	41	50
5	750	91	1140	203	172	112	306	488	146	442	49	47
6	668	115	1160	200	145	102	639	429	122	343	77	40
7	545	123	1180	126	135	97	1240	339	109	378	56	36
8	493	156	1270	185	130	93	1800	265	95	648	42	75
9	418	281	1320	274	100	94	1760	242	130	317	37	92
10	298	273	1450	231	92	85	1160	224	161	249	57	72
11	169	241	1390	257	86	74	991	207	117	214	43	59
12	148	282	1400	281	116	71	958	193	186	185	33	52
13	140	247	1420	293	171	69	1020	178	476	162	29	59
14	143	206	1380	287	138	65	1060	167	281	150	26	56
15	142	179	1370	240	112	67	884	164	207	132	23	44
16	119	168	1080	197	94	67	518	156	193	117	20	38
17	99	330	781	140	96	64	403	141	154	102	19	49
18	85	653	777	130	90	59	346	130	125	85	19	124
19	76	639	695	192	83	58	321	206	110	73	20	97
20	70	624	449	554	74	56	287	226	124	63	18	86
21	65	810	423	573	74	53	239	220	201	51	16	71
22	63	810	372	449	75	52	228	195	250	46	28	55
23	62	732	205	250	83	48	228	183	222	40	159	55
24	61	707	127	170	85	46	496	169	180	33	119	49
25	65	754	284	150	75	45	567	157	147	29	100	40
26	78	872	319	130	72	47	455	182	151	27	98	31
27	82	1100	245	120	66	46	490	426	147	24	110	24
28	83	855	199	110	67	45	613	345	112	23	133	21
29	82	921	258	100	---	43	492	368	90	21	198	22
30	77	817	558	178	---	45	352	160	131	19	147	62
31	71	---	523	356	---	352	---	141	---	18	106	---
TOTAL	6219	13234	27309	7303	3447	2713	19107	7663	5038	7128	1883	1729
MEAN	201	441	881	236	123	87.5	637	247	168	230	60.7	57.6
MAX	750	1100	1790	573	272	352	1800	532	476	1310	198	124
MIN	61	56	127	100	66	43	225	130	90	18	16	21
CAL YR 1986	TOTAL	114957	MEAN	315	MAX	1790	MIN	11				
WTR YR 1987	TOTAL	102773	MEAN	282	MAX	1800	MIN	16				

MUSKINGUM RIVER BASIN

77

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 current year.

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: Nov. 27-30, Dec. 3-6, 10-12, Jan. 25-29, Feb. 11, Apr. 7-13, 15, 16. Records fair, except estimated daily discharges, which are poor. Flow regulated by Piedmont Lake, 35 mi upstream, and Clendenning 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.

AVERAGE DISCHARGE.--65 years, 432 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, 2,500 ft³/s Apr. 9, maximum gage height, 5.04 ft Dec. 3 (backwater from Tuscarawas River); minimum daily discharge, 23 ft³/s Aug. 17, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	187	79	850	463	427	174	772	436	176	188	26	110
2	470	79	1640	355	385	413	619	364	191	416	26	89
3	386	79	2200	327	431	358	514	410	229	1270	41	71
4	570	76	2200	240	385	273	435	750	224	1300	48	58
5	1030	92	1800	218	311	218	493	799	199	790	51	50
6	860	117	1400	267	255	188	933	659	165	452	72	49
7	694	137	1300	223	230	172	1600	560	139	404	76	45
8	579	167	1300	209	219	163	2200	446	121	610	55	46
9	518	306	1390	297	202	157	2500	365	118	550	45	89
10	422	369	1500	335	153	149	2300	330	169	329	43	94
11	283	343	1500	340	140	130	1500	302	192	269	56	73
12	198	389	1500	346	169	123	1100	277	167	227	44	61
13	182	376	1500	365	223	120	1100	255	562	193	36	64
14	202	300	1460	359	237	115	1200	236	493	183	33	70
15	208	253	1400	357	194	113	900	224	297	172	29	61
16	180	226	1340	295	131	113	700	218	228	146	26	50
17	147	221	976	244	147	109	605	203	203	133	23	50
18	123	514	851	201	142	102	497	187	156	109	23	101
19	107	663	852	271	132	99	435	234	128	92	27	151
20	95	654	631	682	118	97	398	319	113	76	31	114
21	92	801	509	767	108	93	342	299	255	68	28	97
22	85	880	477	646	110	92	309	277	306	60	51	77
23	82	811	372	544	114	90	304	247	328	55	135	66
24	82	754	219	315	121	85	526	232	254	48	181	64
25	79	744	320	240	117	82	851	215	192	42	112	56
26	82	901	485	210	107	82	730	203	157	38	100	47
27	92	1300	406	190	102	83	604	329	168	36	115	39
28	95	1100	327	180	100	81	733	484	142	34	127	34
29	95	950	276	170	---	80	744	416	110	32	207	35
30	92	900	467	188	---	85	567	375	99	30	223	74
31	88	---	641	394	---	366	---	204	---	29	153	---
TOTAL	8405	14581	32089	10238	5510	4605	26511	10855	6281	8381	2243	2085
MEAN	271	486	1035	330	197	149	884	350	209	270	72.4	69.5
MAX	1030	1300	2200	767	431	413	2500	799	562	1300	223	151
MIN	79	76	219	170	100	80	304	187	99	29	23	34
CAL YR 1986	TOTAL	140962.4		MEAN	386	MAX	2200	MIN	9.4			
WTR YR 1987	TOTAL	131784		MEAN	361	MAX	2500	MIN	23			

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 current year. 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.--Estimated daily discharges: Dec. 6-19. Records fair except those for periods of estimated record, 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.--49 years, 77.4 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 daily discharge, 700 ft³/s Dec. 9; minimum daily, 1.8 ft³/s Feb. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	16	288	55	55	11	4.6	90	23	37	9.2	41
2	40	15	194	55	143	11	4.6	92	21	82	9.1	36
3	50	15	13	55	193	10	4.6	98	29	108	19	34
4	76	18	58	55	193	10	4.6	225	29	110	17	32
5	99	20	160	55	137	10	4.6	290	22	107	30	32
6	100	22	250	55	65	10	4.6	146	18	105	37	17
7	95	24	400	55	83	11	4.4	87	16	99	26	16
8	88	37	550	55	84	11	4.6	88	15	96	16	17
9	80	45	700	54	84	10	3.7	87	27	93	18	15
10	73	46	550	55	53	10	6.1	86	24	88	17	14
11	65	51	550	55	37	10	11	83	18	80	15	14
12	57	56	650	55	48	11	23	79	31	70	13	14
13	55	52	640	56	22	11	38	73	45	62	12	17
14	52	52	640	87	1.8	11	47	68	42	58	16	15
15	45	48	630	108	1.8	11	53	64	40	51	18	15
16	39	45	620	89	1.9	11	58	58	42	47	16	15
17	34	165	620	56	7.0	11	61	51	37	37	15	26
18	29	229	610	57	11	11	61	49	32	29	14	61
19	25	227	350	57	12	11	62	68	28	18	13	67
20	21	250	200	90	11	11	60	68	33	15	12	68
21	19	330	198	167	11	11	59	62	46	14	12	63
22	18	341	79	197	11	11	57	58	63	12	27	58
23	18	332	4.6	105	11	11	57	52	61	11	64	54
24	17	255	7.2	55	11	11	84	45	59	11	54	49
25	18	189	8.9	55	11	9.8	97	39	52	9.3	45	41
26	18	193	8.9	55	11	6.9	100	39	46	7.9	48	34
27	18	210	8.9	55	11	6.9	324	38	37	7.4	50	31
28	20	213	8.9	36	11	7.1	399	33	29	6.8	55	24
29	19	213	95	27	---	7.5	176	30	23	6.4	56	21
30	18	212	183	46	---	6.3	90	27	32	7.5	54	33
31	18	---	136	55	---	4.6	---	27	---	9.0	50	---
TOTAL	1360	3921	9411.4	2112	1331.5	306.1	1963.4	2400	1020	1494.3	857.3	974
MEAN	43.9	131	304	68.1	47.6	9.87	65.4	77.4	34.0	48.2	27.7	32.5
MAX	100	341	700	197	193	11	399	290	63	110	64	68
MIN	17	15	4.6	27	1.8	4.6	3.7	27	15	6.4	9.1	14
CAL YR 1986	TOTAL	28727.4		MEAN	78.7	MAX	700	MIN	2.2			
WTR YR 1987	TOTAL	27151.0		MEAN	74.4	MAX	700	MIN	1.8			

MUSKINGUM RIVER BASIN

79

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.--66 years, 2,543 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, 11,100 ft³/s Apr. 8, gage height, 8.90 ft; minimum daily, 404 ft³/s Aug. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1010	655	3290	2340	2420	1250	3760	2620	1750	1610	512	829
2	1840	630	5370	2030	2170	2290	4070	2350	1990	3690	501	835
3	2150	612	9480	2020	2570	3230	4750	2500	1890	6630	584	760
4	2920	642	9990	1910	3150	2650	4830	3700	1610	7240	1050	673
5	4250	898	9460	1740	2690	2170	4240	4370	1400	7070	833	604
6	3910	992	8230	1620	2250	1840	5750	3960	1190	6600	732	564
7	2660	1060	6250	1630	2050	1660	9610	3280	1050	5700	676	528
8	1910	1100	5460	1720	1960	1580	10400	2780	948	3030	602	520
9	1580	1250	5520	1850	1910	1530	9650	2370	957	2370	554	542
10	1370	1340	5940	1930	1740	1470	9660	2090	2110	1890	683	578
11	1170	1340	6640	1960	1630	1350	9210	1920	1730	1630	968	559
12	970	1590	5690	2000	1680	1230	8490	1810	1350	1440	829	543
13	949	1660	4720	1960	1790	1180	8070	1700	1500	1270	651	856
14	1070	1500	4190	1940	1960	1140	7020	1580	2130	1220	571	910
15	1250	1340	3850	2030	1780	1140	5740	1500	1640	1200	527	755
16	1230	1250	3750	2810	1490	1230	3970	1410	1440	1200	493	634
17	1090	1200	3540	2950	1290	1280	3400	1360	1190	1120	461	589
18	974	1470	3250	2320	1340	1260	3050	1270	1030	1010	444	649
19	842	2010	3430	2310	1250	1210	2770	1510	904	916	434	948
20	741	2770	3050	4020	1170	1170	2510	2180	895	834	418	1080
21	692	3190	2480	4890	1100	1150	2320	2070	1060	760	404	962
22	683	3780	2280	4140	1090	1100	2160	2310	1430	720	477	831
23	673	3340	1970	2600	1080	1030	2040	1940	1450	682	1410	789
24	653	2850	1650	1900	1090	988	2260	1590	1340	658	1380	733
25	638	2540	1930	1600	1090	974	3590	1360	1160	630	931	679
26	677	2900	3080	1500	1030	974	3960	1220	1000	599	751	612
27	773	5720	3170	1400	998	988	3270	1210	890	576	1180	559
28	871	6880	2500	1400	989	971	3390	1520	846	556	1310	523
29	822	5540	2180	1400	---	932	3770	1440	815	544	1230	503
30	758	4030	2230	1630	---	914	3150	1480	855	536	1150	620
31	700	---	2560	2160	---	1590	---	1430	---	524	950	---
TOTAL	41826	66079	137130	67710	46757	43471	150860	63830	39550	64455	23696	20767
MEAN	1349	2203	4424	2184	1670	1402	5029	2059	1318	2079	764	692
MAX	4250	6880	9990	4890	3150	3230	10400	4370	2130	7240	1410	1080
MIN	638	612	1650	1400	989	914	2040	1210	815	524	404	503
CAL YR 1986	TOTAL	869677		MEAN	2383	MAX	10800	MIN	335			
WTR YR 1987	TOTAL	766131		MEAN	2099	MAX	10400	MIN	404			

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 current year. 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.--Estimated daily discharges: Aug. 3-12. Records fair. Flow regulated by Charles Mill Lake. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--49 years, 205 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, 1,380 ft³/s Apr. 9, gage height, 5.86 ft; minimum daily, 9.7 ft³/s Aug. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	670	116	785	330	168	166	401	130	53	236	30	308
2	722	110	801	293	169	167	522	136	17	718	41	272
3	484	101	748	264	170	169	632	148	42	492	60	237
4	579	98	746	240	177	175	744	180	127	665	90	101
5	598	92	803	221	185	180	809	189	194	872	150	22
6	976	90	851	206	189	182	806	176	172	986	185	26
7	1310	66	768	197	194	182	641	164	152	1210	160	30
8	1270	31	644	193	204	183	928	151	77	1250	140	35
9	1030	41	568	189	214	186	1290	140	190	1270	130	35
10	704	44	584	188	213	186	1260	130	383	1270	110	34
11	470	51	635	187	207	183	827	122	433	1240	100	36
12	357	55	685	185	208	180	598	97	481	1220	96	48
13	292	60	678	182	218	137	592	76	453	1270	89	63
14	290	92	586	180	239	57	771	74	372	1320	78	56
15	275	115	468	181	244	56	912	41	304	1280	68	50
16	244	109	376	184	225	56	818	22	251	1290	60	47
17	149	130	322	188	209	56	803	27	164	1280	28	45
18	48	160	289	191	197	57	673	42	82	1240	9.7	43
19	57	187	266	196	189	60	486	63	46	1190	11	40
20	61	209	247	200	186	46	461	140	33	1300	11	38
21	64	250	230	202	183	20	397	172	45	1300	13	36
22	66	304	215	200	180	30	324	199	126	1290	31	36
23	66	360	203	195	175	38	283	220	264	1190	77	34
24	65	385	200	189	170	45	266	235	315	636	232	32
25	65	365	236	187	169	53	245	227	304	264	167	31
26	69	362	307	184	167	60	227	205	269	234	171	28
27	72	372	403	181	165	65	144	192	241	415	214	26
28	74	558	488	176	165	69	115	181	215	396	349	25
29	111	690	499	170	---	69	130	169	96	301	391	25
30	134	691	446	170	---	111	134	154	49	193	397	28
31	123	---	380	169	---	281	---	144	---	113	357	---
TOTAL	11495	6294	15457	6218	5379	3505	17239	4346	5950	27931	4045.7	1867
MEAN	371	210	499	201	192	113	575	140	198	901	131	62.2
MAX	1310	691	851	330	244	281	1290	235	481	1320	397	308
MIN	48	31	200	169	165	20	115	22	17	113	9.7	22
CAL YR 1986	TOTAL	104350		MEAN	286	MAX	1480	MIN	13			
WTR YR 1987	TOTAL	109726.7		MEAN	301	MAX	1320	MIN	9.7			

MUSKINGUM RIVER BASIN

81

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 3 at Loudonville, 1.5 mi downstream from Big Run.

DRAINAGE AREA.--349 mi².

PERIOD OF RECORD.--May 1931 to current year.

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.--Estimated daily discharges: July 24 to Aug. 12. Records fair. 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.--56 years, 358 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, 5,910 ft³/s July 3, gage height, 12.39 ft; minimum daily, 102 ft³/s Aug. 19-21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1170	210	914	492	289	376	724	264	236	784	150	446
2	1120	199	1390	443	352	427	1290	323	151	3400	160	377
3	1490	189	1680	404	461	335	1060	371	328	4920	180	335
4	1080	189	1160	370	357	307	1040	376	262	2000	250	262
5	1070	186	1050	340	333	299	1200	353	350	1360	350	125
6	983	189	1090	321	332	337	1920	328	320	1280	400	119
7	1430	180	1020	321	330	325	2270	305	288	1440	340	121
8	1420	133	933	316	344	316	1710	287	262	1500	280	127
9	1290	133	930	303	333	310	1660	269	2080	1480	260	130
10	956	130	1190	302	340	292	1700	249	887	1500	240	129
11	663	133	895	306	329	284	1320	232	712	1460	220	127
12	518	159	897	290	352	279	1030	222	758	1410	210	141
13	440	153	879	284	372	271	986	184	744	1410	183	229
14	482	157	786	293	364	163	983	179	615	1630	173	157
15	434	202	673	356	355	163	1260	186	494	1520	163	145
16	371	196	557	338	327	155	1110	140	402	1460	154	141
17	323	196	485	307	316	153	1060	131	332	1460	141	146
18	158	245	471	308	298	149	970	191	184	1460	108	139
19	154	371	431	362	282	153	747	342	160	1460	102	133
20	157	360	383	412	275	154	654	246	150	1460	102	130
21	163	555	357	343	273	122	624	390	181	1460	102	126
22	167	473	335	333	270	117	516	546	366	1460	133	125
23	163	500	318	318	266	125	502	406	368	1460	190	126
24	162	538	319	289	259	133	490	380	432	1100	246	124
25	161	524	1090	279	255	137	448	369	426	500	283	121
26	210	1330	602	273	253	149	385	382	526	400	349	118
27	189	1130	610	268	250	152	329	402	372	660	471	114
28	206	769	682	269	256	156	360	332	344	650	762	112
29	201	918	700	262	---	156	282	311	259	400	572	112
30	240	886	653	327	---	427	276	299	385	300	555	121
31	223	---	568	323	---	684	---	306	---	200	518	---
TOTAL	17794	11533	24048	10152	8823	7606	28906	9301	13374	42984	8347	4858
MEAN	574	384	776	327	315	245	964	300	446	1387	269	162
MAX	1490	1330	1680	492	461	684	2270	546	2080	4920	762	446
MIN	154	130	318	262	250	117	276	131	150	200	102	112
CAL YR 1986	TOTAL	180573	MEAN	495	MAX	2500	MIN	87				
WTR YR 1987	TOTAL	187726	MEAN	514	MAX	4920	MIN	102				

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 Perryville, and 4.7 mi upstream from the confluence of Clear Fork and Black Fork.

DRAINAGE AREA.--198 mi².

PERIOD OF RECORD.--October 1938 to current year. Published as Clear Fork near Perryville 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 1987 water year 14.0 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.--49 years, 200 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, 1,980 ft³/s July 4, gage height 4.49 ft; minimum daily, 36 ft³/s Aug. 25, Sept. 27-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	63	703	345	81	112	346	194	243	283	64	118
2	180	60	754	200	62	242	648	201	192	1160	66	99
3	260	113	693	132	55	317	814	260	315	1930	80	82
4	428	109	698	132	55	212	708	279	340	1950	77	70
5	399	91	692	132	55	165	691	269	274	1910	76	58
6	315	93	552	148	56	132	744	246	210	1830	73	52
7	236	92	469	156	56	114	712	221	164	1730	67	48
8	174	91	388	140	56	114	673	199	136	1610	61	47
9	134	92	337	132	56	147	691	175	353	1480	64	47
10	108	128	611	132	56	165	686	154	543	1240	70	44
11	91	163	696	132	57	165	676	138	467	1050	66	44
12	80	181	344	116	92	139	664	125	346	1100	62	46
13	78	190	158	108	128	100	901	113	360	1140	58	55
14	82	179	158	108	138	50	1040	104	353	1110	54	57
15	91	163	245	129	137	50	1000	104	290	796	51	52
16	90	163	242	156	136	50	923	96	228	279	48	50
17	83	163	158	156	128	50	517	90	178	172	46	48
18	75	163	200	156	106	50	283	101	141	155	44	48
19	68	161	193	156	97	51	253	144	119	117	43	47
20	62	153	158	246	89	50	270	139	109	98	40	47
21	58	149	158	286	85	50	294	136	120	162	39	43
22	57	149	158	200	85	50	272	312	257	166	41	43
23	56	149	132	149	65	50	276	338	329	130	41	42
24	54	184	101	134	55	51	269	272	283	111	38	41
25	55	211	107	134	55	52	295	208	219	100	36	40
26	60	360	108	116	55	54	189	203	241	90	47	38
27	65	495	110	89	75	48	212	280	295	84	67	36
28	67	583	110	80	112	41	257	267	256	78	72	36
29	72	564	486	80	---	46	254	224	198	74	83	36
30	70	557	698	80	---	78	225	181	180	70	83	41
31	67	---	516	80	---	251	---	272	---	67	96	---
TOTAL	3825	6012	11133	4540	2283	3246	15783	6045	7739	22272	1853	1555
MEAN	123	200	359	146	81.5	105	526	195	258	718	59.8	51.8
MAX	428	583	754	345	138	317	1040	338	543	1950	96	118
MIN	54	60	101	80	55	41	189	90	109	67	36	36
CAL YR 1986	TOTAL	75225	MEAN	206	MAX	818	MIN	27				
WTR YR 1987	TOTAL	86286	MEAN	236	MAX	1950	MIN	36				

MUSKINGUM RIVER BASIN

83

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.--No estimated daily discharges. Records fair. 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.--49 years, 241 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, 1,150 ft³/s Apr. 3, gage height, 8.25 ft; minimum daily, 26 ft³/s Aug. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	329	55	813	171	162	290	712	141	96	388	44	120
2	442	53	865	177	257	590	1010	170	79	776	46	89
3	570	51	1020	173	479	344	1110	248	296	721	81	66
4	765	54	988	159	318	252	974	264	172	816	72	54
5	750	56	938	137	227	197	799	196	104	814	77	47
6	471	61	902	139	221	181	1020	163	78	808	52	41
7	251	76	612	171	234	174	1020	142	77	799	43	40
8	176	81	614	236	274	167	1050	124	63	799	39	40
9	134	81	775	195	178	155	1100	111	626	805	41	39
10	111	73	1060	174	196	126	1080	100	319	787	127	37
11	96	74	768	168	175	108	1060	91	186	771	93	36
12	91	88	476	149	277	107	1050	86	144	755	57	62
13	97	82	338	145	387	101	1070	80	160	756	44	100
14	122	74	266	156	265	103	1070	78	111	784	38	59
15	118	73	236	526	163	130	1060	80	83	808	34	46
16	103	63	205	459	175	150	960	73	71	789	32	43
17	89	54	190	229	145	136	679	68	59	797	29	43
18	72	59	220	196	117	122	488	98	55	783	29	42
19	68	410	216	250	101	111	371	204	50	752	27	43
20	63	301	181	368	96	103	306	153	55	757	27	44
21	61	562	160	221	96	96	265	120	71	728	26	38
22	59	337	146	187	100	90	228	157	147	444	98	38
23	57	216	132	162	102	87	227	121	91	267	129	40
24	54	170	137	161	99	84	269	92	69	204	54	36
25	53	144	810	150	97	84	293	78	55	163	40	34
26	79	490	682	121	98	85	213	78	54	133	108	33
27	74	759	391	105	97	83	183	197	50	108	254	32
28	75	770	292	99	102	80	295	122	52	87	278	31
29	69	739	238	99	---	76	214	91	48	68	189	32
30	64	705	206	166	---	313	170	76	174	53	116	34
31	57	---	182	192	---	882	---	123	---	47	82	---
TOTAL	5620	6811	15059	6041	5238	5607	20346	3925	3695	17567	2406	1439
MEAN	181	227	486	195	187	181	678	127	123	567	77.6	48.0
MAX	765	770	1060	526	479	882	1110	264	626	816	278	120
MIN	53	51	132	99	96	76	170	68	48	47	26	31
CAL YR 1986	TOTAL	103100		MEAN	282	MAX	1200	MIN	18			
WTR YR 1987	TOTAL	93754		MEAN	257	MAX	1110	MIN	26			

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 984.16 ft above National Geodetic Vertical Datum of 1929. (Levels by U.S. Army Corps of Engineers.) Prior to Apr. 3, 1953, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. 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.

AVERAGE DISCHARGE.--34 years, (1954-87), 216 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, 8.8 ft³/s Sept. 22, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,900, ft³/s July 2, gage height 9.04 ft; minimum daily, 27 ft³/s Sept. 27-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	300	94	244	196	180	250	459	157	418	732	46	46
2	538	87	977	192	205	388	854	173	261	4260	44	48
3	740	82	1640	184	341	305	704	250	461	3270	52	42
4	961	87	1080	173	281	230	477	253	473	1150	52	38
5	712	110	565	160	217	198	404	216	271	861	52	35
6	377	137	393	152	197	193	1000	185	194	781	48	33
7	251	140	325	160	186	191	1790	165	158	703	43	32
8	190	129	332	166	184	181	1320	150	132	597	40	31
9	155	123	485	161	161	171	723	137	167	326	42	31
10	134	110	876	159	155	150	485	127	205	256	47	31
11	116	106	540	159	146	131	378	119	157	180	47	32
12	106	121	367	147	165	126	429	113	452	147	43	34
13	103	131	278	142	210	123	489	108	751	128	40	34
14	127	115	231	142	189	120	384	100	364	117	38	34
15	153	107	214	197	158	120	331	99	254	105	37	33
16	132	105	200	258	130	118	320	97	441	98	34	32
17	116	102	193	209	130	110	283	91	236	93	33	32
18	103	100	228	187	122	107	251	96	167	86	32	37
19	93	141	263	289	112	105	225	374	138	80	31	38
20	87	163	228	428	108	102	205	286	190	75	29	36
21	85	303	205	279	107	120	190	189	519	71	30	32
22	84	266	191	230	105	127	178	730	842	69	32	32
23	81	206	178	193	106	126	176	638	496	65	36	32
24	79	178	184	172	106	101	199	294	305	61	33	31
25	78	157	618	190	103	89	204	197	222	59	32	31
26	121	900	542	145	101	84	178	203	463	57	51	29
27	140	1450	374	128	100	84	166	284	350	55	79	27
28	131	688	297	112	105	83	193	282	227	53	67	27
29	129	416	253	113	---	80	206	188	172	51	55	27
30	117	304	225	171	---	196	179	187	178	49	47	28
31	104	---	206	209	---	523	---	616	---	48	44	---
TOTAL	6643	7158	12932	5803	4410	5032	13380	7104	9664	14683	1336	1005
MEAN	214	239	417	187	158	162	446	229	322	474	43.1	33.5
MAX	961	1450	1640	428	341	523	1790	730	842	4260	79	48
MIN	78	82	178	112	100	80	166	91	132	48	29	27
CAL YR 1986	TOTAL	85062	MEAN	233	MAX	2420	MIN	37				
WTR YR 1987	TOTAL	89150	MEAN	244	MAX	4260	MIN	27				

MUSKINGUM RIVER BASIN

85

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 current year. 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.

REMARKS.--Estimated daily discharges: Jan. 23 to Feb. 3. Records good except those for periods of estimated record, which are fair. 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.--66 years, 1,525 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 daily discharge, 7,430 ft³/s Dec. 7, gage height, 11.37 ft; minimum daily, 286 ft³/s Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1680	616	3260	1850	1500	1110	3160	1150	1910	1920	612	378
2	3140	587	5050	1720	1400	1920	4460	1150	1390	5630	518	370
3	3090	561	5420	1450	1700	2050	5630	1510	2610	6380	597	365
4	4880	632	5870	1330	1880	1590	4630	1740	2830	6750	735	361
5	4890	671	6400	1240	1390	1320	4090	1620	1920	6820	701	350
6	3370	698	6950	1170	1240	1260	5300	1450	1500	6870	714	348
7	2870	737	6630	1200	1200	1190	6170	1300	1230	6830	656	512
8	2580	715	3680	1280	1230	1150	5850	1190	1070	6880	584	422
9	2300	678	3240	1270	1200	1130	5990	1100	1180	6810	543	390
10	1900	652	4450	1220	1050	1100	6400	1010	2150	6830	593	383
11	1450	688	4510	1230	1070	1010	6650	941	2310	6460	669	359
12	1170	783	3550	1170	1070	963	6540	892	2430	5970	586	350
13	1040	870	2830	1080	1410	898	6660	830	3740	4250	533	348
14	1030	837	2440	1070	1400	801	4930	820	2590	3880	483	341
15	1150	798	2230	1210	1240	704	4430	817	1990	3950	470	325
16	1010	811	2130	1860	1040	713	4180	755	2180	3270	440	315
17	900	799	1830	1550	1030	700	3750	673	1630	2880	416	303
18	763	995	1610	1320	956	664	2850	738	1220	2810	386	291
19	602	1200	1740	1420	871	646	2390	1970	994	2700	340	286
20	569	1690	1530	2500	817	626	2020	1890	1090	2570	325	304
21	555	1710	1390	2350	793	604	1930	1340	1670	2630	314	322
22	547	2000	1290	1810	792	578	1730	2040	1790	2490	335	320
23	535	1610	1370	1300	794	573	1610	2450	2080	2260	513	303
24	518	1480	1150	1100	755	569	1690	1710	1670	2010	496	297
25	513	1440	2960	1100	727	556	1710	1320	1440	1340	742	299
26	591	2520	3560	1100	708	553	1530	1250	1290	956	884	289
27	722	5830	2620	1000	697	557	1330	2960	1640	870	881	318
28	681	5530	2240	980	746	541	1440	2060	1300	1010	806	307
29	678	4820	2130	940	---	534	1470	1560	1100	966	696	297
30	667	3550	2660	1000	---	635	1280	1310	966	800	615	302
31	660	---	2290	1300	---	2780	---	1970	---	686	497	---
TOTAL	47051	46508	99010	42120	30706	30025	111800	43516	52910	116478	17680	10155
MEAN	1518	1550	3194	1359	1097	969	3727	1404	1764	3757	570	339
MAX	4890	5830	6950	2500	1880	2780	6660	2960	3740	6880	884	512
MIN	513	561	1150	940	697	534	1280	673	966	686	314	286
CAL YR 1986	TOTAL	642280	MEAN	1760	MAX	6950	MIN	248				
WTR YR 1987	TOTAL	647959	MEAN	1775	MAX	6950	MIN	286				

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.

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.--Estimated daily discharges: Jan. 23-30, July 26 to Aug. 2, Aug. 6-9, 13-22, 25-31. Records fair. 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.--57 years, 420 ft³/s, 12.34 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)
Dec. 3	0900	2,420	15.31	July 3	0300	2,780	15.62
Apr. 8	1230	*3,070	*15.85				

Minimum daily discharge 57 ft³/s Sept. 29.

REVISIONS.--Revised peak discharges and maximums (*) as well as daily discharges for water years 1984-1986 have been revised as shown in the following tables. They supersede figures published in reports for 1984-1986.

Water Year	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
1984	Mar. 22, 1984	0900	*3,900	*16.40
1985	Feb. 24, 1985	0500	*3,240	*15.97
	Apr. 1	1730	2,000	14.80
	June 12	1200	1,920	14.67
1986	Nov. 14, 1985	0530	2,540	15.42
	Nov. 18	0830	2,800	15.64
	Nov. 30	0830	1,990	14.78
	Dec. 14	0500	2,440	15.33
	Feb. 7, 1986	1630	3,020	15.81
	Mar. 16	0200	2,530	15.41
	July 12	1100	*3,470	*16.13

MUSKINGUM RIVER BASIN

87

03139000 KILLBUCK CREEK AT KILLBUCK, OH

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	130	632	160	222	360	2000	816	647	132	95	153
2	91	292	490	150	200	340	1600	708	561	132	115	110
3	82	554	400	140	872	310	1300	656	469	128	237	115
4	75	460	942	130	1280	290	1100	1540	390	123	283	135
5	73	336	1340	120	879	450	1200	1550	342	587	193	107
6	80	258	1150	110	600	783	1140	1360	383	536	150	96
7	77	215	1190	110	450	734	1080	1180	314	499	185	92
8	73	185	1100	100	370	668	969	1200	270	274	351	94
9	76	163	1000	95	330	580	864	1470	247	200	473	90
10	76	149	905	90	476	520	777	1340	227	178	722	90
11	112	308	780	85	1270	480	696	1170	206	170	487	111
12	139	652	813	80	1040	440	619	1050	190	188	306	100
13	160	636	834	80	966	390	609	958	212	143	206	97
14	190	583	802	75	2000	350	589	948	322	132	162	115
15	160	472	760	70	1970	536	1110	893	256	123	135	124
16	138	470	673	70	1610	1280	1070	811	228	159	116	101
17	118	475	569	65	1410	1670	1030	722	193	125	107	95
18	109	483	454	65	1230	1460	960	626	193	117	98	92
19	165	456	380	60	1040	1580	913	552	1070	111	102	90
20	148	424	353	60	931	1550	850	553	619	104	95	87
21	140	442	325	60	833	3050	771	1300	371	100	87	85
22	182	402	484	60	737	3780	775	1380	275	97	87	84
23	511	335	483	60	658	3440	1160	1480	239	95	106	81
24	405	328	361	407	587	3340	1610	1590	239	94	98	85
25	253	336	291	975	554	3250	1800	1380	198	96	90	99
26	193	273	260	902	490	3100	1650	1190	175	96	85	99
27	182	236	240	791	452	2520	1510	980	157	249	80	103
28	165	705	220	643	422	2010	1360	916	156	206	79	103
29	148	866	200	542	400	2310	1130	962	153	134	81	101
30	132	751	190	413	---	2230	955	833	139	110	143	95
31	124	---	170	294	---	2020	---	750	---	100	321	---
TOTAL	4668	12375	18791	7062	24279	45821	33197	32864	9441	5538	5875	3029
MEAN	151	413	606	228	837	1478	1107	1060	315	179	190	101
MAX	511	866	1340	975	2000	3780	2000	1590	1070	587	722	153
MIN	73	130	170	60	200	290	589	552	139	94	79	81
CAL YR 1983	TOTAL	175386	MEAN	481	MAX	3740	MIN	59	CFSM	1.04	IN	14.08
WTR YR 1984	TOTAL	202940	MEAN	554	MAX	3780	MIN	60	CFSM	1.23	IN	16.65

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	203	168	822	140	2030	1930	214	520	141	93	189
2	149	263	170	897	140	1580	1950	402	380	142	92	137
3	125	288	175	869	140	1220	1970	433	436	165	92	116
4	112	273	185	800	140	997	1880	320	337	165	89	107
5	101	738	170	666	140	943	1550	266	291	142	88	100
6	95	675	160	531	140	812	1330	245	271	181	94	96
7	93	546	160	448	140	720	1140	241	229	173	98	97
8	104	396	150	388	140	766	982	222	209	143	128	93
9	106	315	150	314	140	707	843	204	197	131	112	89
10	101	590	150	272	140	628	752	193	198	141	97	90
11	97	720	500	240	140	558	714	183	233	160	89	90
12	97	624	700	220	160	987	678	177	1560	134	83	85
13	103	491	702	200	180	1010	637	173	1440	122	82	82
14	105	387	710	190	210	873	594	158	1200	114	81	79
15	102	331	718	180	250	727	543	167	522	124	103	77
16	102	308	646	170	290	611	490	191	461	129	348	77
17	103	268	541	160	270	530	419	373	383	117	414	78
18	103	239	436	160	240	456	382	324	358	111	284	77
19	105	219	374	150	220	405	350	283	347	105	208	73
20	108	201	339	150	200	385	327	228	339	100	177	72
21	105	201	322	150	190	348	305	219	277	113	139	69
22	133	194	414	150	812	325	282	257	240	125	124	71
23	153	180	459	140	2440	317	264	217	256	102	115	69
24	138	175	418	140	3200	313	261	190	229	96	110	71
25	133	168	340	140	3040	307	265	175	198	93	131	78
26	126	159	265	140	2870	278	246	159	184	103	126	73
27	122	173	250	140	2790	263	243	144	172	111	117	82
28	120	188	257	140	2610	272	236	475	161	97	116	78
29	355	194	276	140	---	1120	237	616	151	92	115	72
30	409	181	670	140	---	1140	211	583	142	89	146	71
31	285	---	795	140	---	1310	---	697	---	87	231	---
TOTAL	4208	9888	11770	9387	21512	22938	22011	8729	11921	3848	4322	2638
MEAN	136	330	380	303	768	740	734	282	397	124	139	87.9
MAX	409	738	795	897	3200	2030	1970	697	1560	181	414	189
MIN	93	159	150	140	140	263	211	144	142	87	81	69
CFSM	.29	.71	.82	.65	1.66	1.59	1.58	.61	.86	.27	.30	.19
IN.	.34	.79	.94	.75	1.72	1.84	1.76	.70	.96	.31	.35	.21
CAL YR 1984	TOTAL	192972	MEAN	527	MAX	3780	MIN	60	CFSM	1.14	IN	15.42
WTR YR 1985	TOTAL	133172	MEAN	365	MAX	3200	MIN	69	CFSM	.79	IN.	10.68

MUSKINGUM RIVER BASIN

03139000 KILLBUCK CREEK AT KILLBUCK, OH--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	45	84	1890	230	340	574	429	228	775	376	89	60	
2	55	84	1730	220	680	524	412	214	488	1560	90	60	
3	47	86	1560	210	875	511	375	190	352	1410	86	60	
4	47	177	1360	281	2010	562	367	182	277	818	83	60	
5	48	664	1100	249	2340	585	387	175	241	431	80	70	
6	48	1080	858	230	2270	566	366	166	453	299	85	65	
7	48	855	732	220	2890	550	341	187	497	227	94	60	
8	47	825	655	200	2930	481	331	179	410	194	96	55	
9	47	776	592	190	2630	541	330	161	326	488	89	54	
10	49	678	550	190	2080	702	337	145	252	645	88	59	
11	52	1350	512	180	1580	1060	333	136	230	760	96	61	
12	50	1820	562	180	1100	1130	321	130	307	3130	97	145	
13	49	2040	1730	170	800	1600	299	127	262	2440	84	154	
14	53	2120	2370	170	640	1950	277	130	216	1760	80	94	
15	70	1990	2120	160	520	2160	314	125	230	1190	82	80	
16	75	1860	2090	160	480	2130	360	180	327	721	87	70	
17	90	2240	1940	616	560	1840	361	189	369	674	85	65	
18	89	2740	1620	1000	738	1500	320	177	270	510	93	85	
19	87	2520	1330	1500	907	1680	287	164	190	391	90	202	
20	99	2180	1030	1380	1090	1940	274	259	264	312	75	140	
21	95	1770	848	1370	1190	1600	369	224	229	257	72	97	
22	88	1440	680	1320	1330	1300	477	188	166	220	70	85	
23	70	1140	560	1160	1300	1000	473	180	178	180	65	83	
24	72	830	480	969	1200	840	424	158	142	166	65	123	
25	98	647	432	818	1100	687	388	137	121	145	60	191	
26	96	540	380	683	920	640	367	123	111	135	60	186	
27	85	622	340	560	800	590	332	146	234	119	65	275	
28	74	1710	310	480	679	550	297	148	1340	109	104	497	
29	69	1740	290	420	---	510	269	134	1060	106	85	215	
30	67	1980	270	370	---	486	239	255	542	99	66	163	
31	72	---	250	310	---	470	---	1100	---	92	60	---	
TOTAL	2081	38588	31171	16196	35979	31259	10456	6237	10859	19964	2521	3614	
MEAN	67.1	1286	1006	522	1285	1008	349	201	362	644	81.3	120	
MAX	99	2740	2370	1500	2930	2160	477	1100	1340	3130	104	497	
MIN	45	84	250	160	340	470	239	123	111	92	60	54	
CFSM	.14	2.77	2.17	1.12	2.77	2.17	.75	.43	.78	1.39	.18	.26	
IN.	.17	3.09	2.50	1.30	2.88	2.51	.84	.50	.87	1.60	.20	.29	
CAL YR 1985	TOTAL	179146		MEAN	491	MAX	3200	MIN	45	CFSM	1.06	IN.	14.36
WTR YR 1986	TOTAL	208925		MEAN	572	MAX	3130	MIN	45	CFSM	1.23	IN.	16.75

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	291	129	663	394	310	308	641	352	255	599	88	161	
2	451	124	1530	396	339	542	1050	404	214	1860	100	139	
3	605	118	2380	401	466	515	1130	524	387	2560	131	124	
4	686	130	2040	387	442	451	1080	640	311	1860	115	113	
5	710	135	1800	345	389	392	1210	546	233	1660	111	108	
6	575	145	1560	326	361	351	1630	479	200	1590	100	96	
7	408	149	1270	343	346	323	2440	418	185	1370	94	97	
8	308	145	968	374	348	307	3190	366	167	1020	90	94	
9	244	148	859	380	303	304	2860	327	871	679	100	97	
10	190	139	996	373	276	276	2520	301	741	514	119	90	
11	164	141	909	383	304	231	2000	274	427	414	128	86	
12	144	176	847	355	319	216	1620	258	365	345	109	114	
13	143	176	716	333	373	207	1330	238	356	290	100	181	
14	193	158	592	325	377	200	1050	224	306	269	94	155	
15	201	150	531	455	316	216	861	220	272	262	88	105	
16	177	148	481	582	249	220	814	204	272	238	84	86	
17	162	143	451	529	246	220	724	191	214	209	80	87	
18	153	143	447	475	224	229	650	200	180	188	78	118	
19	144	314	436	585	196	227	579	429	165	174	74	123	
20	136	420	408	821	185	209	514	364	206	157	72	116	
21	130	519	369	636	187	188	460	302	209	145	78	101	
22	116	497	336	551	191	172	422	318	194	137	130	97	
23	113	409	310	400	194	164	417	267	192	127	186	101	
24	108	332	310	340	188	158	478	227	178	119	123	92	
25	110	275	799	300	178	152	503	202	157	110	110	80	
26	191	784	759	280	176	149	445	193	142	100	180	71	
27	198	1450	659	260	176	143	404	315	130	94	230	66	
28	168	1170	579	250	179	143	457	236	147	96	170	63	
29	160	1010	511	240	---	137	440	218	125	100	160	57	
30	146	855	468	300	---	171	396	211	210	96	150	76	
31	135	---	427	419	---	576	---	303	---	92	160	---	
TOTAL	7660	10632	25411	12538	7838	8097	32315	9751	8011	17474	3632	3094	
MEAN	247	354	820	404	280	261	1077	315	267	564	117	103	
MAX	710	1450	2380	821	466	576	3190	640	871	2560	230	181	
MIN	108	118	310	240	176	137	396	191	125	92	72	57	
CFSM	.53	.76	1.77	.87	.60	.56	2.32	.68	.58	1.22	.25	.22	
IN.	.61	.85	2.04	1.01	.63	.65	2.59	.78	.64	1.40	.29	.25	
CAL YR 1986	TOTAL	180788		MEAN	495	MAX	3130	MIN	54	CFSM	1.07	IN.	14.49
WTR YR 1987	TOTAL	146453		MEAN	401	MAX	3190	MIN	57	CFSM	.86	IN.	11.74

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 downstream from Little Mill Creek and 6 mi north of Coshocton.

DRAINAGE AREA.--27.2 mi².

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

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 782.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 23-29, Feb. 7-11. Records good, except those for estimated daily discharges, which are fair. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--51 years, 28.7 ft³/s, 14.33 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; 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)
July 2	0945	*815	*9.02	No other peak greater than base discharge.			
Minimum daily discharge 1.1 ft ³ /s Aug. 21.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	32	4.2	22	23	23	50	21	21	12	29	2.4	2.8	
2	18	4.2	404	24	29	55	44	31	10	415	2.5	2.2	
3	41	4.1	226	22	31	36	31	51	29	82	5.7	2.0	
4	66	7.1	92	20	26	29	33	52	15	44	3.3	2.0	
5	71	7.0	55	17	22	24	64	37	11	71	6.2	1.9	
6	25	7.9	43	17	21	22	216	31	9.0	70	4.2	1.8	
7	16	6.7	38	21	19	20	383	28	8.1	37	2.6	1.8	
8	12	11	36	23	16	20	179	24	6.9	29	2.2	1.9	
9	10	12	53	21	15	19	89	20	69	23	2.8	1.9	
10	8.6	9.0	58	24	14	15	60	18	23	21	3.2	1.7	
11	7.3	18	42	26	13	14	49	16	15	17	2.4	1.5	
12	6.7	23	37	23	19	14	45	14	72	14	2.1	7.7	
13	10	16	31	21	18	12	37	12	53	12	1.9	22	
14	14	13	25	21	16	13	33	14	34	16	1.8	4.3	
15	9.4	12	23	25	12	13	37	13	32	11	1.6	3.0	
16	7.8	12	22	23	11	11	35	10	32	11	1.5	2.6	
17	7.1	11	21	20	13	9.7	32	9.3	19	8.5	1.4	2.6	
18	6.1	10	25	21	12	9.8	28	18	15	7.5	1.3	3.4	
19	5.4	13	24	85	10	10	25	50	13	6.8	1.4	3.7	
20	5.1	14	21	70	9.4	9.3	22	22	15	6.2	1.3	6.5	
21	5.0	25	19	45	10	8.7	20	17	16	5.6	1.1	3.3	
22	4.8	17	17	38	10	8.3	19	21	17	5.0	12	3.0	
23	4.5	15	15	25	11	8.1	29	15	12	4.6	9.9	4.8	
24	4.3	14	17	21	9.3	7.7	34	12	10	4.2	2.6	3.1	
25	4.6	12	102	19	8.5	7.9	28	10	8.4	3.9	2.0	2.5	
26	11	106	50	18	8.1	7.6	24	13	7.8	3.7	14	2.2	
27	7.1	63	40	17	8.1	7.3	27	14	6.7	3.6	9.6	2.1	
28	6.1	38	35	16	9.5	7.0	36	9.9	6.9	3.2	7.9	1.9	
29	5.6	31	31	15	---	6.6	28	9.2	6.1	3.0	4.9	2.0	
30	4.6	26	28	38	---	9.5	24	10	8.8	2.6	3.2	3.6	
31	4.3	---	25	35	---	28	---	19	---	2.5	2.6	---	
TOTAL	440.4	562.2	1677	834	423.9	512.5	1732	641.4	592.7	972.9	121.6	105.8	
MEAN	14.2	18.7	54.1	26.9	15.1	16.5	57.7	20.7	19.8	31.4	3.92	3.53	
MAX	71	106	404	85	31	55	383	52	72	415	14	22	
MIN	4.3	4.1	15	15	8.1	6.6	19	9.2	6.1	2.5	1.1	1.5	
CFSM	.52	.69	1.99	.99	.56	.61	2.12	.76	.73	1.15	.14	.13	
IN.	.60	.77	2.29	1.14	.58	.70	2.37	.88	.81	1.33	.17	.14	
CAL YR 1986	TOTAL	9325.2		MEAN	25.5	MAX	404	MIN	1.0	CFSM	.94	IN.	12.75
WTR YR 1987	TOTAL	8616.4		MEAN	23.6	MAX	415	MIN	1.1	CFSM	.87	IN.	11.78

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 excellent except for period of estimated record and Apr. 20 to June 30, which are 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.

AVERAGE DISCHARGE.--51 years, 4,988 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, 22,900 ft³/s Apr. 8, gage height, 15.82 ft; minimum daily, 894 ft³/s Aug. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3030	1640	7680	5120	4540	2920	6920	4650	4430	2910	1400	1990
2	4940	1560	13200	4590	4290	4600	8670	4270	4190	9590	1280	1930
3	5450	1500	19000	4250	4870	6110	11300	4750	4360	14800	1390	1760
4	8440	1540	19500	4050	5920	5350	11300	6270	5330	16400	1900	1580
5	9840	1740	19200	3790	5160	4460	10300	6980	4040	16700	1860	1420
6	8850	1940	18900	3520	4420	3940	12200	6480	3370	16300	1730	1210
7	6590	2050	15900	3550	4090	3680	19200	5630	2880	15400	1570	1140
8	5320	2160	12000	3710	3970	3500	22400	4890	2580	12700	1450	1100
9	4490	2290	10400	3820	3910	3380	21700	4300	3390	10700	1340	1090
10	3930	2330	11700	3890	3600	3270	21000	3880	6880	9800	1370	1120
11	3310	2380	12800	3930	3410	3030	20500	3590	5200	9140	1730	1110
12	2740	2710	11200	3890	3490	2810	18900	3320	4510	8400	1730	1110
13	2520	2910	9150	3760	3750	2680	17700	3110	6200	6790	1470	1500
14	2510	2850	7890	3710	4060	2560	15200	2920	5520	5700	1310	1750
15	2740	2610	7140	3800	3830	2400	12400	2930	4580	5640	1210	1500
16	2740	2500	6800	4960	3260	2460	10100	2680	4600	5160	1130	1300
17	2520	2420	6370	5470	2960	2490	8720	2510	3850	4470	1070	1210
18	2300	2450	5770	4580	2950	2480	7370	2390	3080	4190	1020	1230
19	1970	2960	5870	4660	2760	2410	6450	3690	2570	4000	966	1440
20	1800	4230	5600	7260	2580	2340	5680	4790	2560	3780	923	1660
21	1700	4940	4760	8500	2470	2260	5220	4110	3530	3650	894	1570
22	1640	5880	4330	7320	2430	2160	4800	4430	3720	3520	923	1450
23	1600	5630	4090	5200	2430	2080	4530	4970	4180	3320	1790	1390
24	1540	4860	3650	4000	2400	2020	4730	4030	3690	3070	2200	1320
25	1500	4410	5250	3500	2340	1970	5740	3360	3240	2470	1800	1230
26	1610	5160	7760	3200	2270	1930	6380	3000	2840	1950	1610	1140
27	1820	11800	7250	3100	2210	1930	5540	4260	2860	1780	2250	1060
28	1930	13700	5990	3000	2230	1900	5510	4150	2650	1780	2780	1000
29	1900	12500	5290	2900	---	1850	6050	3810	2430	1820	2860	966
30	1800	9390	5510	3400	---	1840	5470	3360	2220	1640	2480	1040
31	1730	---	5610	4220	---	3780	---	3680	---	1500	2200	---
TOTAL	104800	125040	285560	134650	96600	90590	321980	127190	115480	209070	49636	40316
MEAN	3381	4168	9212	4344	3450	2922	10730	4103	3849	6744	1601	1344
MAX	9840	13700	19500	8500	5920	6110	22400	6980	6880	16700	2860	1990
MIN	1500	1500	3650	2900	2210	1840	4530	2390	2220	1500	894	966
CAL YR 1986	TOTAL	1806003	MEAN	4948	MAX	20000	MIN	709				
WTR YR 1987	TOTAL	1700912	MEAN	4660	MAX	22400	MIN	894				

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 downstream from Senecaville Dam and 1.5 mi southeast of Senecaville.

DRAINAGE AREA.--118 mi².

PERIOD OF RECORD.--September 1938 to current year. Published as Seneca Fork near Senecaville prior to 1940.

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

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.--No estimated daily discharges. Records good except those for discharges between 100 and 350 ft³/s, 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.--49 years, 131 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, 875 ft³/s Dec. 7, gage height, 9.31 ft; minimum daily, 2.8 ft³/s, Mar. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	5.6	531	187	5.0	3.9	5.0	4.6	4.2	4.0	3.9	5.0
2	5.4	5.6	442	270	5.1	3.9	5.1	4.2	88	206	4.0	5.1
3	5.3	6.3	4.1	327	5.1	2.8	5.1	4.0	71	282	4.1	5.2
4	5.7	6.5	22	234	5.1	3.4	4.7	124	24	62	4.2	5.5
5	6.0	35	452	16	5.1	4.8	4.9	264	4.4	4.6	4.4	5.6
6	5.5	51	705	3.6	5.1	5.4	5.2	218	4.3	4.6	4.4	5.4
7	5.8	51	782	3.8	5.1	4.5	6.0	38	4.2	4.6	4.3	4.5
8	6.5	52	821	21	5.1	3.6	6.6	16	4.9	4.4	4.2	3.9
9	6.6	53	826	48	5.1	4.6	5.5	4.3	4.9	4.5	4.3	4.2
10	7.0	125	819	69	5.2	5.6	259	4.3	4.8	4.4	4.2	5.0
11	8.0	154	814	69	4.1	5.5	671	4.2	4.4	4.4	4.2	5.3
12	7.7	178	822	120	3.9	5.5	673	4.4	18	4.4	4.2	5.2
13	7.1	267	822	238	4.0	4.9	671	4.3	5.1	4.4	4.0	4.9
14	7.1	367	820	216	4.0	4.7	661	4.3	5.0	4.4	3.8	6.3
15	7.0	409	820	30	4.1	4.9	654	4.1	139	4.4	3.9	4.7
16	6.5	406	815	19	4.1	4.9	650	4.5	350	4.4	4.1	4.9
17	6.5	403	825	4.6	4.0	4.5	369	4.4	405	6.1	4.1	4.9
18	6.5	401	833	4.6	4.2	4.4	152	4.5	325	4.2	4.0	4.9
19	6.1	399	523	4.9	4.2	4.4	154	4.9	158	4.2	4.0	4.0
20	5.5	399	115	141	4.2	4.7	154	4.9	4.9	5.1	3.8	4.3
21	5.5	425	128	399	4.2	4.7	179	135	4.9	4.6	4.6	4.7
22	5.4	435	61	509	4.2	4.4	193	152	282	3.5	5.6	4.9
23	5.4	432	5.0	302	4.2	5.2	193	3.9	465	4.3	5.2	4.7
24	5.5	452	15	126	4.2	5.2	193	3.7	516	4.0	5.2	4.6
25	5.6	465	5.1	125	4.1	4.2	193	3.7	243	3.6	4.9	4.5
26	5.7	416	5.1	46	4.0	4.0	193	134	4.0	3.5	4.3	4.8
27	5.3	6.1	5.1	4.2	4.0	4.8	193	109	3.8	4.1	5.2	4.9
28	5.3	190	5.1	4.2	4.0	5.6	227	4.9	3.9	4.5	5.3	4.9
29	5.3	280	124	4.2	---	5.6	255	4.7	4.0	4.2	5.3	4.8
30	5.9	280	187	4.7	---	5.3	141	4.1	4.0	4.2	5.3	4.5
31	5.8	---	187	5.0	---	4.9	---	3.8	---	4.2	5.2	---
TOTAL	188.2	7155.1	13340.5	3555.8	124.7	144.8	7076.1	1284.7	3159.7	671.8	138.2	146.1
MEAN	6.07	239	430	115	4.45	4.67	236	41.4	105	21.7	4.46	4.87
MAX	8.0	465	833	509	5.2	5.6	673	264	516	282	5.6	6.3
MIN	5.3	5.6	4.1	3.6	3.9	2.8	4.7	3.7	3.8	3.5	3.8	3.9
CAL YR 1986	TOTAL	40756.53		MEAN	112	MAX	833	MIN	.23			
WTR YR 1987	TOTAL	36985.7		MEAN	101	MAX	833	MIN	2.8			

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: Jan. 23-29, Apr. 8, 9, July 22. Records good except for periods of estimated daily discharges and Feb. 8-12, which are poor. Flow regulated by Senecaville Lake on Seneca Fork, 22 mi upstream, beginning in 1937. Water is diverted 2.7 mi upstream from station for municipal supply of city of Cambridge; diversion not included in figures of daily discharge. Water-quality data collected at this site 1964 to 1975, 1977.

AVERAGE DISCHARGE.--52 years, 446 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, 3,370 ft³/s Dec. 4, gage height, 14.43 ft; Maximum gage height 14.89 ft Apr. 9, backwater from Salt Fork and Crooked Creek; minimum daily, 6.8 ft³/s Aug. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	41	472	360	285	406	1390	308	79	56	8.2	24
2	169	48	1440	381	295	886	825	158	219	499	7.8	19
3	177	47	2890	541	468	520	664	165	249	1160	7.9	17
4	336	55	3300	574	355	307	496	339	207	571	9.3	16
5	856	68	2620	394	258	223	589	436	131	199	10	14
6	473	124	1460	157	209	193	1220	506	62	90	12	13
7	140	171	1020	195	199	174	2170	373	45	73	14	16
8	76	174	1020	398	190	159	2900	188	36	60	16	18
9	55	554	1200	362	165	151	3100	146	39	57	14	20
10	44	477	1640	340	126	135	2930	108	44	58	11	22
11	36	327	1660	406	142	116	1830	97	39	68	12	17
12	37	553	1380	342	155	110	1230	94	310	45	11	16
13	37	434	1150	341	229	115	1260	86	1180	35	9.7	16
14	49	381	1010	442	192	109	1120	78	569	29	9.9	18
15	67	419	994	371	157	107	1020	111	165	24	12	18
16	62	443	980	223	106	111	1020	148	251	25	11	18
17	45	429	962	189	118	111	1010	84	406	21	11	15
18	36	414	987	155	113	96	634	102	432	25	11	13
19	32	409	1010	312	109	88	424	342	365	23	6.8	13
20	29	431	646	1330	103	77	377	266	186	21	8.5	14
21	26	732	313	1030	101	74	345	137	154	19	8.1	15
22	32	715	278	858	105	71	349	256	215	10	45	22
23	32	569	181	480	116	70	375	397	498	8.5	278	18
24	32	519	125	320	137	70	693	259	518	9.1	161	15
25	32	519	592	210	115	76	671	114	600	10	35	14
26	31	791	729	150	105	79	506	104	388	11	23	13
27	40	1750	386	120	94	84	435	243	176	11	20	11
28	51	1740	274	100	94	76	452	194	79	9.5	33	14
29	49	809	218	90	---	72	509	72	53	8.6	143	13
30	43	554	314	185	---	73	471	63	46	8.5	87	29
31	41	---	370	391	---	723	---	73	---	8.2	36	---
TOTAL	3237	14697	31621	11747	4841	5662	31015	6047	7741	3252.4	1082.2	501
MEAN	104	490	1020	379	173	183	1034	195	258	105	34.9	16.7
MAX	856	1750	3300	1330	468	886	3100	506	1180	1160	278	29
MIN	26	41	125	90	94	70	345	63	36	8.2	6.8	11
CAL YR 1986	TOTAL	119132.8		MEAN	326	MAX	3390	MIN	5.4			
WTR YR 1987	TOTAL	121443.6		MEAN	333	MAX	3300	MIN	6.8			

MUSKINGUM RIVER BASIN

93

03142290 SALT FORK LAKE NEAR CAMBRIDGE.

LOCATION.--Lat 40°06'15", long 81°33'15", in T.3 N., R.3 W., Guernsey County, Hydrologic Unit 05040005, at outlet works near left end of dam on Salt Fork, 0.8 mi upstream from mouth, 5.0 mi north of Cambridge, and 3.5 mi south of Kimbolton.

DRAINAGE AREA.--159 mi².

PERIOD OF RECORD. September 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD.

REMARKS.--Reservoir is formed by earthfill dam with concrete morning-glory spillway and emergency spillway cut in natural rock; storage began Dec. 30, 1967. Usable capacity, 41,950 acre-ft between elevations 772.5 ft (invert of lowest outlet) and 800.0 ft (crest of morning-glory spillway). Dead storage below elevation 772.5 ft, 1,250 acre-ft. Additional flood-retention capacity, 28,600 acre-ft between elevations 800.0 ft and 808.0 ft (crest of emergency spillway). Figures given herein represent usable contents. There are no gates on spillway and all regulation is done by conduits through dam. Reservoir is used for recreation, flood control, and future municipal supply.

COOPERATION.--Capacity table furnished by State Department of Natural Resources.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 72,570 acre-ft Aug. 13, 1980, elevation, 808.48 ft; minimum, 12,200 acre-ft Oct. 17, 1968, elevation, 786.53 ft.

EXTREMES FOR CURRENT YEAR: Maximum recorded contents, 55,910 acre-ft Apr. 8, elevation, 804.21 ft; minimum recorded, 43,040 acre-ft Aug. 22, elevation, 800.35 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	800.44	43,310	--
Oct. 31.....	800.54	43,620	+310
Nov. 30.....	801.85	47,770	+4,150
Dec. 31.....	801.43	46,430	-1,340
CAL YR 1986	--	--	--
Jan. 31.....	801.40	46,330	-100
Feb. 28.....	800.93	44,830	-1,500
Mar. 31.....	801.22	45,750	+920
Apr. 30.....	801.55	46,810	+1,060
May 31.....	801.39	46,300	-510
June 30.....	801.05	45,210	-1,090
July 31.....	800.57	43,720	-1,490
Aug. 31.....	800.67	44,030	+310
Sept. 30.....	800.52	43,560	-470
WTR YR 1987.....	--	--	+250

MUSKINGUM RIVER BASIN

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 current year. 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.--Estimated daily discharges: Jan. 23-29. Records good except for estimated period, which is fair. 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 (see station 03142290). Water-quality data collected at this site 1957, 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--49 years, 931 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, 5,530 ft³/s Dec. 7, gage height, 15.56 ft; minimum daily, 51 ft³/s Aug. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	261	132	1340	730	781	828	705	838	525	321	77	191
2	396	122	1670	756	789	1220	1520	779	509	436	75	165
3	371	114	3020	761	871	1100	1650	684	537	958	84	139
4	897	118	2300	801	852	877	1460	673	618	1640	83	116
5	1640	124	3150	846	759	723	1370	708	598	1640	108	101
6	1570	136	4120	822	679	634	1680	788	530	1260	132	91
7	1260	150	4670	686	634	583	2660	825	440	976	130	84
8	868	220	5000	612	598	550	1990	815	363	716	129	83
9	612	341	3840	658	554	509	2700	679	332	585	125	78
10	470	503	2520	745	507	471	4270	560	305	523	117	76
11	383	707	2480	761	505	438	4850	483	274	479	109	77
12	330	731	2500	774	517	405	4770	432	313	442	95	82
13	299	738	2280	772	544	384	4940	391	561	398	83	111
14	287	740	1940	727	556	377	4980	362	1210	358	74	119
15	284	673	1660	727	510	372	4900	394	1220	321	67	101
16	272	622	1520	761	462	366	3240	471	830	290	62	100
17	262	618	1440	678	423	355	2010	486	571	266	57	94
18	246	620	1390	596	401	345	1690	468	539	240	58	96
19	220	610	1380	638	382	335	1420	672	585	219	56	94
20	195	598	1360	873	367	318	1100	929	618	200	54	89
21	175	642	1220	1510	355	303	931	918	732	186	51	82
22	159	785	923	1580	351	287	834	757	635	171	57	81
23	146	960	727	1000	349	274	785	630	598	162	91	86
24	137	920	655	800	350	261	800	643	598	145	131	86
25	137	822	699	620	350	251	938	659	717	133	243	84
26	147	822	898	560	336	247	1070	595	740	121	260	80
27	149	1370	1180	520	337	247	998	585	727	113	210	74
28	145	2070	1070	480	502	246	913	566	593	106	185	68
29	138	2340	882	460	---	242	859	566	447	96	170	68
30	135	1930	756	610	---	251	863	497	356	85	157	84
31	133	---	706	729	---	355	---	513	---	78	180	---
TOTAL	12724	21278	59296	23593	14621	14154	62896	19366	17621	13664	3510	2880
MEAN	410	709	1913	761	522	457	2097	625	587	441	113	96.0
MAX	1640	2340	5000	1580	871	1220	4980	929	1220	1640	260	191
MIN	133	114	655	460	336	242	705	362	274	78	51	68
CAL YR 1986	TOTAL	269364	MEAN	738	MAX	5000	MIN	34				
WTR YR 1987	TOTAL	265603	MEAN	728	MAX	5000	MIN	51				

MUSKINGUM RIVER BASIN

95

03144000 WAKATOMIKA CREEK NEAR FRAZEYSBURG, OH

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

DRAINAGE AREA.--140 mi².

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

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

GAGE.--Water-stage recorder. Datum of gage is 748.12 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 31, 1936, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 24-Feb. 1. Records good except for estimated daily discharges, which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1970 to 1974.

AVERAGE DISCHARGE.--51 years, 154 ft³/s, 14.94 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)
Oct. 5	0130	1,830	5.34	June 21	0930	1,940	5.54
Dec. 3	0130	*4,030	*8.54	July 3	0030	2,350	6.19
Apr. 8	0230	2,210	5.97				

Minimum discharge, 7.0 ft³/s Aug. 20, 21, Sept. 29

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	84	43	160	134	110	195	242	105	75	71	15	13	
2	557	43	1940	142	131	249	391	112	78	1290	15	11	
3	189	42	2670	129	154	179	336	141	409	815	19	9.7	
4	857	51	823	115	129	143	282	184	284	287	18	8.9	
5	1090	71	460	100	112	129	335	141	134	193	25	8.4	
6	349	72	321	95	106	127	935	127	93	361	38	8.4	
7	192	69	266	115	108	115	1960	120	74	198	20	8.6	
8	132	82	241	132	111	112	1630	115	62	153	15	9.0	
9	98	114	267	114	93	110	727	103	63	117	14	9.5	
10	82	91	366	120	90	93	463	96	61	144	14	8.9	
11	71	95	254	132	84	83	352	90	46	104	14	8.3	
12	64	149	222	116	97	82	320	83	333	84	13	8.8	
13	68	127	177	105	103	77	272	75	613	72	12	10	
14	84	98	144	106	88	76	222	70	219	72	11	24	
15	81	91	142	121	80	77	227	73	130	65	9.7	24	
16	62	88	128	118	132	74	237	66	147	54	9.0	14	
17	55	81	122	99	150	66	213	58	91	47	8.5	11	
18	49	74	144	102	113	64	188	58	70	42	8.6	10	
19	44	79	136	188	64	63	165	131	60	38	7.9	11	
20	41	79	112	332	57	61	148	116	78	35	7.5	11	
21	40	132	100	219	61	57	136	75	942	32	7.5	10	
22	39	108	91	191	62	56	126	93	439	28	15	9.4	
23	38	98	84	175	65	53	149	84	208	25	16	9.6	
24	36	94	96	150	59	52	179	61	146	24	11	10	
25	38	83	520	140	55	53	167	51	106	22	9.6	11	
26	77	389	340	120	52	53	141	55	89	21	12	9.7	
27	80	866	253	110	51	50	132	433	73	20	22	8.2	
28	62	380	208	100	61	48	147	164	63	19	49	7.7	
29	56	260	178	94	---	46	130	113	54	17	23	7.5	
30	51	197	164	100	---	62	118	93	55	16	15	8.1	
31	47	---	146	120	---	310	---	89	---	16	14	---	
TOTAL	4813	4246	11275	4134	2578	3015	11070	3375	5295	4482	488.3	318.7	
MEAN	155	142	364	133	92.1	97.3	369	109	177	145	15.8	10.6	
MAX	1090	866	2670	332	154	310	1960	433	942	1290	49	24	
MIN	36	42	84	94	51	46	118	51	46	16	7.5	7.5	
CFSM	1.11	1.01	2.60	.95	.66	.69	2.64	.78	1.26	1.04	.11	.08	
IN.	1.28	1.13	3.00	1.10	.69	.80	2.94	.90	1.41	1.19	.13	.08	
CAL YR 1986	TOTAL	52366.5		MEAN	143	MAX	2670	MIN	5.7	CFSM	1.02	IN.	13.91
WTR YR 1987	TOTAL	55090.0		MEAN	151	MAX	2670	MIN	7.5	CFSM	1.08	IN.	14.64

MUSKINGUM RIVER BASIN

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: Oct. 2 to June 10. Records poor. Occasional regulation by Buckeye Lake, capacity, 27,300 acre-ft, on unnamed tributary 5.6 mi upstream from station. Occasional diversion from Buckeye Lake into Jonathan Creek which bypasses station. Water-quality data collected at this site 1969 to 1977.

AVERAGE DISCHARGE.--28 years, 153 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 discharge, 1,840 ft³/s Dec. 3, gage height 9.45 ft (from highwater mark); minimum daily, 3.6 ft³/s Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	41	150	86	76	62	350	32	110	20	9.4	6.7
2	50	39	500	80	110	200	500	50	98	289	9.5	6.8
3	180	38	1700	74	150	150	400	64	150	205	15	5.6
4	600	38	1100	68	120	110	330	62	110	72	12	4.4
5	380	52	660	64	100	90	260	42	90	49	60	4.4
6	200	82	400	60	86	84	540	31	72	136	21	4.2
7	110	86	230	64	72	80	1400	227	62	230	11	4.0
8	92	76	170	68	60	78	920	25	54	169	9.5	4.1
9	76	68	320	72	50	72	680	23	78	31	9.4	4.2
10	66	60	620	70	43	64	460	22	140	40	8.9	4.6
11	62	56	380	64	38	56	320	20	140	32	8.6	4.9
12	56	66	250	60	45	50	270	19	41	24	8.4	4.9
13	50	72	160	58	56	45	310	19	82	23	8.3	4.6
14	68	66	130	56	50	40	240	18	54	17	6.9	4.7
15	88	58	120	82	44	38	190	17	35	14	6.1	4.9
16	72	50	110	150	40	35	140	17	27	13	5.8	5.3
17	64	47	100	120	38	34	110	16	31	12	6.1	5.3
18	56	44	120	110	36	33	90	19	25	12	5.8	5.5
19	50	62	130	190	35	32	80	100	20	11	5.6	3.9
20	48	100	120	300	34	32	70	80	18	11	5.9	5.0
21	45	200	110	180	32	38	62	68	19	12	5.7	4.9
22	43	170	100	120	31	44	56	170	29	13	5.7	4.3
23	42	130	90	100	30	41	54	130	35	9.4	6.6	4.1
24	40	110	140	90	30	39	64	100	23	8.6	6.1	4.6
25	39	86	360	100	29	36	70	84	19	8.9	5.1	4.2
26	50	300	290	86	28	34	58	74	17	8.4	5.3	3.6
27	72	1000	210	70	27	33	50	94	14	12	6.1	3.8
28	66	580	160	62	26	32	58	82	13	9.4	11	5.1
29	58	340	120	66	---	31	50	72	12	7.4	8.8	5.6
30	50	210	100	90	---	80	40	62	15	7.5	7.4	6.3
31	45	---	90	86	---	300	---	150	---	8.3	6.8	---
TOTAL	2926.4	4327	9240	2946	1516	2093	8222	1989	1633	1514.9	307.8	144.5
MEAN	94.4	144	298	95.0	54.1	67.5	274	64.2	54.4	48.9	9.93	4.82
MAX	600	1000	1700	300	150	300	1400	227	150	289	60	6.8
MIN	8.4	38	90	56	26	31	40	16	12	7.4	5.1	3.6
CAL YR 1986	TOTAL	46977.3	MEAN	129	MAX	1700	MIN	5.4				
WTR YR 1987	TOTAL	36859.6	MEAN	101	MAX	1700	MIN	3.6				

MUSKINGUM RIVER BASIN

97

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.--No estimated daily discharges. Records 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.

AVERAGE DISCHARGE.--48 years, 597 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)
Oct. 4	2200	9,740	11.17	Apr. 7	0530	7,640	10.08
Nov. 26	2330	8,060	10.32	July 2	2030	6,720	9.49
Dec. 2	2200	*12,300	*12.38				

Minimum daily discharge, 56 ft³/s Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	487	285	1390	538	422	939	1440	305	479	358	101	85
2	2060	271	8340	544	461	1390	2770	298	475	4870	96	80
3	972	262	8310	531	651	881	1680	334	3320	3210	130	78
4	6810	282	4050	509	565	628	1100	342	2390	1030	105	75
5	5590	344	2380	489	470	526	1030	308	1150	652	278	72
6	1950	415	1820	465	428	489	3850	285	559	635	173	69
7	1160	462	1590	471	424	469	6990	269	415	638	124	70
8	809	488	1550	489	426	439	4350	261	346	497	105	70
9	648	622	2050	477	385	426	2010	250	316	341	98	69
10	533	535	2990	471	356	390	1320	244	300	339	91	74
11	465	490	1740	500	347	349	1010	231	372	277	89	75
12	410	785	1370	484	397	340	926	225	1780	254	89	83
13	397	712	891	448	675	331	926	224	3510	242	87	72
14	433	528	715	447	555	320	752	227	1110	211	87	68
15	420	448	672	519	502	320	741	685	611	185	79	67
16	393	420	629	602	420	316	851	405	552	176	77	68
17	363	393	610	519	438	300	758	295	446	165	79	79
18	336	379	640	477	410	294	631	312	349	154	80	73
19	319	392	691	823	308	289	545	1200	299	146	79	66
20	292	467	636	1870	283	285	489	1330	324	143	76	63
21	297	916	580	905	277	277	451	669	638	137	76	64
22	285	899	543	671	275	271	420	1800	654	134	114	68
23	279	637	519	552	275	268	441	1640	482	131	87	66
24	268	546	547	414	275	259	459	708	352	121	78	62
25	285	656	1840	399	268	266	470	470	296	120	74	62
26	342	3530	1440	354	264	262	420	587	270	112	83	61
27	378	5600	1110	325	266	253	381	2120	250	111	86	59
28	371	2550	926	313	295	249	366	1390	229	111	156	56
29	354	1890	822	319	---	244	342	999	219	107	101	69
30	327	1570	743	424	---	310	328	555	227	107	84	73
31	296	---	581	495	---	1680	---	623	---	99	86	---
TOTAL	28329	27774	52715	16844	11118	14060	38247	19591	22720	15813	3148	2096
MEAN	914	926	1700	543	397	454	1275	632	757	510	102	69.9
MAX	6810	5600	8340	1870	675	1680	6990	2120	3510	4870	278	85
MIN	268	262	519	313	264	244	328	224	219	99	74	56
CAL YR 1986	TOTAL	259333		MEAN	711	MAX	8340	MIN	56			
WTR YR 1987	TOTAL	252455		MEAN	692	MAX	8340	MIN	56			

MUSKINGUM RIVER BASIN

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 current year. 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.

AVERAGE DISCHARGE.--21 years (water years 1940-60), 760 ft³/s; 27 years (water years 1961-87), 872 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, 4,820 ft³/s Dec. 8, gage height, 9.72 ft; minimum daily, 83 ft³/s Aug. 19, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	237	261	1900	874	459	219	763	281	715	264	101	144
2	1490	259	1990	788	625	1330	2020	232	615	2480	103	121
3	1680	329	2240	650	707	1550	2080	231	1970	4230	154	108
4	1340	439	3560	612	814	809	577	624	3210	2850	228	108
5	3950	531	4450	504	580	599	589	614	1680	1450	236	109
6	4460	492	4430	455	434	499	2450	352	699	1150	377	108
7	4410	531	4550	417	387	497	2550	427	773	923	272	108
8	2970	546	4660	434	385	496	1740	370	656	774	131	108
9	885	590	4660	455	573	490	4430	249	422	480	131	108
10	388	620	4640	439	488	412	4530	248	321	481	130	105
11	266	665	4660	438	361	333	4500	248	272	542	129	110
12	266	687	3230	588	382	280	4500	247	1200	486	99	110
13	266	777	1920	548	513	282	4410	248	3990	339	85	110
14	613	627	1560	443	469	275	3440	248	2980	263	85	108
15	412	426	141	430	470	273	1340	374	1180	264	85	110
16	294	423	367	513	472	292	943	547	778	248	84	97
17	258	343	710	548	614	301	938	544	648	184	84	98
18	234	293	667	547	499	301	741	341	450	137	84	114
19	234	292	616	554	350	300	742	676	323	137	83	111
20	234	339	615	1730	258	258	741	1600	215	170	83	111
21	233	464	615	1390	182	223	656	1040	225	187	84	111
22	232	489	478	709	182	222	540	707	1360	187	97	110
23	208	492	438	608	414	255	568	1460	1200	188	84	108
24	182	814	441	463	316	262	624	1590	609	164	167	106
25	184	815	457	459	296	244	556	737	403	134	143	105
26	185	1140	468	429	289	243	557	659	278	134	143	104
27	395	2570	476	348	239	198	522	1310	191	142	143	103
28	383	2410	480	326	214	153	545	2040	189	150	143	103
29	274	1970	2050	336	---	154	483	1230	330	153	143	106
30	243	1940	2300	447	---	202	383	780	310	146	143	106
31	259	---	1250	456	---	233	---	543	---	118	144	---
TOTAL	27665	22574	61019	17938	11972	12185	49458	20797	28192	19555	4198	3268
MEAN	892	752	1968	579	428	393	1649	671	940	631	135	109
MAX	4460	2570	4660	1730	814	1550	4530	2040	3990	4230	377	144
MIN	182	259	141	326	182	153	383	231	189	118	83	97
CAL YR 1986	TOTAL	292777		MEAN	802	MAX	4660	MIN	87			
WTR YR 1987	TOTAL	278821		MEAN	764	MAX	4660	MIN	83			

MUSKINGUM RIVER BASIN

99

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 McConnelssville, and 3.5 mi downstream from Oilspring 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.--No estimated daily discharges. Records good. Flow regulated by 17 flood-control reservoirs 36.6 mi to 148 mi upstream from station.

AVERAGE DISCHARGE.--66 years, 7,628 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, 38,100 ft³/s Apr. 8, gage height, 10.41 ft; minimum daily, 1150 ft³/s Aug. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3560	2460	13800	8670	6440	5080	8110	7800	6330	3710	1960	2790
2	6730	2370	20300	8100	6970	7260	12300	6950	7080	8960	1640	2590
3	8750	2300	29200	7420	7460	10200	16100	6830	7010	18900	1790	2460
4	10700	2380	29000	7100	8520	9760	15700	8160	11000	20800	2050	2260
5	17100	2600	27500	6700	8720	8330	15100	9750	9050	19900	2780	2050
6	17200	2880	27800	6180	7590	7090	18100	9540	6070	19500	2870	1870
7	14400	3050	27300	5980	6760	6410	30200	8850	5320	18300	2630	1680
8	12000	3440	25500	5920	6400	5980	35500	8010	4770	16600	2170	1620
9	8010	3920	22900	5940	6130	5740	34000	7000	4130	13900	2040	1520
10	6290	3950	21700	6150	5930	5390	31600	6210	6570	12400	1880	1450
11	5170	4180	21400	6330	5430	5050	31500	5630	7800	11700	1870	1440
12	4450	4770	20800	6350	5370	4650	31300	5190	7490	10900	2190	1440
13	3930	5110	17000	6280	5580	4390	29700	4830	11800	9640	2140	1560
14	3920	5180	14700	6010	5920	4140	28100	4440	12300	7710	1870	1890
15	4100	4630	11900	5880	6070	4020	23400	4590	9810	7230	1640	2120
16	3970	4330	10700	6300	5540	3840	20200	4700	7810	6970	1540	1930
17	3760	4170	10600	7710	5040	3840	16300	4480	7190	6150	1450	1700
18	3410	3900	10100	7520	4880	3810	13700	4240	5530	5510	1400	1620
19	3130	4110	9550	7520	4520	3770	11900	5120	4670	5210	1300	1610
20	2820	4910	9520	10100	4200	3640	10500	7870	4300	4950	1210	1790
21	2600	6620	8780	13000	3870	3490	9150	8200	5450	4720	1150	1970
22	2500	7380	7690	12300	3730	3360	8450	6840	7180	4630	1200	1980
23	2420	8100	6810	10900	3830	3080	7860	7730	7760	4380	1700	1890
24	2330	7770	6420	8780	3850	3090	8050	8400	6490	4080	2210	1800
25	2240	7420	8430	6930	3670	3050	8250	6050	5580	3700	2570	1700
26	2270	7730	10500	5950	3610	2980	9510	5670	5140	3050	2370	1590
27	2490	13700	11300	5300	3460	2930	9420	6170	4530	2560	2240	1470
28	2940	18300	10300	5110	3410	2840	8600	8590	4440	2430	3080	1370
29	2770	18800	9640	5070	---	2730	8770	8070	4020	2400	3550	1360
30	2670	17000	10400	5180	---	2800	8840	6360	3830	2380	3350	1510
31	2520	---	9470	5720	---	4640	---	5520	---	2180	3020	---
TOTAL	171150	187460	481010	222400	152900	147380	520210	207790	200450	265450	64860	54030
MEAN	5521	6249	15520	7174	5461	4754	17340	6703	6682	8563	2092	1801
MAX	17200	18800	29200	13000	8720	10200	35500	9750	12300	20800	3550	2790
MIN	2240	2300	6420	5070	3410	2730	7860	4240	3830	2180	1150	1360
CAL YR 1986	TOTAL	2847730		MEAN	7802	MAX	29200	MIN	980			
WTR YR 1987	TOTAL	2675090		MEAN	7329	MAX	35500	MIN	1150			

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 current year.

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.

COOPERATION.--Pesticide analyses furnished by Environmental Protection Agency.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,710 mg/L Aug. 11, 1980; minimum daily mean 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, 577 mg/L Dec. 3; minimum daily mean, 9 mg/L Jan. 15, Feb. 21.

SEDIMENT LOADS: Maximum daily, 46,000 tons Apr. 8; minimum daily, 49 tons Aug. 22.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TOO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML)
NOV 25...	1000	7450	550	8.03	4.0	3.5	19	13.6	105	1600	1800
FEB 05...	1030	8880	615	8.15	9.5	2.0	9.1	13.5	100	1400	460
APR 08...	1130	35100	370	7.74	14.5	9.0	120	10.8	97	6300	7300
JUL 29...	1130	2380	410	9.04	32.0	27.5	3.2	7.8	103	K10000	K40
SEP 02...	1045	2600	636	8.37	24.0	21.0	15	7.1	83	170	80

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD 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 IT-FLD (MG/L AS HCO3)	CAR- BONATE IT-FLD (MG/L AS CO3)	ALKA- LITY WH WAT TOTAL FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
NOV 25...	240	95	63	21	25	4.5	105	--	149	120	37
FEB 05...	220	120	59	18	32	3.6	123	--	102	110	53
APR 08...	130	83	34	10	14	3.1	51	--	43	63	24
JUL 29...	210	94	55	17	23	4.8	103	--	114	91	44
SEP 02...	230	120	62	19	30	5.5	132	5.0	116	120	48

DATE	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 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- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)
NOV 25...	0.20	6.3	384	0.020	1.70	0.090	0.080	0.90	0.120	<0.010	<0.010
FEB 05...	0.20	6.7	350	0.030	1.90	0.180	0.180	1.5	<0.010	0.020	<0.010
APR 08...	0.20	6.7	206	0.010	1.90	0.110	0.100	1.0	0.180	0.020	<0.010
JUL 29...	0.30	1.0	303	0.010	<0.100	<0.010	<0.010	1.6	0.120	0.020	<0.010
SEP 02...	0.30	3.9	397	0.020	1.40	0.030	0.020	1.5	0.170	0.040	0.030

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03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

WATER-QUALITY RECORDS

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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 current year.

REMARKS.--Samples collected each month 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.

COOPERATION.--Pesticide analyses furnished by Environmental Protection Agency.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,710 mg/L Aug. 11, 1980; minimum daily mean 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, 577 mg/L Dec. 3; minimum daily mean, 9 mg/L Jan. 15, Feb. 21.
SEDIMENT LOADS: Maximum daily, 46,000 tons Apr. 8; minimum daily, 49 tons Aug. 22.

MUSKINGUM RIVER BASIN

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03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

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	899	86	209	936	28	71	26000	76	5340
2	891	71	171	963	26	68	26900	70	5080
3	894	73	176	1070	28	81	26300	72	5110
4	877	68	161	1550	24	100	25100	58	3930
5	917	71	176	3430	32	296	24900	52	3500
6	898	46	112	7960	82	1760	24400	46	3030
7	883	64	153	10700	115	3320	23900	41	2650
8	807	38	83	10400	114	3200	22800	40	2460
9	820	50	111	10300	110	3060	21900	38	2250
10	839	38	86	10100	90	2450	21000	35	1980
11	753	28	57	17300	496	24000	21600	70	4350
12	781	30	63	20500	771	42700	27700	180	13500
13	847	38	87	22600	770	47000	27500	150	11100
14	890	30	72	24600	515	34200	28000	102	7710
15	930	50	126	25200	295	20100	27800	66	4950
16	976	104	274	38800	538	59400	27200	56	4110
17	996	94	253	36900	315	31400	27200	50	3670
18	1060	64	183	21600	166	9680	26300	56	3980
19	973	57	150	20400	142	7820	25400	46	3150
20	1090	54	159	24500	140	9260	22600	42	2560
21	1220	54	178	25100	114	7730	16900	40	1830
22	1140	53	163	24800	88	5890	13800	38	1420
23	1060	61	175	24600	76	5050	11900	36	1160
24	1040	48	135	23600	66	4210	10600	34	973
25	1120	50	151	23000	62	3850	10300	15	417
26	1140	41	126	25500	176	14900	8970	16	388
27	1280	48	166	36800	520	51700	7940	17	364
28	1250	38	128	31800	220	18900	7960	20	430
29	1110	40	120	27200	157	11500	7530	23	468
30	1020	29	80	25700	91	6310	6860	28	519
31	962	36	94	---	---	---	6570	42	745
TOTAL	30363	---	4378	577909	---	430006	613830	---	103124
JANUARY			FEBRUARY			MARCH			
1	6380	23	396	7150	13	251	10500	52	1470
2	5970	44	709	8580	29	672	9530	68	1750
3	5600	32	484	11400	73	2250	8880	38	911
4	5510	28	417	20300	235	14700	8850	54	1290
5	5550	41	614	26300	363	25800	8860	46	1100
6	5310	52	746	27400	305	22600	8860	70	1670
7	5120	32	442	28700	189	14600	9030	44	1070
8	4690	30	380	29000	210	16400	8490	70	1600
9	4050	30	328	28000	122	9220	8020	39	845
10	3860	30	313	29200	62	4890	7960	44	946
11	3940	31	330	29200	90	7100	12900	128	4460
12	3900	11	116	28200	71	5410	17500	193	9120
13	3820	55	567	27000	60	4370	19300	267	13900
14	3690	12	120	25800	50	3480	23200	191	12000
15	3610	30	292	23600	44	2800	25600	260	18000
16	3380	17	155	21400	52	3000	26400	243	17300
17	3430	33	306	20300	36	1970	24600	138	9170
18	3920	6	64	19700	110	5850	22400	122	7380
19	6680	55	992	17700	66	3150	20900	114	6430
20	15100	223	9420	19700	86	4570	19800	94	5030
21	19400	333	17400	21400	103	5950	19900	104	5590
22	20900	200	11300	21200	99	5670	17500	71	3350
23	21900	120	7100	21200	102	5840	14600	88	3470
24	20100	78	4230	20400	94	5180	12500	86	2900
25	17800	65	3120	18300	56	2770	11000	80	2380
26	15900	47	2020	16000	72	3110	10100	60	1640
27	14200	40	1530	14200	42	1610	9280	74	1850
28	12600	35	1190	12500	72	2430	8750	54	1280
29	10400	30	842	---	---	---	8240	50	1110
30	8680	20	469	---	---	---	7720	41	855
31	8040	18	391	---	---	---	7240	36	704
TOTAL	273430	---	66783	593830	---	185643	428410	---	140571

MUSKINGUM RIVER BASIN

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

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	6380	32	551	4410	38	452	4460	97	1170
2	5520	52	775	4190	35	396	4440	91	1090
3	5290	62	886	3880	48	503	3540	118	1130
4	5350	60	867	3620	31	303	3000	80	648
5	5150	71	987	3400	29	266	2700	91	663
6	5090	56	770	3230	32	279	2630	104	739
7	5120	56	774	3300	33	294	4010	118	1280
8	5180	54	755	3390	35	320	6170	116	1930
9	5130	58	803	3280	30	266	5600	124	1870
10	5010	60	812	3230	16	140	5550	98	1470
11	4910	51	676	3020	12	98	4980	99	1330
12	4760	53	681	2930	16	127	6230	109	1830
13	4690	58	734	2860	24	185	6710	108	1960
14	4520	54	659	2770	20	150	5750	117	1820
15	4370	48	566	2800	36	272	4970	104	1400
16	4410	56	667	2840	19	146	3760	122	1240
17	4780	48	619	2900	30	235	3340	94	848
18	4800	38	492	3140	14	119	3310	82	733
19	4550	34	418	3170	22	188	3110	86	722
20	4410	33	393	3270	36	318	2920	92	725
21	4540	19	233	3520	50	475	2940	100	794
22	5430	106	1550	3740	72	727	3240	87	761
23	6400	68	1180	3810	60	617	2900	66	517
24	6840	46	850	3470	54	506	2810	88	668
25	6620	52	929	3140	61	517	2740	68	503
26	6110	40	660	2840	34	261	2360	48	306
27	5800	52	814	2790	45	339	2130	37	213
28	5610	36	545	2900	34	266	3790	65	665
29	5280	34	485	3040	98	804	8060	107	2330
30	4720	33	421	3260	71	625	7450	156	3140
31	---	---	---	3440	70	650	---	---	---
TOTAL	156770	---	21552	101580	---	10844	125600	---	34495
JULY			AUGUST			SEPTEMBER			
1	6010	100	1620	2170	27	158	1100	33	98
2	5550	108	1620	2160	22	128	1100	32	95
3	12300	198	6580	2360	16	102	1000	19	51
4	12200	231	7610	2150	23	134	1200	22	71
5	9500	162	4160	2010	20	109	1200	55	178
6	7050	127	2420	1890	18	92	1200	41	133
7	5640	130	1980	1810	35	171	1200	30	97
8	4690	83	1050	1750	26	123	1100	45	134
9	4480	94	1140	1690	34	155	1000	39	105
10	7310	99	1950	1690	42	192	980	39	103
11	9790	165	4360	1740	36	169	1000	38	103
12	10400	143	4020	1750	26	123	1100	38	113
13	14800	290	11600	1800	38	185	1150	35	109
14	15100	398	16200	1730	38	177	1490	35	141
15	13300	265	9520	1630	34	150	1560	35	147
16	11600	220	6890	1540	42	175	1340	30	109
17	11700	220	6950	1500	44	178	1150	30	93
18	9370	190	4810	1470	33	131	1020	30	83
19	7830	129	2730	1410	9	34	1020	30	83
20	6450	116	2020	1490	14	56	1250	28	94
21	5440	109	1600	1480	21	84	1580	28	119
22	4860	74	971	1320	24	86	1540	26	108
23	4430	83	993	1250	30	101	1440	30	117
24	3980	57	613	1290	21	73	1350	34	124
25	3600	65	632	1230	29	96	1690	42	192
26	3380	46	420	1130	17	52	4310	44	512
27	3070	34	282	1200	88	285	4490	60	727
28	2810	25	190	1300	73	256	4620	50	624
29	2630	26	185	1400	54	204	5930	50	801
30	2500	28	189	1300	58	204	4430	45	538
31	2340	27	171	1200	38	123	---	---	---
TOTAL	224110	---	105476	49840	---	4306	54540	---	6002
YEAR	3230212		1113180						

MUSKINGUM RIVER BASIN

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03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

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	3560	45	433	2460	33	219	13800	124	4620
2	6730	50	909	2370	40	256	20300	401	25100
3	8750	105	2480	2300	35	217	29200	577	45500
4	10700	153	4880	2380	38	244	29000	360	28200
5	17100	417	19300	2600	40	281	27500	203	15100
6	17200	344	16000	2880	37	288	27800	154	11600
7	14400	244	9490	3050	42	346	27300	116	8550
8	12000	184	5960	3440	42	390	25500	98	6750
9	8010	118	2550	3920	36	381	22900	75	4640
10	6290	80	1360	3950	51	544	21700	68	3980
11	5170	109	1520	4180	29	327	21400	70	4040
12	4450	56	673	4770	34	438	20800	84	4720
13	3930	80	849	5110	28	386	17000	60	2750
14	3920	49	519	5180	37	517	14700	42	1670
15	4100	83	919	4630	16	200	11900	30	964
16	3970	50	536	4330	16	187	10700	28	809
17	3760	55	558	4170	17	191	10600	26	744
18	3410	66	608	3900	22	232	10100	20	545
19	3130	116	980	4110	18	200	9550	20	516
20	2820	66	503	4910	20	265	9520	23	591
21	2600	101	709	6620	29	518	8780	22	522
22	2500	38	256	7380	40	797	7690	17	353
23	2420	78	510	8100	51	1120	6810	14	257
24	2330	36	226	7770	50	1050	6420	41	711
25	2240	54	327	7420	40	801	8430	43	979
26	2270	41	251	7730	55	1150	10500	76	2150
27	2490	40	269	13700	245	9060	11300	82	2500
28	2940	42	333	18300	514	25400	10300	70	1950
29	2770	106	793	18800	456	23100	9640	49	1280
30	2670	36	260	17000	206	9460	10400	34	955
31	2520	41	279	---	---	---	9470	24	614
TOTAL	171150	---	75240	187460	---	78565	481010	---	183660
JANUARY			FEBRUARY			MARCH			
1	8670	23	538	6440	14	243	5080	64	878
2	8100	26	569	6970	18	339	7260	70	1370
3	7420	16	321	7460	47	947	10200	78	2150
4	7100	33	633	8520	50	1150	9760	73	1920
5	6700	12	217	8720	35	824	8330	45	1010
6	6180	28	467	7590	40	820	7090	30	574
7	5980	10	161	6760	22	402	6410	29	502
8	5920	28	448	6400	19	328	5980	34	549
9	5940	13	208	6130	22	364	5740	31	480
10	6150	23	382	5930	41	656	5390	42	611
11	6330	10	171	5430	16	235	5050	30	409
12	6350	17	291	5370	18	261	4650	25	314
13	6280	12	203	5580	33	497	4390	31	367
14	6010	10	162	5920	24	384	4140	30	335
15	5880	9	143	6070	26	426	4020	32	347
16	6300	15	255	5540	28	419	3840	31	321
17	7710	16	333	5040	22	299	3840	34	353
18	7520	20	406	4880	16	211	3810	36	370
19	7520	24	487	4520	12	146	3770	32	326
20	10100	96	2620	4200	21	238	3640	37	364
21	13000	115	4040	3870	9	94	3490	33	311
22	12300	99	3290	3730	25	252	3360	38	345
23	10900	80	2350	3830	10	103	3080	27	225
24	8780	70	1660	3850	46	478	3090	28	234
25	6930	60	1120	3670	49	486	3050	26	214
26	5950	50	803	3610	41	400	2980	34	274
27	5300	40	572	3460	48	448	2930	29	229
28	5110	30	414	3410	30	276	2840	28	215
29	5070	20	274	---	---	---	2730	27	199
30	5180	10	140	---	---	---	2800	34	257
31	5720	12	185	---	---	---	4640	44	551
TOTAL	222400	---	23863	152900	---	11726	147380	---	16604

MUSKINGUM RIVER BASIN

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

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	8110	69	1510	7800	70	1470	6330	89	1520
2	12300	84	2790	6950	69	1290	7080	148	2830
3	16100	170	7390	6830	72	1330	7010	90	1700
4	15700	185	7840	8160	84	1850	11000	145	4310
5	15100	130	5300	9750	74	1950	9050	77	1880
6	18100	125	6110	9540	86	2220	6070	93	1520
7	30200	358	30000	8850	63	1510	5320	71	1020
8	35500	480	46000	8010	66	1430	4770	84	1080
9	34000	265	24300	7000	50	945	4130	84	937
10	31600	186	15900	6210	60	1010	6570	102	1810
11	31500	142	12100	5630	52	790	7800	80	1680
12	31300	152	12800	5190	52	729	7490	100	2020
13	29700	126	10100	4830	52	678	11800	225	7170
14	28100	136	10300	4440	50	599	12300	217	7210
15	23400	91	5750	4590	52	644	9810	150	3970
16	20200	104	5670	4700	54	685	7810	97	2050
17	16300	94	4140	4480	56	677	7190	87	1690
18	13700	69	2550	4240	50	572	5530	102	1520
19	11900	68	2180	5120	54	746	4670	66	832
20	10500	62	1760	7870	73	1550	4300	86	998
21	9150	50	1240	8200	76	1680	5450	76	1120
22	8450	78	1780	6840	40	739	7180	82	1590
23	7860	58	1230	7730	54	1130	7760	85	1780
24	8050	82	1780	8400	50	1130	6490	62	1090
25	8250	75	1670	6050	24	392	5580	56	844
26	9510	88	2260	5670	28	429	5140	68	944
27	9420	71	1810	6170	48	800	4530	71	868
28	8600	82	1900	8590	100	2320	4440	70	839
29	8770	70	1660	8070	102	2220	4020	52	564
30	8840	84	2000	6360	80	1370	3830	44	455
31	---	---	---	5520	96	1430	---	---	---
TOTAL	520210	---	231820	207790	---	36315	200450	---	57841
JULY			AUGUST			SEPTEMBER			
1	3710	55	551	1960	34	180	2790	98	738
2	8960	130	3590	1640	24	106	2590	85	594
3	18900	340	17400	1790	26	126	2460	96	638
4	20800	525	29500	2050	22	122	2260	74	452
5	19900	372	20000	2780	74	555	2050	102	565
6	19500	234	12300	2870	58	449	1870	65	328
7	18300	170	8400	2630	54	383	1680	96	435
8	16600	152	6810	2170	74	434	1620	56	245
9	13900	124	4650	2040	67	369	1520	92	378
10	12400	130	4350	1880	71	360	1450	55	215
11	11700	100	3160	1870	70	353	1440	86	334
12	10900	84	2470	2190	76	449	1440	42	163
13	9640	72	1870	2140	55	318	1560	92	388
14	7710	44	916	1870	88	444	1890	76	388
15	7230	50	976	1640	63	279	2120	98	561
16	6970	80	1510	1540	64	266	1930	62	323
17	6150	92	1530	1450	45	176	1700	76	349
18	5510	50	744	1400	66	249	1620	67	293
19	5210	92	1290	1300	29	102	1610	103	448
20	4950	76	1020	1210	36	118	1790	56	271
21	4720	86	1100	1150	19	59	1970	84	447
22	4630	64	800	1200	15	49	1980	64	342
23	4380	46	544	1700	27	124	1890	87	444
24	4080	38	419	2210	52	310	1800	68	330
25	3700	42	420	2570	92	638	1700	70	321
26	3050	38	313	2370	98	627	1590	58	249
27	2560	40	276	2240	75	454	1470	82	325
28	2430	32	210	3080	91	757	1370	56	207
29	2400	42	272	3550	70	671	1360	72	264
30	2380	36	231	3350	104	941	1510	51	208
31	2180	35	206	3020	66	538	---	---	---
TOTAL	265450	---	127828	64860	---	11006	54030	---	11243
YEAR	2675090		865711						

HOCKING RIVER BASIN

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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. 24-31. Records good except for periods of estimated record which are fair. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--48 years, 88.8 ft³/s, 13.55 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.

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. 2	1000	*1,770	*7.52				

Minimum discharge, 10 ft³/s Aug. 16, 20, 24-26, 28, Sept. 27-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	112	32	76	55	47	80	94	58	78	39	14	12	
2	145	30	1110	57	92	81	103	58	72	112	14	12	
3	76	29	520	52	74	65	81	66	63	64	23	11	
4	63	33	224	51	62	56	86	69	57	44	16	11	
5	195	37	148	49	56	54	127	58	49	37	15	11	
6	88	56	116	49	55	52	194	56	45	47	15	11	
7	63	50	101	51	54	49	795	53	42	37	14	12	
8	51	90	94	48	56	49	637	52	38	31	13	12	
9	45	99	156	46	49	49	325	50	38	28	13	12	
10	40	73	166	49	48	44	196	48	35	39	13	11	
11	37	102	114	51	47	42	154	47	34	29	13	11	
12	35	112	96	47	50	42	141	45	64	25	12	12	
13	38	77	79	45	47	40	120	43	58	24	12	13	
14	47	63	71	47	46	40	106	42	43	26	11	13	
15	43	59	71	52	44	41	120	175	38	21	11	11	
16	38	55	66	51	39	40	176	99	35	21	10	11	
17	36	51	65	48	43	38	155	71	33	21	11	11	
18	32	48	66	50	43	38	123	61	30	19	13	12	
19	31	45	62	96	41	38	106	92	29	19	11	12	
20	29	56	59	110	40	37	95	77	29	18	10	12	
21	30	62	55	79	42	37	88	207	42	17	11	12	
22	30	53	53	72	42	36	82	511	83	17	11	11	
23	28	50	51	62	43	36	86	161	64	17	11	13	
24	28	48	59	58	40	36	85	110	43	16	10	13	
25	31	44	97	54	39	38	80	90	36	16	10	11	
26	50	313	79	51	38	37	73	136	93	16	11	11	
27	45	244	69	49	39	36	70	182	48	16	11	10	
28	39	131	66	47	44	35	69	95	38	16	15	11	
29	37	101	60	45	---	34	65	76	32	15	16	11	
30	35	84	59	43	---	44	62	67	29	14	13	20	
31	32	---	55	42	---	121	---	120	---	14	12	---	
TOTAL	1629	2327	4163	1706	1360	1465	4694	3075	1418	875	395	356	
MEAN	52.5	77.6	134	55.0	48.6	47.3	156	99.2	47.3	28.2	12.7	11.9	
MAX	195	313	1110	110	92	121	795	511	93	112	23	20	
MIN	28	29	51	42	38	34	62	42	29	14	10	10	
CFSM	.59	.87	1.51	.62	.55	.53	1.75	1.11	.53	.32	.14	.13	
IN.	.68	.97	1.74	.71	.57	.61	1.96	1.29	.59	.37	.17	.15	
CAL YR 1986	TOTAL	27631		MEAN	75.7	MAX	1110	MIN	16	CFSM	.85	IN.	11.55
WTR YR 1987	TOTAL	23463		MEAN	64.3	MAX	1110	MIN	10	CFSM	.72	IN.	9.81

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. 24 to Jan. 31. 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.

AVERAGE DISCHARGE.--57 years, 458 ft³/s, 13.55 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. 3	0030	5,440	11.82	Apr. 8	0730	*5,660	*12.07

Minimum daily discharge, 39 ft³/s Sept. 6, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	235	84	280	290	251	390	452	267	255	275	56	45	
2	457	81	3560	304	451	494	503	256	274	662	54	44	
3	234	79	4200	291	483	396	441	278	236	474	85	43	
4	178	89	1760	279	386	331	401	324	235	258	82	41	
5	406	105	1060	264	334	299	482	267	202	182	73	40	
6	235	150	756	250	312	284	1160	243	177	198	152	39	
7	162	149	586	266	302	266	3490	227	157	187	81	40	
8	132	224	493	267	296	256	5140	215	140	170	63	42	
9	115	324	671	256	239	255	3180	199	129	154	57	49	
10	103	233	1020	257	245	232	1780	193	121	140	54	44	
11	94	258	710	266	246	210	1250	183	113	120	54	42	
12	90	378	564	251	248	205	1050	177	179	204	51	44	
13	95	261	444	237	256	194	900	165	240	133	50	74	
14	128	201	359	234	238	189	730	157	160	117	49	50	
15	130	177	359	248	225	191	779	539	133	100	46	46	
16	111	163	325	253	176	186	1030	387	119	88	44	43	
17	102	152	308	235	213	176	930	248	110	86	46	43	
18	96	145	311	234	209	169	736	207	102	81	52	46	
19	92	137	298	415	203	169	615	273	96	75	45	48	
20	90	141	274	789	189	162	524	380	95	70	44	47	
21	90	174	255	535	188	154	461	288	183	67	42	45	
22	91	164	240	440	191	151	420	1500	361	66	46	45	
23	90	148	227	367	196	148	421	728	316	66	44	51	
24	100	142	252	330	187	146	442	449	204	62	41	46	
25	99	134	718	300	176	151	428	337	150	61	43	45	
26	133	618	605	280	170	146	370	446	195	62	43	41	
27	124	1070	459	260	169	140	342	653	153	79	43	39	
28	112	565	395	250	191	139	334	386	123	62	51	40	
29	102	399	351	240	---	134	301	341	104	61	70	44	
30	93	321	327	230	---	157	293	274	98	55	58	75	
31	86	---	302	220	---	493	---	324	---	53	48	---	
TOTAL	4405	7266	22469	9338	6970	7013	29385	10911	5160	4468	1767	1381	
MEAN	142	242	725	301	249	226	980	352	172	144	57.0	46.0	
MAX	457	1070	4200	789	483	494	5140	1500	361	662	152	75	
MIN	86	79	227	220	169	134	293	157	95	53	41	39	
CFSM	.31	.53	1.58	.66	.54	.49	2.14	.77	.37	.31	.12	.10	
IN.	.36	.59	1.82	.76	.56	.57	2.38	.88	.42	.36	.14	.11	
CAL YR 1986	TOTAL	133118		MEAN	365	MAX	4200	MIN	61	CFSM	.80	IN.	10.79
WTR YR 1987	TOTAL	110533		MEAN	303	MAX	5140	MIN	39	CFSM	.66	IN.	8.96

HOCKING RIVER BASIN

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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.

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. 25-31, May 23 and July 20-22. Records good except for estimated daily 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.

AVERAGE DISCHARGE.--11 years, 1,070 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,600 ft³/s Feb. 27, 1979, gage height, 25.45 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, 10,300 ft³/s Apr. 9, gage height, 21.51 ft; minimum daily, 54 ft³/s Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	210	96	668	537	513	1120	1830	665	470	164	92	70
2	303	92	3800	537	686	1840	1480	620	447	456	91	64
3	565	89	8500	548	1150	1400	1430	612	439	1150	147	62
4	336	90	8390	521	976	1090	1210	815	396	651	113	60
5	249	108	3430	494	773	909	1320	791	374	391	123	59
6	434	139	2200	459	829	717	2800	659	334	304	108	59
7	309	163	1680	444	704	623	6730	689	298	279	136	60
8	220	444	1180	455	604	572	9400	656	267	303	126	62
9	182	700	1150	445	552	541	10100	569	243	264	109	59
10	156	628	2310	431	447	502	7220	489	225	240	195	59
11	138	478	2080	434	428	448	3620	456	211	206	99	62
12	123	583	1540	434	426	415	2790	417	217	259	85	64
13	121	602	1220	404	427	397	2650	387	276	312	83	60
14	136	407	846	380	413	371	1940	367	372	265	81	62
15	146	309	700	377	385	346	1580	1060	270	287	79	74
16	157	268	648	382	352	333	2080	1340	243	215	76	64
17	141	244	591	375	308	312	2410	714	209	151	75	62
18	124	228	570	362	338	292	1870	522	191	139	73	60
19	116	211	555	967	341	281	1490	479	180	132	79	60
20	110	206	509	2150	324	275	1300	533	173	127	73	59
21	108	224	462	1550	306	261	1160	615	223	122	69	58
22	105	263	428	1120	312	248	1050	1230	238	118	70	57
23	104	253	404	849	349	243	998	1500	397	116	68	55
24	102	227	465	553	355	235	1080	982	376	113	66	56
25	104	210	1260	500	325	233	1100	687	288	109	64	58
26	110	1200	1560	470	302	233	996	622	230	112	64	56
27	119	2950	1100	440	290	228	883	899	252	107	65	55
28	131	1780	874	415	325	220	829	853	230	111	65	54
29	123	1070	829	395	---	213	778	589	192	107	66	56
30	114	811	867	330	---	253	713	518	173	101	70	59
31	103	---	663	450	---	1460	---	443	---	97	75	---
TOTAL	5499	15073	51479	18208	13540	16611	74837	21778	8434	7508	2785	1805
MEAN	177	502	1661	587	484	536	2495	703	281	242	89.8	60.2
MAX	565	2950	8500	2150	1150	1840	10100	1500	470	1150	195	74
MIN	102	89	404	330	290	213	713	367	173	97	64	54
CAL YR 1986	TOTAL	272757		MEAN	747	MAX	8800	MIN	52			
WTR YR 1987	TOTAL	237557		MEAN	651	MAX	10100	MIN	54			

HOCKING RIVER BASIN
03159510 HOCKING RIVER BELOW ATHENS, OH
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 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (FTU)	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 16...	1100	642	615	7.62	3.0	2.5	16	12.0	91	2400	2500
FEB 26...	1000	303	665	7.80	12.0	4.0	7.6	13.3	103	630	300
MAY 07...	1030	714	628	7.75	23.0	14.5	15	8.9	90	240	K100
AUG 05...	1030	121	895	7.86	18.0	27.0	17	5.0	65	3100	800

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD 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 IT-FLD (MG/L AS HCO3)	CAR- BONATE IT-FLD (MG/L AS CO3)	ALKA- LITY WH WAT TOTAL FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
DEC 16...	240	140	60	21	26	2.9	122	0	100	130	45
FEB 26...	270	180	68	25	40	2.8	113	0	94	150	65
MAY 07...	240	160	58	22	25	2.7	90	0	74	160	37
AUG 05...	300	200	73	28	68	4.8	122	0	100	210	97

DATE	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 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- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)
DEC 16...	0.20	9.7	370	0.010	1.50	0.250	0.260	1.0	0.060	0.080	<0.010
FEB 26...	0.20	6.4	415	0.030	0.880	0.240	0.340	0.70	0.060	0.020	<0.010
MAY 07...	0.20	7.9	367	0.020	0.670	0.060	0.070	0.80	0.070	0.020	<0.010
AUG 05...	0.30	0.09	552	<0.010	<0.100	0.010	0.010	1.9	0.320	0.030	<0.010

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	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 16...	<10	<1	50	<0.5	<1	<1	3	3	38	<5	15
FEB 26...	<10	<1	47	<0.5	<1	<1	6	8	37	<5	14
MAY 07...	50	<1	46	<0.5	<1	<1	<3	2	8	<5	22
AUG 05...	50	1	56	<0.5	1	<1	<3	3	36	<5	21

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 16...	560	<0.1	<10	10	<1	<1.0	310	<6	47	--
FEB 26...	720	<0.1	<10	12	<1	<1.0	380	<6	30	13
MAY 07...	250	<0.1	<10	7	<1	<1.0	310	<6	12	--
AUG 05...	95	1.1	<10	4	<1	<1.0	420	<6	7	70

K Results based on colony count outside the acceptable range (non-ideal colony count)

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.--No estimated daily discharges. Records fair. Water-quality data collected at this site 1965-77, 1979-81. Sediment data collected 1970-74.

AVERAGE DISCHARGE.--22 years, 167 ft³/s, 14.54 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. 3	1030	*2,730	*17.44	Apr. 7	2400	2,420	16.51

Minimum discharge, 0.17 ft³/s Sept. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	8.6	4.8	123	83	127	936	609	84	10	1.2	1.0	.50	
2	62	4.7	1430	100	231	878	350	75	51	1.4	.73	.42	
3	45	4.7	2390	110	281	351	382	73	44	1.5	1.9	.39	
4	25	4.7	573	104	168	220	320	98	28	1.2	2.2	.37	
5	57	11	254	104	119	165	417	82	19	3.2	1.8	.36	
6	33	73	161	89	100	141	986	69	12	17	1.5	.42	
7	15	68	122	101	92	121	2080	61	8.8	15	.96	.47	
8	9.0	234	105	94	85	106	2190	56	6.9	5.5	.69	.56	
9	6.2	1160	420	81	70	99	806	50	5.7	3.7	.63	.57	
10	5.1	330	934	77	57	92	381	45	4.8	3.3	.62	.53	
11	4.4	173	373	78	60	80	259	41	3.9	2.4	9.3	.48	
12	3.7	291	210	73	71	72	233	37	4.3	1.9	6.3	.47	
13	4.3	126	140	65	74	68	229	34	23	2.1	2.6	.45	
14	6.1	71	92	61	70	63	168	30	32	1.8	1.4	.43	
15	15	53	92	60	63	61	155	44	14	1.5	.93	.43	
16	11	48	83	61	55	60	447	99	8.8	1.1	.68	.42	
17	8.6	44	78	58	47	61	600	53	6.2	.95	.56	.43	
18	6.7	39	79	55	49	61	318	39	4.6	.91	.49	.40	
19	5.5	33	78	399	52	59	206	38	3.8	.86	.46	.38	
20	4.7	30	67	792	62	58	155	44	3.2	.83	.44	.34	
21	3.9	39	60	281	69	55	128	35	2.8	.78	.44	.31	
22	3.5	50	55	181	73	52	111	68	2.6	.68	.42	.31	
23	3.4	43	48	145	160	50	240	119	2.5	.57	.43	.28	
24	3.6	40	187	104	167	48	512	57	2.8	.57	.39	.24	
25	4.6	41	975	98	121	47	254	38	2.8	.57	.39	.22	
26	5.1	1120	400	70	96	46	172	29	2.3	.62	.42	.19	
27	4.6	1940	209	63	81	46	133	22	2.0	.70	.41	.19	
28	5.1	436	148	55	140	46	123	38	1.7	.68	.38	.19	
29	5.8	244	118	56	---	46	105	23	1.5	.62	.41	.18	
30	5.6	165	103	106	---	48	96	15	1.4	.54	.46	.36	
31	5.1	---	92	162	---	1260	---	12	---	.54	.51	---	
TOTAL	386.2	6920.9	10199	3966	2840	5496	13165	1608	316.4	74.22	39.85	11.29	
MEAN	12.5	231	329	128	101	177	439	51.9	10.5	2.39	1.29	.38	
MAX	62	1940	2390	792	281	1260	2190	119	51	17	9.3	.57	
MIN	3.4	4.7	48	55	47	46	96	12	1.4	.54	.38	.18	
CFSM	.08	1.48	2.11	.82	.65	1.13	2.81	.33	.07	.02	.01	.00	
IN.	.09	1.65	2.43	.95	.68	1.31	3.14	.38	.08	.02	.01	.00	
CAL YR 1986	TOTAL	46904.59		MEAN	129	MAX	2390	MIN	.27	CFSM	.83	IN.	11.18
WTR YR 1987	TOTAL	45022.86		MEAN	123	MAX	2390	MIN	.18	CFSM	.79	IN.	10.74

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: Jan. 23-28. Records good except for estimated daily discharges, which are fair. Water-quality data collected at this site 1964 to 1977. Sediment data collected 1951 to 1953.

AVERAGE DISCHARGE.--55 years, 461 ft³/s, 11.04 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)
Oct. 5	0300	4,560	9.94	June 5	1500	4,950	10.42
Nov. 29	0300	4,120	9.36	July 5	1000	*8,490	*14.30
Dec. 5	0700	4,350	9.67				

Minimum discharge 13 ft³/s Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	1850	278	1250	238	197	267	1220	152	896	1190	66	71	
2	2490	239	1490	225	216	686	1630	156	713	6800	69	53	
3	3580	214	2720	219	427	822	1840	185	2060	7590	80	42	
4	4360	215	3890	212	826	554	1650	191	3450	8060	86	35	
5	4500	223	4270	201	804	389	1110	176	4860	8250	124	30	
6	4150	246	3110	193	568	318	1840	158	4120	7370	124	26	
7	3550	245	1400	194	465	283	2360	140	2250	5690	92	23	
8	1520	245	842	194	454	259	2700	129	794	3630	71	23	
9	730	231	1120	188	441	247	1910	120	883	1660	66	24	
10	578	249	2020	186	359	226	981	115	999	737	81	21	
11	379	309	2250	185	310	198	632	105	875	523	66	20	
12	316	312	1940	184	291	173	534	100	1160	429	64	18	
13	281	313	963	172	289	160	488	89	1940	346	53	17	
14	316	301	543	161	295	153	431	85	1700	1190	46	15	
15	477	256	421	196	271	147	379	90	1340	1950	42	15	
16	538	226	389	437	207	142	352	86	888	1230	40	20	
17	401	210	345	488	191	135	340	89	559	555	38	28	
18	311	203	342	361	191	127	357	109	404	363	36	26	
19	256	235	359	328	173	122	324	287	298	280	32	23	
20	217	472	358	384	155	118	280	498	280	222	28	20	
21	195	1100	321	364	145	116	253	670	269	190	27	20	
22	177	1440	295	303	140	110	233	582	802	160	28	20	
23	162	1460	286	250	138	104	221	641	1080	143	25	20	
24	151	982	281	215	134	101	218	396	680	125	23	20	
25	145	619	292	190	129	101	214	263	364	113	24	20	
26	240	1780	336	165	116	102	201	290	302	99	47	16	
27	720	2860	351	150	109	102	186	1030	240	90	144	14	
28	815	3760	326	145	112	99	183	1220	195	84	135	14	
29	606	3920	297	140	---	92	177	1130	153	80	165	13	
30	435	2620	277	159	---	236	166	658	187	74	131	14	
31	335	---	257	176	---	891	---	622	---	69	92	---	
TOTAL	34781	25763	33341	7203	8153	7580	23410	10562	34741	59292	2145	721	
MEAN	1122	859	1076	232	291	245	780	341	1158	1913	69.2	24.0	
MAX	4500	3920	4270	488	826	891	2700	1220	4860	8250	165	71	
MIN	145	203	257	140	109	92	166	85	153	69	23	13	
CFSM	1.98	1.51	1.90	.41	.51	.43	1.38	.60	2.04	3.37	.12	.04	
IN.	2.28	1.69	2.19	.47	.53	.50	1.54	.69	2.28	3.89	.14	.05	
CAL YR 1986	TOTAL	258829		MEAN	709	MAX	5860	MIN	13	CFSM	1.25	IN.	16.98
WTR YR 1987	TOTAL	247692		MEAN	679	MAX	8250	MIN	13	CFSM	1.20	IN.	16.25

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: Oct. 1-10, Jan. 24-28, July 3-7, July 12 to Aug. 3. Records fair except for periods of estimated record, which are poor.

AVERAGE DISCHARGE.--5 years, 74.5 ft³/S, 12.16 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 1982-1987.

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)
Nov. 27	2115	1,640	10.57	July 3	0915	*4,420	*13.54
Dec. 4	0745	1,340	10.14				

Minimum, no flow many days during the year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	300	47	99	28	41	109	270	37	31	17	16	.00	
2	430	40	314	26	30	224	470	39	39	2190	15	.00	
3	320	34	942	25	52	134	482	40	398	2080	16	.00	
4	600	44	1280	25	106	78	173	41	543	1000	18	.00	
5	390	62	948	23	90	56	156	45	198	320	42	.00	
6	225	99	371	22	70	46	450	44	90	220	21	.00	
7	130	82	96	22	58	41	538	43	57	110	11	.00	
8	84	65	80	21	52	37	248	43	40	67	6.0	.00	
9	55	55	102	21	84	34	134	43	31	46	3.9	.00	
10	45	50	467	21	56	29	94	44	26	40	2.5	.00	
11	41	59	587	21	50	25	75	46	25	29	1.8	.00	
12	34	62	147	22	32	22	90	42	29	30	1.3	.00	
13	31	82	87	23	32	20	100	39	123	62	1.2	.00	
14	69	61	66	19	36	20	84	37	137	100	.81	.00	
15	70	47	53	29	37	19	68	36	119	160	.58	.00	
16	65	41	40	87	35	18	65	33	259	138	.58	.00	
17	45	38	37	62	27	17	95	31	76	115	.58	.00	
18	35	35	40	43	26	17	89	30	40	98	.57	.00	
19	29	70	43	62	24	17	68	64	25	80	.50	.00	
20	25	113	41	88	24	15	57	101	58	66	.00	.00	
21	23	220	35	65	18	15	50	196	116	53	.00	.00	
22	20	302	33	64	17	15	47	161	62	45	.00	.00	
23	20	132	31	39	17	16	45	112	52	40	.00	.00	
24	18	89	31	33	16	17	44	71	48	44	.00	.00	
25	18	70	42	29	15	17	44	46	25	44	.00	.00	
26	113	333	48	28	15	17	41	38	14	40	.00	.00	
27	348	1150	47	26	13	17	39	34	11	30	.00	.00	
28	179	1230	41	25	16	17	37	68	8.4	25	.00	.00	
29	113	314	36	25	---	17	37	41	6.6	21	.00	.00	
30	78	147	32	30	---	71	38	27	6.4	19	.00	.00	
31	58	---	30	34	---	265	---	39	---	23	.00	---	
TOTAL	4011	5173	6246	1088	1089	1462	4228	1711	2693.4	7352	159.32	.00	
MEAN	129	172	201	35.1	38.9	47.2	141	55.2	89.8	237	5.14	.00	
MAX	600	1230	1280	88	106	265	538	196	543	2190	42	.00	
MIN	18	34	30	19	13	15	37	27	6.4	17	.00	.00	
CFSM	1.55	2.07	2.42	.42	.47	.57	1.69	.66	1.08	2.85	.06	.00	
IN.	1.79	2.31	2.79	.49	.49	.65	1.89	.77	1.20	3.29	.07	.00	
CAL YR 1986	TOTAL	37520.08		MEAN	103	MAX	1280	MIN	.00	CFSM	1.24	IN.	16.78
WTR YR 1987	TOTAL	35212.72		MEAN	96.5	MAX	2190	MIN	.00	CFSM	1.16	IN.	15.74

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. 24-27. Records good except for period of estimated record, which are fair. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--45 years, 155 ft³/s, 11.82 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)
Oct. 1	1830	2,690	6.64	Dec. 3	1030	2,760	6.71
Oct. 4	1145	4,620	8.27	July 2	0500	*5,670	*8.94
Nov. 27	0830	3,300	7.23	July 3	1330	5,170	8.63

Minimum daily discharge, 2.4 ft³/s Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1250	59	149	47	70	460	868	35	112	367	8.9	6.4
2	2110	51	1470	49	58	689	1300	34	90	4230	10	9.1
3	1210	42	2530	45	158	294	467	35	868	4150	11	7.5
4	3490	43	1870	44	168	149	223	35	677	1680	118	6.0
5	2290	111	408	43	105	104	992	34	158	282	57	4.8
6	514	248	203	41	83	80	1050	35	81	193	27	4.4
7	237	245	144	42	73	71	838	34	54	137	20	5.1
8	144	140	139	40	75	64	442	31	38	88	14	3.3
9	102	107	327	38	65	61	214	30	33	65	11	3.4
10	73	92	1480	40	67	52	141	31	29	49	10	2.4
11	59	91	756	44	51	43	106	26	25	42	8.0	3.3
12	49	112	211	40	49	40	195	25	203	34	8.0	4.8
13	45	159	132	37	52	36	312	26	320	33	8.0	10
14	119	107	87	37	60	37	162	27	144	336	8.4	8.0
15	179	72	75	63	49	37	122	25	142	456	6.2	4.8
16	105	60	68	175	43	34	179	26	870	111	5.4	4.0
17	67	55	65	101	35	34	336	26	170	80	6.3	4.2
18	52	51	79	72	38	33	186	28	64	55	4.8	5.2
19	41	79	87	209	34	32	117	47	39	36	4.9	6.4
20	34	246	77	382	28	30	84	86	35	26	4.6	4.9
21	33	657	66	156	27	28	72	266	175	21	4.5	4.0
22	30	586	63	101	32	27	61	573	125	18	4.5	4.1
23	28	207	58	74	27	27	56	205	54	17	6.1	3.3
24	27	142	59	62	27	25	53	89	42	19	4.4	3.1
25	26	119	75	51	27	23	54	54	27	19	3.4	5.9
26	264	1250	98	43	26	26	48	159	21	14	6.0	4.5
27	732	2930	95	41	27	25	45	114	19	13	11	4.5
28	263	1600	73	40	28	25	41	67	15	11	12	4.6
29	161	364	64	44	---	25	38	45	13	11	8.2	3.0
30	105	209	60	64	---	382	36	136	13	9.9	11	3.5
31	74	---	51	78	---	793	---	390	---	12	7.7	---
TOTAL	13913	10234	11119	2343	1582	3786	8838	2774	4656	12614.9	430.3	148.5
MEAN	449	341	359	75.6	56.5	122	295	89.5	155	407	13.9	4.95
MAX	3490	2930	2530	382	168	793	1300	573	870	4230	118	10
MIN	26	42	51	37	26	23	36	25	13	9.9	3.4	2.4
CFSM	2.52	1.92	2.02	.42	.32	.69	1.66	.50	.87	2.29	.08	.03
IN.	2.91	2.14	2.32	.49	.33	.79	1.85	.58	.97	2.64	.09	.03
CAL YR 1986	TOTAL	83698.7	MEAN	229	MAX	3490	MIN	4.4	CFSM	1.29	IN.	17.49
WTR YR 1987	TOTAL	72438.7	MEAN	198	MAX	4230	MIN	2.4	CFSM	1.11	IN.	15.14

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.--No estimated daily discharges. Records good. 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.

AVERAGE DISCHARGE.--66 years, 796 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,200 ft³/s Jan. 22, 1959, gage height, 22.04 ft, from flood-mark; 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, 19,900 ft³/s July 3, gage height, 13.81 ft; minimum daily, 35 ft³/s Sept. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3400	460	2030	393	314	737	2460	251	1070	989	89	79
2	6010	393	4720	374	334	1650	3770	247	1060	14400	90	79
3	5670	339	7500	355	466	1520	3510	260	2690	17600	130	79
4	10700	363	7120	341	1080	1050	2530	288	4130	13400	433	76
5	8930	464	5060	321	1140	735	1920	260	4830	9580	451	74
6	5340	681	3820	309	905	573	3790	260	4330	8390	62	74
7	3830	662	2230	310	709	492	4110	240	2800	6550	60	71
8	2390	538	1380	300	663	445	3650	273	1460	4260	61	66
9	1310	465	1890	297	617	481	2820	119	843	2420	66	59
10	832	425	4610	298	575	326	1800	141	916	1280	69	57
11	628	501	3680	306	480	316	1130	173	1020	696	69	57
12	518	582	2660	287	445	292	1010	406	1160	500	69	54
13	459	631	1630	276	429	257	1140	295	2410	717	69	44
14	554	537	945	265	458	253	908	154	2180	1080	71	38
15	767	457	719	297	423	246	755	87	1800	2770	70	37
16	821	402	738	591	332	237	699	87	2100	1980	70	37
17	671	366	523	793	306	215	840	90	1220	858	68	38
18	497	375	558	630	302	212	771	93	794	588	65	38
19	407	452	610	706	270	220	640	134	259	462	63	38
20	342	835	600	1100	250	192	520	457	388	370	60	38
21	304	2070	545	798	234	191	448	1030	497	480	59	38
22	277	2370	494	591	227	176	406	1250	1120	175	82	38
23	255	1980	468	462	219	176	372	1010	1010	178	79	35
24	238	1540	467	299	212	169	412	700	1180	420	71	36
25	246	1030	513	332	208	175	326	449	648	87	74	53
26	583	4810	586	288	195	172	320	450	330	87	79	78
27	1590	8210	613	256	187	176	314	907	249	389	64	76
28	1400	6360	563	245	204	173	297	1290	259	110	46	75
29	1100	4570	504	242	---	161	272	1280	303	113	54	74
30	770	3410	464	262	---	623	271	1070	225	132	64	69
31	565	---	424	296	---	1940	---	1060	---	127	74	---
TOTAL	61404	46278	58664	12620	12184	14581	42211	14811	43281	91188	2931	1705
MEAN	1981	1543	1892	407	435	470	1407	478	1443	2942	94.5	56.8
MAX	10700	8210	7500	1100	1140	1940	4110	1290	4830	17600	451	79
MIN	238	339	424	242	187	161	271	87	225	87	46	35

CAL YR 1986 TOTAL 429934.1
WTR YR 1987 TOTAL 401858

MEAN
MEAN

1178
1101

MAX
MAX

10700
17600

MIN
MIN

8.3
35

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: Dec. 18 to Jan. 17, Jan. 26-30, and Mar. 17-18. 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.

AVERAGE DISCHARGE.--40 years, 155 ft³/s, 13.41 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 WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986.--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)
Nov. 28	2330	1,640	8.71	Feb. 5	1100	2,330	10.07
Dec. 12	1000	*2,390	*10.16	Mar. 14	0030	2,010	9.52

Minimum discharge, 3.9 ft³/s Oct. 11, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	5.5	6.9	281	33	66	86	60	46	25	140	13	5.7	
2	5.3	7.2	250	31	554	84	58	42	22	286	13	5.2	
3	5.4	29	194	30	612	85	54	36	19	370	14	6.2	
4	7.4	256	126	28	1010	93	53	32	19	172	11	6.0	
5	5.6	317	106	26	2160	123	49	31	21	89	9.5	8.3	
6	5.1	318	92	25	1980	217	49	30	189	58	9.2	8.5	
7	4.5	220	81	24	1480	226	50	31	424	43	19	11	
8	4.3	249	78	23	1030	138	48	31	178	34	20	6.7	
9	4.2	186	77	23	387	140	41	28	96	132	15	5.2	
10	4.5	346	109	22	230	450	37	24	56	205	13	4.6	
11	4.2	1170	1140	22	158	1180	36	23	43	280	14	4.9	
12	3.9	1030	2260	21	134	887	34	22	36	1040	15	14	
13	4.7	920	1890	21	129	1400	32	22	30	918	13	22	
14	9.7	953	658	20	110	1780	29	21	26	833	9.5	19	
15	13	817	253	20	83	1110	40	21	110	311	8.5	10	
16	14	805	196	20	70	362	56	107	83	150	8.0	7.2	
17	11	1190	135	20	95	255	47	145	43	106	8.0	5.6	
18	7.7	704	118	560	282	200	40	67	29	84	7.2	7.0	
19	5.9	294	102	1160	392	869	36	96	23	62	6.5	31	
20	6.1	209	93	1220	478	944	49	140	508	46	6.1	40	
21	6.4	162	84	548	685	336	454	71	370	39	6.4	18	
22	6.3	134	75	361	679	190	404	52	122	39	6.2	11	
23	6.6	114	69	268	338	156	222	50	89	28	5.9	8.3	
24	13	97	62	182	219	132	142	45	69	23	5.9	9.2	
25	24	82	57	147	187	114	103	35	43	20	5.4	63	
26	19	284	52	122	158	102	83	31	29	24	7.1	134	
27	17	1440	48	108	132	93	70	37	40	33	8.9	231	
28	12	1520	44	94	99	85	64	43	1020	27	11	345	
29	9.1	1310	41	82	---	79	56	40	802	19	13	179	
30	7.9	494	38	74	---	72	47	32	280	16	8.4	99	
31	7.2	---	35	66	---	64	---	28	---	14	6.4	---	
TOTAL	260.5	15664.1	8844	5401	13937	12052	2543	1459	4844	5641	317.1	1325.6	
MEAN	8.40	522	285	174	498	389	84.8	47.1	161	182	10.2	44.2	
MAX	24	1520	2260	1220	2160	1780	454	145	1020	1040	20	345	
MIN	3.9	6.9	35	20	66	64	29	21	19	14	5.4	4.6	
CFSM	.05	3.32	1.82	1.11	3.17	2.48	.54	.30	1.03	1.16	.06	.28	
IN.	.06	3.71	2.10	1.28	3.30	2.86	.60	.35	1.15	1.34	.08	.31	
CAL YR 1985	TOTAL	65751.5		MEAN	180	MAX	5350	MIN	3.9	CFSM	1.15	IN.	15.58
WTR YR 1986	TOTAL	72288.3		MEAN	198	MAX	2260	MIN	3.9	CFSM	1.26	IN.	17.13

SCIOTO RIVER BASIN

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03223000 OLENTANGY RIVER AT CLARIDON, OH--Continued

AVERAGE DISCHARGE.--41 years, 157 ft³/s, 13.58 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)
Nov. 27	0730	1,950	9.41	June 3	0200	*13,700	*16.39
Dec. 3	2400	1,580	8.54				

Minimum discharge, 4.2 ft³/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	527	52	170	72	71	147	442	43	163	689	22	20	
2	856	44	653	71	75	393	829	58	98	8220	47	16	
3	967	40	1370	67	191	275	796	88	1010	10400	60	14	
4	1290	42	1360	63	170	150	353	86	982	3140	31	11	
5	921	48	536	59	113	102	388	69	297	1460	45	9.8	
6	401	59	233	56	96	99	1360	54	152	1210	26	9.4	
7	198	60	171	60	101	103	1450	47	99	692	19	9.1	
8	125	59	224	57	117	91	1050	42	73	351	16	8.6	
9	90	56	494	58	88	80	395	38	679	264	17	8.1	
10	69	51	1180	59	101	65	235	35	938	592	27	7.9	
11	58	50	718	59	79	55	175	32	343	322	36	7.6	
12	51	75	252	51	87	50	196	29	245	228	21	7.3	
13	48	84	150	51	112	46	267	26	419	352	16	7.3	
14	66	65	110	47	105	44	217	25	437	952	13	7.1	
15	106	55	107	174	68	45	156	27	175	1170	12	6.9	
16	84	50	87	290	79	43	132	25	100	479	9.9	6.8	
17	61	48	81	154	61	40	112	26	71	181	9.5	7.0	
18	49	47	92	100	50	37	92	25	54	117	8.4	6.4	
19	41	181	104	111	46	37	78	236	47	88	8.0	6.6	
20	37	276	95	186	42	36	70	170	50	72	7.5	6.4	
21	35	642	81	142	40	35	63	80	88	60	7.3	6.3	
22	33	442	77	97	40	33	59	732	256	50	7.9	6.2	
23	31	219	75	84	38	31	55	381	154	44	7.8	6.0	
24	28	153	71	68	35	31	51	142	80	37	7.1	5.8	
25	27	123	202	58	32	30	47	82	54	32	6.9	5.6	
26	49	890	394	53	31	30	44	139	101	29	17	5.4	
27	91	1770	196	46	30	28	42	1140	82	26	48	5.2	
28	161	1340	129	44	33	28	60	587	49	23	144	4.9	
29	125	425	104	44	---	27	65	213	35	21	142	4.7	
30	84	236	89	62	---	163	53	144	89	19	47	4.4	
31	62	---	79	75	---	479	---	404	---	18	28	---	
TOTAL	6771	7682	9684	2618	2131	2853	9332	5225	7420	31338	914.3	237.8	
MEAN	218	256	312	84.5	76.1	92.0	311	169	247	1011	29.5	7.93	
MAX	1290	1770	1370	290	191	479	1450	1140	1010	10400	144	20	
MIN	27	40	71	44	30	27	42	25	35	18	6.9	4.4	
CFSM	1.39	1.63	1.99	.54	.48	.59	1.98	1.08	1.57	6.44	.19	.05	
IN.	1.60	1.82	2.29	.62	.50	.68	2.21	1.24	1.76	7.43	.22	.06	
CAL YR 1986	TOTAL	71656.7		MEAN	196	MAX	2160	MIN	4.6	CFSM	1.25	IN.	16.98
WTR YR 1987	TOTAL	86206.1		MEAN	236	MAX	10400	MIN	4.4	CFSM	1.50	IN.	20.43

SCIOTO RIVER BASIN

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.

AVERAGE DISCHARGE.--60 years, 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, 4,530 ft³/s July 8, gage height, 8.61 ft; minimum daily, 18 ft³/s Sept. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	672	278	2500	120	122	88	280	48	741	465	193	130
2	897	276	1230	120	211	748	520	48	553	594	37	67
3	1650	233	652	120	307	904	1280	49	599	108	40	36
4	553	214	2710	120	376	489	761	49	1160	951	65	31
5	1590	216	3060	376	373	212	600	91	1120	4170	114	28
6	3420	235	2980	209	203	95	1770	208	701	4460	132	28
7	3000	299	2310	120	121	170	2930	243	359	4400	97	28
8	1490	314	1190	120	123	255	3010	144	95	4450	47	24
9	368	314	1170	252	263	262	2290	106	400	4410	47	21
10	304	290	2020	261	381	260	566	106	1110	4400	47	21
11	135	281	2390	172	203	164	483	69	821	4430	47	21
12	135	243	1270	120	122	117	286	53	882	4330	47	21
13	135	209	128	210	297	117	545	43	2050	4350	47	21
14	187	207	129	254	309	117	919	38	1160	4240	47	21
15	375	207	650	256	119	117	498	38	644	4010	47	21
16	223	207	712	302	118	117	362	38	458	2030	47	21
17	135	207	292	383	117	117	304	38	78	337	42	21
18	132	235	250	380	215	86	393	38	78	100	38	21
19	132	284	250	392	165	71	109	302	115	129	38	21
20	132	464	250	541	120	70	109	509	138	221	38	21
21	132	801	249	607	120	70	109	178	684	310	36	20
22	132	860	246	298	117	70	109	444	986	197	35	19
23	74	850	222	73	99	70	109	893	707	37	35	19
24	52	830	180	48	70	70	172	334	443	37	35	19
25	52	546	184	48	70	71	179	52	129	37	34	18
26	59	806	187	162	70	71	109	203	129	37	35	20
27	114	1210	379	260	70	70	106	1440	130	37	35	20
28	244	1720	663	177	71	71	106	2050	129	37	35	20
29	281	2710	659	120	---	71	66	829	493	37	35	21
30	281	2630	320	123	---	351	450	174	256	37	35	21
31	281	---	120	123	---	651	---	417	---	37	100	---
TOTAL	17367	18176	29552	6867	4952	6212	19530	9272	17348	53425	1707	821
MEAN	560	606	953	222	177	200	651	299	578	1723	55.1	27.4
MAX	3420	2710	3060	607	381	904	3010	2050	2050	4460	193	130
MIN	52	207	120	48	70	70	66	38	78	37	34	18
CAL YR 1986	TOTAL	179494.5	MEAN	492	MAX	4390	MIN	1.0				
WTR YR 1987	TOTAL	185229	MEAN	507	MAX	4460	MIN	18				

SCIOTO RIVER BASIN

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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: Oct. 1-29. Records good except for estimated daily discharges, which are 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.

AVERAGE DISCHARGE.--67 years, 1,405 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, 22,300 ft³/s July 2, gage height, 20.75 ft; minimum daily, 149 ft³/s Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3650	898	4880	805	647	912	3610	624	1890	2000	230	226
2	7340	805	9930	708	880	1770	4640	412	2230	16400	346	292
3	6970	720	9450	673	1560	2720	4760	464	4860	17100	1040	267
4	14200	804	9900	651	1600	1960	3580	443	5080	15300	332	199
5	13500	871	8790	617	1370	1490	3880	407	5590	13200	1050	182
6	9930	1040	7310	606	994	956	6350	439	5100	13400	590	178
7	8300	1160	5450	773	908	763	7400	567	3810	11600	322	186
8	5880	1160	3540	750	845	764	6660	599	2170	9290	300	183
9	3500	975	3040	588	1020	848	5320	378	1180	7230	226	182
10	2100	885	6210	563	995	754	2530	324	1520	5690	224	186
11	1250	1020	6600	586	796	697	2110	368	2120	4990	206	186
12	904	1030	5130	740	679	602	1900	445	1830	4810	202	227
13	833	1020	2610	744	809	493	1900	632	3470	4660	205	408
14	867	915	1520	586	907	470	2020	342	4190	4810	221	246
15	1110	817	1170	542	664	473	1920	512	2530	6410	202	183
16	1390	752	1770	614	555	460	1400	243	2860	5630	191	173
17	1090	711	1460	664	543	426	1490	218	1900	2230	201	180
18	830	677	1000	761	571	426	1430	229	1030	966	204	212
19	692	784	1100	1110	625	397	1050	296	813	748	194	170
20	622	1210	1070	1250	512	357	832	799	471	629	189	161
21	572	2420	1010	1310	468	358	744	1360	741	655	184	162
22	522	3410	952	2030	456	341	711	1710	1970	799	193	194
23	491	2980	903	1930	452	349	630	1810	1950	522	181	181
24	438	2670	884	1670	439	346	702	1760	2010	317	178	166
25	500	2130	919	1330	382	348	693	864	1240	473	171	162
26	646	6450	1030	790	394	344	594	758	846	254	215	157
27	1550	10900	1020	596	361	341	544	1600	528	252	242	149
28	1760	8660	1000	693	478	344	529	3070	481	406	373	158
29	1590	7320	1410	585	---	565	510	2950	487	241	205	163
30	1300	6330	1380	569	---	1940	630	1700	1110	217	178	172
31	1040	---	1300	580	---	3280	---	2080	---	236	206	---
TOTAL	95367	71524	103738	26414	20910	26294	71069	28403	66007	151465	9001	5891
MEAN	3076	2384	3346	852	747	848	2369	916	2200	4886	290	196
MAX	14200	10900	9930	2030	1600	3280	7400	3070	5590	17100	1050	408
MIN	438	677	884	542	361	341	510	218	471	217	171	149
CAL YR 1986	TOTAL	714905		MEAN	1959	MAX	14200	MIN	153			
WTR YR 1987	TOTAL	676083		MEAN	1852	MAX	17100	MIN	149			

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.--No estimated daily discharges. Records good. Flow completely regulated by Hoover Reservoir since September 1954. (See station 03228400). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--49 years, 190 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, 5,000 ft³/s July 2, gage height, 11.38 ft; minimum daily, 102 ft³/s Oct. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	176	185	286	165	123	126	156	148	206	275	197	137
2	162	185	767	165	123	124	151	151	175	2390	197	140
3	158	185	1100	165	123	123	139	153	1020	2150	197	147
4	296	185	891	165	123	123	137	155	1060	1530	197	150
5	207	185	696	165	123	123	143	157	587	1470	196	165
6	166	185	745	165	123	123	155	164	163	1470	193	165
7	142	185	1070	165	123	123	145	171	161	1460	170	145
8	117	185	1310	165	123	123	540	171	162	777	170	161
9	117	185	1130	165	123	126	538	189	161	187	169	151
10	117	185	1070	165	123	123	256	220	159	186	168	171
11	117	187	851	165	123	123	184	202	159	182	168	164
12	117	185	910	152	123	123	260	209	366	159	168	131
13	116	185	959	123	123	119	387	213	601	159	167	130
14	117	150	458	123	123	113	248	215	546	157	184	130
15	117	128	266	123	123	113	207	213	456	156	176	130
16	132	122	204	123	123	113	221	213	524	155	175	130
17	114	117	169	123	123	113	192	220	567	154	180	130
18	114	117	153	123	123	113	152	218	601	154	183	142
19	102	110	153	129	123	113	141	218	640	173	183	139
20	129	111	149	125	123	113	138	218	715	164	179	145
21	122	111	141	125	123	113	137	219	796	201	164	158
22	129	110	139	125	123	113	136	216	831	205	142	153
23	146	110	139	124	123	113	137	202	470	203	144	132
24	185	111	141	126	122	108	143	198	168	202	158	118
25	186	129	169	124	122	119	139	197	177	201	152	125
26	186	158	270	123	122	147	139	195	165	192	140	125
27	187	605	239	123	122	158	141	195	165	171	139	128
28	187	754	188	123	124	153	142	193	169	168	139	152
29	187	513	185	123	---	150	144	192	189	169	138	151
30	185	363	176	123	---	159	146	205	187	187	137	134
31	185	---	165	123	---	157	---	234	---	198	137	---
TOTAL	4718	6226	15289	4321	3441	3883	5894	6064	12346	15605	5207	4279
MEAN	152	208	493	139	123	125	196	196	412	503	168	143
MAX	296	754	1310	165	124	159	540	234	1060	2390	197	171
MIN	102	110	139	123	122	108	136	148	159	154	137	118
CAL YR 1986	TOTAL	83111	MEAN	228	MAX	1540	MIN	102				
WTR YR 1987	TOTAL	87273	MEAN	239	MAX	2390	MIN	102				

SCIOTO RIVER BASIN

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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.

AVERAGE DISCHARGE.--9 years (water years 1964-72), 115 ft³/s, 14 years (water years 1974-87), 110 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, 1,730 ft³/s July 4, gage height, 5.38 ft; minimum daily, 3.4 ft³/s Apr. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	138	633	175	5.4	6.4	5.4	17	92	133	9.5	6.9
2	400	137	287	99	5.4	5.9	5.4	18	173	106	9.6	7.0
3	870	135	106	48	5.4	5.7	4.2	18	147	14	9.8	9.8
4	381	135	783	48	5.4	5.5	3.4	18	159	598	9.0	6.8
5	498	178	1030	48	5.4	5.4	9.1	18	170	1580	12	6.6
6	1160	197	1000	48	5.4	5.3	4.6	18	170	1560	9.7	6.7
7	1180	197	516	47	5.4	5.4	6.9	18	137	1610	7.0	6.3
8	1170	197	190	47	6.1	5.7	6.4	17	92	1590	6.7	6.1
9	827	197	157	47	6.4	5.8	4.2	17	92	1540	6.5	6.2
10	149	126	491	47	5.5	5.5	6.2	17	92	1420	6.7	6.2
11	31	92	529	47	5.4	5.2	7.7	15	42	760	8.1	6.4
12	31	124	134	47	5.6	5.0	9.7	13	102	94	8.1	6.5
13	31	162	8.5	18	5.7	5.2	9.7	12	265	31	8.1	6.5
14	31	159	8.3	3.8	5.7	5.0	27	12	265	24	8.1	6.8
15	31	145	7.0	3.6	6.0	5.0	85	11	268	24	9.4	7.0
16	31	145	6.3	3.8	5.5	4.9	100	11	268	24	9.5	6.4
17	31	142	6.8	3.9	4.9	4.6	100	11	268	18	9.5	6.3
18	31	116	30	3.9	4.8	4.2	100	11	268	15	9.5	6.3
19	31	92	64	5.2	5.4	4.2	100	12	187	15	7.0	6.3
20	64	129	64	5.7	5.2	4.3	125	34	152	10	6.9	6.5
21	366	187	64	5.2	5.4	4.3	122	44	152	7.7	9.5	6.5
22	487	197	64	5.0	5.4	4.1	117	84	152	7.4	12	6.7
23	202	197	64	5.6	5.7	3.7	116	148	152	9.0	12	6.8
24	143	197	69	9.5	6.0	3.5	83	200	112	11	10	6.6
25	194	145	77	9.0	6.1	4.5	50	171	95	11	8.4	6.2
26	195	319	77	6.6	5.9	4.3	36	93	50	11	8.9	6.1
27	195	492	77	5.5	5.7	5.0	18	146	25	12	8.3	6.0
28	195	715	77	5.7	6.0	5.1	17	207	16	12	6.8	5.7
29	195	826	167	5.7	---	4.0	17	158	14	11	6.5	6.0
30	195	819	209	5.6	---	7.3	17	112	23	9.5	6.5	6.3
31	176	---	193	5.4	---	5.6	---	91	---	9.5	6.7	---
TOTAL	9584	7037	7188.9	864.7	156.2	155.6	1312.9	1772	4200	11277.1	266.3	196.5
MEAN	309	235	232	27.9	5.58	5.02	43.8	57.2	140	364	8.59	6.55
MAX	1180	826	1030	175	6.4	7.3	125	207	268	1610	12	9.8
MIN	31	92	6.3	3.6	4.8	3.5	3.4	11	14	7.4	6.5	5.7
CAL YR 1986	TOTAL	53455.3	MEAN	146	MAX	1340	MIN	2.7				
WTR YR 1987	TOTAL	44011.2	MEAN	121	MAX	1610	MIN	3.4				

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 poor. 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.

AVERAGE DISCHARGE.--61 years, 174 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, 4,560 ft³/s Oct. 4, gage height, 8.86 ft; minimum daily, 4.4 ft³/s Aug. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	836	175	918	91	36	141	167	35	203	546	7.7	12
2	367	166	2020	81	37	81	313	37	267	1540	7.3	11
3	1320	168	659	80	43	52	113	49	1160	188	167	7.8
4	3660	213	622	76	40	39	83	48	275	106	22	7.9
5	554	207	1080	72	33	36	289	28	238	1640	123	12
6	1450	258	1030	72	30	31	560	24	220	1650	25	9.5
7	1400	241	820	73	28	31	345	25	211	1560	17	6.9
8	1410	262	354	71	29	28	155	27	108	1570	10	5.5
9	1290	241	394	71	28	28	91	25	104	1530	7.5	8.4
10	370	216	529	80	29	27	64	23	97	1500	5.6	6.9
11	105	183	675	79	28	25	58	22	86	1200	5.4	10
12	98	156	370	76	34	26	126	22	225	242	6.1	71
13	107	197	93	71	41	24	79	18	377	72	6.8	91
14	119	206	83	42	39	22	59	18	328	51	5.7	16
15	92	183	79	34	36	22	131	103	320	39	5.0	10
16	82	177	74	35	29	22	164	26	315	33	5.0	8.1
17	81	174	73	31	29	22	146	15	311	31	6.4	8.7
18	80	172	84	39	30	21	137	18	311	25	5.1	26
19	78	142	114	176	30	21	130	24	275	19	4.4	17
20	77	172	115	143	29	20	136	22	171	17	7.1	9.7
21	243	288	111	64	27	17	151	56	185	14	6.4	8.0
22	514	250	108	57	27	17	125	209	212	11	7.8	19
23	401	241	101	49	28	20	118	127	169	12	9.2	31
24	123	236	108	39	27	22	85	231	150	10	15	14
25	277	216	192	40	26	22	76	232	87	7.3	13	8.4
26	269	1440	138	34	26	23	66	182	82	27	25	6.9
27	257	865	122	32	29	24	52	236	34	33	41	7.2
28	242	710	116	29	64	24	42	245	27	17	69	7.6
29	238	948	149	41	---	26	40	239	17	12	24	7.4
30	235	912	248	76	---	305	41	236	60	10	13	11
31	235	---	239	48	---	292	---	549	---	8.9	17	---
TOTAL	16610	10015	11818	2002	912	1511	4142	3151	6625	13721.2	689.5	475.9
MEAN	536	334	381	64.6	32.6	48.7	138	102	221	443	22.2	15.9
MAX	3660	1440	2020	176	64	305	560	549	1160	1650	167	91
MIN	77	142	73	29	26	17	40	15	17	7.3	4.4	5.5

CAL YR 1986 TOTAL 85213.0 MEAN 233 MAX 3660 MIN 6.0
WTR YR 1987 TOTAL 71672.6 MEAN 196 MAX 3660 MIN 4.4 mouth.

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.--Estimated daily discharges: Nov. 9-11. Record good except for estimated daily discharges, which are fair. Flow regulated by Hoover Reservoir 26 mi upstream (see station 03228400) and Alum Creek Lake 30 mi upstream since August 1973. Beginning June 15, 1956, diversion at Morse Road Treatment Plant, 21 mi upstream from station, for municipal water supply for the city of Columbus. Water-quality data collected at this site 1964 to 1977.

AVERAGE DISCHARGE.--63 years, 524 ft³/s (adjusted for diversion).

COOPERATION.--Gage-height record for Oct. 16 to Dec. 4 provided by U.S. Army Corps of Engineers.

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, 7,290 ft³/s Oct. 4, gage height, 11.08 ft; minimum daily, 37 ft³/s Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	867	730	1440	265	141	434	624	109	444	600	57	94
2	1170	705	5310	227	128	353	1140	111	483	3490	79	66
3	1180	705	2690	220	153	228	509	139	2760	3220	472	64
4	5490	800	1740	204	154	177	332	157	1740	1840	137	48
5	2240	978	1910	200	132	154	606	115	1100	2730	313	52
6	1560	875	1800	195	126	139	1850	102	469	3260	184	59
7	1470	858	1780	189	120	132	2310	96	334	2880	121	69
8	1430	892	1640	195	121	125	1110	102	248	2840	91	87
9	1340	890	1830	191	109	120	982	99	203	1690	80	50
10	590	590	2050	208	111	125	535	81	215	1620	64	56
11	193	440	1730	216	113	107	359	107	199	1450	76	64
12	142	370	1310	216	116	100	426	98	281	493	74	165
13	177	363	1010	182	128	104	508	96	1140	218	66	232
14	187	356	721	143	118	97	415	91	912	150	52	91
15	165	265	389	135	119	91	409	523	720	132	49	61
16	460	265	299	140	101	85	455	198	724	120	47	50
17	452	259	245	134	105	83	421	129	722	119	47	56
18	425	250	237	127	106	79	345	115	730	101	49	75
19	402	259	264	366	108	77	275	200	740	80	66	74
20	406	210	257	618	99	77	262	150	679	69	51	71
21	636	399	243	252	106	73	279	151	863	77	46	63
22	1120	456	223	195	97	71	225	550	886	62	52	84
23	932	370	217	164	103	68	248	396	908	78	59	119
24	531	363	216	129	97	72	217	348	338	84	52	89
25	925	346	394	141	97	76	219	333	211	83	50	52
26	897	309	426	114	97	72	175	475	207	85	43	42
27	848	5000	387	110	94	109	160	1170	152	152	120	42
28	826	1510	338	113	135	112	131	557	111	103	298	41
29	810	1580	275	109	---	108	124	380	109	72	120	37
30	826	1550	399	244	---	621	139	279	115	68	80	69
31	794	---	386	172	---	1120	---	923	---	69	75	---
TOTAL	29491	22943	32156	6114	3234	5389	15790	8380	18743	28035	3170	2222
MEAN	951	765	1037	197	116	174	526	270	625	904	102	74.1
MAX	5490	5000	5310	618	154	1120	2310	1170	2760	3490	472	232
MIN	142	210	216	109	94	68	124	81	109	62	43	37
(+)	126	116	120	120	119	120	122	141	145	157	162	143

CAL YR 1986 TOTAL 192877 MEAN 528 MAX 5490 MIN 41 (+) 129
WTR YR 1987 TOTAL 175667 MEAN 481 MAX 5490 MIN 37 (+) 133
(+) 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: Jan. 24 to Feb. 2. 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.

AVERAGE DISCHARGE.--63 years, 455 ft³/s, 11.57 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)
Oct. 6	0730	*6,900	*10.88	Dec. 4	0130	5,370	9.72
Nov. 28	0530	5,170	9.51	July 3	1730	5,480	9.83

Minimum discharge, 14 ft³/s Sept. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	301	244	781	245	220	225	1440	203	379	111	61	43	
2	1720	219	2760	240	210	703	1880	189	300	2020	64	40	
3	2590	202	4880	236	223	603	1960	186	1510	5150	72	36	
4	1970	196	5000	219	286	419	1070	184	2010	4130	69	34	
5	4930	197	2350	205	271	327	866	172	921	1310	82	32	
6	5830	258	1290	201	235	282	1690	160	593	922	133	31	
7	2050	375	928	205	225	257	1890	153	420	666	92	31	
8	1070	394	824	202	228	242	1330	150	328	503	71	31	
9	793	319	894	192	224	236	894	146	268	376	63	29	
10	608	286	1980	195	196	222	667	140	224	294	56	27	
11	486	266	1950	204	194	197	562	135	191	243	52	26	
12	408	263	958	199	190	182	523	129	180	356	49	32	
13	357	302	682	186	184	174	631	123	185	222	47	32	
14	329	303	538	177	179	167	591	118	290	192	45	30	
15	407	253	469	177	180	165	508	392	304	337	43	29	
16	387	233	422	186	165	164	609	241	245	445	41	28	
17	306	224	394	229	143	156	919	174	316	263	39	28	
18	262	212	392	217	167	149	772	146	304	328	37	25	
19	231	201	406	229	153	147	573	161	190	215	35	23	
20	209	211	390	446	144	146	475	161	148	161	34	21	
21	196	294	355	577	139	143	420	169	135	136	31	19	
22	186	658	321	435	138	138	375	313	141	120	29	18	
23	176	490	304	385	140	136	340	899	134	108	30	17	
24	167	389	306	350	139	133	316	467	123	98	29	17	
25	207	320	329	320	135	133	293	326	112	89	27	17	
26	183	967	336	300	128	133	264	280	155	86	27	16	
27	699	3990	326	280	126	130	246	445	153	81	29	16	
28	584	3910	307	260	132	127	235	343	119	74	42	14	
29	422	1560	284	250	---	127	225	275	111	72	38	14	
30	336	991	276	240	---	266	215	229	95	68	37	15	
31	283	---	264	230	---	1320	---	268	---	65	42	---	
TOTAL	28683	18727	31696	8017	5094	7949	22779	7477	10584	19241	1546	771	
MEAN	925	624	1022	259	182	256	759	241	353	621	49.9	25.7	
MAX	5830	3990	5000	577	286	1320	1960	899	2010	5150	133	43	
MIN	167	196	264	177	126	127	215	118	95	65	27	14	
CFSM	1.73	1.17	1.91	.49	.34	.48	1.42	.45	.66	1.16	.09	.05	
IN.	2.00	1.30	2.21	.56	.35	.55	1.59	.52	.74	1.34	.11	.05	
CAL YR 1986	TOTAL	213313		MEAN	584	MAX	5830	MIN	35	CFSM	1.09	IN.	14.86
WTR YR 1987	TOTAL	162564		MEAN	445	MAX	5830	MIN	14	CFSM	.83	IN.	11.32

SCIOTO RIVER BASIN

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03230900 DEER CREEK NEAR PANCOASTBURG, OH

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

DRAINAGE AREA.--277 mi².

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

REVISED RECORDS.--WRD Ohio 1972: 1971.

GAGE.--Water-stage recorder. Datum of gage is 768.00 ft above 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.--Estimated daily discharges: Jan. 23-26. Records good except for estimated daily discharges, which are fair. 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.

AVERAGE DISCHARGE.--21 years 259 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, 1,470 ft³/s Dec. 4, gage height, 4.77 ft; minimum daily, 7.7 ft³/s Apr. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	145	280	142	73	41	12	85	137	43	17	10
2	11	145	580	122	72	39	12	86	162	226	17	9.9
3	11	145	880	111	99	163	10	88	322	745	17	9.9
4	11	145	1240	111	111	226	7.7	90	774	1020	17	9.9
5	11	143	1410	83	111	186	9.3	66	1140	911	17	9.9
6	11	148	1130	69	78	126	9.9	55	796	639	17	9.9
7	267	158	516	69	69	108	9.9	55	263	316	17	10
8	495	158	293	69	69	109	9.9	54	168	91	17	10
9	489	156	295	69	68	111	9.6	55	168	91	17	10
10	302	172	478	69	68	87	39	55	106	91	17	10
11	169	197	562	69	69	68	63	57	79	91	17	11
12	168	216	326	69	121	67	63	57	80	141	17	11
13	168	268	219	69	113	66	118	58	80	188	17	11
14	168	301	218	69	69	67	172	34	80	187	12	11
15	167	297	250	69	69	67	207	261	80	134	10	11
16	167	295	269	69	69	68	455	548	80	89	10	11
17	166	221	234	69	69	53	595	294	80	79	12	11
18	166	150	186	69	69	43	554	23	52	79	17	11
19	166	150	171	70	69	43	551	23	39	79	17	12
20	166	149	171	69	69	21	186	116	40	38	17	12
21	166	210	171	120	69	15	52	326	63	17	17	11
22	166	239	104	145	69	15	52	844	85	17	17	11
23	166	235	99	145	59	12	67	1150	85	17	17	11
24	166	200	111	145	44	11	83	700	89	17	15	11
25	166	135	111	145	43	11	83	265	76	17	9.9	11
26	164	387	111	74	42	13	83	265	66	17	9.9	10
27	163	606	111	43	42	12	153	309	66	17	9.9	10
28	141	605	111	63	42	11	176	418	66	17	10	10
29	129	598	132	73	---	11	177	339	66	17	9.9	11
30	133	587	142	73	---	12	110	199	50	17	9.9	11
31	145	---	142	73	---	12	---	137	---	17	9.9	---
TOTAL	4995	7561	11053	2704	2014	1894	4129.3	7112	5438	5465	451.4	318.5
MEAN	161	252	357	87.2	71.9	61.1	138	229	181	176	14.6	10.6
MAX	495	606	1410	145	121	226	595	1150	1140	1020	17	12
MIN	11	135	99	43	42	11	7.7	23	39	17	9.9	9.9
CAL YR 1986	TOTAL	67968.4		MEAN	186	MAX	1900	MIN	9.5			
WTR YR 1987	TOTAL	53135.2		MEAN	146	MAX	1410	MIN	7.7			

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.

REMARKS.--Estimated daily discharges: Oct. 28-Nov. 14, Jan. 24-27. Records good except for estimated daily discharges, which are fair. 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.--52 years (1926-35, 1938-56, 1962-87), 300 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, 1,900 ft³/s Dec. 4, gage height, 7.21 ft; minimum daily, 6.1 ft³/s Sept. 9, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	170	429	156	98	66	155	111	177	60	26	7.7
2	14	170	1030	151	94	68	164	112	192	231	20	7.4
3	12	170	1370	139	105	138	112	114	328	826	27	7.0
4	12	170	1510	135	122	235	91	113	851	1260	22	7.0
5	17	170	1820	115	122	220	112	93	1370	1210	29	7.0
6	19	170	1450	89	108	156	342	73	1140	821	24	7.0
7	169	175	774	89	86	129	270	72	388	541	22	7.0
8	538	180	369	89	86	128	173	66	217	120	22	6.6
9	540	185	393	89	94	131	119	66	212	112	22	6.1
10	401	190	579	89	85	123	99	66	164	112	22	6.7
11	187	210	701	89	83	85	132	66	104	108	22	7.3
12	184	240	481	89	115	83	124	64	111	186	22	8.0
13	184	270	255	84	144	83	139	65	108	248	22	8.1
14	184	300	260	73	87	83	190	54	105	233	22	7.5
15	182	323	267	73	85	83	230	274	103	185	13	7.5
16	182	323	299	73	84	83	538	674	101	116	12	7.0
17	181	275	278	73	84	79	782	472	100	94	10	7.4
18	178	178	235	73	84	55	672	55	84	94	13	6.7
19	178	169	208	82	84	56	651	176	53	93	17	6.8
20	175	165	204	102	84	49	361	210	53	72	17	7.5
21	173	205	202	128	84	25	97	361	99	22	17	7.0
22	173	249	149	165	84	24	91	1010	165	20	17	7.0
23	173	249	110	166	82	23	93	1470	126	18	16	7.0
24	173	232	130	170	60	20	116	1060	115	18	16	6.7
25	173	177	134	170	58	21	115	340	115	18	11	6.6
26	173	425	135	170	54	21	113	330	105	18	8.0	6.6
27	173	765	135	110	53	24	163	352	90	19	7.6	6.1
28	150	728	135	126	54	24	208	483	87	19	13	6.3
29	140	704	143	131	---	24	209	448	84	19	9.4	6.4
30	150	680	156	121	---	75	157	279	75	23	7.8	7.2
31	160	---	156	111	---	189	---	173	---	28	7.5	---
TOTAL	5362	8617	14497	3520	2463	2603	6818	9302	7022	6944	536.3	210.2
MEAN	173	287	468	114	88.0	84.0	227	300	234	224	17.3	7.01
MAX	540	765	1820	170	144	235	782	1470	1370	1260	29	8.1
MIN	12	165	110	73	53	20	91	54	53	18	7.5	6.1
CAL YR 1986	TOTAL	89425.0		MEAN	245	MAX	2450	MIN	7.5			
WTR YR 1987	TOTAL	67894.5		MEAN	186	MAX	1820	MIN	6.1			

SCIOTO RIVER BASIN

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03231500 SCIOTO RIVER AT CHILLICOTHE, OH

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

DRAINAGE AREA.--3,849 mi².

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

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

GAGE.--Water-stage recorder. Datum of gage is 594.05 ft above 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.

REMARKS.--No estimated daily discharges. Records poor. Flow regulated by 6 reservoirs 36 mi to 91 mi upstream from station.

AVERAGE DISCHARGE.--67 years, 3,458 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 144,000 ft³/s Jan. 23, 1959, gage height, 32.5 ft, (from high-water mark in well); minimum daily, 166 ft³/s Sept. 27, 1944.

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, 24,600 ft³/s Dec. 4, gage height, 11.86 ft; minimum daily, 401 ft³/s Sept. 28.

 DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6130	2210	10800	2350	1570	1160	7710	1620	4630	1780	877	535
2	7220	1990	12400	2050	1510	2280	7720	1840	4620	5930	848	602
3	11300	1840	20200	1900	1530	3780	9530	1490	5090	15300	1030	605
4	11700	1730	23900	1830	1690	4480	8850	1460	12000	20800	2040	606
5	15200	1890	23300	1730	2210	3650	6740	1520	12200	23800	1190	547
6	19300	2030	18500	1670	2630	2840	8460	1380	10600	22400	1870	493
7	20200	2330	14100	1830	2440	2190	15000	1300	8550	21300	1620	480
8	14600	2610	10600	1700	2020	1840	17700	1360	6210	19700	1110	481
9	9430	2740	8190	1560	1820	1780	14600	1380	4060	17200	977	504
10	5870	2440	9290	1540	1740	1860	10700	1340	2720	12800	869	509
11	3930	2300	13300	1700	1790	1750	6530	1110	2920	9600	802	474
12	2810	2500	12500	1770	1820	1570	4960	1100	3630	8430	785	485
13	2330	2550	9320	1680	1700	1450	4510	1110	3410	7440	753	558
14	2170	2510	5860	1510	1580	1320	4530	1290	5940	7050	742	812
15	2150	2370	4210	1490	1670	1270	4530	1670	6590	6870	741	670
16	2420	2160	3480	1540	1690	1270	5320	3570	4730	8450	702	545
17	2590	2020	3770	1660	1420	1230	5340	2220	4730	7300	669	475
18	2200	1860	3300	2090	1310	1190	5130	1470	3890	3720	658	456
19	1900	1720	2790	2260	1330	1130	4440	1320	2830	2390	654	490
20	1700	1780	2840	3200	1350	1120	3860	1840	2430	1920	624	497
21	1580	2230	2730	4430	1300	1060	2860	2120	2430	1640	632	448
22	1530	4080	2580	3630	1200	1000	2520	3850	2850	1550	625	437
23	1810	5280	2350	3020	1180	990	2320	5620	4000	1630	623	448
24	1800	4660	2280	2200	1170	968	2220	5700	3990	1370	614	502
25	1470	4140	2360	1750	1100	974	2190	4350	3460	1120	604	495
26	1620	3890	2760	1830	1030	959	2150	3080	2890	1210	597	452
27	1910	11600	2850	1610	1010	970	1970	4170	2270	1000	589	415
28	3270	17600	2680	1320	1010	969	1880	6470	1650	994	691	401
29	3230	17200	2820	1430	---	994	1800	6330	1350	1100	1000	408
30	2880	12800	2860	1470	---	1020	1710	5290	1310	933	780	439
31	2520	---	2850	1680	---	4230	---	4410	---	880	578	---
TOTAL	168770	127060	241770	61430	43820	53294	177780	82780	137980	237607	26894	15269
MEAN	5444	4235	7799	1982	1565	1719	5926	2670	4599	7665	868	509
MAX	20200	17600	23900	4430	2630	4480	17700	6470	12200	23800	2040	812
MIN	1470	1720	2280	1320	1010	959	1710	1100	1310	880	578	401
CAL YR 1986	TOTAL	1546071	MEAN	4236	MAX	24300	MIN	524				
WTR YR 1987	TOTAL	1374454	MEAN	3766	MAX	23900	MIN	401				

SCIOTO RIVER BASIN

03231500 SCIOTO RIVER AT CHILLICOTHE, OH

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1950-51, 1965-1981, November 1985 to September 1986.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1965 to October 1981, November 1985 to September 1986.

pH: June 1971 to October 1981, November 1985 to September 1986.

WATER TEMPERATURES: October 1950 to September 1951, October 1953 to October 1981,
November 1985 to September 1986.

DISSOLVED OXYGEN: May 1965 to October 1981, November 1985 to September 1986.

INSTRUMENTATION.--Water-quality monitor.

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; minimum, 6.3 units Mar. 6, 1979.

WATER TEMPERATURES: Maximum, 32.0°C July 14, 1954, Aug. 2, 3, 1955, July 20, 1977; minimum 0.0°C on many days
during winters.

DISSOLVED OXYGEN: Maximum, ≥ 20.0 mg/L on several days during 1978, 1981, and 1986, minimum, 0.0 mg/L April 27,
Aug. 12, SEPT. 22, 1966.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 902 microsiemens Sept. 4; minimum, 260 micromhos July 5.

pH: Maximum, 8.9 units Aug. 13, 14; minimum 7.0 units Sept. 5.

WATER TEMPERATURES: Maximum, 31.0°C July 24, 25, Aug. 2, 4; minimum recorded, 1.0°C Feb. 9, 10.

DISSOLVED OXYGEN: Maximum recorded, 17.5 mg/L Mar. 20; minimum recorded, 4.0 mg/L Aug. 28.

SCIOTO RIVER BASIN

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03231500 SCIOTO RIVER AT CHILLICOTHE OH--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	404	370	387	616	604	607	---	---	---	612	598	606
2	406	354	391	622	612	617	364	322	353	622	608	616
3	394	354	378	632	622	626	326	308	316	640	616	628
4	414	380	405	632	620	624	368	310	333	---	---	---
5	374	314	340	670	620	662	370	360	363	---	---	---
6	312	304	309	664	644	663	372	364	369	---	---	---
7	---	---	---	---	---	---	382	372	377	---	---	---
8	---	---	---	---	---	---	408	380	392	---	---	---
9	---	---	---	---	---	---	440	410	423	---	---	---
10	---	---	---	---	---	---	452	434	444	---	---	---
11	---	---	---	---	---	---	432	408	423	---	---	---
12	---	---	---	---	---	---	462	410	431	---	---	---
13	---	---	---	---	---	---	470	464	467	---	---	---
14	---	---	---	---	---	---	498	468	483	---	---	---
15	---	---	---	---	---	---	510	498	502	796	736	773
16	---	---	---	---	---	---	542	512	527	752	746	748
17	578	568	575	646	632	639	554	538	545	756	746	752
18	572	564	567	650	640	644	570	542	556	752	720	740
19	594	570	582	648	642	644	580	546	561	718	682	693
20	602	592	596	650	640	646	590	582	585	---	---	---
21	658	600	610	650	644	647	598	582	589	---	---	---
22	614	610	612	650	604	632	604	586	595	---	---	---
23	636	616	626	628	610	622	602	592	597	---	---	---
24	638	598	626	622	614	617	604	592	596	---	---	---
25	594	572	579	624	614	619	618	600	610	---	---	---
26	626	580	596	---	---	---	622	612	616	---	---	---
27	640	630	634	---	---	---	616	598	607	---	---	---
28	630	586	605	---	---	---	608	594	599	---	---	---
29	598	578	583	---	---	---	606	596	601	---	---	---
30	596	580	586	---	---	---	606	594	599	---	---	---
31	606	596	602	---	---	---	612	602	608	---	---	---
MONTH	658	304	533	670	604	634	622	308	502	796	598	695
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	746	732	739	646	568	595	668	640	657
2	---	---	---	766	736	755	662	636	649	652	634	643
3	---	---	---	834	704	763	636	600	623	652	638	645
4	---	---	---	768	664	682	602	572	588	648	628	635
5	---	---	---	668	664	666	586	574	582	670	648	661
6	---	---	---	680	662	670	608	572	588	670	652	661
7	---	---	---	680	668	675	604	422	516	652	644	647
8	---	---	---	680	668	675	500	406	444	670	654	662
9	698	688	690	690	676	683	512	462	485	686	672	681
10	698	680	694	694	688	691	464	456	460	674	632	657
11	810	680	701	696	686	689	500	458	474	648	616	635
12	722	680	697	694	688	691	530	504	516	698	618	655
13	722	680	692	706	692	701	548	532	543	706	684	693
14	698	680	689	710	696	703	556	544	551	716	692	706
15	698	680	687	710	698	704	558	542	552	696	606	675
16	692	652	680	716	704	710	542	508	521	588	488	540
17	664	648	655	718	710	715	556	510	532	570	532	552
18	676	656	664	722	706	714	578	556	570	582	568	575
19	688	668	673	722	702	713	584	576	581	596	560	584
20	700	684	690	722	700	712	586	582	584	636	540	608
21	772	698	719	734	718	727	602	586	594	654	620	635
22	778	728	753	726	716	719	608	602	605	660	522	583
23	740	726	730	726	694	715	622	596	611	604	552	572
24	756	742	747	722	702	714	634	618	625	574	560	568
25	760	740	749	732	696	721	648	634	642	576	564	570
26	746	716	733	732	712	722	658	644	651	580	564	575
27	734	718	726	742	706	728	644	624	639	582	492	563
28	736	718	731	744	720	732	646	614	635	514	430	462
29	---	---	---	748	726	735	646	600	627	516	494	507
30	---	---	---	734	700	719	642	612	622	538	514	527
31	---	---	---	702	586	656	---	---	---	542	464	518
MONTH	810	648	705	834	586	708	662	406	574	716	430	608

SCIOTO RIVER BASIN

03231500 SCIOTO RIVER AT CHILLICOTHE OH--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	570	496	539	626	586	611	648	618	635	682	650	666
2	520	490	501	496	394	459	674	636	652	718	670	693
3	522	508	516	388	344	365	696	646	678	806	720	754
4	506	364	415	362	284	322	728	642	694	902	814	869
5	490	400	451	282	260	268	632	522	552	898	840	871
6	512	492	505	278	264	271	600	530	546	870	852	862
7	502	454	478	276	268	272	630	516	566	866	832	850
8	454	424	435	290	276	282	536	514	522	844	808	828
9	464	426	444	308	286	298	548	528	540	824	790	808
10	508	466	483	324	308	314	590	546	567	802	782	792
11	546	512	528	334	322	329	616	588	601	796	786	793
12	518	490	507	340	328	334	634	606	625	796	790	794
13	526	494	504	348	318	339	632	606	619	798	792	796
14	524	444	475	350	326	339	634	612	624	798	782	791
15	474	456	464	366	348	357	646	622	638	792	766	781
16	502	474	489	394	346	368	656	646	651	782	772	778
17	506	476	500	408	396	398	676	650	665	798	784	791
18	508	470	486	480	410	445	690	664	678	810	798	807
19	518	508	513	512	482	497	708	680	697	814	810	813
20	538	508	521	544	514	528	704	680	696	816	808	814
21	520	398	462	576	546	557	702	692	698	816	796	809
22	528	458	496	588	576	582	714	688	704	810	798	804
23	514	482	493	606	598	601	704	694	700	798	790	792
24	502	474	482	602	578	594	720	702	713	---	---	---
25	492	466	484	594	576	585	738	714	726	---	---	---
26	522	482	502	608	530	590	738	726	734	---	---	---
27	548	478	508	666	612	644	734	726	730	---	---	---
28	578	554	566	670	648	663	736	694	723	752	744	750
29	612	578	595	644	620	635	722	702	714	746	652	715
30	618	580	604	674	642	660	734	700	720	746	698	722
31	---	---	---	660	606	650	716	684	692	---	---	---
MONTH	618	364	498	674	260	457	738	514	655	902	650	790
YEAR	902	260	603									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.53	7.47	7.50	7.91	7.86	7.88	---	---	---	8.10	8.05	8.07
2	7.49	7.31	7.43	7.88	7.83	7.86	7.84	7.74	7.82	8.10	8.02	8.05
3	7.51	7.39	7.47	7.89	7.83	7.87	7.76	7.74	7.75	8.07	8.01	8.04
4	7.53	7.42	7.50	7.88	7.83	7.85	7.84	7.74	7.77	---	---	---
5	7.39	7.32	7.37	7.87	7.85	7.86	7.86	7.84	7.85	---	---	---
6	7.35	7.31	7.34	7.86	7.82	7.83	7.90	7.86	7.87	---	---	---
7	---	---	---	---	---	---	7.91	7.88	7.90	---	---	---
8	---	---	---	---	---	---	7.92	7.88	7.90	---	---	---
9	---	---	---	---	---	---	7.92	7.88	7.90	---	---	---
10	---	---	---	---	---	---	7.95	7.90	7.93	---	---	---
11	---	---	---	---	---	---	8.01	7.95	7.99	---	---	---
12	---	---	---	---	---	---	8.00	7.99	7.99	---	---	---
13	---	---	---	---	---	---	8.02	7.98	8.00	---	---	---
14	---	---	---	---	---	---	7.99	7.96	7.98	---	---	---
15	---	---	---	---	---	---	7.98	7.96	7.97	8.18	8.04	8.13
16	---	---	---	---	---	---	8.00	7.94	7.97	8.06	8.03	8.05
17	7.99	7.94	7.96	7.93	7.91	7.92	8.01	7.95	7.98	8.05	8.03	8.04
18	7.96	7.91	7.93	7.95	7.90	7.92	8.02	7.94	7.99	8.11	8.04	8.07
19	7.91	7.85	7.88	7.99	7.88	7.94	8.00	7.93	7.98	8.16	8.10	8.14
20	7.89	7.86	7.87	7.93	7.89	7.91	8.03	7.97	8.00	---	---	---
21	7.89	7.83	7.86	7.90	7.87	7.89	8.05	7.98	8.01	---	---	---
22	7.90	7.87	7.88	7.99	7.88	7.91	8.05	7.98	8.01	---	---	---
23	7.88	7.83	7.86	8.08	7.98	8.04	8.04	7.97	8.00	---	---	---
24	7.88	7.83	7.85	8.07	8.02	8.05	8.05	7.97	8.01	---	---	---
25	7.86	7.81	7.84	8.13	8.04	8.06	8.03	7.98	8.01	---	---	---
26	7.84	7.80	7.82	---	---	---	8.03	7.98	8.00	---	---	---
27	7.80	7.68	7.75	---	---	---	8.07	8.00	8.04	---	---	---
28	7.83	7.67	7.75	---	---	---	8.09	8.04	8.07	---	---	---
29	7.84	7.80	7.83	---	---	---	8.08	8.03	8.05	---	---	---
30	7.93	7.81	7.87	---	---	---	8.11	8.04	8.08	---	---	---
31	7.91	7.87	7.90	---	---	---	8.12	8.07	8.09	---	---	---
MONTH	7.99	7.31	7.74	8.13	7.82	7.92	8.12	7.74	7.96	8.18	8.01	8.07

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	8.31	8.13	8.24	7.77	7.61	7.69	8.60	7.84	8.20
2	---	---	---	8.28	8.07	8.17	7.88	7.78	7.84	8.66	8.37	8.50
3	---	---	---	8.36	8.11	8.23	7.92	7.83	7.88	8.32	7.79	7.95
4	---	---	---	8.60	8.24	8.43	8.01	7.89	7.91	8.09	7.75	7.90
5	---	---	---	8.38	8.25	8.30	7.92	7.87	7.91	7.95	7.65	7.79
6	---	---	---	8.48	8.24	8.34	7.86	7.71	7.81	8.02	7.60	7.78
7	---	---	---	8.65	8.31	8.47	7.72	7.65	7.69	8.05	7.66	7.87
8	---	---	---	8.65	8.33	8.50	7.67	7.65	7.66	8.25	7.65	7.92
9	8.42	8.21	8.30	8.53	8.35	8.45	7.70	7.67	7.68	8.27	7.63	7.94
10	8.41	8.21	8.30	8.60	8.27	8.44	7.71	7.68	7.69	8.47	7.63	8.04
11	8.47	8.20	8.32	8.63	8.29	8.47	7.74	7.69	7.71	8.54	7.79	8.18
12	8.47	8.03	8.32	8.53	8.33	8.42	7.73	7.70	7.71	8.54	7.89	8.24
13	8.65	8.22	8.43	8.52	8.17	8.35	7.73	7.67	7.70	8.59	8.02	8.31
14	8.49	8.26	8.41	8.51	8.19	8.36	7.77	7.68	7.72	8.42	7.93	8.21
15	8.49	8.20	8.33	8.44	8.12	8.29	7.77	7.73	7.75	8.19	7.52	7.89
16	8.48	8.21	8.38	8.45	8.03	8.26	7.73	7.70	7.71	7.49	7.35	7.42
17	8.48	8.20	8.37	8.45	8.08	8.28	7.75	7.69	7.72	7.65	7.49	7.56
18	8.58	8.34	8.46	8.40	8.06	8.26	7.81	7.74	7.78	7.78	7.60	7.67
19	8.60	8.35	8.48	8.53	8.09	8.32	7.85	7.81	7.82	7.78	7.57	7.65
20	8.50	8.26	8.38	8.54	8.18	8.38	7.85	7.78	7.81	7.65	7.54	7.60
21	8.55	8.22	8.36	8.56	8.17	8.38	7.99	7.75	7.85	7.57	7.48	7.52
22	8.47	8.20	8.33	8.65	8.23	8.45	8.15	7.77	7.94	7.53	7.35	7.43
23	8.40	8.14	8.27	8.72	8.28	8.51	8.09	7.79	7.92	7.56	7.50	7.51
24	8.55	8.13	8.35	8.64	8.30	8.50	7.90	7.79	7.84	7.64	7.57	7.59
25	8.69	8.28	8.50	8.64	8.18	8.42	8.18	7.77	7.95	7.66	7.58	7.62
26	8.74	8.35	8.56	8.65	8.20	8.44	8.36	7.88	8.10	7.76	7.66	7.71
27	8.59	8.33	8.45	8.48	8.16	8.34	8.42	7.99	8.19	7.73	7.47	7.66
28	8.49	8.22	8.35	8.62	8.05	8.35	8.62	7.98	8.30	7.52	7.40	7.44
29	---	---	---	8.61	8.16	8.41	8.82	8.28	8.54	7.59	7.47	7.53
30	---	---	---	8.40	7.99	8.17	8.82	8.27	8.59	7.65	7.57	7.60
31	---	---	---	7.95	7.61	7.73	---	---	---	7.63	7.49	7.58
MONTH	8.74	8.03	8.38	8.72	7.61	8.34	8.82	7.61	7.88	8.66	7.35	7.80
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.63	7.51	7.57	7.84	7.64	7.77	8.52	7.98	8.25	7.93	7.42	7.62
2	7.61	7.53	7.57	7.56	7.35	7.51	8.66	8.21	8.42	7.57	7.36	7.45
3	7.59	7.49	7.54	7.50	7.31	7.46	8.38	8.01	8.17	7.57	7.42	7.51
4	7.49	7.46	7.48	7.47	7.42	7.44	8.13	7.68	7.90	7.39	7.10	7.19
5	7.67	7.50	7.57	7.41	7.37	7.38	8.10	7.56	7.78	7.16	7.01	7.11
6	7.70	7.65	7.67	7.40	7.36	7.38	8.09	7.67	7.85	7.23	7.14	7.20
7	7.68	7.59	7.63	7.37	7.35	7.36	8.36	7.56	7.88	7.27	7.21	7.25
8	7.59	7.55	7.57	7.38	7.36	7.36	8.85	8.10	8.48	7.35	7.21	7.29
9	7.60	7.57	7.58	7.41	7.37	7.39	8.78	8.23	8.53	7.39	7.27	7.34
10	7.66	7.55	7.59	7.46	7.38	7.42	8.61	8.15	8.41	7.47	7.38	7.43
11	7.66	7.56	7.61	7.48	7.44	7.46	8.72	8.14	8.43	7.47	7.43	7.45
12	7.62	7.57	7.60	7.52	7.46	7.48	8.78	8.26	8.52	7.51	7.47	7.48
13	7.65	7.58	7.61	7.52	7.48	7.50	8.89	8.40	8.64	7.55	7.50	7.52
14	7.62	7.51	7.57	7.54	7.46	7.50	8.92	8.53	8.70	7.54	7.51	7.53
15	7.70	7.59	7.65	7.55	7.48	7.51	8.79	8.48	8.63	7.54	7.49	7.52
16	7.69	7.65	7.67	7.68	7.50	7.58	8.74	8.42	8.55	7.53	7.50	7.51
17	7.68	7.62	7.65	7.66	7.60	7.63	8.73	8.43	8.53	7.51	7.46	7.49
18	7.70	7.60	7.64	7.71	7.54	7.62	8.68	8.27	8.44	7.48	7.43	7.46
19	7.68	7.62	7.65	7.86	7.63	7.72	8.65	8.25	8.41	7.52	7.47	7.49
20	7.67	7.63	7.65	8.29	7.73	7.95	8.60	8.18	8.34	7.54	7.48	7.51
21	7.64	7.54	7.60	8.25	7.83	8.03	8.47	8.25	8.36	7.54	7.50	7.52
22	7.64	7.55	7.61	8.40	7.95	8.13	8.37	8.03	8.18	7.54	7.50	7.53
23	7.63	7.53	7.59	8.24	7.85	8.02	8.39	7.90	8.09	7.54	7.51	7.52
24	7.64	7.55	7.60	8.52	7.88	8.17	8.38	7.94	8.12	---	---	---
25	7.66	7.59	7.63	8.63	8.09	8.35	8.12	7.80	7.99	---	---	---
26	7.71	7.66	7.68	8.41	8.05	8.23	8.08	7.70	7.87	---	---	---
27	7.71	7.60	7.65	8.21	7.85	8.06	8.02	7.70	7.85	---	---	---
28	7.76	7.61	7.67	8.52	7.90	8.18	7.78	7.66	7.72	8.13	7.79	7.89
29	7.87	7.69	7.76	8.59	7.96	8.26	7.71	7.54	7.61	8.16	7.79	7.93
30	8.00	7.75	7.86	8.59	8.00	8.31	7.67	7.38	7.50	8.05	7.80	7.89
31	---	---	---	8.40	8.12	8.28	7.77	7.47	7.58	---	---	---
MONTH	8.00	7.46	7.62	8.63	7.31	7.76	8.92	7.38	8.18	8.16	7.01	7.49
YEAR	8.92	7.01	7.92									

SCIOTO RIVER BASIN

03231500 SCIOTO RIVER AT CHILLICOTHE OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

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

03231500 SCIOTO RIVER AT CHILLICOTHE OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

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

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	7.1	6.8	6.9	7.9	7.7	7.8	---	---	---	11.3	11.2	11.3
2	6.9	6.2	6.7	7.8	7.6	7.7	10.0	9.7	9.9	11.2	11.0	11.1
3	7.0	6.8	6.9	7.9	7.7	7.8	9.9	9.7	9.8	11.0	10.9	11.0
4	7.1	6.8	7.0	7.9	7.8	7.8	10.2	9.9	10.0	---	---	---
5	6.9	6.7	6.8	8.0	7.9	8.0	10.5	10.2	10.4	---	---	---
6	7.0	6.8	6.9	7.9	7.8	7.8	10.7	10.5	10.6	---	---	---
7	---	---	---	---	---	---	10.8	10.7	10.8	---	---	---
8	---	---	---	---	---	---	10.7	10.6	10.7	---	---	---
9	---	---	---	---	---	---	10.6	10.4	10.5	---	---	---
10	---	---	---	---	---	---	10.6	10.4	10.5	---	---	---
11	---	---	---	---	---	---	11.2	10.6	11.0	---	---	---
12	---	---	---	---	---	---	11.3	11.2	11.3	---	---	---
13	---	---	---	---	---	---	11.4	11.3	11.4	---	---	---
14	---	---	---	---	---	---	11.5	11.4	11.4	---	---	---
15	---	---	---	---	---	---	11.5	11.4	11.4	11.1	10.7	11.0
16	---	---	---	---	---	---	11.5	11.4	11.4	11.1	10.7	10.8
17	8.8	8.6	8.7	8.4	8.2	8.3	11.5	11.4	11.5	11.0	10.7	10.8
18	8.7	8.5	8.6	8.2	8.0	8.1	11.5	11.0	11.3	11.2	10.8	11.0
19	8.5	8.4	8.4	8.4	8.0	8.2	11.2	10.9	11.1	11.2	11.0	11.1
20	8.6	8.4	8.5	8.2	7.9	8.0	11.2	11.1	11.2	---	---	---
21	8.5	8.3	8.4	8.1	7.9	8.0	11.3	11.2	11.3	---	---	---
22	8.3	8.1	8.3	8.4	7.9	8.1	11.3	11.2	11.3	---	---	---
23	8.1	7.8	8.0	8.6	8.4	8.5	11.3	11.2	11.2	---	---	---
24	7.9	7.7	7.8	8.5	8.4	8.5	11.2	11.0	11.2	---	---	---
25	7.8	7.6	7.7	9.4	8.5	9.1	11.0	10.9	10.9	---	---	---
26	7.8	7.5	7.6	---	---	---	11.0	10.8	10.9	---	---	---
27	7.5	7.3	7.4	---	---	---	11.2	10.9	11.1	---	---	---
28	7.7	7.3	7.5	---	---	---	11.3	11.2	11.3	---	---	---
29	7.9	7.7	7.8	---	---	---	11.3	11.2	11.3	---	---	---
30	7.9	7.7	7.8	---	---	---	11.4	11.3	11.4	---	---	---
31	8.0	7.8	7.9	---	---	---	11.4	11.3	11.4	---	---	---
MONTH	8.8	6.2	7.7	9.4	7.6	8.1	11.5	9.7	11.0	11.3	10.7	11.0

SCIOTO RIVER BASIN

03231500 SCIOTO RIVER AT CHILLICOTHE OH--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	---	---	---	11.6	10.4	11.1	9.5	8.2	8.9	12.2	7.8	9.7
2	---	---	---	11.5	10.0	10.7	9.9	9.5	9.7	12.2	9.4	10.6
3	---	---	---	11.2	10.1	10.6	9.9	9.5	9.8	9.4	7.5	8.1
4	---	---	---	12.4	10.6	11.4	10.4	9.9	10.1	8.9	7.2	8.0
5	---	---	---	11.7	11.2	11.5	10.5	10.3	10.4	8.5	7.2	7.8
6	---	---	---	12.5	11.0	11.7	10.5	10.0	10.3	8.8	6.9	7.8
7	---	---	---	13.3	11.0	12.1	10.3	10.1	10.2	9.0	7.1	8.0
8	---	---	---	13.3	10.9	12.1	10.2	10.0	10.1	10.0	7.1	8.4
9	12.6	12.0	12.2	11.8	10.7	11.3	10.1	9.9	10.0	10.2	7.2	8.6
10	12.6	11.2	12.0	13.0	10.3	11.6	9.9	9.5	9.8	11.0	7.0	8.8
11	12.9	11.6	12.2	13.3	10.8	12.0	9.5	9.1	9.4	14.2	7.3	9.5
12	12.6	10.8	11.9	13.1	10.9	12.0	9.1	8.9	9.0	12.9	7.3	9.9
13	13.8	11.2	12.4	13.9	10.9	12.3	8.9	8.5	8.8	13.6	8.8	11.0
14	12.9	11.3	12.0	16.1	10.9	12.4	8.7	8.6	8.6	14.9	8.4	10.8
15	13.0	10.9	11.9	12.8	10.5	11.7	8.6	8.5	8.5	10.4	6.3	8.4
16	12.8	11.3	12.1	13.3	10.1	11.6	8.5	8.4	8.4	6.4	6.0	6.2
17	13.4	11.2	12.4	16.2	10.5	11.9	8.5	8.3	8.4	6.9	6.4	6.6
18	14.2	12.1	13.1	16.1	10.3	11.7	8.5	8.3	8.4	7.4	6.6	6.9
19	14.4	12.2	13.3	15.9	10.2	11.9	8.5	8.2	8.4	7.2	6.2	6.6
20	14.0	11.8	12.9	17.5	10.4	12.0	8.8	8.1	8.5	6.3	5.9	6.2
21	14.2	11.7	12.8	13.2	10.3	11.7	9.4	8.2	8.7	6.4	5.9	6.1
22	13.3	11.4	12.3	14.2	10.3	12.1	10.1	8.2	9.0	6.1	5.8	5.9
23	13.1	10.9	12.0	14.8	10.4	12.5	9.8	8.1	8.8	6.5	6.1	6.3
24	14.2	11.1	12.6	15.6	10.4	12.2	8.9	8.2	8.5	6.6	6.5	6.6
25	15.0	11.7	13.3	14.7	9.4	11.3	10.5	8.3	9.2	6.6	6.5	6.6
26	15.4	11.8	13.5	12.7	9.1	10.9	11.4	8.7	9.9	6.9	6.6	6.8
27	13.3	11.6	12.5	13.0	9.1	11.0	11.7	8.9	10.1	6.8	6.0	6.6
28	13.0	11.0	11.8	14.6	9.8	12.1	12.8	8.9	10.7	6.3	5.9	6.1
29	---	---	---	14.0	10.3	12.2	13.9	9.7	11.6	6.5	6.2	6.3
30	---	---	---	11.4	9.4	10.2	13.9	9.6	11.4	6.5	6.4	6.4
31	---	---	---	9.3	8.2	8.7	---	---	---	6.5	5.8	6.3
MONTH	15.4	10.8	12.5	17.5	8.2	11.6	13.9	8.1	9.5	14.9	5.8	7.7
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	6.3	5.8	6.0	7.3	6.8	7.0	7.3	5.5	6.4	---	---	---
2	6.3	6.0	6.2	6.7	5.9	6.4	7.7	5.6	6.5	---	---	---
3	6.2	5.7	6.0	6.9	5.8	6.7	6.3	4.8	5.5	---	---	---
4	6.5	5.9	6.2	7.5	5.1	6.7	8.4	4.5	6.1	---	---	---
5	6.8	6.6	6.7	7.0	6.6	6.7	7.5	5.1	6.4	---	---	---
6	6.9	6.7	6.8	7.7	5.7	6.6	7.2	5.8	6.5	---	---	---
7	7.0	6.8	6.9	7.5	6.0	6.6	8.2	5.2	6.6	---	---	---
8	7.0	6.8	6.9	7.8	6.5	6.7	10.5	6.8	8.5	---	---	---
9	6.8	6.7	6.7	6.8	6.5	6.7	9.9	6.8	8.2	---	---	---
10	6.8	6.7	6.8	7.4	6.7	6.8	9.4	6.1	8.0	---	---	---
11	6.9	6.5	6.7	7.6	5.7	6.7	10.9	7.0	8.1	---	---	---
12	6.9	6.6	6.7	7.5	6.6	6.9	10.1	7.2	8.5	---	---	---
13	7.0	6.6	6.8	7.7	5.6	6.9	9.5	6.6	8.0	---	---	---
14	6.9	6.4	6.8	7.4	5.7	6.8	8.7	6.4	7.3	---	---	---
15	7.0	6.9	7.0	7.7	6.7	6.8	8.4	6.2	6.9	---	---	---
16	7.0	6.8	6.9	7.1	6.8	6.9	8.6	5.8	6.8	---	---	---
17	6.9	6.7	6.8	7.0	6.8	6.9	8.2	6.0	6.9	---	---	---
18	6.8	6.7	6.8	6.7	5.8	6.1	8.1	5.1	6.3	---	---	---
19	6.7	6.6	6.7	6.2	5.6	5.9	7.2	5.6	6.3	---	---	---
20	6.7	6.6	6.6	9.2	5.7	7.5	6.1	5.2	5.6	---	---	---
21	6.6	6.4	6.5	8.8	6.9	7.8	5.6	5.2	5.5	---	---	---
22	6.5	6.2	6.4	9.4	7.0	8.0	5.3	4.7	4.9	---	---	---
23	6.4	6.1	6.3	8.8	6.0	7.5	4.9	4.7	4.8	---	---	---
24	7.0	6.3	6.7	10.2	6.8	8.3	4.7	4.6	4.7	---	---	---
25	6.9	6.7	6.8	11.0	7.1	8.9	4.8	4.4	4.6	---	---	---
26	6.9	6.8	6.9	9.3	7.2	8.2	8.8	4.1	4.4	---	---	---
27	6.8	6.7	6.8	8.3	5.9	7.4	9.1	4.3	6.2	---	---	---
28	6.9	6.6	6.8	9.9	5.2	8.1	6.5	4.0	5.0	7.9	7.9	7.9
29	7.1	6.6	6.8	9.7	6.6	7.9	---	---	---	8.8	7.4	8.0
30	7.7	6.7	7.2	9.0	6.4	7.5	---	---	---	8.7	7.0	7.6
31	---	---	---	7.6	5.5	6.7	---	---	---	---	---	---
MONTH	7.7	5.7	6.7	11.0	5.1	7.1	10.9	4.0	6.4	8.8	7.0	7.8
YEAR	17.5	4.0	8.8									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

SCIOTO RIVER BASIN

135

03232470 PAINT CREEK BELOW PAINT CREEK DAM, NEAR BAINBRIDGE, OH

LOCATION.--Lat 39°15'08", long 83°20'58", Highland County, Hydrologic Unit 05060003, on right bank, 400 ft downstream from Paint Creek dam, 700 ft upstream from Cliff Creek, and 4.5 mi northwest of Bainbridge.

DRAINAGE AREA.--570 mi².

PERIOD OF RECORD.-- Water years 1962-67, (occasional low-flow measurements), water years 1963-67 (annual maximums). Published as "at damsite near Bainbridge" 1963-67, October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 746.00 ft above National Geodetic Vertical Datum of 1929. (Levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1984, datum 46.00 ft lower. Prior to May 3, 1968, water-stage recorder and crest-stage gage at partial-record site 1,000 ft downstream at datum 3.04 ft lower.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Paint Creek Lake. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--20 years, 559 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 45,000 ft³/s Mar. 10, 1964, gage height, 27.3 ft, site and datum then in use; minimum daily, 4.7 ft³/s Sept. 1, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,570 ft³/s Dec. 6, gage height, 6.67 ft; minimum daily, 12 ft³/s Sept. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	101	942	296	111	81	453	137	896	125	36	45
2	36	97	987	159	180	203	19	131	1010	202	36	46
3	79	93	931	93	282	335	216	520	906	262	36	27
4	160	154	2030	85	309	419	568	121	608	334	36	13
5	208	190	3460	149	310	369	672	105	739	392	36	12
6	236	177	3410	233	207	284	1080	109	791	203	37	14
7	314	172	2720	302	91	216	1910	110	595	111	51	14
8	206	243	1080	257	59	155	2220	86	457	96	71	13
9	79	243	788	185	209	216	1980	421	400	51	70	27
10	41	240	1230	130	201	188	932	431	194	32	55	42
11	70	279	1140	91	145	120	673	75	133	32	41	45
12	169	332	734	79	99	213	605	45	144	32	42	47
13	190	333	607	168	148	202	540	39	136	32	42	49
14	100	303	403	146	122	141	580	38	129	32	42	49
15	92	313	266	95	81	93	618	64	127	75	42	50
16	63	296	297	170	53	157	922	107	127	96	42	51
17	23	167	314	142	185	144	1020	109	127	96	44	51
18	14	74	462	93	177	92	1380	109	127	97	43	48
19	15	53	392	211	126	115	1740	210	126	97	43	46
20	15	55	212	301	89	136	1540	272	125	54	44	49
21	15	87	148	263	60	96	866	271	125	33	44	48
22	16	346	235	197	127	49	612	364	125	34	44	46
23	16	320	278	291	184	83	455	675	125	25	44	46
24	16	104	270	275	146	66	351	924	125	35	45	45
25	422	169	207	214	99	105	365	879	99	35	45	45
26	425	691	373	169	67	81	394	739	88	35	45	44
27	166	947	351	130	133	109	336	468	88	36	44	48
28	148	956	270	97	119	82	247	566	59	36	45	49
29	113	954	299	69	---	65	167	803	14	36	45	47
30	103	947	331	162	---	509	190	596	14	36	45	42
31	103	---	362	157	---	1440	---	943	---	36	45	---
TOTAL	3686	9436	25529	5409	4119	6564	23651	10467	8759	2828	1380	1198
MEAN	119	315	824	174	147	212	788	338	292	91.2	44.5	39.9
MAX	425	956	3460	302	310	1440	2220	943	1010	392	71	51
MIN	14	53	148	69	53	49	19	38	14	25	36	12
CAL YR 1986	TOTAL	136344.3		MEAN	374	MAX	4690	MIN	5.7			
WTR.YR 1987	TOTAL	103026		MEAN	282	MAX	3460	MIN	12			

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 good. 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.

AVERAGE DISCHARGE.--48 years, 152 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, 1,710 ft³/s Dec. 2, gage height, 6.12 ft; minimum daily, 3.9 ft³/s July 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	12	188	110	78	51	523	72	63	12	4.2	8.3
2	170	12	1380	109	77	38	509	71	57	37	4.2	7.7
3	127	13	1030	108	24	28	409	100	55	39	5.0	47
4	182	14	610	102	24	34	344	59	50	34	5.9	63
5	322	20	406	92	86	42	331	55	39	27	7.4	50
6	204	64	303	77	86	51	455	52	33	24	7.3	50
7	138	64	244	51	86	56	929	51	28	21	6.7	49
8	98	123	209	56	86	60	806	48	23	17	6.4	17
9	72	141	287	88	83	63	516	102	19	14	8.5	5.5
10	51	110	366	90	83	57	360	134	14	17	17	4.7
11	39	145	299	92	75	53	286	22	11	18	9.2	5.7
12	33	162	271	106	30	53	257	17	12	32	7.8	7.3
13	34	133	239	106	16	51	200	17	17	24	7.2	9.1
14	34	102	231	116	14	51	154	17	18	49	8.2	8.6
15	25	86	224	138	14	49	288	23	16	24	7.7	6.4
16	21	76	201	120	12	58	1110	22	15	35	6.6	6.1
17	18	67	200	69	13	56	965	21	13	33	6.3	7.6
18	15	61	200	79	14	52	534	22	12	25	6.0	8.1
19	12	52	154	132	13	56	292	26	10	22	6.0	7.9
20	12	50	72	131	13	55	223	32	9.6	18	5.9	6.8
21	11	59	72	97	13	51	178	32	16	15	5.7	6.2
22	9.9	52	71	95	15	49	156	43	31	12	6.9	5.4
23	9.1	50	70	86	16	47	140	41	28	9.6	7.2	5.7
24	9.3	49	74	34	15	46	126	34	23	7.7	6.4	5.3
25	11	45	86	14	14	48	112	30	20	6.3	6.8	5.1
26	15	493	78	13	14	46	102	36	17	5.7	8.5	5.5
27	17	574	75	12	14	42	96	35	13	6.4	8.6	5.4
28	19	383	74	12	19	42	92	31	9.5	5.5	11	4.1
29	17	276	84	13	---	43	85	27	6.4	4.7	10	6.5
30	16	184	110	61	---	309	78	26	5.7	4.2	8.8	8.8
31	13	---	110	78	---	669	---	71	---	3.9	8.4	---
TOTAL	1869.3	3672	8018	2487	1047	2406	10656	1369	684.2	603.0	231.8	433.8
MEAN	60.3	122	259	80.2	37.4	77.6	355	44.2	22.8	19.5	7.48	14.5
MAX	322	574	1380	138	86	669	1110	134	63	49	17	63
MIN	9.1	12	70	12	12	28	78	17	5.7	3.9	4.2	4.1
CAL YR 1986	TOTAL	38051.7		MEAN	104	MAX	1380	MIN	3.4			
WTR YR 1987	TOTAL	33477.1		MEAN	91.7	MAX	1380	MIN	3.9			

SCIOTO RIVER BASIN

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03234000 PAINT CREEK NEAR BOURNEVILLE, OH

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

DRAINAGE AREA.--807 mi².

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

REVISED RECORDS.--WRD Ohio 1972: 1971.

GAGE.--Water-stage recorder. Datum of gage is 665.56 ft above National Geodetic Vertical Datum of 1929. See WSP 1725 for history of changes prior to May 3, 1939.

REMARKS.--No estimated daily discharges. Records good. 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.

AVERAGE DISCHARGE.--64 years (1921-36, 1939-87), 801 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, 6,390 ft³/s Apr. 7, gage height, 8.35 ft; minimum daily, 35 ft³/s Oct. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	121	1410	454	240	287	1920	337	1230	113	62	61
2	246	118	3840	364	260	289	1100	291	1390	292	62	61
3	208	114	3220	260	317	388	874	722	1380	332	65	62
4	291	113	2730	231	338	464	1270	358	936	345	62	75
5	694	209	4990	229	380	490	1340	252	873	478	62	70
6	565	237	4810	295	395	379	2180	248	1050	400	61	61
7	528	250	4220	324	252	323	4650	243	851	229	60	64
8	437	341	2630	333	202	276	4970	231	612	168	75	62
9	277	474	1200	300	217	274	3910	512	545	150	85	43
10	131	426	2300	272	328	299	2170	677	369	106	91	40
11	104	465	2150	230	281	232	1450	322	222	92	75	53
12	134	598	1520	208	210	228	1300	153	219	97	66	57
13	258	595	1150	233	154	293	1110	133	228	99	66	61
14	188	473	926	295	186	239	977	126	210	132	67	64
15	136	476	645	277	142	194	1340	131	202	115	65	61
16	110	423	569	275	109	189	3250	181	197	156	63	61
17	82	382	593	271	120	243	3100	182	194	166	63	63
18	55	182	674	214	224	190	2720	182	190	158	64	63
19	44	159	794	303	179	167	2840	216	187	151	62	59
20	39	117	378	511	141	206	2580	326	185	141	61	57
21	38	151	299	440	114	194	1560	330	203	88	61	55
22	36	311	283	361	115	145	1090	389	213	78	62	51
23	35	423	350	357	195	123	819	699	216	74	61	49
24	36	277	367	435	207	153	667	1160	203	64	61	49
25	164	180	357	329	161	132	608	1140	191	69	61	49
26	614	1130	374	287	124	170	626	955	158	70	64	49
27	277	2190	495	244	125	133	572	658	150	71	63	53
28	183	1820	385	159	198	166	471	628	144	71	69	50
29	162	1620	355	130	---	118	388	970	99	67	67	49
30	126	1470	439	156	---	582	362	814	75	63	64	54
31	124	---	470	273	---	3140	---	1290	---	62	62	---
TOTAL	6412	15845	44923	9050	5914	10706	52214	14856	12922	4697	2032	1706
MEAN	207	528	1449	292	211	345	1740	479	431	152	65.5	56.9
MAX	694	2190	4990	511	395	3140	4970	1290	1390	478	91	75
MIN	35	113	283	130	109	118	362	126	75	62	60	40
CAL YR 1986	TOTAL	232313		MEAN	636	MAX	6180	MIN	35			
WTR YR 1987	TOTAL	181277		MEAN	497	MAX	4990	MIN	35			

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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.

PERIOD OF RECORD.--October 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 600 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: July 25-31, Aug. 15, 16, and Sept. 5-22. Records good except for estimated daily discharges and Aug. 1 to Sept. 30, which are fair. 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,300 ft³/s Nov. 28, 1985, gage height 17.66 ft; minimum daily, 52 ft³/s Aug. 6, 22, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,700 ft³/s Apr. 7, gage height, 14.87 ft; minimum daily, 59 ft³/s Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	171	143	1100	571	354	595	2930	490	1290	306	100	81
2	261	137	7420	507	364	571	1790	430	1440	693	99	79
3	243	129	5010	412	447	528	1380	418	1360	517	111	77
4	255	132	2880	365	451	544	1350	779	1060	452	98	72
5	428	173	4890	339	446	585	1410	397	854	478	96	70
6	441	243	4720	379	483	506	2890	358	986	471	96	68
7	394	257	4230	422	406	454	7140	348	875	323	92	68
8	384	324	2930	447	336	411	8060	339	658	256	92	66
9	296	423	1310	408	289	372	5090	310	574	229	108	66
10	204	393	2480	395	397	412	2880	627	479	201	110	60
11	151	422	2230	361	388	359	1700	690	322	161	109	64
12	144	509	1650	322	343	310	1510	299	308	160	94	66
13	205	491	1190	316	269	378	1390	240	324	253	90	68
14	230	435	1030	390	277	352	1160	218	298	282	90	70
15	170	401	812	385	255	311	1370	244	277	214	88	70
16	156	386	707	359	209	280	4730	297	261	207	88	68
17	131	368	713	386	187	326	4320	321	251	221	86	68
18	106	278	719	332	281	306	2890	291	245	214	84	70
19	83	210	861	477	283	265	2940	323	237	202	83	70
20	76	190	599	742	247	284	2680	813	237	192	81	70
21	71	172	469	634	220	290	1890	539	488	150	81	68
22	70	200	413	538	202	256	1310	871	588	130	83	66
23	69	379	465	468	268	217	1070	834	368	121	81	67
24	66	373	492	456	308	231	900	1120	304	114	75	67
25	63	222	525	451	273	226	776	1100	284	110	77	65
26	336	1180	486	694	231	245	761	975	428	110	80	63
27	342	2320	617	884	202	231	732	802	285	110	81	59
28	203	1600	533	758	273	241	644	591	232	110	92	60
29	186	1340	476	431	---	227	563	828	199	100	88	67
30	162	1170	522	257	---	300	501	909	161	100	85	73
31	145	---	558	355	---	3600	---	1650	---	100	81	---
TOTAL	6242	15000	53037	14241	8689	14213	68757	18451	15673	7287	2799	2046
MEAN	201	500	1711	459	310	458	2292	595	522	235	90.3	68.2
MAX	441	2320	7420	884	483	3600	8060	1650	1440	693	111	81
MIN	63	129	413	257	187	217	501	218	161	100	75	59
CAL YR 1986	TOTAL	281444		MEAN	771	MAX	9700	MIN	52			
WTR YR 1987	TOTAL	226435		MEAN	620	MAX	8060	MIN	59			

SCIOTO RIVER BASIN

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03234300 PAINT CREEK AT CHILLICOTHE, OH

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.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 758 microsiemens Jan. 7, 8, 1987; minimum, 188 microsiemens May 21, June 22, 1987.
pH: Maximum, 9.0 units May 24, 1986; minimum, 7.5 units Oct. 1, 2, 1986.
WATER TEMPERATURES: Maximum, 31.0°C July 18, 19, 1986, July 22, 24, 25, Aug. 4, 1987; minimum 0.5°C on several days during winter periods.
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, 758 microsiemens Jan. 7, 8; minimum, 188 microsiemens May 31, June 22.
pH: Maximum, 8.8 units Feb. 11; minimum 7.5 units Oct. 1, 2.
WATER TEMPERATURES: Maximum, 31.0°C July 22, 24, 25, Aug. 4; minimum, 1.0°C several times during winter.
DISSOLVED OXYGEN: Maximum, 19.2 mg/L Feb. 11, 13; minimum, 6.0 mg/L May 14, 15, June 15, 21, July 24.

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03234300 PAINT CREEK AT CHILLICOTHE, OH--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	455	322	428	533	494	514	565	541	552	654	644	648
2	463	306	398	533	502	520	525	337	393	654	640	647
3	424	400	410	565	533	546	463	369	427	654	640	649
4	416	361	394	557	533	541	510	463	489	674	640	657
5	384	353	367	557	525	541	525	486	507	668	635	652
6	392	353	377	549	510	528	518	478	499	754	640	681
7	424	376	408	525	494	510	518	486	498	758	642	706
8	439	400	421	502	455	479	525	494	512	758	642	654
9	455	424	436	494	463	477	533	502	522	670	632	663
10	478	439	460	525	494	511	549	494	520	627	612	621
11	494	463	477	525	486	510	580	549	569	643	596	614
12	494	471	480	525	494	510	635	588	604	612	573	599
13	478	439	465	549	510	536	643	604	624	612	533	572
14	486	439	461	580	541	559	659	612	631	573	525	551
15	533	486	503	549	533	541	643	588	616	565	518	534
16	541	510	526	533	525	530	620	588	607	580	557	571
17	533	510	523	549	518	534	596	525	567	580	541	564
18	565	518	540	565	541	556	565	549	556	565	541	550
19	580	525	553	596	565	584	596	557	572	588	486	555
20	588	541	567	612	588	600	604	588	596	525	486	509
21	596	549	573	612	596	604	627	604	614	565	533	546
22	573	533	556	627	580	604	635	588	616	620	557	578
23	580	549	563	596	533	554	674	620	633	659	604	630
24	580	557	568	580	541	561	643	627	633	690	627	656
25	580	557	571	612	580	591	651	627	638	722	659	686
26	573	455	516	580	361	473	667	651	655	722	674	696
27	502	471	489	510	431	465	659	627	640	722	682	692
28	518	478	499	549	510	534	674	651	662	690	667	672
29	525	486	506	549	502	532	682	612	644	659	620	638
30	518	486	504	549	518	534	627	640	627	627	604	619
31	541	502	522	---	---	---	662	640	651	635	596	614
MONTH	596	306	486	627	361	536	682	337	577	758	486	620
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	620	588	602	518	424	466	549	502	528	510	431	473
2	596	533	551	478	439	454	502	424	465	486	431	458
3	557	533	544	494	471	482	471	447	457	494	455	479
4	627	541	580	549	486	521	486	455	469	525	463	487
5	635	588	613	580	549	560	502	478	489	533	471	507
6	635	580	601	573	510	546	510	376	450	541	455	501
7	604	549	582	573	502	538	471	376	420	518	471	492
8	627	580	602	565	518	541	463	424	444	512	452	486
9	604	565	589	588	533	555	471	424	445	518	447	492
10	588	525	559	604	557	585	471	416	447	471	439	456
11	588	549	564	604	541	575	463	439	450	463	424	445
12	573	525	545	588	541	565	463	431	451	486	447	467
13	580	525	559	588	525	560	478	424	450	525	455	490
14	588	541	564	565	533	549	455	431	443	722	455	500
15	627	557	590	580	541	561	455	290	421	714	416	478
16	620	596	609	580	525	558	337	267	303	525	471	499
17	620	588	603	580	510	551	400	337	372	518	439	485
18	596	533	573	565	510	540	471	408	431	486	447	467
19	612	523	575	557	518	537	463	424	444	486	392	458
20	612	557	583	580	518	552	471	424	445	439	251	331
21	596	549	573	580	502	547	471	424	445	463	431	449
22	596	549	566	580	518	546	463	424	444	494	329	400
23	573	533	550	580	502	544	463	439	454	424	361	398
24	580	525	554	565	502	530	510	471	483	447	424	435
25	580	518	549	541	471	509	525	471	499	455	447	454
26	588	549	565	533	478	505	502	439	472	456	422	442
27	580	557	567	549	510	525	502	447	474	455	424	445
28	580	525	555	549	494	521	510	455	484	455	416	441
29	---	---	---	549	494	522	518	447	485	431	408	421
30	---	---	---	565	502	525	494	447	473	431	408	422
31	---	---	---	525	416	461	---	---	---	455	188	322
MONTH	635	518	574	604	416	533	549	267	451	722	188	454

03234300 PAINT CREEK AT CHILLICOTHE, OHIO

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	424	361	396	643	361	609	604	573	588	612	573	593
2	400	337	361	549	314	462	604	533	577	620	573	597
3	384	345	363	580	525	544	573	533	556	604	557	584
4	408	376	390	573	541	556	588	557	573	604	557	581
5	431	384	406	573	541	561	604	573	586	588	549	570
6	408	376	391	573	549	562	612	573	596	573	557	567
7	416	392	403	588	565	578	612	573	594	580	557	568
8	439	408	422	604	588	595	612	573	592	573	549	564
9	431	408	416	612	557	594	596	565	579	580	541	564
10	447	408	432	604	565	588	596	580	589	588	549	571
11	471	439	455	604	573	588	604	565	584	580	557	571
12	455	416	446	620	588	602	596	565	580	588	565	575
13	463	416	444	620	525	598	588	557	578	596	565	578
14	455	416	439	580	518	550	596	557	582	588	549	567
15	706	416	444	573	549	562	596	564	586	573	540	558
16	439	416	430	588	549	570	604	565	584	556	540	549
17	455	416	437	588	518	556	588	565	577	556	548	547
18	463	416	441	557	510	536	604	565	585	566	548	557
19	463	424	441	565	518	541	604	565	586	566	554	562
20	463	431	450	557	510	532	612	565	589	598	556	571
21	478	227	328	549	518	538	612	580	591	580	570	575
22	400	188	282	565	533	552	596	557	576	592	578	590
23	424	384	402	580	549	564	596	573	588	620	550	572
24	604	416	539	588	557	572	612	580	596	580	533	556
25	620	596	607	596	549	571	612	596	604	573	533	555
26	659	486	544	588	502	553	620	573	593	596	533	563
27	604	525	569	580	510	550	580	557	574	588	525	559
28	643	612	626	588	549	569	580	494	565	573	533	555
29	651	612	632	596	565	583	596	565	579	580	494	544
30	643	620	629	604	565	583	604	565	583	580	494	539
31	---	---	---	596	549	583	588	565	579	---	---	---
MONTH	706	188	452	643	314	565	620	494	584	620	494	567
YEAR	758	188	533									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.90	7.50	7.83	8.30	8.00	8.15	8.20	8.10	8.12	8.31	8.20	8.25
2	7.80	7.50	7.73	8.20	8.00	8.12	8.10	7.80	7.86	8.37	8.20	8.28
3	7.90	7.80	7.84	8.30	8.00	8.16	8.00	7.80	7.92	8.37	8.30	8.35
4	7.90	7.80	7.83	8.20	8.00	8.05	8.00	7.80	7.96	8.37	8.30	8.34
5	8.00	7.80	7.85	8.10	8.00	8.03	8.10	7.80	7.94	8.36	8.32	8.34
6	8.00	7.90	7.91	8.20	8.00	8.07	8.00	7.80	7.88	8.37	8.20	8.31
7	8.10	7.90	7.98	8.20	8.00	8.09	7.80	7.70	7.79	8.37	8.20	8.30
8	8.10	8.00	8.03	8.00	8.00	8.00	7.80	7.70	7.77	8.39	8.20	8.26
9	8.20	8.00	8.06	8.20	7.90	8.04	7.80	7.70	7.71	8.30	8.20	8.30
10	8.10	8.00	8.04	8.30	8.10	8.16	8.00	7.70	7.75	8.30	8.20	8.24
11	8.10	7.90	8.02	8.20	8.10	8.12	7.80	7.70	7.72	8.30	8.20	8.24
12	8.10	7.90	7.99	8.20	8.10	8.15	8.10	7.70	7.91	8.30	8.20	8.25
13	8.00	7.90	7.97	8.30	8.20	8.22	8.10	8.00	8.06	8.40	8.20	8.26
14	8.10	7.90	8.03	8.40	8.20	8.26	8.10	8.00	8.05	8.40	8.20	8.31
15	8.20	8.00	8.09	8.30	8.20	8.22	8.00	8.00	8.00	8.40	8.20	8.26
16	8.20	8.00	8.12	8.20	8.10	8.18	8.00	8.00	8.00	8.40	8.20	8.29
17	8.20	8.00	8.09	8.30	8.10	8.17	8.20	8.00	8.05	8.50	8.30	8.37
18	8.20	8.00	8.12	8.20	8.10	8.17	8.20	8.10	8.11	8.40	8.20	8.29
19	8.20	8.00	8.08	8.40	8.00	8.16	8.20	8.10	8.19	8.30	8.20	8.22
20	8.20	8.00	8.09	8.20	8.10	8.15	8.20	8.10	8.16	8.40	8.20	8.29
21	8.20	8.00	8.10	8.20	8.00	8.13	8.10	8.10	8.10	8.50	8.30	8.39
22	8.20	8.00	8.09	8.40	8.10	8.25	8.20	8.10	8.10	8.50	8.20	8.38
23	8.10	8.00	8.04	8.30	8.20	8.23	8.20	8.10	8.15	8.60	8.30	8.40
24	8.10	7.90	8.02	8.30	8.10	8.20	8.20	8.10	8.17	8.60	8.30	8.42
25	8.00	7.90	7.97	8.40	8.10	8.26	8.20	8.10	8.18	8.50	8.20	8.39
26	8.20	7.90	8.05	8.50	7.70	8.01	8.20	8.20	8.20	8.50	8.30	8.37
27	8.10	8.00	8.04	8.10	7.80	7.98	8.30	8.20	8.20	8.50	8.20	8.35
28	8.20	8.00	8.09	8.20	8.10	8.16	8.20	8.20	8.20	8.40	8.20	8.29
29	8.20	8.00	8.11	8.20	8.10	8.16	8.20	8.20	8.20	8.40	8.10	8.25
30	8.20	7.90	8.09	8.60	8.00	8.12	8.40	8.20	8.28	8.30	8.20	8.24
31	8.30	8.00	8.14	---	---	---	8.40	8.10	8.27	8.50	8.20	8.38
MONTH	8.30	7.50	8.01	8.60	7.70	8.14	8.40	7.70	8.03	8.60	8.10	8.31

03234300 PAINT CREEK AT CHILLICOTHE, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	8.50	8.20	8.38	8.10	8.00	8.01	8.30	8.20	8.20	8.60	8.20	8.39
2	8.60	8.30	8.42	8.30	7.90	8.09	8.20	8.00	8.13	8.60	8.20	8.38
3	8.60	8.30	8.40	8.40	8.00	8.19	8.20	8.00	8.14	8.20	8.10	8.17
4	8.70	8.40	8.49	8.40	8.10	8.28	8.30	8.10	8.22	8.50	8.10	8.29
5	8.70	8.40	8.55	8.40	8.30	8.34	8.20	8.20	8.20	8.60	8.10	8.33
6	8.70	8.50	8.57	8.40	8.20	8.30	8.20	8.00	8.08	8.60	8.10	8.33
7	8.70	8.30	8.51	8.50	8.20	8.29	8.00	7.80	7.86	8.50	8.10	8.29
8	8.60	8.40	8.46	8.50	8.20	8.29	8.20	7.80	8.03	8.20	8.10	8.11
9	8.60	8.40	8.49	8.30	8.10	8.20	8.20	8.00	8.09	8.36	8.00	8.19
10	8.70	8.40	8.53	8.50	8.20	8.31	8.10	7.70	7.79	8.50	8.20	8.30
11	8.80	8.40	8.57	8.50	8.20	8.32	8.00	7.70	7.87	8.50	8.20	8.30
12	8.70	8.40	8.55	8.50	8.20	8.31	8.00	7.90	8.00	8.30	8.00	8.14
13	8.70	8.30	8.55	8.60	8.20	8.35	8.10	8.00	8.01	8.50	8.00	8.12
14	8.70	8.40	8.54	8.50	8.20	8.35	8.00	8.00	8.00	8.20	7.90	8.14
15	8.80	8.40	8.58	8.50	8.20	8.29	8.00	7.70	7.95	8.20	7.80	8.08
16	8.70	8.30	8.51	8.50	8.10	8.28	7.80	7.70	7.71	8.30	7.90	8.10
17	8.60	8.30	8.46	8.50	8.10	8.31	7.90	7.70	7.81	8.30	8.00	8.14
18	8.60	8.40	8.53	8.40	8.20	8.30	7.90	7.80	7.83	8.30	7.90	8.07
19	8.60	8.40	8.52	8.40	8.10	8.25	8.20	7.80	8.03	8.20	7.80	8.05
20	8.60	8.20	8.47	8.40	8.00	8.24	8.20	8.00	8.09	8.00	7.70	7.85
21	8.60	8.20	8.42	8.40	8.10	8.27	8.20	8.00	8.06	8.20	8.00	8.07
22	8.50	8.20	8.36	8.40	8.10	8.27	8.20	8.00	8.12	8.00	7.90	7.97
23	8.60	8.30	8.46	8.40	8.00	8.20	8.20	8.10	8.15	8.10	8.00	8.04
24	8.60	8.30	8.47	8.30	8.00	8.15	8.20	8.10	8.14	8.20	8.00	8.12
25	8.60	8.30	8.32	8.40	8.00	8.15	8.20	8.10	8.19	8.10	8.00	8.06
26	8.50	8.20	8.38	8.40	8.00	8.18	8.30	8.10	8.22	8.10	8.00	8.02
27	8.30	8.00	8.19	8.40	8.00	8.19	8.30	8.10	8.23	8.20	8.00	8.06
28	8.30	8.00	8.14	8.40	8.00	8.16	8.40	8.20	8.28	8.20	8.00	8.08
29	---	---	---	8.30	8.00	8.13	8.50	8.20	8.31	8.20	8.00	8.06
30	---	---	---	8.00	7.90	7.96	8.50	8.10	8.30	8.10	7.90	8.00
31	---	---	---	8.20	7.90	8.02	---	---	---	8.00	7.80	7.84
MONTH	8.80	8.00	8.46	8.60	7.90	8.23	8.50	7.70	8.07	8.60	7.70	8.13
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.00	7.90	7.92	8.20	7.80	8.05	8.10	7.90	8.01	8.20	8.00	8.07
2	7.90	7.80	7.87	8.00	7.80	7.92	8.10	7.80	7.97	8.20	8.00	8.05
3	7.90	7.80	7.86	8.10	8.00	8.02	8.10	7.90	8.00	8.20	8.00	8.06
4	8.00	7.90	7.92	8.10	8.00	8.04	8.20	7.90	8.01	8.20	8.00	8.06
5	8.00	7.90	8.00	8.10	8.00	8.01	8.10	7.90	7.99	8.20	8.00	8.06
6	8.00	7.90	8.00	8.00	7.90	7.97	8.20	7.90	8.03	8.10	8.00	8.02
7	8.00	7.90	7.97	8.30	7.90	8.09	8.20	7.90	8.04	8.10	7.90	7.99
8	8.10	8.00	8.01	8.20	8.10	8.16	8.20	7.90	8.04	8.10	7.90	7.97
9	8.10	8.00	8.04	8.20	8.10	8.16	8.10	7.90	8.02	8.10	7.90	7.99
10	8.20	8.00	8.12	8.20	8.00	8.13	8.10	7.90	8.01	8.00	7.90	7.95
11	8.20	8.00	8.10	8.10	8.00	8.05	8.10	8.00	8.03	8.00	7.80	7.94
12	8.10	8.00	8.02	8.20	8.00	8.09	8.10	7.90	8.01	8.10	7.90	7.98
13	8.20	8.00	8.10	8.40	8.00	8.18	8.10	7.90	7.99	8.10	8.00	8.05
14	8.20	8.00	8.10	8.20	7.90	8.10	8.10	7.90	7.97	8.20	8.00	8.05
15	8.20	8.00	8.00	8.20	8.00	8.10	8.00	7.90	7.93	8.12	8.00	8.03
16	8.20	8.00	8.10	8.40	8.10	8.20	8.00	7.90	7.96	8.07	7.90	7.99
17	8.30	8.00	8.11	8.30	8.10	8.18	8.00	7.90	7.96	8.09	7.90	7.99
18	8.30	8.00	8.13	8.30	8.00	8.17	8.10	7.90	7.98	8.07	7.90	7.99
19	8.30	8.00	8.12	8.40	8.00	8.19	8.10	7.90	7.98	8.06	7.90	7.96
20	8.30	8.00	8.13	8.40	8.00	8.19	8.00	7.90	7.98	8.01	7.90	7.99
21	8.10	7.80	7.94	8.30	8.00	8.11	8.00	7.90	7.99	8.08	7.90	8.00
22	8.00	7.80	7.87	8.20	7.90	8.05	8.00	7.90	7.95	8.06	7.90	7.99
23	8.00	8.00	8.00	8.20	7.90	8.04	8.10	7.90	8.00	8.20	8.10	8.15
24	8.10	8.00	8.04	8.20	7.90	8.04	8.10	8.00	8.04	8.20	8.00	8.14
25	8.20	8.00	8.07	8.20	7.90	8.04	8.10	8.00	8.02	8.20	8.00	8.12
26	8.20	8.00	8.04	8.20	7.80	8.00	8.20	8.00	8.05	8.20	8.00	8.15
27	8.10	8.00	8.03	8.20	7.80	8.02	8.10	7.90	8.03	8.20	8.00	8.14
28	8.20	8.10	8.11	8.20	8.00	8.07	8.10	7.90	7.99	8.20	8.00	8.10
29	8.10	8.00	8.09	8.20	8.00	8.07	8.10	8.00	8.02	8.20	8.00	8.11
30	8.10	8.00	8.04	8.10	8.00	8.04	8.10	8.00	8.04	8.20	8.00	8.09
31	---	---	---	8.20	7.90	8.03	8.10	8.00	8.03	---	---	---
MONTH	8.30	7.80	8.03	8.40	7.80	8.08	8.20	7.80	8.00	8.20	7.80	8.04
YEAR	8.80	7.50	8.13									

03234300 PAINT CREEK AT CHILLICOTHE, OHIO

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

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

SCIOTO RIVER BASIN

03234300 PAINT CREEK AT CHILLICOTHE, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	23.5	22.0	23.0	25.5	23.0	25.0	29.0	26.5	28.0	23.5	19.5	21.5
2	24.0	22.0	23.0	24.5	22.5	23.5	30.5	26.5	28.5	22.5	19.0	21.0
3	24.5	23.0	23.5	26.5	22.5	24.5	30.0	27.0	28.5	23.5	19.5	21.5
4	25.0	23.0	24.0	27.5	24.5	26.0	31.0	27.5	29.0	24.0	20.0	22.0
5	24.5	21.5	23.0	27.5	25.0	26.0	29.0	26.5	28.0	23.5	21.5	22.5
6	24.5	21.5	23.5	28.0	25.5	26.5	29.0	25.5	27.5	23.5	22.0	22.5
7	25.5	22.0	24.0	29.0	25.5	27.5	29.0	26.0	27.5	23.0	22.0	22.5
8	26.0	23.0	24.5	28.5	25.5	27.0	29.0	25.5	27.5	24.5	22.0	23.5
9	25.0	22.5	24.0	28.0	26.0	27.0	29.0	27.0	28.0	25.5	22.5	24.0
10	24.0	21.5	22.5	29.0	25.5	27.0	27.0	25.0	26.5	25.5	22.0	24.0
11	24.5	20.5	22.5	28.5	26.5	27.0	27.5	24.0	26.0	23.5	22.5	23.5
12	22.5	22.0	22.5	29.0	25.5	27.0	28.0	25.0	26.5	23.5	22.0	22.5
13	24.5	21.5	23.0	29.0	26.5	27.5	29.0	25.5	27.5	24.5	21.5	23.0
14	27.0	22.5	25.0	27.0	25.0	26.0	29.5	26.0	27.5	25.0	22.0	23.5
15	28.0	16.0	26.0	25.0	22.5	24.0	26.0	24.5	26.0	23.0	20.5	22.0
16	27.0	25.0	26.0	25.5	22.5	24.0	29.0	25.0	27.5	23.0	21.5	22.5
17	28.0	24.5	26.5	27.0	22.5	25.0	28.0	25.5	26.5	24.0	21.5	23.0
18	29.0	25.0	27.0	27.5	23.5	25.5	28.5	24.0	26.5	23.0	21.5	22.0
19	28.5	25.5	27.0	28.5	24.5	26.5	28.0	24.5	26.0	22.0	21.0	21.5
20	27.5	25.5	26.5	30.0	25.5	28.0	27.5	23.5	25.5	21.5	19.0	20.5
21	27.0	24.5	26.0	30.5	26.5	28.5	25.5	23.5	24.5	23.5	18.5	20.0
22	27.0	24.0	25.5	31.0	27.5	29.0	26.0	23.5	25.0	20.5	18.5	20.0
23	26.5	25.0	26.0	30.5	27.5	29.0	26.5	23.0	25.0	19.0	17.0	18.0
24	27.5	24.0	26.0	31.0	27.0	29.0	25.5	22.0	24.0	20.0	16.5	18.5
25	27.5	24.5	26.5	31.0	27.5	29.0	22.5	21.0	22.0	20.5	17.5	18.5
26	27.0	24.5	26.0	28.5	26.5	27.5	24.5	20.5	23.0	20.0	16.0	18.0
27	25.0	23.0	24.0	28.0	25.5	27.0	25.5	23.0	24.5	20.0	15.5	18.0
28	25.5	21.0	23.5	28.0	25.0	26.5	24.5	23.0	24.0	20.5	17.5	18.5
29	26.0	22.5	24.0	29.0	25.0	27.0	23.5	21.0	22.5	19.5	18.0	19.0
30	27.5	24.0	26.0	29.5	26.0	28.0	24.5	20.5	22.5	19.5	17.5	18.5
31	---	---	---	29.5	26.5	28.0	23.0	20.5	22.0	---	---	---
MONTH	29.0	16.0	24.5	31.0	22.5	26.5	31.0	20.5	26.0	25.5	15.5	21.0
YEAR	31.0	1.0	15.5									

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.7	6.6	7.1	12.2	9.0	10.3	11.5	11.3	11.4	11.5	10.4	10.7
2	7.9	7.0	7.4	11.4	8.7	9.8	11.7	11.0	11.4	11.5	11.2	11.3
3	8.0	7.4	7.7	12.2	9.1	10.3	---	---	---	11.5	10.6	11.3
4	8.0	7.3	7.5	10.1	8.9	9.6	---	---	---	11.2	10.4	10.6
5	8.2	7.3	7.7	10.0	9.3	9.6	---	---	---	11.3	10.4	10.6
6	8.8	7.8	8.2	11.1	9.5	10.0	---	---	---	10.7	10.4	10.6
7	9.7	8.6	9.0	11.1	9.4	10.0	---	---	---	11.5	10.4	10.6
8	9.7	8.8	9.2	9.4	8.9	9.0	---	---	---	11.5	10.4	11.1
9	9.9	8.7	9.2	10.0	8.7	9.2	---	---	---	11.7	10.0	10.8
10	10.3	8.9	9.5	11.3	9.3	10.2	---	---	---	10.7	10.0	10.3
11	10.4	9.0	9.6	10.7	10.1	10.3	---	---	---	11.0	9.9	10.4
12	10.1	8.8	9.3	11.5	10.4	10.8	---	---	---	11.1	10.0	10.5
13	9.3	8.4	8.8	11.8	10.5	11.1	---	---	---	14.1	10.1	12.0
14	9.7	8.4	9.0	12.9	11.4	12.0	---	---	---	13.8	12.4	13.1
15	11.1	9.1	10.0	12.2	11.3	11.7	---	---	---	13.3	12.3	12.7
16	11.4	9.8	10.5	11.5	10.8	11.1	---	---	---	14.2	11.6	12.6
17	11.3	9.6	10.3	11.8	10.6	11.1	12.8	11.9	12.6	14.2	12.2	13.0
18	11.8	9.8	10.6	11.5	10.4	10.9	12.1	11.9	12.0	13.2	11.8	12.5
19	12.0	10.0	10.8	13.0	10.4	11.4	12.4	11.8	12.2	12.3	11.4	11.8
20	12.3	10.0	10.9	11.8	10.7	11.1	12.6	12.1	12.3	13.6	11.5	12.3
21	12.6	10.0	11.0	12.6	10.5	11.3	12.7	11.9	12.4	13.8	12.0	12.8
22	12.3	9.4	10.6	14.0	11.1	12.2	12.6	12.2	12.4	13.1	11.8	12.3
23	11.6	9.0	10.1	12.0	11.1	11.6	12.9	12.4	12.6	14.3	12.0	12.9
24	11.2	8.8	9.7	12.1	10.5	11.2	12.6	12.1	12.4	14.1	12.3	13.0
25	9.6	8.4	9.0	13.6	10.9	11.9	12.3	11.9	12.1	14.6	12.2	13.1
26	9.6	8.5	9.0	11.5	10.0	10.7	12.4	11.8	12.1	14.9	12.2	13.3
27	9.0	8.6	8.8	11.2	10.2	10.7	12.8	12.2	12.5	16.5	14.0	15.0
28	10.8	8.7	9.5	11.8	11.2	11.5	12.9	12.5	12.6	15.9	13.8	14.7
29	11.1	8.9	9.7	11.5	11.1	11.4	13.0	12.6	12.8	15.8	13.1	14.5
30	11.4	8.7	9.7	11.7	11.1	11.4	12.9	12.7	12.8	15.0	13.1	13.9
31	12.1	9.0	10.2	---	---	---	13.7	10.7	12.4	16.2	13.3	14.5
MONTH	12.6	6.6	9.3	14.0	8.7	10.8	13.7	10.7	12.3	16.5	9.9	12.2

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	16.5	12.6	14.2	11.0	10.1	10.6	11.8	11.1	11.4	11.9	8.6	10.0
2	16.3	11.9	13.9	12.9	10.1	11.2	11.5	11.1	11.3	12.1	8.3	9.9
3	14.2	12.2	13.0	13.8	10.2	11.4	12.0	11.4	11.7	9.6	8.2	8.9
4	16.6	12.6	14.2	13.3	10.1	12.0	12.6	11.8	12.2	12.3	8.7	10.4
5	16.6	12.6	14.3	12.9	10.8	11.8	12.9	12.0	12.6	13.6	9.4	11.2
6	17.2	12.1	14.2	13.1	10.5	11.5	12.2	12.1	12.2	13.8	9.2	11.1
7	16.3	11.5	13.6	13.0	10.0	11.1	12.1	9.4	10.6	12.8	8.9	10.7
8	14.0	11.7	12.7	13.0	9.6	11.0	13.6	9.9	12.0	9.4	8.9	9.0
9	15.7	12.8	14.1	11.5	9.6	10.4	12.7	12.0	12.5	12.9	8.7	8.7
10	19.1	13.9	15.8	13.4	10.2	11.7	12.1	8.7	10.1	12.1	8.9	10.0
11	19.2	13.1	15.7	13.7	10.9	12.0	11.9	9.1	10.5	11.8	8.3	9.8
12	17.7	12.3	14.5	13.7	10.5	11.9	13.3	12.1	12.8	11.3	7.6	9.2
13	19.2	12.6	15.4	13.4	10.4	11.6	13.9	12.3	13.1	11.4	7.7	9.4
14	17.4	12.6	14.6	13.1	10.1	11.3	13.4	12.3	12.9	11.2	6.0	9.1
15	18.9	12.8	15.4	12.6	9.6	10.8	12.7	9.9	12.1	11.3	6.0	8.9
16	17.2	12.7	14.7	13.0	9.4	11.0	10.9	8.9	9.9	11.5	7.6	9.2
17	16.6	12.9	14.6	12.7	9.6	10.9	9.5	8.6	8.9	11.3	7.6	9.1
18	17.6	12.8	14.9	12.2	9.5	10.7	9.6	8.5	9.0	11.2	6.9	8.7
19	16.9	12.2	14.4	12.3	9.2	10.5	9.8	8.2	9.3	9.6	6.7	8.0
20	17.1	11.9	14.2	12.2	9.0	10.4	8.9	8.2	8.7	7.4	6.6	7.1
21	16.2	11.3	13.7	12.0	9.0	10.3	8.9	8.2	8.6	8.8	6.7	7.7
22	15.1	10.6	12.9	11.9	8.9	10.2	8.9	8.2	8.4	8.2	7.5	7.9
23	15.8	12.9	14.0	11.8	8.6	10.0	9.2	8.2	8.7	8.5	7.8	8.1
24	15.4	11.0	12.9	11.2	8.1	9.4	9.5	8.4	8.9	9.2	7.8	8.5
25	16.0	10.6	13.1	11.1	7.8	9.2	10.4	9.4	9.9	8.3	8.2	8.3
26	15.6	11.4	13.5	11.1	7.5	9.2	10.4	9.2	9.8	9.1	8.0	8.0
27	13.8	10.9	12.3	12.6	7.8	10.1	10.2	9.0	9.5	9.2	8.0	8.4
28	13.7	10.2	11.7	13.0	9.4	11.0	10.8	8.9	9.8	9.2	7.3	8.2
29	---	---	---	12.3	9.2	10.5	11.0	8.9	9.8	8.9	7.2	7.9
30	---	---	---	10.1	8.3	9.2	11.3	8.5	9.7	8.2	7.3	7.6
31	---	---	---	11.4	10.0	11.1	---	---	---	7.5	7.1	7.3
MONTH	19.2	10.2	14.0	13.8	7.5	10.8	13.9	8.2	10.6	13.8	6.0	8.9
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.5	7.1	7.3	8.4	7.0	7.7	9.1	6.5	7.6	9.9	8.5	9.1
2	7.5	7.0	7.2	7.8	6.8	7.5	9.6	6.6	7.8	9.6	8.4	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: Aug. 17-28, Aug. 31 to Sept. 2 and Sept. 5-13, 16-30. Records fair. Flow slightly regulated by 8 reservoirs 45 mi to 105 mi upstream from station.

AVERAGE DISCHARGE.--57 years, 4,588 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, 27,300 ft³/s Apr. 8, gage height, 13.68 ft; minimum daily, 490 ft³/s Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5970	2310	11400	2980	2060	2040	9940	2130	5550	1980	1070	740
2	6370	2120	18200	2620	2020	2930	9110	2220	5760	5570	1020	760
3	10300	1990	24300	2380	2120	4140	10100	1960	6020	13300	1160	821
4	10800	1920	25300	2220	2220	4790	9770	2220	11900	18800	2050	879
5	13500	2000	26200	2150	2650	3990	7990	1930	12100	21900	1410	780
6	17600	2220	22400	2120	3090	3270	10500	1800	10700	21800	1810	740
7	19400	2450	17700	2270	2870	2650	21100	1690	8950	20600	1840	680
8	14800	2890	13400	2240	2450	2300	25600	1690	6600	19300	1310	640
9	9470	3090	9460	2080	2210	2180	19800	1700	4530	16700	1160	620
10	6060	2790	11000	2050	2210	2240	13200	2000	3230	12700	1070	600
11	4050	2740	14500	2120	2240	2130	8080	1850	3110	9330	985	600
12	2930	2960	13700	2150	2260	1940	6320	1470	3740	8090	943	580
13	2520	2980	10300	2090	2080	1880	5710	1450	3480	7320	897	700
14	2430	2870	6980	2000	1940	1770	5400	1520	5660	7010	879	957
15	2300	2720	5140	1970	2000	1670	5880	1870	6260	6540	864	880
16	2450	2540	4190	1970	2010	1650	10300	3610	4530	7840	827	700
17	2590	2390	4380	2090	1760	1640	9260	2520	4590	7250	780	640
18	2340	2200	4050	2390	1720	1620	7710	1880	3840	4010	760	580
19	2030	1970	3660	2910	1740	1530	7040	1730	2950	2730	740	620
20	1830	1970	3490	3910	1720	1510	6290	2550	2620	2250	720	620
21	1710	2180	3150	4960	1680	1490	4760	2630	3170	1990	720	560
22	1650	3690	3010	4100	1580	1400	3840	4780	3300	1810	700	520
23	1810	5270	2840	3470	1610	1340	3480	5940	4140	1840	700	500
24	1890	4750	2800	2690	1640	1300	3180	6180	3990	1680	680	580
25	1630	4130	3010	2080	1570	1320	3000	4890	3500	1410	680	540
26	1800	5320	3220	1990	1470	1310	2920	3640	3120	1480	680	520
27	2260	12600	3450	1910	1410	1320	2720	4280	2550	1330	680	500
28	2980	17900	3230	1790	1480	1300	2520	6190	2000	1200	780	500
29	3220	17900	3220	1830	---	1330	2390	6580	1700	1300	1040	490
30	2870	13500	3330	1870	---	1450	2230	5890	1610	1170	1080	520
31	2560	---	3360	2120	---	6910	---	5640	---	1070	800	---
TOTAL	164120	136360	284370	75520	55810	68340	240140	96430	145200	231300	30835	19367
MEAN	5294	4545	9173	2436	1993	2205	8005	3111	4840	7461	995	646
MAX	19400	17900	26200	4960	3090	6910	25600	6580	12100	21900	2050	957
MIN	1630	1920	2800	1790	1410	1300	2230	1450	1610	1070	680	490
CAL YR 1986	TOTAL	1731838		MEAN	4745	MAX	29100	MIN	600			
WTR YR 1987	TOTAL	1547792		MEAN	4241	MAX	26200	MIN	490			

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: October 1953 to current year.

DISSOLVED OXYGEN: March 1967 to current year.

INSTRUMENTATION.--Water-quality monitor since March 1967.

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 periods.

DISSOLVED OXYGEN: Maximum, ≥20.0 mg/L on several days during period 1982 to 1985; minimum, 0.0 mg/L on many days during 1968, Sept. 13, 1969.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 974 microsiemens Sept. 28; minimum, 284 microsiemens Dec. 2.

pH: Maximum, 8.9 units Aug. 14, 15; minimum 7.3 units May 22, 28.

WATER TEMPERATURES: Maximum, 30.0°C July 22, 25, Aug. 4; minimum, 2.5°C Dec. 12, Jan. 12, 13, 18, 24.

DISSOLVED OXYGEN: Maximum, 18.4 mg/L Aug. 14; minimum, 3.6 mg/L Sept. 19.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML)	CALCIUM DIS- SOLVED (MG/L AS CA)
NOV 18...	1000	2240	685	7.90	5.0	8.5	7.1	13.5	119	2000	380	75
MAR 09...	1015	2150	740	8.52	7.0	10.0	8.0	11.2	102	260	230	79
MAY 05...	1145	1960	748	8.38	16.0	15.5	4.5	9.4	96	320	100	81
AUG 26...	1100	736	875	8.48	23.0	21.0	12	7.1	83	K20000	410	84

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY WH WAT TOTAL 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, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)
NOV 18...	28	33	4.6	190	90	43	0.40	6.2	439	2.40	0.80	0.290
MAR 09...	31	37	4.0	210	110	52	0.40	0.70	455	2.70	1.5	0.290
MAY 05...	30	34	3.7	219	100	44	0.40	22	441	3.10	1.5	0.240
AUG 26...	28	65	6.8	245	150	74	0.50	2.5	556	2.70	4.9	0.850

DATE	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	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)
NOV 18...	0.180	0.100	20	1	68	<0.5	1	<1	<3	9	27	8
MAR 09...	0.200	0.130	40	1	66	<0.5	<1	<1	<3	6	52	<5
MAY 05...	0.160	0.100	40	<1	41	<0.5	<1	<1	<3	5	14	5
AUG 26...	0.740	0.610	30	2	82	<0.5	<1	<1	<3	2	42	<5

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	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)
NOV 18...	13	23	<0.1	<10	3	<1	<1.0	1700	<6	23	21
MAR 09...	15	12	<0.1	10	2	<1	<1.0	1800	<6	20	16
MAY 05...	76	12	<0.1	<10	2	<1	<1.0	200	<6	7	18
AUG 26...	14	36	0.2	10	4	1	<1.0	1300	6	20	30

K Results based on colony count outside the acceptable range

SCIOTO RIVER BASIN
03234500 SCIOTO RIVER AT HIGBY, OH--Continued
WATER-QUALITY RECORDS

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)
NOV 18...	1	68	<0.5	1	<1	<3	9	27	8	13
MAR 09...	1	66	<0.5	<1	<1	<3	6	52	<5	15
MAY 05...	<1	41	<0.5	<1	<1	<3	5	14	5	76
AUG 26...	2	82	<0.5	<1	<1	<3	2	42	<5	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- PENDEDED (MG/L)
NOV 18...	23	<0.1	<10	3	<1	<1.0	1700	<6	23	21
MAR 09...	12	<0.1	10	2	<1	<1.0	1800	<6	20	16
MAY 05...	12	<0.1	<10	2	<1	<1.0	200	<6	7	18
AUG 26...	36	0.2	10	4	1	<1.0	1300	6	20	30

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.

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 during period 1982 to 1986; minimum, 0.0 mg/L on many days during 1968, Sept. 13, 1969.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 974 microsiemens Sept. 28, minimum, 284 microsiemens Dec. 2.

pH: Maximum, 8.9 units Aug. 14, 15; minimum, 7.3 units May 22, 28.

WATER TEMPERATURES: Maximum, 30.0°C July 22, 25, Aug. 4; minimum, 2.5°C Dec. 12, Jan. 12, 13, 18, 24.

DISSOLVED OXYGEN: Maximum, 18.4 mg/L Aug. 14; minimum, 3.6 mg/L Sept. 19.

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	456	430	463	686	676	680	442	438	440	662	652	655
2	454	424	440	694	686	690	436	284	341	674	656	665
3	438	402	421	704	696	700	354	340	349	686	676	680
4	460	432	449	712	704	708	392	352	364	698	686	693
5	448	370	403	708	690	698	416	396	408	704	694	700
6	368	348	356	688	666	672	416	402	409	714	704	708
7	388	348	360	672	660	668	430	418	422	726	712	716
8	430	392	412	670	612	644	450	430	438	746	726	736
9	464	432	449	638	626	632	470	450	462	750	744	747
10	508	466	485	648	640	643	480	446	464	762	748	755
11	542	508	525	644	594	625	476	470	473	760	750	754
12	582	546	562	624	600	607	494	464	473	768	750	760
13	618	582	599	642	624	633	522	498	515	764	750	758
14	628	616	622	648	626	636	544	518	528	768	746	750
15	642	624	632	656	644	650	560	542	549	784	768	777
16	652	640	644	670	656	661	584	556	568	778	768	774
17	652	648	650	680	670	674	596	582	588	784	776	779
18	652	646	650	702	678	690	610	586	596	788	780	786
19	666	648	655	718	702	712	612	594	599	784	588	718
20	684	666	677	714	710	713	640	616	630	684	598	643
21	700	682	690	722	714	719	650	636	642	698	686	692
22	714	700	709	724	688	714	658	652	654	688	676	683
23	712	704	708	688	662	675	668	658	663	694	682	686
24	724	710	719	690	662	672	662	656	660	708	694	701
25	716	678	696	678	670	674	652	592	615	748	706	727
26	734	652	680	678	390	542	656	630	645	772	744	759
27	692	652	669	580	468	531	662	652	657	790	762	775
28	698	654	681	470	452	462	652	650	651	798	780	790
29	670	646	658	470	440	454	660	652	657	796	790	794
30	652	648	650	442	432	438	662	644	653	804	790	795
31	676	654	665	---	---	---	664	646	657	804	778	797
MONTH	734	348	580	724	390	641	668	284	541	804	588	734
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	798	776	785	746	660	677	612	586	597	---	---	---
2	796	754	778	736	660	693	642	618	634	---	---	---
3	760	740	749	762	724	740	646	630	640	---	---	---
4	758	740	751	724	708	715	632	584	620	---	---	---
5	772	754	764	708	700	704	580	534	568	---	---	---
6	764	748	760	714	706	709	524	360	467	---	---	---
7	748	744	747	720	712	717	416	356	388	744	730	740
8	756	750	754	720	714	718	480	394	446	744	730	737
9	762	748	754	732	720	728	494	480	489	764	744	752
10	764	740	753	738	730	733	524	492	502	780	712	738
11	754	738	746	738	732	735	542	526	536	750	682	709
12	760	750	754	750	736	745	568	542	556	736	720	729
13	766	758	762	754	744	748	582	568	577	746	736	741
14	764	754	760	766	746	757	582	524	562	782	748	767
15	758	752	755	768	762	764	550	390	477	786	612	731
16	756	746	751	776	760	767	428	380	400	708	572	645
17	748	730	739	778	764	772	520	430	475	624	604	612
18	738	724	731	774	760	766	570	522	550	662	626	643
19	738	726	731	774	768	771	586	568	580	670	616	662
20	756	736	745	786	772	777	---	---	---	652	558	603
21	774	750	761	782	774	778	---	---	---	686	632	664
22	828	774	802	782	778	780	---	---	---	634	448	529
23	818	776	798	788	780	783	---	---	---	624	542	598
24	786	772	779	806	790	799	---	---	---	618	596	607
25	798	782	788	792	774	785	---	---	---	620	616	618
26	808	798	803	796	782	791	---	---	---	626	618	623
27	802	788	793	792	776	782	---	---	---	630	564	609
28	794	752	787	812	794	804	---	---	---	624	500	545
29	---	---	---	820	804	812	---	---	---	570	508	553
30	---	---	---	832	792	823	---	---	---	592	566	579
31	---	---	---	764	546	603	---	---	---	590	498	557
MONTH	828	724	764	832	546	751	646	356	530	786	448	652

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	604	520	574	710	678	700	766	724	744	908	878	890
2	586	536	555	670	426	542	752	724	740	882	840	864
3	566	538	556	542	396	460	782	672	741	852	832	843
4	562	424	488	412	352	392	730	672	707	890	844	859
5	538	438	489	350	308	325	772	676	731	890	810	852
6	564	538	553	326	308	314	668	578	604	888	836	875
7	564	522	545	324	312	317	664	588	629	894	870	886
8	520	498	508	332	320	325	640	580	606	922	894	914
9	538	498	516	350	332	342	616	590	606	930	908	920
10	576	542	561	364	344	357	630	606	621	936	920	927
11	618	576	596	390	364	380	660	632	647	938	926	932
12	614	572	588	398	380	389	698	668	682	960	926	949
13	578	574	576	412	388	400	712	680	694	950	918	940
14	586	506	550	410	372	389	712	664	690	916	882	904
15	526	506	518	418	400	408	716	660	690	932	882	902
16	556	528	541	434	400	410	718	682	698	948	934	942
17	574	558	569	460	436	450	760	704	743	936	922	933
18	572	548	556	520	458	484	768	716	751	922	908	912
19	596	560	581	576	524	552	758	722	741	908	886	902
20	604	596	598	610	578	589	766	718	743	882	842	857
21	608	354	500	636	612	627	756	726	747	874	850	864
22	550	462	512	664	636	653	776	754	766	886	870	876
23	566	508	542	680	650	671	798	760	781	934	890	912
24	560	542	552	692	678	684	770	736	752	940	916	928
25	562	542	549	684	664	677	790	770	780	936	918	931
26	590	552	571	686	644	669	802	776	786	916	902	910
27	592	572	582	700	624	664	792	776	786	922	916	918
28	658	574	621	748	704	731	774	766	769	974	912	938
29	670	660	664	754	712	739	---	---	---	964	936	949
30	700	672	686	734	712	718	---	---	---	954	876	922
31	---	---	---	758	738	746	922	910	920	---	---	---
MONTH	700	354	560	758	308	519	922	578	721	974	810	905
YEAR	974	284	661									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.68	7.62	7.60	7.95	7.92	7.93	7.90	7.86	7.88	8.02	7.98	8.00
2	7.67	7.49	7.64	7.94	7.92	7.93	7.90	7.74	7.79	7.98	7.94	7.97
3	7.66	7.49	7.59	7.96	7.93	7.95	7.74	7.69	7.71	7.94	7.91	7.93
4	7.67	7.61	7.64	7.93	7.91	7.92	7.77	7.72	7.74	7.93	7.87	7.90
5	7.64	7.56	7.58	7.95	7.91	7.93	7.85	7.78	7.82	8.01	7.90	7.96
6	7.59	7.56	7.57	7.93	7.91	7.92	7.88	7.84	7.86	7.96	7.78	7.89
7	7.66	7.59	7.62	7.92	7.86	7.88	7.87	7.84	7.86	7.91	7.77	7.85
8	7.74	7.66	7.70	7.87	7.78	7.82	7.86	7.84	7.85	7.91	7.89	7.90
9	7.80	7.75	7.77	7.95	7.80	7.87	7.84	7.76	7.79	7.93	7.90	7.91
10	7.87	7.80	7.82	7.96	7.93	7.94	7.87	7.79	7.83	7.93	7.88	7.89
11	7.87	7.83	7.85	7.93	7.90	7.92	7.94	7.87	7.92	7.93	7.89	7.90
12	7.85	7.83	7.84	7.98	7.93	7.96	7.95	7.90	7.93	7.93	7.80	7.88
13	7.86	7.85	7.85	7.99	7.97	7.98	7.96	7.93	7.94	7.92	7.76	7.85
14	7.92	7.86	7.90	7.99	7.95	7.97	7.96	7.89	7.93	7.89	7.82	7.87
15	7.96	7.92	7.94	7.99	7.95	7.97	7.91	7.82	7.87	7.81	7.70	7.75
16	7.95	7.90	7.93	7.95	7.94	7.94	7.89	7.83	7.87	7.85	7.73	7.78
17	7.95	7.91	7.92	7.95	7.92	7.94	7.85	7.81	7.84	7.91	7.85	7.88
18	7.94	7.90	7.92	7.96	7.91	7.93	7.85	7.79	7.81	7.93	7.80	7.87
19	7.95	7.89	7.92	8.03	7.95	7.97	7.90	7.85	7.86	7.94	7.83	7.90
20	7.94	7.91	7.92	8.03	7.95	7.98	7.93	7.89	7.91	7.91	7.86	7.88
21	7.93	7.90	7.92	7.98	7.93	7.95	7.93	7.89	7.91	8.10	7.86	7.98
22	7.93	7.89	7.91	7.98	7.94	7.97	7.98	7.81	7.91	8.05	8.01	8.04
23	7.94	7.92	7.93	8.07	7.96	8.04	7.94	7.83	7.88	8.14	8.05	8.08
24	7.94	7.89	7.91	8.07	8.04	8.05	7.87	7.76	7.82	8.16	8.03	8.10
25	7.93	7.88	7.90	8.09	8.07	8.08	7.79	7.72	7.76	8.07	7.94	8.01
26	7.94	7.84	7.88	8.08	7.81	7.95	7.82	7.74	7.76	8.03	7.88	7.97
27	7.95	7.88	7.91	7.95	7.77	7.86	7.92	7.81	7.86	8.06	7.90	7.97
28	7.89	7.83	7.85	7.83	7.78	7.81	8.01	7.92	7.95	7.96	7.82	7.89
29	7.95	7.89	7.93	7.84	7.81	7.83	8.07	7.98	8.02	7.86	7.80	7.83
30	7.94	7.92	7.93	7.86	7.83	7.84	8.05	7.97	8.03	7.82	7.74	7.78
31	7.96	7.94	7.94	---	---	---	8.03	8.00	8.02	8.14	7.78	7.82
MONTH	7.96	7.49	7.82	8.09	7.77	7.93	8.07	7.69	7.87	8.16	7.70	7.91

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	8.13	7.95	8.03	8.24	7.98	8.06	7.88	7.83	7.86	---	---	---
2	7.98	7.87	7.93	8.14	7.96	8.04	7.90	7.82	7.86	---	---	---
3	8.00	7.94	7.96	8.17	7.95	8.05	7.91	7.83	7.86	---	---	---
4	8.06	7.93	7.97	8.41	8.03	8.21	8.01	7.91	7.94	---	---	---
5	8.07	7.94	8.02	8.39	8.16	8.25	7.99	7.78	7.92	---	---	---
6	8.07	7.87	8.00	8.27	8.06	8.14	7.76	7.68	7.71	---	---	---
7	8.11	7.91	7.98	8.39	8.12	8.23	7.69	7.63	7.66	---	---	---
8	8.14	7.94	8.04	8.38	8.23	8.31	7.68	7.65	7.66	---	---	---
9	8.17	8.09	8.13	8.37	8.11	8.20	7.73	7.59	7.66	---	---	---
10	8.21	8.04	8.14	8.36	8.09	8.20	7.66	7.62	7.64	---	---	---
11	8.25	8.11	8.19	8.35	8.19	8.27	7.69	7.63	7.66	---	---	---
12	8.27	8.19	8.23	8.32	8.16	8.25	7.65	7.54	7.61	8.63	8.25	8.36
13	8.42	8.23	8.28	8.34	8.16	8.25	7.55	7.46	7.51	8.66	8.26	8.44
14	8.43	8.30	8.36	8.35	8.22	8.26	7.72	7.54	7.66	8.56	8.25	8.42
15	8.36	8.21	8.29	8.31	8.18	8.23	7.70	7.55	7.63	8.43	7.94	8.14
16	8.37	8.30	8.34	8.26	8.14	8.21	7.78	7.55	7.68	8.23	7.41	7.65
17	8.31	8.20	8.26	8.32	8.17	8.24	7.86	7.78	7.83	7.60	7.42	7.50
18	8.39	8.20	8.29	8.27	8.17	8.22	7.89	7.85	7.87	7.70	7.56	7.61
19	8.43	8.31	8.38	8.34	8.13	8.22	7.97	7.90	7.94	7.70	7.56	7.65
20	8.44	8.30	8.35	8.42	8.26	8.34	---	---	---	7.63	7.48	7.55
21	8.36	8.15	8.22	8.43	8.31	8.37	---	---	---	7.56	7.48	7.52
22	8.28	8.18	8.22	8.45	8.30	8.38	---	---	---	7.47	7.28	7.37
23	8.19	8.10	8.14	8.52	8.36	8.43	---	---	---	7.47	7.37	7.44
24	8.23	8.11	8.16	8.49	8.34	8.41	---	---	---	7.56	7.45	7.52
25	8.34	8.21	8.28	8.49	8.28	8.37	---	---	---	7.60	7.55	7.58
26	8.37	8.28	8.32	8.45	8.22	8.34	---	---	---	7.68	7.57	7.61
27	8.35	8.22	8.28	8.63	8.26	8.46	---	---	---	7.73	7.59	7.65
28	8.21	8.10	8.13	8.55	8.31	8.43	---	---	---	7.58	7.34	7.40
29	---	---	---	8.46	8.34	8.41	---	---	---	7.49	7.41	7.45
30	---	---	---	8.40	8.10	8.24	---	---	---	7.52	7.49	7.51
31	---	---	---	8.08	7.85	7.96	---	---	---	7.55	7.43	7.49
MONTH	8.44	7.87	8.18	8.63	7.85	8.26	8.01	7.46	7.75	8.66	7.28	7.69
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.50	7.39	7.43	7.90	7.77	7.85	8.44	8.18	8.26	8.41	7.86	8.08
2	7.53	7.43	7.50	7.90	7.56	7.71	8.26	8.09	8.17	8.37	8.00	8.17
3	7.52	7.42	7.48	7.61	7.38	7.52	8.39	8.27	8.32	8.42	8.05	8.21
4	7.50	7.35	7.38	7.55	7.50	7.53	8.29	7.88	8.06	8.41	8.07	8.22
5	7.53	7.38	7.46	7.51	7.48	7.49	8.12	7.58	7.88	8.47	8.04	8.24
6	7.59	7.54	7.57	7.48	7.47	7.48	8.36	7.78	8.02	8.20	7.84	7.96
7	7.59	7.56	7.58	7.47	7.44	7.45	8.18	7.78	7.97	7.84	7.75	7.81
8	7.59	7.55	7.57	7.49	7.42	7.45	8.66	7.77	8.15	7.92	7.72	7.79
9	7.59	7.56	7.58	7.51	7.47	7.48	8.81	8.35	8.57	8.05	7.75	7.87
10	7.60	7.58	7.59	7.51	7.48	7.49	8.69	8.36	8.53	8.01	7.80	7.90
11	7.62	7.55	7.60	7.59	7.52	7.55	8.61	8.19	8.41	7.89	7.82	7.86
12	7.56	7.52	7.53	7.60	7.58	7.59	8.49	8.30	8.40	7.85	7.75	7.79
13	7.61	7.53	7.57	7.65	7.58	7.61	8.63	8.32	8.46	7.90	7.69	7.77
14	7.61	7.46	7.53	7.65	7.58	7.61	8.94	8.51	8.68	7.84	7.70	7.76
15	7.66	7.52	7.58	7.68	7.63	7.65	8.93	8.60	8.75	7.76	7.63	7.70
16	7.67	7.65	7.66	7.76	7.65	7.68	8.77	8.57	8.66	7.63	7.53	7.58
17	7.66	7.63	7.65	7.78	7.69	7.74	8.55	8.38	8.48	7.58	7.49	7.52
18	7.64	7.58	7.61	7.80	7.64	7.71	8.70	8.31	8.46	7.50	7.43	7.46
19	7.65	7.61	7.63	7.97	7.73	7.81	8.73	8.36	8.52	7.46	7.41	7.43
20	7.67	7.61	7.64	8.19	7.80	7.93	8.71	8.38	8.53	7.55	7.46	7.51
21	7.65	7.38	7.55	8.59	8.02	8.23	8.49	8.28	8.37	7.59	7.55	7.57
22	7.63	7.49	7.56	8.67	8.02	8.30	8.32	8.11	8.22	7.64	7.58	7.60
23	7.59	7.53	7.56	8.57	8.07	8.30	8.16	7.92	8.03	7.66	7.61	7.63
24	7.60	7.54	7.58	8.51	7.96	8.20	8.06	7.89	7.97	7.67	7.61	7.63
25	7.62	7.60	7.61	8.52	8.09	8.30	7.91	7.75	7.82	7.61	7.56	7.59
26	7.72	7.59	7.65	8.36	8.05	8.17	8.32	7.68	8.01	7.74	7.61	7.68
27	7.67	7.61	7.64	8.42	7.79	8.16	8.27	7.98	8.12	7.75	7.68	7.71
28	7.66	7.60	7.63	8.26	7.95	8.08	8.13	7.96	7.99	7.97	7.66	7.80
29	7.76	7.65	7.69	8.53	8.19	8.32	---	---	---	7.91	7.83	7.87
30	7.83	7.70	7.75	8.58	8.24	8.39	---	---	---	7.89	7.78	7.83
31	---	---	---	8.50	8.33	8.43	8.04	7.80	7.88	---	---	---
MONTH	7.83	7.35	7.58	8.67	7.38	7.85	8.94	7.58	8.27	8.47	7.41	7.78
YEAR	8.94	7.28	7.92									

SCIOTO RIVER BASIN

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03234500 SCIOTO RIVER AT HIGBY, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

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

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	24.5	23.5	24.0	26.0	25.0	25.0	28.0	26.5	27.0	23.5	20.5	22.0
2	24.0	22.5	23.5	24.5	23.0	24.0	29.0	26.5	28.0	23.0	20.0	21.5
3	24.5	23.5	24.0	24.5	22.5	23.5	29.0	27.5	28.0	23.5	20.5	22.0
4	24.5	23.0	24.0	23.5	22.5	23.0	30.0	27.5	29.0	23.5	21.0	22.5
5	24.0	22.5	23.0	23.5	23.0	23.0	29.5	28.0	28.5	23.5	22.0	22.5
6	25.0	23.0	24.0	24.5	23.5	23.5	28.5	26.5	27.5	23.0	22.0	22.5
7	24.5	23.5	24.0	24.5	23.5	24.0	28.5	26.5	27.5	22.5	22.0	22.5
8	25.0	23.0	24.0	25.0	24.0	24.5	28.0	26.0	27.0	24.5	22.5	23.0
9	24.5	23.5	24.0	25.5	24.5	25.0	28.0	26.5	27.5	25.5	23.0	24.0
10	24.5	22.0	23.0	25.5	24.0	25.0	27.5	26.0	27.0	25.5	23.5	24.5
11	24.5	21.5	23.0	25.5	24.5	25.0	26.5	24.5	25.5	24.5	23.5	24.0
12	24.0	23.0	23.5	26.0	24.0	25.0	27.5	25.5	26.5	23.5	23.0	23.0
13	25.0	23.0	24.0	26.5	24.5	25.5	28.0	26.0	27.0	24.5	22.5	23.5
14	26.0	23.5	25.0	25.5	24.0	25.0	29.0	26.5	27.5	25.0	22.5	23.5
15	26.0	24.5	25.0	25.0	23.5	24.0	29.0	26.0	27.5	24.0	23.0	23.5
16	25.5	24.5	25.5	25.5	23.0	24.0	28.5	26.0	27.5	24.0	23.0	23.5
17	27.0	24.5	25.5	27.0	24.5	25.5	27.5	26.5	27.0	25.0	23.0	24.0
18	27.5	25.0	26.0	26.5	24.0	25.5	28.0	25.0	26.5	24.0	22.5	23.5
19	28.0	26.0	26.5	27.5	25.0	26.0	27.5	25.0	26.5	23.0	22.0	22.5
20	27.5	26.0	26.5	28.5	25.5	27.0	27.5	24.5	26.0	23.0	21.0	22.0
21	27.0	23.5	25.5	29.0	26.5	27.5	26.0	24.0	25.0	21.5	20.0	21.0
22	26.5	25.5	26.0	30.0	27.0	28.5	26.0	24.0	25.0	20.5	19.0	20.0
23	26.5	25.5	26.0	29.5	27.5	28.5	26.5	23.5	25.0	20.0	18.0	19.0
24	27.0	25.0	26.0	29.5	27.5	28.5	25.5	22.5	24.0	21.0	18.0	19.5
25	27.0	25.0	26.0	30.0	27.5	28.5	24.0	22.0	23.0	21.5	19.0	20.0
26	27.0	25.0	26.0	29.5	27.5	28.0	24.0	21.5	22.5	21.0	18.0	19.5
27	26.5	24.0	25.0	27.5	26.0	27.0	25.0	23.5	24.0	21.0	18.0	19.5
28	25.5	22.5	24.0	27.5	25.5	27.0	24.5	24.0	24.0	21.0	18.5	20.0
29	26.0	23.0	24.5	28.5	25.5	27.0	---	---	---	20.5	19.5	20.0
30	26.5	24.5	25.5	28.5	26.0	27.5	---	---	---	20.5	18.5	19.5
31	---	---	---	28.0	27.0	27.5	23.0	22.0	22.5	---	---	---
MONTH	28.0	21.5	25.0	30.0	22.5	26.0	30.0	21.5	26.0	25.5	18.0	22.0
YEAR	30.0	2.5	16.5									

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	6.4	6.0	6.2	12.0	11.5	11.8	10.9	10.8	10.9	11.4	10.7	11.1
2	6.4	5.4	6.2	12.9	11.8	12.2	11.0	10.7	10.9	10.8	10.1	10.5
3	7.4	5.5	6.8	13.2	12.4	12.8	10.8	10.5	10.6	10.2	9.8	10.0
4	7.9	7.4	7.6	13.4	12.6	12.8	10.8	10.4	10.6	9.8	8.5	9.4
5	7.9	7.4	7.6	13.4	12.4	12.9	11.3	10.8	11.0	11.8	8.8	10.7
6	8.3	7.7	7.9	13.1	12.5	12.8	11.6	11.2	11.4	11.5	9.4	10.9
7	9.3	8.2	8.7	12.9	11.5	12.1	11.6	11.4	11.5	12.4	9.4	11.3
8	10.0	9.1	9.6	11.6	11.1	11.3	11.4	11.1	11.3	12.0	11.4	11.7
9	10.5	9.9	10.2	11.7	11.2	11.4	11.0	10.4	10.6	11.4	11.3	11.3
10	10.7	10.3	10.5	12.1	11.6	11.8	10.5	10.3	10.4	11.3	11.1	11.2
11	12.5	10.3	11.2	12.4	11.9	12.1	11.1	10.3	10.7	11.3	11.0	11.2
12	12.7	11.8	12.5	13.0	12.1	12.5	11.6	11.1	11.4	11.4	10.9	11.1
13	12.7	11.7	12.1	13.8	12.9	13.3	11.5	11.1	11.3	10.9	10.5	10.8
14	12.2	11.8	11.9	14.9	13.9	14.3	11.4	11.0	11.2	10.9	10.6	10.7
15	12.5	12.2	12.3	15.2	13.9	14.5	19.7	10.4	15.5	10.8	10.2	10.5
16	12.6	12.2	12.4	14.2	13.7	14.1	20.0	16.8	18.5	11.0	10.4	10.6
17	12.6	12.2	12.4	14.2	13.8	14.0	17.4	16.5	17.1	12.3	11.0	11.5
18	13.3	12.5	12.9	14.8	13.6	14.2	16.4	12.3	14.4	11.7	10.8	11.4
19	13.8	13.1	13.6	14.9	13.9	14.4	12.1	11.1	11.5	11.7	11.1	11.4
20	13.8	11.8	12.9	14.8	14.0	14.4	11.3	11.0	11.2	9.9	7.7	8.5
21	13.3	12.4	12.9	14.6	13.3	13.9	11.4	11.1	11.3	12.5	11.6	12.2
22	13.4	13.1	13.2	14.4	12.5	13.2	12.0	9.2	11.0	11.9	11.6	11.7
23	13.1	12.4	12.6	15.0	10.5	12.7	10.6	9.3	9.8	12.3	11.6	12.0
24	12.7	11.6	12.5	16.5	14.1	15.3	10.3	9.8	10.1	12.0	10.2	11.3
25	13.0	11.6	12.4	15.9	12.9	14.8	10.3	10.0	10.2	10.3	9.8	10.1
26	13.0	11.7	12.3	13.0	10.1	11.3	10.4	10.2	10.3	10.4	9.1	10.1
27	12.4	11.7	12.0	10.1	8.6	9.3	11.0	10.4	10.6	10.9	10.3	10.5
28	12.2	8.2	10.0	10.5	9.3	10.0	11.4	11.0	11.2	10.9	10.4	10.6
29	11.6	8.3	10.8	10.5	10.4	10.5	12.0	11.5	11.7	10.9	10.3	10.5
30	12.0	11.4	11.6	10.9	10.4	10.7	12.5	11.8	12.2	10.7	10.4	10.6
31	12.0	11.5	11.7	---	---	---	11.9	11.3	11.7	11.6	10.5	11.0
MONTH	13.8	5.4	10.9	16.5	8.6	12.7	20.0	9.2	11.7	12.5	7.7	10.9

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	11.4	10.4	10.9	11.6	10.7	11.1	10.0	8.9	9.5	---	---	---
2	11.9	9.9	11.0	12.1	10.4	11.2	10.6	9.8	10.2	---	---	---
3	11.6	10.7	10.9	11.8	10.2	11.1	10.5	10.0	10.3	---	---	---
4	11.0	10.4	10.8	13.1	10.4	11.7	11.7	10.4	10.8	---	---	---
5	10.9	10.2	10.5	12.5	11.5	12.1	11.6	11.1	11.4	---	---	---
6	10.5	10.1	10.3	13.0	11.2	12.1	11.4	11.0	11.2	---	---	---
7	---	---	---	13.8	11.4	12.6	11.2	10.7	11.0	9.7	8.7	9.0
8	---	---	---	13.5	11.6	12.7	10.7	10.2	10.6	12.1	8.0	9.8
9	---	---	---	13.1	11.2	11.9	10.3	9.8	10.1	13.7	8.5	10.7
10	---	---	---	13.8	10.9	12.3	9.7	8.9	9.3	12.4	7.8	10.0
11	---	---	---	14.2	12.0	13.2	9.2	8.9	9.0	11.9	7.8	9.8
12	12.4	12.0	12.2	13.8	12.1	13.1	10.5	8.5	8.9	16.1	7.6	11.1
13	13.5	11.4	12.4	13.8	12.0	13.0	9.9	6.6	7.6	17.0	9.9	12.8
14	13.4	12.0	12.5	13.5	12.3	13.1	9.9	7.0	8.4	15.9	10.1	13.0
15	12.9	11.4	12.3	13.2	12.0	12.6	9.0	8.6	8.8	14.1	8.4	10.6
16	12.8	11.8	12.4	14.2	11.6	12.8	9.4	8.9	9.2	11.6	5.5	7.2
17	12.7	11.7	12.3	14.5	11.9	13.0	9.2	9.1	9.2	6.9	5.7	6.3
18	13.5	11.9	12.8	13.6	11.9	12.7	9.3	8.9	9.1	7.7	6.5	6.9
19	14.3	12.4	13.4	14.4	11.5	12.7	9.0	8.7	8.9	7.6	6.5	7.1
20	13.8	12.5	13.3	14.6	11.7	13.1	---	---	---	7.2	6.1	6.5
21	13.4	11.7	12.4	14.6	11.7	13.0	---	---	---	6.2	5.5	5.8
22	14.4	12.0	13.1	15.3	11.5	13.1	---	---	---	6.8	5.2	6.1
23	12.6	11.4	12.1	15.8	11.6	13.5	---	---	---	5.7	5.2	5.5
24	12.8	11.4	12.1	14.5	11.6	12.9	---	---	---	6.2	5.6	6.0
25	14.2	12.2	13.2	14.9	10.6	12.5	---	---	---	6.5	6.1	6.3
26	13.8	12.7	13.4	14.5	10.2	12.3	---	---	---	7.1	6.3	6.6
27	13.6	12.1	12.7	14.7	10.5	12.5	---	---	---	7.2	6.3	6.9
28	12.0	11.0	11.6	15.1	10.9	12.9	---	---	---	6.0	5.0	5.2
29	---	---	---	13.4	11.3	12.4	---	---	---	5.7	5.3	5.4
30	---	---	---	11.2	9.4	10.0	---	---	---	5.9	5.7	5.8
31	---	---	---	10.3	9.4	10.0	---	---	---	6.3	5.8	6.1
MONTH	14.4	9.9	12.1	15.8	9.4	12.4	11.7	6.6	9.7	17.0	5.0	7.9
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	5.7	5.2	5.4	7.4	6.7	7.1	9.9	6.8	8.6	13.1	7.1	9.5
2	6.2	5.3	5.9	7.4	5.8	6.6	10.4	6.9	8.6	12.0	7.9	9.9
3	6.0	5.1	5.6	6.4	4.3	5.5	10.3	7.1	8.5	12.7	7.9	10.0
4	5.7	4.5	4.8	6.4	6.3	6.4	10.2	6.2	7.9	12.2	7.9	9.9
5	5.9	5.2	5.6	6.3	6.1	6.2	9.7	5.2	7.3	12.5	7.7	9.9
6	6.0	5.6	5.8	6.1	6.1	6.1	11.5	6.1	8.3	9.5	5.9	7.0
7	6.4	5.4	6.0	6.0	5.8	5.9	11.1	6.4	8.3	6.2	5.6	5.9
8	6.2	6.0	6.2	6.0	5.8	5.9	15.3	6.6	10.2	7.7	5.5	6.3
9	6.2	6.1	6.1	6.0	5.5	5.8	17.2	8.8	12.6	8.9	5.8	7.1
10	6.4	6.2	6.3	6.0	5.5	5.7	16.1	8.2	11.9	8.5	6.0	7.0
11	6.4	5.6	6.2	6.0	5.8	5.9	15.7	8.0	11.7	6.8	6.1	6.4
12	5.9	5.6	5.7	6.2	5.8	5.9	13.6	8.3	11.0	6.9	5.8	6.2
13	6.1	5.7	5.9	6.5	5.7	6.0	15.7	8.5	11.7	7.9	5.6	6.5
14	5.9	5.2	5.6	6.4	5.7	6.1	18.4	8.6	12.8	7.6	5.7	6.5
15	6.6	5.4	6.0	6.3	5.8	6.1	16.9	7.8	12.0	6.6	5.4	6.0
16	6.5	6.3	6.4	6.3	5.9	6.0	13.0	7.4	10.2	5.8	4.9	5.4
17	6.3	6.2	6.3	6.1	4.7	5.4	9.5	6.6	8.0	6.2	4.4	5.2
18	6.2	6.0	6.1	6.8	4.2	5.5	13.6	5.9	9.0	4.8	4.0	4.4
19	6.3	6.0	6.1	7.7	5.9	6.6	13.2	6.6	9.6	4.1	3.6	3.8
20	6.5	5.9	6.1	9.1	5.9	7.1	13.6	6.7	9.7	5.3	4.1	4.8
21	6.4	5.8	6.2	12.4	6.4	8.4	9.8	6.8	8.4	5.7	5.0	5.3
22	6.0	5.6	5.8	13.5	5.1	8.7	9.9	6.1	7.7	5.8	5.2	5.4
23	5.9	5.6	5.7	10.8	6.5	8.6	11.1	5.4	7.8	6.2	5.3	5.7
24	5.9	5.3	5.7	11.6	6.0	8.3	11.3	6.4	8.6	6.7	5.4	5.9
25	6.0	5.3	5.7	12.4	6.5	9.0	8.4	6.3	7.0	6.1	5.3	5.7
26	6.3	5.5	5.8	11.1	5.6	8.0	10.9	5.7	8.1	7.0	5.8	6.4
27	6.3	6.0	6.2	11.0	6.2	8.6	10.3	7.0	8.6	7.0	5.9	6.4
28	6.6	6.2	6.4	8.5	6.1	7.4	8.4	6.7	7.1	8.9	6.0	7.4
29	7.5	6.4	6.8	13.2	7.5	9.7	---	---	---	10.1	7.5	8.5
30	7.8	6.6	7.1	13.6	7.7	10.3	---	---	---	8.1	6.9	7.5
31	---	---	---	11.5	8.1	10.1	9.8	7.2	8.1	---	---	---
MONTH	7.8	4.5	6.0	13.6	4.2	7.1	18.4	5.2	9.3	13.1	3.6	6.7
YEAR	20.0	3.6	9.8									

SCIOTO RIVER BASIN

RESERVOIRS IN SCIOTO RIVER BASIN

03220500 O'SHAUGHNESSY RESERVOIR NEAR DUBLIN.--Lat 40°09'14", long 83°07'33", Delaware County, Hydrologic Unit 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, 20,760 acre-ft July 3, elevation, 851.50 ft; minimum, 15,250 acre-ft Sept. 30, elevation, 845.96 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, 6,040 acre-ft July 3, elevation, 760.00 ft; minimum, 4,030 acre-ft Aug. 21, elevation, 754.39 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, revised, 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, 80,000 acre-ft July 3, elevation, 896.34 ft; minimum, 37,300 acre-ft Sept. 30, elevation, 880.60 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

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.....	848.79	17,850	--	756.45	4,740	--	882.12	40,440	--
Oct. 31.....	848.25	17,310	-540	755.87	4,540	-200	886.92	51,980	+11,540
Nov. 30.....	849.10	18,160	+850	756.73	4,840	+300	890.30	60,950	+8,970
Dec. 31.....	848.22	17,280	-880	755.69	4,480	-360	889.95	59,990	-960
CAL YR 1985	-	-	-400	-	-	-80	-	-	+180
Jan. 31.....	848.09	17,150	-130	755.67	4,470	-10	889.18	57,920	-2,070
Feb. 28.....	848.10	17,160	+10	755.64	4,460	-10	887.95	54,660	-3,260
Mar. 31.....	848.76	17,820	+660	756.67	4,820	+360	888.23	55,400	+740
Apr. 30.....	848.08	17,140	-680	755.59	4,440	-380	892.68	67,700	+12,300
May. 31.....	848.54	17,600	+460	756.15	4,630	+190	892.35	66,710	-990
June 30.....	848.09	17,150	-450	755.87	4,540	-90	892.87	68,270	+1,560
July 31.....	847.19	16,320	-830	755.35	4,360	-180	889.48	58,730	-9,540
Aug. 31.....	847.68	16,770	+450	755.34	4,360	0	884.96	47,000	-11,730
Sept. 30.....	845.97	15,260	-1,510	755.31	4,350	-10	880.60	37,330	-9,670
WTR YR 1986..	--	--	-2,590			-390			-3,110

UPPER TWIN CREEK BASIN

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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.--No estimated daily discharges. Records poor.

AVERAGE DISCHARGE.--24 years, 13.6 ft³/s., 15.14 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)
Nov. 26	0930	*995	*8.40	Dec. 2	0530	660	7.60

Minimum daily discharge, 0.00 ft³/s Aug. 26, Sept. 10, 13-16, 19-28DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	1.7	.37	29	6.1	6.4	79	58	7.5	4.9	.10	.07	.12	
2	2.9	.37	237	6.1	16	42	63	6.8	6.3	.20	.07	.06	
3	1.8	.37	71	5.7	16	30	56	6.7	5.6	.18	.12	.06	
4	1.4	.37	42	5.1	13	22	43	5.5	3.5	.13	.13	.06	
5	1.4	2.4	24	4.6	11	18	42	4.6	2.2	.13	.23	.06	
6	.96	7.8	17	4.6	11	16	51	4.5	1.4	.21	.20	.06	
7	.66	4.0	13	4.6	10	14	179	3.8	.79	.78	.12	.06	
8	.63	34	11	4.6	9.5	13	154	3.2	.56	.78	.00	.06	
9	.47	24	48	4.6	7.9	12	68	2.7	.53	.48	.11	.04	
10	.34	7.0	63	4.6	7.0	9.4	34	2.5	.41	.45	.20	.00	
11	.27	12	38	4.6	6.8	8.2	22	2.1	.40	14	.20	.05	
12	.27	9.3	24	4.6	7.0	7.6	18	1.9	.39	10	.13	.06	
13	.27	6.7	15	4.5	6.2	6.9	15	1.8	.40	3.1	.16	.00	
14	.50	4.2	12	3.8	5.3	6.8	13	1.6	.36	2.5	.19	.00	
15	.39	3.5	10	3.8	5.2	6.8	105	4.6	.32	1.8	.20	.00	
16	.27	3.0	8.5	3.8	4.6	7.7	152	2.6	.32	1.1	.20	.00	
17	.27	2.5	7.0	3.8	4.6	7.1	66	2.4	.31	.55	.21	.03	
18	.23	2.3	6.7	4.4	4.9	6.8	39	1.5	.26	.45	.20	.03	
19	.19	2.1	5.7	87	5.1	8.1	24	1.6	.24	.40	.16	.00	
20	.19	2.1	4.8	52	6.3	8.4	18	2.5	.20	.36	.07	.00	
21	.19	3.3	4.3	33	11	8.2	16	2.3	.31	.28	.05	.00	
22	.19	3.0	3.6	25	19	8.2	15	2.2	.20	.28	.03	.00	
23	.19	2.8	3.4	17	44	7.7	16	1.9	.20	.28	.06	.00	
24	.19	2.9	5.8	12	31	7.6	15	1.4	.20	.24	.06	.00	
25	.19	3.5	8.8	10	25	11	13	2.5	.17	.20	.03	.00	
26	.19	284	8.2	8.4	20	10	12	2.1	.13	.17	.00	.00	
27	.23	68	8.2	7.2	23	10	10	1.3	.13	.09	.04	.00	
28	.32	31	7.6	7.2	70	10	10	.82	.10	.06	.13	.00	
29	.37	20	7.2	6.4	---	10	9.0	.55	.07	.07	.13	.09	
30	.37	14	7.2	7.4	---	68	8.9	.52	.07	.07	.13	.12	
31	.37	---	6.7	6.8	---	103	---	.73	---	.01	.13	---	
TOTAL	17.91	560.88	757.7	363.3	406.8	583.5	1344.9	86.72	30.97	39.45	3.76	.96	
MEAN	.58	18.7	24.4	11.7	14.5	18.8	44.8	2.80	1.03	1.27	.12	.03	
MAX	2.9	284	237	87	70	103	179	7.5	6.3	14	.23	.12	
MIN	.19	.37	3.4	3.8	4.6	6.8	8.9	.52	.07	.01	.00	.00	
CFSM	.05	1.53	2.00	.96	1.19	1.54	3.67	.23	.08	.10	.01	.00	
IN.	.05	1.71	2.31	1.11	1.24	1.78	4.10	.26	.09	.12	.01	.00	
CAL YR 1986	TOTAL	5805.97		MEAN	15.9	MAX	700	MIN	.02	CFSM	1.30	IN.	17.70
WTR YR 1987	TOTAL	4196.85		MEAN	11.5	MAX	284	MIN	.00	CFSM	.94	IN.	12.80

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 September 1985.

pH: March 1985 to September 1985.

WATER TEMPERATURES: Water years 1963-66, 1967-70, 1972-1982, 1984-1985.

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.--Water temperature unavailable for 1983 water year due to malfunction of the instrument or probe out of water. No flow conditions during September 1987.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 210 microsiemens Sept. 1, 1987; minimum, 40 microsiemens July 1, 1986.

pH: Maximum recorded, 8.18 units Oct. 2, 1986; minimum, 5.8 units June 27-31, July 1, 3-5, 1985.

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, 210 microsiemens Sept. 1; minimum recorded, 52 microsiemens Nov. 26.

pH: Maximum recorded, 8.18 units Oct. 2; minimum recorded, 5.85 units Aug. 5.

WATER TEMPERATURE: Maximum recorded, 33.0°C July 24, 25, Aug. 3, 4; minimum recorded, 0.5°C Jan. 26, Feb. 10.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

[illegible][illegible]

UPPER TWIN CREEK AT MCGAW, OH--Continued
03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

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WATER-QUALITY RECORDS

DATE	FLUORIDE, 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 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 + DIS- ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)
OCT 15...	<0.1	9.7	85	<0.01	0.25	<0.01	<0.01	0.20	0.02	<0.01	<0.01
NOV 19...	<0.1	9.6	69	<0.01	0.46	<0.01	0.02	0.30	<0.01	<0.01	<0.01
DEC 16...	<0.1	9.4	56	<0.01	0.34	<0.01	0.02	0.40	0.01	<0.01	<0.01
JAN 06...	<0.1	9.4	61	<0.01	0.26	<0.01	<0.01	<0.20	<0.01	<0.01	<0.01
FEB 10...	<0.1	9.3	53	<0.01	0.28	<0.01	<0.01	1.5	<0.01	<0.01	<0.01
MAR 30...	<0.1	10	79	<0.01	0.21	<0.01	<0.01	0.30	0.01	0.02	<0.01
APR 21...	<0.1	11	62	<0.01	0.24	<0.01	<0.01	0.30	0.01	0.01	<0.01
MAY 12...	<0.1	11	69	0.02	0.31	0.02	0.04	<0.20	0.01	0.01	0.02
JUN 09...	0.1	11	86	<0.01	0.31	<0.01	0.03	0.20	<0.01	0.03	<0.01
JUL 21...	0.1	11	78	<0.01	0.21	0.01	0.01	0.50	0.03	<0.01	0.02
AUG 25...	0.1	11	94	<0.01	0.21	<0.01	0.01	0.40	0.02	<0.01	0.02
SEP 24...	--	--	--	--	--	--	--	--	--	--	--

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	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)
OCT 15...	10	<1	24	<10	<1	5	<3	5	10	<5	4
NOV 19...	--	--	--	--	--	--	--	--	--	--	--
DEC 16...	--	--	--	--	--	--	--	--	--	--	--
JAN 06...	<10	<1	19	<0.5	<1	<1	<3	3	9	<5	<4
FEB 10...	--	--	--	--	--	--	--	--	--	--	--
MAR 30...	--	--	--	--	--	--	--	--	--	--	--
APR 21...	10	<1	20	<0.5	1	<1	<3	<1	12	<5	7
MAY 12...	--	--	--	--	--	--	--	--	--	--	--
JUN 09...	--	--	--	--	--	--	--	--	--	--	--
JUL 21...	20	<1	26	<0.5	<1	<1	<3	3	10	<5	<4
AUG 25...	--	--	--	--	--	--	--	--	--	--	--
SEP 24...	--	--	--	--	--	--	--	--	--	--	--

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)
OCT 15...	4	0.4	<10	<1	<1	<1.0	50	<6	34	1
NOV 19...	--	--	--	--	--	--	--	--	--	1
DEC 16...	--	--	--	--	--	--	--	--	--	2
JAN 06...	<1	<0.1	40	2	<1	<1.0	<6	<6	73	2
FEB 10...	--	--	--	--	--	--	--	--	--	2
MAR 30...	--	--	--	--	--	--	--	--	--	32
APR 21...	1	<0.1	<10	3	<1	<1.0	36	<6	23	2
MAY 12...	--	--	--	--	--	--	--	--	--	1
JUN 09...	--	--	--	--	--	--	--	--	--	1
JUL 21...	6	0.2	<10	4	<1	<1.0	58	<6	10	8
AUG 25...	--	--	--	--	--	--	--	--	--	3
SEP 24...	--	--	--	--	--	--	--	--	--	--

K Results based on colony outside the acceptable range (non-ideal colony count)

UPPER TWIN CREEK BASIN

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

WATER-QUALITY RECORDS

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

PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: March 1985 to current year.

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

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INSTRUMENTATION.--Water temperature recorder since July 1972.

REMARKS.--Water temperature unavailable for 1983 water year due to malfunction of the instrument or probe out of water.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 210 microsiemens Sept. 1, 1987; minimum, 40 microsiemens July 1, 1986.

pH: Maximum recorded, 8.18, units Oct. 2, 1986; minimum, 5.8 units June 27-31, July 1, 3-5, 1985.

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, 210 microsiemens Sept. 1; minimum recorded, 52 microsiemens Nov. 26.

pH: Maximum recorded, 8.18 units Oct. 2; minimum recorded, 5.85 units Aug. 5.

WATER TEMPERATURE: Maximum recorded, 33.0°C July 24, 25. Aug. 3, 4; minimum recorded 0.5°C Jan. 26, Feb. 10.

UPPER TWIN CREEK BASIN

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03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	104	90	100	118	114	115	104	94	101	86	84	85
2	102	96	99	116	114	116	92	68	73	86	84	85
3	106	100	103	118	114	116	78	70	74	88	84	86
4	106	102	104	116	114	116	84	78	81	88	86	88
5	104	100	103	116	100	112	90	84	87	88	86	88
6	104	100	103	102	96	98	96	90	92	88	86	88
7	104	100	102	104	102	102	98	94	97	88	86	88
8	104	102	103	104	74	85	102	98	100	90	88	88
9	106	102	104	88	76	81	106	88	100	90	88	90
10	106	104	105	94	88	91	94	86	91	90	88	89
11	106	104	105	94	76	85	98	94	96	90	88	88
12	108	104	106	84	78	81	98	98	98	90	88	90
13	108	106	107	88	84	87	100	98	99	92	90	90
14	108	106	107	88	88	88	100	98	100	92	80	90
15	108	104	106	88	88	88	102	100	101	90	90	90
16	106	104	106	90	88	88	78	76	78	92	90	91
17	108	106	107	90	90	90	80	78	79	92	80	91
18	108	106	108	92	90	91	80	78	80	92	80	88
19	108	106	108	94	92	92	82	80	82	94	66	77
20	108	106	107	94	90	91	84	82	82	76	70	73
21	108	106	107	90	88	89	84	82	84	78	76	76
22	108	106	108	90	88	89	86	84	85	78	60	77
23	110	108	109	90	88	89	86	84	86	82	78	79
24	112	108	110	90	80	87	84	82	83	88	80	84
25	112	110	110	90	80	88	84	82	84	82	80	82
26	114	112	113	82	52	63	86	84	84	86	80	84
27	116	114	114	80	68	75	84	84	84	---	---	---
28	116	114	114	88	82	84	84	82	84	---	---	---
29	116	112	114	94	88	91	84	82	84	---	---	---
30	116	114	115	100	94	96	84	82	84	---	---	---
31	116	114	115	---	---	---	86	84	84	---	---	---
MONTH	116	90	107	118	52	92	106	68	88	94	60	86
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	70	64	66						
2	---	---	---	70	70	70						
3	---	---	---	74	70	73						
4	---	---	---	74	74	74						
5	---	---	---	74	70	74						
6	---	---	---	78	74	75						
7	---	---	---	78	74	77						
8	---	---	---	80	78	78						
9	---	---	---	80	78	80						
10	88	84	84	80	80	80						
11	88	84	86	80	80	80						
12	84	84	84	84	80	80						
13	88	84	88	84	80	82						
14	90	88	89	84	80	84						
15	90	88	90	84	84	84						
16	90	88	89	84	84	84						
17	90	88	88	84	84	84						
18	90	88	88	88	84	85						
19	90	80	88	84	84	84						
20	98	80	91	88	84	85						
21	100	84	94	88	84	87						
22	94	88	91	88	84	87						
23	90	80	82	88	84	87						
24	80	80	80	88	88	88						
25	80	80	80	88	84	86						
26	84	80	82	88	84	87						
27	84	80	81	88	84	86						
28	80	60	75	84	84	84						
29	---	---	---	88	80	84						
30	---	---	---	84	80	81						
31	---	---	---	---	---	---						
MONTH	100	60	86	88	64	81						

UPPER TWIN CREEK BASIN

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1				---	---	---	140	136	138	210	145	164
2				---	---	---	142	138	140	156	141	151
3				---	---	---	145	141	143	157	150	152
4				---	---	---	145	142	143	155	147	152
5				---	---	---	146	132	140	155	151	153
6				---	---	---	145	140	142	157	151	154
7				---	---	---	145	144	144	159	143	155
8				---	---	---	147	143	145	157	154	156
9				---	---	---	152	143	147	158	153	156
10				---	---	---	150	142	147	---	---	---
11				---	---	---	154	144	147	159	152	156
12				---	---	---	150	146	148	153	151	153
13				113	108	109	150	142	148	---	---	---
14				112	107	109	152	148	150	---	---	---
15				112	105	109	156	142	152	---	---	---
16				114	110	111	154	151	153	---	---	---
17				116	112	114	162	142	156	175	163	168
18				119	115	117	158	152	154	180	175	177
19				122	117	119	154	148	152	---	---	---
20				124	120	122	154	150	151	---	---	---
21				126	121	123	---	---	---	---	---	---
22				127	123	125	---	---	---	---	---	---
23				128	124	126	---	---	---	---	---	---
24				129	126	127	---	---	---	---	---	---
25				131	127	129	---	---	---	---	---	---
26				137	128	130	---	---	---	---	---	---
27				135	130	133	---	---	---	---	---	---
28				135	131	134	160	152	154	---	---	---
29				137	133	135	155	142	151	---	---	---
30				138	134	136	158	147	152	---	---	---
31				139	135	137	160	149	154	---	---	---
MONTH				139	105	123	162	132	148	210	141	157
YEAR	210	52	103									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.24	6.78	7.10	7.94	7.02	7.22	7.28	6.96	7.22	---	---	---
2	8.18	7.00	7.32	7.78	6.96	7.11	7.16	6.80	6.96	---	---	---
3	7.56	6.80	7.05	7.76	6.96	7.15	7.22	7.10	7.18	---	---	---
4	7.58	6.80	6.97	7.16	6.98	7.02	7.16	7.10	7.13	---	---	---
5	7.74	6.80	7.10	7.42	6.96	7.13	7.16	7.12	7.14	---	---	---
6	7.78	6.98	7.16	7.70	7.14	7.33	7.14	7.06	7.10	7.06	6.82	6.95
7	7.42	7.00	7.13	7.62	7.06	7.22	7.22	7.08	7.13	7.04	6.94	7.01
8	7.50	7.00	7.16	7.14	6.86	7.01	7.26	7.18	7.23	7.02	6.92	6.99
9	7.94	6.98	7.18	6.96	6.88	6.92	7.24	7.14	7.21	7.02	6.90	6.99
10	8.02	7.00	7.29	7.06	6.96	7.00	7.14	6.96	7.05	7.08	6.98	7.03
11	7.82	6.98	7.18	7.14	7.00	7.05	7.24	7.10	7.16	7.08	7.02	7.05
12	7.94	6.94	7.15	7.06	7.00	7.04	7.16	7.06	7.11	7.06	7.00	7.04
13	7.40	6.92	7.06	7.18	7.04	7.08	7.22	7.10	7.15	7.08	7.04	7.04
14	8.08	7.02	7.30	7.16	7.12	7.14	7.20	7.20	7.20	7.08	7.00	7.05
15	7.62	7.10	7.33	7.22	7.08	7.14	7.24	7.18	7.05	7.10	7.02	7.07
16	7.58	7.04	7.26	7.18	7.10	7.12	---	---	---	7.10	7.04	7.07
17	7.58	7.04	7.17	7.20	7.06	7.11	---	---	---	7.12	7.00	7.07
18	7.44	7.02	7.15	7.18	7.02	7.07	---	---	---	7.20	7.00	7.12
19	7.40	7.04	7.13	7.20	7.02	7.07	---	---	---	7.22	6.98	7.07
20	7.34	7.06	7.15	7.18	7.04	7.09	---	---	---	7.04	7.00	7.02
21	7.56	7.04	7.21	7.36	7.18	7.27	---	---	---	7.04	6.98	7.02
22	7.58	7.02	7.20	7.36	7.24	7.29	---	---	---	7.08	6.98	7.04
23	7.60	6.98	7.15	7.34	7.20	7.26	---	---	---	7.08	7.02	7.06
24	7.70	6.96	7.14	7.38	7.20	7.24	---	---	---	7.12	6.98	7.05
25	7.58	6.94	7.10	7.48	7.20	7.31	---	---	---	7.14	7.08	7.11
26	7.70	6.96	7.16	7.28	6.76	6.88	---	---	---	7.20	7.00	7.12
27	7.54	6.94	7.08	6.86	6.82	6.83	---	---	---	---	---	---
28	7.82	7.00	7.24	7.00	6.36	6.84	---	---	---	---	---	---
29	7.94	6.98	7.28	7.24	7.02	7.12	---	---	---	---	---	---
30	8.02	6.96	7.21	7.24	7.04	7.16	---	---	---	---	---	---
31	8.04	7.00	7.25	---	---	---	---	---	---	---	---	---
MONTH	8.18	6.78	7.17	7.94	6.36	7.11	7.28	6.80	7.13	7.22	6.82	7.05

UPPER TWIN CREEK BASIN

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03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	7.20	7.10	7.15						
2	---	---	---	7.20	7.14	7.16						
3	---	---	---	7.20	7.14	7.17						
4	---	---	---	7.24	7.20	7.20						
5	---	---	---	7.24	7.20	7.22						
6	---	---	---	7.28	7.20	7.24						
7	---	---	---	7.30	7.24	7.26						
8	---	---	---	7.30	7.24	7.27						
9	---	---	---	7.34	7.24	7.29						
10	7.20	7.14	7.17	7.34	7.30	7.32						
11	7.20	7.10	7.14	7.34	7.30	7.32						
12	7.20	7.14	7.16	7.38	7.30	7.33						
13	7.18	7.14	7.16	7.38	7.34	7.36						
14	7.20	7.14	7.16	7.40	7.34	7.36						
15	7.20	7.14	7.18	7.40	7.30	7.36						
16	7.20	7.14	7.18	7.44	7.34	7.39						
17	7.24	7.20	7.20	7.40	7.38	7.39						
18	7.24	6.80	7.19	7.44	7.34	7.40						
19	7.24	7.18	7.20	7.50	7.38	7.43						
20	7.30	7.20	7.24	7.48	7.40	7.43						
21	7.30	7.20	7.24	7.44	7.40	7.42						
22	7.24	7.18	7.22	7.48	7.40	7.43						
23	7.18	7.14	7.16	7.48	7.40	7.44						
24	7.18	7.14	7.15	7.48	7.40	7.44						
25	7.20	7.14	7.16	7.54	7.40	7.47						
26	7.20	7.14	7.18	7.50	7.44	7.48						
27	7.28	7.18	7.21	7.54	7.44	7.49						
28	7.24	7.10	7.19	7.54	7.44	7.50						
29	---	---	---	7.54	7.48	7.50						
30	---	---	---	7.54	7.50	7.53						
31	---	---	---	---	---	---						
MONTH	7.30	6.80	7.18	7.54	7.10	7.36						
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1				---	---	---	7.53	6.80	7.04	7.18	7.00	7.09
2				---	---	---	7.56	6.57	6.95	7.19	7.00	7.06
3				---	---	---	7.58	6.54	6.89	7.19	7.00	7.08
4				---	---	---	7.58	6.48	6.84	7.17	7.00	7.11
5				---	---	---	7.50	5.85	6.66	7.19	6.96	7.08
6				---	---	---	7.57	6.52	6.98	7.06	6.91	6.98
7				---	---	---	7.04	6.54	6.74	6.98	6.84	6.90
8				---	---	---	7.54	6.43	6.80	6.94	6.81	6.86
9				---	---	---	7.42	6.14	6.62	6.96	6.86	6.92
10				---	---	---	7.40	6.47	6.72	---	---	---
11				---	---	---	7.56	6.41	6.77	6.98	6.87	6.93
12				---	---	---	7.41	6.40	6.70	6.97	6.87	6.95
13				7.57	7.26	7.38	7.15	6.41	6.64	---	---	---
14				7.90	7.29	7.51	7.45	6.44	6.80	---	---	---
15				7.68	7.35	7.45	7.50	6.50	6.90	---	---	---
16				7.69	7.33	7.42	7.16	6.49	6.76	---	---	---
17				7.58	7.27	7.38	7.00	6.45	6.71	7.18	7.01	7.10
18				7.47	7.18	7.30	7.58	6.52	6.95	7.14	7.01	7.08
19				7.42	7.17	7.27	7.58	6.52	6.92	---	---	---
20				7.28	7.06	7.16	7.50	6.83	7.29	---	---	---
21				7.58	7.01	7.17	---	---	---	---	---	---
22				7.59	6.97	7.15	---	---	---	---	---	---
23				7.58	6.92	7.11	---	---	---	---	---	---
24				7.59	6.90	7.09	---	---	---	---	---	---
25				7.49	7.01	7.16	---	---	---	---	---	---
26				7.18	6.91	7.04	---	---	---	---	---	---
27				7.13	6.55	6.90	---	---	---	---	---	---
28				7.59	6.55	7.09	7.16	6.85	7.04	---	---	---
29				7.52	6.85	7.11	7.19	7.00	7.14	---	---	---
30				7.56	6.56	6.98	7.19	7.00	7.09	---	---	---
31				7.49	6.58	7.04	7.19	7.00	7.11	---	---	---
MONTH				7.90	6.55	7.20	7.58	5.85	6.88	7.19	6.81	7.01
YEAR	8.18	5.85	7.13									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

UPPER TWIN CREEK BASIN

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER				NOVEMBER			DECEMBER			JANUARY		
1	23.5	21.0	51.0	15.5	12.5	14.0	9.0	8.5	9.0	4.5	3.5	4.0
2	23.0	20.0	21.5	14.5	12.5	13.5	9.5	8.5	9.0	4.0	3.5	4.0
3	22.0	20.0	21.0	14.0	12.0	13.0	9.5	9.0	9.5	4.5	3.5	3.5
4	23.0	20.0	21.5	13.0	12.0	12.5	8.5	7.5	8.0	5.0	3.0	4.0
5	21.5	18.0	20.0	12.5	12.0	12.0	7.5	7.0	7.5	4.0	2.0	3.0
6	19.0	15.0	17.5	13.5	12.0	12.5	7.0	6.5	6.5	4.5	1.5	3.0
7	18.5	14.0	16.0	15.0	13.0	14.0	7.0	6.0	6.5	4.5	3.5	4.5
8	18.0	14.0	15.5	14.5	14.0	14.5	7.5	7.0	7.0	5.0	4.0	4.5
9	18.0	14.0	16.0	15.0	12.5	14.0	9.0	7.5	8.0	5.5	4.0	4.5
10	16.5	15.0	15.5	12.0	10.5	11.5	9.0	7.5	8.5	5.0	4.0	5.0
11	16.5	14.0	15.5	11.0	10.0	10.5	7.5	7.0	7.0	4.5	3.5	3.5
12	17.5	15.5	16.5	11.5	10.0	10.5	7.0	6.5	6.5	5.0	3.0	3.5
13	18.0	17.0	17.5	10.0	6.5	8.5	6.5	5.5	6.0	4.5	2.0	3.0
14	16.5	14.0	15.5	7.5	5.0	6.5	5.0	4.5	5.0	4.5	2.5	3.5
15	16.0	13.0	14.0	8.0	6.5	7.5	5.0	4.5	4.5	6.0	4.5	5.5
16	14.0	12.0	13.0	9.0	8.0	8.5	5.5	4.5	5.0	5.5	5.0	5.0
17	15.0	13.0	13.5	11.0	9.0	9.5	6.0	4.5	5.5	5.0	4.0	4.5
18	14.5	12.0	13.0	11.0	9.5	10.5	6.5	5.5	6.0	5.0	4.0	4.5
19	14.0	11.0	12.5	10.0	8.5	9.5	5.5	4.5	5.0	6.0	4.5	5.0
20	13.5	10.5	12.0	9.0	8.5	8.5	4.5	4.0	4.0	5.0	4.5	5.0
21	14.0	10.5	12.0	8.5	8.0	8.0	5.0	3.5	4.5	4.5	3.5	4.0
22	15.0	12.0	13.5	8.5	6.5	7.5	5.0	3.0	4.0	4.5	3.0	4.0
23	15.5	13.5	14.5	9.0	7.0	7.5	4.0	2.0	3.0	3.5	1.0	2.0
24	16.0	14.0	15.0	9.0	5.0	8.5	5.0	4.0	4.5	1.5	1.0	1.0
25	16.0	14.5	15.0	8.5	7.0	8.0	5.5	5.0	5.5	1.5	1.0	1.0
26	16.5	15.0	15.5	11.5	8.0	10.5	6.0	5.5	5.5	2.0	.5	1.0
27	15.0	14.0	14.5	11.0	10.5	10.5	5.5	5.0	5.0	---	---	---
28	16.0	14.0	14.5	10.5	9.5	10.0	5.0	4.0	4.5	---	---	---
29	15.5	12.5	14.0	10.0	9.5	9.5	4.5	3.0	3.5	---	---	---
30	15.5	13.0	14.5	9.0	8.5	8.5	4.0	3.5	3.5	---	---	---
31	15.0	11.5	13.0	---	---	---	5.0	4.0	4.5	---	---	---
MONTH	23.5	10.5	16.5	15.5	5.0	10.5	9.5	2.0	6.0	6.0	.5	3.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	---	---	---	6.5	5.5	6.0						
2	---	---	---	7.5	5.0	6.0						
3	---	---	---	7.5	4.5	5.5						
4	---	---	---	6.5	3.5	5.0						
5	---	---	---	6.0	4.0	5.0						
6	---	---	---	9.0	4.5	6.5						
7	---	---	---	10.0	5.0	7.0						
8	---	---	---	8.5	5.5	7.0						
9	---	---	---	7.5	5.5	7.0						
10	3.0	1.5	3.0	7.5	3.5	5.0						
11	4.0	.5	2.5	7.0	2.5	4.5						
12	6.0	2.5	4.5	8.0	3.5	5.5						
13	6.0	3.0	4.5	8.0	3.0	5.0						
14	5.0	2.5	4.0	8.0	3.5	5.5						
15	6.0	2.5	4.5	9.0	5.5	7.0						
16	2.5	1.0	1.5	9.5	6.0	7.0						
17	3.0	1.5	2.0	9.0	4.0	6.5						
18	3.5	1.0	2.0	7.5	5.0	6.5						
19	4.5	1.0	2.5	9.0	6.5	7.5						
20	4.5	2.0	3.0	10.5	5.0	7.5						
21	4.5	2.0	3.5	10.5	4.5	7.5						
22	4.5	2.5	3.5	11.0	5.0	7.5						
23	5.5	3.0	4.0	12.0	5.5	8.5						
24	5.5	2.5	4.0	11.0	6.5	8.5						
25	6.0	3.0	4.5	13.0	8.0	10.0						
26	5.5	3.0	4.5	13.5	8.5	10.5						
27	5.0	4.5	5.0	11.0	8.5	9.5						
28	6.0	5.0	5.5	14.5	8.5	11.0						
29	---	---	---	13.5	8.5	11.0						
30	---	---	---	11.5	10.5	11.0						
31	---	---	---	---	---	---						
MONTH	6.0	.5	3.5	14.5	2.5	7.5						

UPPER TWIN CREEK BASIN

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03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1				---	---	---	31.0	22.0	25.5	25.5	15.0	20.0
2				---	---	---	32.5	22.5	27.0	25.5	14.5	19.0
3				---	---	---	33.0	24.0	27.0	26.0	15.0	20.0
4				---	---	---	33.0	22.5	27.0	25.5	15.0	20.5
5				---	---	---	29.5	22.5	25.5	26.0	17.5	21.5
6				---	---	---	32.5	22.0	26.0	26.0	20.0	22.0
7				---	---	---	24.5	20.0	22.5	24.5	20.0	21.5
8				---	---	---	32.0	22.0	26.0	27.5	20.0	23.0
9				---	---	---	31.0	22.5	25.5	27.0	20.0	23.5
10				---	---	---	28.0	22.0	25.0	---	---	---
11				---	---	---	30.0	20.5	24.5	24.0	20.0	21.5
12				---	---	---	32.0	21.0	25.5	22.0	20.0	20.5
13				26.0	23.0	24.5	30.0	22.0	25.0	---	---	---
14				25.0	21.5	23.0	32.0	22.0	25.5	---	---	---
15				25.5	19.5	22.0	32.0	20.0	25.0	---	---	---
16				25.5	19.5	22.0	30.5	22.0	25.5	---	---	---
17				28.0	19.5	23.0	29.5	22.0	24.5	27.0	20.5	23.5
18				27.5	19.5	23.5	30.5	20.5	25.0	25.0	20.0	22.5
19				29.5	21.0	24.5	31.0	20.0	24.0	---	---	---
20				30.5	22.0	25.0	22.5	20.0	21.5	---	---	---
21				30.5	22.0	25.5	---	---	---	---	---	---
22				32.5	22.0	26.0	---	---	---	---	---	---
23				32.0	22.0	26.0	---	---	---	---	---	---
24				33.0	22.0	26.0	---	---	---	---	---	---
25				33.0	22.5	26.5	---	---	---	---	---	---
26				30.5	22.5	26.0	---	---	---	---	---	---
27				29.5	22.0	25.0	---	---	---	---	---	---
28				32.0	22.0	25.5	27.0	21.0	23.0	---	---	---
29				31.0	20.5	25.0	24.5	19.5	21.5	---	---	---
30				31.0	21.0	25.0	27.0	17.0	21.0	---	---	---
31				31.0	22.0	25.0	24.0	17.0	20.0	---	---	---
MONTH				33.0	19.5	24.5	33.0	17.0	24.5	27.5	14.5	21.5
YEAR	33.0	.5	12.0									

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

OHIO BRUSH CREEK BASIN

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. 24-30. 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.--56 years, 450 ft³/s, 15.79 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)
Nov. 26	1245	13,600	15.25	Dec. 2	1200	*14,800	*15.87

Minimum daily discharge, 0.84 ft³/s Sept. 15-16, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	206	24	763	172	137	2330	1550	127	277	5.4	2.3	1.4	
2	1070	23	9960	167	415	1050	1860	118	252	11	3.1	1.3	
3	242	21	2820	161	483	552	1090	112	145	8.5	3.0	1.2	
4	2220	22	1150	146	313	387	660	110	133	21	2.9	1.2	
5	1590	53	613	136	227	312	918	117	89	31	3.3	1.1	
6	394	562	438	127	186	273	2720	102	58	63	4.3	.95	
7	193	264	362	128	177	237	5460	93	40	483	3.3	.95	
8	128	3050	332	126	170	216	3330	88	29	115	2.7	.95	
9	96	1210	2510	116	152	209	1570	83	25	73	2.6	.91	
10	76	445	2640	120	119	187	805	77	20	105	2.3	.89	
11	59	1460	836	127	124	154	573	72	17	49	1.9	.89	
12	49	1060	536	123	129	144	517	66	16	63	1.6	.89	
13	47	414	390	111	133	136	514	61	17	114	1.4	.86	
14	56	258	278	105	121	128	391	58	18	128	2.1	.85	
15	82	199	270	107	114	125	2370	119	20	91	2.1	.84	
16	59	176	242	108	108	247	5290	79	18	59	1.8	.84	
17	44	154	224	101	103	336	1830	56	17	31	1.4	.86	
18	35	137	224	109	112	204	884	45	14	44	1.3	.93	
19	30	126	212	1190	126	207	578	38	12	27	1.2	1.2	
20	26	120	181	917	165	263	442	32	11	16	1.0	1.2	
21	23	202	162	418	195	193	362	33	13	11	1.1	1.0	
22	21	189	149	310	221	160	306	82	11	8.1	1.2	.91	
23	19	145	138	253	378	143	274	102	12	6.2	1.2	.86	
24	19	135	178	140	279	132	243	64	10	5.0	1.1	.84	
25	22	158	752	100	201	137	218	66	7.8	4.2	1.0	1.1	
26	28	8180	440	90	169	138	189	109	6.4	3.6	1.0	1.3	
27	33	1970	305	84	159	122	167	63	5.6	3.5	1.8	1.2	
28	44	759	251	84	849	114	156	56	5.1	3.2	2.1	1.1	
29	37	458	217	84	---	111	143	38	5.2	2.9	1.9	1.1	
30	32	338	203	120	---	2000	136	30	4.8	2.5	1.6	1.3	
31	28	---	190	155	---	3750	---	817	---	2.1	1.5	---	
TOTAL	7008	22312	27966	6235	6065	14697	35546	3113	1308.9	1590.2	61.1	30.92	
MEAN	226	744	902	201	217	474	1185	100	43.6	51.3	1.97	1.03	
MAX	2220	8180	9960	1190	849	3750	5460	817	277	483	4.3	1.4	
MIN	19	21	138	84	103	111	136	30	4.8	2.1	1.0	.84	
CFSM	.58	1.92	2.33	.52	.56	1.22	3.06	.26	.11	.13	.01	.00	
IN.	.67	2.14	2.69	.60	.58	1.41	3.42	.30	.13	.15	.01	.00	
CAL YR 1986	TOTAL	140952.6		MEAN	386	MAX	9960	MIN	2.6	CFSM	1.00	IN.	13.55
WTR YR 1987	TOTAL	125933.12		MEAN	345	MAX	9960	MIN	.84	CFSM	.89	IN.	12.11

WHITEOAK CREEK BASIN

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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 mi .

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. 24-Feb. 1. Records good except those below 30 ft /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 averaged 0.89 ft /s for water year 1987.

AVERAGE DISCHARGE.--60 years, 257 ft /s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,400 ft /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, 1983-1987.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,500 ft /s, and maximum (*):

Date	Time	Discharge (ft /s)	Gage height (ft)	Date	Time	Discharge (ft /s)	Gage height (ft)
Nov. 26	2130	*7,140	*6.67	Dec. 2	1430	6,990	6.62

Minimum daily discharge, no flow July 23-27, Aug. 13-29, Sept. 4-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	19	276	65	40	1150	1180	26	191	4.3	4.4	5.2
2	1330	19	5740	63	191	482	1440	25	204	77	3.3	3.0
3	193	20	1960	62	297	197	567	23	116	50	1.6	.57
4	1640	23	548	56	149	118	232	22	182	22	.09	.00
5	1810	38	208	51	101	88	234	21	80	13	5.3	.00
6	286	346	140	46	82	69	1700	23	40	8.1	31	.00
7	115	188	113	43	67	60	3500	20	26	14	14	.00
8	66	1080	103	41	65	52	1160	16	19	11	6.5	.00
9	45	653	1590	38	56	50	332	15	15	28	3.9	.00
10	32	209	1920	37	40	46	186	15	10	115	2.6	.00
11	29	737	325	38	41	36	141	15	7.5	70	1.4	.00
12	28	743	172	42	39	31	123	13	8.9	50	.37	.00
13	26	208	129	42	39	30	167	11	11	44	.00	.00
14	25	112	84	41	40	30	124	11	14	31	.00	.00
15	21	82	80	40	39	30	2530	13	11	28	.00	.00
16	20	70	71	40	33	52	3520	19	8.0	18	.00	.00
17	18	64	67	40	30	118	1040	15	11	9.7	.00	.00
18	15	55	67	40	30	75	321	13	40	6.7	.00	.00
19	15	46	67	257	32	95	186	11	17	8.3	.00	.00
20	14	42	62	550	37	141	136	12	8.7	5.4	.00	.00
21	13	119	52	157	40	93	105	486	7.1	2.9	.00	.00
22	13	140	47	99	45	66	86	1040	54	1.3	.00	.00
23	13	90	40	62	65	50	71	150	61	.00	.00	.00
24	13	71	69	30	74	43	58	60	29	.00	.00	.00
25	18	65	602	26	51	40	51	107	17	.00	.00	.00
26	23	5160	278	25	41	33	43	202	8.9	.00	.00	.00
27	25	2070	143	24	39	32	38	135	6.0	.00	.00	.00
28	27	364	105	23	282	31	34	57	4.2	23	.00	.00
29	24	207	87	23	---	31	32	32	4.2	24	.00	.00
30	21	149	76	23	---	3630	30	24	4.2	11	2.6	.00
31	20	---	70	30	---	2960	---	1150	---	6.1	6.9	---
TOTAL	6068	13189	15291	2154	2085	9959	19367	3782	1215.7	681.80	83.96	8.77
MEAN	196	440	493	69.5	74.5	321	646	122	40.5	22.0	2.71	.29
MAX	1810	5160	5740	550	297	3630	3520	1150	204	115	31	5.2
MIN	13	19	40	23	30	30	30	11	4.2	.00	.00	.00
CAL YR 1986	TOTAL	91161.89		MEAN	250	MAX	5740	MIN	.00			
WTR YR 1987	TOTAL	73885.23		MEAN	202	MAX	5740	MIN	.00			

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: Dec. 6-9 and Jan. 24-31. 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.--35 years, 117 ft³/s, 12.32 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, 5.1 ft³/s Sept. 20-22, 1985.

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. 3	1545	939	4.62	July 2	0245	*2,990	*8.32
June 3	0500	2,270	7.29				

Minimum discharge, 8.7 ft³/s Sept. 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	84	55	135	76	63	104	207	66	59	155	42	16	
2	171	52	697	76	68	116	334	65	235	1280	40	14	
3	87	47	910	73	78	95	233	64	1500	395	35	16	
4	173	54	549	69	73	79	168	63	810	203	35	15	
5	271	58	318	66	66	72	141	57	281	136	31	12	
6	136	72	245	66	64	69	214	56	195	112	31	11	
7	87	72	230	67	64	65	218	55	149	98	30	10	
8	67	69	200	64	66	63	184	53	122	86	28	11	
9	56	66	185	63	58	63	142	51	109	76	28	13	
10	48	59	316	68	61	57	119	49	95	71	29	9.7	
11	43	61	227	69	58	55	108	49	85	105	27	13	
12	40	72	179	64	59	53	120	48	88	126	27	16	
13	42	72	143	62	57	52	114	46	85	89	25	16	
14	51	64	126	62	55	51	101	45	75	76	24	12	
15	51	62	119	63	53	52	121	49	70	65	21	13	
16	45	60	111	62	45	50	341	53	76	63	21	15	
17	41	57	107	59	55	47	374	45	66	61	21	15	
18	37	54	109	60	53	46	235	42	59	56	21	15	
19	35	51	106	73	50	48	175	51	55	52	20	15	
20	34	52	100	93	48	46	142	96	53	50	20	13	
21	32	67	93	83	47	45	124	145	55	48	21	12	
22	30	65	89	78	49	44	112	410	53	45	20	13	
23	30	63	87	71	50	44	110	208	50	43	18	12	
24	30	61	90	66	47	42	99	126	47	41	15	16	
25	55	55	95	64	45	44	91	96	43	39	21	14	
26	188	488	94	64	45	42	84	107	42	41	20	12	
27	132	544	91	64	45	40	80	97	39	45	18	11	
28	96	297	87	64	51	40	78	77	38	38	18	10	
29	78	205	84	64	---	40	73	66	36	38	18	9.9	
30	68	156	84	64	---	117	72	68	42	35	17	11	
31	60	---	79	62	---	237	---	64	---	35	16	---	
TOTAL	2398	3210	6085	2099	1573	2018	4714	2567	4712	3803	758	391.6	
MEAN	77.4	107	196	67.7	56.2	65.1	157	82.8	157	123	24.5	13.1	
MAX	271	544	910	93	78	237	374	410	1500	1280	42	16	
MIN	30	47	79	59	45	40	72	42	36	35	15	9.7	
CFSM	.60	.83	1.52	.52	.44	.50	1.22	.64	1.22	.95	.19	.10	
IN.	.69	.93	1.75	.61	.45	.58	1.36	.74	1.36	1.10	.22	.11	
CAL YR 1986	TOTAL	43653		MEAN	120	MAX	1370	MIN	15	CFSM	.93	IN.	12.59
WTR YR 1987	TOTAL	34328.6		MEAN	94.1	MAX	1500	MIN	9.7	CFSM	.73	IN.	9.90

LITTLE MIAMI RIVER BASIN

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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: Oct. 21-25, Nov. 14-Dec. 1, Jan. 23-31. 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.

AVERAGE DISCHARGE.--35 years, 45.5 ft³/s, 13.49 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. 3	0200	651	4.98	June 3	0400	*1,420	*6.64
May 25	2100	807	5.37				

Minimum, 0.83 ft³/s Sept. 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	32	15	82	30	24	55	158	35	51	24	6.4	2.0	
2	41	15	230	30	25	59	249	34	70	180	6.1	1.5	
3	25	15	619	29	27	47	158	34	888	131	5.8	1.3	
4	23	17	394	28	26	38	109	33	666	65	6.4	1.2	
5	36	18	208	27	24	35	84	30	209	45	6.7	.99	
6	30	23	144	27	24	33	146	29	127	36	5.3	1.1	
7	21	24	113	27	24	31	146	29	90	30	4.7	1.2	
8	17	23	97	26	25	30	116	29	69	26	4.5	1.3	
9	15	22	112	24	24	30	85	27	55	23	4.2	1.4	
10	12	21	174	29	23	25	70	26	43	21	4.0	1.3	
11	11	23	121	27	23	24	62	25	40	53	3.9	1.8	
12	10	26	89	24	23	23	66	25	42	117	3.9	1.4	
13	11	27	66	23	22	23	60	23	39	51	3.4	1.8	
14	14	25	57	23	21	23	53	23	34	34	3.4	1.7	
15	14	23	53	23	20	24	68	28	33	25	3.2	1.4	
16	12	22	48	23	22	21	193	27	32	22	2.9	1.5	
17	12	21	45	21	20	20	206	24	26	19	2.8	2.0	
18	12	20	46	22	19	20	134	23	24	16	2.5	2.2	
19	11	19	45	28	18	21	96	34	22	15	1.9	1.8	
20	11	20	41	35	18	21	77	46	21	14	1.6	1.8	
21	10	23	37	32	17	20	66	36	21	13	1.4	1.6	
22	9.6	25	35	29	17	20	59	236	22	11	1.8	1.4	
23	9.4	24	34	27	18	19	57	174	20	10	2.2	1.4	
24	9.6	22	36	25	17	18	50	94	18	9.7	1.9	1.1	
25	35	21	39	24	16	18	46	155	17	8.6	1.9	.95	
26	49	300	39	24	16	18	42	278	17	10	2.2	.89	
27	33	320	38	24	16	17	39	207	15	10	2.4	1.0	
28	25	170	37	24	21	17	39	117	13	8.4	2.6	1.1	
29	22	120	34	24	---	17	37	79	13	7.0	2.6	1.2	
30	18	100	34	24	---	102	38	60	17	6.7	2.4	1.6	
31	16	---	32	24	---	188	---	53	---	6.4	2.3	---	
TOTAL	606.6	1544	3179	807	590	1057	2809	2073	2754	1047.8	107.3	42.93	
MEAN	19.6	51.5	103	26.0	21.1	34.1	93.6	66.9	91.8	33.8	3.46	1.43	
MAX	49	320	619	35	27	188	249	278	888	180	6.7	2.2	
MIN	9.4	15	32	21	16	17	37	23	13	6.4	1.4	.89	
CFSM	.31	.81	1.63	.41	.33	.54	1.48	1.06	1.45	.53	.05	.02	
IN.	.36	.91	1.87	.48	.35	.62	1.65	1.22	1.62	.62	.06	.03	
CAL YR 1986	TOTAL	22260.9		MEAN	61.0	MAX	1020	MIN	2.9	CFSM	.97	IN.	13.10
WTR YR 1987	TOTAL	16617.63		MEAN	45.5	MAX	888	MIN	.89	CFSM	.72	IN.	9.78

LITTLE MIAMI RIVER BASIN

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: Jan. 23-30, and Feb. 21-27. Records fair. Some regulation since 1948 by Cowan Lake, capacity 12,000 acre-ft, 45 mi upstream on Cowan Creek, tributary to Todd Fork, and Caesar Creek Lake capacity 242,200 acre-ft 41.3 mi upstream on Caesar Creek. National Weather Service gage height telemeter and U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--62 years, (1915-17, 1925-36, 1938-87), 1,246 ft³/s, 14.07 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)
Nov. 26	0900	*15,100	*12.97	No other peak greater than base discharge.			

Minimum daily discharge, 97 ft³/s Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	921	347	2440	564	528	2270	3360	519	1300	398	188	126	
2	1600	361	10500	564	593	1580	4370	495	1320	963	175	117	
3	895	373	6600	564	759	1190	2690	522	4940	2340	179	115	
4	1170	355	4980	551	641	964	2240	550	5110	1080	182	112	
5	1240	493	3510	531	553	856	1970	480	4320	625	247	108	
6	822	1060	2830	475	523	650	4100	442	1650	549	245	104	
7	558	807	2540	459	507	582	3360	417	1130	509	198	102	
8	451	762	2280	440	477	549	2810	406	915	394	174	100	
9	364	890	2090	432	451	531	2230	384	705	399	161	98	
10	300	654	3280	464	417	506	1290	369	569	352	163	97	
11	282	607	2150	530	405	482	1020	357	529	429	153	150	
12	278	816	1430	509	405	425	1060	340	574	803	147	155	
13	259	670	1290	486	405	395	1260	332	592	1620	144	164	
14	293	581	1000	478	405	386	982	324	597	1130	147	141	
15	362	561	952	464	390	388	4370	339	455	577	146	122	
16	358	544	911	460	369	509	7650	425	462	450	138	113	
17	306	532	770	454	351	459	6000	358	477	447	130	138	
18	266	477	722	449	347	418	2910	323	386	367	130	134	
19	254	439	721	797	355	592	1880	353	354	314	127	119	
20	240	443	784	1240	355	554	1460	456	347	285	122	126	
21	231	522	717	981	340	496	1120	537	376	259	119	114	
22	227	620	634	723	350	440	991	2850	424	246	117	107	
23	222	599	602	520	370	403	1150	1510	378	250	131	104	
24	220	582	594	410	360	388	1050	1110	369	227	340	103	
25	263	537	653	360	340	428	874	790	344	213	164	103	
26	849	9960	821	320	330	369	732	2000	294	205	140	107	
27	911	4590	747	310	340	356	669	2670	248	241	139	108	
28	718	2520	691	310	674	334	618	2290	231	246	237	104	
29	635	2650	617	330	---	325	577	1080	228	220	170	108	
30	486	2380	568	400	---	5390	548	935	235	196	157	120	
31	382	---	564	556	---	4230	---	3230	---	186	146	---	
TOTAL	16363	36732	58988	16131	12340	27445	65341	27193	29859	16520	5156	3519	
MEAN	528	1224	1903	520	441	885	2178	877	995	533	166	117	
MAX	1600	9960	10500	1240	759	5390	7650	3230	5110	2340	340	164	
MIN	220	347	564	310	330	325	548	323	228	186	117	97	
CFSM	.44	1.02	1.58	.43	.37	.74	1.81	.73	.83	.44	.14	.10	
IN.	.51	1.14	1.82	.50	.38	.85	2.02	.84	.92	.51	.16	.11	
CAL YR 1986	TOTAL	395222		MEAN	1083	MAX	16800	MIN	124	CFSM	.90	IN.	12.22
WTR YR 1987	TOTAL	315587		MEAN	865	MAX	10500	MIN	97	CFSM	.72	IN.	9.76

03245500 LITTLE MIAMI RIVER AT MILFORD OH--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1975 to September 1986.

pH: May 1975 to September 1986.

WATER TEMPERATURES: May 1975 to September 1986.

DISSOLVED OXYGEN: May 1975 to September 1986.

SUSPENDED SEDIMENT DISCHARGE: January 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since May 1975. Prior to May 1975, sampling site was 4.2 mi upstream.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,280 microsiemens Feb. 12, 1985; minimum, 174 microsiemens July 31, 1985.

pH: Maximum, 9.3 units June 10, 1977; minimum, 6.6 units Mar. 5, 1980.

WATER TEMPERATURES: Maximum, 33.0 C July 8, 18, 20, 1977; minimum, 0.0 C on many days during winter periods.

DISSOLVED OXYGEN: Maximum, >20.0 mg/L July 18, 19, 1978, July 16-19, 31, 1984; minimum, 3.3 mg/L May 20, 1982.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,120 mg/L May 31; minimum daily mean, 4 mg/L many days during the year.

SEDIMENT LOADS: Maximum daily, 33,700 tons Nov. 26; minimum daily, 1.1 ton Sept. 28.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (FTU)	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 12...	1245	835	620	8.30	6.0	9.5	18	10.2	90	6000	1200
DEC 17...	1230	747	665	8.30	3.0	5.0	4.2	12.8	100	7000	780
MAR 11...	0945	482	780	8.29	3.0	6.5	0.50	12.8	107	K8000	820
MAY 13...	1140	331	830	8.32	26.5	21.5	3.5	9.1	106	100	73
JUL 14...	1130	1000	320	7.88	26.0	23.5	100	8.3	101	>6000	9000
AUG 18...	1215	130	856	8.63	30.0	26.0	6.2	7.9	101	K130	1200

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD 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 IT-FLD (MG/L AS HCO3)	CAR- BONATE IT-FLD (MG/L AS CO3)	ALKA- LINITY WH WAT TOTAL FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
NOV 12...	270	59	68	24	25	4.7	256	0	205	51	43
DEC 17...	300	87	75	28	19	3.0	264	0	214	54	44
MAR 11...	320	83	80	29	32	3.2	288	0	235	57	60
MAY 13...	330	73	78	32	37	3.2	310	0	253	61	66
JUL 14...	130	36	35	10	11	4.6	113	0	94	26	15
AUG 18...	330	72	79	32	59	5.1	275	19	256	63	92

DATE	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 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- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)
NOV 12...	0.30	6.3	357	0.030	1.90	0.060	0.050	1.0	0.410	0.330	0.270
DEC 17...	0.20	6.8	341	0.040	3.50	0.270	0.280	0.90	0.240	0.210	0.180
MAR 11...	0.30	370	421	0.060	2.60	0.080	0.120	1.1	0.350	0.320	0.270
MAY 13...	0.30	0.40	446	0.130	2.20	0.120	0.140	0.70	0.570	0.450	0.410
JUL 14...	0.20	5.0	189	0.040	1.70	0.110	0.110	1.4	0.580	0.250	0.090
AUG 18...	0.40	4.0	493	0.020	2.40	0.020	<0.010	1.1	1.10	0.910	0.810

LITTLE MIAMI RIVER BASIN

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

WATER-QUALITY RECORDS

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	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)
NOV 12...	30	1	56	<0.5	1	<1	<3	7	20	<5	9
DEC 17...	<10	1	63	<0.5	<1	<1	<3	4	12	<5	8
MAR 11...	--	--	--	--	--	--	--	--	--	--	--
MAY 13...	20	1	76	<0.5	<1	<1	<3	48	17	<5	11
JUL 14...	<10	1	37	<0.5	<1	<1	<3	9	43	<5	<4
AUG 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- PENDE (MG/L)
NOV 12...	13	<0.1	<10	<1	<1	<1.0	340	<6	6	35
DEC 17...	20	<0.1	<10	1	<1	<1.0	390	<6	15	10
MAR 11...	--	--	--	--	--	--	--	--	--	6
MAY 13...	20	<0.1	<10	<1	<1	<1.0	420	<6	10	28
JUL 14...	2	0.3	<10	3	<1	<1.0	150	<6	7	176
AUG 18...	--	--	--	--	--	--	--	--	--	25

K Results based on colony count outside the acceptable range (non-ideal colony count)

LITTLE MIAMI RIVER BASIN
03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1965 to September 1986.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1975 to September 1986 (discontinued).
pH: May 1975 to September 1986 (discontinued).
WATER TEMPERATURES: May 1975 to September 1986 (discontinued).
DISSOLVED OXYGEN: May 1975 to September 1986 (discontinued).
SUSPENDED SEDIMENT DISCHARGE: January 1979 to current year (discontinued).

INSTRUMENTATION.--Water-quality monitor since May 1975. Prior to May 1975, sampling site was 4.2 mi upstream.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,280 microsiemens Feb. 12, 1985; minimum, 174 microsiemens July 31, 1985.
pH: Maximum, 9.3 units June 10, 1977; minimum, 6.6 units Mar. 5, 1980.
WATER TEMPERATURES: Maximum, 33.0°C July 8, 18, 20, 1977; minimum, 0.0°C on many days during winter periods.
DISSOLVED OXYGEN: Maximum, ≥20.0 mg/L July 18, 19, 1978, July 16-19, 31, 1984; minimum 3.3 mg/L May 20, 1982.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 4,850 mg/L Aug. 8, 1984; minimum daily mean, 1 mg/L several days in 1979, 1980, 1982, 1983, 1984.
SEDIMENT LOADS: Maximum daily, 185,000 tons Sept. 14, 1979; minimum daily, 0.85 ton Dec. 15, 1982.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 950 microsiemens Oct. 16; minimum, 206 microsiemens Mar. 13.
pH: Maximum, 9.2 units Aug. 9; minimum, 7.6 units Oct. 20, 21, 24, June 8, July 13, Sept. 28.
WATER TEMPERATURES: Maximum, 31.0°C July 19-21; minimum, 0.0°C on several days during the winter period.
DISSOLVED OXYGEN: Maximum, 18.7 mg/L Aug. 25; minimum, 5.5 mg/L Sept. 25.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,770 mg/L Nov. 11; minimum daily mean, 3 mg/L Jan. 1.
SEDIMENT LOADS: Maximum daily, 78,400 tons Mar. 13; minimum daily, 2.5 tons Oct. 2.

REVISIONS.--Figures for temperature and dissolved oxygen were inadvertently omitted from the 1986 water year data report. The 1986 data is shown in the following tables.

LITTLE MIAMI RIVER BASIN

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	922	890	909	780	732	748	546	444	495	772	728	747
2	940	838	878	774	736	756	574	548	563	752	716	728
3	870	842	856	736	646	697	606	566	580	752	718	735
4	858	816	840	634	612	623	584	462	495	770	740	754
5	870	850	859	638	618	625	476	466	471	788	750	767
6	876	846	864	696	636	666	500	472	490	786	760	772
7	874	824	845	660	616	638	500	492	497	784	760	771
8	874	838	858	624	588	605	550	492	516	774	754	764
9	892	856	873	672	604	634	572	544	553	776	744	758
10	902	870	886	700	662	680	598	570	584	776	748	759
11	898	874	887	638	292	391	636	314	530	786	750	764
12	908	878	891	406	316	373	388	296	335	826	766	795
13	912	874	889	450	372	416	454	392	427	828	782	803
14	930	878	905	478	444	460	486	458	472	806	774	785
15	948	918	937	484	356	470	536	488	513	802	776	789
16	950	912	931	338	244	268	570	532	546	794	772	782
17	928	900	915	404	282	351	632	570	586	794	768	778
18	944	918	929	444	404	425	668	626	644	794	770	787
19	942	878	902	480	446	465	630	610	621	810	558	696
20	878	402	611	502	480	491	698	616	656	624	570	604
21	616	562	592	500	492	496	724	700	713	626	588	603
22	648	582	613	524	494	507	718	700	712	622	510	546
23	644	496	565	568	520	540	708	694	699	570	510	544
24	554	486	522	572	562	565	736	702	718	586	556	567
25	558	530	542	598	566	584	732	702	715	602	586	593
26	604	544	575	582	214	521	734	710	719	634	594	619
27	676	588	629	288	214	252	728	712	717	630	612	619
28	742	678	693	294	266	276	726	708	714	680	634	656
29	794	726	756	378	298	344	770	724	747	680	658	670
30	802	762	782	440	378	405	758	746	753	722	652	684
31	770	718	740	---	---	---	782	742	756	728	696	711
MONTH	950	402	789	780	214	509	782	296	598	828	510	708
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	704	662	691	806	680	756	680	656	664	768	746	756
2	696	644	670	790	748	763	676	652	662	776	748	761
3	642	596	614	752	730	740	682	662	672	774	736	755
4	614	296	361	730	688	711	702	678	689	774	746	762
5	390	306	357	690	664	672	730	698	717	788	746	764
6	446	392	418	662	648	656	748	728	738	770	746	760
7	422	318	353	652	628	641	756	740	750	784	722	764
8	418	364	398	658	636	644	774	750	758	618	430	528
9	462	420	444	660	644	650	776	740	762	642	532	573
10	472	464	468	666	620	653	762	720	734	754	646	702
11	484	472	480	594	406	486	766	748	757	758	712	744
12	494	480	486	544	438	500	766	726	739	708	632	684
13	522	488	500	464	206	263	746	728	736	720	668	705
14	536	508	525	370	294	352	746	724	733	692	512	617
15	544	534	538	456	370	408	736	710	725	662	496	572
16	566	538	553	482	456	469	748	720	732	718	666	693
17	678	494	597	504	486	495	736	716	725	748	704	730
18	542	450	499	512	502	504	748	724	737	762	736	751
19	538	528	534	520	380	421	738	710	722	774	740	757
20	550	532	538	486	418	453	744	702	731	760	734	745
21	562	546	554	514	482	495	718	684	700	784	726	750
22	570	534	550	570	516	540	700	686	691	802	768	783
23	576	546	562	602	570	588	690	610	644	800	766	781
24	598	570	581	624	604	615	680	616	648	816	782	798
25	636	602	617	670	622	653	726	680	700	834	804	816
26	726	608	636	660	648	655	738	714	726	834	752	814
27	740	696	723	658	646	652	746	724	736	778	688	739
28	692	658	675	654	634	645	774	740	759	764	734	748
29	---	---	---	650	624	636	784	758	772	734	692	707
30	---	---	---	650	630	637	788	748	761	736	708	722
31	---	---	---	668	640	658	---	---	---	708	664	686
MONTH	740	296	533	806	206	581	788	610	721	834	430	725

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	728	682	709	692	414	518	691	660	673	816	708	753
2	730	700	711	414	288	341	709	671	692	720	652	695
3	752	728	740	408	340	366	728	687	708	642	606	626
4	756	738	746	504	388	448	707	685	696	740	620	678
5	786	746	765	542	504	522	726	659	700	792	742	766
6	774	740	751	606	528	553	688	651	669	820	778	798
7	762	472	565	680	588	629	657	605	638	816	776	795
8	500	360	427	724	682	703	660	622	641	830	806	820
9	502	412	453	732	708	720	685	639	666	860	814	844
10	616	506	551	738	408	659	698	669	685	878	860	870
11	638	598	619	554	438	501	669	599	634	880	684	838
12	628	568	604	592	512	556	661	634	647	786	578	686
13	642	498	585	550	268	418	692	660	683	716	606	644
14	568	490	523	416	290	349	690	658	673	760	674	704
15	598	568	586	498	418	466	696	672	681	716	682	696
16	602	584	595	556	504	529	734	698	715	742	710	726
17	686	600	639	580	548	561	748	512	635	742	696	716
18	754	682	716	642	564	608	790	538	685	724	632	674
19	766	758	763	656	630	641	842	788	821	664	630	643
20	766	712	745	730	648	686	834	758	804	716	654	679
21	714	608	673	740	728	733	750	694	717	774	722	753
22	650	590	619	764	728	743	734	702	722	820	778	797
23	616	572	600	762	716	741	740	694	712	844	810	825
24	602	568	582	770	724	746	732	702	719	850	378	566
25	654	590	621	776	678	734	750	698	718	520	406	457
26	688	652	668	762	672	725	766	688	723	656	536	603
27	710	680	700	746	650	698	754	578	680	642	402	496
28	716	690	703	722	638	680	800	652	743	482	330	391
29	750	688	719	716	652	699	842	796	816	472	436	454
30	780	714	761	736	652	708	816	782	798	532	466	505
31	---	---	---	697	644	670	806	788	796	---	---	---
MONTH	786	360	648	776	268	602	842	512	706	880	330	683
YEAR	950	206	651									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.40	8.20	8.30	8.20	8.10	8.20	8.10	7.90	8.00	8.30	8.30	8.30
2	8.40	8.20	8.30	8.10	8.10	8.10	8.20	8.10	8.20	8.30	8.30	8.30
3	8.40	8.30	8.30	8.10	8.00	8.10	8.20	8.20	8.20	8.30	8.30	8.30
4	8.40	8.30	8.30	8.10	8.00	8.00	8.20	8.10	8.10	8.30	8.30	8.30
5	8.40	8.30	8.30	8.10	8.00	8.00	8.10	8.10	8.10	8.30	8.30	8.30
6	8.40	8.30	8.40	8.20	8.00	8.10	8.20	8.10	8.10	8.30	8.30	8.30
7	8.50	8.40	8.40	8.10	8.10	8.10	8.10	8.10	8.10	8.30	8.30	8.30
8	8.50	8.40	8.40	8.20	8.00	8.10	8.20	8.10	8.10	8.30	8.30	8.30
9	8.40	8.30	8.40	8.20	8.10	8.20	8.20	8.10	8.20	8.30	8.30	8.30
10	8.40	8.20	8.30	8.20	8.10	8.20	8.20	8.10	8.10	8.30	8.30	8.30
11	8.30	8.20	8.20	8.20	7.80	7.90	8.20	7.90	8.10	8.30	8.30	8.30
12	8.30	8.10	8.20	7.90	7.80	7.90	7.90	7.90	7.90	8.30	8.30	8.30
13	8.30	8.10	8.20	7.90	7.80	7.90	8.00	7.90	8.00	8.30	8.30	8.30
14	8.20	8.10	8.20	7.90	7.90	7.90	8.10	8.00	8.10	8.40	8.30	8.30
15	8.20	8.10	8.10	8.00	7.90	7.90	8.10	8.10	8.10	8.40	8.30	8.30
16	8.10	8.00	8.10	7.90	7.80	7.80	8.10	8.10	8.10	8.40	8.30	8.30
17	8.20	8.00	8.10	7.90	7.80	7.90	8.20	8.10	8.20	8.30	8.30	8.30
18	8.20	8.10	8.20	7.90	7.90	7.90	8.20	8.20	8.20	8.30	8.30	8.30
19	8.20	8.00	8.10	8.00	7.90	8.00	8.30	8.20	8.20	8.30	8.10	8.20
20	8.10	7.60	7.80	8.10	8.00	8.00	8.20	8.20	8.20	8.20	8.10	8.10
21	7.80	7.60	7.80	8.10	8.10	8.10	8.20	8.20	8.20	8.20	8.10	8.20
22	7.80	7.80	7.80	8.10	8.10	8.10	8.20	8.20	8.20	8.20	8.10	8.20
23	7.80	7.70	7.70	8.20	8.10	8.20	8.30	8.20	8.20	8.20	8.10	8.20
24	7.90	7.60	7.80	8.20	8.20	8.20	8.30	8.20	8.20	8.20	8.20	8.20
25	7.90	7.80	7.80	8.20	8.20	8.20	8.30	8.30	8.30	8.30	8.20	8.20
26	8.00	7.80	7.90	8.20	7.80	8.10	8.30	8.20	8.30	8.30	8.20	8.30
27	8.10	7.90	8.00	7.90	7.80	7.80	8.30	8.20	8.30	8.40	8.30	8.40
28	8.10	7.90	8.00	7.80	7.80	7.80	8.30	8.20	8.20	8.40	8.30	8.40
29	8.20	8.00	8.10	7.90	7.80	7.90	8.30	8.30	8.30	8.40	8.30	8.40
30	8.20	8.10	8.10	7.90	7.90	7.90	8.30	8.30	8.30	8.40	8.30	8.30
31	8.20	8.10	8.10	---	---	---	8.30	8.30	8.30	8.40	8.30	8.40
MONTH	8.50	7.60	8.12	8.20	7.80	8.02	8.30	7.90	8.16	8.40	8.10	8.29

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	8.40	8.30	8.40	8.30	8.30	8.30	8.70	8.40	8.50	8.40	8.10	8.20
2	8.40	8.30	8.30	8.30	8.30	8.30	8.70	8.40	8.60	8.40	8.10	8.20
3	8.30	8.20	8.20	8.30	8.30	8.30	8.70	8.50	8.60	8.40	8.10	8.30
4	8.20	7.90	8.00	8.30	8.20	8.30	8.70	8.40	8.50	8.40	8.10	8.30
5	7.90	7.90	7.90	8.40	8.30	8.40	8.60	8.40	8.50	8.60	8.10	8.40
6	8.00	7.90	8.00	8.40	8.30	8.40	8.50	8.30	8.40	8.50	8.20	8.40
7	8.00	7.90	8.00	8.50	8.30	8.40	8.50	8.30	8.40	8.50	8.10	8.30
8	8.10	8.00	8.00	8.50	8.40	8.40	8.50	8.30	8.40	8.10	7.70	7.80
9	8.10	8.10	8.10	8.50	8.40	8.40	8.40	8.30	8.40	7.80	7.70	7.80
10	8.10	8.10	8.10	8.50	8.30	8.40	8.60	8.30	8.50	8.10	7.80	8.00
11	8.20	8.10	8.10	8.30	8.00	8.10	8.60	8.50	8.50	8.10	7.90	8.00
12	8.20	8.20	8.20	8.10	8.00	8.00	8.70	8.50	8.60	7.90	7.80	7.80
13	8.20	8.20	8.20	8.00	7.80	7.90	8.70	8.50	8.60	7.90	7.80	7.80
14	8.20	8.20	8.20	7.90	7.80	7.90	8.60	8.50	8.60	7.90	7.80	7.80
15	8.20	8.20	8.20	8.00	7.90	7.90	8.50	8.50	8.50	7.90	7.80	7.80
16	8.20	8.20	8.20	8.10	8.00	8.00	8.60	8.50	8.50	7.90	7.80	7.90
17	8.20	8.10	8.20	8.10	8.10	8.10	8.60	8.50	8.50	8.00	7.80	7.90
18	8.10	8.00	8.10	8.10	8.10	8.10	8.60	8.50	8.50	8.00	7.90	7.90
19	8.10	8.00	8.10	8.10	7.90	8.00	8.60	8.50	8.50	8.00	7.90	7.90
20	8.10	8.10	8.10	8.10	8.00	8.00	8.50	8.30	8.50	8.00	7.90	7.90
21	8.20	8.10	8.10	8.10	8.10	8.10	8.40	8.30	8.30	8.10	8.00	8.00
22	8.20	8.10	8.20	8.20	8.10	8.20	8.50	8.20	8.40	8.20	8.10	8.10
23	8.20	8.20	8.20	8.20	8.20	8.20	8.60	8.40	8.50	8.20	8.10	8.10
24	8.20	8.20	8.20	8.20	8.20	8.20	8.70	8.50	8.60	8.30	8.10	8.20
25	8.30	8.20	8.20	8.20	8.20	8.20	8.80	8.60	8.70	8.20	8.10	8.10
26	8.30	8.20	8.20	8.30	8.20	8.20	8.70	8.60	8.60	8.20	8.10	8.10
27	8.30	8.20	8.30	8.30	8.20	8.30	8.60	8.50	8.60	8.10	8.00	8.10
28	8.30	8.30	8.30	8.40	8.20	8.30	8.50	8.30	8.40	8.10	8.00	8.10
29	---	---	---	8.50	8.20	8.40	8.50	8.30	8.40	8.10	7.90	8.00
30	---	---	---	8.50	8.30	8.40	8.40	8.20	8.30	8.00	7.90	7.90
31	---	---	---	8.60	8.30	8.50	---	---	---	8.10	7.90	8.00
MONTH	8.40	7.90	8.15	8.60	7.80	8.21	8.80	8.20	8.50	8.60	7.70	8.04
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.20	7.90	8.00	8.10	7.80	7.90	8.40	8.20	8.30	---	---	---
2	8.20	7.90	8.00	7.90	7.70	7.70	8.40	8.30	8.30	8.50	8.30	8.40
3	8.30	8.00	8.20	7.90	7.80	7.80	8.40	8.30	8.30	8.30	8.10	8.20
4	8.30	8.00	8.20	8.00	7.90	7.90	8.30	8.20	8.20	8.30	8.00	8.10
5	8.40	8.10	8.20	8.10	8.00	8.00	8.30	8.20	8.20	8.40	8.10	8.30
6	8.40	8.10	8.20	8.10	8.00	8.00	8.30	8.20	8.30	8.60	8.30	8.50
7	8.20	7.70	7.90	8.20	8.00	8.10	8.30	8.30	8.30	8.90	8.60	8.80
8	7.80	7.60	7.70	8.30	8.10	8.10	8.30	8.20	8.20	8.80	8.60	8.70
9	7.80	7.70	7.70	8.40	8.10	8.20	9.20	8.20	8.30	8.70	8.50	8.60
10	7.90	7.80	7.80	8.30	7.90	8.10	---	---	---	8.70	8.40	8.60
11	7.90	7.90	7.90	8.00	7.90	7.90	---	---	---	8.60	8.40	8.50
12	7.90	7.90	7.90	8.00	7.90	8.00	---	---	---	8.50	8.10	8.30
13	8.00	7.90	7.90	8.00	7.60	7.80	---	---	---	8.20	8.00	8.10
14	8.00	7.90	7.90	7.90	7.70	7.80	---	---	---	8.20	8.10	8.20
15	8.00	7.90	8.00	8.00	7.90	7.90	---	---	---	8.20	8.10	8.10
16	8.00	8.00	8.00	8.10	8.00	8.00	---	---	---	8.40	8.10	8.20
17	8.20	8.00	8.10	8.10	8.00	8.00	---	---	---	8.60	8.30	8.40
18	8.30	8.10	8.20	8.20	8.00	8.10	---	---	---	8.30	8.00	8.20
19	8.40	8.10	8.20	8.30	8.10	8.20	---	---	---	8.20	7.90	8.00
20	8.30	8.10	8.20	8.40	8.10	8.30	---	---	---	8.20	8.00	8.10
21	8.20	8.00	8.10	8.50	8.20	8.30	---	---	---	8.30	8.10	8.20
22	8.10	8.00	8.00	8.60	8.30	8.40	---	---	---	8.30	8.10	8.20
23	8.00	7.90	7.90	8.70	8.30	8.50	---	---	---	8.30	8.20	8.30
24	8.10	7.80	8.00	8.70	8.40	8.50	---	---	---	8.20	7.80	8.00
25	8.20	8.00	8.10	8.60	8.40	8.50	---	---	---	7.80	7.80	7.80
26	8.50	8.10	8.30	8.50	8.30	8.40	---	---	---	8.00	7.80	8.00
27	8.60	8.20	8.40	8.30	8.20	8.30	---	---	---	8.00	7.80	7.90
28	8.70	8.30	8.50	8.30	8.20	8.20	---	---	---	7.80	7.60	7.70
29	8.60	8.30	8.40	8.40	8.20	8.30	---	---	---	7.80	7.70	7.80
30	8.40	8.20	8.30	8.40	8.20	8.30	---	---	---	7.90	7.70	7.80
31	---	---	---	8.80	8.30	8.30	---	---	---	---	---	---
MONTH	8.70	7.60	8.07	8.80	7.60	8.12	9.20	8.20	8.27	8.90	7.60	8.21
YEAR	9.20	7.60	8.17									

LITTLE MIAMI RIVER BASIN

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03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	18.0	16.0	17.5	15.5	14.0	15.0	9.5	9.0	9.0	1.0	.0	.5
2	17.0	14.5	16.0	15.5	15.0	15.5	9.0	5.5	7.0	1.5	.5	1.0
3	17.5	15.0	16.0	15.0	14.0	14.5	5.5	4.0	4.5	2.0	1.5	1.5
4	18.0	15.5	16.5	14.0	12.0	13.0	6.5	4.0	5.5	3.0	2.0	2.5
5	16.0	14.0	15.0	12.0	11.5	11.5	7.0	6.5	6.5	3.0	1.5	2.5
6	15.0	13.0	14.0	12.0	11.5	11.5	6.5	6.5	6.5	2.0	1.0	1.5
7	15.5	12.5	14.0	12.5	10.5	11.5	6.5	6.5	6.5	1.5	.0	1.0
8	16.5	13.5	15.0	11.0	9.5	10.5	6.5	5.5	6.0	1.0	.0	.5
9	17.5	14.5	16.0	10.5	10.0	10.5	6.0	5.5	5.5	.5	.0	.5
10	19.0	16.0	17.5	11.5	10.0	11.0	6.5	5.5	6.0	1.0	.0	.5
11	19.0	18.0	18.5	12.5	11.5	12.0	8.5	6.5	7.5	1.5	.5	1.0
12	20.5	18.0	19.0	12.5	12.0	12.5	8.5	7.5	8.0	2.0	.5	1.5
13	21.5	19.5	20.5	13.5	12.5	13.0	7.5	5.5	6.5	1.5	1.0	1.5
14	21.5	20.0	20.5	14.5	13.5	13.5	5.5	3.5	4.5	1.5	.5	1.0
15	21.0	19.0	20.5	14.0	11.5	13.0	3.5	3.0	3.0	2.0	.5	1.0
16	19.5	17.0	18.5	12.0	11.0	11.5	4.0	3.5	3.5	2.5	.5	1.5
17	18.5	16.5	17.5	11.5	11.0	11.0	3.5	2.0	3.0	3.5	2.0	3.0
18	19.0	17.5	18.5	12.5	11.0	11.5	2.0	.5	1.0	4.5	3.5	4.0
19	19.0	18.5	19.0	14.0	12.5	13.0	1.0	.0	.5	4.5	2.5	3.5
20	19.0	17.5	18.5	14.0	11.5	13.0	.5	.0	.5	2.5	2.0	2.5
21	17.5	16.5	17.0	11.5	10.0	10.5	.5	.0	.5	3.0	1.5	2.5
22	16.0	16.0	16.0	10.0	9.0	10.0	1.0	.0	.5	3.0	2.5	3.0
23	17.0	16.0	16.5	9.0	8.5	8.5	1.0	.5	1.0	3.5	2.5	3.0
24	18.5	17.0	18.0	9.0	8.5	9.0	2.0	1.0	1.5	3.5	2.5	3.0
25	18.5	17.0	18.0	9.0	8.5	8.5	1.5	.0	.5	3.5	3.0	3.5
26	17.0	15.5	16.5	13.0	8.5	10.0	.5	.0	.5	3.5	2.0	3.0
27	17.0	15.0	16.0	13.0	10.5	12.0	.5	.5	.5	2.0	.0	1.0
28	16.0	15.0	15.5	10.5	8.5	9.5	.5	.0	.5	.5	.0	.5
29	14.5	13.5	14.0	8.5	8.0	8.5	1.0	.5	.5	.5	.0	.5
30	14.0	13.0	13.5	9.0	8.0	8.5	.5	.0	.5	1.0	.0	.5
31	14.5	13.0	14.0	---	---	---	1.0	.5	.5	1.5	.5	1.0
MONTH	21.5	12.5	17.0	15.5	8.0	11.5	9.5	.0	3.5	4.5	.0	1.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	2.5	.5	1.5	3.5	1.5	2.5	17.5	15.0	16.5	20.5	18.5	19.5
2	4.5	2.5	4.0	3.5	2.0	3.0	17.5	15.0	16.5	19.5	17.5	18.5
3	4.5	4.0	4.5	3.5	3.0	3.5	16.5	15.0	16.0	18.5	16.0	17.0
4	7.0	4.5	5.5	4.5	3.5	4.0	18.0	15.0	16.5	19.0	15.0	17.0
5	8.5	7.0	8.0	5.0	3.5	4.5	17.5	16.5	17.0	20.5	16.0	18.5
6	8.0	6.5	7.5	4.5	4.5	4.5	17.0	16.0	16.5	22.5	18.5	20.5
7	6.0	4.0	5.0	4.0	3.0	3.5	18.0	15.0	16.5	23.5	20.5	22.0
8	4.0	3.5	3.5	3.5	2.0	3.0	18.0	16.0	17.0	22.5	19.5	21.0
9	3.5	3.0	3.0	6.5	3.0	5.0	16.0	12.5	14.5	23.0	20.0	21.5
10	3.0	2.0	2.5	9.5	6.5	8.0	13.5	11.5	12.5	23.5	20.5	22.0
11	2.5	2.0	2.0	9.0	8.5	9.0	14.0	11.0	12.5	24.0	21.5	22.5
12	2.0	1.0	1.5	8.5	8.0	8.5	15.0	12.0	13.5	22.5	21.0	22.0
13	1.5	.5	1.0	9.5	8.5	9.0	16.5	13.5	15.0	23.0	20.0	21.5
14	1.0	1.0	1.0	9.0	9.0	9.0	16.5	14.5	15.5	21.5	19.5	21.0
15	2.5	1.0	1.5	10.0	9.0	9.5	15.5	13.0	14.5	22.5	20.0	21.0
16	3.0	2.0	2.5	9.0	7.0	7.5	12.5	11.5	12.0	24.0	21.5	22.5
17	3.5	3.0	3.5	7.5	6.5	7.0	12.0	11.0	11.5	25.5	22.5	24.0
18	5.5	3.0	4.0	7.5	7.0	7.5	15.0	11.0	13.0	24.5	23.5	24.0
19	7.0	5.5	6.5	10.0	7.5	9.0	15.0	13.5	14.5	23.0	20.5	22.0
20	7.5	7.0	7.0	9.0	7.0	8.0	14.5	13.5	14.5	20.5	18.0	19.0
21	7.0	6.0	6.5	6.5	5.0	6.0	13.5	12.5	13.0	17.5	16.5	17.0
22	6.0	4.5	5.0	6.5	4.5	5.5	12.0	10.0	11.0	18.0	15.5	16.5
23	5.0	4.0	4.5	7.5	5.5	6.5	12.0	8.5	10.5	19.0	16.0	17.5
24	4.5	4.0	4.5	9.0	6.5	8.0	14.0	10.0	12.0	21.0	17.0	19.0
25	5.0	3.5	4.0	11.5	8.0	9.5	16.5	13.0	14.5	20.0	19.0	19.5
26	4.0	3.5	3.5	12.5	10.5	11.5	19.5	16.0	17.5	20.0	18.5	19.5
27	3.5	3.0	3.5	13.0	11.0	12.0	22.0	18.0	20.0	22.0	19.0	20.5
28	3.0	2.0	2.5	13.0	10.5	11.5	21.0	19.5	20.5	22.5	21.0	21.5
29	---	---	---	14.0	11.0	12.5	21.5	18.0	19.5	24.0	21.5	22.5
30	---	---	---	15.0	12.0	13.5	20.0	18.5	19.5	25.0	22.0	23.5
31	---	---	---	17.0	13.5	15.5	---	---	---	26.5	23.0	24.5
MONTH	8.5	.5	4.0	17.0	1.5	7.5	22.0	8.5	15.0	26.5	15.0	20.5

LITTLE MIAMI RIVER BASIN

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	26.0	23.5	25.0	26.0	23.0	24.5	27.5	25.0	26.5	24.0	21.5	22.5
2	25.5	22.5	24.0	23.0	22.0	22.5	28.0	25.0	26.5	24.5	22.5	23.5
3	24.5	21.0	22.5	23.0	21.0	22.0	27.5	25.0	26.5	24.5	22.5	23.5
4	24.5	22.0	23.0	24.0	21.5	23.0	26.5	23.5	25.5	25.5	23.0	24.0
5	24.0	22.5	23.0	26.0	22.5	24.0	27.0	24.0	26.0	25.5	23.5	24.5
6	25.0	23.0	24.0	28.0	24.5	26.0	27.0	24.5	26.0	25.0	22.0	23.5
7	25.0	22.5	23.5	28.5	25.5	27.0	27.0	24.5	26.0	23.0	20.5	22.0
8	24.5	22.5	23.0	29.5	27.0	28.0	27.0	25.0	26.0	23.0	19.5	21.0
9	25.5	23.5	24.5	29.5	27.5	28.5	27.5	24.5	26.0	23.5	19.0	21.0
10	26.0	24.0	25.0	28.5	23.5	26.5	25.5	24.0	25.0	23.5	20.0	22.0
11	26.0	25.0	25.5	26.0	23.5	25.0	25.5	23.0	24.0	23.0	21.5	22.0
12	26.5	24.5	25.5	26.0	24.5	25.5	25.5	22.5	24.0	22.0	20.5	21.5
13	25.5	23.0	24.0	25.0	23.5	24.0	25.0	22.0	24.0	22.5	20.0	21.0
14	24.0	22.0	23.0	25.0	23.0	24.0	26.5	23.5	25.0	22.5	19.5	21.0
15	25.0	23.5	24.0	26.0	23.5	24.5	28.0	24.5	26.5	22.5	20.5	22.0
16	26.0	24.5	25.0	27.0	24.5	25.5	26.5	25.0	26.0	22.5	20.0	21.5
17	27.0	23.5	26.0	28.5	25.5	27.0	25.5	24.5	25.0	22.0	18.5	20.5
18	26.0	23.5	24.5	30.5	27.0	28.5	28.0	24.5	26.0	21.5	20.5	21.0
19	26.5	23.0	25.0	31.0	28.0	29.5	27.5	25.0	26.5	22.5	20.5	21.5
20	27.0	24.0	25.0	31.0	28.5	30.0	26.5	24.5	25.5	24.0	21.0	23.0
21	26.0	23.5	25.0	31.0	28.0	29.5	27.5	25.0	26.5	24.0	22.5	23.0
22	27.0	23.5	25.5	30.5	27.5	29.0	29.0	26.0	27.5	25.0	22.5	24.0
23	28.0	25.0	26.5	30.0	27.0	28.5	29.0	26.0	27.0	25.0	23.5	24.5
24	28.0	25.5	27.0	30.0	26.5	28.5	27.0	24.5	25.5	24.5	22.5	23.0
25	27.0	24.5	25.5	30.5	27.0	29.0	27.0	23.0	25.0	24.5	22.0	23.5
26	26.5	23.5	25.0	30.0	27.5	29.0	27.5	23.5	25.5	25.5	23.0	24.5
27	27.0	24.0	25.5	30.5	27.5	29.0	25.0	23.0	24.0	24.0	23.0	23.5
28	28.0	25.5	27.0	29.5	27.5	28.5	23.5	21.5	22.5	24.5	22.5	23.5
29	28.5	25.5	27.0	29.5	27.0	28.5	22.0	19.5	21.0	25.0	23.0	24.0
30	27.5	26.0	26.5	29.5	26.5	28.0	22.0	19.0	21.0	25.5	24.0	24.5
31	---	---	---	28.5	25.5	27.0	23.0	19.5	21.5	---	---	---
MONTH	28.5	21.0	25.0	31.0	21.0	27.0	29.0	19.0	25.0	25.5	18.5	22.5
YEAR	31.0	.0	15.0									

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	9.7	7.7	8.6	9.7	8.9	9.2	11.0	10.7	10.8	13.6	13.5	13.5
2	10.5	7.9	9.1	8.9	8.6	8.8	12.0	10.8	11.5	13.5	13.2	13.4
3	10.6	8.5	9.5	9.2	8.8	9.0	12.7	12.0	12.4	13.2	12.9	13.0
4	10.4	8.5	9.2	9.7	9.0	9.4	12.8	12.1	12.3	12.8	12.5	12.7
5	9.7	8.4	9.0	10.1	9.4	9.8	12.1	11.8	12.0	12.9	12.5	12.7
6	10.6	8.7	9.6	10.5	9.8	10.0	12.0	11.8	11.9	13.1	12.9	13.0
7	10.8	9.1	9.9	10.1	9.8	9.9	12.0	11.9	12.0	13.4	13.0	13.2
8	10.7	9.1	9.8	11.1	9.8	10.4	12.1	11.9	12.0	13.8	13.4	13.7
9	10.7	8.6	9.5	10.9	10.4	10.6	12.2	12.1	12.1	13.9	13.6	13.8
10	10.5	8.3	9.3	10.8	10.1	10.5	12.1	11.8	12.0	13.7	13.5	13.6
11	9.4	7.8	8.4	10.1	8.7	9.6	11.8	11.1	11.5	13.6	13.4	13.5
12	9.9	7.4	8.4	10.1	9.8	10.0	11.3	11.0	11.2	13.5	13.2	13.4
13	9.8	7.3	8.3	10.0	9.9	10.0	12.0	11.3	11.6	13.5	13.2	13.4
14	8.9	7.1	7.8	9.9	9.6	9.8	12.7	12.0	12.4	13.5	13.3	13.4
15	9.0	6.8	7.6	10.4	9.7	10.0	13.0	12.7	12.9	13.6	13.4	13.5
16	9.6	6.9	8.1	10.4	10.2	10.4	12.9	12.7	12.8	13.7	13.4	13.5
17	10.0	7.6	8.8	10.4	10.2	10.3	12.9	12.6	12.7	13.3	12.8	13.1
18	9.8	8.0	8.8	10.5	10.2	10.4	13.5	12.9	13.2	12.7	12.3	12.5
19	8.4	7.6	8.1	10.2	9.9	10.1	13.9	13.5	13.7	12.5	11.8	12.2
20	8.1	7.2	7.9	10.3	9.8	10.0	13.8	13.7	13.8	12.6	12.4	12.6
21	8.4	7.8	8.1	10.8	10.3	10.6	13.9	13.7	13.8	12.9	12.6	12.8
22	8.8	8.5	8.6	10.9	10.7	10.8	13.8	13.7	13.8	12.8	12.6	12.7
23	9.0	8.4	8.6	11.2	10.9	11.1	13.6	13.4	13.5	12.8	12.7	12.7
24	8.6	8.2	8.4	11.3	11.1	11.2	13.3	12.9	13.1	13.0	12.6	12.8
25	9.1	7.9	8.4	11.3	11.1	11.2	13.6	12.9	13.3	12.7	12.4	12.6
26	9.6	8.2	8.9	11.1	9.9	10.8	13.8	13.6	13.7	12.6	12.2	12.4
27	9.9	8.6	9.1	10.7	9.9	10.2	13.7	13.5	13.6	13.3	12.5	12.9
28	10.0	8.7	9.3	11.1	10.8	11.0	13.7	13.6	13.6	14.0	13.3	13.7
29	10.1	9.0	9.5	11.3	11.1	11.2	13.7	13.5	13.6	13.8	13.4	13.6
30	10.4	9.1	9.7	11.3	11.0	11.2	13.7	13.5	13.6	13.9	13.4	13.6
31	10.4	9.0	9.6	---	---	---	13.6	13.4	13.5	14.0	13.3	13.7
MONTH	10.8	6.8	8.8	11.3	8.6	10.3	13.9	10.7	12.7	14.0	11.8	13.1

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	13.8	12.9	13.4	12.8	12.3	12.5	13.7	9.5	11.4	9.4	6.4	7.7
2	12.8	11.4	12.5	12.7	12.1	12.4	14.3	9.3	11.6	9.7	6.6	8.1
3	12.2	11.8	12.1	12.2	11.8	12.0	14.3	9.5	11.6	10.3	7.1	8.6
4	11.8	11.2	11.6	12.6	10.9	12.0	14.0	9.5	11.4	10.5	7.2	8.7
5	11.2	10.8	11.0	12.8	11.7	12.2	12.0	9.1	10.3	11.0	7.0	8.9
6	11.3	10.8	11.1	12.4	11.7	12.0	11.5	8.8	9.9	10.7	6.4	8.3
7	11.7	10.4	11.0	12.9	11.7	12.3	12.2	8.8	10.3	11.3	5.9	8.3
8	12.3	10.4	11.5	13.6	12.2	12.9	11.8	8.6	10.0	7.1	6.3	6.8
9	12.1	11.7	11.9	13.3	11.9	12.7	10.9	8.7	9.7	6.7	6.2	6.4
10	12.5	11.8	12.2	12.4	10.4	11.6	13.0	9.5	11.1	8.4	6.3	7.2
11	12.4	11.8	12.2	10.4	9.9	10.1	13.5	10.4	11.8	8.3	6.3	7.1
12	13.1	12.2	12.8	10.4	9.9	10.2	13.7	10.2	11.8	6.3	5.8	6.1
13	13.2	12.0	13.0	10.4	9.7	10.1	13.2	9.9	11.3	7.2	5.9	6.5
14	13.0	12.8	12.9	10.1	9.5	9.8	12.0	9.3	10.5	7.1	6.2	6.7
15	13.0	12.7	12.9	10.4	9.5	10.1	10.3	8.8	9.4	7.1	6.5	6.8
16	12.8	12.5	12.7	10.7	10.2	10.5	12.0	9.3	10.5	7.3	6.4	6.8
17	12.4	12.2	12.3	11.8	10.4	11.3	12.5	9.9	11.0	7.9	6.4	7.0
18	12.2	11.3	11.9	11.6	11.3	11.4	13.2	10.2	11.5	7.2	6.1	6.6
19	11.3	10.8	11.0	11.2	10.3	10.6	12.2	9.9	10.9	7.3	6.2	6.7
20	11.1	10.7	10.9	11.4	10.6	11.0	9.7	8.5	9.1	7.5	6.6	7.1
21	11.1	10.8	10.9	12.0	11.4	11.8	9.8	8.4	9.0	8.6	7.4	8.0
22	11.4	11.0	11.2	12.1	11.9	12.0	11.7	9.1	10.3	9.6	8.1	8.8
23	12.2	11.3	11.8	11.9	11.5	11.7	13.0	10.3	11.5	9.9	8.2	9.0
24	11.9	11.7	11.8	11.7	11.2	11.5	13.8	10.5	11.9	10.3	8.1	9.2
25	12.1	11.7	11.9	11.4	10.7	11.1	14.1	9.9	11.7	9.1	7.7	8.3
26	11.9	11.5	11.7	11.1	10.3	10.6	13.6	9.4	11.2	9.2	7.6	8.4
27	12.2	11.5	11.9	11.5	10.0	10.7	12.5	8.5	10.1	8.5	7.6	8.0
28	12.7	12.0	12.3	12.1	10.5	11.2	9.7	7.4	8.5	8.5	7.5	7.9
29	---	---	---	12.4	10.5	11.3	11.1	6.8	8.8	8.2	7.1	7.6
30	---	---	---	13.0	10.1	11.4	9.6	7.0	8.1	7.9	6.5	7.3
31	---	---	---	13.4	9.9	11.4	---	---	---	8.0	6.3	7.0
MONTH	13.8	10.4	11.9	13.6	9.5	11.4	14.3	6.8	10.5	11.3	5.8	7.6
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	8.2	6.1	7.1	7.5	6.8	7.1	11.2	7.7	9.5	11.1	7.0	9.0
2	9.6	6.2	7.5	7.5	6.7	7.1	12.4	7.8	10.1	10.5	6.6	8.3</

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 current year.

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, 0.85 tons Dec. 15, 1982.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,120 mg/L May. 31; minimum daily mean, 4 mg/L many days during the year.

SEDIMENT LOADS: Maximum daily, 33,700 tons Nov. 26; minimum daily, 1.1 tons Sept. 28.

LITTLE MIAMI RIVER BASIN

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03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

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	163	48	21	284	34	26	2460	82	545
2	156	6	2.5	396	22	24	1980	66	353
3	163	27	12	542	44	64	1710	38	175
4	150	18	7.3	721	45	88	3050	64	527
5	148	21	8.4	613	46	76	2950	28	223
6	146	22	8.7	502	30	41	2930	24	190
7	148	18	7.2	409	42	46	2800	22	166
8	129	24	8.4	412	30	33	1740	18	85
9	121	22	7.2	423	28	32	1440	14	54
10	123	16	5.3	629	580	1390	1060	12	34
11	122	14	4.6	6200	1770	28000	4710	217	5650
12	121	25	8.2	5410	633	9250	7860	438	9300
13	120	18	5.8	5590	280	4230	4750	113	1450
14	119	16	5.1	4550	180	2210	3920	56	593
15	126	22	7.5	4460	140	1690	2660	20	144
16	142	28	11	17700	902	43800	1840	16	79
17	210	28	16	8070	524	11400	1210	12	39
18	218	31	18	5330	119	1710	1000	10	27
19	232	24	15	4310	78	908	780	5	11
20	959	104	269	3340	66	595	700	4	7.6
21	1060	85	243	2990	34	274	640	5	8.6
22	644	56	97	2210	24	143	600	5	8.1
23	567	52	80	1530	19	78	560	5	7.6
24	459	50	62	1260	24	82	540	5	7.3
25	370	47	47	1260	17	58	540	5	7.3
26	348	45	42	4350	359	13900	523	5	7.1
27	266	34	24	15600	507	25400	574	5	7.7
28	233	32	20	13500	170	6200	520	6	8.4
29	218	15	8.8	7250	140	2740	470	5	6.3
30	226	19	12	5840	103	1620	450	4	4.9
31	254	24	16	---	---	---	430	4	4.6
TOTAL	8461	---	1100.0	125681	---	156108	57397	---	19730.5
JANUARY			FEBRUARY			MARCH			
1	420	3	3.4	600	14	23	836	8	18
2	410	5	5.5	1040	60	168	786	5	11
3	410	8	8.9	1700	443	10900	804	7	15
4	400	5	5.4	13000	1020	35800	862	36	84
5	380	4	4.1	7770	342	7170	952	30	77
6	370	5	5.0	5990	330	5340	984	18	48
7	350	4	3.8	11000	388	11500	1090	13	38
8	330	6	5.3	7170	217	4200	895	12	29
9	320	4	3.5	5220	170	2400	827	20	45
10	320	5	4.3	4290	110	1270	950	80	205
11	330	4	3.6	3390	46	421	2600	400	2810
12	330	4	3.6	3120	28	236	1920	360	1870
13	330	5	4.5	2760	30	224	16800	1580	78400
14	320	8	6.9	1950	32	168	6760	480	8760
15	300	15	12	1900	24	123	4520	304	3710
16	300	6	4.9	1610	22	96	3810	173	1780
17	320	8	6.9	2500	203	1720	3250	86	755
18	400	44	48	3830	210	2170	2960	72	575
19	2020	250	1360	3140	116	983	6090	359	6720
20	2590	88	615	2670	74	533	4090	105	1160
21	1800	148	719	2330	38	239	2770	109	815
22	2760	54	402	2310	79	493	1910	54	278
23	2180	21	124	1870	45	227	1500	50	202
24	1500	13	53	1480	51	204	1200	49	159
25	1170	13	41	1520	76	312	1060	59	169
26	1230	17	56	1220	36	119	986	67	178
27	1040	8	22	1290	10	35	1000	50	135
28	785	8	17	1030	7	19	1030	44	122
29	700	8	15	---	---	---	914	44	109
30	640	10	17	---	---	---	796	26	56
31	600	12	19	---	---	---	725	24	47
TOTAL	25355	---	3599.6	97700	---	87093	75677	---	109380

LITTLE MIAMI RIVER BASIN

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

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	656	25	44	400	13	14	301	104	85
2	613	25	41	395	27	29	272	125	92
3	585	18	28	369	30	30	284	61	47
4	547	17	25	346	14	13	260	67	47
5	528	34	48	336	42	38	239	55	35
6	512	45	62	328	12	11	777	372	1950
7	523	35	49	382	31	32	1480	664	2890
8	543	12	18	1340	370	1560	1760	717	3710
9	490	36	48	615	50	83	724	67	131
10	464	14	18	475	52	67	472	50	64
11	447	20	24	395	50	53	432	43	50
12	439	39	46	383	57	59	1050	231	680
13	423	28	32	407	49	54	862	232	540
14	405	17	19	738	201	464	615	166	276
15	459	30	37	516	170	237	479	192	248
16	477	9	12	447	98	118	354	102	97
17	442	13	16	408	82	90	325	122	107
18	424	14	16	411	82	91	325	49	43
19	404	10	11	367	82	81	255	158	109
20	463	33	41	332	76	68	287	175	136
21	804	32	69	317	65	56	701	152	288
22	753	19	39	301	72	59	430	96	111
23	602	10	16	293	63	50	439	109	129
24	527	10	14	277	35	26	351	134	127
25	483	10	13	268	56	41	316	69	59
26	460	8	9.9	289	66	51	251	69	47
27	438	9	11	488	89	117	211	26	15
28	417	12	14	578	122	190	203	74	41
29	405	18	20	407	73	80	437	102	120
30	420	12	14	414	81	91	460	90	112
31	---	---	---	393	123	131	---	---	---
TOTAL	15153	---	854.9	13415	---	4084	15352	---	12386
JULY			AUGUST			SEPTEMBER			
1	1230	376	1980	234	55	35	163	55	24
2	2950	671	5340	234	50	32	161	55	24
3	1680	325	1470	234	46	29	173	50	23
4	1070	150	433	234	40	25	162	48	21
5	589	83	132	234	40	25	156	60	25
6	395	75	80	196	48	25	152	76	31
7	345	70	65	187	38	19	151	79	32
8	314	42	36	187	80	40	142	53	20
9	291	41	32	187	62	31	131	11	3.9
10	573	215	599	257	64	44	124	49	16
11	524	190	269	430	62	72	136	50	18
12	1190	305	1060	312	104	88	523	210	307
13	3020	613	5650	228	91	56	471	115	146
14	2060	130	723	198	82	44	271	60	44
15	1350	148	539	190	95	49	206	69	38
16	1110	147	441	180	55	27	172	64	30
17	806	93	202	299	67	54	155	48	20
18	642	63	109	257	60	42	146	62	24
19	496	76	102	219	55	33	143	44	17
20	435	60	70	182	50	25	146	49	19
21	395	50	53	166	50	22	152	53	22
22	366	46	45	155	50	21	160	46	20
23	346	42	39	150	45	18	178	54	26
24	330	39	35	152	45	18	806	445	1280
25	318	45	39	139	45	17	442	210	251
26	306	49	40	134	45	16	295	110	88
27	293	68	54	279	142	107	1150	298	940
28	284	72	55	364	96	94	1080	205	598
29	274	57	42	253	75	51	489	253	334
30	258	62	43	203	70	38	529	148	211
31	234	41	26	174	60	28	---	---	---
TOTAL	24474	---	19803	6848	---	1225	9165	---	4652.9
YEAR	474678		420016.9						

LITTLE MIAMI RIVER BASIN

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03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

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	921	103	329	347	42	39	2440	116	1020
2	1600	118	510	361	28	27	10500	813	23400
3	895	42	101	373	48	48	6600	480	8550
4	1170	122	432	355	44	42	4980	160	2150
5	1240	104	348	493	70	115	3510	35	332
6	822	80	178	1060	113	323	2830	34	260
7	558	46	69	807	55	120	2540	32	219
8	451	68	83	762	49	101	2280	31	191
9	364	65	64	890	52	125	2090	50	310
10	300	50	40	654	54	95	3280	88	779
11	282	58	44	607	83	136	2150	20	116
12	278	58	44	816	35	77	1430	14	54
13	259	48	34	670	12	22	1290	14	49
14	293	43	34	581	20	31	1000	13	35
15	362	58	57	561	16	24	952	8	21
16	358	32	31	544	7	10	911	13	32
17	306	30	25	532	16	23	770	10	21
18	266	51	37	477	14	18	722	8	16
19	254	36	25	439	16	19	721	6	12
20	240	34	22	443	16	19	784	10	21
21	231	30	19	522	16	23	717	8	15
22	227	34	21	620	14	23	634	9	15
23	222	30	18	599	14	23	602	10	16
24	220	34	20	582	12	19	594	6	9.6
25	263	35	25	537	12	17	653	10	18
26	849	132	318	9960	1100	33700	821	8	18
27	911	109	268	4590	325	4030	747	5	10
28	718	84	163	2520	165	1120	691	5	9.3
29	635	59	101	2650	64	458	617	4	6.7
30	486	56	73	2380	44	283	568	4	6.1
31	382	56	58	---	---	---	564	5	7.6
TOTAL	16363	---	3591	36732	---	41110	58988	---	37719.3
JANUARY			FEBRUARY			MARCH			
1	564	8	12	528	5	7.1	2270	330	2020
2	564	5	7.6	593	4	6.4	1580	40	171
3	564	4	6.1	759	10	20	1190	40	129
4	551	4	6.0	641	4	6.9	964	27	70
5	531	5	7.2	553	4	6.0	856	14	32
6	475	6	7.7	523	5	7.1	650	13	23
7	459	6	7.4	507	5	6.8	582	8	13
8	440	6	7.1	477	6	7.7	549	8	12
9	432	6	7.0	451	5	6.1	531	5	7.2
10	464	8	10	417	4	4.5	506	12	16
11	530	4	5.7	405	6	6.6	482	6	7.8
12	509	5	6.9	405	5	5.5	425	8	9.2
13	486	5	6.6	405	5	5.5	395	7	7.5
14	478	6	7.7	405	4	4.4	386	5	5.2
15	464	6	7.5	390	4	4.2	388	14	15
16	460	6	7.5	369	5	5.0	509	25	34
17	454	6	7.4	351	6	5.7	459	11	14
18	449	7	8.5	347	10	9.4	418	22	25
19	797	101	327	355	11	11	592	22	35
20	1240	189	633	355	4	3.8	554	8	12
21	981	48	127	340	5	4.6	496	6	8.0
22	723	40	78	350	5	4.7	440	5	5.9
23	520	30	42	370	5	5.0	403	8	8.7
24	410	25	28	360	5	4.9	388	12	13
25	360	20	19	340	6	5.5	428	19	22
26	320	15	13	330	6	5.3	369	14	14
27	310	10	8.4	340	6	5.5	356	15	14
28	310	8	6.7	674	177	682	334	4	3.6
29	330	6	5.3	---	---	---	325	30	26
30	400	5	5.4	---	---	---	5390	874	13700
31	556	4	6.0	---	---	---	4230	180	2060
TOTAL	16131	---	1434.7	12340	---	857.2	27445	---	18533.1

LITTLE MIAMI RIVER BASIN

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

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	3360	80	726	519	28	39	1300	1000	3510
2	4370	90	1060	495	22	29	1320	590	2100
3	2690	27	196	522	22	31	4940	1580	21100
4	2240	33	200	550	13	19	5110	730	10100
5	1970	48	255	480	26	34	4320	250	2920
6	4100	108	1200	442	21	25	1650	125	557
7	3360	68	617	417	13	15	1130	71	217
8	2810	60	455	406	7	7.7	915	84	208
9	2230	49	295	384	22	23	705	90	171
10	1290	53	185	369	18	18	569	98	151
11	1020	30	83	357	24	23	529	132	189
12	1060	42	120	340	22	20	574	100	155
13	1260	11	37	332	28	25	592	79	126
14	982	10	27	324	12	10	597	148	239
15	4370	294	3680	339	18	16	455	60	74
16	7650	514	12600	425	12	14	462	65	81
17	6000	380	6160	358	23	22	477	72	93
18	2910	101	794	323	11	9.6	386	51	53
19	1880	42	213	353	68	65	354	58	55
20	1460	52	205	456	60	74	347	54	51
21	1120	53	160	537	178	473	376	166	169
22	991	65	174	2850	703	5840	424	160	183
23	1150	49	152	1510	360	1470	378	186	190
24	1050	50	142	1110	190	569	369	102	102
25	874	30	71	790	277	724	344	77	72
26	732	22	43	2000	593	3580	294	90	71
27	669	26	47	2670	975	7530	248	95	64
28	618	26	43	2290	380	2350	231	109	68
29	577	34	53	1080	300	875	228	74	46
30	548	14	21	935	200	505	235	98	62
31	---	---	---	3230	2120	21000	---	---	---
TOTAL	65341	---	30014	27193	---	45435.3	29859	---	43177
JULY			AUGUST			SEPTEMBER			
1	398	84	90	188	41	21	126	20	6.8
2	963	262	1080	175	54	26	117	13	4.1
3	2340	430	2720	179	60	29	115	35	11
4	1080	160	467	182	63	31	112	25	7.6
5	625	85	143	247	50	33	108	28	8.2
6	549	63	93	245	52	34	104	37	10
7	509	65	89	198	51	27	102	14	3.9
8	394	70	74	174	49	23	100	52	14
9	399	68	73	161	68	30	98	40	11
10	352	74	70	163	45	20	97	21	5.5
11	429	230	266	153	20	8.3	150	44	18
12	803	620	1340	147	46	18	155	28	12
13	1620	914	5150	144	38	15	164	24	11
14	1130	695	2120	147	66	26	141	22	8.4
15	577	170	265	146	56	22	122	20	6.6
16	450	45	55	138	60	22	113	34	10
17	447	16	19	130	12	4.2	138	38	14
18	367	45	45	130	25	8.8	134	10	3.6
19	314	38	32	127	42	14	119	23	7.4
20	285	44	34	122	36	12	126	27	9.2
21	259	56	39	119	58	19	114	20	6.2
22	246	69	46	117	40	13	107	16	4.6
23	250	38	26	131	33	12	104	11	3.1
24	227	40	25	340	114	105	103	24	6.7
25	213	54	31	164	62	27	103	24	6.7
26	205	47	26	140	52	20	107	16	4.6
27	241	41	27	139	62	23	108	32	9.3
28	246	43	29	237	35	22	104	4	1.1
29	220	74	44	170	29	13	108	15	4.4
30	196	11	5.8	157	30	13	120	10	3.2
31	186	12	6.0	146	24	9.5	---	---	---
TOTAL	16520	---	14529.8	5156	---	700.8	3519	---	232.2
YEAR	315587		237334.4						

LITTLE MIAMI RIVER BASIN

185

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 fair. Flow regulated by William H. Harsha reservoir, formerly East Fork Lake, since 1977. Water-quality data collected at this site 1965 to 1977. Satellite telemeter at station operated for U.S. Army Corps of Engineers.

AVERAGE DISCHARGE.--11 years (water years 1966-76), 432 ft³/s, 11 years (water years 1977-87) 413 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, 2,940 ft³/s Dec. 4, gage height, 11.21 ft; minimum daily, 25 ft³/s Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	530	107	1730	117	40	154	1600	47	333	245	34	34
2	495	54	1280	85	116	154	2030	49	471	639	34	34
3	598	54	1970	104	287	154	1940	52	638	789	34	34
4	654	55	2690	129	425	154	1900	50	636	532	56	34
5	627	94	2900	115	430	151	1400	50	481	221	39	34
6	1410	202	2860	90	372	116	1370	50	227	45	35	34
7	2100	413	2410	69	251	71	1970	49	70	45	34	34
8	1680	577	1540	43	166	65	2170	48	36	42	34	34
9	789	578	841	50	140	65	1770	48	35	41	34	34
10	203	569	964	80	116	65	805	47	36	46	34	25
11	79	575	1520	102	90	73	319	47	36	67	34	32
12	79	851	1110	90	67	85	314	45	35	125	34	63
13	79	1120	632	90	59	85	318	44	35	232	33	32
14	79	621	398	90	85	70	315	43	34	292	33	31
15	68	281	159	90	81	55	589	42	34	261	33	31
16	49	123	106	97	76	91	1080	40	37	317	33	31
17	49	120	133	103	76	143	1920	39	34	226	34	33
18	49	129	133	90	76	143	2300	39	34	193	35	33
19	49	145	133	133	64	167	1790	38	34	122	28	33
20	49	146	133	307	43	152	992	37	34	120	28	33
21	47	186	125	426	60	149	738	36	34	107	31	33
22	47	271	100	430	83	147	533	78	34	61	32	33
23	48	271	80	430	85	147	210	154	44	34	34	33
24	63	245	94	430	91	109	96	154	68	33	33	33
25	101	161	160	259	107	50	104	195	89	33	33	33
26	108	682	308	109	107	49	106	281	90	35	33	33
27	135	1210	416	54	109	48	88	590	90	42	33	31
28	135	1530	416	33	124	48	76	782	90	35	36	31
29	135	1970	416	33	---	49	68	512	93	34	35	32
30	135	1950	289	36	---	398	53	129	93	34	35	33
31	135	---	140	40	---	764	---	173	---	34	34	---
TOTAL	10804	15290	26186	4354	3826	4171	28964	3988	4035	5082	1062	1008
MEAN	349	510	845	140	137	135	965	129	135	164	34.3	33.6
MAX	2100	1970	2900	430	430	764	2300	782	638	789	56	63
MIN	47	54	80	33	40	48	53	36	34	33	28	25
CAL YR 1986	TOTAL	131768		MEAN	361	MAX	3120	MIN	21			
WTR YR 1987	TOTAL	108770		MEAN	298	MAX	2900	MIN	25			

LITTLE MIAMI RIVER BASIN

03247500 EAST FORK LITTLE MIAMI RIVER AT PERINTOWN, OH

LOCATION.--Lat 39°08'14", long 84°14'17", Clermont County, Hydrologic Unit 05090202, on right bank at upstream wingwall of highway bridge at Perintown, 0.2 mi downstream from Sugarcamp Run, 5 mi upstream from mouth, and at mile 6.4.

DRAINAGE AREA.--476 mi².

PERIOD OF RECORD.--May 1915 to September 1917, October 1917 to May 1920 (gage heights only), January 1925 to current year.

GAGE.--Water-stage recorder. Datum of gage is 507.03 ft above National Geodetic Vertical Datum of 1929. Prior to Feb. 6, 1940, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Apr. 15. Records 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.--64 years (1915-17, 1925-86), 549 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, 5,530 ft³/s Nov. 26, gage height, 8.64 ft; minimum daily, 27 ft³/s Aug. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	808	125	2390	158	86	969	2370	62	460	843	43	33
2	671	66	3640	120	219	1020	3030	59	517	869	43	33
3	645	62	2960	116	330	999	2430	55	687	793	43	34
4	1390	65	3000	151	423	850	2310	56	627	474	62	33
5	1260	266	3100	148	390	399	2140	55	469	225	95	33
6	1350	708	3050	122	365	252	2680	53	229	72	44	33
7	2340	473	2750	111	260	115	2700	52	96	87	41	35
8	2060	950	1890	74	187	107	2600	50	52	67	39	34
9	1120	858	1370	75	149	101	2260	50	45	63	40	33
10	224	682	1400	104	144	93	1190	48	46	97	37	33
11	87	894	1960	131	115	93	322	49	46	98	38	28
12	84	1140	1510	123	117	106	370	47	50	318	38	43
13	82	1580	652	121	80	105	351	46	52	376	36	47
14	86	797	473	124	109	105	327	46	46	650	33	32
15	81	329	209	128	110	77	2280	43	44	229	32	32
16	61	147	141	116	94	151	2420	43	42	266	32	34
17	61	134	173	130	103	184	2500	42	48	185	33	37
18	55	134	169	132	105	164	2670	42	43	174	36	36
19	52	143	156	268	100	324	2270	41	49	118	32	34
20	54	154	153	429	82	235	1240	42	47	115	27	34
21	53	184	151	426	84	184	775	43	128	112	28	34
22	55	291	137	415	117	168	606	69	128	77	33	33
23	55	279	112	361	122	160	253	138	70	54	32	34
24	56	269	150	347	118	153	127	135	80	44	32	34
25	186	159	234	289	133	94	125	155	95	44	31	33
26	289	3610	310	138	128	80	133	380	93	45	33	33
27	156	2030	401	96	140	80	113	559	86	59	34	32
28	137	1930	397	69	287	76	93	743	89	66	45	32
29	129	2340	377	69	---	76	89	572	93	48	37	33
30	127	2290	322	82	---	2390	72	165	163	45	34	35
31	125	---	168	80	---	1810	---	255	---	43	33	---
TOTAL	13939	23089	33905	5253	4697	11720	40846	4195	4720	6756	1196	1024
MEAN	450	770	1094	169	168	378	1362	135	157	218	38.6	34.1
MAX	2340	3610	3640	429	423	2390	3030	743	687	869	95	47
MIN	52	62	112	69	80	76	72	41	42	43	27	28
CAL YR 1986	TOTAL	180374		MEAN	494	MAX	5280	MIN	29			
WTR YR 1987	TOTAL	151340		MEAN	415	MAX	3640	MIN	27			

MILL CREEK BASIN

187

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: Oct. 1-3, Jan. 24-28. Records fair except for periods of estimated record, which are poor. 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)
Nov. 26	0400	3,070	13.07	May 21	1800	*4,450	*16.38
Mar. 30	0430	1,730	9.73				

Minimum daily 8.6 ft³/s June 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	350	12	303	23	24	257	412	33	138	213	23	12
2	80	10	894	23	54	102	581	30	202	57	12	11
3	34	12	463	21	38	61	197	26	667	17	26	13
4	264	24	133	19	30	46	152	26	121	11	23	11
5	64	177	86	19	26	40	250	24	67	9.4	20	10
6	31	93	63	24	28	50	229	23	46	248	15	10
7	23	31	51	49	25	67	176	22	33	54	15	9.6
8	20	49	48	56	23	57	106	22	31	20	16	11
9	16	27	214	21	20	34	81	19	28	22	19	12
10	14	20	138	69	21	27	68	18	23	18	15	11
11	13	77	70	31	21	26	61	19	21	146	13	43
12	12	35	55	28	22	26	146	19	112	55	13	75
13	25	23	40	26	21	27	65	20	35	99	14	18
14	49	19	34	25	21	26	90	18	20	39	13	12
15	17	17	36	24	18	30	794	159	20	22	10	13
16	13	15	34	22	19	104	474	25	22	20	10	12
17	13	16	33	22	21	34	259	18	21	17	18	53
18	11	16	32	41	32	32	186	68	19	16	13	17
19	9.9	15	28	204	25	200	92	115	16	15	12	11
20	11	50	24	83	22	68	77	28	46	17	12	10
21	12	40	22	48	21	48	67	953	63	17	12	11
22	12	20	21	41	21	36	62	348	66	17	12	12
23	13	19	21	31	21	35	273	106	21	16	9.5	12
24	13	18	64	20	20	34	76	55	18	16	11	12
25	81	88	39	18	20	56	54	158	14	14	10	12
26	37	1440	26	18	21	34	44	226	15	60	13	9.9
27	16	173	23	17	42	31	45	100	9.9	84	11	9.1
28	14	96	22	17	314	30	39	88	8.6	30	87	12
29	14	65	21	34	---	176	37	79	12	19	15	33
30	13	50	27	49	---	990	39	230	19	18	11	21
31	13	---	25	25	---	452	---	164	---	55	14	---
TOTAL	1307.9	2747	3090	1148	991	3236	5232	3239	1934.5	1461.4	517.5	518.6
MEAN	42.2	91.6	99.7	37.0	35.4	104	174	104	64.5	47.1	16.7	17.3
MAX	350	1440	894	204	314	990	794	953	667	248	87	75
MIN	9.9	10	21	17	18	26	37	18	8.6	9.4	9.5	9.1
CAL YR 1986	TOTAL	27673.2		MEAN	75.8	MAX	1440	MIN	2.2			
WTR YR 1987	TOTAL	25422.9		MEAN	69.7	MAX	1440	MIN	8.6			

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: Oct. 1-3, Nov. 27 to Jan. 28, Apr. 3-7 and May 2-14. Records fair except those for periods of estimated record, which are poor. Some inter-basin transfers of water between Mill Creek and Great Miami River basins by industrial and municipal operations. Flow regulated by West Fork Mill Creek Reservoir, 6.9 mi upstream, beginning 1953. Water-quality data collected at this site 1965 to 1977.

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, 4,700 ft³/s May 21, gage height 17.04 ft; minimum daily, 6.2 ft³/s June 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	470	12	200	24	51	290	614	39	114	148	42	11
2	220	12	900	24	66	320	897	37	158	78	47	10
3	130	12	350	22	54	202	400	33	659	50	35	13
4	454	35	150	20	44	63	200	32	112	41	41	10
5	302	551	90	21	38	52	300	30	77	27	48	9.2
6	85	241	62	26	39	59	250	29	52	242	43	8.3
7	68	72	52	50	38	83	220	28	34	103	42	7.6
8	29	100	60	68	34	73	174	26	31	53	28	8.9
9	27	63	240	23	30	40	154	23	29	49	21	11
10	22	68	155	70	31	39	143	22	31	44	18	10
11	9.7	663	90	35	26	35	136	23	26	85	21	34
12	7.5	169	57	30	27	27	228	24	83	77	21	57
13	25	107	40	28	25	27	138	24	54	119	15	23
14	62	74	35	27	24	27	150	22	30	49	13	20
15	16	35	37	25	31	29	884	149	31	43	9.8	22
16	9.4	24	36	24	29	131	665	42	41	30	7.9	16
17	8.9	14	35	24	25	52	510	63	30	27	16	49
18	7.6	12	33	50	36	34	195	77	22	24	14	28
19	15	10	29	150	33	204	114	134	16	16	12	34
20	15	143	27	330	28	135	82	74	34	16	13	20
21	9.6	339	25	184	68	111	75	1070	72	17	12	10
22	8.3	86	23	65	70	86	68	474	78	18	13	12
23	11	32	22	59	69	73	277	120	43	17	10	12
24	12	30	80	29	62	37	115	54	21	17	10	10
25	116	100	45	26	53	67	85	141	14	13	10	11
26	119	1940	30	25	26	75	56	184	15	31	13	8.8
27	46	210	25	24	47	56	56	85	7.8	77	12	7.4
28	47	160	23	24	267	30	52	57	6.2	44	68	11
29	16	100	24	37	---	146	47	50	13	52	15	27
30	12	70	28	73	---	1070	43	163	23	36	9.8	26
31	12	---	27	64	---	743	---	185	---	66	14	---
TOTAL	2392.0	5484	3030	1681	1371	4416	7328	3514	1957.0	1709	694.5	537.2
MEAN	77.2	183	97.7	54.2	49.0	142	244	113	65.2	55.1	22.4	17.9
MAX	470	1940	900	330	267	1070	897	1070	659	242	68	57
MIN	7.5	10	22	20	24	27	43	22	6.2	13	7.9	7.4
CAL YR 1986	TOTAL	37112.3		MEAN	102	MAX	1940	MIN	5.8			
WTR YR 1987	TOTAL	34113.7		MEAN	93.5	MAX	1940	MIN	6.2			

GREAT MIAMI RIVER BASIN

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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. 22-31. 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 7 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--30 years, 33.6 ft³/s, 12.57 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)
Oct. 1	2045	403	4.04	July 2	0830	*693	*5.94
Oct. 3	1030	512	4.80	July 4	0700	339	3.60
Nov. 26	1315	483	4.60	July 7	0530	321	3.47
Dec. 3	0745	370	3.81				

Minimum daily discharge, 6.2 ft³/s Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	255	29	59	34	27	48	52	25	27	181	19	12	
2	182	26	215	35	47	41	114	29	22	641	19	12	
3	336	26	268	33	55	32	63	25	180	343	40	11	
4	303	50	123	32	42	28	43	23	74	253	21	9.8	
5	177	43	83	31	38	26	48	22	49	144	20	9.1	
6	109	39	68	31	36	26	128	21	38	109	19	8.4	
7	78	33	64	32	34	25	98	20	29	207	18	8.4	
8	62	33	73	31	34	25	62	17	26	101	17	9.3	
9	52	65	136	31	43	25	47	15	28	78	16	9.5	
10	45	47	151	32	27	23	38	13	23	67	17	9.0	
11	41	48	82	30	27	22	34	12	22	57	16	9.0	
12	37	52	67	29	29	22	54	12	55	50	15	9.6	
13	41	43	56	29	28	21	41	12	75	46	16	8.7	
14	95	36	51	33	27	21	33	11	36	67	15	8.1	
15	59	35	49	50	22	20	39	19	30	45	13	8.1	
16	47	34	49	42	41	21	80	11	37	88	12	8.5	
17	41	32	49	36	21	20	58	11	23	58	12	8.6	
18	36	35	53	36	21	20	44	21	21	44	12	8.6	
19	32	47	49	39	20	21	36	27	20	35	12	8.5	
20	31	57	46	36	20	20	34	16	20	31	12	7.9	
21	30	85	43	31	20	19	33	15	23	29	13	8.2	
22	28	59	42	30	19	19	32	16	26	26	13	8.6	
23	27	51	42	29	20	20	43	12	20	32	11	8.6	
24	26	47	43	28	19	20	37	11	20	24	11	8.1	
25	43	42	43	27	19	22	32	11	20	22	11	8.0	
26	103	293	42	26	19	21	29	16	20	21	23	7.2	
27	65	175	39	26	20	21	29	25	20	21	17	6.2	
28	54	105	37	26	24	20	27	13	19	20	15	6.8	
29	46	79	36	25	---	20	26	11	18	20	14	8.0	
30	41	65	35	25	---	73	25	31	44	20	11	8.7	
31	32	---	34	26	---	62	---	60	---	20	12	---	
TOTAL	2554	1811	2227	981	799	824	1459	583	1065	2900	492	262.5	
MEAN	82.4	60.4	71.8	31.6	28.5	26.6	48.6	18.8	35.5	93.5	15.9	8.75	
MAX	336	293	268	50	55	73	128	60	180	641	40	12	
MIN	26	26	34	25	19	19	25	11	18	20	11	6.2	
CFSM	2.27	1.66	1.98	.87	.79	.73	1.34	.52	.98	2.58	.44	.24	
IN.	2.62	1.86	2.28	1.01	.82	.84	1.50	.60	1.09	2.97	.50	.27	
CAL YR 1986	TOTAL	19570.8		MEAN	53.6	MAX	336	MIN	7.6	CFSM	1.48	IN.	20.06
WTR YR 1987	TOTAL	15957.5		MEAN	43.7	MAX	641	MIN	6.2	CFSM	1.20	IN.	16.35

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 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.--No estimated daily discharges. Records good. 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 4.26 ft³/s in 1987 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 7 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--62 years, (1925-87) 482 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.

EMES 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)
Oct. 1	2100	5,040	8.23	Dec. 3	0600	4,620	7.87
Oct. 4	1130	*7,090	*9.91	July 2	0830	6,310	9.27
Nov. 26	1800	4,460	7.73				

Minimum daily discharge 45 ft³/s Sept. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3060	257	935	420	235	428	562	197	497	1240	123	70
2	3880	244	2580	425	321	747	1200	170	504	5810	128	74
3	5140	271	4320	411	699	514	994	173	2450	5370	152	65
4	6530	278	3180	395	590	409	704	173	2770	5340	157	62
5	5700	371	2130	387	428	292	899	187	2330	3990	125	58
6	3540	348	1500	296	365	251	1680	155	1830	2930	116	55
7	2350	302	1010	227	351	230	1660	105	1350	2290	94	54
8	1620	278	941	211	358	226	1150	134	813	1590	82	55
9	1000	382	1590	201	296	234	758	129	425	939	81	54
10	633	426	2620	214	258	411	555	128	365	604	81	52
11	460	351	1650	213	235	271	457	124	247	504	88	51
12	384	415	1010	193	231	174	512	126	329	514	80	54
13	371	405	667	184	236	165	531	131	1290	481	69	53
14	715	349	505	194	226	160	414	121	1560	1080	66	51
15	792	260	473	317	209	164	435	169	1250	659	61	53
16	542	249	549	401	154	174	937	167	986	752	55	49
17	424	241	539	302	194	167	1000	127	590	1160	54	51
18	380	240	550	267	175	149	693	122	371	627	55	52
19	304	410	543	273	160	142	503	390	270	376	54	52
20	275	490	508	267	151	151	412	388	229	276	50	53
21	253	1290	482	224	152	140	356	272	226	221	53	49
22	241	1170	472	222	156	139	341	387	398	193	55	47
23	225	767	469	193	155	130	347	253	399	176	53	50
24	216	604	476	203	148	127	335	207	265	166	60	51
25	237	503	524	208	140	136	401	178	204	146	54	48
26	657	3160	560	198	137	135	272	166	171	144	75	47
27	678	3840	520	181	137	129	222	876	169	151	112	47
28	507	2700	485	159	158	127	227	730	148	139	122	45
29	395	1900	463	165	---	128	248	379	130	127	102	45
30	361	1340	453	213	---	248	214	271	175	145	85	46
31	324	---	431	249	---	618	---	501	---	140	72	---
TOTAL	42194	23841	33135	8013	7055	7516	19019	7636	22741	38280	2614	1593
MEAN	1361	795	1069	258	252	242	634	246	758	1235	84.3	53.1
MAX	6530	3840	4320	425	699	747	1680	876	2770	5810	157	74
MIN	216	240	431	159	137	127	214	105	130	127	50	45
CAL YR 1986	TOTAL	277259	MEAN	760	MAX	6530	MIN	56				
WTR YR 1987	TOTAL	213637	MEAN	585	MAX	6530	MIN	45				

GREAT MIAMI RIVER BASIN

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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.--No estimated daily discharges. Records good except for winter period, which are fair. 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 8 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--23 years, 133 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,600 ft³/s June 14, 1981, maximum gage height, 14.08 ft Feb. 24, 1975; 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)
Oct. 3	2100	2,480	11.67	June 3	1830	2,270	11.44
Nov. 27	0230	1,500	10.15	July 2	1930	*3,420	*12.52

Minimum daily discharge 0.86 ft³/s Sept. 26

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	862	33	144	45	87	266	131	16	32	320	6.2	1.4
2	1870	30	948	45	173	314	257	17	60	2780	5.8	1.1
3	2110	24	1360	39	342	197	210	19	1800	2760	19	.97
4	2270	45	866	36	239	121	142	17	1560	1720	9.8	.91
5	1450	58	403	33	176	89	159	11	569	1010	4.7	.91
6	587	52	248	33	140	77	486	7.5	213	402	3.4	1.0
7	267	42	143	37	132	64	412	7.1	111	209	3.0	1.0
8	158	38	115	29	139	59	257	7.5	64	126	2.9	1.2
9	108	35	331	27	91	66	160	6.4	53	79	2.7	1.3
10	71	27	601	35	78	43	109	5.5	35	50	3.0	1.5
11	46	26	301	35	62	25	84	4.6	20	103	2.8	2.1
12	36	25	167	19	62	22	73	5.6	96	252	2.6	3.5
13	42	19	101	28	56	20	60	6.1	163	177	2.6	2.8
14	124	14	80	34	54	20	47	4.7	81	399	2.5	1.8
15	139	15	63	175	47	29	137	6.1	47	165	2.4	1.5
16	98	17	52	169	36	26	549	5.3	30	118	2.1	1.3
17	73	18	47	106	35	17	465	3.9	17	130	2.0	1.3
18	48	21	52	85	29	16	246	4.9	11	82	2.3	1.3
19	33	35	51	90	22	17	149	50	7.6	47	2.1	1.2
20	26	66	47	76	20	17	102	107	6.5	28	2.0	1.1
21	22	269	42	57	21	13	77	67	22	18	2.1	.94
22	20	209	39	58	21	14	66	53	100	14	2.1	.98
23	18	143	41	40	22	13	56	39	74	9.5	2.6	.95
24	17	104	55	32	18	13	53	21	39	6.7	2.3	1.1
25	27	82	134	27	16	17	39	14	21	5.3	2.4	1.1
26	161	855	141	22	16	16	27	20	15	4.8	7.5	.86
27	165	1380	105	21	16	16	23	18	7.7	5.7	9.4	.99
28	114	755	83	20	23	17	24	9.7	5.1	5.0	7.7	.94
29	84	348	69	20	---	14	17	6.8	3.4	4.9	3.0	.89
30	64	208	63	48	---	75	20	5.8	29	4.5	1.9	1.3
31	42	---	49	77	---	129	---	99	---	4.5	1.4	---
TOTAL	11152	4993	6941	1598	2173	1842	4637	665.5	5292.3	11039.9	126.3	39.24
MEAN	360	166	224	51.5	77.6	59.4	155	21.5	176	356	4.07	1.31
MAX	2270	1380	1360	175	342	314	549	107	1800	2780	19	3.5
MIN	17	14	39	19	16	13	17	3.9	3.4	4.5	1.4	.86
CAL YR 1986	TOTAL	64628.1		MEAN	177	MAX	2270	MIN	2.0			
WTR YR 1987	TOTAL	50499.24		MEAN	138	MAX	2780	MIN	.86			

GREAT MIAMI RIVER BASIN

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.--No estimated daily discharges. Records good except those for winter periods, which are fair. 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 9 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--72 years, 210 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, 1.4 ft³/s Sept. 20, 1983.

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, 5,260 ft³/s July 2, gage height, 83.97 ft; minimum daily, 8.6 ft³/s Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1150	68	253	90	136	603	230	51	93	877	34	15
2	1970	63	1780	92	255	635	576	44	47	4660	32	14
3	2800	59	2250	86	534	340	379	48	1640	4140	39	13
4	3610	68	1340	78	374	213	246	42	1970	2950	52	12
5	2700	107	611	75	275	158	293	41	869	1350	36	12
6	998	111	385	73	220	138	1030	34	311	610	29	11
7	419	89	273	76	208	119	698	33	180	335	26	11
8	256	78	226	71	219	109	423	32	113	216	24	11
9	178	77	600	64	160	110	275	29	82	154	24	10
10	137	71	987	70	136	101	195	27	81	119	23	11
11	110	64	481	75	118	73	157	27	59	112	23	11
12	91	66	291	58	119	63	156	24	194	416	21	10
13	90	60	196	49	119	55	136	24	298	346	18	13
14	215	49	146	67	108	52	112	24	150	2070	17	14
15	233	44	138	265	99	57	335	43	96	451	15	12
16	169	45	117	284	75	58	1220	37	74	325	15	11
17	130	46	108	182	85	50	869	30	54	242	16	11
18	106	45	113	145	70	45	445	24	40	176	16	10
19	85	58	109	150	63	50	272	81	33	128	13	11
20	74	103	97	140	53	51	192	312	29	93	13	10
21	68	385	90	101	50	46	151	133	44	76	12	9.9
22	62	340	85	114	51	44	131	94	122	67	14	9.8
23	58	240	85	79	52	43	130	82	115	59	15	9.7
24	55	185	95	72	50	42	109	60	79	50	13	9.5
25	54	142	228	60	44	45	100	43	53	40	13	9.2
26	189	1850	252	51	41	50	79	39	49	37	18	9.1
27	248	1820	186	45	41	45	70	47	34	36	27	9.0
28	175	1170	149	45	50	45	71	34	25	36	30	8.6
29	129	546	127	46	---	44	62	29	21	33	24	8.9
30	103	329	118	78	---	85	53	24	33	32	18	9.1
31	84	---	101	131	---	222	---	97	---	31	16	---
TOTAL	16746	8378	12017	3012	3805	3791	9195	1689	6988	20267	686	325.8
MEAN	540	279	388	97.2	136	122	307	54.5	233	654	22.1	10.9
MAX	3610	1850	2250	284	534	635	1220	312	1970	4660	52	15
MIN	54	44	85	45	41	42	53	24	21	31	12	8.6
CAL YR 1986	TOTAL	107004.0		MEAN	293	MAX	3610	MIN	8.3			
WTR YR 1987	TOTAL	86899.8		MEAN	238	MAX	4660	MIN	8.6			

GREAT MIAMI RIVER BASIN

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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. 26-29 and Sept. 16-23. Records good except those for periods of estimated record, 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 5.1 ft³/s in 1987 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 11 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--25 years, 821 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,300 ft³/s Mar. 6, 1963, gage height, 14.66 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, 14,100 ft³/s Oct. 4, gage height, 12.66 ft; minimum daily, 66 ft³/s Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3460	409	1570	582	418	902	966	340	739	1690	163	111
2	6950	362	4270	575	497	1630	1780	282	510	11300	164	102
3	8540	365	7640	573	1180	1120	1880	273	3750	11800	201	106
4	12800	382	5220	543	1200	757	1160	273	5130	10200	209	99
5	11300	494	3340	513	814	589	1250	267	3820	6050	208	96
6	5670	543	2390	495	660	487	2830	262	2600	4070	166	95
7	3350	485	1720	378	611	443	2890	220	1890	3030	165	91
8	2370	440	1360	357	611	404	2150	179	1190	2230	150	84
9	1600	465	2200	332	556	412	1430	205	667	1430	139	82
10	1010	609	4160	338	452	508	1000	194	519	883	132	79
11	718	547	2790	354	418	476	792	193	407	707	133	78
12	597	538	1790	329	398	339	818	189	508	1080	121	77
13	562	562	1160	296	397	286	868	184	1450	986	112	76
14	894	544	782	301	385	275	718	194	1940	3310	107	78
15	1290	413	756	490	373	273	897	220	1630	1570	111	80
16	882	366	728	807	290	281	2520	265	1280	971	107	75
17	686	359	756	604	312	283	2490	219	820	1600	112	70
18	581	342	743	511	313	263	1650	200	537	1040	110	67
19	486	390	749	498	285	248	1060	361	414	628	104	66
20	424	645	706	499	260	238	782	1230	347	464	101	66
21	396	1570	654	416	252	255	662	599	309	363	93	67
22	374	1870	632	394	249	235	575	545	440	314	87	67
23	355	1230	632	352	249	234	623	468	630	275	87	67
24	332	901	645	221	253	225	548	336	439	253	89	68
25	338	761	778	279	237	247	579	290	316	235	89	67
26	682	4660	929	250	228	243	504	252	275	205	97	67
27	1130	6540	825	230	226	233	408	556	239	210	136	67
28	834	4440	725	220	253	228	367	1010	209	206	173	66
29	636	3000	669	220	---	228	384	523	189	190	158	67
30	554	2150	654	304	---	307	359	361	234	167	139	68
31	494	---	619	390	---	805	---	388	---	161	134	---
TOTAL	70295	36382	52592	12651	12377	13454	34940	11078	33428	67618	4097	2349
MEAN	2268	1213	1697	408	442	434	1165	357	1114	2181	132	78.3
MAX	12800	6540	7640	807	1200	1630	2890	1230	5130	11800	209	111
MIN	332	342	619	220	226	225	359	179	189	161	87	66
CAL YR 1986	TOTAL	451763	MEAN	1238	MAX	12800	MIN	99				
WTR YR 1987	TOTAL	351261	MEAN	962	MAX	12800	MIN	66				

GREAT MIAMI RIVER BASIN

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.--No estimated daily discharges. Records good. 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.--69 years, 1,006 ft³/s, 11.89 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, 18,000 ft³/s Oct. 5, gage height, 20.81 ft; minimum daily, 85 ft³/s Sept. 27, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	3890	597	1970	792	578	935	1330	535	870	723	243	157	
2	8710	526	4610	783	653	1790	2110	515	669	7650	245	135	
3	7050	506	8760	769	1200	1420	2290	470	2910	10700	258	136	
4	12300	572	7320	732	1420	978	1560	466	4910	9750	283	136	
5	16900	633	4130	702	1040	811	1490	449	3850	7640	295	125	
6	9480	754	2780	693	871	665	2850	451	2540	4460	251	124	
7	4270	701	2120	584	802	601	3240	397	1930	3120	235	120	
8	2920	632	1730	530	802	561	2480	355	1380	2380	220	117	
9	2120	644	2530	502	747	557	1770	352	896	1680	178	115	
10	1510	771	5440	521	620	591	1310	348	648	1170	170	111	
11	1170	764	3500	528	575	652	1090	335	547	924	170	107	
12	989	748	2260	499	548	513	1240	329	522	1170	162	111	
13	925	778	1580	456	538	410	1260	313	1320	1250	156	111	
14	1140	729	1180	459	526	400	1080	313	1830	2860	148	110	
15	1590	629	1090	569	508	393	1370	325	1630	1930	147	110	
16	1250	554	1020	979	426	394	3010	378	1560	1170	144	109	
17	978	540	1060	826	420	400	3150	343	1050	1530	136	111	
18	832	516	1060	703	445	384	2170	300	707	1280	140	113	
19	735	521	1040	708	402	370	1520	452	534	827	127	109	
20	643	761	982	727	375	357	1170	1340	481	621	121	101	
21	599	1410	916	617	364	367	1000	880	421	516	120	100	
22	563	2020	880	577	364	353	876	812	475	433	113	99	
23	536	1500	867	538	369	351	934	722	695	391	109	96	
24	507	1130	903	537	362	343	832	530	567	351	110	94	
25	519	977	1010	690	346	376	801	452	442	335	113	90	
26	787	4760	1160	808	331	373	767	431	372	307	125	90	
27	1340	8870	1080	743	328	366	621	500	330	304	152	85	
28	1070	5780	974	542	367	356	580	1210	310	301	185	85	
29	889	3630	905	432	---	355	574	752	284	287	203	89	
30	739	2520	883	482	---	590	580	531	319	265	158	95	
31	644	---	835	545	---	1020	---	489	---	246	156	---	
TOTAL	87595	45473	66575	19573	16327	18032	45055	16075	34999	66571	5373	3291	
MEAN	2826	1516	2148	631	583	582	1502	519	1167	2147	173	110	
MAX	16900	8870	8760	979	1420	1790	3240	1340	4910	10700	295	157	
MIN	507	506	835	432	328	343	574	300	284	246	109	85	
CFSM	2.46	1.32	1.87	.55	.51	.51	1.31	.45	1.02	1.87	.15	.10	
IN.	2.84	1.47	2.16	.63	.53	.58	1.46	.52	1.13	2.16	.17	.11	
CAL YR 1986	TOTAL	556209		MEAN	1524	MAX	16900	MIN	133	CFSM	1.33	IN.	18.01
WTR YR 1987	TOTAL	424939		MEAN	1164	MAX	16900	MIN	85	CFSM	1.01	IN.	13.76

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: Jan. 24-29. 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 7 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--57 years, 174 ft³/s, 12.24 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)
Oct. 2	2130	1,550	4.97	June 4	0600	1,690	5.19
Oct. 5	1900	3,380	7.45	July 2	0630	*3,430	*7.51

Minimum daily discharge 19 ft³/s Sept. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	288	104	226	112	125	430	181	108	179	737	77	32	
2	1370	99	1030	112	184	487	311	107	152	3100	77	30	
3	1090	91	1090	105	253	284	247	107	1070	2590	77	27	
4	2150	96	586	99	202	198	178	102	1280	954	77	27	
5	3250	99	359	95	165	165	169	97	459	501	66	28	
6	2250	101	271	95	151	160	208	92	282	351	62	26	
7	814	100	233	95	148	146	195	91	200	289	58	25	
8	484	97	217	92	148	135	171	87	149	220	57	25	
9	353	95	294	88	120	129	151	81	117	176	53	30	
10	272	86	448	94	116	110	135	77	96	150	53	28	
11	224	86	300	96	105	99	129	72	86	283	52	26	
12	194	88	233	87	103	96	205	69	87	1270	50	27	
13	186	86	183	84	100	90	218	67	108	762	48	24	
14	210	80	159	85	93	88	172	61	83	1110	46	26	
15	216	77	153	118	89	88	662	61	95	624	44	26	
16	177	78	142	135	69	86	886	63	526	461	42	24	
17	157	79	139	117	89	81	662	55	236	330	40	24	
18	135	78	138	113	82	79	413	53	130	237	41	25	
19	121	80	135	118	71	81	298	103	94	189	38	24	
20	113	84	127	121	72	82	239	143	88	154	37	24	
21	109	101	119	101	72	79	204	176	79	132	37	23	
22	103	105	114	103	72	77	182	201	74	115	36	25	
23	98	103	112	87	73	77	173	176	69	103	33	24	
24	94	97	121	88	70	77	157	117	58	93	35	21	
25	97	90	156	84	67	87	138	95	52	79	29	22	
26	136	830	163	84	66	86	128	113	48	82	32	22	
27	166	1040	149	84	64	80	122	155	46	121	47	20	
28	156	515	135	82	76	79	107	107	41	100	41	19	
29	139	340	125	82	---	79	111	80	40	87	38	19	
30	124	259	123	111	---	118	113	71	61	78	34	21	
31	112	---	119	126	---	184	---	169	---	77	34	---	
TOTAL	15388	5264	7899	3093	3045	4137	7265	3156	6085	15555	1491	744	
MEAN	496	175	255	99.8	109	133	242	102	203	502	48.1	24.8	
MAX	3250	1040	1090	135	253	487	886	201	1280	3100	77	32	
MIN	94	77	112	82	64	77	107	53	40	77	29	19	
CFSM	2.57	.91	1.32	.52	.56	.69	1.25	.53	1.05	2.60	.25	.13	
IN.	2.97	1.01	1.52	.60	.59	.80	1.40	.61	1.17	3.00	.29	.14	
CAL YR 1986	TOTAL	87547		MEAN	240	MAX	3250	MIN	27	CFSM	1.24	IN.	16.87
WTR YR 1987	TOTAL	73122		MEAN	200	MAX	3250	MIN	19	CFSM	1.04	IN.	14.09

GREAT MIAMI RIVER BASIN

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: July 10-13. Records good except for periods of estimated record and winter periods, which are fair. Sediment data collected at this site 1963 to 1975.

COOPERATION.--Gage-height tapes and 9 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--65 years, 446 ft³/s, 12.04 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)
Oct. 4	2200	*11,300	*13.28	July 2	1230	10,800	13.01
June 3	2330	5,510	9.02				

Minimum daily discharge 24 ft³/s Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	1100	190	518	234	283	1090	443	194	412	1370	116	43	
2	4080	180	3560	237	443	1220	918	185	281	9910	158	40	
3	3470	172	3810	226	832	661	601	180	3890	7160	135	37	
4	8830	184	1700	205	580	437	395	167	4320	2100	128	33	
5	8390	200	901	198	427	349	404	153	1290	961	104	32	
6	3750	213	641	197	368	332	807	148	654	646	94	31	
7	1520	205	529	205	368	311	602	147	448	502	84	29	
8	904	192	499	191	383	289	455	143	335	374	78	29	
9	648	187	859	181	304	277	358	137	265	296	75	36	
10	485	173	1550	197	263	234	302	129	215	280	75	36	
11	396	171	783	200	238	200	286	125	187	260	74	34	
12	341	183	560	177	229	191	504	124	210	1500	72	32	
13	324	176	415	168	220	180	465	123	368	3400	66	33	
14	413	159	346	175	207	176	356	118	224	2870	59	30	
15	498	156	333	313	194	179	1750	131	171	1260	55	30	
16	362	160	304	423	233	169	2560	142	752	816	52	30	
17	301	159	291	286	180	153	1730	116	478	594	53	29	
18	255	154	293	255	171	148	963	115	254	406	53	28	
19	223	151	284	266	157	156	671	560	187	313	46	30	
20	208	162	267	266	150	156	521	562	272	254	43	27	
21	198	269	247	217	148	146	436	542	372	215	42	27	
22	187	308	234	227	151	142	383	643	414	186	44	29	
23	179	252	233	184	153	138	370	567	246	166	43	29	
24	171	224	259	137	144	136	328	304	158	149	43	26	
25	179	198	428	177	135	157	282	225	125	130	42	27	
26	261	2950	464	155	132	154	255	506	107	126	46	27	
27	368	3370	367	151	132	142	242	525	97	173	62	27	
28	310	1400	313	159	155	139	226	289	86	191	64	25	
29	264	850	286	163	---	133	217	196	81	158	61	24	
30	232	616	279	211	---	192	209	160	105	131	51	27	
31	207	---	254	272	---	427	---	352	---	117	48	---	
TOTAL	39054	13964	21807	6653	7380	8814	18039	8008	17004	37014	2166	917	
MEAN	1260	465	703	215	264	284	601	258	567	1194	69.9	30.6	
MAX	8830	3370	3810	423	832	1220	2560	643	4320	9910	158	43	
MIN	171	151	233	137	132	133	209	115	81	117	42	24	
CFSM	2.50	.92	1.40	.43	.52	.56	1.19	.51	1.13	2.37	.14	.06	
IN.	2.89	1.03	1.61	.49	.55	.65	1.33	.59	1.26	2.74	.16	.07	
CAL YR 1986	TOTAL	224058		MEAN	614	MAX	8830	MIN	35	CFSM	1.22	IN.	16.57
WTR YR 1987	TOTAL	180820		MEAN	495	MAX	9910	MIN	24	CFSM	.98	IN.	13.37

GREAT MIAMI RIVER BASIN

197

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 699.97 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 1, 2. Records good except for periods of estimated record and Jan. 16 to Feb. 4, 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.--62 years, 583 ft³/s, 12.18 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, 7,590 ft³/s Oct. 5, gage height, 79.37 ft; minimum daily, 33 ft³/s July 26-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	2500	233	797	309	371	918	595	264	575	241	140	66	
2	4800	221	2950	304	447	1750	1320	249	454	4300	147	59	
3	4800	211	4860	296	837	1040	1080	241	2420	6280	174	55	
4	5730	223	4190	273	824	642	668	231	4630	6130	154	52	
5	7250	236	1820	258	546	471	567	213	3330	4420	145	49	
6	7390	261	1090	253	449	415	1060	206	1020	1220	125	46	
7	6590	263	863	260	419	391	998	202	646	708	116	45	
8	5290	253	765	251	437	364	753	197	459	508	105	46	
9	2380	258	1110	237	398	351	572	190	354	393	100	46	
10	828	242	2400	250	317	311	458	182	291	366	95	46	
11	615	235	1400	257	301	270	414	175	252	320	93	48	
12	496	246	935	240	281	252	757	171	243	2170	92	45	
13	452	244	672	223	272	240	862	166	338	2720	89	43	
14	510	223	512	223	257	232	606	165	339	2390	84	43	
15	678	214	474	248	246	233	1680	160	257	2250	78	44	
16	523	214	428	500	212	228	3360	173	499	1080	72	43	
17	407	213	402	452	212	212	3000	171	824	850	71	39	
18	339	207	401	382	228	201	1580	158	364	526	68	39	
19	294	199	386	392	210	205	1070	308	253	374	68	38	
20	268	204	360	404	197	205	805	906	211	302	63	37	
21	253	243	333	354	194	199	651	698	341	257	62	38	
22	243	345	311	335	196	191	548	726	423	225	63	40	
23	233	317	304	325	198	186	555	899	376	202	58	40	
24	225	284	329	278	192	182	480	450	227	185	56	39	
25	231	255	458	269	183	201	409	310	182	170	59	36	
26	273	2450	616	282	175	207	357	348	159	154	64	33	
27	383	4630	513	251	174	194	330	825	142	156	62	33	
28	377	3260	420	248	194	184	313	444	132	193	75	33	
29	320	1420	374	253	---	180	293	285	122	182	76	33	
30	280	1000	364	288	---	249	285	231	137	159	71	34	
31	253	---	336	335	---	457	---	247	---	145	67	---	
TOTAL	55211	18804	31173	9230	8967	11361	26426	10191	20000	39576	2792	1288	
MEAN	1781	627	1006	298	320	366	881	329	667	1277	90.1	42.9	
MAX	7390	4630	4860	500	837	1750	3360	906	4630	6280	174	66	
MIN	225	199	304	223	174	180	285	158	122	145	56	33	
CFSM	2.74	.96	1.55	.46	.49	.56	1.36	.51	1.03	1.96	.14	.07	
IN.	3.16	1.08	1.78	.53	.51	.65	1.51	.58	1.14	2.26	.16	.07	
CAL YR 1986	TOTAL	295670		MEAN	810	MAX	7390	MIN	55	CFSM	1.25	IN.	16.92
WTR YR 1987	TOTAL	235019		MEAN	644	MAX	7390	MIN	33	CFSM	.99	IN.	13.45

GREAT MIAMI RIVER BASIN

03267000 MAD RIVER NEAR URBANA, OH

LOCATION.--Lat 40°06'27", long 83°47'57", on west line of sec. 35, T.5 E., R. 11 N., Champaign County, Hydrologic Unit 05080001, on left bank at downstream side of bridge on U.S. Highway 36, 1.8 mi upstream from Dugan Run, 1.8 mi downstream from Muddy Creek, 2.5 mi west of Urbana, and at mile 39.7.

DRAINAGE AREA.--162 mi².

PERIOD OF RECORD.--September 1925 to September 1931, August 1939 to current year.

REVISED RECORDS.--WSP 1305: 1930(M), WSP 1505: 1956. WSP 1625: 1929. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 985.22 ft above 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 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.

REMARKS.--Estimated daily discharges: Oct. 3. Records good except for period Oct. 1-4, which are fair. Sediment data collected at this site 1970 to 1974.

COOPERATION.--Gage-height tapes, and 7 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--54 years, 147 ft³/s, 12.33 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 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 1,400 ft³/s and maximum (*).

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 4	1330	*2,500	*7.00	Dec. 9	2130	1,480	5.57
Nov. 26	1230	2,350	6.80	July 2	1530	2,000	6.33
Dec. 3	0600	1,450	5.52				

Minimum daily discharge 75 ft³/s Sept. 10, 11, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	662	207	313	221	164	210	160	129	146	257	132	98
2	626	200	865	218	188	194	324	126	138	1580	129	94
3	500	194	1020	212	212	165	214	126	402	615	144	92
4	1560	211	542	208	181	153	181	123	216	352	129	89
5	792	204	426	202	173	150	178	121	178	283	121	87
6	492	205	383	202	171	145	308	120	165	259	121	84
7	394	198	357	199	169	144	272	120	156	237	115	83
8	343	198	361	194	165	144	216	117	150	219	112	79
9	307	194	671	194	154	140	188	116	147	195	111	76
10	281	183	691	202	154	132	172	114	141	186	110	75
11	265	182	435	194	153	129	169	112	136	178	109	75
12	255	185	378	187	154	129	205	111	163	174	107	76
13	244	178	335	182	152	126	189	107	185	174	105	78
14	258	175	318	182	149	120	174	111	155	394	104	76
15	243	174	311	201	142	119	186	119	146	212	102	75
16	232	171	297	199	139	118	253	113	161	260	103	76
17	230	168	289	188	141	115	225	112	144	222	103	79
18	218	164	293	186	135	115	195	113	139	192	104	81
19	209	170	281	190	133	115	180	134	136	180	102	82
20	202	181	270	190	133	114	171	116	133	172	102	80
21	199	255	264	181	132	115	165	136	134	171	99	80
22	196	212	261	179	132	115	156	196	135	168	101	80
23	191	195	252	173	127	115	160	142	130	173	101	80
24	209	187	250	176	126	115	153	129	128	161	99	80
25	225	182	253	160	127	116	148	122	126	154	99	80
26	444	1250	242	158	129	118	142	127	125	153	107	80
27	292	691	239	157	129	113	139	156	121	148	106	80
28	262	442	236	157	137	111	136	138	120	141	104	80
29	242	371	230	158	---	111	136	132	120	134	101	80
30	221	333	225	176	---	169	130	143	133	136	96	80
31	213	---	222	168	---	172	---	187	---	133	99	---
TOTAL	11007	7860	11510	5794	4201	4147	5625	3968	4609	8013	3377	2435
MEAN	355	262	371	187	150	134	188	128	154	258	109	81.2
MAX	1560	1250	1020	221	212	210	324	196	402	1580	144	98
MIN	191	164	222	157	126	111	130	107	120	133	96	75
CFSM	2.19	1.62	2.29	1.15	.93	.83	1.16	.79	.95	1.59	.67	.50
IN.	2.53	1.80	2.64	1.33	.96	.95	1.29	.91	1.06	1.84	.78	.56
CAL YR 1986	TOTAL	86116	MEAN	236	MAX	1560	MIN	94	CFSM	1.46	IN.	19.77
WTR YR 1987	TOTAL	72546	MEAN	199	MAX	1580	MIN	75	CFSM	1.23	IN.	16.66

GREAT MIAMI RIVER BASIN

199

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.

GAGE.--Water-stage recorder. Datum of gage is 904.66 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good except those for Mar. 7 to July 2, and those above 2,000 ft³/s, 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 23.2 ft³/s in 1987, 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.--22 years, 313 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)
Oct. 1	1730	3,350	10.45	Dec. 3	0600	2,980	10.00
Oct. 4	0930	*8,080	*14.97	Dec. 9	2230	2,840	9.82
Nov. 26	1230	4,750	11.98	July 2	1300	2,950	9.96

Minimum daily discharge, 123 ft³/s Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1690	368	560	368	275	427	361	225	223	352	190	141
2	1230	354	2000	365	316	386	753	220	203	2320	186	137
3	826	345	2200	352	373	311	476	216	525	964	208	135
4	5380	374	1090	344	316	278	381	205	321	605	194	131
5	1820	390	809	339	295	269	367	200	256	459	186	130
6	1070	409	693	336	288	260	618	197	224	411	179	130
7	820	378	638	336	286	249	562	195	208	364	175	135
8	674	364	638	326	285	245	431	192	199	327	172	135
9	586	358	1360	322	263	241	359	187	194	303	170	134
10	522	347	1460	333	265	225	326	180	190	293	169	133
11	481	351	849	323	261	220	309	177	187	276	169	133
12	451	380	704	312	261	218	434	171	246	268	165	135
13	442	356	606	305	259	211	379	169	279	270	161	133
14	473	335	563	308	257	203	330	169	220	603	161	130
15	437	330	543	342	247	201	354	194	259	351	155	131
16	407	326	524	343	235	199	660	173	354	369	153	132
17	387	318	511	318	244	193	519	166	231	328	154	135
18	362	312	516	317	241	190	412	172	208	290	152	133
19	341	320	491	355	234	188	358	225	201	271	149	132
20	335	351	470	348	230	185	328	202	197	259	147	130
21	328	524	451	320	227	182	311	255	202	248	146	130
22	321	417	442	316	226	175	296	409	197	253	146	132
23	315	379	433	301	226	175	306	263	191	256	141	131
24	311	355	435	269	221	175	291	221	187	238	138	129
25	425	337	443	272	219	178	279	205	186	224	138	127
26	931	3150	427	266	217	173	265	219	183	220	155	126
27	597	1430	413	263	213	170	258	229	171	217	149	125
28	502	879	400	263	239	168	252	205	171	209	146	123
29	447	692	389	265	---	168	243	191	168	204	142	126
30	414	588	385	312	---	318	236	211	184	197	138	128
31	385	---	373	292	---	379	---	283	---	193	145	---
TOTAL	23710	15817	21816	9831	7219	7160	11454	6526	6765	12142	4979	3942
MEAN	765	527	704	317	258	231	382	211	226	392	161	131
MAX	5380	3150	2200	368	373	427	753	409	525	2320	208	141
MIN	311	312	373	263	213	168	236	166	168	193	138	123
CAL YR 1986	TOTAL	162321		MEAN	445	MAX	5380	MIN	138			
WTR YR 1987	TOTAL	131361		MEAN	360	MAX	5380	MIN	123			

GREAT MIAMI RIVER BASIN

03269500 MAD RIVER NEAR SPRINGFIELD, OH

LOCATION.--Lat 39°55'23", long 83°52'13", in NW 1/4 sec. 16, R.9, T.4, Clark County, Hydrologic Unit 05080001, on right bank 150 ft downstream from Rock Run, 300 ft downstream from bridge on Lower Valley Pike, 2 mi downstream from Buck Creek, 3 mi west of Springfield, and at mile 24.1.

DRAINAGE AREA.--490 mi².

PERIOD OF RECORD.--January 1904 to March 1906 (fragmentary), February 1914 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 603: 1924. WSP 823: 1929(M). WSP 1305: 1914(M), 1916-17(M), 1922-23(M), 1925(M). WSP 1625: 1924(M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 881.42 ft above 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.--No estimated daily discharges. Records good. 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 7 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--74 years, (1904-05, 1914-87), 492 ft³/s, 13.64 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, 7,080 ft³/s Oct. 4, gage height, 9.51 ft; minimum daily, 184 ft³/s Sept. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	2020	547	891	523	475	608	578	378	451	699	267	249	
2	1560	529	2700	519	511	591	1070	371	497	3310	251	199	
3	1220	522	2950	503	501	538	693	362	1360	1280	271	196	
4	5670	574	1590	475	442	494	566	352	649	797	255	192	
5	2470	590	1420	461	419	451	558	343	539	642	246	188	
6	1560	605	1280	459	413	423	821	340	444	588	244	184	
7	1520	571	1210	434	418	369	773	338	370	534	257	188	
8	1380	557	1210	394	483	349	604	332	347	493	251	192	
9	1280	545	1820	390	460	347	548	322	316	466	242	189	
10	1180	530	2020	418	462	327	488	312	297	451	233	186	
11	941	556	1150	397	448	313	463	308	286	432	229	189	
12	642	573	971	380	362	310	644	302	370	431	227	194	
13	644	549	830	374	351	303	547	294	381	425	224	189	
14	714	527	770	382	345	296	491	298	314	702	219	189	
15	635	527	740	414	330	293	586	388	312	445	209	192	
16	595	523	717	415	318	292	1060	310	493	464	204	191	
17	571	514	701	388	332	286	798	298	345	400	208	202	
18	543	497	715	398	335	286	620	302	317	359	205	195	
19	518	488	678	505	321	285	541	362	307	338	195	191	
20	513	561	612	509	317	281	502	365	299	326	193	204	
21	505	728	538	527	315	278	478	480	316	311	212	208	
22	495	609	557	520	314	275	479	831	302	315	218	216	
23	485	567	607	493	316	278	607	560	292	309	207	214	
24	480	531	623	474	307	280	567	483	282	295	197	210	
25	727	528	610	369	340	292	547	465	292	281	198	207	
26	1270	3620	557	357	376	282	526	486	291	285	217	205	
27	853	1930	541	373	380	279	522	467	275	281	210	203	
28	716	1250	529	379	426	276	515	439	261	272	207	206	
29	638	1020	525	454	---	284	469	410	250	266	266	214	
30	594	871	523	512	---	612	395	380	319	260	267	209	
31	566	---	515	470	---	624	---	452	---	325	278	---	
TOTAL	33505	22539	31100	13666	10817	11202	18056	12130	11574	16782	7107	5991	
MEAN	1081	751	1003	441	386	361	602	391	386	541	229	200	
MAX	5670	3620	2950	527	511	624	1070	831	1360	3310	278	249	
MIN	480	488	515	357	307	275	395	294	250	260	193	184	
CFSM	2.21	1.53	2.05	.90	.79	.74	1.23	.80	.79	1.10	.47	.41	
IN.	2.54	1.71	2.36	1.04	.82	.85	1.37	.92	.88	1.27	.54	.45	
CAL YR 1986	TOTAL	239303		MEAN	656	MAX	5670	MIN	200	CFSM	1.34	IN.	18.17
WTR YR 1987	TOTAL	194469		MEAN	533	MAX	5670	MIN	184	CFSM	1.09	IN.	14.76

GREAT MIAMI RIVER BASIN

201

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: Oct. 1-5. Records fair. Flood flows affected by backwater from Huffman retarding dam beginning in 1921, some regulation by C. J. Brown Reservoir 26 mi upstream on Buck Creek since 1972. Also see REMARKS for station 03269500.

COOPERATION.--Gage-height tapes and 8 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--73 years, 632 ft³/s, 13.52 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, 6,490 ft³/s Oct. 5, gage height, 13.25 ft; minimum daily, 197 ft³/s Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	3000	702	1120	704	613	820	925	523	577	728	401	319	
2	2500	673	3220	700	658	833	1480	516	1010	3210	310	239	
3	2000	656	4190	682	675	734	1120	507	2770	2260	301	220	
4	4500	723	2310	642	604	651	845	488	1210	1100	307	209	
5	6000	751	1860	621	560	595	801	463	837	891	286	204	
6	2080	802	1620	613	547	565	1050	457	698	782	279	201	
7	1890	766	1500	605	541	506	1100	455	563	700	282	201	
8	1670	732	1460	549	600	471	896	452	517	634	283	210	
9	1520	709	1800	539	585	470	741	446	467	593	277	211	
10	1400	679	2960	581	592	451	689	437	427	575	261	208	
11	1190	710	1610	558	579	427	626	428	399	624	258	205	
12	887	735	1320	533	510	420	842	421	449	610	259	212	
13	839	721	1160	519	476	409	799	405	511	545	290	213	
14	908	677	1070	519	466	400	687	396	435	748	265	201	
15	842	666	1020	542	453	397	940	481	393	628	252	197	
16	783	665	999	566	420	391	1480	411	628	547	242	199	
17	738	654	972	534	446	386	1300	387	488	539	239	206	
18	697	636	968	536	445	382	956	380	419	457	240	224	
19	661	623	926	707	434	385	793	434	397	422	232	210	
20	645	661	876	750	420	379	709	443	388	399	222	210	
21	634	867	758	738	417	374	659	531	388	384	222	217	
22	621	808	747	722	417	372	622	1170	411	371	244	225	
23	606	746	798	684	417	370	801	721	383	377	232	223	
24	600	697	829	716	411	374	749	578	370	364	225	223	
25	703	673	847	661	412	382	724	527	363	347	228	220	
26	1700	3750	776	587	455	382	681	576	382	351	236	220	
27	1190	3550	748	538	461	377	669	528	359	364	248	219	
28	975	1780	727	510	504	374	668	499	345	343	239	216	
29	857	1400	718	555	---	382	647	467	323	331	266	223	
30	794	1190	721	690	---	888	551	502	378	320	302	233	
31	740	---	699	629	---	1050	---	695	---	324	307	---	
TOTAL	44170	29402	41329	19030	14118	15397	25550	15724	17285	20868	8235	6518	
MEAN	1425	980	1333	614	504	497	852	507	576	673	266	217	
MAX	6000	3750	4190	750	675	1050	1480	1170	2770	3210	401	319	
MIN	600	623	699	510	411	370	551	380	323	320	222	197	
CFSM	2.24	1.54	2.10	.97	.79	.78	1.34	.80	.91	1.06	.42	.34	
IN.	2.59	1.72	2.42	1.11	.83	.90	1.50	.92	1.01	1.22	.48	.38	
CAL YR 1986	TOTAL	321011		MEAN	879	MAX	6000	MIN	265	CFSM	1.38	IN.	18.81
WTR YR 1987	TOTAL	257626		MEAN	706	MAX	6000	MIN	197	CFSM	1.11	IN.	15.09

GREAT MIAMI RIVER BASIN

03270500 GREAT MIAMI RIVER AT DAYTON, OH

LOCATION.--Lat 39°45'55", long 84°11'51", in sec. 10, R.7, T.1, Montgomery County, Hydrologic Unit 05080002, on left bank 1,000 ft downstream from Main Street Bridge in Dayton, 0.7 mi upstream from Wolf Creek, 0.8 mi downstream from Mad River, and at mile 80.0.

DRAINAGE AREA.--2,511 mi².

PERIOD OF RECORD.--April to September 1905, January to September 1906, January 1907 to December 1909 (gage heights only), April 1913 to current year. Monthly discharge only for October 1919 to September 1921, published in WSP 1305. Gage-height records collected at Main Street Bridge since January 1892 are contained in reports of National Weather Service. Prior to October 1962, published as Miami River at Dayton.

REVISED RECORDS.--WSP 1385: 1917. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft above 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.--No estimated daily discharge. 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.

COOPERATION.--Gage-height charts, tapes, and 8 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--58 years (1929-87). 2,177 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, 29,400 ft³/s Oct. 5, gage height 31.64 ft; minimum daily, 276 ft³/s Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6460	1590	4110	1880	1550	2390	2870	1350	1970	1700	632	490
2	15400	1480	10000	1820	1660	4490	4550	1290	2600	12900	556	423
3	12800	1420	17200	1800	2480	3470	4790	1170	7520	17600	606	361
4	19800	1590	14300	1710	3070	2490	3290	1140	10700	16200	607	354
5	27500	1650	8520	1640	2380	2070	2930	1100	8870	13000	609	337
6	19600	1810	5850	1620	2040	1790	4550	1060	4780	6950	540	326
7	13000	1790	4670	1530	1890	1630	5570	1020	3510	4690	493	326
8	10300	1690	4040	1380	1900	1500	4460	968	2710	3670	492	323
9	6550	1640	5050	1310	1870	1420	3330	893	2030	2740	464	313
10	3820	1690	10800	1380	1630	1370	2670	904	1540	2120	458	313
11	3010	1810	7130	1390	1510	1450	2270	862	1360	1980	451	313
12	2450	1800	4820	1330	1400	1280	2860	852	1280	3380	461	304
13	2260	1830	3630	1240	1330	1120	3140	838	1970	4410	488	298
14	2400	1730	2940	1200	1300	1090	2590	832	2670	5130	465	292
15	2990	1640	2710	1300	1250	1060	3950	871	2480	5160	414	299
16	2680	1530	2530	1940	1120	1050	7910	865	2650	2730	374	299
17	2240	1490	2480	1860	1080	1040	8020	899	2640	2700	367	329
18	1950	1430	2470	1630	1170	1020	5030	853	1780	2340	375	351
19	1750	1390	2440	1850	1110	1020	3560	1040	1360	1650	351	327
20	1590	1630	2320	1930	1050	1020	2840	2520	1170	1310	339	316
21	1520	2330	2100	1740	1020	985	2440	2360	1170	1110	319	289
22	1450	3230	2010	1600	1020	970	2170	2650	1300	968	368	299
23	1380	2760	1970	1530	1020	954	2440	2460	1480	889	323	321
24	1330	2310	2070	1350	1020	951	2170	1750	1280	822	293	311
25	1490	2050	2240	1140	984	992	2040	1420	1030	768	285	319
26	2630	10200	2540	1140	989	1000	1970	1470	941	730	313	311
27	2910	16800	2460	1190	996	966	1760	1850	831	710	355	276
28	2550	11500	2220	1230	1180	940	1660	2230	767	720	414	287
29	2170	6930	2080	1270	---	951	1590	1740	699	702	458	335
30	1880	4980	2020	1470	---	1910	1510	1430	821	639	459	339
31	1700	---	1960	1480	---	2410	---	1500	---	576	474	---
TOTAL	179560	95720	141680	46880	41019	46799	100930	42187	75909	120994	13603	9781
MEAN	5792	3191	4570	1512	1465	1510	3364	1361	2530	3903	439	326
MAX	27500	16800	17200	1940	3070	4490	8020	2650	10700	17600	632	490
MIN	1330	1390	1960	1140	984	940	1510	832	699	576	285	276
CAL YR 1986	TOTAL	1207079		MEAN	3307	MAX	27500	MIN	334			
WTR YR 1987	TOTAL	915062		MEAN	2507	MAX	27500	MIN	276			

GREAT MIAMI RIVER BASIN

203

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 September 1987.

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: Jan. 30 to Feb. 2. Records good except for periods of estimated record, which are fair.

COOPERATION.--Gage-height tapes and 8 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--13 years, 56.7 ft³/s, 11.21 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)
Oct. 1	1445	3,050	6.79	Apr. 15	0445	1,480	5.34
Oct. 4	0815	1,470	5.33	June 3	0200	2,990	6.75
Nov. 26	0630	*4,820	*7.98	July 2	0015	2,730	6.54
Dec. 2	2245	1,650	5.53	July 11	1830	3,400	7.05

Minimum daily discharge, 4.6 ft³/s Sept. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	957	21	164	39	35	292	208	37	26	397	11	6.8
2	384	20	946	41	50	147	355	39	205	611	12	6.2
3	172	20	669	37	42	81	135	36	882	96	28	5.9
4	844	35	216	35	35	57	90	33	120	47	38	5.5
5	312	40	122	33	32	49	158	30	60	32	23	5.4
6	133	45	88	34	33	44	238	30	42	87	12	5.4
7	83	36	75	34	34	39	156	30	34	44	11	5.9
8	59	33	67	30	36	38	103	28	29	29	9.8	7.1
9	42	42	373	31	28	36	75	27	27	44	10	6.0
10	32	34	286	44	28	30	62	25	24	41	10	5.6
11	28	47	127	37	28	29	59	23	21	570	9.6	5.4
12	26	45	84	32	31	28	320	22	26	281	9.1	7.9
13	38	36	60	31	27	26	133	21	22	93	9.2	5.5
14	48	30	53	35	27	27	106	20	20	55	8.3	5.5
15	34	30	48	41	26	27	909	20	116	37	8.0	5.4
16	28	29	45	36	21	25	762	19	58	35	8.0	5.0
17	25	27	45	33	26	22	306	19	21	27	8.0	7.2
18	22	25	52	36	28	22	176	25	17	23	7.9	6.0
19	20	24	45	80	25	29	119	29	16	21	7.2	4.8
20	20	35	41	51	23	23	91	19	19	19	6.9	5.1
21	19	39	37	42	24	22	75	70	20	17	7.5	5.0
22	18	31	36	39	26	21	65	54	17	15	36	5.1
23	17	30	35	32	26	21	140	27	14	15	13	4.7
24	17	27	61	29	23	20	76	21	13	14	8.2	4.6
25	47	28	73	24	22	40	63	22	14	13	8.8	4.8
26	45	1430	55	23	22	28	54	55	15	13	10	4.7
27	35	327	46	22	22	22	50	138	11	15	8.3	4.7
28	28	170	42	23	89	21	46	42	11	14	7.9	5.0
29	24	104	39	37	---	32	42	27	11	12	7.2	8.3
30	23	74	44	45	---	206	40	56	28	12	6.2	5.6
31	21	---	38	32	---	166	---	48	---	12	7.6	---
TOTAL	3601	2914	4112	1118	869	1670	5212	1092	1939	2741	367.7	170.1
MEAN	116	97.1	133	36.1	31.0	53.9	174	35.2	64.6	88.4	11.9	5.67
MAX	957	1430	946	80	89	292	909	138	882	611	38	8.3
MIN	17	20	35	22	21	20	40	19	11	12	6.2	4.6
WTR YR 1987	TOTAL	25805.8		MEAN	70.7	MAX	1430	MIN	4.6			

GREAT MIAMI RIVER BASIN

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 mi².

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.--No estimated daily discharges. Records fair. 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 8 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--50 years, 2,454 ft³/s, 12.29 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, 28,800 ft³/s Oct. 5, gage height, 13.94 ft; minimum daily, 376 ft³/s Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5530	1850	4740	2190	1750	2790	3520	1640	2200	2090	917	599
2	15300	1710	10500	2150	1850	4830	5130	1740	2950	12500	867	539
3	12900	1640	18300	2130	2520	4040	5450	1630	8310	17900	912	562
4	18500	1840	15700	2010	3420	2970	3940	1510	10700	16900	952	461
5	27200	1910	9450	1920	2780	2460	3500	1450	9350	14000	970	411
6	21300	2140	6420	1900	2370	2140	4840	1400	5310	8050	881	429
7	13600	2080	5240	1820	2180	1940	6040	1360	3860	5350	790	421
8	10700	1960	4550	1640	2170	1780	5030	1300	3070	4300	764	446
9	7500	1890	5360	1560	2170	1700	3910	1230	2360	3420	703	446
10	4470	1900	10900	1670	1920	1610	3180	1230	1830	2770	675	444
11	3600	2090	7970	1660	1770	1670	2750	1180	1630	3730	648	436
12	2950	2030	5470	1610	1680	1520	3540	1170	1580	4380	642	438
13	2660	2050	4220	1480	1580	1370	3730	1140	2010	5250	630	432
14	2870	1920	3490	1450	1530	1310	3150	1120	2950	4920	619	419
15	3390	1860	3170	1510	1470	1270	5340	1200	2920	6240	560	419
16	3160	1710	2990	2070	1370	1250	9330	1130	3200	3480	544	425
17	2610	1660	2950	2180	1300	1240	8930	1170	3010	3230	543	442
18	2280	1600	2940	1880	1400	1190	6030	1100	2110	2980	535	469
19	2050	1550	2890	2310	1350	1220	4290	1320	1620	2200	508	416
20	1880	1750	2740	2350	1270	1200	3470	2510	1410	1730	483	388
21	1790	2340	2490	2080	1220	1140	2980	2760	1360	1520	488	397
22	1720	3510	2370	1890	1210	1110	2650	3160	1500	1330	767	421
23	1640	3100	2350	1820	1240	1100	3100	2850	1690	1230	662	418
24	1580	2570	2500	1760	1220	1110	2690	2120	1560	1120	469	416
25	1740	2250	2670	1470	1190	1180	2430	1710	1280	1050	482	406
26	2840	10600	2960	1700	1180	1190	2330	1910	1150	991	537	387
27	3250	17600	2900	1360	1180	1150	2080	2230	1050	1040	531	376
28	3010	12700	2610	1360	1410	1110	1960	2480	962	982	562	382
29	2530	7790	2440	1410	---	1090	1880	2120	911	976	594	418
30	2190	5610	2400	1740	---	2680	1810	1660	1090	910	589	431
31	2030	---	2320	1680	---	2990	---	1870	---	951	593	---
TOTAL	188770	105210	158000	55760	47700	55350	119010	52400	84933	137520	20417	13094
MEAN	6089	3507	5097	1799	1704	1785	3967	1690	2831	4436	659	436
MAX	27200	17600	18300	2350	3420	4830	9330	3160	10700	17900	970	599
MIN	1580	1550	2320	1360	1180	1090	1810	1100	911	910	469	376
CFSM	2.25	1.29	1.88	.66	.63	.66	1.46	.62	1.04	1.64	.24	.16
IN.	2.59	1.44	2.17	.77	.65	.76	1.63	.72	1.17	1.89	.28	.18
CAL YR 1986	TOTAL	1321397	MEAN	3620	MAX	27200	MIN	502	CFSM	1.34	IN.	18.13
WTR YR 1987	TOTAL	1038164	MEAN	2844	MAX	27200	MIN	376	CFSM	1.05	IN.	14.25

GREAT MIAMI RIVER BASIN

205

03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH

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.

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, 9.1 units July 7, 1979, July 13-15, 23, 1983; minimum, 7.0 units July 30, Aug. 30, 1979.

WATER TEMPERATURES: Maximum, 33.0°C July 20, 22, 1978; minimum, 0.0°C on several days during winter 1979, 1980, 1982, 1984, 1986.

DISSOLVED OXYGEN: Maximum, >20.0 mg/L July 12, 1978, Aug. 15, 16, 1982, Feb. 10, 13, 15, 1987; minimum, 0.4 mg/L Aug. 27, 1981, Aug. 2, 1982.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum 1,110 microsiemens Sept. 5; minimum, 288 microsiemens Oct. 5.

pH: Maximum, 9.0 units Aug. 3, minimum, 7.5 units May 22.

WATER TEMPERATURES: Maximum, 29.0°C Aug. 3, 4; minimum, 0.0°C on Jan. 23-27.

DISSOLVED OXYGEN: Maximum >20.0 mg/L Feb. 10, 13, 15; minimum, 2.7 mg/L May 19.

GREAT MAIMI RIVER BASIN

03271510 GREAT MAIMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH-Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER				NOVEMBER			DECEMBER			JANUARY		
1	652	348	563	766	750	757	626	556	605	762	748	755
2	364	330	348	770	758	762	546	460	516	752	732	743
3	426	368	398	792	774	779	448	386	407	750	726	737
4	414	300	364	794	752	769	460	384	413	742	724	732
5	336	288	306	762	742	756	536	462	499	752	728	738
6	392	340	365	768	742	752	588	538	562	776	736	752
7	432	394	408	772	754	766	618	590	600	772	736	753
8	514	434	467	784	762	769	654	602	633	770	750	760
9	594	516	553	786	762	774	654	630	641	780	758	765
10	638	596	614	776	760	771	626	480	536	814	764	775
11	666	616	642	776	742	754	544	484	513	874	788	816
12	696	664	672	758	746	753	606	546	573	866	810	832
13	710	680	697	760	738	750	648	600	621	842	780	833
14	710	676	695	762	740	751	680	650	660	576	572	609
15	708	686	698	764	742	752	714	682	692	576	570	572
16	708	680	701	768	752	760	724	706	711	---	---	---
17	724	706	713	780	758	766	738	718	728	---	---	---
18	730	706	714	788	776	779	736	726	732	---	---	---
19	740	716	725	782	756	766	736	712	724	---	---	---
20	768	736	744	784	754	769	732	714	720	---	---	---
21	770	748	761	762	736	747	736	718	727	---	---	---
22	782	750	762	742	662	701	754	732	740	---	---	---
23	790	770	778	670	652	662	756	730	743	---	---	---
24	796	772	782	702	660	675	744	716	727	---	---	---
25	788	744	769	714	672	701	718	700	709	---	---	---
26	754	632	690	656	380	442	704	692	698	---	---	---
27	716	640	674	410	358	381	710	702	705	---	---	---
28	732	714	723	508	414	459	710	698	704	---	---	---
29	744	718	726	568	510	537	712	698	705	908	874	888
30	748	728	736	608	570	586	844	706	746	902	856	884
31	764	738	748	---	---	---	848	738	778	884	848	867
MONTH	796	288	630	794	358	705	848	384	647	908	570	767
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	862	826	842	896	812	843	900	842	864	828	788	812
2	852	824	840	816	738	770	844	794	810	836	714	802
3	842	788	817	734	710	722	---	---	---	824	738	794
4	786	704	741	756	720	737	778	704	732	844	806	830
5	722	682	697	776	748	759	810	762	789	860	820	844
6	728	696	712	800	770	778	806	730	782	858	820	842
7	760	720	730	812	774	791	728	666	686	864	830	850
8	772	748	757	814	778	795	692	666	679	868	834	857
9	794	754	767	822	792	805	734	694	710	872	828	853
10	812	778	790	840	800	818	760	730	742	876	828	850
11	824	788	805	840	800	823	782	752	763	864	826	847
12	882	800	825	852	810	829	764	684	725	880	834	859
13	886	798	838	872	826	851	742	724	732	896	836	867
14	846	808	824	884	830	857	776	730	756	896	852	881
15	844	802	822	858	804	830	714	636	671	906	802	868
16	844	812	824	840	812	830	660	598	619	902	856	883
17	896	838	858	866	820	845	646	608	624	900	846	868
18	1010	896	952	874	836	858	696	648	671	916	850	898
19	1070	954	1010	878	842	862	728	698	712	932	858	891
20	946	912	930	880	850	871	762	730	745	888	728	831
21	940	892	918	896	856	876	786	762	771	772	674	741
22	912	870	893	886	850	869	806	780	788	692	584	643
23	898	864	883	882	852	870	774	724	756	738	680	698
24	900	866	887	894	854	877	784	768	775	770	728	742
25	904	864	887	900	850	879	812	782	789	776	740	762
26	918	860	891	894	858	877	810	784	796	794	702	771
27	906	864	888	910	868	893	828	796	805	754	710	729
28	908	840	887	920	860	887	828	796	812	790	758	778
29	---	---	---	908	780	872	828	786	807	798	776	787
30	---	---	---	830	636	719	826	784	804	772	684	724
31	---	---	---	954	804	893	---	---	---	752	674	717
MONTH	1070	682	840	954	636	832	900	598	749	932	584	810

03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	724	680	707	858	506	733	916	852	881	982	922	953
2	772	592	731	526	362	434	894	824	861	994	930	972
3	546	364	447	360	330	342	866	826	843	1000	938	977
4	558	480	497	408	362	388	876	824	849	988	944	961
5	548	486	507	474	400	423	888	824	861	1110	990	1050
6	622	552	587	532	478	499	892	848	871	1010	950	969
7	652	600	632	584	536	556	916	866	899	956	928	941
8	702	652	670	618	586	599	942	872	908	956	928	945
9	748	680	705	654	600	629	930	874	901	998	942	980
10	788	740	756	698	648	672	934	892	921	1010	960	996
11	816	772	790	714	536	662	992	928	964	1040	978	1020
12	832	792	813	676	474	586	988	946	967	1060	1010	1040
13	828	784	806	658	510	559	988	956	971	1030	1000	1020
14	784	680	730	634	582	612	992	922	951	1030	974	997
15	748	590	676	590	404	460	1020	932	971	1070	1000	1050
16	652	508	578	644	508	574	980	932	955	1070	1030	1050
17	698	636	662	696	650	674	984	928	961	1090	1010	1060
18	736	680	703	736	684	701	1010	954	990	1060	1030	1050
19	784	730	747	730	690	706	1050	982	1020	1080	1020	1050
20	784	742	765	774	720	736	1040	988	1020	1070	1040	1060
21	788	764	778	802	776	783	1050	1000	1030	1080	1020	1040
22	802	768	783	844	800	814	1040	800	998	1080	1020	1050
23	808	774	791	860	800	842	778	706	756	1080	1040	1060
24	814	766	779	878	800	845	980	780	880	1070	1050	1060
25	848	800	817	860	798	825	1030	970	1000	1070	1030	1050
26	874	826	854	844	788	812	1020	976	1000	1090	1040	1070
27	876	822	849	840	724	802	996	966	984	1090	1050	1070
28	866	836	854	866	820	849	1020	960	996	1080	1030	1050
29	882	786	863	886	818	860	1010	942	980	1100	1040	1070
30	906	806	855	878	814	850	980	936	957	1070	1040	1060
31	---	---	---	878	832	856	972	922	948	---	---	---
MONTH	906	364	724	886	330	667	1050	706	939	1110	922	1020
YEAR	1110	288	778									

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.97	7.76	7.89	8.25	8.16	8.20	8.20	8.16	8.19	8.35	8.30	8.32
2	7.77	7.68	7.70	8.24	8.17	8.20	8.20	8.09	8.15	8.38	8.33	8.35
3	7.84	7.71	7.77	8.27	8.18	8.22	8.07	7.96	8.00	8.41	8.34	8.37
4	7.82	7.67	7.74	8.22	8.13	8.19	8.04	7.94	7.98	8.44	8.35	8.39
5	7.71	7.64	7.67	8.17	8.06	8.13	8.15	8.05	8.10	8.46	8.33	8.41
6	7.84	7.72	7.76	8.14	8.00	8.10	8.20	8.10	8.17	8.48	8.35	8.40
7	7.90	7.82	7.86	8.24	8.15	8.19	8.22	8.19	8.20	8.42	8.30	8.38
8	7.99	7.90	7.93	8.28	8.18	8.23	8.23	8.00	8.19	8.39	8.29	8.34
9	8.08	7.98	8.02	8.32	8.20	8.25	8.20	8.17	8.19	8.44	8.28	8.35
10	8.18	8.00	8.10	8.37	8.24	8.30	8.20	8.11	8.16	8.42	8.33	8.37
11	8.18	8.13	8.15	8.31	8.21	8.28	8.12	8.00	8.11	8.49	8.32	8.40
12	8.20	8.16	8.17	8.36	8.22	8.28	8.20	8.12	8.16	8.60	8.38	8.48
13	8.17	8.11	8.15	8.41	8.27	8.34	8.23	8.20	8.22	8.69	8.41	8.53
14	8.22	8.15	8.18	8.43	8.32	8.38	8.25	8.23	8.24	8.54	8.39	8.48
15	8.25	8.18	8.21	8.41	8.31	8.37	8.25	8.23	8.24	8.42	8.27	8.35
16	8.25	8.20	8.22	8.42	8.30	8.36	8.25	8.22	8.24	8.45	8.11	8.25
17	8.21	8.17	8.20	8.47	8.32	8.38	8.25	8.22	8.23	8.29	8.15	8.21
18	8.23	8.14	8.20	8.36	8.32	8.35	8.25	8.22	8.23	8.21	8.06	8.15
19	8.24	8.21	8.22	8.47	8.31	8.41	8.26	8.23	8.25	8.09	7.89	8.04
20	8.26	8.20	8.23	8.35	8.22	8.31	8.29	8.25	8.26	8.10	7.91	8.01
21	8.25	8.16	8.20	8.33	8.21	8.27	8.28	8.26	8.27	8.29	8.06	8.16
22	8.26	8.14	8.19	8.31	8.26	8.28	8.30	8.26	8.27	8.27	8.14	8.20
23	8.21	8.15	8.19	8.30	8.21	8.25	8.29	8.25	8.28	8.36	8.15	8.24
24	8.20	8.14	8.18	8.26	8.20	8.23	8.28	8.24	8.26	8.58	8.21	8.38
25	8.19	8.15	8.17	8.34	8.22	8.28	8.27	8.24	8.26	8.56	8.43	8.48
26	8.15	8.06	8.11	8.29	7.98	8.13	8.31	8.28	8.29	8.52	8.43	8.46
27	8.18	8.02	8.13	7.97	7.88	7.91	8.32	8.28	8.30	8.50	8.38	8.44
28	8.24	8.17	8.20	8.04	7.91	7.98	8.31	8.27	8.29	8.46	8.36	8.41
29	8.21	8.16	8.18	8.12	8.05	8.08	8.33	8.29	8.31	8.42	8.31	8.37
30	8.20	8.15	8.18	8.18	8.12	8.15	8.33	8.29	8.31	8.33	8.24	8.29
31	8.22	8.17	8.19	---	---	---	8.33	8.30	8.31	8.43	8.22	8.31
MONTH	8.26	7.64	8.07	8.47	7.88	8.23	8.33	7.94	8.21	8.69	7.89	8.33

GREAT MIAMI RIVER BASIN

03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	8.53	8.32	8.41	8.41	8.29	8.34	8.38	8.27	8.33	8.87	8.50	8.64
2	8.60	8.39	8.46	8.32	8.27	8.29	8.36	8.26	8.29	8.83	8.47	8.60
3	8.48	8.37	8.43	8.36	8.22	8.27	8.24	8.22	8.23	8.55	8.29	8.42
4	8.37	8.20	8.29	8.48	8.36	8.42	8.28	8.23	8.26	8.64	8.19	8.39
5	8.27	8.17	8.23	8.47	8.41	8.44	8.35	8.27	8.30	8.73	8.32	8.51
6	8.39	8.23	8.30	8.70	8.39	8.53	8.36	8.31	8.33	8.75	8.39	8.56
7	8.55	8.27	8.41	8.86	8.58	8.69	8.32	8.20	8.25	8.69	8.31	8.48
8	8.50	8.39	8.44	8.93	8.61	8.74	8.34	8.18	8.24	8.68	8.24	8.45
9	8.72	8.43	8.57	8.76	8.56	8.67	8.40	8.26	8.34	8.85	8.30	8.56
10	8.79	8.54	8.64	8.89	8.55	8.71	8.56	8.36	8.45	8.77	8.31	8.54
11	8.78	8.55	8.64	8.98	8.68	8.82	8.66	8.42	8.52	8.73	8.29	8.49
12	8.75	8.47	8.61	8.98	8.75	8.84	8.48	8.30	8.42	8.63	8.00	8.35
13	8.82	8.46	8.61	8.96	8.69	8.81	8.44	8.23	8.34	8.71	8.00	8.37
14	8.73	8.51	8.61	8.94	8.64	8.80	8.52	8.31	8.41	8.61	7.98	8.27
15	8.81	8.47	8.62	8.91	8.63	8.77	8.41	8.00	8.21	8.56	8.01	8.26
16	8.80	8.60	8.69	8.93	8.60	8.77	8.12	7.99	8.03	8.64	8.06	8.34
17	8.75	8.58	8.66	8.95	8.60	8.78	8.02	7.96	7.99	8.61	8.02	8.32
18	8.78	8.50	8.64	8.88	8.62	8.75	8.15	8.02	8.07	8.24	7.81	8.05
19	8.81	8.54	8.68	8.88	8.56	8.71	8.23	8.08	8.15	7.93	7.73	7.83
20	8.79	8.56	8.67	8.80	8.52	8.65	8.23	8.10	8.18	7.86	7.69	7.78
21	8.71	8.53	8.61	8.81	8.42	8.63	8.36	8.10	8.22	7.81	7.63	7.73
22	8.63	8.43	8.55	8.84	8.44	8.65	8.52	8.19	8.33	7.67	7.54	7.61
23	8.73	8.46	8.58	8.82	8.45	8.64	8.37	8.18	8.29	7.72	7.62	7.67
24	8.75	8.51	8.63	8.76	8.38	8.58	8.36	8.20	8.28	7.85	7.72	7.78
25	8.76	8.53	8.65	8.73	8.36	8.54	8.53	8.25	8.37	7.85	7.71	7.79
26	8.76	8.53	8.65	8.68	8.28	8.48	8.65	8.42	8.52	7.81	7.73	7.77
27	8.65	8.52	8.59	8.70	8.28	8.48	8.64	8.40	8.52	7.80	7.63	7.71
28	8.56	8.39	8.48	8.84	8.24	8.55	8.69	8.40	8.52	7.94	7.72	7.81
29	---	---	---	8.80	8.33	8.59	8.76	8.45	8.57	8.02	7.75	7.88
30	---	---	---	8.48	8.03	8.28	8.83	8.43	8.61	7.75	7.63	7.70
31	---	---	---	8.24	8.05	8.15	---	---	---	7.80	7.64	7.73
MONTH	8.82	8.17	8.55	8.98	8.03	8.59	8.83	7.96	8.32	8.87	7.54	8.14
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	7.80	7.71	7.75	8.47	8.00	8.32	8.60	7.98	8.30	8.89	8.33	8.61
2	7.92	7.78	7.85	8.05	7.67	7.84	9.00	8.05	8.52	8.80	8.42	8.66
3	7.79	7.60	7.68	7.71	7.67	7.69	9.04	8.32	8.65	8.87	8.42	8.71
4	7.72	7.60	7.64	7.78	7.71	7.74	8.75	8.02	8.47	8.99	8.58	8.79
5	7.79	7.67	7.72	7.86	7.76	7.79	8.60	8.16	8.36	8.79	8.56	8.69
6	7.89	7.80	7.83	7.93	7.84	7.89	8.76	8.17	8.46	8.94	8.57	8.72
7	7.97	7.88	7.91	8.04	7.92	7.98	8.82	8.22	8.51	9.01	8.56	8.72
8	8.06	7.94	7.97	8.17	8.00	8.04	8.85	8.27	8.57	8.93	8.44	8.62
9	8.06	7.96	7.99	8.08	8.01	8.05	8.81	8.17	8.51	8.66	8.11	8.43
10	8.13	7.95	8.02	8.25	7.97	8.09	8.67	8.23	8.45	8.71	8.22	8.45
11	8.21	7.99	8.08	8.28	8.00	8.11	8.73	8.07	8.41	8.40	7.94	8.19
12	8.20	8.00	8.08	8.17	7.81	7.96	8.70	8.14	8.44	8.13	7.90	8.00
13	8.36	7.96	8.14	8.07	7.85	7.92	8.84	8.17	8.50	8.18	7.92	8.03
14	8.25	8.00	8.09	8.05	7.95	8.00	8.92	8.16	8.51	8.42	7.96	8.15
15	8.08	7.82	7.96	8.01	7.77	7.83	8.87	8.01	8.48	8.19	8.00	8.11
16	7.91	7.73	7.83	8.03	7.88	7.94	8.95	8.32	8.68	8.16	7.94	8.04
17	8.00	7.87	7.92	8.16	8.04	8.09	8.73	8.37	8.57	8.11	7.87	7.99
18	8.09	7.90	7.99	8.22	8.13	8.17	8.51	8.10	8.31	8.04	7.87	7.99
19	8.17	7.96	8.03	8.16	7.98	8.09	8.48	8.05	8.29	8.05	7.85	7.93
20	8.23	7.95	8.05	8.28	8.00	8.15	8.53	8.13	8.35	8.08	7.92	8.00
21	8.42	8.00	8.19	8.45	8.00	8.22	8.46	8.22	8.34	8.44	7.99	8.20
22	8.37	8.00	8.23	8.72	8.17	8.40	8.40	8.04	8.24	8.26	8.00	8.18
23	8.47	8.00	8.24	8.86	8.34	8.56	8.30	7.71	8.09	8.48	8.00	8.23
24	8.58	8.25	8.37	8.96	8.25	8.60	8.53	7.78	8.17	8.45	8.00	8.22
25	8.57	8.14	8.32	9.00	8.02	8.58	8.38	8.16	8.24	8.59	8.29	8.45
26	8.65	8.02	8.36	8.85	8.02	8.49	8.61	8.06	8.33	8.68	8.30	8.51
27	8.55	8.24	8.38	8.57	8.14	8.35	8.45	8.10	8.31	8.73	8.53	8.61
28	8.50	8.00	8.29	8.70	8.08	8.39	8.41	8.07	8.22	8.87	8.59	8.70
29	8.79	8.22	8.47	8.83	8.25	8.52	8.63	8.13	8.34	8.63	8.19	8.39
30	8.79	8.36	8.55	8.88	8.30	8.55	8.99	8.34	8.68	8.41	8.02	8.23
31	---	---	---	8.75	8.20	8.47	8.95	8.65	8.77	---	---	---
MONTH	8.79	7.60	8.06	9.00	7.67	8.16	9.04	7.71	8.42	9.01	7.85	8.35
YEAR	9.04	7.54	8.29									

GREAT MIAMI RIVER BASIN

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03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	23.0	20.5	22.5	14.5	13.0	13.5	7.0	6.0	6.5	5.0	4.5	4.5
2	20.5	20.0	20.0	14.0	13.0	14.0	6.0	5.5	6.0	5.0	4.5	4.5
3	20.5	20.0	20.0	13.0	12.0	12.5	6.0	5.5	6.0	5.0	4.5	4.5
4	20.5	20.0	20.5	12.5	11.5	12.0	5.5	4.5	5.0	5.0	4.5	5.0
5	20.0	19.0	20.0	11.5	11.0	11.5	4.5	4.0	4.5	5.0	4.0	4.5
6	19.0	17.5	18.5	11.5	11.0	11.5	4.0	3.5	4.0	5.0	4.0	4.5
7	17.5	16.5	17.0	12.5	11.5	12.0	5.5	4.0	4.5	5.5	5.0	5.0
8	16.5	16.0	16.5	14.5	13.0	13.5	6.5	5.5	6.0	5.0	4.5	5.0
9	16.0	15.0	15.5	14.0	12.5	13.5	8.0	6.5	7.5	4.5	4.5	4.5
10	15.0	14.5	15.0	12.5	10.5	11.5	7.5	5.5	6.5	4.5	3.5	4.0
11	15.5	14.5	15.0	10.5	9.0	10.0	5.0	4.0	4.5	3.5	3.0	3.5
12	16.0	15.0	15.5	9.0	8.0	8.5	3.5	3.0	3.5	3.5	2.5	3.0
13	16.5	16.0	16.0	8.0	5.5	7.0	3.5	2.5	3.0	4.5	3.0	3.5
14	16.0	13.5	15.0	5.5	4.5	5.0	2.5	2.0	2.5	5.0	4.0	4.5
15	13.5	12.5	13.0	5.5	5.0	5.0	4.0	2.5	3.0	6.0	5.5	5.5
16	13.0	12.0	12.5	6.5	5.5	6.0	4.5	3.5	4.0	6.0	4.5	5.5
17	13.0	12.0	12.5	7.5	6.5	7.0	5.5	4.5	5.0	4.5	3.5	4.0
18	13.0	11.5	12.5	7.5	7.5	7.5	6.0	5.0	5.5	4.0	3.5	4.0
19	13.0	11.5	12.5	7.5	7.5	7.5	5.0	5.0	5.0	4.0	3.5	4.0
20	13.0	12.0	12.5	7.5	7.0	7.5	5.0	4.5	5.0	3.5	3.0	3.0
21	14.0	12.0	13.0	7.0	6.5	7.0	5.0	5.0	5.0	3.0	2.0	2.5
22	15.0	13.5	14.5	6.5	6.0	6.5	5.5	5.0	5.0	2.5	2.0	2.5
23	15.5	15.0	15.0	7.5	6.5	7.0	5.0	4.5	5.0	2.0	.0	1.0
24	15.5	15.0	15.0	7.5	7.0	7.0	5.0	4.5	4.5	.0	.0	.0
25	15.5	15.0	15.0	7.0	6.0	6.5	5.0	4.5	4.5	.5	.0	.0
26	15.0	14.5	15.0	8.5	7.0	8.0	4.5	4.0	4.5	.5	.0	.0
27	15.0	14.0	14.5	8.5	8.0	8.5	4.0	4.0	4.0	1.0	.0	.5
28	14.5	13.5	14.0	8.0	7.5	8.0	4.0	3.5	4.0	1.5	.5	1.0
29	14.5	13.5	14.5	7.5	7.5	7.5	4.0	3.0	3.5	2.0	1.0	1.5
30	14.5	13.5	14.0	7.5	7.0	7.0	4.0	3.5	3.5	2.0	2.0	2.0
31	14.0	12.5	13.5	---	---	---	4.5	4.0	4.0	2.5	2.0	2.0
MONTH	23.0	11.5	15.5	14.5	4.5	9.0	8.0	2.0	4.5	6.0	.0	3.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	3.0	2.5	3.0	7.5	6.5	7.0	7.5	6.5	7.0	18.0	16.0	17.0
2	4.5	3.5	4.0	6.5	5.5	6.0	7.5	6.5	7.0	18.5	16.5	17.5
3	4.5	3.5	4.0	7.0	5.5	6.5	---	---	---	18.0	17.0	17.5
4	3.5	2.5	3.0	7.0	5.5	6.5	6.0	4.5	5.0	17.5	15.0	16.5
5	3.5	2.0	3.0	6.5	6.0	6.5	5.0	4.0	4.5	17.5	15.0	16.5
6	4.5	3.5	4.0	8.5	5.5	7.0	6.0	5.0	5.5	18.0	15.5	17.0
7	5.0	3.5	4.5	10.0	7.5	9.0	8.5	6.0	7.0	17.5	16.5	17.0
8	5.0	3.0	4.5	10.5	9.0	10.0	10.5	8.0	9.0	18.5	16.0	17.0
9	3.0	2.0	2.5	10.5	7.0	9.5	12.0	9.5	11.0	19.5	16.5	18.0
10	3.5	2.0	3.0	6.5	5.0	6.0	13.0	11.0	12.0	20.5	17.5	19.0
11	4.5	3.0	4.0	6.5	5.0	5.5	13.5	12.5	13.0	22.0	19.0	20.5
12	6.0	4.5	5.5	7.0	5.5	6.5	13.0	12.0	12.5	22.0	20.0	21.0
13	6.0	4.5	5.5	7.5	5.5	6.5	12.0	11.0	11.5	21.5	18.5	20.0
14	5.5	5.0	5.5	8.5	7.0	7.5	14.0	12.0	12.5	23.0	20.0	21.5
15	5.0	3.0	4.0	8.0	7.5	8.0	14.0	13.5	13.5	23.5	21.5	22.0
16	2.5	1.5	2.0	9.0	7.0	8.0	13.5	12.0	12.5	22.5	19.5	21.0
17	2.5	1.5	2.0	8.5	6.5	7.5	11.5	11.0	11.5	23.5	20.0	21.5
18	4.0	2.0	3.0	8.0	7.0	7.5	14.0	11.0	12.0	24.0	21.5	23.0
19	5.0	3.0	4.0	10.0	7.5	8.5	15.5	13.0	14.5	23.5	22.0	23.0
20	5.5	3.5	4.5	11.0	8.0	9.5	17.5	15.5	16.5	23.5	22.5	23.0
21	5.5	5.0	5.0	11.5	9.0	10.5	19.5	17.0	18.0	23.5	22.0	22.5
22	6.0	5.5	5.5	12.0	9.5	11.0	19.5	18.5	19.0	23.0	21.5	22.5
23	7.0	5.0	6.0	13.5	10.0	12.0	19.0	18.0	18.5	23.5	22.0	22.5
24	7.0	5.5	6.5	13.5	11.5	12.5	18.0	14.5	16.5	23.5	21.5	22.5
25	7.0	6.0	6.5	13.5	12.0	12.5	15.0	13.0	14.0	22.5	21.5	22.0
26	6.5	6.0	6.5	12.5	11.5	12.0	16.5	14.0	15.0	23.0	21.5	22.0
27	6.0	6.0	6.0	13.5	11.0	12.0	17.0	15.5	16.0	24.5	22.0	23.0
28	7.0	6.0	6.5	15.0	12.0	13.5	16.5	14.5	15.5	25.5	23.0	24.0
29	---	---	---	15.5	13.0	14.5	17.0	14.5	15.5	26.5	24.5	25.5
30	---	---	---	14.0	8.5	11.5	18.0	15.5	16.5	25.5	24.0	25.0
31	---	---	---	8.5	7.5	8.0	---	---	---	24.5	23.0	24.0
MONTH	7.0	1.5	4.5	15.5	5.0	9.0	19.5	4.0	12.5	26.5	15.0	21.0

GREAT MIAMI RIVER BASIN

03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	23.5	22.5	23.0	24.5	23.0	23.5	27.5	26.0	27.0	22.5	20.0	21.5
2	24.0	22.0	23.0	22.5	20.0	21.0	28.5	25.5	27.0	21.5	20.0	21.0
3	22.5	20.0	21.5	21.0	19.5	20.0	29.0	26.5	28.0	22.0	20.0	21.0
4	21.5	20.0	20.5	22.5	20.5	21.5	29.0	27.0	28.0	23.0	20.0	21.5
5	21.0	20.0	20.5	23.0	21.5	22.0	27.5	25.5	26.5	24.0	21.5	22.5
6	22.5	20.0	21.0	23.0	22.0	22.5	26.0	24.0	25.0	24.5	22.5	23.5
7	23.0	21.0	22.0	24.0	22.0	23.0	27.0	24.5	25.5	25.0	23.0	23.5
8	24.0	22.0	23.0	25.5	23.0	24.5	26.5	25.0	26.0	25.0	23.0	24.0
9	24.5	23.0	23.5	25.5	24.5	25.0	26.5	25.5	26.0	25.0	23.0	24.0
10	23.5	21.5	22.5	26.0	24.0	25.0	25.5	24.0	25.0	25.5	23.5	24.0
11	23.0	21.5	22.5	26.0	24.0	25.0	25.5	22.5	24.0	24.5	23.0	24.0
12	22.5	22.0	22.5	25.0	23.0	24.0	25.5	23.5	24.5	23.0	22.5	23.0
13	23.5	21.5	22.5	24.5	23.0	24.0	27.0	24.0	25.5	24.5	21.5	23.0
14	25.0	22.0	23.5	24.0	23.5	23.5	27.5	25.5	26.5	24.5	21.5	23.0
15	25.5	24.0	24.5	23.0	21.0	21.5	27.5	25.0	26.5	23.5	22.0	23.0
16	26.0	24.0	24.5	22.0	20.5	21.0	27.5	25.5	26.5	23.0	22.5	22.5
17	26.5	24.5	25.5	23.0	21.0	22.0	27.5	26.0	26.5	23.5	22.0	22.5
18	27.0	24.5	25.5	24.0	22.0	23.0	26.5	24.0	25.5	22.5	21.5	22.0
19	27.0	25.0	26.0	25.5	23.0	24.0	27.0	24.5	25.5	23.0	21.0	21.5
20	26.0	25.0	25.5	27.0	24.0	25.5	26.5	24.0	25.5	21.5	20.0	20.5
21	26.5	24.5	25.5	28.0	25.0	26.5	25.5	24.0	24.5	20.5	19.0	20.0
22	26.0	24.5	25.5	28.5	26.0	27.0	25.0	23.5	24.5	20.5	18.5	19.5
23	26.0	24.5	25.0	28.5	26.0	27.5	25.0	22.0	23.5	19.5	18.0	19.0
24	26.5	24.0	25.5	28.5	26.5	27.5	24.0	21.5	23.0	20.5	18.0	19.0
25	27.0	24.5	25.5	28.5	26.5	27.5	23.0	20.5	21.5	21.0	18.5	20.0
26	26.0	24.5	25.5	28.5	26.5	27.5	23.0	20.5	21.5	21.0	18.0	19.5
27	25.0	23.0	24.0	26.5	25.5	26.0	23.5	22.5	23.0	21.0	18.5	20.0
28	24.5	21.5	23.0	27.0	24.5	25.5	23.5	22.0	23.0	21.5	19.5	20.5
29	25.0	22.0	23.5	27.0	24.5	26.0	23.5	21.0	22.0	20.5	19.0	20.0
30	25.0	23.0	24.0	27.0	25.0	26.0	23.5	21.0	22.5	20.0	18.5	19.0
31	---	---	---	27.5	25.5	26.5	23.0	21.5	22.5	---	---	---
MONTH	27.0	20.0	23.5	28.5	19.5	24.5	29.0	20.5	25.0	25.5	18.0	21.5
YEAR	29.0	.0	14.5									

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	6.8	5.5	6.1	10.0	9.2	9.5	12.0	11.7	11.9	13.0	12.3	12.6
2	7.3	6.9	7.1	9.9	9.0	9.4	12.0	11.7	11.9	12.9	12.0	12.4
3	7.5	7.3	7.4	10.2	9.1	9.5	11.9	11.7	11.8	13.4	12.0	12.6
4	7.4	7.2	7.3	9.8	9.3	9.5	12.3	11.9	12.1	13.8	12.3	13.0
5	7.7	7.2	7.4	9.8	9.3	9.5	12.5	12.3	12.4	14.0	12.4	13.1
6	8.3	7.7	8.0	10.3	9.3	9.8	12.6	12.5	12.6	14.0	12.4	13.0
7	8.6	8.3	8.4	10.3	9.5	9.7	12.5	12.0	12.3	12.7	11.9	12.3
8	8.8	8.6	8.7	9.9	9.0	9.4	12.1	11.6	11.8	12.8	11.7	12.1
9	8.8	8.4	8.7	10.1	8.6	9.3	11.6	11.1	11.3	13.5	11.8	12.5
10	9.2	8.9	9.1	11.2	9.3	10.1	12.0	11.1	11.5	12.8	11.9	12.3
11	9.2	8.9	9.1	10.8	10.0	10.3	12.4	12.0	12.2	14.1	12.1	13.0
12	9.0	8.6	8.8	11.9	10.3	11.0	12.7	12.4	12.6	15.4	12.6	13.7
13	8.8	8.4	8.6	12.7	11.1	11.8	13.1	12.7	12.9	14.9	12.8	14.0
14	9.2	8.4	8.8	13.4	11.8	12.4	13.2	13.0	13.1	---	---	---
15	9.7	9.2	9.5	12.7	11.8	12.3	13.1	12.7	12.9	---	---	---
16	9.9	9.6	9.7	12.8	11.4	11.9	12.7	12.4	12.6	15.4	13.4	14.0
17	10.0	9.5	9.7	12.7	11.0	11.7	12.4	12.0	12.2	15.6	13.1	14.2
18	10.0	9.5	9.7	11.1	10.6	10.7	12.1	11.8	12.0	14.8	13.0	13.8
19	10.0	9.6	9.8	13.5	11.8	12.8	12.4	12.0	12.2	13.4	12.5	12.9
20	9.9	9.5	9.7	11.6	10.7	11.2	12.6	12.0	12.3	14.6	12.5	13.4
21	9.7	9.3	9.5	12.1	10.7	11.3	12.6	12.2	12.4	16.8	13.2	14.8
22	9.5	9.0	9.2	12.3	11.5	11.8	12.6	12.1	12.3	15.9	13.5	14.7
23	9.3	8.7	8.9	11.9	11.2	11.5	12.8	12.1	12.4	17.1	13.7	15.2
24	8.9	8.7	8.8	11.7	11.1	11.4	12.4	12.0	12.3	17.5	14.8	16.0
25	8.8	8.6	8.7	12.6	11.5	11.9	12.4	12.0	12.2	18.0	15.0	16.4
26	9.0	8.3	8.6	11.6	10.7	11.0	12.8	12.3	12.5	17.6	15.5	16.4
27	9.1	8.7	8.9	11.2	10.9	11.1	12.9	12.6	12.7	17.1	14.9	15.8
28	9.6	8.9	9.2	11.5	11.3	11.4	13.1	12.6	12.8	16.4	13.7	15.1
29	9.5	8.9	9.2	11.6	11.4	11.5	13.2	12.6	12.9	15.4	13.6	14.5
30	9.6	8.8	9.2	11.8	11.5	11.7	13.2	12.6	12.8	13.5	12.3	12.8
31	9.9	9.2	9.5	---	---	---	13.0	12.5	12.7	16.6	12.5	14.2
MONTH	10.0	5.5	8.8	13.5	8.6	10.9	13.2	11.1	12.3	18.0	11.7	13.8

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	17.2	13.9	15.3	8.8	3.9	8.0	---	---	---	14.8	7.2	10.6
2	18.6	13.5	15.6	10.0	8.3	9.1	---	---	---	13.6	7.2	9.8
3	14.9	13.0	14.2	10.4	9.4	9.8	---	---	---	9.2	6.6	7.9
4	15.9	13.5	14.5	11.8	9.6	10.6	10.8	10.2	10.5	12.9	6.5	9.3
5	15.3	13.5	14.4	11.0	9.6	10.4	11.3	10.5	10.8	13.1	7.0	9.7
6	16.0	13.6	14.6	14.6	9.4	11.6	10.9	10.5	10.7	13.1	6.9	9.8
7	17.7	12.8	14.9	14.8	9.4	11.7	10.4	10.1	10.2	12.9	6.8	9.6
8	15.0	13.1	14.2	14.8	8.6	11.3	10.1	9.6	9.8	13.4	6.6	9.8
9	19.1	13.6	15.9	10.4	8.2	9.3	10.7	9.0	9.8	14.7	5.7	10.2
10	20.0	14.5	16.9	15.1	8.2	11.1	12.0	8.6	10.2	13.9	5.8	9.8
11	19.5	14.4	16.7	15.3	9.9	12.4	12.0	8.1	9.8	13.2	5.7	9.3
12	17.8	13.8	15.6	15.1	10.1	12.4	9.6	8.1	8.9	12.0	4.4	7.9
13	20.0	12.4	15.7	14.4	9.8	12.4	11.2	8.5	9.7	13.1	4.6	8.5
14	16.8	13.3	15.1	---	---	---	11.7	8.5	9.8	12.0	4.2	7.8
15	20.0	13.0	16.1	---	---	---	8.9	7.7	8.1	11.6	3.5	7.2
16	18.9	14.3	16.5	---	---	---	8.7	8.0	8.4	12.7	4.1	8.1
17	18.0	14.4	16.1	---	---	---	9.2	8.7	9.0	11.8	4.2	7.8
18	19.8	14.3	16.8	---	---	---	9.3	9.0	9.2	7.6	3.4	5.3
19	19.6	14.5	16.9	---	---	---	9.6	8.4	9.0	5.9	2.7	4.1
20	19.5	14.3	16.8	---	---	---	10.2	7.6	8.8	5.7	3.0	4.4
21	17.4	13.7	15.4	---	---	---	11.7	6.7	9.0	5.6	4.7	5.1
22	16.4	12.5	14.6	---	---	---	12.4	6.6	9.2	5.5	4.4	5.0
23	18.7	12.3	15.1	---	---	---	9.9	6.2	8.0	5.7	4.8	5.3
24	18.3	12.6	15.4	---	---	---	10.2	6.6	8.2	6.5	4.8	5.7
25	18.7	12.7	15.6	---	---	---	13.2	7.6	10.3	6.0	4.8	5.5
26	15.1	11.0	13.2	---	---	---	13.9	8.4	10.8	6.1	4.8	5.4
27	11.2	9.0	10.2	---	---	---	12.7	7.7	10.0	6.1	4.0	5.1
28	9.9	8.1	9.0	---	---	---	14.0	7.4	10.4	6.5	4.8	5.5
29	---	---	---	---	---	---	13.9	7.6	10.3	7.2	4.8	5.8
30	---	---	---	---	---	---	14.8	6.8	10.4	5.1	4.3	4.8
31	---	---	---	---	---	---	---	---	---	5.7	4.4	5.1
MONTH	20.0	8.1	15.1	15.3	3.9	10.8	14.8	6.2	9.6	14.8	2.7	7.3
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	6.2	5.3	5.7	8.7	6.6	7.4	12.0	4.7	8.5	15.4	6.2	10.5
2	6.6	5.6	6.0	7.9	7.0	7.4	17.2	5.2	10.5	14.5	6.0	10.7
3	6.9	6.3	6.7	8.2	7.9	8.0	18.1	6.2	11.6	14.0	7.1	11.0
4	7.4	6.8	7.2	8.0	7.6	7.9	14.5	5.1	9.7	17.6	7.4	12.0
5	7.8	7.4	7.6	7.9	7.6	7.7	11.3	5.2	8.0	14.8	8.9	11.8
6	7.8	7.4	7.6	7.8	7.6	7.6	13.3	6.0	9.3	17.7	8.2	12.5
7	7.7	7.4	7.5	8.2	7.5	7.9	14.4	6.6	10.1	18.5	8.7	12.8
8	7.7	7.0	7.4	8.6	7.5	8.0	15.2	6.5	10.7	16.9	7.8	11.5
9	7.7	6.9	7.2	8.4	7.2	7.8	15.1	6.2	10.3	13.6	5.5	9.8
10	8.8	6.8	7.7	9.7	7.1	8.2	12.2	6.3	9.2	13.3	6.0	9.7
11	9.3	6.9	8.0	9.3	7.0	7.9	14.2	5.4	9.3	8.6	4.3	6.3
12	8.6	6.9	7.6	8.6	6.9	7.5	13.3	5.6	9.3	5.6	3.3	4.4
13	10.3	6.6	8.2	7.7	7.4	7.5	15.7	5.8	10.3	8.0	3.4	5.3
14	8.4	7.3	7.8	7.8	7.2	7.5	16.8	5.6	10.5	10.3	4.5	6.8
15	7.2	6.5	6.9	7.9	7.4	7.7	16.4	5.3	10.6	6.3	4.0	5.2
16	6.9	6.1	6.6	8.1	7.8	7.9	18.1	6.1	12.0	6.0	3.1	4.3
17	7.4	6.4	6.8	8.8	7.7	8.2	13.1	6.2	9.4	6.1	3.1	4.4
18	8.1	6.4	7.2	9.0	8.0	8.4	10.5	3.8	7.3	5.3	3.3	4.2
19	8.4	6.4	7.2	8.5	7.5	7.9	10.8	4.2	7.4	5.7	3.1	4.2
20	8.6	5.6	6.9	9.2	7.2	8.1	10.4	4.3	7.4	6.7	4.0	5.2
21	10.0	6.3	7.9	10.8	6.2	8.4	8.8	4.7	6.8	9.0	4.7	6.5
22	9.4	6.3	7.7	13.6	6.2	9.6	8.8	4.1	6.4	7.1	4.9	6.0
23	10.0	6.0	7.8	16.0	6.7	10.8	8.7	4.6	6.2	10.0	4.8	7.0
24	11.1	6.6	8.6	18.0	7.0	11.9	12.3	4.7	8.1	9.7	5.0	6.8
25	11.0	6.1	8.3	18.4	6.8	12.2	8.4	5.4	6.7	10.6	5.6	8.1
26	12.7	6.0	9.2	16.3	6.4	10.6	11.7	4.7	7.9	11.9	5.7	8.7
27	10.7	6.4	8.7	10.8	5.7	8.5	10.6	5.3	8.0	12.1	7.1	9.4
28	11.0	6.4	8.6	12.7	5.8	9.0	7.8	4.3	6.3	13.9	7.1	10.0
29	13.1	7.0	9.6	14.0	6.2	9.7	12.0	4.2	7.8	8.6	4.8	6.4
30	12.2	6.8	9.1	14.8	6.2	10.0	16.6	6.3	11.3	8.1	4.0	5.9
31	---	---	---	13.4	5.9	9.4	14.7	8.3	11.2	---	---	---
MONTH	13.1	5.3	7.6	18.4	5.7	8.6	18.1	3.8	9.0	18.5	3.1	7.9
YEAR	20.0	2.7	10.1									

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: Oct. 5-13, Jan. 24-29. 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.--25 years, 199 ft³/s, 13.72 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)
Oct. 1	2100	*14,000	*13.10	May 21	2130	5,340	7.54
Oct. 4	1815	6,200	8.32	July 11	2045	6,990	8.76
Nov. 26	0915	4,860	7.30				

Minimum discharge, 6.3 ft³/s Sept. 9, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	5200	68	268	87	75	923	197	95	399	166	27	9.2	
2	4210	63	2390	90	119	597	577	95	626	1100	26	8.7	
3	884	60	2100	82	178	329	318	93	2540	413	26	8.6	
4	4560	67	749	74	138	225	212	83	782	200	30	8.2	
5	4000	76	422	72	116	184	201	76	350	144	29	7.9	
6	1200	98	303	73	109	160	270	72	221	113	22	7.1	
7	500	97	250	77	114	135	259	72	163	113	20	6.7	
8	320	88	227	68	120	128	214	70	129	80	19	6.4	
9	240	100	629	66	90	124	173	64	107	63	17	6.3	
10	170	87	827	76	86	100	147	60	91	77	17	6.7	
11	150	83	365	74	81	87	140	57	79	1740	17	7.0	
12	130	100	255	62	81	84	563	57	79	2390	16	7.3	
13	140	98	181	61	76	78	394	54	79	636	15	7.1	
14	161	79	154	65	71	78	261	50	67	464	14	6.7	
15	168	77	144	83	68	79	1490	51	59	263	14	6.8	
16	133	79	131	88	53	73	1550	45	55	216	13	7.4	
17	117	73	126	75	66	66	994	42	66	142	12	7.6	
18	91	68	134	77	62	64	546	42	50	103	11	7.7	
19	79	64	124	85	56	73	371	47	43	80	11	7.6	
20	70	63	112	83	54	67	285	130	47	65	9.4	7.5	
21	66	82	97	66	55	62	238	1380	49	56	9.3	7.1	
22	62	89	91	74	59	60	207	1530	54	48	12	7.2	
23	59	85	91	63	60	58	207	408	50	43	15	7.2	
24	56	80	107	58	56	57	173	222	42	39	12	6.7	
25	59	71	158	54	53	77	147	157	37	34	12	6.8	
26	115	2960	152	50	52	75	131	215	34	42	13	6.5	
27	144	1350	132	49	53	65	124	607	30	72	13	6.3	
28	136	634	117	48	107	60	119	222	27	46	12	6.7	
29	104	403	104	48	---	58	108	143	26	35	12	7.1	
30	88	294	107	78	---	94	106	145	31	30	11	7.1	
31	75	---	92	75	---	150	---	800	---	28	9.8	---	
TOTAL	23487	7636	11139	2181	2308	4470	10722	7184	6412	9041	496.5	217.2	
MEAN	758	255	359	70.4	82.4	144	357	232	214	292	16.0	7.24	
MAX	5200	2960	2390	90	178	923	1550	1530	2540	2390	30	9.2	
MIN	56	60	91	48	52	57	106	42	26	28	9.3	6.3	
CFSM	3.85	1.29	1.82	.36	.42	.73	1.81	1.18	1.09	1.48	.08	.04	
IN.	4.44	1.44	2.10	.41	.44	.84	2.02	1.36	1.21	1.71	.09	.04	
CAL YR 1986	TOTAL	107669.5		MEAN	295	MAX	5200	MIN	9.7	CFSM	1.50	IN.	20.33
WTR YR 1987	TOTAL	85293.7		MEAN	234	MAX	5200	MIN	6.3	CFSM	1.19	IN.	16.11

GREAT MIAMI RIVER BASIN

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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: Jan. 23 to Feb. 1. 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.--69 years (1914-23, 1927-87), 266 ft³/s, 13.14 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, 6,270 ft³/s Oct. 2, gage height 26.57 ft; minimum daily, 6.0 ft³/s Sept. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	1140	82	336	128	140	1180	316	129	337	153	42	12	
2	5730	75	2910	130	146	920	866	132	411	1640	41	11	
3	2420	70	3390	124	201	467	530	141	2780	571	39	11	
4	3080	74	1240	113	173	309	332	120	1030	248	39	11	
5	4620	87	651	108	143	247	302	108	424	166	56	11	
6	1280	106	444	107	136	217	415	102	261	131	38	9.9	
7	636	122	352	111	137	187	400	99	187	131	32	9.4	
8	414	110	310	105	144	174	330	96	150	106	29	8.6	
9	299	113	564	98	126	168	263	89	127	83	27	8.4	
10	224	114	1320	110	112	146	220	83	112	87	25	7.8	
11	178	105	548	113	107	127	204	77	98	644	24	8.1	
12	154	117	372	99	106	122	649	74	93	3560	22	8.6	
13	146	125	266	93	104	115	618	70	95	897	21	8.9	
14	150	106	215	95	96	111	388	67	85	513	20	8.2	
15	178	96	202	108	94	112	1920	65	73	334	19	7.7	
16	145	97	181	121	78	107	2010	60	66	330	18	7.6	
17	125	93	172	110	84	97	1390	55	71	195	17	8.1	
18	108	86	176	108	86	93	732	54	64	142	16	8.8	
19	93	79	170	120	79	102	492	58	55	114	15	9.4	
20	84	77	158	126	75	100	373	68	53	96	15	8.5	
21	79	86	145	105	75	91	305	454	56	81	13	8.5	
22	74	106	136	108	79	88	263	2140	59	71	13	8.2	
23	70	102	132	100	83	85	277	481	58	62	15	8.1	
24	66	99	144	95	81	83	234	252	51	56	16	7.7	
25	69	89	187	90	75	101	201	173	45	51	14	7.1	
26	87	3110	198	86	73	111	175	178	41	48	16	6.7	
27	153	2330	175	84	74	97	163	551	38	102	14	6.5	
28	148	955	160	84	102	89	155	266	35	76	14	6.0	
29	124	578	146	110	---	86	144	162	34	58	13	6.0	
30	106	405	146	150	---	161	139	148	38	49	14	7.0	
31	93	---	137	140	---	246	---	699	---	45	13	---	
TOTAL	22273	9794	15683	3379	3009	6339	14806	7251	7027	10840	710	255.8	
MEAN	718	326	506	109	107	204	494	234	234	350	22.9	8.53	
MAX	5730	3110	3390	150	201	1180	2010	2140	2780	3560	56	12	
MIN	66	70	132	84	73	83	139	54	34	45	13	6.0	
CFSM	2.61	1.19	1.84	.40	.39	.74	1.80	.85	.85	1.27	.08	.03	
IN.	3.01	1.32	2.12	.46	.41	.86	2.00	.98	.95	1.47	.10	.03	
CAL YR 1986	TOTAL	135438		MEAN	371	MAX	5730	MIN	16	CFSM	1.35	IN.	18.32
WTR YR 1987	TOTAL	101366.8		MEAN	278	MAX	5730	MIN	6.0	CFSM	1.01	IN.	13.71

GREAT MIAMI RIVER BASIN

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.--No estimated daily discharges. Records good except for winter periods, which are fair. Water-quality data collected at this site 1972 to 1974.

COOPERATION.--Gage-height tapes, and 7 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--16 years (1972-87), 72.4 ft³/s, 14.25 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,210 ft³/s June 22, 1974, gage height 13.25 ft, present datum, from rating curve extended above 2,200 ft³/s; minimum daily, 1.5 ft³/s Sept. 28, 29, 1987.

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)
Oct. 1	2330	*2,960	*9.56	No other peaks above base.			

Minimum daily discharge, 1.5 ft³/s Sept. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	899	23	117	33	24	363	67	29	37	176	7.3	2.6
2	805	21	791	35	36	217	170	29	32	196	7.1	2.6
3	210	20	633	32	41	126	95	29	316	42	7.0	2.6
4	589	24	272	30	32	86	66	25	122	22	15	2.5
5	344	26	158	28	27	72	62	22	64	16	24	2.5
6	166	30	116	28	27	60	62	21	41	20	8.6	2.2
7	113	30	96	29	28	52	60	21	31	19	6.6	2.0
8	81	29	86	26	30	50	53	19	25	14	6.0	2.1
9	62	33	186	26	22	47	46	17	21	11	5.8	2.2
10	50	27	239	31	22	36	41	16	18	13	5.1	2.2
11	43	28	133	28	23	32	42	15	17	30	5.1	2.3
12	37	32	96	25	24	32	155	14	17	56	4.5	2.5
13	33	29	70	23	22	29	110	13	18	26	4.5	2.3
14	35	25	62	24	21	28	83	12	15	22	4.5	1.9
15	33	25	58	27	20	30	478	12	13	26	4.3	2.1
16	29	26	53	28	15	26	492	10	11	110	3.9	2.2
17	26	25	51	26	20	24	312	10	9.4	39	3.6	2.0
18	23	23	52	27	19	23	183	9.8	9.6	22	3.5	2.3
19	20	21	47	32	17	30	126	15	8.4	16	3.6	2.5
20	19	21	44	30	17	25	96	20	7.7	13	3.5	2.1
21	19	26	41	24	18	23	79	38	11	10	3.2	1.9
22	18	23	39	28	19	22	66	93	9.7	9.1	2.9	2.0
23	17	23	37	28	19	21	67	37	9.0	8.0	7.3	2.3
24	17	23	44	24	18	22	53	23	7.6	7.5	3.8	1.9
25	19	21	49	24	17	40	45	19	7.0	6.4	3.5	1.7
26	36	867	44	24	16	29	41	28	5.9	6.6	4.9	1.6
27	37	406	41	21	17	25	39	59	5.5	23	4.6	1.6
28	35	220	39	17	69	23	37	33	5.0	13	4.1	1.5
29	31	147	38	18	---	21	34	22	4.9	9.3	3.8	1.5
30	27	107	39	32	---	41	32	19	11	7.7	3.1	2.2
31	24	---	35	24	---	49	---	47	---	7.6	2.8	---
TOTAL	3897	2381	3806	832	680	1704	3292	776.8	909.7	997.2	177.5	63.9
MEAN	126	79.4	123	26.8	24.3	55.0	110	25.1	30.3	32.2	5.73	2.13
MAX	899	867	791	35	69	363	492	93	316	196	24	2.6
MIN	17	20	35	17	15	21	32	9.8	4.9	6.4	2.8	1.5
CFSM	1.83	1.15	1.78	.39	.35	.80	1.59	.36	.44	.47	.08	.03
IN.	2.10	1.28	2.05	.45	.37	.92	1.77	.42	.49	.54	.10	.03
CAL YR 1986	TOTAL	32186.6	MEAN	88.2	MAX	1550	MIN	3.2	CFSM	1.28	IN.	17.35
WTR YR 1987	TOTAL	19517.1	MEAN	53.5	MAX	899	MIN	1.5	CFSM	.78	IN.	10.52

GREAT MIAMI RIVER BASIN

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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: May 23-29. Records good except for periods of estimated record 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). Small diversion about 6 mi upstream from gage for municipal supply of Hamilton. Diversion averaged 1.02 ft³/s in 1987 and is returned as sewage 1.4 mi downstream from the station. 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 8 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--56 years (1931-87), 3,305 ft³/s, 12.37 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, 30,900 ft³/s Oct. 5, gage height, 68.15 ft; minimum daily, 443 ft³/s Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	3200	2050	5550	2540	1940	4680	4580	1980	2580	1480	1040	659	
2	19700	1930	14000	2460	2050	6400	7110	1870	3630	11000	981	654	
3	17000	1780	23000	2430	2440	5380	6940	1980	10400	17300	930	604	
4	17500	1850	18600	2350	3450	3880	5090	1730	12200	16800	1020	631	
5	27600	2030	12100	2240	3130	3100	4300	1670	10800	14800	1070	536	
6	24500	2240	7920	2160	2630	2720	5170	1590	6810	9980	1020	469	
7	15500	2290	6380	2140	2420	2450	6870	1550	4590	6280	906	522	
8	11900	2180	5490	2000	2330	2250	6000	1490	3630	4880	860	488	
9	9100	2070	5750	1920	2350	2120	4700	1400	2880	3860	845	503	
10	5490	2050	11700	1980	2180	2010	3790	1330	2240	3130	802	523	
11	4240	2210	10600	2060	1970	1910	3230	1310	1900	3110	780	520	
12	3540	2250	6890	1980	1880	1860	4030	1270	1820	8670	739	533	
13	3080	2210	5420	1820	1790	1680	4910	1250	1900	7040	745	519	
14	3110	2140	4470	1720	1720	1550	4100	1210	2720	4770	754	468	
15	3350	2030	3780	1730	1640	1530	9170	1290	2940	7550	687	520	
16	3560	1890	3520	1960	1550	1530	13400	1240	3310	4720	656	506	
17	3030	1790	3320	2500	1430	1450	12500	1170	3100	3470	656	516	
18	2660	1760	3340	2230	1490	1400	8440	1280	2560	3430	652	533	
19	2390	1690	3280	2510	1500	1570	5860	1480	1890	2670	638	537	
20	2170	1680	3150	2980	1390	1520	4600	1870	1580	2090	581	489	
21	2050	2140	2940	2480	1330	1400	3880	3340	1440	1780	590	464	
22	1960	3090	2740	2250	1300	1320	3400	5050	1570	1570	606	446	
23	1860	3250	2670	2110	1310	1270	3820	3600	1670	1410	927	471	
24	1770	2740	2760	1720	1330	1250	3420	3100	1770	1300	600	477	
25	1800	2460	3000	1540	1280	1360	3000	2800	1470	1200	560	479	
26	2490	13300	3160	1560	1250	1450	2790	2600	1270	1110	611	468	
27	3240	19700	3250	1670	1280	1360	2580	2400	1130	1180	622	465	
28	3260	14700	3010	1550	1670	1290	2390	2300	1020	1180	621	465	
29	2790	9350	2800	1550	---	1250	2230	2200	956	1090	640	443	
30	2490	6660	2710	1900	---	3400	2150	2080	1000	1040	663	477	
31	2250	---	2680	1960	---	4000	---	2520	---	982	646	---	
TOTAL	208580	117510	189980	64000	52030	70340	154450	61950	96776	150872	23448	15385	
MEAN	6728	3917	6128	2065	1858	2269	5148	1998	3226	4867	756	513	
MAX	27600	19700	23000	2980	3450	6400	13400	5050	12200	17300	1070	659	
MIN	1770	1680	2670	1540	1250	1250	2150	1170	956	982	560	443	
CFSM	1.85	1.08	1.69	.57	.51	.63	1.42	.55	.89	1.34	.21	.14	
IN.	2.14	1.20	1.95	.66	.53	.72	1.58	.63	.99	1.55	.24	.16	
CAL YR 1986	TOTAL	1596154		MEAN	4373	MAX	27600	MIN	606	CFSM	1.20	IN.	16.36
WTR YR 1987	TOTAL	1205321		MEAN	3302	MAX	27600	MIN	443	CFSM	.91	IN.	12.35

GREAT MIAMI RIVER BASIN

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 site from July 1966 to September 1981. See records of daily discharge for station at Hamilton (station 03274000).

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR (DEG C)	TEMPER- ATURE WATER (DEG C)	TUR- BID- ITY (FTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML)
NOV 12...	1100	2260	800	8.54	1.5	9.5	3.6	10.6	94	1500	180
DEC 17...	1030	3300	765	8.39	3.0	5.5	8.0	9.0	71	7000	670
MAR 11...	0830	1880	800	8.78	-1.5	5.0	1.4	12.2	--	500	73
MAY 13...	1000	1240	835	9.00	20.0	19.5	13	10.2	114	110	67
JUL 14...	1015	4720	473	8.24	26.0	24.0	95	8.5	104	6200	2000
AUG 18...	1030	647	906	8.95	30.0	27.0	5.3	7.6	99	480	5500

DATE	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD 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 IT-FLD (MG/L AS HCO3)	CAR- BONATE IT-FLD (MG/L AS CO3)	ALKA- LITY WH WAT TOTAL FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
NOV 12...	360	110	88	35	33	4.0	--	--	254	72	54
DEC 17...	350	90	86	33	22	3.1	320	0	260	64	40
MAR 11...	340	90	83	33	30	3.0	276	17	253	71	54
MAY 13...	330	100	74	35	41	4.2	--	--	226	88	68
JUL 14...	230	45	57	20	14	3.8	221	0	180	42	22
AUG 18...	350	110	81	37	65	5.5	242	28	246	98	99

DATE	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 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- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)
NOV 12...	0.40	6.1	468	0.110	3.40	0.040	0.040	0.30	0.350	0.330	0.250
DEC 17...	0.30	8.6	445	0.060	4.00	0.440	0.420	1.7	0.280	0.240	0.210
MAR 11...	0.40	0.86	447	0.080	3.60	0.070	0.110	1.4	0.340	0.310	0.190
MAY 13...	0.40	0.60	473	0.130	2.30	0.040	0.070	0.90	0.450	0.250	0.180
JUL 14...	0.30	8.6	359	0.040	2.80	0.100	0.100	2.3	0.570	0.280	0.210
AUG 18...	0.60	<1.0	553	0.050	1.50	0.010	0.020	1.8	0.750	0.530	0.460

WATER-QUALITY RECORDS

[illegible]

PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

CREST-STAGE PARTIAL-RECORD STATIONS

The following table contains annual maximum discharge for crest-stage stations. A crest-stage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, and discharge measurements may have been made for purposes of establishing the stage-discharge relation, but these are not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1987

						Annual maximum	
Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Gage height (feet)	Dis- charge (ft ³ /s)
Cross Creek basin							
03110980	Consol Run at Bloomingdale, OH	Lat 40°19'56", long 80°48'44", Jefferson County, Hydrologic Unit 05030101, at culvert on Township Road, 0.8 mi south- east of Bloomingdale.	0.04	1978-87	12- 2-86	99.44	2.8
03111450	Branson Run at Georgetown, OH	Lat 40°12'26", long 80°55'22", Harrison County, Hydrologic Unit 05030101, at culvert on County Highway 41, 300 ft southwest from intersection with U.S. Highway 250 in Georgetown.	1.31	1978-87	7- 2-87	94.58	26
03111455	South Fork Short Creek at Georgetown, OH	Lat 40°12'27", long 80°55'12", Harrison County, Hydrologic Unit 05030101, at bridge on U.S. Highway 250 in Georgetown.	10.9	1978-87	4-24-87	86.58	200
03111470	Little Piney Fork at Parlett, OH	Lat 40°18'07", long 80°50'55", Jefferson County, Hydrologic Unit 05030101, at culvert on State Route 151, 0.9 mi east of Parlett.	1.57	1978-87	8-22-87	97.62	222
03111490	Piney Fork tributary near Piney Fork, OH	Lat 40°16'18", long 80°50'48", Jefferson County, Hydrologic Unit 05030101, at culvert on County Road 12, 0.08 mi east of Penn Central Railroad crossing on Smithfield-Adena Road, 1.6 mi northwest of Piney Fork and 3.0 mi west of Smithfield.	0.44	1978-87	8-22-87	97.04	8.6
Wheeling Creek basin							
03111540	Sloan Run tributary near Harrisville, OH	Lat 40°09'07", long 80°52'59", Belmont County, Hydrologic Unit 05030106, at culvert on unnamed R & F Coal Company private road, 1.7 mi south of Harrisville, and 2.1 mi west of Pleasant Grove.	0.34	1978-87	4- 4-87	99.88	9.0
Sunfish Creek basin							
03114240	Wood Run near Woodsfield, OH	Lat 39°46'56", long 81°03'21", Monroe County, Hydrologic Unit 05030201, at culvert on State Highway 26, 0.5 mi upstream from Standing Stone Run, and 3.5 mi northeast of Woodsfield.	0.53	1978-87	12- 2-86	96.07	36
Little Muskingum River basin							
03115280	Trail Run near Antioch, OH	Lat 39°37'29", long 81°02'54", Monroe County, Hydrologic Unit 05030201, at private road bridge, adjacent to State Route 800, 2.7 mi southeast of Antioch.	5.45	1978-87	6-21-87	93.80	520
03115410	Graham Run near Bloomfield, OH	Lat 39°32'36", long 81°12'32", Washington County, Hydrologic Unit 05030201, at culvert on State Highway 26, 0.25 mi upstream from mouth, and 1.2 mi southwest of Bloomfield.	0.13	1978-87	4- 4-87	98.47	32

PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Annual maximum Gage height (feet)	Dis charge (ft ³ /s)
Little Muskingum River basin--Continued							
03115510	Moss Run near Wingett, O	Lat 39°28'24", long 81°18'52", Washington County, Hydrologic Unit 05030201, at culvert on State Route 26 at Moss Run and 8 mi southwest of Wingett.	1.52	1978-87	-----	<89.86	<138
Duck Creek basin							
03115710	Buffalo Run tributary near Dexter City, OH	Lat 39°39'41", long 81°26'58", Noble County, Hydrologic Unit 05030201, at culvert on County Road 2, 1.3 mi east of Dexter City.	0.19	1978-87	11- 8-86	96.59	40
Muskingum River basin							
03125450	Robinson Run near Hendrysburg, OH	Lat 40°05'08", long 81°10'27", Belmont County, Hydrologic Unit 05040001, at culvert on County Road 108, 1.7 mi north of Hendrysburg.	1.97	1978-87	10-03-86	98.74	75
03127950	Clear Fork near Jewett, OH	Lat 40°19'28", long 81°01'20", Harrison County, Hydrologic Unit 05040001, at bridge 150 ft north of County Road 13, 0.5 mi east of State Route 9, and 3.1 mi south of Jewett.	5.45	1978-87	12- 2-86	96.07	155
03128650	Mud Run tributary at Wainwright, OH	Lat 40°25'07", long 81°24'57", Tuscarawas County, Hydrologic Unit 05040001, at culvert on Warwick Township Road 461, 0.5 mi west of State Route 416, and 0.7 mi east of Wainwright.	0.55	1978-87	12- 2-86	98.95	6.2
3148300	Moxahala Creek at Roseville, OH	Lat 39°48'38", long 82°04'13", Muskingum County, Hydrologic Unit 05040004, at pumping station about 2,500 ft down- stream from First Street bridge in Roseville.	80.6	1964-87	12- 2-86	11.36	1,950
03158220	Glen Run near Doanville, OH	Lat 39°24'06", long 82°11'44", Athens County, Hydrologic Unit 05030204, at culvert on County Road 4, 0.8 mi west of U.S. Highway 33, and 2.3 mi south of Doanville.	1.09	1978-87	4- 4-87	96.92	155
7803159450	Mill Creek near Chauncey, OH	Lat 39°22'46", long 82°05'04", Athens County, Hydrologic Unit 05030204, at Culvert on U.S. Highway 50, 200 ft above mouth, 4.5 mi north of Athens, and 3.0 mi southeast of Chauncey.	1.48	1978-87	12- 2-86	94.16	78
Raccoon Creek basin							
03201550	Starr Run near New Plymouth, OH	Lat 39°23'46", long 82°20'49", Hocking County, Hydrologic Unit 05090101, at culvert on State Route 56, 0.8 mi east of State Route 328, and 3.0 mi east of New Plymouth.	0.30	1978-87	11- 8-86	96.87	40
Charlie Creek basin							
03205995	Sandusky Creek near Burlington, OH	Lat 38°25'03", long 82°30'36", Lawrence County, Hydrologic Unit 05090101, at culvert on U.S. Highway 52, 0.35 mi west of Charley Creek Road, and 1.25 mi northeast of Burlington.	0.73	1978-87	11- 8-86	12.87	82

PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Annual maximum Gage height (feet)	Dis- charge (ft ³ /s)
Scioto River basin							
03235080	Bull Creek near Adelphi, OH	Lat 39°27'11", long 82°46'46", Ross County, Hydrologic Unit 05060002, at culvert on State Route 180, 1.9 mi southwest of Adelphi.	3.13	1978-87	12- 2-86	69.11	218
03236090	South Branch Little Salt Creek near Jackson, OH	Lat 39°00'50", long 82°39'01", Jackson County, Hydrologic Unit 05010002, at culvert on State Highway 124, 300 ft east of State Highway 139, and 2.7 mi south of Jackson.	1.28	1978-87	12- 2-86	93.59	109
03237095	Devers Run at Lucasville, OH	Lat 38°52'54", long 83°01'13" Scioto County, Hydrologic Unit 05060002, at culvert on State Highway 104, 300 ft north of State Highway 348, and 1.2 mi northwest of Lucasville.	1.22	1978-87	10- 1-86	93.44 ^e	117
Little Miami River basin							
03272695	Trippetts Branch at Camden, OH	Lat 39°38'03", long 84°39'08" Preble County, Hydrologic Unit 05080002, at culvert on U.S. Highway 127, 0.3 mi north of State Highway 725 at Camden.	0.33	1978-87	11-26-86	12.72	46

^eEstimate

GROUND-WATER RECORDS

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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, 34.22 ft below land-surface datum, March 17, 1972; minimum daily low, 13.20 ft below land-surface datum, May 15, 18, 1967.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.35	27.79	27.34	26.89	27.02	26.57	26.07	23.81	23.71	24.89	18.28	22.80
2	27.41	27.76	27.28	26.77	27.05	26.62	26.12	23.73	23.65	24.87	18.30	22.72
3	27.48	27.87	27.29	26.71	27.11	26.69	26.13	23.65	23.66	22.61	18.40	22.67
4	27.57	27.95	27.28	26.62	27.14	26.71	26.10	23.62	23.78	22.10	18.66	22.59
5	27.68	28.02	27.27	26.57	27.14	26.73	26.04	23.55	23.86	21.80	18.90	22.51
6	27.68	28.10	27.23	26.55	27.13	26.67	25.94	23.45	23.93	21.31	19.09	22.42
7	27.61	28.10	27.05	26.54	27.13	26.60	25.82	23.37	23.91	20.89	19.27	22.34
8	27.58	28.01	26.93	26.53	27.06	26.51	25.73	23.36	23.86	20.53	19.41	22.27
9	27.56	27.98	26.90	26.50	27.04	26.45	25.63	23.42	23.97	20.12	19.54	22.19
10	27.54	27.96	26.91	26.44	26.92	26.44	25.51	23.53	24.01	19.80	19.76	22.15
11	27.46	28.02	26.88	26.35	26.84	26.37	25.36	23.61	24.01	19.54	19.87	22.09
12	27.41	28.04	26.90	26.26	26.72	26.28	25.23	23.73	23.93	19.27	20.11	22.02
13	27.36	28.00	26.94	26.23	26.70	26.22	25.12	23.78	23.89	19.06	20.42	21.95
14	27.33	27.94	26.90	26.14	26.61	26.15	24.98	23.82	23.86	19.04	20.74	21.96
15	27.33	27.85	26.99	26.17	26.58	26.08	24.81	23.79	23.84	17.83	21.06	22.01
16	27.31	27.79	27.08	26.23	26.53	26.01	24.67	23.76	23.84	16.70	21.26	21.94
17	27.31	27.74	27.12	26.25	26.45	25.95	24.53	23.66	23.87	16.63	21.54	21.88
18	27.32	27.78	27.26	26.28	26.41	25.87	24.42	23.60	23.88	16.81	21.75	21.89
19	27.32	27.78	27.27	26.43	26.39	25.87	24.30	23.56	23.89	17.05	22.00	21.92
20	27.29	27.79	27.18	26.47	26.36	25.88	24.18	23.71	23.92	17.28	22.23	21.92
21	27.36	27.77	27.20	26.49	26.29	25.91	24.04	23.83	23.92	17.28	22.33	21.94
22	27.50	27.72	27.19	26.57	26.25	25.94	23.93	23.92	23.98	17.49	22.44	21.98
23	27.59	27.65	27.17	26.72	26.29	25.96	23.78	23.95	24.02	17.56	22.60	21.99
24	27.56	27.72	27.15	26.76	26.36	25.98	23.69	23.92	24.12	17.74	22.63	22.04
25	27.50	27.65	27.19	26.79	26.43	26.03	23.62	23.90	24.25	17.93	22.60	22.09
26	27.47	27.61	27.19	26.84	26.47	26.07	23.63	23.90	24.38	18.10	22.61	22.13
27	27.61	27.61	27.19	26.87	26.49	26.09	23.63	23.88	24.51	18.19	22.75	22.17
28	27.70	27.57	27.16	26.93	26.50	26.11	23.64	23.86	24.62	18.17	22.85	22.19
29	27.78	27.52	27.13	26.93	---	26.05	23.68	23.82	24.73	18.11	22.91	22.18
30	27.86	27.43	27.12	26.98	---	25.99	23.78	23.78	24.82	18.08	22.96	22.18
31	27.86	---	27.01	27.02	---	26.07	---	23.72	---	18.16	22.87	---
MAX	27.86	28.10	27.34	27.02	27.14	26.73	26.13	23.95	24.82	24.89	22.96	22.80
WTR YR 1987 MEAN	24.72											
HIGH				16.63	JUL 17							
LOW							28.10	NOV 6	AND OTHERS			

405425082173000. Local number. AS-3.

Owner: Ashland Water Department.

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, 32.05 ft below land-surface datum, Oct. 22, 1980; minimum daily low, 3.10 ft, above land-surface, Feb. 23, 1978.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.81	20.43	28.80	24.77	22.00	19.54	20.75	17.78	16.05	16.08	21.20	18.66
2	23.16	20.43	28.78	25.33	22.31	18.85	20.59	17.87	14.99	17.75	23.12	19.00
3	23.43	20.57	29.48	25.69	22.71	19.07	20.43	17.93	14.19	17.88	23.21	19.23
4	23.46	24.57	29.93	26.00	22.82	19.17	20.25	22.40	18.90	17.99	23.13	22.56
5	25.43	25.62	30.27	26.19	22.81	19.19	16.23	24.11	19.70	14.32	23.14	23.87
6	25.46	26.52	30.63	26.42	22.66	20.85	14.34	24.24	20.08	14.75	23.14	24.05
7	23.44	27.29	30.98	26.70	22.62	18.23	12.24	23.99	16.37	15.18	23.11	20.63
8	23.67	27.99	31.21	26.91	22.70	16.99	10.91	24.28	14.44	20.70	23.10	23.68
9	23.91	28.62	31.52	27.05	23.34	16.00	10.35	21.19	13.97	21.86	23.08	24.28
10	24.05	28.85	31.63	27.26	23.83	15.75	10.26	20.45	13.83	18.45	23.16	24.79
11	23.57	26.76	28.58	27.44	24.07	15.09	10.28	20.12	16.88	20.44	23.15	24.93
12	22.79	29.04	28.62	27.62	24.09	14.37	16.12	19.35	20.66	22.76	18.31	21.95
13	22.73	29.06	28.87	27.75	20.73	13.96	12.99	18.28	22.24	22.84	17.28	21.70
14	23.20	28.90	28.68	27.88	20.13	13.39	11.18	21.83	22.29	18.86	16.50	21.64
15	23.45	28.66	28.44	28.03	19.99	13.02	10.55	22.29	16.49	17.46	15.81	21.45
16	23.15	28.51	28.17	27.98	23.20	12.87	14.91	22.26	16.77	17.39	15.15	22.09
17	22.79	28.55	27.91	24.84	23.95	12.66	16.85	17.53	16.72	17.49	14.59	22.53
18	22.59	28.56	27.60	24.33	24.43	12.31	15.44	20.58	15.89	17.62	14.26	22.97
19	22.68	26.01	27.42	23.95	24.79	11.93	13.27	21.50	15.19	17.79	13.78	23.23
20	22.42	28.36	27.19	23.72	25.08	11.92	16.31	18.77	15.52	20.89	13.53	22.98
21	22.52	28.45	26.98	23.39	25.09	10.91	20.73	16.18	14.39	22.83	17.98	23.19
22	25.52	28.35	26.86	23.09	21.77	10.84	23.25	15.03	13.48	23.45	18.54	22.94
23	25.99	28.14	26.86	22.83	21.29	16.44	24.30	14.29	12.97	23.69	14.25	22.70
24	26.01	27.97	26.63	22.65	21.13	17.86	24.43	13.67	12.69	20.27	15.31	22.57
25	25.98	25.69	26.42	22.46	20.98	18.77	23.73	16.54	12.37	19.90	16.33	22.54
26	25.88	27.99	26.24	22.22	20.88	19.41	23.35	16.24	14.64	19.79	16.78	22.51
27	25.79	27.83	25.99	22.06	20.76	19.74	19.30	16.61	15.28	19.35	17.38	22.45
28	22.79	25.60	25.82	21.48	20.60	20.24	17.49	17.00	14.59	19.41	17.81	21.94
29	21.95	28.14	25.60	20.78	---	20.29	17.55	17.41	13.71	19.52	18.04	21.78
30	21.17	28.16	22.54	19.73	---	20.56	17.77	18.44	15.41	19.60	18.12	21.79
31	20.45	---	22.07	19.06	---	20.75	---	17.54	---	19.65	18.51	

GROUND-WATER RECORDS

223

ATHENS COUNTY

392004082071600. 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.--Biyearly 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, 21.05 ft below land-surface datum, Oct. 22, 1986; minimum daily low, 1.05 ft below land-surface datum, May 25, 28, 1968.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 22, 1986	21.05	Apr. 23, 1987	18.23

392009082072200. Local number, AT-5

AOUIFER.--Sand and gravel of Quater

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 12.07 ft below land-surface datum, May 5, 1983.

CORRECTIONS.--Table of ground-water levels published in 1986 report was in error. Below is corrected table.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.96	21.21	14.92	18.27	18.77	17.80	18.72	19.76	20.80	20.30	19.92	20.33
2	20.73	21.25	16.34	18.47	18.84	16.97	18.82	19.80	20.48	19.41	19.95	20.29
3	20.96	20.89	16.69	18.63	18.44	16.74	18.92	19.83	20.65	19.15	19.96	20.19
4	21.15	20.52	16.72	18.74	18.44	17.20	19.09	19.27	20.69	19.75	19.99	20.21
5	21.23	19.72	17.01	18.87	17.79	17.65	19.23	19.34	20.74	20.04	20.02	20.21
6	21.30	20.17	17.22	18.99	17.24	17.80	19.24	19.66	20.86	20.20	20.04	20.16
7	21.37	20.20	17.41	19.02	17.13	18.00	19.23	19.80	20.93	20.32	20.06	20.05
8	21.43	20.33	17.55	19.13	17.04	18.15	19.36	19.95	20.98	20.45	20.55	20.07
9	21.46	20.52	17.78	19.22	17.10	18.25	19.49	20.05	20.98	20.46	20.68	20.10
10	21.34	20.69	17.96	19.24	17.29	18.33	19.51	20.13	20.99	20.25	20.21	20.15
11	21.23	20.70	18.02	19.30	17.43	18.32	19.52	20.19	21.02	20.46	20.16	20.34
12	21.41	20.16	17.79	19.32	17.21	18.05	19.52	20.30	20.88	20.52	20.16	20.21
13	21.49	19.75	16.04	19.37	17.43	17.93	19.62	20.40	20.48	20.52	20.13	20.21
14	21.52	19.55	15.77	19.47	17.66	17.88	19.73	20.45	20.64	20.17	20.14	20.18
15	21.53	19.38	16.32	19.44	17.77	17.84	19.82	20.48	20.73	20.11	20.16	20.20
16	21.53	19.29	15.75	19.55	17.83	17.81	19.91	20.50	20.85	20.17	20.55	20.33
17	21.25	18.47	15.59	19.38	17.64	17.96	20.00	20.54	20.92	20.22	20.21	20.40
18	21.40	17.32	15.96	19.43	17.55	18.01	20.04	20.61	20.96	20.28	20.16	20.84
19	21.41	16.84	16.00	19.07	17.15	18.01	20.04	20.65	21.01	20.39	20.15	21.07
20	21.03	17.12	16.72	19.11	17.29	17.99	20.03	20.68	21.03	20.50	20.15	20.59
21	20.39	17.33	16.35	18.73	17.31	17.88	19.88	20.72	21.07	20.53	20.16	20.61
22	20.80	17.56	17.05	18.87	17.27	17.94	19.86	20.79	21.04	20.53	20.16	21.32
23	21.02	17.61	17.28	18.87	17.29	17.92	19.79	20.83	21.04	20.53	20.17	21.43
24	21.07	16.73	17.00	18.51	16.23	18.01	19.74	20.87	21.05	20.12	20.17	21.39
25	21.09	17.86	17.43	18.61	16.88	17.80	19.72	20.68	21.10	20.16	20.14	21.43
26	21.19	18.19	17.49	18.62	17.35	17.99	19.59	20.76	21.11	19.76	20.06	20.92
27	21.25	18.19	17.46	18.70	17.63	18.20	19.60	20.46	21.12	19.75	20.06	20.63
28	21.28	17.26	17.79	18.50	17.78	18.38	19.64	20.58	21.12	20.30	20.05	20.51
29	20.72	16.07	17.89	17.55	---	18.51	19.72	20.68	20.04	20.03	20.03	20.33
30	20.85	14.81	17.79	18.26	---	18.46	19.73	20.72	20.19	19.87	20.07	21.26
31	21.07	---	18.05	18.65	---	18						

GROUND WATER RECORDS

225

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.--Biyearly 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.--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, 4.86 ft below land-surface datum, Oct. 29, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 29, 1986	4.86	Apr. 27, 1987	5.15

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, 61.89 ft below land-surface datum, July 31,--Aug. 1, 1987; minimum daily low, 56.61 ft below land-surface datum, July 19-20, 1984.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60.58	59.99	58.75	58.89	59.03	59.54	60.18	59.11	59.47	60.91	61.89	61.50
2	60.40	60.00	58.71	58.88	58.97	59.60	60.17	59.16	59.50	60.91	61.88	61.48
3	60.32	60.02	58.58	58.91	59.03	59.75	60.09	59.27	59.61	60.92	61.85	61.44
4	60.21	60.03	58.38	59.01	59.13	59.82	59.99	59.34	59.77	60.96	61.84	61.40
5	60.02	60.03	58.37	59.09	59.15	---	59.78	59.39	59.90	60.99	61.84	61.35
6	59.93	60.06	58.31	59.09	---	---	59.52	59.38	60.00	61.01	61.85	61.31
7	59.86	60.06	58.19	59.13	---	---	58.65	59.38	60.07	61.02	61.85	61.30
8	59.70	60.06	58.09	59.17	58.93	---	58.33	59.46	60.12	61.03	61.84	61.28
9	59.60	60.00	58.01	59.17	59.02	59.59	58.63	59.49	60.26	61.09	61.82	61.28
10	59.53	60.00	58.01	59.14	59.05	59.76	58.66	59.53	60.34	61.12	61.75	61.30
11	59.45	59.98	58.01	59.13	59.06	59.77	58.65	59.56	60.36	61.16	61.75	61.31
12	59.35	---	58.05	59.17	59.07	59.78	58.64	59.66	60.36	61.17	61.72	61.33
13	59.27	---	58.23	59.22	59.11	59.78	58.60	59.73	60.37	61.17	61.69	61.35
14	59.19	---	58.23	59.21	59.13	59.78	58.50	59.78	60.40	61.24	61.66	61.43
15	59.17	---	58.26	59.21	59.23	59.80	58.33	59.84	60.48	61.28	61.66	61.45
16	59.18	---	58.30	59.28	59.23	59.87	58.27	59.87	60.50	61.35	61.66	61.45
17	59.20	---	58.32	59.28	59.24	59.90	58.28	59.88	60.57	61.45	61.65	61.45
18	59.30	---	58.31	59.28	59.32	59.91	58.42	59.90	60.60	61.47	61.66	61.45
19	59.38	59.10	58.36	59.17	59.44	59.90	58.54	59.91	60.60	61.47	61.66	61.50
20	59.39	59.10	58.48	59.21	59.47	59.86	58.62	59.95	60.60	61.52	61.76	61.52
21	59.40	59.04	58.62	59.22	59.47	59.90	58.67	59.99	60.60	61.57	61.78	61.60
22	59.43	59.08	58.68	59.20	59.46	59.96	58.71	60.00	60.60	61.61	61.77	61.64
23	59.50	59.08	58.68	---	59.50	59.99	58.79	60.00	60.66	61.61	61.76	61.65
24	59.59	59.07	58.68	---	59.58	59.99	58.89	60.00	60.72	61.64	61.78	61.65
25	59.61	59.08	58.68	---	59.61	60.00	58.94	59.95	60.72	61.66	61.77	61.70
26	59.61	59.08	58.82	---	59.64	60.06	58.98	59.85	60.73	61.66	61.76	61.79
27	59.61	58.98	58.89	---	59.64	60.08	58.98	59.78	60.76	61.65	61.66	61.82
28	59.71	58.98	58.89	---	59.62	60.13	58.99	59.68	60.83	61.66	61.63	61.84
29	59.78	58.97	58.89	59.03	---	60.15	58.99	59.59	60.85	61.73	61.60	61.84
30	59.82	58.84	58.88	59.01	---	60.14	59.08	59.53	60.90	61.84	61.57	61.80
31	59.95	---	58.88	59.03	---	60.15	---	59.49	---	61.89	61.53	---
MAX	60.58	---	58.89	---	---	---	60.18	60.00	60.90	61.89	61.89	61.84
WTR YR 1987 MEAN	59.99		HIGH	58.01	DEC	9 AND OTHERS		LOW	61.89	JUL 31 AND OTHERS		

GROUND-WATER RECORDS

227

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 OBSERVATION

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT. 31, 1986	10.69	MAY 1, 1987	10.49

GROUND-WATER RECORDS

BUTLER COUNTY--Continued

393202084241500. Local number, BU-15.

LOCATION.--Lat 39°32'02", long 84°24'15", Hydrologic Unit 05080002, at Hook Field (municipal airport) at Middletown.

Owner: City of Middletown.

AQUIFER.--Sand and gravel of Pleistocene Age.

INSTRUMENTATION.--Biyearly 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. 30, 1986	10.79	Apr. 30, 1987	11.10

GROUND-WATER RECORDS

229

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, 25.85 ft below land-surface datum, Oct. 17, 1985; minimum daily low, 2.00 ft above land surface, May 24, 25, 1968.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.55	17.45	16.95	17.50	19.50	18.35	18.05	18.85	20.05	21.00	19.40	22.05
2	20.10	19.00	15.60	18.85	19.75	18.40	17.15	19.05	20.05	21.00	20.40	22.15
3	15.60	19.25	12.60	18.00	19.80	18.55	17.30	18.65	19.55	16.75	20.55	21.95
4	15.45	19.40	12.25	19.15	19.65	18.95	17.85	18.90	17.45	15.20	20.55	22.45
5	13.55	18.30	13.30	20.00	19.35	19.15	18.55	19.10	16.65	15.20	20.45	22.80
6	13.30	18.25	14.10	20.35	18.50	19.35	18.70	19.20	17.20	15.25	20.45	23.00
7	13.90	18.15	16.35	20.55	17.35	19.50	18.45	19.30	17.65	17.10	20.65	23.00
8	14.65	18.20	16.85	20.60	17.35	19.65	18.35	19.65	18.50	18.00	20.75	23.05
9	16.65	19.70	16.95	18.40	17.35	19.70	18.40	20.00	19.20	18.60	20.75	23.05
10	17.90	18.70	15.85	17.70	17.35	19.70	16.95	20.10	19.55	19.15	20.95	22.90
11	18.65	18.30	15.90	17.40	19.05	19.75	18.45	20.20	19.60	19.30	21.10	22.75
12	19.15	19.70	17.10	18.85	19.40	19.90	18.60	19.90	19.90	18.70	21.50	22.65
13	19.55	19.85	17.65	18.95	19.30	20.00	18.75	20.00	20.00	18.25	21.65	21.25
14	19.65	19.90	18.40	18.90	19.30	20.05	18.80	20.25	20.05	17.70	21.75	22.05
15	19.75	19.85	18.65	19.60	19.45	19.70	18.20	20.30	20.10	17.75	22.30	22.35
16	19.90	20.05	18.75	19.75	19.60	20.05	15.40	20.10	20.10	16.50	22.60	22.40
17	20.00	20.15	18.80	17.80	19.95	18.75	13.80	20.50	20.00	18.05	22.70	22.40
18	19.00	20.15	17.75	17.40	20.10	19.95	14.10	20.70	19.75	18.95	22.10	22.35
19	19.05	18.45	17.95	19.20	20.20	18.80	14.35	20.40	19.90	19.55	22.50	20.70
20	19.80	19.65	18.00	19.60	20.20	18.45	14.70	20.05	20.30	19.95	22.65	20.30
21	20.00	20.05	18.10	19.95	18.95	18.45	16.50	19.80	20.60	20.35	22.75	21.65
22	20.10	19.65	16.95	20.15	18.50	18.45	16.90	19.35	20.60	20.50	22.80	21.90
23	20.37	19.85	18.35	20.20	18.30	18.45	17.30	18.70	20.45	20.50	22.80	22.15
24	19.80	19.05	18.50	20.15	18.15	20.10	17.50	18.85	20.30	20.50	22.80	22.35
25	19.25	18.45	18.55	20.20	17.85	20.25	16.25	18.85	20.25	20.90	22.65	22.45
26	19.10	18.25	17.00	20.20	18.45	20.00	16.35	18.70	20.35	21.35	22.45	22.40
27	18.80	14.50	16.65	20.20	18.85	20.10	18.00	19.05	20.65	21.35	22.45	22.40
28	18.55	13.20	16.50	20.25	18.55	20.25	18.40	19.20	20.95	20.80	22.10	22.50
29	17.20	14.00	18.55	20.25	---	20.20	18.50	19.25	21.00	20.75	22.05	22.55
30	18.00	16.15	18.90	18.80	---	20.35	18.75	19.55	21.10	20.80	21.75	22.70
31	18.40	---	17.55	19.00	---	19.75	---	19.90	---	20.85	22.05	---
MAX	21.55	20.15	18.90	20.60	20.20	20.35	18.80	20.70	21.10	21.35	22.80	23.05
WTR YR 1987 MEAN	19.25		HIGH		12.25	DEC 4	LOW		23.05	SEP 8	AND OTHERS	

GROUND-WATER RECORDS

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, 31.88 ft below land-surface datum, Sept. 29-30, 1987; minimum daily low, 11.45 ft below land-surface datum, June 6, 1947.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29.55	28.60	28.10	27.50	27.54	28.14	28.93	27.77	28.55	29.50	29.72	30.85
2	29.53	28.60	27.93	27.45	27.59	28.15	28.98	27.65	28.48	29.38	29.74	30.90
3	29.23	28.58	27.88	27.65	27.67	28.14	28.98	27.74	28.32	29.23	29.80	30.96
4	29.00	28.62	27.50	27.68	27.73	28.08	28.98	27.83	28.24	28.98	29.85	31.06
5	28.72	28.60	27.38	27.61	27.75	28.06	28.68	27.99	28.05	28.75	29.83	31.12
6	28.33	28.50	27.32	27.64	27.77	28.04	28.68	28.13	28.00	28.54	29.68	31.26
7	28.02	28.37	27.32	27.47	27.77	27.99	28.68	28.11	27.94	28.45	29.72	31.37
8	27.66	28.37	27.20	27.54	27.74	28.03	28.50	28.14	28.00	28.41	29.88	---
9	27.52	28.40	27.34	27.55	27.73	28.12	28.31	28.34	28.04	28.41	30.05	---
10	27.57	28.58	27.34	27.53	27.75	28.28	28.24	28.48	28.08	28.47	30.12	---
11	27.63	28.57	27.30	27.49	27.75	28.33	28.10	28.55	27.95	28.51	30.15	---
12	27.72	28.60	27.35	27.49	27.80	28.37	28.04	28.62	27.88	28.49	30.05	---
13	27.83	28.61	27.45	27.58	27.80	28.55	28.00	28.53	27.99	28.40	30.33	---
14	27.88	28.52	27.49	27.63	27.73	28.65	27.94	28.60	28.07	28.35	30.34	---
15	27.69	28.49	27.54	27.61	27.80	28.65	27.91	28.59	28.30	28.34	30.45	---
16	27.75	28.54	27.59	27.56	27.83	28.59	27.96	28.55	28.42	28.42	30.63	---
17	27.93	28.79	27.61	27.41	27.90	28.57	27.76	28.66	28.51	28.41	30.75	---
18	28.05	28.80	27.62	27.28	27.90	28.57	27.55	28.77	28.59	28.51	30.80	---
19	28.08	28.78	27.49	27.20	28.00	28.57	27.46	28.73	28.73	28.63	30.83	---
20	28.32	28.81	27.59	27.23	27.99	28.58	27.55	28.79	28.75	28.80	30.89	---
21	28.38	28.70	27.73	27.17	27.97	28.66	27.64	28.74	28.79	29.03	30.95	---
22	28.50	28.73	27.80	27.16	28.05	28.74	27.53	28.71	28.78	29.13	---	---
23	28.53	28.78	27.83	27.30	28.12	28.75	27.50	28.69	28.75	29.28	---	---
24	28.38	28.78	27.84	27.33	28.10	28.77	27.50	28.63	28.85	29.43	---	---
25	28.46	28.84	27.73	27.38	28.09	28.73	27.40	28.62	28.98	29.46	---	31.43
26	28.41	28.84	27.78	27.40	28.10	28.70	27.34	28.56	29.12	29.58	---	31.53
27	28.41	28.71	27.86	27.44	28.13	28.69	27.51	28.64	29.25	29.55	---	31.62
28	28.47	28.40	27.80	27.47	28.16	28.79	27.49	28.69	29.41	29.37	---	31.80
29	28.51	28.08	27.89	27.47	---	28.79	27.49	28.68	29.47	29.52	---	31.88
30	28.56	28.08	27.89	27.50	---	---	27.67	28.61	29.51	29.52	---	31.88
31	28.51	---	27.67	27.50	---	---	---	28.54	---	29.68	30.82	---
MAX	29.55	28.84	28.10	27.68	28.16	---	28.98	28.79	29.51	29.68	---	---
WTR YR 1987 MEAN	28.47			HIGH	27.16	JAN 22	LOW	31.88	SEP 29	AND OTHERS		

GROUND-WATER RECORDS

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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, 39.11 ft below land-surface datum, Feb. 25-26, 1977; minimum daily low, 26.81 ft below land-surface datum, Apr. 10, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36.08	35.04	35.12	33.19	35.63	36.60	36.75	35.56	36.33	36.74	36.93	38.23
2	36.03	35.05	35.08	33.25	35.69	36.61	36.75	35.60	36.35	36.74	36.97	38.24
3	35.95	35.06	34.95	33.30	35.74	36.63	36.75	35.59	---	36.73	37.02	38.26
4	35.80	35.08	34.79	33.34	35.79	36.64	36.74	35.60	---	36.69	37.08	38.30
5	35.79	35.09	34.72	33.36	35.84	36.65	36.70	35.60	---	36.67	37.10	38.33
6	35.75	35.10	34.72	33.40	35.87	36.65	36.67	35.63	---	36.70	37.12	38.37
7	35.59	35.10	34.68	33.42	35.90	36.66	36.66	35.66	---	36.66	37.15	38.42
8	35.58	35.08	34.61	33.43	35.97	36.66	36.66	35.67	---	36.61	37.20	38.47
9	35.50	35.10	34.50	33.41	35.99	36.67	36.65	35.73	---	36.59	37.25	38.49
10	35.42	35.10	34.17	33.44	36.01	36.68	36.64	35.78	---	36.56	37.32	38.53
11	35.34	35.11	33.96	33.45	36.04	36.69	36.60	35.85	---	36.51	37.35	38.57
12	35.24	35.13	33.80	33.49	36.08	36.71	36.56	35.90	---	36.47	37.38	38.60
13	35.16	35.15	33.71	33.50	36.10	36.72	36.50	35.93	36.12	36.42	37.43	38.61
14	35.09	35.15	33.60	33.51	36.13	36.72	36.40	36.00	36.07	36.40	37.50	38.62
15	35.06	35.14	33.54	33.63	36.17	36.72	36.30	36.00	36.06	36.37	37.55	38.65
16	34.84	35.15	33.49	34.05	36.20	36.73	36.23	36.00	36.13	36.33	37.62	38.68
17	34.84	35.16	33.43	34.33	36.23	36.75	36.19	36.01	36.18	36.31	37.68	38.72
18	34.85	35.20	33.37	34.51	36.25	36.73	36.12	36.05	36.22	36.32	37.73	38.75
19	34.85	35.22	33.31	34.68	36.29	36.73	36.06	36.06	36.26	36.37	37.79	38.75
20	34.86	35.21	33.28	34.79	36.31	36.73	36.01	36.07	36.26	36.43	37.84	38.76
21	34.88	35.21	33.24	34.87	36.35	36.73	35.95	36.09	36.30	36.50	37.91	38.79
22	34.90	35.24	33.21	34.96	36.38	36.73	35.88	36.10	36.31	36.56	37.97	38.82
23	34.92	35.26	33.17	35.04	36.40	36.73	35.78	36.11	36.35	36.62	37.99	38.83
24	34.93	35.29	33.13	35.13	36.44	36.76	35.71	36.12	36.37	36.69	38.01	38.84
25	34.91	35.30	33.11	35.20	36.47	36.82	35.67	36.14	36.42	36.76	38.05	38.85
26	34.92	35.32	33.11	35.27	36.50	36.80	35.66	36.17	36.47	36.83	38.07	38.89
27	34.93	35.29	33.10	35.34	36.55	36.79	35.63	36.17	36.54	36.82	38.12	38.90
28	34.96	35.29	33.10	35.41	36.62	36.77	35.62	36.19	36.60	36.84	38.15	38.92
29	34.99	35.16	33.07	35.47	---	36.80	35.55	36.22	36.69	36.86	38.16	38.95
30	35.01	35.15	33.12	35.54	---	36.82	35.51	36.25	36.70	36.89	38.18	38.99
31	35.02	---	33.15	35.59	---	36.77	---	36.28	---	36.90	38.22	---
MAX	36.08	35.32	35.12	35.59	36.62	36.82	36.75	36.28	---	36.90	38.22	38.99
WTR YR 1987 MEAN	36.04		HIGH		33.07	DEC 29	LOW		38.99	SEP 30		

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.

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54.04	54.83	54.84	53.37	54.12	54.76	55.14	52.35	52.38	52.56	53.93	55.53
2	54.06	54.85	54.70	53.36	54.12	54.87	55.03	52.37	52.37	52.60	53.96	55.58
3	54.06	54.86	54.49	53.43	54.25	54.98	55.00	52.43	52.36	52.63	54.00	55.65
4	54.06	54.88	54.45	53.49	54.40	55.05	54.81	52.53	52.34	52.66	54.06	55.71
5	54.06	54.88	54.45	53.52	54.45	55.05	54.43	52.62	52.22	52.70	54.12	55.75
6	54.08	54.93	54.32	53.53	54.45	55.04	54.36	52.65	52.09	52.73	54.20	55.78
7	54.09	54.98	54.04	53.51	54.45	55.04	54.23	52.67	51.93	52.77	54.28	55.81
8	54.11	55.00	53.77	53.58	54.30	54.95	54.13	52.71	51.80	52.82	54.33	55.86
9	54.13	55.06	53.65	53.60	54.40	54.78	54.01	52.74	51.73	52.85	54.35	55.91
10	54.16	55.08	53.55	53.50	54.45	54.88	54.00	52.76	51.72	52.88	54.41	55.98
11	54.17	55.10	53.56	53.56	54.45	54.93	53.78	52.78	51.72	52.93	54.46	56.03
12	54.17	55.13	53.53	53.63	54.48	55.00	53.79	52.84	51.71	52.96	54.51	56.07
13	54.17	55.20	53.59	53.70	54.50	55.04	53.82	52.89	51.69	52.99	54.57	56.12
14	54.18	55.21	53.59	53.72	54.52	55.04	53.82	52.93	51.68	53.03	54.64	56.18
15	54.23	55.21	53.49	53.78	54.57	55.03	53.70	52.99	51.69	53.08	54.69	56.23
16	54.26	55.14	53.47	53.86	54.58	55.07	53.59	53.01	51.72	53.14	54.73	56.27
17	54.32	55.11	53.43	53.88	54.60	55.12	53.42	53.01	51.78	53.23	54.76	56.28
18	54.38	55.15	53.24	53.88	54.65	55.12	53.34	53.01	51.85	53.28	54.84	56.28
19	54.43	55.21	53.28	53.86	54.71	55.12	53.26	53.01	51.91	53.32	54.90	56.39
20	54.44	55.23	53.32	53.97	54.75	55.14	53.11	53.00	51.95	53.40	54.98	56.43
21	54.45	55.31	53.38	53.98	54.77	55.14	52.97	52.98	51.98	53.45	55.05	56.50
22	54.47	55.33	53.40	53.91	54.77	55.14	52.82	52.94	52.03	53.51	55.09	56.55
23	54.50	55.36	53.40	53.89	54.82	55.14	52.77	52.91	52.11	53.54	55.16	56.61
24	54.53	55.40	53.33	54.01	54.87	55.11	52.73	52.78	52.18	53.62	55.22	56.64
25	54.54	55.42	53.19	54.04	54.92	55.10	52.73	52.63	52.22	53.66	55.26	56.71
26	54.53	55.31	53.28	54.06	54.97	55.12	52.68	52.54	52.27	53.70	55.28	56.75
27	54.53	55.31	53.34	54.08	54.98	55.14	52.53	52.52	52.33	53.74	55.32	56.80
28	54.61	55.31	53.38	54.09	54.98	55.17	52.42	52.52	52.41	53.78	55.37	56.83
29	54.66	55.10	53.39	54.12	---	55.18	52.42	52.47	52.46	53.82	55.43	56.86
30	54.74	54.93	53.34	53.96	---	55.17	52.31	52.43	52.53	53.85	55.46	56.89
31	54.79	---	53.36	54.10	---	55.1						

GROUND-WATER RECORDS

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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 Twomile 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 1986 TO SEPTEMBER 1987

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)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
NOV 13...	1315	900	7.41	6.0	14.5	<10	410	110	110	34
MAR 10...	1430	920	7.49	3.0	16.5	<10	410	61	110	34
SEP 01...	1155	932	7.45	17.0	17.0	<10	410	96	110	33

DATE	ALKA- LINIT WH WAT TOTAL 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)	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 DIS- SOLVED (UG/L AS AS)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)
NOV 13...	302	94	51	0.20	480	<0.010	1.70	<1	30	30
MAR 10...	354	95	51	0.20	528	<0.010	1.50	--	--	--
SEP 01...	315	94	49	0.20	537	<0.010	1.30	<1	30	<10

DATE	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...	8	5	3	16	<5	3	<10	4	1.3
MAR 10...	--	--	4	--	--	2	--	--	0.7
SEP 01...	5	3	<3	<5	<5	4	20	10	0.7

BUTLER COUNTY--Continued

392515084322000. Local number, BU-5.
LOCATION.--Lat 39°25'15", long 84°32'20", Hydrologic Unit 05080002, 2.0 mi north of courthouse in Hamilton.
Owner: Hamilton Water Department.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled unused water table well, diameter 18 in., depth 110 ft, cased.
INSTRUMENTATION.--Digital recorder -- 60-minute punch.
DATUM.--Elevation of land-surface datum is 590 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 5.71 ft above land-surface datum.
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water. Water level affected by pumping of nearby North Hamilton well field and by stage of the Great Miami River.
PERIOD OF RECORD.--July 1939 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 42.05 ft below land-surface datum, Sept. 16-17, 1954; minimum daily low, 4.10 ft below land-surface datum, Jan. 23, 1959.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.70	16.57	15.97	16.23	16.63	16.94	17.05	15.90	16.76	17.80	17.60	23.02
2	17.39	16.59	15.90	16.17	20.98	16.87	16.83	15.89	16.65	21.88	17.51	22.98
3	16.71	16.56	21.09	16.21	16.83	16.75	16.69	15.88	16.59	21.44	17.49	22.99
4	16.32	16.57	20.86	16.24	16.74	16.69	16.54	20.36	16.18	21.11	17.48	23.03
5	15.89	16.57	20.93	16.25	16.64	16.69	16.42	21.99	16.00	16.27	17.59	23.54
6	15.06	20.40	15.46	20.62	16.60	21.60	19.02	17.79	20.24	15.94	22.12	19.24
7	18.94	16.70	15.37	22.20	16.54	17.01	21.10	16.72	16.10	15.84	17.73	22.77
8	19.30	16.71	15.40	16.77	16.61	16.88	16.49	16.52	16.03	15.88	17.53	23.72
9	19.50	16.68	15.44	16.53	16.61	16.87	16.34	21.74	16.09	20.38	17.57	20.25
10	15.71	16.68	15.42	16.47	16.59	16.95	19.22	21.96	16.14	16.21	17.77	24.31
11	15.75	16.68	15.22	16.49	16.60	16.91	16.37	20.78	20.16	21.06	21.86	24.35
12	15.82	16.82	15.29	16.51	16.65	16.92	16.33	20.82	16.39	16.39	18.08	23.65
13	15.95	16.89	15.32	16.52	21.14	16.93	20.78	20.95	16.30	16.07	22.81	19.30
14	19.95	16.92	15.37	16.52	16.88	16.90	20.86	22.60	16.28	16.02	23.05	19.21
15	21.16	17.07	15.44	16.56	16.80	16.92	16.57	21.76	16.26	15.95	23.14	19.15
16	21.23	17.02	15.53	21.42	16.77	16.93	16.23	21.84	16.25	15.99	24.16	19.08
17	16.57	17.06	15.52	16.89	16.78	20.94	20.13	21.93	16.27	16.02	22.98	18.53
18	16.43	17.13	20.01	16.68	16.81	17.03	15.75	22.67	20.35	16.06	18.74	23.78
19	16.42	17.14	15.87	16.69	16.85	16.99	15.67	17.83	21.01	16.14	24.04	18.65
20	16.40	20.84	15.80	20.94	16.85	16.98	15.64	17.03	20.99	20.58	23.59	18.42
21	16.42	17.08	15.85	16.81	16.86	16.97	20.03	20.82	17.06	21.98	24.39	18.31
22	16.46	17.02	15.84	16.75	16.85	16.99	22.10	16.98	16.81	22.57	24.50	18.24
23	21.01	17.00	15.85	16.89	21.36	17.00	21.77	20.66	16.73	23.32	23.71	21.91
24	16.57	17.03	15.85	16.86	17.17	17.00	16.31	16.83	16.69	23.09	19.05	18.47
25	16.52	17.02	15.93	16.88	17.02	17.04	16.07	20.77	16.68	23.22	18.81	18.27
26	16.50	16.99	15.96	16.90	17.02	21.44	16.00	16.92	21.47	23.76	18.67	18.19
27	16.49	16.42	15.94	16.87	17.01	17.28	15.93	16.70	21.89	23.16	18.67	18.14
28	16.55	15.95	15.99	16.72	17.00	17.21	15.92	16.60	22.08	18.07	18.66	18.10
29	16.51	15.84	15.99	16.69	---	17.19	15.87	20.48	22.73	17.68	18.66	18.07
30	21.06	15.92	16.04	16.65	---	17.11	15.91	21.56	22.57	23.29	18.64	18.07
31	16.62	---	20.41	16.67	---	21.21	---	16.91	---	17.79	22.78	

GROUND WATER RECORDS

235

BUTLER COUNTY--Continued

392733084293000. Local number, BU-16.

LOCATION.--Lat 39°27'33", long 84°29'30", Hydrologic Unit 05080002, Wayn-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, 1.5 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 19.24 ft below land-surface datum, Nov. 24, 1986; minimum daily low, 10.55 ft below land-surface datum, May 4-8, 17-21, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.11	18.03	18.28	17.35	17.90	18.34	18.07	16.67	17.30	17.41		
2	17.11	18.03	17.86	17.36	18.17	18.31	17.83	16.67	17.26	17.41		
3	17.12	18.11	16.67	17.37	17.97	18.03	17.49	16.68	17.24	17.42		
4	17.13	18.07	16.70	17.37	17.97	18.03	17.36	17.50	17.17	17.42		
5	17.14	18.06	16.72	17.63	17.97	18.03	17.35	17.00	17.10	17.42		
6	17.91	18.06	16.75	17.58	17.97	18.05	17.44	---	17.10	18.31		
7	17.42	18.06	16.77	17.56	17.97	18.05	17.35	---	17.10	17.77		
8	17.42	18.07	16.81	17.56	17.97	18.05	17.33	---	17.10	17.77		
9	17.43	18.07	16.83	17.56	17.97	18.06	17.34	---	17.10	17.75		
10	17.44	18.08	16.84	17.56	17.97	18.09	17.33	---	17.10	17.75		
11	17.44	18.08	16.86	17.57	17.98	18.10	17.33	---	17.10	17.75		
12	17.44	18.09	16.87	17.57	17.98	18.10	17.34	---	17.11	17.75		
13	17.45	18.10	16.88	17.58	17.98	18.11	17.34	17.01	17.12	17.75		
14	17.46	18.10	16.90	17.59	17.99	18.12	17.34	---	17.12	17.75		
15	17.49	18.11	16.93	17.59	17.99	18.13	17.34	---	17.12	17.75		
16	17.49	18.12	16.95	17.60	17.99	18.14	17.20	---	17.12	17.68		
17	17.50	18.13	18.05	17.60	18.00	18.15	16.93	---	17.13	17.68		
18	17.51	18.14	17.25	17.60	18.00	18.15	16.70	---	17.13	17.68		
19	17.52	18.15	17.25	17.62	18.02	18.16	16.64	---	17.39	17.68		
20	17.53	18.16	17.26	17.62	18.03	18.17	16.63	17.02	17.37	17.68		
21	17.54	18.18	17.57	17.63	18.04	18.18	16.63	17.11	17.37	17.68		
22	17.55	18.20	17.57	17.64	18.04	18.20	16.63	---	17.37	17.68		
23	17.57	18.25	17.32	17.64	18.05	19.06	16.64	---	17.40	17.68		
24	17.59	19.24	17.32	17.65	18.05	19.07	16.64	---	17.40	17.68		
25	17.60	18.55	17.32	17.65	18.05	18.44	16.65	---	17.40	17.69		
26	17.61	18.49	17.33	17.66	18.10	18.44	16.65	---	17.40	17.69		
27	17.63	17.76	17.33	17.66	18.52	18.44	16.65	---	17.40	17.92		
28	17.66	17.73	17.33	17.67	18.40	18.44	16.66	---	17.40	17.90		
29	17.67	17.77	17.34	18.75	---	18.44	16.66	17.70	17.40	17.90		
30	17.70	17.83	17.35	18.63	---	18.44	16.66	17.30	17.40	17.90		
31	18.18	---	17.35	17.90	---	18.42	---	17.18	---	---		
MAX	18.18	19.24	18.28	18.75	18.52	19.07	18.07	---	17.40	---		
WTR YR 1987	MEAN	17.62		HIGH	16.63	APR 20	AND OTHERS	LOW	19.24	NOV 24		

GROUND-WATER RECORDS

BUTLER COUNTY

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.--Type F continuous recorder.

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.

WATER, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51.98	55.46	---	57.08	55.35	56.85	59.45	58.18	59.80	59.40	55.24	54.72
2	52.11	55.53	56.16	57.03	55.05	57.02	59.50	57.85	59.77	59.25	55.15	54.75
3	53.11	55.56	56.33	57.04	55.27	57.07	59.54	57.72	59.80	59.08	55.34	54.71
4	53.42	55.60	56.51	57.02	56.17	59.14	59.47	58.31	58.85	58.96	55.75	54.80
5	53.69	55.59	56.59	57.04	56.23	59.47	59.33	58.38	58.76	58.80	56.16	54.89
6	53.87	55.70	56.52	56.99	56.28	59.62	59.33	58.32	58.65	58.93	55.51	55.03
7	53.30	55.70	56.48	57.74	56.27	58.64	59.33	58.39	58.55	58.94	55.63	55.08
8	52.98	54.99	56.59	57.76	56.52	58.28	59.40	58.66	58.53	58.80	55.20	55.26
9	53.69	55.21	56.77	57.76	56.55	59.28	59.34	58.76	58.56	57.99	55.10	55.29
10	54.03	55.23	56.89	57.34	56.47	59.38	59.54	58.76	58.68	57.90	55.25	54.77
11	54.00	55.13	56.05	57.52	57.01	59.42	58.62	58.81	58.60	57.83	59.65	54.87
12	54.00	55.50	56.12	57.48	57.50	58.73	58.72	58.96	58.54	57.60	60.30	54.25
13	54.38	55.68	56.25	56.85	56.50	58.80	59.36	59.63	58.54	57.48	56.10	54.00
14	54.54	55.68	56.15	56.83	56.35	58.93	59.51	59.78	58.58	57.41	55.40	53.69
15	54.70	55.59	56.10	57.14	56.42	59.01	59.51	59.87	58.64	56.13	54.87	53.53
16	54.13	55.67	56.08	56.94	56.40	59.22	59.50	59.83	58.65	56.20	54.87	54.09
17	54.39	55.88	57.67	56.80	56.49	59.29	59.56	59.75	58.55	56.25	54.87	53.30
18	54.47	55.88	58.17	56.57	57.27	59.26	59.63	59.87	58.50	55.91	55.10	53.00
19	54.47	56.25	58.24	56.61	57.25	59.05	59.60	60.02	58.43	55.76	54.93	52.93
20	54.47	56.35	58.36	56.67	57.30	59.04	59.96	60.17	58.30	56.11	54.85	52.77
21	54.52	---	58.45	56.85	57.13	58.96	59.61	58.94	58.17	55.70	55.32	52.74
22	54.59	56.43	58.69	56.85	57.15	58.92	59.53	58.77	58.31	55.14	54.51	52.60
23	54.70	56.29	58.50	57.37	57.34	58.95	58.43	58.74	58.34	54.80	54.50	52.60
24	54.78	---	58.43	---	58.37	58.93	58.46	58.69	58.40	55.43	54.49	52.98
25	54.81	---	58.55	57.36	57.91	58.72	58.46	58.67	58.40	54.81	54.38	52.68
26	54.96	---	58.71	57.33	56.85	57.96	58.62	58.75	58.35	54.68	54.69	52.50
27	55.15	---	58.71	---	56.70	58.26	58.37	59.50	58.87	54.84	54.95	52.31
28	55.33	---	58.79	---	56.65	58.35	58.32	59.72	59.30	54.75	54.88	52.06
29	55.33	---	58.79	56.60	---	58.36	58.28	59.79	59.35	55.58	54.89	52.20
30	55.51	---	58.93	56.08	---	---	58.29	59.77	59.50	56.15	54.62	53.38
31	55.44	---	58.93	55.63	---	---	---	59.72	---	55.88	54.84	---
MAX	55.51	---	---	---	58.37	---	59.96	60.17	59.80	59.40	60.30	55.29
WTR YR 1987 MEAN	56.91				51.98	OCT 1	LOW	60.30	AUG 12			

GROUND-WATER RECORDS

237

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.--Type F continuous recorder.

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, 27.30 ft below land-surface datum, June 17, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34.95	34.70	31.40	33.05	33.75	35.40	34.70	33.05	36.85	38.20	37.30	36.90
2	36.25	34.85	33.65	32.15	34.00	36.05	35.00	33.35	36.75	38.30	37.20	36.95
3	36.15	34.55	33.35	32.05	33.45	36.20	36.05	33.05	36.75	36.25	37.35	38.15
4	34.65	34.40	33.25	31.50	33.45	36.30	36.75	33.55	36.40	35.65	37.50	38.80
5	34.50	34.25	32.90	32.25	34.30	36.15	34.05	33.75	35.65	35.85	37.35	38.10
6	34.15	34.00	32.95	32.80	33.45	36.15	34.15	34.00	36.15	37.20	38.00	38.15
7	34.00	34.25	32.45	32.75	33.65	35.05	34.15	33.95	36.55	34.85	36.65	38.45
8	33.65	34.45	32.65	32.90	33.25	34.80	34.20	33.95	35.90	36.45	38.35	38.80
9	33.65	34.00	32.70	32.75	33.75	34.75	34.30	34.70	36.70	36.75	38.30	37.70
10	33.80	34.40	32.85	32.85	33.35	34.80	34.30	35.15	36.85	36.75	37.15	38.00
11	33.60	34.25	32.90	32.75	33.50	34.90	33.90	35.25	36.35	36.50	37.15	37.35
12	34.10	34.65	32.95	33.10	33.75	35.00	33.95	35.20	36.40	36.20	38.25	37.20
13	33.75	34.45	32.95	33.25	34.60	35.10	33.75	35.35	34.35	36.30	38.80	36.30
14	33.50	34.45	32.25	32.70	34.70	34.65	33.55	35.50	35.05	36.15	39.10	39.05
15	33.65	34.00	32.80	33.45	33.90	34.60	33.65	35.10	36.75	36.45	39.25	39.15
16	33.50	32.35	32.85	33.15	33.95	34.65	33.25	36.25	37.15	34.60	38.95	39.30
17	33.60	33.75	32.20	33.30	34.60	34.65	33.10	36.95	37.70	36.65	39.15	39.70
18	33.40	33.85	32.75	32.90	34.40	34.90	30.00	36.40	37.40	37.20	37.90	39.50
19	33.10	33.90	32.95	33.15	34.15	34.90	29.45	35.05	37.95	37.50	38.55	38.90
20	33.25	34.25	32.75	33.75	34.30	34.70	33.55	35.35	36.90	36.80	39.65	39.50
21	33.55	34.40	32.85	33.80	34.40	34.85	33.05	35.80	36.30	37.70	39.25	40.10
22	33.45	34.15	32.90	33.40	34.10	35.35	33.00	35.35	38.30	37.50	37.40	39.95
23	33.35	33.85	32.45	33.70	34.60	35.35	33.20	34.15	38.25	37.55	38.75	40.05
24	33.30	34.55	31.85	34.30	34.95	---	33.05	34.15	38.35	37.55	38.65	40.15
25	33.35	34.15	29.15	34.30	35.30	---	33.15	35.25	38.15	38.10	38.55	40.20
26	33.05	33.65	31.15	34.35	35.45	---	30.15	34.35	37.80	37.95	37.35	39.65
27	33.80	33.10	30.90	35.10	35.60	---	32.25	34.85	37.65	37.15	37.10	40.00
28	33.50	31.75	31.10	35.55	35.20	---	32.70	34.95	38.10	35.90	36.60	40.55
29	34.25	31.80	31.75	34.95	---	---	32.65	35.05	38.25	36.50	36.25	40.55
30	34.40	31.25	32.75	35.20	---	---	33.00	34.85	38.25	37.00	36.90	39.40
31	34.75	---	32.90	35.00	---	---	---	34.70	---	37.80	37.20	---
MAX	36.25	34.85	33.65	35.55	35.60	---	36.75	36.95	38.35	38.30	39.65	40.55
WTR YR 1987 MEAN	35.16		HIGH		29.15	DEC 25	LOW		40.55	SEP 28 AND OTHERS		

GROUND-WATER RECORDS

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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			---	28.03	25.08	24.24	24.17	18.53	20.12	24.88	26.00	31.29
2			---	27.98	24.54	24.46	23.98	18.57	20.39	24.96	26.19	31.41
3			---	28.03	24.43	24.44	23.97	18.63	20.65	25.00	26.30	31.52
4			---	27.92	24.41	24.45	23.52	18.66	20.88	24.95	26.52	31.59
5			---	27.87	24.42	24.32	23.59	18.49	21.08	24.98	---	31.70
6			---	27.69	24.19	24.29	23.32	18.32	21.29	24.99	---	31.77
7			---	27.73	24.09	24.21	23.06	18.22	21.44	24.94	---	31.87
8			---	27.71	24.17	24.09	22.67	18.13	21.70	24.92	---	31.97
9			---	27.64	24.26	24.13	22.27	18.11	21.92	24.92	---	32.09
10			---	27.48	23.99	24.24	21.91	17.96	22.08	24.89	---	32.15
11			---	27.54	23.97	24.09	21.65	17.97	22.23	24.85	28.16	32.23
12			---	27.56	23.91	24.11	21.51	18.01	22.41	24.87	28.40	31.90
13			---	27.60	23.93	24.09	21.52	18.02	22.53	24.87	28.59	31.73
14			---	27.48	23.76	23.98	21.22	18.08	22.72	24.94	28.75	31.74
15			---	27.50	23.91	24.08	21.10	18.12	22.89	24.99	28.79	31.76
16			---	27.51	23.81	24.14	20.93	18.15	23.02	25.07	28.99	31.91
17			---	27.30	23.80	24.07	20.81	18.24	23.11	25.10	29.20	32.02
18			---	27.00	23.82	23.99	20.82	18.42	23.21	25.12	29.38	32.16
19			---	26.92	23.80	23.92	20.71	18.02	23.27	25.17	29.54	32.26
20			---	26.67	23.80	23.96	20.66	17.76	23.44	25.15	29.76	32.37
21			---	26.58	23.80	23.95	20.53	17.90	23.71	25.12	29.92	32.52
22			---	26.20	23.80	23.94	20.51	17.90	23.84	25.11	30.17	32.62
23			---	26.10	24.01	24.00	20.48	18.20	24.03	25.14	30.22	32.72
24			---	25.94	24.07	23.93	20.48	18.51	24.20	25.21	30.29	32.93
25			---	25.72	24.10	23.93	20.45	18.76	24.28	25.26	30.38	32.86
26			---	25.46	24.15	24.04	20.18	19.05	24.46	25.41	30.52	32.97
27			---	25.36	24.12	24.05	19.96	19.18	24.65	25.54	30.68	33.15
28			---	25.24	24.16	24.12	19.38	19.34	24.69	25.57	30.82	33.11
29			---	25.27	---	24.08	18.33	19.53	24.73	25.81	30.98	33.09
30			28.25	25.14	---	24.07	18.54	19.73	24.82	25.94	31.06	33.14
31			28.24	25.23	---	24.14	---	20.00	---	25.96	31.16	---
MAX			---	28.03	25.08	24.46	24.17	20.00	24.82	25.96	---	33.15
WTR YR 1987	MEAN	24.86		HIGH	17.76	MAY 20	LOW	33.15	SEP 27			

GROUND-WATER RECORDS

239

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.WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.63	16.35	15.79	15.12	16.00	16.77	17.37	17.45	17.73	18.09	18.17	18.79
2	17.22	16.34	15.79	15.20	16.01	16.80	17.36	17.48	17.78	17.87	18.14	18.84
3	17.22	16.34	15.59	15.27	16.07	16.84	17.38	17.43	17.81	17.77	18.11	18.87
4	17.05	16.43	15.36	15.32	16.20	16.86	17.39	17.43	17.86	17.72	18.16	18.87
5	16.02	16.44	15.26	15.34	16.22	16.89	17.35	17.44	17.87	17.69	18.17	18.90
6	15.84	16.43	15.22	15.35	16.20	16.96	17.35	17.55	17.90	17.71	18.23	18.88
7	15.85	16.45	15.20	15.41	16.24	16.96	17.32	17.61	17.80	17.81	18.29	18.88
8	15.87	16.45	15.19	15.46	16.26	16.85	17.31	17.64	17.78	17.89	18.34	18.94
9	15.91	16.47	15.16	15.45	16.28	16.91	17.36	17.68	17.80	17.92	18.29	18.94
10	15.97	16.48	15.11	15.47	16.32	16.95	17.33	17.72	17.86	17.97	18.36	18.96
11	15.99	16.48	15.09	15.49	16.32	16.97	17.37	17.72	17.89	17.99	18.42	18.98
12	16.01	16.54	15.10	15.50	16.37	17.02	17.37	17.67	17.90	18.01	18.44	18.99
13	16.02	16.55	15.11	15.54	16.41	17.05	17.37	17.71	17.91	18.02	18.49	19.02
14	16.03	16.54	15.09	15.60	16.42	17.05	17.36	17.70	17.82	17.69	18.53	19.05
15	16.09	16.56	15.07	15.65	16.43	17.04	17.38	17.73	17.97	17.70	18.57	19.08
16	16.11	16.59	15.09	15.70	16.44	17.07	17.34	17.74	17.78	17.74	18.50	19.10
17	16.16	16.61	15.10	15.75	16.52	17.09	17.33	17.73	17.79	17.77	18.58	19.14
18	16.05	16.64	15.14	15.71	16.52	17.11	17.31	17.77	17.83	17.82	18.60	19.16
19	16.03	16.67	15.15	15.72	16.58	17.13	17.29	17.72	17.83	17.74	18.65	19.18
20	16.06	16.64	15.17	15.75	16.61	17.17	17.27	17.75	17.87	17.86	18.65	19.18
21	16.19	16.66	15.18	15.80	16.64	17.24	17.35	17.78	17.89	17.93	18.68	19.18
22	16.25	16.64	15.15	15.82	16.63	17.22	17.38	17.74	17.90	17.95	18.70	19.22
23	16.32	16.62	15.17	15.88	16.67	17.26	17.37	17.75	18.01	17.97	18.67	19.22
24	16.37	16.63	15.18	15.90	16.68	17.29	17.38	17.65	18.03	18.04	18.74	19.24
25	16.39	16.68	15.08	15.90	16.74	17.34	17.38	17.56	18.03	18.07	18.74	19.26
26	16.27	16.67	15.04	15.93	16.76	17.37	17.38	17.60	18.05	18.01	18.74	19.31
27	16.29	16.06	15.02	15.97	16.80	17.41	17.39	17.68	18.07	18.06	18.75	19.22
28	16.37	15.85	15.00	15.99	16.85	17.45	17.40	17.72	18.04	18.10	18.80	19.29
29	16.39	15.76	15.05	16.03	---	17.41	17.42	17.75	18.09	18.13	18.82	19.28
30	16.38	15.72	15.12	16.03	---	17.37	17.43	17.77	18.07	18.16	18.82	19.29
31	16.42	---	15.14	16.10	---	17.34	---	17.77	---	18.14	18.86	---
MAX	17.63	16.68	15.79	16.10	16.85	17.45	17.43	17.78	18.09	18.16	18.86	19.31
WTR YR 1987 MEAN	17.13		HIGH		15.00	DEC 28	LOW		19.31	SEP 26		

395840083495200. Local number, CL-7.

Owner: State of Ohio.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 6 in., depth 50 ft, cased.

DATUM.--Elevation of land-surface datum is 928.02 ft. Measuring point: Floor of instrument shelter 2.00 ft above land-surface datum.

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, 10.04 ft below land-surface datum, June 16, 1981.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	13.17	12.01	12.50	13.89	14.90	15.67	14.31	15.34	16.47	16.45	17.48
2	---	13.16	11.85	12.57	13.90	14.91	15.66	14.32	15.37	16.42	16.47	17.50
3	---	13.19	11.44	12.62	13.96	14.91	15.66	14.34	15.39	16.27	16.48	17.52
4	---	13.19	11.15	12.66	14.00	14.94	15.57	14.37	15.43	16.11	16.52	17.54
5	---	13.24	11.10	12.76	14.00	14.95	15.51	14.40	15.46	15.98	16.56	17.56
6	---	13.27	11.12	12.85	14.01	14.98	15.47	14.43	15.50	15.87	16.61	17.57
7	---	13.27	11.16	12.92	14.03	14.98	15.42	14.48	15.54	15.79	16.63	17.58
8	---	13.27	11.17	12.98	14.05	14.99	15.36	14.53	15.58	15.74	16.67	17.58
9	---	13.28	11.18	13.04	14.08	15.02	15.31	14.55	15.65	15.70	16.72	17.62
10	---	13.30	11.14	13.09	14.12	15.06	15.26	14.61	15.72	15.68	16.74	17.65
11	---	13.33	11.15	13.15	14.15	15.12	15.23	14.65	15.79	15.68	16.77	17.70
12	---	13.37	11.26	13.19	14.20	15.19	15.18	14.72	15.84	15.67	16.82	17.73
13	---	13.39	11.29	13.26	14.23	15.22	15.13	14.79	15.86	15.65	16.89	17.73
14	12.75	13.40	11.37	13.33	14.27	15.27	15.08	14.85	15.87	15.63	16.95	17.73
15	12.81	13.42	11.46	13.36	14.29	15.32	15.02	14.90	15.89	15.65	17.00	17.75
16	12.86	13.44	11.53	13.39	14.31	15.36	14.99	14.92	15.84	15.69	17.06	17.77
17	12.95	13.45	11.63	13.40	14.37	15.38	14.91	14.92	15.85	15.71	17.10	17.78
18	13.00	13.52	11.73	13.44	14.46	15.42	14.82	14.95	15.89	15.74	17.14	17.79
19	13.02	13.52	11.83	13.47	14.52	15.48	14.72	14.97	15.95	15.78	17.19	17.79
20	13.05	13.57	11.90	13.49	14.57	15.51	14.61	14.99	16.00	15.82	17.24	17.79
21	13.11	13.58	11.96	13.51	14.62	15.54	14.50	15.02	16.04	15.88	17.31	17.79
22	13.17	13.60	12.00	---	14.64	15.56	14.43	15.03	16.09	15.96	17.34	17.79
23	13.23	13.63	12.06	---	14.69	15.56	14.37	15.04	16.16	16.03	17.35	17.82
24	13.26	13.64	12.16	---	14.73	15.58	14.35	15.05	16.20	16.10	17.37	17.83
25	13.27	13.63	12.20	---	14.79	15.62	14.33	15.06	16.24	16.15	17.39	17.84
26	13.22	13.29	12.22	13.66	14.83	15.65	14.31	15.07	16.28	16.18	17.43	17.86
27	13.14	12.67	12.28	13.72	14.88	15.67	14.28	15.11	16.33	16.20	17.45	17.88
28	13.12	12.31	12.30	13.78	14.90	15.69	14.25	15.16	16.36	16.22	17.47	17.88
29	13.13	12.12	12.36	13.79	---	15.71	14.26	15.21	16.39	16.27	17.47	17.89
30	13.15	12.05	12.42	13.84	---	15.71	14.30	15.26	16.45	16.34	17.47	17.92
31	13.17	---	12.45	13.89	---	15.68	---	15.31	---	16.40	17.46	---
MAX	---	13.64	12.45	---	14.90	15.71	15.67	15.31				

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.

REMARKS.--Station operated by Ohio Department
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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32.12	32.15	29.83	28.41	30.14	31.12	31.92	29.01	30.44	31.13	31.57	32.07
2	31.99	31.94	29.77	28.56	30.24	31.28	31.62	29.10	30.49	31.05	31.65	32.12
3	31.75	32.09	29.48	28.64	30.29	31.28	31.26	29.01	30.47	30.46	31.79	32.28
4	31.50	32.16	28.90	28.81	30.27	31.18	30.83	29.00	30.40	29.55	31.86	32.27
5	31.05	32.19	28.17	29.31	30.17	31.08	30.32	28.95	30.35	28.61	31.90	32.19
6	30.59	32.27	27.55	29.62	30.19	31.18	30.01	28.85	30.50	27.85	31.96	31.84
7	30.30	32.46	27.03	29.86	30.31	31.14	29.73	28.91	30.47	27.63	31.95	31.74
8	30.18	32.49	26.79	30.03	30.25	31.10	29.04	29.09	30.62	27.50	31.89	32.00
9	30.28	32.48	26.95	30.19	30.29	31.23	28.07	29.10	30.70	27.57	31.95	32.22
10	30.42	32.58	27.02	30.34	30.35	31.05	27.19	29.46	30.63	27.57	32.04	32.32
11	30.44	32.60	27.00	30.37	30.42	31.06	26.41	29.53	30.33	27.63	32.06	32.44
12	30.62	32.46	27.05	30.41	30.51	31.09	25.72	29.72	30.26	27.64	32.09	32.41
13	30.79	32.45	27.18	30.51	30.56	31.17	25.32	29.89	30.23	27.86	32.27	32.40
14	30.97	32.44	27.35	30.58	30.63	31.20	25.24	30.04	29.97	28.13	32.31	32.46
15	31.05	32.41	27.64	30.61	30.64	31.17	25.34	30.19	29.81	28.33	32.24	32.50
16	31.15	32.34	27.93	30.66	30.76	31.30	25.55	30.31	29.78	28.52	32.16	32.58
17	31.24	32.42	28.17	30.60	30.87	31.35	25.58	30.35	29.85	28.94	32.13	32.66
18	31.24	32.49	28.49	30.50	30.97	31.34	25.86	30.51	29.98	29.07	32.34	32.74
19	31.28	32.48	28.73	30.18	30.81	31.40	26.27	30.53	30.10	29.27	32.36	32.62
20	31.41	32.43	28.90	30.17	30.81	31.42	26.79	30.52	30.15	29.47	32.40	32.21
21	31.52	32.31	29.08	30.07	30.85	31.42	27.22	30.55	30.14	29.66	32.60	32.20
22	31.65	32.12	29.35	29.97	30.82	31.40	27.63	30.53	30.15	29.83	32.60	32.22
23	31.76	31.90	29.49	29.91	30.96	31.45	27.95	30.44	30.16	30.01	32.59	32.26
24	31.82	31.77	29.47	29.96	31.05	31.52	28.18	30.20	30.21	30.20	32.64	32.30
25	32.04	31.76	29.29	30.00	31.12	31.66	28.20	30.27	30.47	30.39	32.71	32.33
26	32.08	31.73	29.12	30.04	31.16	31.87	28.09	30.38	30.68	30.60	32.76	32.28
27	32.12	31.56	28.88	30.09	31.34	31.97	28.35	30.38	30.74	30.87	32.79	32.34
28	32.00	30.85	28.68	30.27	31.26	31.98	28.58	30.37	30.80	31.08	32.71	32.46
29	32.06	30.38	28.59	30.32	---	31.94	28.69	30.42	30.99	31.20	32.57	32.47
30	32.11	30.03	28.48	30.29	---	32.05	28.84	30.44	31.11	31.32	32.09	32.51
31	32.17	---	28.45	30.27	---	32.09	---	30.39	---	31.43	32.03	---
MAX	32.17	32.60	29.83	30.66	31.34	32.09	31.92	30.55	31.11	31.43	32.79	32.74
WTR YR 1987	MEAN	30.49		HIGH	25.24	APR 14	LOW	32.79	AUG 27			

GROUND-WATER RECORDS

243

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, 16.76 ft below land-surface datum, Apr. 14, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.62	18.25	18.16	17.89	18.06	18.12	18.21	17.80	17.96	18.02	17.65	18.02
2	18.62	18.27	17.93	17.84	17.94	18.32	18.28	17.75	17.98	17.84	17.64	18.12
3	18.46	18.16	18.06	18.05	18.31	18.36	18.27	17.95	18.03	17.83	17.73	18.18
4	18.40	18.19	18.15	18.02	18.34	18.33	18.15	18.01	18.04	17.77	17.78	18.12
5	18.46	18.14	18.20	17.98	18.30	18.10	18.14	17.97	18.03	17.72	17.77	18.09
6	18.51	18.30	18.03	17.87	18.09	18.13	18.12	17.81	17.97	17.74	17.75	18.15
7	18.38	18.26	17.94	17.99	17.91	18.05	18.02	17.81	17.89	17.77	17.63	18.20
8	18.24	18.17	17.84	18.03	18.28	17.90	17.99	17.88	17.88	17.77	17.83	18.24
9	18.36	18.45	17.89	17.93	18.35	18.20	18.04	17.86	17.97	17.77	17.86	18.23
10	18.36	18.45	18.04	17.71	18.05	18.23	17.99	17.86	18.02	17.74	17.83	18.18
11	18.20	18.26	17.96	18.01	18.04	18.16	17.94	17.83	17.88	17.73	17.79	18.20
12	18.16	18.34	18.03	17.96	18.20	18.16	18.15	17.97	17.80	17.67	17.84	18.17
13	18.19	18.54	18.23	18.05	18.20	18.11	18.16	17.97	17.86	17.59	17.84	18.26
14	18.25	18.38	18.07	17.93	18.12	17.93	17.96	17.88	17.91	17.68	17.87	18.26
15	18.31	18.06	17.85	18.05	18.22	18.05	17.87	18.02	17.90	17.63	17.88	18.29
16	18.24	18.11	17.83	18.18	18.12	18.15	17.77	17.99	17.93	17.63	17.84	18.26
17	18.35	18.19	17.83	18.08	18.03	18.16	17.84	17.93	17.98	17.67	17.86	18.36
18	18.43	18.43	17.81	17.90	18.22	17.99	17.92	17.86	17.98	17.59	17.92	18.42
19	18.33	18.48	17.89	17.84	18.27	18.05	17.92	17.89	17.86	17.59	17.98	18.33
20	18.19	18.28	17.91	18.18	18.22	18.06	17.87	17.98	17.82	17.62	17.95	18.32
21	18.12	18.47	18.06	18.05	18.00	18.03	17.78	18.00	17.82	17.56	17.99	18.37
22	18.18	18.36	18.00	17.95	17.99	18.10	17.70	18.00	17.89	17.55	18.05	18.43
23	18.19	18.34	17.84	18.09	18.28	18.03	17.78	18.04	17.98	17.58	18.01	18.42
24	18.19	18.46	17.70	18.20	18.29	17.96	17.90	18.00	18.03	17.59	17.97	18.46
25	18.11	18.40	17.96	18.18	18.24	18.06	17.90	17.95	17.91	17.55	18.06	18.50
26	18.09	18.40	18.03	18.11	18.25	18.14	17.84	17.98	17.95	17.54	18.13	18.50
27	18.25	18.46	18.01	18.07	18.08	18.14	17.75	18.03	18.00	17.61	18.12	18.53
28	18.31	18.27	17.96	18.17	17.98	18.23	17.80	18.01	18.04	17.62	18.08	18.59
29	18.26	18.20	17.90	18.16	---	18.15	17.70	18.03	18.05	17.63	18.05	18.58
30	18.36	18.19	17.86	18.15	---	18.06	17.88	17.96	18.07	17.59	17.99	18.57
31	18.33	---	17.97	18.23	---	18.21	---	18.00	---	17.54	18.02	---
MAX	18.62	18.54	18.23	18.23	18.35	18.36	18.28	18.04	18.07	18.02	18.13	18.59
WTR YR 1987 MEAN	18.05		HIGH		17.54	JUL 26 AND OTHERS		LOW	18.62	OCT 1 AND OTHERS		

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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31.56	31.87	29.98	32.21	32.38	32.35	32.22	31.87	31.48	31.86	31.48	31.80
2	31.54	31.86	29.96	32.30	32.30	32.38	32.13	31.91	31.69	30.98	31.53	31.89
3	30.86	31.85	30.74	32.32	32.29	32.14	31.60	31.99	31.69	30.26	31.54	31.93
4	30.93	31.85	30.35	32.33	32.29	32.16	31.61	32.02	31.30	28.80	31.55	31.95
5	30.91	31.84	29.65	32.35	32.28	32.36	31.63	32.02	31.27	26.65	31.55	31.97
6	29.76	31.82	29.50	32.21	32.31	32.40	31.44	31.93	31.32	24.75	31.54	31.95
7	29.75	31.80	29.87	32.35	32.32	32.37	30.45	31.80	31.62	24.11	31.59	31.95
8	30.67	31.74	30.36	32.36	32.37	32.28	30.14	31.89	31.80	24.09	31.65	31.96
9	30.88	31.83	30.67	32.35	32.42	32.26	30.80	31.90	31.82	24.28	31.63	31.99
10	31.19	31.86	30.50	32.16	32.27	32.32	30.90	31.91	31.52	24.51	31.70	31.99
11	31.35	31.85	30.44	32.31	32.30	32.37	31.10	31.96	31.45	24.80	31.71	32.00
12	31.43	31.91	30.32	32.38	32.35	32.42	31.20	32.03	31.45	25.20	31.71	31.99
13	31.52	31.97	30.46	32.38	32.40	32.43	31.22	32.07	30.88	25.60	31.74	32.00
14	31.59	31.96	31.53	32.27	32.20	32.40	31.03	32.07	31.14	26.27	31.75	32.01
15	31.60	31.90	31.64	32.33	32.40	32.42	31.15	32.13	31.18	26.85	31.77	32.00
16	31.69	31.89	31.66	32.33	---	32.46	31.16	32.11	31.50	28.59	31.77	32.00
17	31.83	31.94	31.62	32.25	---	---	31.31	32.10	31.65	29.44	31.78	31.97
18	31.87	31.98	31.69	32.13	---	---	31.47	32.09	31.69	29.89	31.85	31.99
19	31.89	31.98	31.85	32.09	---	---	31.55	32.04	31.71	30.14	31.85	32.01
20	31.89	31.88	31.88	32.05	---	---	31.60	31.77	31.68	30.29	31.91	32.02
21	31.89	31.71	31.97	31.88	---	---	31.63	31.88	31.65	30.39	31.91	32.04
22	31.91	31.55	32.05	32.00	---	---	31.63	31.87	31.25	30.73	31.90	32.04
23	32.03	31.47	32.08	32.28	---	---	31.68	31.53	31.29	30.90	31.97	32.04
24	32.04	31.55	32.08	32.33	---	---	31.70	31.88	31.58	31.05	31.99	32.05
25	32.04	31.69	32.11	---	32.56	---	31.75	31.93	31.62	31.13	31.99	32.07
26	32.01	31.66	32.16	---	32.57	---	31.77	31.93	31.70	31.20	31.99	32.07
27	32.02	31.11	32.20	---	32.55	---	31.75	31.76	31.75	31.27	31.95	32.08
28	32.00	30.83	32.22	32.38	32.50	---	31.77	31.09	31.77	31.32	31.93	32.10
29	31.90	30.20	32.21	32.38	---	---	31.83	31.58	31.77	31.39	31.97	32.07
30	31.90	30.03	31.93	32.35	---	32.48	31.85	31.66	31.85	31.45	31.93	32.05
31	31.89	---	32.22	32.40	---	32.07	---	31.67	---	31.47	31.85	---
MAX	32.04	31.98	32.22	---	---	---	32.22	32.13	31.85	31.86	31.99	32.10
WTR YR 1987 MEAN	31.49											
HIGH				24.09	JUL 8							
LOW							32.57	FEB 26				

GROUND-WATER RECORDS

245

FAIRFIELD COUNTY

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.

EXREMES FOR PERIOD OF RECORD.--Maximum daily low, 27.10 ft below land-surface datum, Aug. 31, Sept. 1, 4-5, 14, 24-25, 1987; minimum daily low, 16.40 ft below land-surface datum, June 25, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.40	25.65	25.55	24.30	24.90	24.90	24.00	25.65	25.55	25.45	26.00	27.10
2	26.45	24.90	25.50	24.70	25.00	25.05	24.80	25.55	25.65	25.40	25.90	26.85
3	26.20	24.40	25.55	24.75	25.05	25.30	24.70	24.95	25.55	25.35	26.00	27.05
4	25.55	25.65	25.35	25.00	25.55	25.05	24.15	24.95	25.45	25.35	26.05	27.10
5	24.95	25.55	25.50	24.80	25.15	24.95	24.25	25.30	25.75	25.15	25.85	27.10
6	24.85	25.85	25.40	24.95	24.90	25.15	24.50	25.75	25.55	24.85	25.70	26.00
7	25.90	25.00	25.00	24.90	24.80	25.05	24.55	24.80	25.30	24.90	25.55	26.40
8	25.30	25.05	25.30	24.30	24.90	24.95	24.50	25.50	25.50	24.95	25.65	26.75
9	25.00	25.60	25.30	24.70	25.25	25.35	24.85	25.50	25.45	25.15	25.35	27.00
10	25.65	25.55	25.30	24.95	24.80	25.30	24.10	25.50	25.50	25.40	25.60	27.05
11	24.10	25.60	24.80	24.75	24.85	25.05	24.00	25.75	25.60	25.45	25.70	26.95
12	23.25	25.70	25.10	25.05	25.00	25.35	23.35	25.75	25.65	25.05	25.80	27.00
13	24.25	25.70	24.90	25.70	24.90	25.30	23.95	25.55	25.65	25.45	25.85	26.40
14	24.60	25.70	24.80	25.45	25.05	24.85	24.50	25.55	25.10	25.65	26.10	27.10
15	24.85	25.55	25.05	25.70	24.40	24.75	25.00	25.55	25.50	25.55	26.10	27.05
16	25.00	24.90	25.25	25.80	24.90	25.05	25.20	25.55	25.65	25.65	26.00	27.00
17	25.45	25.50	25.00	25.45	25.10	25.00	24.60	25.75	25.70	25.65	26.05	27.00
18	25.55	25.85	25.20	25.35	25.00	25.05	24.10	25.25	25.80	25.60	26.05	27.05
19	24.35	25.95	25.15	25.75	25.85	24.90	24.20	25.85	25.80	25.70	26.00	26.90
20	24.60	25.70	25.15	25.50	24.85	24.75	25.00	25.75	25.75	25.65	26.00	26.80
21	25.25	26.10	24.80	25.30	24.50	25.30	25.20	25.85	25.80	25.65	26.00	26.95
22	25.35	25.95	24.05	25.40	24.65	25.95	25.30	25.30	25.85	25.75	25.90	26.80
23	26.05	25.25	23.50	25.20	25.35	26.15	25.75	25.85	25.70	25.80	25.80	26.75
24	25.80	25.95	22.95	---	25.00	26.30	25.60	26.00	25.50	25.90	25.75	27.10
25	24.20	26.05	24.30	24.55	25.05	26.30	25.10	25.50	25.50	25.90	25.90	27.10
26	24.35	26.15	24.70	25.25	24.85	26.40	25.10	25.20	25.60	25.90	26.20	27.05
27	25.75	25.85	24.70	25.30	25.15	26.10	25.40	25.30	25.70	25.60	26.75	26.95
28	25.85	25.00	23.65	25.50	24.80	25.75	25.20	25.55	25.35	25.60	26.95	26.65
29	25.95	25.05	24.15	25.70	---	23.55	25.65	25.65	25.35	25.55	27.05	26.90
30	25.70	---	24.40	25.80	---	---	25.70	25.15	25.45	25.80	26.75	26.80
31	24.95	---	24.10	24.75	---	24.92	---	25.30	---	25.85	27.10	---
MAX	26.45	---	25.55	---	25.85	---	25.75	26.00	25.85	25.90	27.10	27.10
WTR YR 1987 MEAN	25.44				22.95	DEC 24	LOW	27.10	AUG 31	AND OTHERS		

GROUND-WATER RECORDS

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, 19.81 ft below land-surface datum, Mar. 1-4, 1964; minimum daily low, 7.27 ft below land-surface datum, May 5-6, 1962.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.88	18.64	18.22	15.67	15.67	16.05	16.76	14.68	15.32	16.06	17.55	18.42
2	18.82	18.64	18.14	15.59	15.60	16.11	16.83	14.70	15.23	16.06	17.56	18.44
3	18.76	18.67	17.98	15.61	15.63	16.22	16.87	14.74	15.20	16.05	17.57	18.57
4	18.75	18.67	17.86	15.61	15.64	16.26	16.87	14.82	15.27	16.23	17.60	18.57
5	18.74	18.64	17.70	15.59	15.66	16.32	16.79	14.84	15.28	16.28	17.60	18.54
6	18.74	18.66	17.53	15.57	15.67	16.31	16.85	14.93	15.27	16.29	17.58	18.54
7	18.73	18.68	17.34	15.53	15.66	16.26	16.85	14.95	15.27	16.29	17.64	18.63
8	18.71	18.68	17.17	15.54	15.65	16.17	16.83	15.05	15.27	16.36	17.67	18.62
9	18.70	18.64	16.94	15.53	15.70	16.21	16.61	15.17	15.28	16.36	17.65	18.63
10	18.68	18.68	16.75	15.52	15.72	16.22	16.40	15.21	15.33	16.45	17.68	18.71
11	18.65	18.68	16.68	15.51	15.72	16.25	15.97	15.26	15.53	16.51	17.68	18.71
12	18.64	18.63	16.54	15.53	15.72	16.21	15.58	15.31	15.53	16.56	17.70	18.72
13	18.58	18.65	16.40	15.58	15.73	16.26	15.37	15.34	15.62	16.56	17.84	18.71
14	18.48	18.69	16.37	15.59	15.73	16.25	15.13	15.36	15.62	16.61	17.92	18.73
15	18.48	18.63	16.25	15.56	15.75	16.22	14.93	---	15.75	16.61	17.92	18.73
16	18.48	18.56	16.15	15.63	15.77	16.27	14.70	---	15.76	16.73	17.92	18.74
17	18.48	18.48	16.05	15.64	15.78	16.27	14.61	---	15.78	16.73	18.02	18.74
18	18.52	18.46	16.00	15.65	15.81	16.27	14.54	---	---	16.76	18.02	18.75
19	18.53	18.39	---	15.59	15.85	16.30	14.51	---	---	16.81	18.02	18.77
20	18.58	18.39	---	15.61	15.86	16.31	14.55	---	---	17.02	18.02	18.77
21	18.59	18.33	---	15.64	15.92	16.35	14.49	---	---	17.21	18.05	18.92
22	18.56	18.34	---	15.63	15.92	16.39	14.41	---	---	17.23	18.08	18.92
23	18.57	18.34	---	15.60	15.93	16.40	14.36	---	---	17.22	18.14	18.92
24	18.59	18.39	---	15.64	16.00	16.48	14.35	---	---	17.24	18.30	18.92
25	18.59	18.39	15.91	15.68	16.02	16.55	14.43	---	---	17.29	18.29	18.92
26	18.53	18.35	---	15.63	16.17	16.58	14.43	---	---	17.28	18.30	19.03
27	18.54	18.28	---	15.60	16.17	16.59	14.45	---	---	17.50	18.30	19.03
28	18.59	18.36	---	15.57	16.15	16.76	14.50	---	---	17.46	18.30	19.07
29	18.60	18.33	15.85	15.57	---	16.76	14.50	---	---	17.45	18.33	19.07
30	18.66	18.29	15.79	15.50	---	16.76	14.52	---	16.06	17.44	18.37	19.03
31	18.67	---	15.68	15.72	---	16.75	---	15.33	---	17.55	18.39	---
MAX	18.88	18.69	---	15.72	16.17	16.76	16.87	---	---	17.55	18.39	19.07
WTR YR 1987 MEAN	16.89		HIGH	14.35	APR 24	LOW	19.07	SEP 28	AND OTHERS			

GROUND-WATER RECORDS

247

FAIRFIELD COUNTY

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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.05	9.70	9.20	6.80	7.10	5.80	6.40	7.20	6.70	6.20	10.30	15.00
2	13.45	8.30	8.60	7.20	6.80	8.10	6.30	6.70	6.90	6.00	11.60	13.60
3	11.10	9.00	8.80	7.40	6.20	6.50	5.80	6.00	5.90	5.80	12.80	13.90
4	10.00	9.00	7.70	7.10	6.30	5.10	6.20	9.20	6.80	5.80	14.50	16.60
5	12.20	7.80	7.80	7.80	7.50	6.10	6.40	8.20	5.90	6.10	12.70	16.30
6	11.30	8.60	8.60	8.20	8.10	7.30	6.50	7.20	5.60	6.00	10.70	15.80
7	10.90	8.00	7.50	7.20	7.80	7.30	5.60	8.90	5.90	8.30	9.80	16.20
8	10.80	8.40	8.10	7.70	5.90	5.80	7.80	8.10	7.20	6.10	9.40	15.60
9	11.95	9.20	7.90	7.80	6.50	6.20	6.90	9.60	6.80	8.20	9.10	13.60
10	9.40	10.10	7.60	7.10	6.70	6.60	6.20	9.40	6.70	6.40	9.80	20.00
11	9.40	9.00	7.20	6.40	5.80	7.90	7.30	9.90	6.50	5.70	10.60	15.10
12	8.60	8.90	7.40	7.60	6.10	13.80	6.80	9.10	6.60	6.00	10.40	15.10
13	8.80	8.60	7.10	7.40	6.10	10.40	5.90	7.30	6.60	6.50	10.40	16.60
14	8.00	11.50	7.70	7.30	5.80	6.60	5.40	6.90	6.60	7.60	12.00	16.90
15	7.60	9.40	7.60	6.50	7.00	6.80	5.40	7.70	6.60	7.50	12.10	16.30
16	8.80	8.40	8.00	6.90	5.80	10.60	4.80	7.70	8.00	8.60	11.20	16.60
17	10.90	8.80	8.50	7.40	5.80	---	4.40	7.20	7.20	8.00	10.70	17.60
18	10.90	9.40	7.90	5.90	10.10	---	5.20	9.30	7.80	9.50	13.00	18.80
19	10.20	9.60	8.00	6.30	7.00	---	6.40	7.30	7.30	10.60	11.40	19.40
20	9.75	8.60	7.80	7.70	6.00	---	7.00	8.30	8.50	13.20	10.90	20.10
21	10.90	9.20	6.80	6.90	6.00	---	7.30	6.70	7.30	11.80	12.40	20.00
22	11.80	9.10	7.40	6.80	6.20	---	7.00	6.70	9.30	13.30	11.50	18.30
23	14.40	10.50	7.60	6.00	5.90	---	7.10	6.30	11.00	8.80	13.20	17.70
24	15.10	9.80	12.50	6.60	7.00	---	7.10	5.95	9.10	8.80	12.80	18.70
25	15.00	10.00	6.70	6.00	7.90	---	6.70	6.00	7.20	8.20	12.10	18.90
26	15.80	8.60	6.70	6.60	6.00	---	7.30	6.90	7.50	8.20	11.00	18.10
27	15.50	8.40	7.00	6.20	6.40	---	6.80	6.80	7.00	8.20	12.70	18.00
28	10.85	10.70	7.00	12.20	6.40	---	6.30	7.30	6.60	8.60	12.20	18.80
29	10.70	11.90	7.30	11.60	---	---	6.30	7.30	6.60	7.30	11.80	18.70
30	11.80	---	6.90	7.50	---	---	8.10	7.00	6.20	7.90	13.10	18.60
31	10.90	---	8.60	7.50	---	5.40	---	6.30	---	9.20	16.70	---
MAX	15.80	---	12.50	12.20	10.10	---	8.10	9.90	11.00	13.30	16.70	20.10
WTR YR 1987 MEAN	9.05		HIGH	4.40	APR 17	LOW	20.10	SEP 20				

GROUND-WATER RECORDS

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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.00	9.80	9.35	7.90	7.80	7.85	7.90	7.40	7.65	7.80	9.90	9.80
2	10.00	9.85	9.30	7.70	7.90	8.05	7.80	7.25	7.80	7.80	10.00	9.80
3	10.05	9.70	9.05	7.95	7.80	8.10	7.90	7.40	7.65	8.25	10.05	10.00
4	9.95	9.85	9.15	7.80	8.10	8.20	7.60	7.30	7.70	8.05	10.05	10.05
5	10.10	9.65	8.95	7.95	8.30	7.95	7.70	7.50	7.75	7.95	10.15	9.90
6	9.95	9.80	8.95	7.65	8.10	8.15	7.60	7.55	7.75	8.00	10.30	10.25
7	10.05	9.65	8.65	7.80	7.95	7.95	7.65	7.75	7.55	8.00	10.35	10.15
8	9.95	9.80	8.70	7.75	7.90	8.00	7.55	7.90	7.65	8.15	10.35	10.05
9	10.20	9.75	8.40	7.85	8.05	7.90	7.60	8.00	7.90	8.55	10.30	10.25
10	10.20	9.90	8.45	7.65	8.10	8.05	7.50	7.95	8.05	8.50	10.45	10.25
11	10.05	9.70	8.35	7.75	7.90	8.00	7.50	8.20	7.95	8.65	10.65	10.20
12	9.95	9.80	8.30	7.85	7.95	8.05	7.50	8.05	7.75	8.65	9.95	10.35
13	10.10	9.80	8.15	7.95	7.95	8.05	7.60	8.25	7.65	8.60	9.55	10.35
14	9.80	9.90	8.20	7.80	8.00	8.10	7.55	8.20	7.60	8.95	9.55	10.40
15	9.85	9.70	8.00	7.90	8.05	7.95	7.45	8.35	7.60	8.95	9.50	10.45
16	9.80	9.90	8.15	7.90	8.15	8.10	7.40	8.20	7.60	8.70	9.55	10.45
17	9.85	10.00	8.00	8.00	8.25	8.05	7.35	8.55	7.65	8.90	10.05	10.50
18	9.95	9.90	8.05	7.80	8.20	8.10	7.25	8.40	7.60	9.10	9.60	10.50
19	10.05	9.70	8.00	7.90	8.00	7.90	7.35	8.40	7.55	9.15	9.45	10.55
20	9.95	9.80	8.10	7.80	8.15	7.90	7.20	8.10	7.65	9.15	9.75	10.50
21	10.20	9.75	7.90	7.95	8.00	---	7.35	8.00	7.65	9.45	9.65	10.70
22	9.95	9.80	8.05	7.70	8.05	---	7.30	7.80	7.60	9.45	9.55	10.70
23	10.05	9.55	7.75	7.85	8.00	---	7.25	7.75	7.75	9.40	9.70	10.75
24	9.80	9.75	7.85	7.85	8.15	---	7.30	7.65	7.80	9.45	9.55	10.80
25	9.90	9.70	8.00	8.05	8.00	---	7.25	7.70	8.15	9.75	9.50	10.85
26	9.90	9.75	7.95	8.00	8.15	---	7.25	7.80	8.00	9.60	9.65	10.75
27	10.15	9.60	7.75	8.05	8.05	---	7.30	7.75	8.15	9.75	9.60	11.10
28	9.70	9.60	7.85	7.90	8.10	---	7.45	7.70	8.15	9.85	9.60	11.15
29	9.75	9.50	7.75	8.10	---	---	7.40	7.85	8.15	9.85	9.75	11.00
30	9.65	9.50	7.90	7.90	---	---	7.25	7.75	8.05	10.15	9.70	10.95
31	9.85	---	7.85	8.10	---	---	---	7.85	---	10.00	9.70	---
MAX	10.20	10.00	9.35	8.10	8.30	---	7.90	8.55	8.15	10.15	10.65	11.15
WTR YR 1987 MEAN	8.71		HIGH		7.20	APR 20	LOW		11.15	SEP 28		

GROUND-WATER RECORDS

249

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, 23.03 ft below land-surface datum, May 20-21, 1987; minimum daily low, 13.23 ft below land-surface datum, July 7, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.55		17.85	---	21.07	21.79	21.80	21.74	21.88	22.45	19.92	22.72
2	19.45		17.86	---	---	21.69	21.48	21.85	21.85	22.22	20.07	22.74
3	18.83		17.15	---	---	21.46	21.10	21.94	21.74	18.50	20.10	22.75
4	18.48		16.55	---	---	21.15	20.77	21.99	21.16	14.60	20.19	22.80
5	17.00		16.32	---	---	21.16	20.67	22.07	20.78	13.59	20.23	22.85
6	15.30		---	---	---	21.30	20.60	22.14	20.52	13.56	20.25	22.90
7	15.56		---	---	---	21.42	20.20	22.18	20.30	13.23	20.42	22.95
8	16.01		---	---	---	21.49	19.61	22.22	20.55	13.59	20.56	22.98
9	16.64		---	---	---	21.52	19.35	22.25	20.92	14.12	20.66	---
10	17.15		---	---	---	21.59	19.50	22.36	21.18	14.60	20.77	---
11	17.55		---	---	---	21.65	19.77	22.44	21.20	14.99	20.88	---
12	17.90		---	20.30	21.08	21.70	19.96	22.50	21.21	15.26	20.99	---
13	18.19		---	20.36	---	21.79	20.09	22.53	21.25	15.47	21.08	---
14	18.45		---	20.40	---	21.87	20.15	22.55	21.14	15.61	21.19	---
15	18.63		---	20.45	---	21.93	20.19	22.60	20.78	15.69	21.30	---
16	---		---	20.47	---	21.99	20.36	22.60	20.91	15.69	21.39	---
17	---		---	20.47	---	22.04	20.46	22.74	20.95	16.03	21.49	---
18	---		---	20.38	---	22.07	20.55	22.85	21.24	16.54	21.57	---
19	---		---	20.30	---	22.11	20.62	22.95	21.49	17.00	21.66	---
20	---		---	20.20	---	22.16	20.73	23.03	21.78	17.35	21.75	---
21	---		---	20.00	---	22.21	20.87	23.03	21.98	17.62	21.82	---
22	---		---	20.04	---	22.26	21.00	22.83	22.02	17.80	21.91	---
23	---		---	20.20	---	22.30	21.11	22.66	21.89	18.00	21.99	---
24	---		---	20.38	---	22.36	21.22	22.54	21.67	18.25	22.05	---
25	---		---	20.50	---	22.41	21.31	22.52	21.73	18.42	22.09	---
26	---		---	20.61	21.74	22.45	21.38	22.75	21.98	18.66	22.14	---
27	---		---	20.73	21.77	22.49	21.48	22.79	22.22	18.88	22.20	---
28	---		---	20.82	21.79	22.53	21.55	22.59	22.39	19.05	22.30	---
29	20.05		19.17	20.87	---	22.58	21.65	22.28	22.50	19.29	22.30	---
30	---		---	20.89	---	22.58	21.72	22.00	22.50	19.57	22.40	---
31	---		---	20.95	---	22.33	---	22.00	---	19.75	22.50	---
MAX	---		---	---	---	22.58	21.80	23.03	22.50	22.45	22.50	---
WTR YR 1987 MEAN		20.57		HIGH	13.23	JUL 7	LOW	23.03	MAY 20	AND OTHERS		

GROUND-WATER RECORDS

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.--Monthly measurement with chalked tape by USGS personnel.

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.

PERIOD OF RECORD.--April 1946 to September 1982 continuous, periodic 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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 31, 1986	12.24	Jan. 30, 1987	12.67	Apr. 30, 1987	12.85	July 31, 1987	13.37
Nov. 30, 1986	11.06	Feb. 27, 1987	12.91	May 28, 1987	11.96	Aug. 31, 1987	13.40
Dec. 31, 1986	12.11	Mar. 31, 1987	12.34	June 30, 1987	12.76	Sept. 30, 1987	13.28

GROUND-WATER RECORDS

251

FRANKLIN COUNTY--Continued

395157083003500. Local number, FR-109.

LOCATION.--Lat 39°51'57", long 83°00'35", Hydrologic Unit 05060001, 6.6 mi south of the State capital in Columbus.

Owner: City of Columbus.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 6 in., depth 92 ft, cased to 82 ft.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 702.24 ft above National Geodetic Vertical Datum of 1929. Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 25.40 ft below land-surface datum, Sept. 30, 1987; minimum daily low, 12.43 ft below land-surface datum, Mar. 27, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.39	---	18.82	18.40	21.55	23.63	25.10	23.88	24.97	24.79	18.45	22.60
2	25.29	---	18.65	18.55	21.64	23.69	25.11	23.91	24.98	24.76	18.58	22.74
3	24.95	19.28	17.80	18.66	21.77	23.77	25.12	23.96	24.97	21.23	18.69	22.85
4	24.69	19.38	17.47	18.76	21.87	23.82	25.12	24.00	24.89	18.47	18.83	22.96
5	21.33	19.45	17.15	18.85	21.93	23.88	25.15	24.03	24.84	17.15	18.97	23.07
6	---	19.57	17.01	18.92	22.00	23.93	25.12	24.07	24.78	16.42	19.12	23.18
7	---	19.65	16.97	19.09	22.06	23.97	25.03	24.12	24.67	15.93	19.27	23.30
8	---	19.72	16.98	19.19	22.20	24.01	24.85	24.16	24.63	15.94	19.39	23.42
9	---	19.86	16.95	19.24	22.26	24.11	24.66	24.21	24.61	16.13	19.53	23.53
10	---	19.92	16.95	19.37	22.35	24.16	24.50	24.26	24.59	16.28	19.70	23.63
11	---	20.01	16.89	19.50	22.40	24.20	24.36	24.30	24.56	16.41	19.83	23.74
12	---	20.11	16.92	19.64	22.52	24.27	24.24	24.36	24.52	16.48	19.95	23.84
13	---	20.22	17.00	19.73	22.56	24.30	24.14	24.41	24.51	16.54	20.10	23.94
14	---	20.28	16.98	19.83	22.65	24.36	24.03	24.45	24.50	16.66	20.25	24.04
15	---	20.37	17.02	19.97	22.73	24.41	23.94	24.44	24.50	16.68	20.38	24.13
16	---	20.46	17.06	20.07	22.78	24.47	23.86	24.46	24.49	16.73	20.51	24.23
17	---	20.57	17.06	20.14	22.85	24.51	23.79	24.51	24.49	16.84	20.67	24.31
18	---	20.69	17.17	20.23	22.94	24.56	23.76	24.56	24.49	16.89	20.80	24.42
19	---	20.75	17.23	20.37	23.00	24.61	23.74	24.62	24.49	16.96	20.93	24.53
20	---	20.84	17.33	20.44	23.05	24.66	23.72	24.67	24.50	17.06	21.07	24.59
21	---	20.94	17.41	20.52	23.12	24.71	23.71	24.73	24.51	17.13	21.19	24.68
22	---	21.01	17.47	20.59	23.16	24.77	23.70	24.79	24.53	17.23	21.33	24.77
23	---	21.11	17.53	20.75	23.27	24.82	23.71	24.84	24.57	17.32	21.48	24.86
24	---	21.20	17.58	20.85	23.33	24.87	23.73	24.88	24.59	17.45	21.62	24.94
25	---	21.24	17.74	20.93	23.40	24.92	23.74	24.92	24.60	17.54	21.72	25.02
26	---	21.23	17.84	21.04	23.46	24.95	23.75	24.94	24.62	17.66	21.84	25.10
27	---	20.99	17.93	21.11	23.52	25.00	23.76	24.88	24.66	17.75	21.97	25.19
28	---	19.73	18.03	21.23	23.54	25.05	23.79	24.90	24.69	17.90	22.10	25.26
29	---	19.23	18.10	21.25	---	25.09	23.81	24.92	24.73	18.03	22.23	25.33
30	---	19.00	18.25	21.39	---	25.10	23.86	24.94	24.78	18.16	22.35	25.40
31	---	---	18.34	21.48	---	25.10	---	24.96	---	18.31	22.48	---
MAX	---	---	18.82	21.48	23.54	25.10	25.15	24.96	24.98	24.79	22.48	25.40

WTR YR 1987 MEAN 21.88 HIGH 15.93 JUL 7 LOW 25.40 SEP 30

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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44.10	43.63	43.28	42.76	42.66	42.47	42.56	42.84	43.52	43.77		44.68
2	44.15	43.63	43.15	42.72	42.47	42.62	42.58	42.75	43.52	43.67		---
3	44.00	43.57	43.14	42.79	42.70	42.80	42.62	42.84	43.39	43.68		---
4	43.93	43.46	43.25	42.80	42.87	42.86	42.55	43.02	43.47	43.70		---
5	43.93	43.45	43.30	42.83	42.88	42.80	42.47	43.00	43.60	43.76		---
6	43.97	43.44	43.28	42.78	42.81	42.77	42.47	42.97	43.70	43.86		---
7	43.96	43.59	43.22	42.73	42.65	42.74	42.44	42.93	43.68	43.76		---
8	43.89	43.45	43.09	42.74	42.70	42.60	42.40	42.97	43.64	43.77		---
9	43.91	43.55	42.96	42.73	42.80	42.64	42.43	43.05	43.64	43.92		---
10	43.96	43.63	43.07	42.58	42.73	42.74	42.40	43.02	43.76	43.98		---
11	43.84	43.48	43.07	42.59	42.68	42.74	42.32	43.01	43.67	44.12		---
12	43.76	43.52	43.08	42.65	42.70	42.74	42.43	43.33	43.57	43.94		---
13	43.69	43.69	43.25	42.69	42.68	42.74	42.47	43.50	43.51	43.78		---
14	43.64	43.69	43.20	42.66	42.67	42.66	42.40	43.42	43.51	43.78		---
15	43.72	43.46	43.05	42.65	42.75	42.62	42.30	43.13	43.62	43.93		---
16	43.68	43.29	43.01	42.80	42.67	42.68	42.22	43.15	43.66	43.95		---
17	44.26	43.25	42.97	42.80	42.60	42.74	42.25	43.23	43.80	44.13		---
18	43.82	43.37	42.83	42.70	42.76	42.67	42.47	43.19	43.81	44.19		---
19	43.79	43.38	42.88	42.57	42.81	42.52	42.42	43.10	43.73	44.18		---
20	43.72	43.28	42.91	42.69	42.83	42.57	42.41	43.26	43.67	44.30		---
21	43.64	43.34	43.08	42.67	42.70	42.55	42.46	43.32	43.60	44.27		---
22	43.60	43.34	43.11	42.64	42.63	42.58	42.42	43.42	43.58	44.30		---
23	43.58	43.27	42.93	42.60	42.76	42.57	42.62	43.53	43.68	44.30		---
24	43.58	43.39	42.83	42.70	42.81	42.52	42.72	43.53	43.79	44.23		---
25	43.56	43.39	42.81	42.74	42.85	42.48	42.65	43.50	43.72	44.23		---
26	43.39	43.35	42.89	42.67	42.87	42.53	42.70	43.50	43.70	44.15		---
27	43.45	43.35	42.89	42.74	42.82	42.58	42.69	43.48	43.76	44.28		---
28	43.54	43.32	42.88	42.78	42.67	42.63	42.65	43.65	43.84	44.28		---
29	43.63	43.31	42.87	42.78	---	42.63	42.63	43.66	43.85	44.38		---
30	43.69	43.33	42.79	42.60	---	42.49	42.83	43.70	43.93	44.53		---
31	43.70	---	42.82	42.68	---	42.55	---	43.39	---	44.61		---
MAX	44.26	43.69	43.30	42.83	42.88	42.86	42.83	43.70	43.93	44.61		---
WTR YR 1987	MEAN	43.19		HIGH	42.22	APR 16	LOW	44.68	SEP 1			

GROUND-WATER RECORDS

253

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.--Biyearly 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
Oct. 27, 1986	33.02	Apr. 29, 1987	23.72

GROUND-WATER RECORDS

255

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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	7.37	8.63	9.35	9.51	10.28	9.52	9.04	9.88	7.92	7.75	10.23
2	---	7.33	8.35	9.28	9.26	9.78	9.34	9.68	9.56	7.50	9.91	10.24
3	---	7.57	7.55	9.38	9.36	9.76	9.03	9.11	9.24	8.08	9.95	10.25
4	---	7.29	6.98	9.42	9.38	9.77	8.91	7.79	6.26	8.18	9.65	10.26
5	---	7.48	7.18	9.18	9.53	9.80	8.94	7.84	6.80	8.45	9.64	10.28
6	---	7.45	7.39	9.45	9.59	9.87	7.50	7.97	7.17	8.54	9.67	10.31
7	---	7.14	7.48	9.59	9.61	9.92	7.23	8.23	8.34	8.67	9.72	8.63
8	---	7.01	7.38	9.68	9.58	9.94	7.08	7.92	7.52	8.75	9.75	8.65
9	---	6.98	7.55	9.75	8.37	8.47	7.02	8.52	7.80	8.77	9.75	8.65
10	---	7.32	7.55	9.91	8.28	8.35	7.03	10.22	8.00	8.82	8.02	8.66
11	---	6.99	7.74	9.89	8.25	8.32	7.06	10.30	8.18	8.86	8.04	8.72
12	---	6.90	7.88	8.49	8.23	8.28	8.84	9.93	8.34	6.62	8.07	8.67
13	---	6.87	7.98	8.31	8.25	8.26	9.30	9.95	8.40	6.22	8.08	10.27
14	---	6.86	8.07	8.26	8.18	8.26	9.44	9.97	8.47	6.23	8.16	10.30
15	8.62	6.81	6.93	8.21	10.46	10.54	9.51	9.68	7.20	6.27	8.23	10.33
16	8.63	6.82	6.88	8.24	10.60	10.68	9.51	9.75	7.22	6.54	9.92	10.38
17	8.80	7.98	6.89	8.18	10.65	10.80	9.15	9.75	7.46	6.76	9.97	10.31
18	10.29	8.85	7.28	10.38	10.74	10.87	8.98	9.68	7.39	6.91	9.98	10.30
19	10.45	7.02	6.99	10.45	10.88	10.87	9.01	9.74	7.47	8.71	9.96	10.29
20	10.52	6.94	7.08	10.48	10.97	11.03	8.53	9.75	7.52	8.87	10.08	10.27
21	10.47	6.93	9.28	10.53	11.06	11.05	8.55	9.76	9.72	8.97	10.14	8.61
22	10.46	6.92	9.54	10.60	11.06	11.05	8.57	9.61	9.77	9.08	10.17	8.62
23	10.46	8.76	9.68	10.61	10.62	10.55	8.63	9.11	9.47	9.18	10.18	8.54
24	10.44	9.46	9.71	8.46	10.39	10.54	8.69	9.07	9.53	9.27	8.61	8.54
25	10.36	9.72	9.80	8.11	10.40	10.52	8.71	7.67	9.58	9.32	8.57	8.59
26	10.23	9.73	9.87	7.91	10.47	10.45	8.72	7.40	9.67	9.32	8.51	8.62
27	9.78	8.94	9.95	7.61	10.39	10.45	8.48	7.20	9.74	7.59	8.50	10.28
28	8.07	8.62	9.46	9.26	10.37	10.38	8.64	7.31	9.75	9.87	8.48	10.31
29	7.79	8.76	9.35	9.36	---	10.39	8.73	7.43	9.75	7.69	8.51	10.39
30	7.57	8.76	9.38	9.36	---	9.88	8.94	7.53	8.08	7.90	10.17	10.35
31	7.47	---	9.28	9.48	---	9.75	---	9.79	---	7.71	10.18	---
MAX	---	9.73	9.95	10.61	11.06	11.05	9.52	10.30	9.88	9.87	10.18	10.39
WTR YR 1987	MEAN	8.92		HIGH	6.22	JUL 13	LOW	11.06	FEB 21	AND OTHERS		

GROUND-WATER RECORDS

HAMILTON COUNTY

391039084291500. Local number, H-11.

LOCATION.--Lat $39^{\circ}10'39''$, long $84^{\circ}29'15''$, 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 daily low, 69.83 ft below land-surface datum, Nov 1, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 31, 1986	70.79	Apr. 30, 1987	70.02

GROUND-WATER RECORDS

257

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.--Type F continuous recorder.

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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.90	27.60	25.50	27.30	28.25	27.95	25.25	26.95	26.90	28.15	29.85	29.55
2	27.70	27.50	24.70	27.00	27.90	27.40	25.05	27.05	26.35	27.85	28.10	30.35
3	27.40	27.25	23.10	27.20	27.05	27.15	24.60	27.15	26.25	27.25	27.70	30.60
4	27.40	27.20	---	27.30	27.80	27.10	25.25	27.15	25.45	26.25	27.75	31.00
5	26.95	27.50	---	27.80	28.00	27.10	25.80	26.60	25.15	26.25	27.75	32.25
6	27.15	28.05	---	27.25	27.50	27.25	---	27.35	25.30	26.50	27.65	31.70
7	27.40	27.60	---	27.60	26.40	27.25	---	27.85	27.30	26.50	29.70	31.75
8	27.50	27.65	---	28.00	27.25	27.20	---	28.30	28.35	26.65	30.35	31.85
9	27.75	27.60	---	28.00	27.95	27.35	---	30.00	28.60	26.70	29.35	31.85
10	27.80	27.65	23.75	27.70	28.00	27.50	25.70	30.70	28.85	26.65	30.20	32.85
11	28.15	26.70	23.55	27.80	26.65	27.55	25.35	31.25	29.20	26.80	28.40	31.75
12	28.25	26.10	25.40	27.90	27.85	27.65	24.80	31.60	29.50	26.80	30.25	30.00
13	28.25	27.10	25.40	28.20	28.10	27.75	25.60	32.20	27.90	26.10	30.60	29.55
14	28.25	27.10	25.75	27.45	28.20	27.65	26.00	32.35	---	25.90	31.05	30.30
15	28.40	27.20	25.85	27.70	28.30	27.75	25.30	31.30	---	25.90	31.95	32.10
16	28.35	27.40	26.35	28.25	28.40	27.90	23.70	32.30	---	26.00	32.70	32.20
17	28.35	27.35	26.40	27.75	28.45	27.65	---	32.90	---	26.35	32.45	31.05
18	27.95	27.85	26.40	27.55	28.50	27.75	---	32.65	---	26.90	32.45	29.35
19	27.45	26.95	26.05	27.90	28.55	27.75	---	32.45	---	26.65	31.95	28.85
20	28.75	27.45	26.55	27.60	28.55	27.30	---	31.65	---	28.35	32.50	28.70
21	29.05	27.90	26.65	27.80	28.30	27.40	---	31.30	---	28.95	32.70	28.60
22	29.05	26.90	26.85	27.75	28.30	27.40	---	29.50	---	30.15	32.45	29.60
23	28.75	27.20	27.30	28.00	28.40	27.30	---	29.45	---	30.70	31.90	29.95
24	28.75	28.00	26.90	28.00	28.40	27.45	---	30.15	28.80	30.95	31.95	30.25
25	28.65	28.00	27.00	27.40	28.50	27.50	---	29.75	28.85	31.45	31.75	31.70
26	28.35	26.55	27.00	28.05	28.50	27.55	---	29.65	---	31.35	30.90	32.10
27	27.50	24.80	26.95	28.35	28.55	27.40	---	27.50	29.85	30.85	31.85	32.65
28	28.05	25.05	26.95	28.05	28.55	27.35	---	27.85	30.50	28.70	31.70	32.75
29	27.90	25.05	27.10	27.90	---	27.50	---	29.45	30.30	28.20	30.35	32.85
30	27.35	25.25	27.15	28.30	---	27.35	---	30.35	28.50	28.00	29.90	32.05
31	27.55	---	27.15	27.90	---	25.65	---	28.25	---	29.90	29.85	---
MAX	29.05	28.05	---	28.35	28.55	27.95	---	32.90	---	31.45	32.70	32.85
WTR YR 1987 MEAN	28.26			HIGH 23.10	DEC 3	LOW 32.90	MAY 17					

GROUND-WATER RECORDS

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, 57.34 ft below land-surface datum, Aug. 2, Sept. 17, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58.28	58.53	---	58.03	58.10	58.09	58.15	57.90	57.68	57.55	57.38	57.51
2	---	58.52	58.18	58.15	57.92	58.26	58.19	57.82	57.69	57.52	57.34	57.49
3	58.28	58.41	---	58.22	58.26	---	58.20	57.96	57.76	57.54	57.38	57.54
4	58.27	---	---	58.22	---	---	58.10	58.07	57.79	57.52	57.35	57.54
5	---	58.27	---	58.23	---	58.28	58.07	58.06	57.83	57.52	57.41	57.49
6	---	---	---	58.06	58.26	---	58.05	57.96	57.79	57.57	57.46	57.43
7	---	---	---	58.18	58.08	58.28	57.99	58.28	57.71	57.55	57.49	57.38
8	---	---	58.22	58.19	58.27	58.08	57.96	57.96	57.68	57.56	57.46	57.36
9	---	---	58.21	58.10	---	58.23	58.02	57.94	57.70	57.56	57.35	57.43
10	---	---	---	57.91	58.22	58.29	57.98	57.89	57.76	57.53	57.44	57.44
11	---	---	58.26	58.10	58.16	58.28	57.93	57.86	57.65	57.56	57.45	57.43
12	---	---	---	58.11	58.24	---	58.08	57.91	57.55	57.49	57.37	57.39
13	---	---	---	58.16	58.23	---	58.11	57.92	57.54	57.41	57.41	57.44
14	---	---	---	58.06	58.12	58.13	57.97	57.87	57.56	57.50	57.47	57.50
15	---	---	58.26	58.20	58.23	58.15	57.87	57.93	57.54	57.51	57.46	57.47
16	---	58.23	58.22	58.27	58.15	58.28	57.82	57.92	57.58	57.57	57.39	57.42
17	---	58.24	58.13	58.21	58.08	---	57.92	57.85	57.63	57.63	57.44	57.34
18	---	---	58.18	57.99	58.27	58.14	58.01	57.77	57.66	57.60	57.47	57.42
19	---	---	58.19	58.20	---	58.13	58.07	57.76	57.56	57.56	57.48	57.46
20	---	---	58.25	58.23	---	58.16	58.08	57.83	57.50	57.57	57.55	57.47
21	---	---	---	58.19	58.17	58.10	58.01	57.88	57.46	57.56	57.54	57.50
22	---	---	58.28	57.94	58.09	58.16	57.92	57.87	57.49	57.52	57.51	57.56
23	---	---	58.16	58.15	58.27	58.09	57.95	57.92	57.57	57.46	57.58	57.58
24	---	---	57.92	58.25	---	57.98	58.07	57.88	57.59	57.46	57.61	57.50
25	58.28	---	58.19	58.20	---	58.06	58.11	57.79	57.49	57.46	57.56	57.60
26	58.22	---	58.26	58.21	---	58.11	58.07	57.79	57.51	57.42	57.47	57.62
27	---	---	58.26	58.20	58.22	58.09	57.96	57.83	57.56	57.38	57.44	57.65
28	---	---	58.26	58.23	58.09	58.15	57.98	57.80	57.60	57.40	57.50	57.65
29	---	---	58.14	58.20	---	58.11	57.88	57.78	57.62	57.39	57.57	57.51
30	---	---	58.16	58.11	---	58.01	57.94	57.71	57.60	57.42	57.55	57.50
31	58.53	---	58.20	58.22	---	58.14	---	57.71	---	57.44	57.49	---
MAX	---	---	---	58.27	---	---	58.20	58.28	57.83	57.63	57.61	57.65
WTR YR 1987 MEAN	57.86		HIGH		57.34	AUG 2 AND OTHERS		LOW	58.53	OCT 31 AND OTHERS		

GROUND-WATER RECORDS

259

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, 25.80 ft below land-surface datum, Jan. 18-20, 1964; minimum daily low, 14.00 ft below land-surface datum, Jan. 22, 1959.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.24	23.50	22.54	23.04	23.30	23.08	22.56	22.68	22.69	23.62	23.53	24.24
2	24.10	23.52	22.25	23.07	23.31	22.23	22.40	22.70	22.66	23.50	23.54	24.27
3	22.81	23.54	21.49	23.09	23.29	22.37	22.39	22.71	22.64	21.91	23.54	24.30
4	22.81	23.56	21.71	23.11	23.25	22.45	22.51	22.74	21.98	22.49	22.75	24.32
5	22.14	23.75	21.83	23.12	23.25	22.62	22.59	22.78	22.33	22.71	22.85	24.33
6	22.12	23.75	21.90	23.12	23.25	22.83	22.65	22.81	22.56	22.81	23.12	24.35
7	22.25	23.53	21.93	23.11	23.25	22.94	22.70	22.83	22.67	22.65	23.31	24.36
8	22.31	23.50	21.96	23.11	23.27	22.99	22.75	22.87	22.77	22.75	23.38	24.40
9	22.31	23.49	21.96	23.12	23.30	23.04	22.79	22.89	22.86	22.88	23.46	24.44
10	22.70	23.49	21.83	23.12	23.30	23.09	22.82	22.96	22.93	23.03	23.51	24.45
11	22.82	23.46	21.87	23.12	23.21	23.13	22.85	23.02	23.06	23.08	23.58	24.47
12	22.65	23.46	21.93	23.15	23.16	23.17	22.85	23.06	23.10	22.93	23.63	24.49
13	22.59	23.45	21.99	23.16	23.25	23.19	22.52	23.08	23.14	22.76	23.68	24.50
14	22.80	23.44	22.26	23.16	23.33	23.22	22.54	23.11	23.18	22.55	23.71	24.53
15	23.10	23.43	22.49	23.17	23.35	23.23	22.35	23.14	23.23	22.38	23.75	24.55
16	23.23	23.43	22.57	23.08	23.37	23.23	21.28	23.17	23.27	22.47	23.77	24.58
17	23.33	23.42	22.65	23.11	23.38	23.22	21.55	23.20	23.29	22.82	23.81	24.60
18	23.41	23.43	22.70	23.15	23.40	23.24	21.78	23.23	23.34	22.99	23.85	24.60
19	23.50	23.43	22.76	23.14	23.42	22.77	21.95	23.23	23.37	23.09	23.89	24.61
20	23.60	23.48	22.82	23.11	23.43	22.79	22.08	23.24	23.38	23.17	23.92	24.62
21	23.66	23.49	22.86	23.14	23.45	22.90	22.19	23.29	23.36	23.25	23.95	24.65
22	23.66	23.49	22.89	23.25	23.46	22.95	22.26	23.29	23.37	23.32	23.98	24.65
23	23.71	23.50	22.92	---	23.47	23.00	22.29	22.87	23.37	23.39	23.99	24.66
24	23.74	23.50	22.92	---	23.47	23.03	22.35	23.02	23.42	23.45	24.04	24.69
25	23.70	23.50	22.92	---	23.49	22.90	22.39	23.07	23.48	23.48	24.07	24.73
26	23.59	23.42	22.92	---	23.51	22.92	22.44	23.01	23.53	23.51	24.10	24.74
27	23.57	22.08	22.94	---	23.53	22.99	22.50	22.54	23.58	23.50	24.11	24.75
28	23.40	22.20	22.95	---	23.53	23.03	22.53	22.82	23.61	23.37	24.14	24.77
29	23.34	22.41	22.99	23.31	---	23.05	22.59	22.97	23.63	23.47	24.16	24.78
30	23.36	22.49	23.01	23.31	---	22.98	22.66	23.01	23.63	23.51	24.18	24.81
31	23.47	---	23.02	23.30	---	22.70	---	22.97	---	23.51	24.22	---
MAX	24.24	23.75	23.02	---	23.53	23.24	22.85	23.29	23.63	23.62	24.22	24.81
WTR YR 1987 MEAN	23.18		HIGH		21.28	APR 16	LOW		24.81	SEP 30		

GROUND-WATER RECORDS

HAMILTON COUNTY--Continued

391324084272500. Local number, H-9.

LOCATION.--Lat $39^{\circ}13'24''$, long $84^{\circ}27'25''$, 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.--Biyearly 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, 55.33 ft below land-surface datum, May 1, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 31, 1986	58.14	May 1, 1987	55.33

261

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, 80.25 ft below land-surface datum, Apr. 16, 1987.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84.75	84.20	---	81.95	82.20	81.65	80.70	81.00	---	82.35	82.00	82.50
2	84.80	84.20	82.10	82.00	81.90	81.80	81.00	81.05	---	83.45	81.90	---
3	84.45	84.05	82.45	82.15	82.95	81.75	81.00	81.35	---	82.00	82.50	---
4	84.40	83.70	82.75	82.15	82.70	81.75	81.00	81.50	81.80	82.10	82.65	---
5	84.55	83.65	82.85	82.15	82.70	81.65	80.80	81.55	81.85	82.15	82.50	87.80
6	84.90	83.70	82.70	81.95	82.40	81.50	80.85	81.45	82.05	82.50	82.65	87.80
7	84.80	83.75	82.50	81.90	82.15	81.40	80.75	---	82.20	81.85	82.70	83.80
8	84.60	---	82.45	81.90	82.50	81.20	80.65	---	82.30	81.95	82.85	83.70
9	84.65	---	82.25	81.85	82.60	81.25	83.75	---	82.15	81.90	82.50	85.55
10	84.55	---	82.40	81.70	82.40	82.00	80.50	---	82.10	81.75	82.15	87.20
11	84.60	---	82.25	81.60	82.15	81.45	80.35	---	81.95	81.85	82.05	83.60
12	84.20	---	82.55	81.90	81.80	81.40	80.70	---	81.75	81.60	82.30	82.50
13	84.20	---	82.60	86.45	82.10	81.35	80.75	---	81.65	81.45	82.45	82.65
14	84.20	---	82.50	82.10	81.80	81.15	80.85	---	81.85	81.55	82.70	82.75
15	84.35	---	82.40	82.40	81.50	83.25	80.35	---	81.95	81.50	83.30	82.60
16	84.15	---	82.20	82.45	81.40	81.45	80.25	---	82.00	81.60	83.45	82.65
17	84.50	---	82.00	82.30	81.20	81.40	80.40	---	82.55	81.70	83.25	82.15
18	84.65	---	82.05	82.00	81.50	81.15	81.50	---	82.40	81.85	83.10	81.95
19	84.55	---	82.10	83.00	81.65	81.15	80.80	---	81.95	82.10	83.30	82.05
20	84.40	---	82.30	82.45	81.60	81.55	80.80	---	81.65	82.25	83.55	82.10
21	84.30	---	82.40	82.30	81.50	80.95	80.70	---	81.60	83.00	83.35	82.10
22	84.35	---	82.35	81.95	81.35	81.00	81.10	---	81.60	82.85	83.50	82.05
23	84.50	---	82.10	82.20	81.55	81.20	81.10	---	81.75	82.95	83.85	82.10
24	84.15	---	82.70	82.75	81.70	80.70	81.00	---	81.80	83.15	83.55	82.10
25	83.75	---	82.05	82.45	81.85	83.95	81.20	---	81.80	83.65	82.90	82.35
26	83.85	---	82.40	83.15	81.90	80.90	81.15	---	82.05	83.25	82.60	82.90
27	83.95	---	82.15	82.85	81.90	80.80	81.05	---	83.00	83.00	82.70	83.20
28	83.95	---	82.10	82.70	81.55	80.95	81.20	---	87.60	82.45	82.55	83.10
29	83.95	---	81.90	84.45	---	80.80	80.80	---	82.95	82.50	82.75	82.40
30	84.05	---	82.70	86.10	---	84.85	80.95	---	82.60	82.25	82.80	82.10
31	84.10	---	82.05	82.50	---	81.10	---	---	---	82.15	82.65	---
MAX	84.90	---	---	86.45	82.95	84.85	83.75	---	---	83.65	83.85	---
WTR YR 1987	MEAN	82.44		HIGH	80.25	APR 16	LOW	87.80	SEP 5	AND OTHERS		

GROUND-WATER RECORDS

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, 33.62 ft below land-surface datum, June 14, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35.25	35.45	34.96	34.20	34.82	34.75	34.69	34.20	34.08	34.68	34.25	34.45
2	35.30	35.45	34.64	34.12	34.51	35.12	34.84	34.07	33.92	34.65	34.08	34.37
3	35.24	35.35	34.84	34.32	35.05	35.50	34.87	34.15	34.03	34.68	33.98	34.45
4	35.18	35.15	35.10	34.32	35.35	35.60	34.83	34.39	34.10	34.62	33.95	34.53
5	35.35	35.07	35.25	34.37	35.39	35.50	34.55	34.45	34.38	34.47	34.12	34.49
6	35.45	35.10	35.20	34.20	35.28	35.88	34.55	34.32	34.36	34.55	34.24	34.38
7	35.48	35.15	35.05	34.30	35.05	35.50	34.46	34.13	34.13	34.57	34.31	34.31
8	35.31	35.02	34.80	34.33	35.15	35.05	34.48	34.16	34.04	34.48	34.32	34.19
9	35.46	35.36	34.10	34.27	35.39	34.98	34.57	34.17	34.03	34.46	34.23	34.13
10	35.47	35.42	34.85	33.82	35.25	35.14	34.55	34.09	34.05	34.59	34.30	34.22
11	35.28	35.23	34.83	34.13	35.14	35.12	34.40	34.02	33.97	34.73	34.29	34.32
12	35.17	35.51	35.00	34.25	35.21	35.13	34.68	34.06	33.74	34.74	34.20	34.34
13	35.06	35.68	35.25	34.31	35.23	35.16	34.73	34.19	33.63	34.63	34.35	34.32
14	35.11	35.60	35.08	34.19	35.10	34.97	34.55	34.16	33.62	34.30	34.42	34.35
15	35.19	35.09	34.86	34.42	35.29	34.73	34.38	34.25	34.41	34.33	34.43	34.27
16	35.17	34.77	34.76	34.50	35.26	34.94	34.20	34.34	34.25	34.49	34.40	34.25
17	35.41	34.70	34.65	34.49	35.06	35.00	34.25	34.30	36.12	34.55	34.41	34.13
18	35.57	34.98	34.57	34.15	35.32	34.86	34.49	34.18	35.55	34.48	34.41	34.18
19	35.62	35.04	34.61	34.25	35.45	34.75	34.57	34.06	34.18	34.35	34.53	34.25
20	35.50	34.88	34.77	34.80	35.48	34.85	34.56	34.11	34.05	34.34	35.09	34.29
21	35.31	35.88	34.88	34.61	35.25	34.80	34.42	34.13	33.87	34.43	35.00	34.35
22	35.21	35.70	34.87	33.92	35.10	34.86	34.28	34.53	33.69	34.49	34.60	34.40
23	35.24	35.17	34.70	34.35	35.34	34.75	34.35	34.78	33.74	34.41	34.63	34.44
24	35.24	35.25	34.28	34.55	35.40	34.55	34.59	34.76	33.80	34.53	34.61	34.35
25	35.13	35.22	34.46	34.55	35.45	34.48	34.63	34.71	33.74	34.54	34.59	34.41
26	34.89	35.20	34.55	34.69	35.52	34.64	34.52	34.53	33.94	34.43	34.94	34.45
27	35.07	35.25	34.56	34.60	35.40	34.65	34.35	34.67	34.30	34.36	34.75	34.52
28	35.17	35.24	34.55	34.80	35.19	34.73	34.24	34.65	34.49	34.41	34.69	34.56
29	35.19	35.16	34.46	34.75	---	34.73	34.15	34.35	34.65	34.33	34.67	34.40
30	35.41	35.05	34.31	34.62	---	34.55	34.18	34.28	34.70	34.26	34.47	34.33
31	35.43	---	34.35	34.86	---	34.67	---	34.18	---	34.33	34.40	---
MAX	35.62	35.88	35.25	34.86	35.52	35.88	34.87	34.78	36.12	34.74	35.09	34.56
WTR YR 1987 MEAN	34.67		HIGH		33.62	JUN 14	LOW		36.12	JUN 17		

GROUND-WATER RECORDS

263

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, 23.10 ft below land-surface datum, Apr. 28, 1939.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35.42	35.40	34.40	32.60	33.90	34.40	35.20	34.75	33.90	34.00	35.10	34.50
2	35.50	34.30	34.60	33.60	34.20	34.10	35.50	34.30	34.20	34.70	34.10	35.40
3	35.25	33.60	34.80	34.30	34.60	35.00	35.50	33.30	34.10	34.30	34.50	36.80
4	35.20	34.80	35.10	33.80	35.40	34.80	35.00	33.90	33.80	33.30	34.70	37.10
5	34.50	35.60	35.20	35.00	35.00	35.40	34.00	34.50	34.40	32.95	34.70	37.20
6	34.20	35.40	35.20	33.00	34.80	35.60	34.20	34.40	33.50	33.45	34.60	36.00
7	34.90	35.40	33.80	31.80	35.20	35.50	34.30	35.10	32.60	34.40	35.00	34.70
8	35.30	34.60	34.00	33.50	34.00	33.90	34.40	35.20	33.30	37.35	35.10	35.20
9	---	34.30	35.00	33.80	34.50	32.50	34.80	35.10	34.10	35.30	33.50	36.40
10	---	34.50	35.10	33.80	35.00	32.70	35.20	33.90	34.60	34.70	34.60	36.80
11	---	35.50	35.40	33.30	34.70	32.30	35.20	33.90	34.40	34.70	35.10	36.80
12	---	35.30	35.50	33.50	34.80	34.90	34.10	35.20	34.10	32.90	35.40	36.40
13	---	35.30	35.50	34.20	35.20	35.20	34.40	35.60	34.20	33.30	36.10	34.70
14	---	35.00	33.80	34.10	34.80	35.30	35.00	36.20	33.00	33.90	36.60	34.90
15	---	34.60	34.50	34.70	33.70	34.00	34.90	36.20	34.00	33.85	35.80	35.60
16	---	34.20	34.60	34.50	33.80	34.40	35.10	34.10	34.50	34.60	35.00	35.60
17	---	34.40	34.40	34.10	34.30	35.10	35.20	32.70	34.60	34.70	35.60	35.00
18	---	35.40	35.20	33.70	34.70	34.80	33.90	32.10	35.40	34.70	36.20	35.00
19	---	35.10	35.30	33.80	35.10	35.30	33.40	31.80	35.00	33.75	36.30	34.70
20	---	35.40	34.40	34.50	35.30	35.50	34.20	33.65	34.60	34.00	35.90	34.00
21	---	35.40	33.50	34.10	35.10	34.80	34.50	34.30	33.30	35.40	36.70	34.60
22	---	35.50	34.20	34.40	34.40	34.20	34.50	34.70	31.70	35.70	36.70	35.40
23	---	34.50	34.80	34.40	34.70	34.30	34.80	33.90	31.60	35.80	35.30	36.00
24	---	35.00	33.50	34.80	35.50	34.80	34.90	33.50	31.40	35.80	35.30	36.30
25	---	35.50	32.20	33.50	35.50	35.00	35.00	32.20	32.80	35.50	35.40	36.40
26	---	35.30	33.80	33.60	35.80	35.50	33.70	33.50	34.00	34.20	35.70	36.50
27	---	35.10	34.50	34.00	35.60	35.70	33.70	34.20	34.50	33.80	36.40	36.30
28	---	34.40	34.20	34.60	35.10	35.40	33.90	34.50	33.80	34.30	35.80	35.80
29	---	34.60	34.10	34.90	---	34.20	34.30	34.70	34.80	34.90	35.80	36.20
30	---	34.70	34.70	35.10	---	34.30	34.70	34.40	34.30	35.30	34.70	36.00
31	35.50	---	34.40	35.30	---	33.40	---	33.30	---	35.35	34.30	---
MAX	---	35.60	35.50	35.30	35.80	35.70	35.50	36.20	35.40	37.35	36.70	37.20
WTR YR 1987 MEAN		34.65										
			HIGH	31.40	JUN 24		LOW	37.35	JUL 8			

GROUND-WATER RECORDS

265

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 1986 TO SEPTEMBER 1987

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)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
NOV 13...	1130	735	7.44	5.0	15.5	16	320	90	81	28
MAR 10...	1500	750	7.55	3.0	17.0	<10	310	81	80	27
SEP 01...	1030	744	7.72	17.0	17.5	<10	300	66	77	27

DATE	ALKA- LITY WH WAT TOTAL 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)	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 DIS- SOLVED (UG/L AS AS)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)
NOV 13...	228	67	51	0.30	404	0.010	1.60	<1	180	20
MAR 10...	230	66	47	0.30	402	0.020	2.00	--	--	--
SEP 01...	237	69	52	0.40	434	0.020	1.20	<1	90	<10

DATE	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...	4	4	26	48	<5	270	20	14	1.3
MAR 10...	--	--	13	--	--	250	--	--	1.0
SEP 01...	6	3	11	<5	<5	260	20	30	3.8

GROUND-WATER RECORDS

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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.57	23.88	22.84	21.83	24.07	24.82	24.89	22.55	23.50	23.86	23.67	25.11
2	25.56	23.94	22.85	21.67	24.09	24.78	24.90	22.63	23.48	23.88	23.80	25.18
3	25.39	23.94	22.75	21.96	24.08	24.72	24.90	22.63	23.42	23.83	23.85	25.19
4	24.98	23.96	22.38	22.03	24.08	24.65	24.83	22.71	23.24	23.48	23.91	25.23
5	24.67	23.99	21.94	22.20	24.10	24.58	24.61	22.77	22.98	22.87	23.89	25.29
6	24.03	24.03	21.69	22.32	24.13	24.57	24.40	22.83	22.78	22.50	23.97	25.31
7	23.27	24.06	21.59	22.49	24.16	24.60	24.39	22.89	22.74	22.35	24.04	25.36
8	22.81	24.06	21.58	22.62	24.16	24.47	24.32	22.98	22.70	22.41	24.12	25.40
9	22.62	24.10	21.65	22.72	24.11	24.44	24.25	23.07	22.61	22.49	24.19	25.42
10	22.61	24.12	21.64	22.84	24.11	24.55	24.19	23.07	22.64	22.57	24.24	25.44
11	22.62	24.14	21.59	22.84	24.14	24.62	24.16	23.07	22.71	22.59	24.27	25.48
12	22.61	24.18	21.48	22.90	24.20	24.69	24.05	23.15	22.79	22.40	24.31	25.51
13	22.70	24.23	21.53	23.02	24.27	24.74	23.85	23.23	22.86	22.17	24.38	25.55
14	22.86	24.27	21.57	23.11	24.31	24.80	23.86	23.28	22.97	22.18	24.45	25.57
15	23.00	24.37	21.62	23.18	24.18	24.78	23.86	23.33	22.99	22.22	24.54	25.57
16	23.09	24.44	21.71	23.18	24.17	24.77	23.80	23.40	22.98	22.24	24.63	25.61
17	23.19	24.45	21.82	23.21	24.23	24.84	23.63	23.44	23.03	22.31	24.65	25.65
18	23.22	24.47	21.95	23.17	24.34	24.91	23.21	23.43	23.09	22.42	24.66	25.69
19	23.14	24.50	22.06	23.28	24.43	24.98	22.69	23.46	23.15	22.50	24.72	25.75
20	23.23	24.55	22.15	23.30	24.51	25.00	22.31	23.48	23.22	22.55	24.74	25.81
21	23.32	24.61	22.12	23.31	24.56	25.00	22.28	23.48	23.31	22.65	24.79	25.82
22	23.43	24.67	22.23	23.33	24.43	24.71	22.30	23.46	23.35	22.77	24.88	25.83
23	23.48	24.69	22.28	23.39	24.56	24.73	22.31	23.41	23.41	22.89	24.96	25.84
24	23.55	24.65	22.13	23.49	24.64	24.82	22.33	23.45	23.45	23.01	24.96	25.85
25	23.65	24.58	21.88	23.51	24.71	24.89	22.37	23.39	23.48	23.13	24.91	25.87
26	23.67	24.61	21.71	23.59	24.79	24.96	22.20	23.38	23.57	23.20	24.95	25.91
27	23.66	24.50	21.56	23.66	24.85	25.04	22.26	23.38	23.63	23.16	24.99	25.94
28	23.69	23.88	21.60	23.72	24.89	25.09	22.36	23.38	23.62	23.27	25.02	25.88
29	23.73	23.31	21.88	23.83	---	25.10	22.40	23.40	23.67	23.39	25.07	25.91
30	23.79	23.02	22.09	23.92	---	25.02	22.50	23.47	23.77	23.47	25.12	25.92
31	23.81	---	22.09	24.01	---	24.92	---	23.50	---	23.58	25.12	---
MAX	25.57	24.69	22.85	24.01	24.89	25.10	24.90	23.50	23.77	23.88	25.12	25.94
WTR YR 1987 MEAN	23.71			HIGH	21.48	DEC 12	LOW	25.94	SEP 27			

GROUND-WATER RECORDS

267

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, 22.15 ft below land-surface datum, Dec. 14, 1964; minimum daily low, 5.85 ft below land-surface datum, July 1, 1946.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.60	12.85	13.15	14.05	13.90	13.95	13.30	12.65	13.25	12.45	15.30	14.80
2	12.80	12.45	12.80	14.15	14.10	14.00	13.15	12.65	12.75	11.70	15.10	14.80
3	12.00	12.15	13.05	14.35	13.95	14.30	13.90	12.85	12.45	12.15	14.40	15.10
4	12.10	12.40	12.55	14.35	14.20	14.20	13.80	13.10	12.85	12.15	14.10	15.20
5	11.95	12.25	12.75	14.15	14.00	13.95	13.70	13.15	12.75	12.10	14.40	15.50
6	12.25	12.15	12.90	13.50	13.55	13.90	13.40	13.10	13.55	12.25	14.60	15.10
7	12.05	12.15	12.70	13.75	13.75	14.20	13.05	13.25	13.15	11.95	14.80	15.85
8	11.80	11.90	12.50	14.05	13.65	14.30	12.75	13.45	13.35	12.00	15.90	15.65
9	12.00	12.45	12.05	13.95	14.45	13.50	12.55	13.55	12.45	12.25	14.20	15.60
10	11.65	13.00	12.35	14.35	13.75	13.65	13.15	14.25	12.45	12.20	14.30	15.40
11	12.25	12.35	12.40	14.05	13.55	13.65	13.20	13.95	12.50	12.40	14.35	15.50
12	12.10	12.35	12.50	14.25	13.25	13.45	13.10	14.30	12.30	12.65	14.75	15.65
13	11.65	12.95	13.25	14.35	13.05	13.40	13.35	14.15	12.55	12.55	14.85	15.70
14	11.60	12.85	13.10	14.30	13.45	13.65	12.80	14.35	12.80	12.05	15.00	16.50
15	11.50	13.15	13.05	14.25	13.65	13.65	12.60	13.50	13.65	12.10	15.30	16.05
16	11.45	13.05	13.10	14.35	14.25	13.50	12.70	14.70	13.80	11.95	15.80	15.50
17	11.85	13.00	12.75	14.30	14.20	13.35	13.10	15.45	12.65	13.00	15.00	15.85
18	12.35	12.95	12.90	14.60	14.00	13.20	13.10	15.00	13.55	12.60	15.20	15.60
19	11.90	14.40	13.15	14.50	13.90	13.55	13.05	13.60	13.35	11.70	15.65	15.90
20	14.10	13.90	13.25	14.25	13.95	13.30	13.65	14.15	13.55	15.25	16.40	15.45
21	12.15	13.90	13.40	14.35	14.00	13.25	13.30	14.00	12.55	15.30	15.40	16.05
22	12.60	14.05	13.45	14.30	13.85	13.35	13.20	13.10	13.85	14.05	14.90	16.00
23	12.10	13.30	13.30	14.75	14.30	13.30	13.30	13.35	12.45	13.55	15.20	15.80
24	12.05	13.15	13.45	15.35	14.25	13.65	13.30	13.50	13.15	14.00	15.90	16.35
25	12.20	13.55	13.45	15.50	14.40	13.20	13.30	13.85	12.85	14.20	15.15	15.90
26	11.80	13.15	13.80	15.55	14.40	13.10	13.45	13.55	12.95	13.25	15.10	16.20
27	12.15	13.50	14.00	15.50	14.20	13.40	13.10	13.45	12.80	13.85	14.65	16.50
28	12.15	13.70	13.85	15.00	14.05	13.50	12.50	14.25	13.15	14.50	14.45	16.35
29	12.15	13.65	14.00	14.50	---	13.55	12.65	14.15	12.85	14.65	14.80	15.85
30	12.05	13.60	14.20	13.95	---	13.30	12.75	14.45	12.35	15.40	14.95	15.85
31	12.15	---	14.60	14.45	---	13.30	---	13.55	---	14.90	14.95	---
MAX	14.10	14.40	14.60	15.55	14.45	14.30	13.90	15.45	13.85	15.40	16.40	16.50
WTR YR 1987 MEAN	13.65		HIGH		11.45	OCT 16	LOW		16.50	SEP 14	AND OTHERS	

GROUND-WATER RECORDS

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.--Biyearly 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.

REVISIONS.--The value published for April 23, 1986 in the 1986 report is in error. It should read 16.98 feet.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 22, 1986	19.05	Apr. 23, 1987	16.42

GROUND-WATER RECORDS

269

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, 19.98 ft below land-surface datum, Oct. 1, 1983; minimum daily low, 1.43 ft below land-surface datum, Apr. 29, 1950.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.83	10.54	10.39	5.95	8.58	8.36	9.59	9.19	8.83	8.43	10.46	10.22
2	10.21	10.56	10.41	4.83	9.29	10.98	9.04	9.03	8.86	7.98	8.44	8.53
3	10.84	11.40	8.59	5.65	9.52	11.10	9.89	7.59	9.31	7.46	10.08	10.28
4	10.76	11.78	8.48	6.31	9.44	10.88	9.37	9.37	9.21	5.32	9.93	10.57
5	8.53	10.23	9.89	6.63	9.19	9.77	7.37	9.75	9.75	6.65	10.32	8.49
6	10.28	11.75	8.75	6.73	9.30	10.14	9.24	9.64	7.06	9.46	9.61	8.81
7	10.67	11.69	8.52	6.88	8.42	10.05	9.32	9.65	6.06	10.26	10.24	8.85
8	10.52	10.50	7.58	7.88	8.45	8.53	9.32	9.34	8.23	10.31	8.70	9.88
9	10.61	9.37	8.58	8.79	7.89	10.41	9.54	9.45	8.24	8.37	9.74	12.46
10	10.97	10.35	9.06	7.73	9.95	8.52	9.75	7.68	8.89	8.21	8.84	12.54
11	9.42	10.78	9.03	6.88	8.87	9.95	8.69	9.46	8.33	6.86	8.90	10.94
12	8.87	10.73	7.47	7.95	10.22	10.63	7.10	9.70	8.25	5.97	9.86	11.01
13	8.47	9.74	7.72	8.40	11.00	9.24	8.63	9.66	7.59	7.86	10.18	9.53
14	9.61	11.50	7.73	8.64	11.27	8.89	8.59	9.58	6.39	8.31	10.33	10.41
15	10.21	11.51	9.44	8.71	10.03	8.63	9.51	9.62	8.41	8.26	9.42	10.75
16	10.25	9.24	7.52	8.70	11.33	10.09	9.05	8.79	8.75	8.10	8.74	10.88
17	10.34	11.37	9.10	8.67	10.40	9.96	8.37	7.07	8.75	8.36	9.85	10.93
18	8.77	11.47	9.85	7.89	11.14	10.10	7.21	8.91	7.79	8.42	10.05	11.07
19	9.40	11.29	9.41	8.43	11.30	10.10	7.26	9.37	8.47	8.35	10.04	11.07
20	11.34	11.41	7.92	10.19	11.33	10.43	9.36	9.33	7.35	9.10	12.08	10.08
21	11.25	11.48	---	10.21	10.55	10.48	9.80	9.52	7.52	10.15	10.66	10.47
22	11.77	11.24	---	8.00	8.77	8.10	9.45	9.99	7.41	9.83	8.53	10.73
23	11.95	9.42	---	8.40	10.85	10.21	9.98	9.94	8.76	12.22	7.76	10.55
24	12.02	9.98	---	8.99	11.08	9.99	8.83	6.27	7.76	12.68	9.40	10.17
25	10.21	10.62	---	9.25	10.87	9.00	9.55	6.49	8.02	10.44	9.11	10.65
26	8.78	10.62	---	10.14	11.22	10.50	8.09	6.82	8.88	8.31	9.29	9.53
27	10.34	7.81	---	10.30	11.33	10.26	9.68	6.70	8.18	12.16	8.66	8.62
28	10.87	8.03	---	10.43	9.85	8.92	9.73	8.08	6.65	11.29	8.88	10.29
29	11.02	7.16	5.61	8.90	---	8.15	9.24	8.46	8.77	12.30	8.88	10.60
30	11.18	7.97	6.40	10.70	---	9.27	9.15	7.73	9.14	12.37	8.77	10.46
31	10.29	---	6.62	9.60	---	9.57	---	7.54	---	12.33	10.18	---
MAX	12.02	11.78	---	10.70	11.33	11.10	9.98	9.99	9.75	12.68	12.08	12.54
WTR YR 1987 MEAN	9.36		HIGH		4.83	JAN 2	LOW	12.68	JUL 24			

GROUND-WATER RECORDS

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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---				---	20.63	24.68			---	32.09	33.98
2	---				---	17.14	26.84			---	31.97	33.85
3	---				12.72	21.14	27.99			---	31.99	33.93
4	---				12.85	20.61	29.60			---	31.92	33.91
5	---				14.16	21.14	30.36			---	28.23	33.85
6	---				21.01	21.05	29.61			---	29.89	33.79
7	---				21.08	21.27	29.54			---	30.73	33.75
8	---				19.48	22.07	31.35			---	31.30	28.85
9	---				22.02	19.92	32.03			28.54	31.73	31.68
10	---				18.64	18.92	31.38			29.12	31.97	33.25
11	---				20.39	15.64	30.63			29.66	31.95	33.44
12	---				20.79	14.35	31.41			29.85	30.33	28.16
13	---				20.57	13.67	30.77			26.85	31.25	24.51
14	---				20.27	13.09	30.01			28.53	31.88	29.24
15	---				21.49	12.70	29.69			29.13	32.27	31.34
16	31.61				20.39	18.00	29.51			29.36	32.49	32.00
17	31.30				21.44	22.12	---			29.48	32.70	32.34
18	32.14				23.00	24.11	---			29.54	32.85	32.67
19	32.15				23.52	25.39	---			29.56	33.17	32.83
20	31.69				18.37	26.13	---			29.65	33.60	32.94
21	---				19.83	26.67	---			30.17	35.18	33.01
22	---				18.85	27.09	---			30.74	35.59	33.34
23	---				23.12	27.28	---			31.61	35.72	33.66
24	---				24.64	27.47	---			31.81	35.54	35.47
25	---				21.87	27.66	---			31.80	35.30	35.78
26	---				23.05	28.12	---			31.90	35.33	32.47
27	---				23.31	28.13	---			31.76	31.62	28.78
28	---				18.85	28.22	---			31.56	33.05	31.24
29	---				---	28.29	---			31.74	33.80	33.08
30	---				---	28.16	---			31.92	33.97	31.62
31	---				---	28.08	---			32.09	33.91	---
MAX	---				---	28.29	---			---	35.72	35.78
WTR YR 1987	MEAN	27.98		HIGH	12.70	MAR 15	LOW	35.78	SEP 25			

271

395352083292100. Local number, M-5.

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.

INSTRUMENTATION: Type I 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, 51.51 ft below land-surface datum, Aug. 21, 1987; minimum daily low, 44.42 ft below land-surface datum, Apr. 27, 1987.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47.13	---	46.13	44.43	46.06	45.05	45.55	50.01	47.73	47.78	47.91	47.98
2	47.29	---	45.70	44.70	46.04	45.01	45.49	46.03	48.27	47.00	46.94	48.03
3	47.32	---	45.44	---	46.20	45.28	45.30	45.54	47.17	46.70	46.67	47.50
4	46.88	---	45.52	---	46.33	45.59	45.25	48.25	46.23	46.69	46.84	48.09
5	46.54	---	45.55	---	46.53	44.72	45.10	49.20	47.19	45.98	48.26	48.84
6	46.83	47.47	45.54	46.02	46.58	45.33	45.33	46.66	47.00	45.60	47.73	49.02
7	46.85	47.16	45.48	46.33	46.58	45.26	45.10	45.30	45.90	45.89	46.47	48.50
8	46.88	47.30	46.17	---	46.17	45.20	45.23	46.55	46.80	46.32	46.16	47.88
9	47.35	46.72	47.66	45.80	46.30	44.94	45.23	46.31	47.43	45.29	46.32	48.88
10	47.56	46.83	48.26	45.10	46.88	45.26	45.28	45.60	46.97	45.68	46.30	48.50
11	47.42	47.05	46.95	45.12	47.00	45.25	45.18	45.53	46.35	46.60	46.48	47.58
12	47.53	46.75	46.42	48.67	46.20	44.52	45.02	45.49	47.44	45.99	46.14	47.35
13	47.33	46.86	45.76	50.18	46.65	45.02	45.05	45.90	46.46	45.43	46.42	46.83
14	47.35	47.04	45.62	50.90	46.39	44.85	45.06	46.15	46.29	45.83	46.67	48.83
15	47.39	47.03	47.60	51.03	46.40	44.71	45.40	46.15	45.92	45.39	46.73	47.36
16	47.29	46.73	48.17	---	46.51	44.50	44.50	45.69	46.35	45.73	46.38	48.78
17	47.62	46.34	46.79	---	46.50	44.79	46.25	45.51	48.00	46.05	46.35	47.60
18	47.85	47.17	48.12	---	46.58	45.02	45.40	46.22	48.55	45.84	46.73	47.74
19	47.72	46.87	48.59	---	---	45.53	45.45	45.77	47.54	45.72	46.95	47.50
20	47.88	47.06	---	---	---	46.07	45.43	47.39	46.94	46.30	48.13	47.66
21	48.17	47.11	---	---	---	45.89	46.79	46.58	47.05	46.45	51.51	48.00
22	48.22	47.07	---	---	---	46.38	45.47	46.25	46.60	47.09	48.40	47.40
23	47.80	46.62	---	---	---	45.78	45.23	45.99	47.07	46.77	47.49	47.62
24	49.17	46.23	---	---	---	46.00	45.13	44.97	46.41	47.00	47.97	47.86
25	49.26	46.75	---	---	45.48	45.83	44.92	45.03	46.84	47.17	47.65	49.38
26	---	46.30	---	---	45.30	45.37	44.43	45.44	46.79	46.67	47.32	47.65
27	48.77	45.88	---	---	45.58	45.98	44.42	45.48	46.72	46.47	49.05	47.55
28	---	46.70	---	---	45.42	45.80	47.17	47.21	46.22	45.97	48.85	47.60
29	---	46.52	---	---	---	45.52	47.97	46.63	46.34	46.31	47.60	47.66
30	---	46.32	---	46.38	---	45.38	49.38	47.32	46.43	47.21	47.15	---
31	---	---	45.05	46.53	---	46.31	---	47.37	---	48.56	48.60	---
MAX	---	---	---	---	---	46.38	49.38	50.01	48.55	48.56	51.51	---
WTR YR 1987	MEAN	46.65		HIGH	44.42	APR 27	LOW	51.51	AUG 21			

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, 25.55 ft below land-surface datum, June 6, 1983; minimum daily low 0.20 ft below land-surface datum, Mar. 30, 1986.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.75	17.25	13.15	13.10	17.40	17.75	20.40	10.35	13.36	15.35	17.40	19.45
2	---	17.30	15.90	13.10	17.70	17.75	19.35	10.70	13.70	14.70	17.40	18.05
3	19.30	17.30	15.95	13.20	17.45	17.80	19.20	10.90	13.15	14.55	17.45	18.05
4	18.80	17.35	15.95	13.25	19.20	17.80	15.60	11.05	12.30	14.25	17.50	18.05
5	19.20	17.10	15.95	13.05	19.65	17.95	15.55	10.95	12.15	15.50	17.55	18.05
6	19.25	17.20	12.65	13.00	19.45	19.50	12.80	11.00	12.00	16.30	17.65	18.10
7	19.25	16.70	12.10	14.70	19.90	19.45	12.45	11.05	12.15	16.55	17.45	18.15
8	19.30	17.15	11.90	13.10	20.05	19.30	11.90	11.15	12.20	16.65	16.05	17.75
9	19.10	17.30	11.75	13.05	20.10	19.50	12.00	12.65	12.30	16.75	15.80	17.90
10	18.60	17.35	14.65	12.90	19.90	19.50	12.50	13.15	12.35	16.70	17.05	18.55
11	15.25	17.35	14.95	13.00	20.15	19.30	12.65	13.35	11.85	16.70	16.45	17.75
12	14.95	17.10	15.15	13.00	20.50	19.30	12.75	13.55	11.80	16.75	15.90	17.80
13	14.80	17.25	15.30	13.05	19.60	19.30	12.80	13.45	14.95	16.85	15.85	17.85
14	17.90	17.30	15.30	17.75	16.10	19.25	11.15	13.45	15.05	16.95	15.90	17.85
15	15.35	17.20	15.35	17.90	17.20	19.25	10.95	13.55	14.10	16.95	17.65	17.75
16	17.80	15.35	15.40	13.40	17.55	19.25	11.85	13.60	15.85	15.55	17.80	17.90
17	16.10	15.15	13.80	13.30	17.70	19.20	11.05	12.00	16.00	15.50	17.95	18.05
18	16.20	15.05	13.55	13.20	17.80	19.15	9.95	11.70	16.10	16.70	18.15	17.95
19	16.20	15.10	13.55	13.25	17.85	19.05	11.60	11.60	16.20	16.95	17.50	19.20
20	16.25	15.00	13.50	13.25	17.95	14.00	12.20	11.45	16.30	16.80	18.10	19.35
21	16.15	15.05	13.50	16.75	17.90	13.80	12.30	13.00	16.35	16.95	18.25	18.30
22	19.30	15.05	13.50	18.50	17.90	17.45	12.35	15.50	16.40	17.00	18.40	19.50
23	19.85	15.00	13.45	16.75	17.85	17.60	12.40	11.40	16.55	17.15	18.70	19.80
24	17.95	15.00	13.40	16.75	17.85	16.05	12.45	13.05	16.40	17.30	17.65	18.60
25	16.85	14.50	13.50	16.75	17.90	16.15	11.60	13.65	16.05	17.35	18.30	18.65
26	16.75	14.30	13.50	17.20	17.95	16.35	10.50	---	16.45	17.15	19.00	18.65
27	16.80	14.10	13.50	17.20	17.90	16.50	10.40	12.90	14.90	17.15	19.05	18.70
28	16.85	13.70	13.20	17.30	17.90	16.30	10.35	13.25	15.20	17.25	19.10	18.85
29	17.00	13.20	13.10	17.30	---	16.30	10.30	13.30	15.25	17.30	17.80	---
30	17.05	13.05	13.05	17.35	---	20.10	10.35	13.35	15.35	17.35	17.80	---
31	17.20	---	13.00	17.40	---	19.75	---	13.35	---	17.40	19.15	---
MAX	---											

GROUND-WATER RECORDS

273

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.--Monthly 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 daily low, 10.03 ft below land-surface datum, Oct. 6, 1982; 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	DATE	WATER LEVEL
Oct. 29, 1986	6.30	Jan. 30, 1987	6.17	Apr. 30, 1987	5.50	July 29, 1987	6.95
Nov. 28, 1986	5.82	Feb. 25, 1987	6.50	June 1, 1987	5.46	Aug. 28, 1987	8.04
Dec. 31, 1986	5.80	Mar. 30, 1987	6.11	July 1, 1987	6.03	Sept. 15, 1987	8.79

GROUND-WATER RECORDS

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.--Biyearly 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 daily low, 30.35 ft below land-surface datum, Apr. 23, 1951.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

DATE	WATER LEVEL	DATE	WATER LEVEL
Oct. 1, 1986	45.02	May 1, 1987	35.81

GROUND-WATER RECORDS

275

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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.69	23.09	6.38	6.77	6.89	6.69	6.71	6.57	6.78	6.34	---	23.85
2	23.70	24.78	6.28	6.78	6.75	6.78	6.48	6.55	6.77	5.68	---	24.67
3	23.70	25.57	6.01	6.87	6.87	6.84	6.41	6.66	6.50	4.50	---	24.91
4	23.69	26.13	5.79	6.89	6.91	6.87	6.19	6.75	6.01	3.87	---	21.95
5	23.58	26.38	5.71	6.92	6.90	6.77	6.09	6.74	5.51	3.87	---	24.21
6	23.69	26.73	5.80	6.83	6.78	6.73	6.03	6.70	5.54	4.02	---	24.99
7	23.90	26.80	5.84	6.90	6.60	6.69	5.81	6.75	5.67	---	---	25.26
8	24.35	18.75	5.87	6.90	6.69	6.58	5.60	6.79	5.76	---	---	21.94
9	24.88	13.04	5.85	6.87	6.76	6.72	5.65	6.81	5.90	---	---	24.65
10	25.18	15.38	5.91	6.71	6.65	6.78	5.66	6.87	5.99	---	---	25.38
11	25.47	23.70	5.82	6.82	6.64	6.77	5.68	6.91	5.99	---	---	25.80
12	25.70	25.47	5.98	6.93	6.71	6.81	5.87	7.05	5.92	---	---	26.06
13	25.88	26.35	6.14	6.93	6.71	6.80	5.95	7.07	5.83	---	---	26.32
14	26.21	26.51	6.15	6.81	6.71	6.73	5.89	7.07	5.75	---	---	26.44
15	26.39	17.25	6.25	6.97	6.78	6.79	5.87	7.15	5.78	---	---	15.97
16	26.46	12.47	6.33	6.98	6.79	6.88	5.90	7.11	5.84	---	---	22.78
17	26.72	10.80	6.34	6.96	6.67	6.88	5.98	7.06	5.95	---	---	24.90
18	26.88	9.96	6.44	6.79	6.80	6.82	6.10	7.04	6.00	---	---	25.28
19	26.93	9.45	6.50	6.77	6.89	6.80	6.19	6.98	6.06	---	---	15.00
20	27.01	8.83	6.62	6.80	6.91	6.80	6.22	6.96	6.11	---	---	12.87
21	27.12	8.42	6.70	6.77	6.81	6.83	6.26	6.94	6.16	---	21.00	11.96
22	27.26	8.09	6.71	6.64	6.78	6.85	6.24	6.95	6.11	---	23.11	11.43
23	27.30	7.68	6.66	6.73	6.97	6.84	6.32	7.00	6.11	---	23.52	11.07
24	16.40	7.59	6.58	6.85	7.02	6.81	6.45	6.98	6.17	---	21.97	20.94
25	13.04	7.51	6.72	6.82	7.02	6.86	6.49	6.96	6.14	---	23.83	24.08
26	11.50	7.25	6.80	6.87	7.03	6.95	6.51	6.95	6.18	---	24.33	25.35
27	10.56	7.06	6.79	6.85	7.00	6.94	6.45	6.92	6.28	---	24.57	26.05
28	9.94	6.57	6.79	6.93	6.90	7.01	6.50	6.88	6.37	---	21.93	26.38
29	9.45	6.29	6.76	6.93	---	7.00	6.45	6.91	6.42	---	23.90	26.62
30	9.09	6.39	6.79	6.82	---	6.87	6.58	6.87	6.47	---	24.25	26.77
31	18.19	---	6.80	6.91	---	6.72	---	6.84	---	---	21.75	---
MAX	27.30	26.80	6.80	6.98	7.03	7.01	6.71	7.15	6.78	---	---	26.77
WTR YR 1987 MEAN	10.94											
HIGH												
LOW												

WTR YR 1987 MEAN 10.94 HIGH 3.87 JUL 4 AND OTHERS LOW 27.30 OCT 23

GROUND-WATER RECORDS

277

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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.25	14.66	14.48		---	---	11.80	10.92	13.70	12.91	---	16.05
2	16.49	14.60	---		---	---	11.95	10.84	13.92	12.63	---	16.05
3	16.59	14.55	---		---	---	12.02	10.78	13.98	10.50	---	16.18
4	16.56	14.46	---		---	---	12.03	10.83	14.00	7.23	---	16.20
5	16.55	14.43	---		---	---	11.93	---	14.02	---	---	16.23
6	16.45	14.36	---		---	---	11.74	---	13.95	---	10.42	16.32
7	16.32	14.30	---		---	---	11.94	---	13.80	---	10.47	16.36
8	16.23	14.27	---		---	---	12.06	---	13.65	---	10.52	16.34
9	16.14	14.22	---		---	---	12.19	---	13.72	---	10.57	16.57
10	16.08	14.15	---		---	---	12.30	---	13.96	---	10.57	16.84
11	15.98	14.15	---		---	---	12.30	---	14.08	---	10.65	16.79
12	15.88	14.25	---		---	---	12.18	---	14.11	7.00	11.00	16.70
13	15.78	14.30	---		---	---	11.98	---	13.86	---	11.12	16.68
14	15.68	14.46	---		---	---	11.91	---	13.90	---	11.18	16.64
15	15.64	14.48	---		---	---	11.84	---	14.04	---	11.24	16.61
16	15.58	14.46	---		---	---	11.80	---	13.97	---	11.35	16.62
17	15.51	14.50	---		---	---	11.69	---	13.81	---	11.41	16.61
18	15.49	14.55	---		---	---	11.60	---	13.73	---	---	16.60
19	15.45	14.62	---		---	---	11.53	---	13.64	---	---	16.60
20	15.39	14.70	---		---	---	11.47	---	13.60	---	---	16.58
21	15.32	14.65	---		---	---	11.44	---	13.45	---	13.95	16.61
22	15.24	14.71	---		---	---	11.43	---	13.28	---	---	16.61
23	15.18	14.71	---		---	---	11.43	---	13.20	---	---	16.64
24	15.13	14.75	---		---	---	11.38	---	13.08	---	---	16.64
25	15.08	14.76	---		12.00	---	11.30	---	13.05	---	---	16.69
26	14.94	14.66	---		---	---	11.24	---	13.07	---	---	16.70
27	14.87	14.62	---		---	---	11.15	---	12.97	---	---	16.73
28	14.83	14.62	---		---	---	11.10	---	12.92	---	---	16.75
29	14.78	14.61	---		---	---	11.05	---	12.98	8.92	---	16.79
30	14.73	14.52	---		---	11.38	11.00	---	12.96	---	---	16.80
31	14.72	---	---		---	11.60	---	---	---	---	16.06	---
MAX	16.59	14.76	---		---	---	12.30	---	14.11	---	---	16.84
WTR_YR 1987 MEAN	13.90			HIGH	7.00	JUL 12	LOW	16.84	SEP 10			

GROUND-WATER RECORDS

MEDINA COUNTY

410120081431800. Local number, MD-3.

LOCATION.--Lat^o 41 01'20", long 81^o 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, 140.60 ft below land-surface datum, Apr. 16, 1983

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	168.80		---	152.85	---	151.30	156.84	150.30	166.60	172.70	173.00	171.10
2	169.00		156.60	151.80	---	161.90	157.20	150.30	168.50	156.50	---	172.70
3	169.00		156.55	152.00	---	163.70	157.30	151.80	167.30	156.60	---	---
4	168.70		157.30	---	---	164.20	157.10	152.50	155.50	152.30	---	---
5	168.40		157.35	---	---	157.80	147.90	152.70	154.20	150.40	---	---
6	168.90		156.55	---	---	163.60	154.60	152.90	154.50	165.90	---	---
7	168.45		152.35	---	---	162.60	155.90	153.30	152.90	168.90	---	---
8	168.70		154.55	---	---	162.70	156.10	154.40	153.60	168.00	---	---
9	168.60		155.10	---	---	---	156.20	154.60	167.80	169.10	---	---
10	168.60		154.80	---	---	---	156.20	154.50	167.80	167.90	---	---
11	167.50		154.90	---	---	---	156.00	155.10	166.40	168.50	---	---
12	165.90		154.25	---	---	---	153.20	155.30	169.40	168.00	---	---
13	165.25		155.35	---	---	---	155.50	156.40	169.50	168.05	---	---
14	167.90		154.05	---	---	---	155.50	155.30	169.90	170.20	---	---
15	167.90		154.90	---	---	---	155.50	156.10	170.40	167.90	---	---
16	167.80		155.15	---	---	---	153.00	155.70	170.60	168.20	---	---
17	168.40		155.25	---	---	---	147.40	155.60	171.10	169.40	---	---
18	167.50		154.15	---	---	---	147.20	156.10	171.20	167.30	---	---
19	168.00		154.80	---	---	---	146.80	155.70	171.20	167.80	---	---
20	168.00		154.90	---	---	---	153.40	155.90	171.20	170.00	---	---
21	167.90		154.35	---	---	---	154.40	156.10	171.30	170.65	---	---
22	167.55		162.55	---	---	---	154.60	156.50	171.10	171.05	---	---
23	168.10		163.15	---	---	---	154.70	156.30	170.10	171.40	---	---
24	167.60		155.25	---	---	---	158.40	156.30	171.10	171.80	---	---
25	165.50		153.90	---	---	---	149.60	155.40	171.40	171.90	---	---
26	167.00		149.45	---	---	---	152.80	154.70	170.20	172.00	---	---
27	167.60		149.45	---	161.17	---	157.00	155.20	170.70	172.20	---	---
28	167.30		149.25	---	163.20	---	148.00	155.60	171.90	172.40	---	---
29	167.40		152.65	154.20	---	---	153.00	166.40	172.00	172.65	---	---
30	167.66		152.75	154.20	---	---	153.80	166.40	172.20	172.85	---	---
31	---		152.85	---	---	---	---	155.40	---	173.00	---	---
MAX	---		---	---	---	---	158.40	166.40	172.20	173.00	---	---
WTR YR 1987	MEAN	161.17		HIGH	146.80	APR 19	LOW	173.00	JUL 31	AND OTHERS		

GROUND-WATER RECORDS

279

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, 79.35 ft below land-surface datum, Sept. 3, 1987; minimum daily low, 60.13 ft below land-surface datum, Feb. 14, 1967.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75.57	75.90	74.89	74.89	76.82	76.62	77.34	77.43	78.18	78.41	78.41	79.05
2	75.82	75.74	74.85	75.59	77.15	77.02	77.58	77.53	78.32	78.19	78.47	79.29
3	75.76	75.18	74.47	75.46	77.63	77.57	77.99	77.64	78.49	77.22	78.56	79.35
4	74.84	75.17	76.01	74.35	77.69	77.68	77.81	77.67	78.57	76.71	78.60	79.32
5	74.87	75.54	76.20	74.91	77.66	77.57	76.35	77.69	78.54	75.38	78.73	79.25
6	74.75	75.84	76.07	75.43	77.39	77.60	77.08	77.58	78.46	77.06	78.76	78.96
7	75.91	76.01	75.99	76.33	77.11	77.54	77.33	77.84	76.99	77.01	78.77	78.47
8	76.12	75.73	75.26	75.98	77.40	77.36	77.24	77.95	77.79	76.98	78.65	79.12
9	76.21	75.05	74.31	76.11	77.26	77.60	76.84	78.02	78.25	77.27	78.49	79.26
10	76.06	75.57	75.87	75.98	77.32	77.70	76.67	78.06	78.42	77.54	78.69	79.33
11	75.95	76.23	75.87	75.14	77.23	77.86	76.70	77.99	78.22	77.53	78.34	79.16
12	75.39	76.36	76.26	75.95	77.40	77.94	76.53	78.20	78.23	76.95	78.54	79.03
13	75.38	76.27	76.49	75.99	77.33	77.78	76.54	78.20	77.88	77.37	78.59	78.79
14	75.79	76.27	76.01	75.84	76.90	77.34	77.12	78.10	78.09	77.85	78.73	78.77
15	76.00	75.94	76.07	76.62	76.68	77.18	77.22	78.32	78.14	77.89	78.65	78.98
16	76.04	74.46	76.49	76.72	76.84	77.94	77.28	78.32	78.13	77.94	78.61	78.84
17	76.30	75.56	76.15	76.36	77.10	77.69	77.43	78.22	78.50	77.39	78.90	78.76
18	76.39	75.87	76.20	76.26	77.37	77.72	77.41	78.22	78.52	77.40	78.90	79.04
19	76.46	76.23	76.57	76.72	77.52	77.87	77.32	78.19	78.56	77.24	78.96	78.81
20	76.54	75.96	76.46	76.82	77.47	77.73	77.49	78.23	78.52	77.27	79.07	79.02
21	76.49	76.38	76.77	76.89	77.25	77.47	77.65	78.32	78.33	77.42	79.07	78.99
22	76.79	76.35	77.05	76.62	77.21	77.68	77.43	78.29	78.34	77.42	79.06	79.19
23	76.89	75.45	76.67	77.08	77.51	77.25	77.68	77.34	78.53	77.50	79.02	79.13
24	76.60	75.02	76.54	77.17	77.51	77.24	77.68	77.00	78.55	77.49	79.07	79.22
25	75.96	74.96	76.66	77.06	77.56	77.37	77.45	77.15	78.46	77.58	79.07	79.29
26	73.10	75.90	74.48	76.99	77.55	77.48	77.04	77.64	78.58	77.65	78.86	79.34
27	75.75	76.10	76.37	76.88	77.45	77.48	77.05	77.85	78.64	77.57	78.98	79.13
28	76.05	75.08	75.56	77.24	77.08	77.25	77.27	78.08	78.57	77.66	78.98	78.99
29	76.14	73.94	75.90	77.07	---	77.01	77.08	78.23	78.49	78.08	78.32	78.99
30	75.66	74.10	76.16	77.12	---	77.31	77.46	78.32	78.61	78.19	78.30	79.27
31	75.73	---	76.24	77.15	---	77.51	---	78.37	---	78.31	79.11	---
MAX	76.89	76.38	77.05	77.24	77.69	77.94	77.99	78.37	78.64	78.41	79.11	79.35
WTR YR 1987 MEAN	77.27		HIGH		73.10	OCT 26	LOW		79.35	SEP 3		

GROUND-WATER RECORDS

MIAMI COUNTY

395848084085500. Local number, MJ-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. 14, 1986	8.60	Apr. 9, 1987	10.66
Feb. 23, 1987	11.01	July 14, 1987	10.40

GROUND-WATER RECORDS

281

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 1986 TO SEPTEMBER 1987

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)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
NOV 13...	1530	735	7.57	6.0	12.0	<10	350	66	85	34
MAR 10...	1015	765	7.81	3.0	13.0	16	360	69	92	32
SEP 01...	1545	758	7.71	22.0	16.5	<10	330	13	79	32

DATE	ALKA- LITY WH WAT TOTAL 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)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	ARSENIC DIS- SOLVED (UG/L AS AS)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)
NOV 13...	287	62	26	0.90	442	<0.010	<0.100	1	20	20
MAR 10...	293	56	56	0.40	467	0.020	2.80	--	--	--
SEP 01...	316	63	24	0.90	426	<0.010	<0.100	1	20	<10

DATE	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...	6	2	1000	<5	<5	46	20	11	1.0
MAR 10...	--	--	6	--	--	190	--	--	0.8
SEP 01...	3	1	1200	<5	<5	51	140	20	0.4

GROUND-WATER RECORDS

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 1986 TO SEPTEMBER 1987

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE	PH (STAND- ARD UNITS)	TEMPER- ATURE AIR	TEMPER- ATURE WATER	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL)	HARD- NESS TOTAL	HARD- NESS NONCARB TOT FLD	CALCIUM DIS- SOLVED	MAGNE- SIUM, DIS- SOLVED
		(US/CM)		(DEG C)	(DEG C)	(MG/L)	(MG/L AS CACO3)	MG/L AS CACO3	(MG/L AS CA)	(MG/L AS MG)
NOV 14...	0900	840	7.41	6.0	14.5	<10	350	67	91	31
MAR 10...	1145	880	7.66	3.0	16.0	28	350	57	84	33
SEP 01...	1400	871	7.64	22.0	16.5	<10	350	63	90	31
DATE	ALKA- LINIT WH WAT TOTAL FIELD	SULFATE DIS- SOLVED	CHLO- RIDE, DIS- SOLVED	FLUO- RIDE, DIS- SOLVED	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED	NITRO- GEN, NITRITE TOTAL	NITRO- GEN, NO2+NO3 TOTAL	ARSENIC DIS- SOLVED	CHRO- MIUM, TOTAL RECOV- ERABLE	CHRO- MIUM, DIS- SOLVED
	MG/L AS CACO3	(MG/L AS SO4)	(MG/L AS CL)	(MG/L AS F)	(MG/L)	(MG/L AS N)	(MG/L AS N)	(UG/L AS AS)	(UG/L AS CR)	(UG/L AS CR)
NOV 14...	288	55	60	0.40	489	<0.010	1.30	<1	20	20
MAR 10...	289	62	24	0.90	418	<0.010	<0.100	--	--	--
SEP 01...	289	57	45	0.30	488	0.010	1.80	1	10	<10
DATE	COPPER, TOTAL RECOV- ERABLE	COPPER, DIS- SOLVED	IRON, DIS- SOLVED	LEAD, TOTAL RECOV- ERABLE	LEAD, DIS- SOLVED	MANGA- NESE, DIS- SOLVED	ZINC, TOTAL RECOV- ERABLE	ZINC, DIS- SOLVED	CARBON, ORGANIC TOTAL	
	(UG/L AS CU)	(UG/L AS CU)	(UG/L AS FE)	(UG/L AS PB)	(UG/L AS PB)	(UG/L AS MN)	(UG/L AS ZN)	(UG/L AS ZN)	(MG/L AS C)	
NOV 14...	12	7	27	8	5	180	10	16	1.2	
MAR 10...	--	--	320	--	--	46	--	--	1.1	
SEP 01...	17	4	9	57	<5	180	720	18	1.0	

GROUND-WATER RECORDS

283

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, 26.16 ft below land-surface datum, Mar. 22, 23, 1982.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32.63	30.15	28.51	28.33	29.02	29.23	29.42	28.16	28.74	29.14	28.89	30.79
2	32.54	30.10	28.50	28.39	29.01	29.26	29.17	28.22	28.80	28.87	28.95	30.83
3	32.20	30.07	28.39	28.45	29.09	29.14	29.11	28.27	28.74	28.33	29.05	30.91
4	31.82	30.10	28.11	28.50	29.35	29.01	28.94	28.32	28.50	27.50	29.04	30.89
5	31.31	30.11	27.77	28.63	29.10	28.95	28.92	28.38	28.20	27.22	29.10	30.28
6	30.46	30.11	27.59	28.67	29.07	29.03	28.75	28.41	27.97	26.78	29.13	30.70
7	29.74	30.09	27.61	28.83	29.07	29.04	28.70	28.38	27.89	26.77	29.22	30.77
8	29.38	29.91	27.74	28.93	28.95	28.88	28.65	28.38	27.92	26.90	29.26	30.93
9	29.21	29.74	27.86	28.98	29.01	28.98	28.70	28.40	28.03	27.03	29.27	31.12
10	29.28	29.71	27.88	28.96	29.05	29.13	28.73	28.42	28.11	27.17	29.38	31.22
11	29.28	29.94	27.81	28.99	29.06	29.23	28.71	28.49	28.11	27.24	29.46	31.29
12	29.24	30.03	27.75	29.13	29.14	29.27	28.57	28.53	28.14	27.35	29.54	31.33
13	29.37	30.11	27.79	29.19	29.15	29.26	28.57	28.51	28.17	27.40	29.59	31.36
14	29.44	30.12	27.83	29.20	29.14	29.24	28.49	28.57	28.20	27.41	29.73	31.38
15	29.52	30.11	27.90	29.13	29.04	29.17	28.48	28.58	28.29	27.33	29.69	31.40
16	29.58	30.06	28.03	29.18	29.08	29.31	28.40	28.59	28.17	27.33	29.83	31.36
17	29.64	30.14	28.08	29.16	29.08	29.42	28.09	28.68	28.08	27.41	29.90	31.32
18	29.65	30.21	28.16	28.97	29.11	29.42	27.83	28.72	28.12	27.52	29.98	31.20
19	29.63	30.26	28.16	29.06	29.13	29.48	27.63	28.77	28.14	27.65	30.09	31.14
20	29.76	30.28	28.14	29.09	29.21	29.49	27.70	28.83	27.79	27.82	30.26	31.14
21	29.89	30.31	28.20	29.08	29.21	29.42	27.84	28.71	28.32	27.86	30.27	31.14
22	29.96	30.29	28.28	29.00	29.12	29.45	27.95	28.68	28.45	27.98	30.41	31.17
23	30.03	30.11	28.31	29.03	29.26	29.43	27.96	28.60	28.46	28.09	30.39	31.20
24	30.07	30.02	28.31	29.03	29.32	29.39	27.99	28.55	28.62	28.28	30.34	31.19
25	30.08	30.02	28.25	29.02	29.37	29.56	28.00	28.48	28.69	28.38	30.49	30.93
26	29.99	30.01	28.25	29.13	29.38	29.56	27.94	28.57	28.74	28.49	30.58	30.91
27	30.01	29.73	28.24	29.14	29.50	29.55	27.98	28.49	28.85	28.64	30.62	30.96
28	30.03	29.20	28.29	29.18	29.55	29.52	28.07	28.59	29.01	28.65	30.65	31.06
29	30.06	28.73	28.32	29.18	---	29.50	28.07	28.65	29.22	28.80	30.60	30.97
30	30.12	28.50	28.32	29.17	---	29.54	28.20	28.70	29.26	28.81	30.64	31.00
31	30.14	---	28.33	29.17	---	29.45	---	28.81	---	28.86	30.72	---
MAX	32.63	30.31	28.51	29.20	29.55	29.56	29.42	28.83	29.26	29.14	30.72	31.40
WTR YR 1987 MEAN	29.13				26.77	JUL 7	LOW	32.63	OCT 1			

GROUND-WATER RECORDS

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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.68	20.56	19.78	19.48	19.97	20.22	20.44	19.72	20.16	20.30	20.26	21.37
2	21.20	20.38	19.58	19.56	19.97	20.45	20.39	19.48	20.18	19.95	20.01	21.38
3	20.85	20.56	19.18	19.58	20.02	20.49	20.29	19.44	19.88	19.40	20.26	21.47
4	20.62	20.55	18.97	19.59	20.01	20.51	20.05	19.73	19.63	19.00	20.34	21.50
5	20.06	20.54	19.06	19.62	19.98	20.52	19.97	19.77	19.52	18.76	20.39	21.24
6	19.19	20.61	18.85	19.58	19.96	20.52	20.21	19.79	19.30	18.95	20.43	21.17
7	19.27	20.62	18.86	19.67	19.93	20.28	20.16	19.85	19.29	19.13	20.47	21.16
8	19.31	20.40	19.11	19.69	20.00	20.17	20.16	19.91	19.63	19.24	20.49	21.47
9	19.45	20.40	19.18	19.69	20.03	20.51	20.18	19.70	19.71	19.35	20.26	21.57
10	19.61	20.64	18.97	19.69	20.01	20.30	20.20	19.64	19.77	19.41	20.58	21.57
11	19.65	20.68	18.74	19.74	20.00	20.25	19.94	19.89	19.80	19.44	20.63	21.65
12	19.58	20.73	19.08	19.78	20.07	20.56	19.90	19.99	19.87	19.11	20.67	21.66
13	19.80	20.53	18.99	19.80	20.05	20.59	20.08	20.04	19.89	19.22	20.74	21.43
14	19.94	20.47	18.99	19.81	20.08	20.32	20.08	20.05	19.64	19.34	20.77	21.66
15	20.01	20.44	19.28	19.88	20.09	20.29	19.97	20.12	19.85	19.25	20.78	21.70
16	20.04	20.44	19.35	19.87	20.09	20.61	19.75	19.91	19.78	19.37	20.55	21.69
17	20.15	20.78	19.38	19.83	20.11	20.65	19.54	19.80	19.84	19.42	20.83	21.64
18	20.20	20.73	19.49	19.79	20.19	20.68	19.31	20.10	19.85	19.36	20.93	21.74
19	20.02	20.83	19.54	19.85	20.21	20.66	19.23	20.18	19.95	19.19	20.72	21.76
20	20.23	20.82	19.36	19.84	20.21	20.66	19.47	20.16	19.94	19.33	20.77	21.49
21	20.30	20.86	19.36	19.82	20.19	20.44	19.51	20.11	19.73	19.57	21.03	21.69
22	20.38	20.61	19.52	19.77	20.19	20.39	19.53	20.10	20.01	19.65	21.07	21.76
23	20.42	20.49	19.39	19.87	20.28	20.63	19.55	19.89	20.06	19.72	20.85	21.77
24	20.43	20.79	19.34	19.89	20.29	20.73	19.59	19.79	20.08	19.72	21.11	21.78
25	20.38	20.81	19.41	19.90	20.31	20.77	19.35	19.77	20.10	19.84	21.20	21.83
26	20.22	20.55	19.42	19.96	20.32	20.81	19.28	20.06	20.19	19.64	21.19	21.86
27	20.40	19.98	19.41	19.96	20.29	20.79	19.50	20.11	20.21	19.95	21.27	21.57
28	20.45	19.69	19.42	20.00	20.28	20.58	19.62	20.14	20.01	20.04	21.33	21.83
29	20.49	19.55	19.42	20.00	---	20.51	19.59	20.14	20.29	20.09	21.33	21.89
30	20.51	19.56	19.49	20.01	---	20.65	19.69	19.95	20.35	20.14	21.08	21.94
31	20.54	---	19.51	20.02	---	20.38	---	19.88	---	20.23	21.31	---
MAX	21.68	20.86	19.78	20.02	20.32	20.81	20.44	20.18	20.35	20.30	21.33	21.94
WTR YR 1987 MEAN	20.15			HIGH	18.74	DEC 11	LOW	21.94	SEP 30			

GROUND-WATER RECORDS

285

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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41.19	36.20	33.05	31.54	30.71	30.22	30.88	32.00	36.30	41.49	44.23	46.43
2	40.59	36.05	33.02	31.54	30.60	30.07	30.57	32.44	36.44	41.52	44.39	46.43
3	39.32	35.90	32.69	31.55	30.74	30.09	30.46	32.71	36.44	41.14	44.61	46.45
4	38.94	35.79	32.23	31.50	30.71	30.11	30.33	32.92	36.22	40.33	44.78	46.61
5	38.22	35.69	32.25	31.45	30.64	30.08	30.22	33.06	35.86	39.86	44.95	46.68
6	37.08	35.63	32.25	31.96	30.55	30.45	30.22	33.20	36.46	40.22	45.08	46.70
7	36.51	35.58	32.23	31.51	30.45	30.60	30.16	33.36	36.36	40.66	45.20	46.74
8	36.86	35.58	32.22	31.50	30.54	30.67	30.24	33.52	36.36	41.05	45.32	46.91
9	36.66	35.58	32.33	31.36	30.55	30.84	30.28	33.54	36.55	41.48	45.46	46.92
10	37.37	35.56	32.32	31.25	30.66	30.68	30.32	33.15	36.64	41.74	45.62	46.93
11	37.10	35.27	31.98	31.28	30.46	30.57	30.41	33.56	36.75	41.92	45.67	47.09
12	36.51	35.18	33.30	31.25	30.52	30.47	30.47	33.68	37.01	42.07	45.82	47.11
13	36.91	35.11	33.49	31.26	30.52	30.47	30.48	32.82	37.14	42.21	45.99	47.27
14	37.72	35.03	32.58	31.98	30.42	30.42	30.58	32.47	37.25	42.30	46.12	47.43
15	37.48	34.83	32.35	33.23	30.45	30.36	30.58	33.06	37.91	42.30	46.20	47.43
16	37.35	34.68	32.27	31.86	30.39	30.42	30.47	33.28	37.79	41.93	46.25	47.35
17	37.95	34.62	32.92	31.43	30.34	30.42	30.17	33.69	37.73	40.88	46.37	47.13
18	37.53	34.77	32.49	31.21	30.41	30.39	30.23	34.10	37.75	40.25	46.39	46.96
19	36.64	34.77	32.26	31.25	30.42	30.52	30.30	34.57	37.89	39.86	46.41	46.88
20	37.02	34.63	32.15	31.25	30.41	30.52	30.42	35.12	37.95	40.06	46.41	46.71
21	37.89	34.67	32.12	31.14	30.33	30.52	30.52	34.87	38.08	41.31	46.41	46.57
22	37.75	34.57	32.07	31.01	30.30	30.52	30.60	34.92	38.25	42.03	46.42	46.51
23	38.32	34.42	32.72	31.07	30.38	30.53	30.60	34.96	38.43	42.47	46.42	46.51
24	38.04	34.38	32.14	31.05	30.95	30.56	30.60	34.97	38.55	42.76	46.41	46.48
25	38.10	34.30	31.94	30.99	30.58	30.66	30.59	35.11	38.90	42.99	46.39	46.43
26	38.17	34.14	31.89	30.87	30.46	30.65	30.55	35.40	39.53	43.20	46.39	46.43
27	37.37	33.69	31.80	30.86	30.37	30.68	30.54	35.60	39.78	43.41	46.41	46.43
28	36.95	32.90	31.70	30.82	30.32	30.70	30.55	35.76	39.94	43.58	46.43	46.45
29	36.65	32.96	32.33	31.31	---	30.70	30.60	35.94	40.25	43.74	46.43	46.46
30	36.48	33.04	31.76	30.85	---	31.42	31.74	36.05	41.01	43.91	46.43	46.47
31	36.33	---	31.68	30.85	---	31.34	---	36.14	---	44.07	46.43	---
MAX	41.19	36.20	33.49	33.23	30.95	31.42	31.74	36.14	41.01	44.07	46.43	47.43
WTR YR 1987 MEAN	36.20		HIGH		30.07	MAR 2	LOW		47.43	SEP 14	AND OTHERS	

GROUND-WATER RECORDS

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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36.34	30.20	27.44	26.55	27.10	28.28	28.87	28.13	32.05	34.07	34.33	35.45
2	35.86	30.00	27.31	26.52	27.10	28.31	28.63	27.92	32.19	34.17	34.14	35.48
3	35.91	29.79	27.24	26.52	27.43	28.30	28.58	27.69	32.41	33.87	34.21	35.51
4	35.54	29.72	27.07	26.37	27.52	28.06	28.25	27.68	32.30	33.62	34.42	35.72
5	35.09	29.55	26.89	26.53	27.57	28.10	28.03	27.93	32.10	32.88	34.77	35.57
6	34.14	29.62	26.77	26.59	27.64	28.19	28.00	28.18	32.00	32.65	34.80	35.39
7	33.15	30.01	26.62	26.72	27.70	28.29	28.12	28.29	31.73	32.77	34.98	35.24
8	32.40	29.70	26.65	26.76	27.86	28.34	28.29	28.47	31.61	32.91	34.80	35.48
9	32.12	29.61	26.84	26.71	27.89	28.47	28.49	28.54	32.00	33.19	34.49	35.68
10	31.89	29.42	26.79	26.61	27.89	28.46	28.56	28.43	31.74	33.20	34.69	35.84
11	31.64	29.47	26.64	26.45	27.64	27.95	28.31	29.56	32.10	32.97	34.82	36.02
12	31.45	29.40	26.65	26.39	27.80	28.22	28.49	29.71	32.38	32.60	35.14	36.03
13	31.37	29.40	26.66	26.61	27.84	28.28	28.66	29.92	32.44	32.92	35.22	35.79
14	31.24	29.27	26.53	26.77	27.50	28.16	28.50	30.40	32.25	33.07	35.42	36.05
15	31.14	28.88	26.58	26.81	27.51	28.31	28.52	30.71	32.39	33.08	35.31	36.26
16	31.03	28.57	26.68	26.86	27.74	28.41	28.16	30.46	32.56	33.26	35.05	36.24
17	30.92	28.63	26.67	26.83	27.83	28.73	28.67	30.31	32.76	33.17	35.19	36.52
18	30.86	28.80	26.74	26.69	27.95	28.05	27.98	30.37	32.95	33.09	35.36	36.15
19	30.63	28.87	26.77	26.93	28.03	28.21	27.87	30.88	33.06	32.78	35.54	36.17
20	30.39	28.88	26.74	27.20	27.84	28.25	28.61	31.08	32.88	33.04	35.65	35.84
21	30.49	28.95	26.77	27.47	27.78	28.13	29.20	31.24	32.68	33.39	35.81	35.85
22	30.67	28.85	26.83	27.48	27.78	28.03	29.01	31.51	32.98	33.57	35.55	35.27
23	30.80	28.65	26.84	27.12	28.13	28.23	28.58	31.40	33.35	33.77	35.30	35.35
24	30.82	28.65	26.79	26.89	28.20	28.55	28.46	31.23	33.51	34.08	35.33	35.60
25	30.55	28.63	26.72	27.06	28.26	28.85	28.17	30.71	33.50	33.92	35.47	35.75
26	30.34	28.76	26.77	27.07	28.17	28.88	28.04	31.13	33.90	33.70	35.41	35.04
27	30.20	28.56	26.75	26.94	28.22	28.78	28.07	31.52	33.55	33.81	35.68	34.83
28	30.27	28.13	26.79	27.02	28.04	28.81	27.95	31.89	33.23	34.05	35.42	35.52
29	30.40	27.94	26.80	26.85	---	28.83	28.43	32.09	33.56	34.29	35.59	35.34
30	30.32	27.64	26.80	27.06	---	28.97	28.13	32.17	33.95	34.41	35.21	35.59
31	30.30	---	26.73	27.11	---	29.08	---	31.95	---	34.51	35.43	---
MAX	36.34	30.20	27.44	27.48	28.26	29.08	29.20	32.17	33.95	34.51	35.81	36.52
WTR YR 1987 MEAN	30.52				26.37	JAN 4		LOW	36.52	SEP 17		

GROUND-WATER RECORDS

287

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, 8.50 ft below land-surface datum, May 25, 1967.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.30	---	28.00	26.00	27.88	28.04	27.07	22.54	22.53	22.63	23.81	24.08
2	26.54	---	28.35	26.02	27.41	28.11	27.03	22.69	22.82	22.48	23.84	24.54
3	26.43	---	28.51	25.91	28.00	28.05	26.98	22.33	22.82	22.26	23.82	24.67
4	26.49	---	28.51	25.86	28.05	27.98	---	22.09	22.63	21.65	23.97	24.20
5	26.24	27.01	28.43	26.19	28.06	27.94	---	22.41	22.56	21.39	24.24	23.90
6	25.86	27.30	27.89	26.18	28.11	27.86	---	22.28	22.42	20.99	24.03	23.67
7	25.76	27.50	27.02	26.52	28.21	27.62	---	22.41	22.46	20.85	24.06	23.75
8	25.91	27.50	26.97	26.44	28.24	27.51	---	22.45	22.47	21.63	23.78	24.34
9	25.85	27.61	25.53	26.60	28.15	27.26	---	22.04	22.51	21.95	23.70	24.48
10	25.75	27.62	25.41	26.57	28.18	27.53	---	21.83	22.97	22.31	23.60	24.42
11	25.59	27.64	25.37	26.38	28.35	27.56	---	21.95	23.00	22.33	24.23	24.16
12	25.53	27.66	25.31	26.56	28.35	27.68	---	22.36	23.02	22.36	24.53	24.26
13	25.38	27.64	25.09	26.67	28.23	27.68	---	22.52	22.83	22.46	24.85	23.86
14	25.39	27.77	24.85	27.01	28.03	27.46	---	22.66	22.49	22.30	24.88	23.60
15	25.71	27.79	24.75	27.02	27.87	27.34	---	22.73	22.32	22.69	24.82	23.80
16	25.87	27.53	25.06	27.25	28.24	27.31	---	22.50	22.41	22.71	24.76	24.16
17	25.76	27.49	25.37	27.23	28.37	27.48	21.09	22.30	22.57	22.54	25.15	24.20
18	25.90	27.52	25.45	26.97	28.56	27.49	21.54	22.20	22.85	22.64	25.31	24.18
19	25.83	27.68	25.58	27.00	28.53	27.53	21.45	22.51	23.07	22.74	25.57	24.39
20	25.84	27.68	25.31	27.14	28.32	27.47	21.92	22.54	23.25	22.66	25.43	24.40
21	26.03	27.62	25.09	27.13	28.28	27.28	22.06	22.52	23.28	23.08	25.35	25.12
22	26.18	27.66	25.43	27.07	28.09	27.15	22.39	22.54	22.87	23.09	25.43	25.12
23	26.44	27.39	25.75	27.25	28.27	26.97	22.80	22.51	22.75	23.49	25.50	24.96
24	26.80	27.49	25.86	27.18	28.27	27.16	22.80	22.16	22.62	23.83	24.78	24.91
25	26.80	27.63	25.86	27.07	28.30	27.25	22.41	22.22	22.70	23.84	24.81	24.88
26	26.39	27.98	25.53	27.11	28.36	27.31	22.38	21.94	22.61	23.63	25.10	25.17
27	26.55	28.06	25.87	27.24	28.30	27.19	22.07	22.32	22.68	23.45	24.95	25.24
28	26.68	28.05	25.82	27.77	28.07	27.09	22.35	22.33	22.46	23.59	24.62	24.71
29	26.73	27.99	25.71	27.64	---	27.04	22.27	22.51	22.34	23.72	24.34	24.96
30	26.92	27.70	26.03	27.88	---	26.97	22.59	22.71	22.45	23.78	23.82	24.96
31	26.97	---	26.10	27.88	---	27.12	---	22.54	---	23.86	24.06	---
MAX	26.97	---	28.51	27.88	28.56	28.11	---	22.73	23.28	23.86	25.57	25.24
WTR YR 1987 MEAN	25.21				20.85	JUL 7	LOW	28.56	FEB 18			

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, 38.32 ft below land-surface datum, Dec. 25, 1979.

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47.94	49.19	48.98	48.90	50.10	50.33	50.32	49.90	49.40	49.45	49.85	49.56
2	48.03	49.18	49.07	48.63	50.15	50.40	50.36	49.81	49.48	49.37	49.65	49.66
3	48.03	49.07	49.21	48.79	50.43	50.52	50.37	49.82	49.49	49.36	49.53	49.78
4	48.01	49.27	49.30	49.04	50.55	50.55	50.36	49.84	49.53	48.88	49.65	49.83
5	47.74	49.30	49.38	49.30	50.55	50.55	50.03	49.84	49.53	48.75	49.71	49.84
6	47.80	49.37	49.38	49.30	50.55	50.54	49.85	49.83	49.52	48.90	49.76	49.60
7	47.89	49.40	49.01	49.53	50.50	50.53	50.05	49.74	49.15	49.08	49.75	49.37
8	48.01	49.40	48.90	49.58	50.26	50.46	50.20	49.72	49.22	49.18	49.74	49.52
9	48.12	49.31	49.20	49.58	50.41	50.31	50.25	49.73	49.35	49.20	49.55	49.75
10	48.12	49.18	49.39	49.57	50.50	50.49	50.25	49.59	49.35	49.13	49.57	49.82
11	48.13	49.31	49.39	49.40	50.50	50.01	50.25	49.51	49.30	49.12	49.62	49.83
12	48.03	49.46	49.38	49.53	50.60	50.53	50.20	49.73	49.27	49.10	49.68	49.83
13	48.03	49.61	49.39	49.71	50.63	50.53	50.12	49.76	49.24	49.17	49.75	49.74
14	48.31	49.62	49.15	49.75	50.63	50.47	50.10	49.75	49.18	49.29	49.75	49.84
15	48.39	49.50	49.03	49.88	50.50	50.37	50.09	49.73	49.12	49.29	49.74	50.07
16	48.43	49.30	49.21	49.88	50.40	50.30	50.10	49.73	49.22	49.27	49.10	50.10
17	48.49	49.08	49.21	49.87	50.45	50.48	50.10	49.59	49.30	49.25	49.35	50.10
18	48.49	49.27	49.21	49.65	50.55	50.50	50.07	49.47	49.31	49.24	49.53	50.20
19	48.39	49.46	49.23	49.43	50.60	50.51	50.02	---	49.30	49.11	49.63	50.20
20	48.31	49.46	49.23	49.62	50.61	50.51	49.76	49.61	49.29	49.21	49.66	50.02
21	48.46	49.49	49.05	49.68	50.60	50.45	50.00	49.69	49.15	49.30	49.66	50.07
22	48.60	49.51	48.98	49.71	50.22	50.39	50.01	49.65	49.07	49.32	49.64	50.16
23	48.60	49.51	49.03	49.94	50.18	50.25	50.05	49.61	49.24	49.32	49.10	50.18
24	48.74	49.27	49.03	49.94	50.35	50.23	50.08	49.23	49.31	49.40	49.25	50.18
25	48.76	49.35	48.74	49.93	50.45	50.31	50.08	48.93	49.33	49.44	49.39	50.20
26	48.73	49.37	48.70	49.81	50.53	50.38	50.03	49.22	49.30	49.40	49.47	50.20
27	48.84	49.38	48.66	49.92	50.54	50.35	50.08	49.50	49.26	49.39	49.61	50.10
28	49.03	49.41	48.75	50.15	50.54	50.35	49.89	49.54	49.10	49.55	49.64	50.20
29	49.09	49.02	48.90	50.17	---	50.35	49.89	49.55	49.27	49.65	49.64	50.25
30	49.15	48.90	49.07	50.20	---	50.21	49.92	49.54	49.41	49.75	49.17	50.25
31	49.18	---	48.90	50.24	---	50.29						

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.

REMARKS: Station operated by Ohio Department of
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.

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72.95	76.50	73.95	72.55	74.05	70.10	68.60	71.50	72.60	73.55	74.25	73.65
2	73.15	76.50	74.10	72.95	74.35	70.10	68.65	71.65	72.15	73.15	74.25	73.60
3	72.85	77.25	74.20	72.85	74.05	70.20	68.55	71.60	71.85	73.05	---	74.00
4	72.85	77.30	73.95	74.70	73.95	70.25	68.45	72.40	71.75	73.35	---	73.95
5	72.75	76.80	74.55	75.00	73.95	70.10	69.15	72.20	72.00	72.45	---	74.00
6	72.75	---	73.95	74.45	73.95	70.10	68.45	71.35	71.95	72.30	---	73.75
7	72.80	---	73.90	75.00	73.35	70.00	68.35	71.50	72.00	72.20	---	74.35
8	72.90	---	74.10	74.75	73.05	70.05	68.20	71.55	72.15	72.85	---	74.45
9	72.80	---	73.85	72.15	74.35	70.15	68.30	68.30	72.50	72.65	---	74.60
10	73.00	77.65	74.25	72.00	73.00	70.55	68.30	69.25	72.50	72.50	---	74.30
11	73.35	77.75	74.05	73.25	70.50	70.20	68.30	72.25	72.60	72.75	---	74.35
12	72.85	78.05	74.75	73.50	74.75	70.05	68.40	72.35	72.30	72.75	---	74.10
13	73.50	---	73.50	73.75	70.30	70.00	68.90	71.75	72.55	73.75	---	74.00
14	73.20	---	73.35	73.45	70.10	69.75	68.25	71.95	72.70	73.65	74.30	74.30
15	73.30	75.05	73.80	74.50	70.05	69.85	68.30	71.50	72.40	73.50	---	74.55
16	73.70	74.40	73.30	74.25	69.90	69.95	68.25	71.60	72.75	---	---	74.10
17	73.75	---	73.30	74.50	69.80	71.80	68.35	71.65	72.65	73.30	---	74.35
18	74.00	73.45	73.35	73.85	69.90	70.00	68.50	71.55	72.55	73.40	---	74.70
19	73.50	73.30	73.30	74.55	69.95	69.95	68.35	71.45	72.80	73.50	---	74.45
20	73.70	---	73.25	74.50	69.90	68.95	68.45	71.70	72.75	73.50	---	74.35
21	76.45	73.80	73.00	74.20	70.05	68.70	68.45	71.75	72.20	73.55	---	74.65
22	76.30	74.60	73.15	74.10	69.75	68.65	69.30	71.70	72.60	73.65	---	74.35
23	73.20	---	73.10	74.20	69.90	68.75	68.40	71.80	72.75	73.95	---	74.50
24	74.75	74.85	73.05	74.50	70.05	69.50	68.40	71.70	72.95	73.95	---	74.30
25	74.85	---	73.05	74.30	69.90	69.60	68.50	71.80	72.90	74.25	---	74.25
26	75.15	---	73.00	74.65	70.25	68.70	68.40	72.15	72.85	74.55	---	74.60
27	75.20	74.15	73.10	74.20	70.30	68.50	71.85	72.10	73.10	75.20	---	74.65
28	75.45	---	72.95	74.20	70.00	69.35	71.65	71.40	73.20	---	---	74.75
29	75.80	73.85	72.85	73.95	---	68.70	71.55	71.50	73.30	---	---	74.50
30	76.60	---	72.90	74.70	---	68.50	71.60	71.40	73.30	74.30	---	74.50
31	76.55	---	73.85	74.45	---	68.65	---	71.40	---	74.25	74.30	---
MAX	76.60	---	74.75	75.00	74.75	71.80	71.85	72.40	73.30	---	---	74.75
WTR YR 1987	MEAN	72.55		HIGH	68.20	APR 8	LOW	78.05	NOV 12			

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

REMARKS.--Station operated by Ohio Department
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.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.60	25.55	27.75	---	26.65	27.20	26.50	30.35	29.90	30.20	30.90	31.25
2	29.65	30.10	26.20	---	28.15	27.05	26.30	30.20	29.35	28.35	31.00	31.50
3	28.95	30.20	24.60	---	29.40	26.95	25.95	25.95	28.75	27.65	30.85	31.25
4	28.85	30.15	23.50	---	27.50	28.80	25.85	29.55	28.35	24.40	31.00	32.55
5	27.90	30.35	23.80	29.00	29.05	29.25	26.35	26.05	29.25	23.70	30.95	32.55
6	25.85	28.25	---	29.00	26.65	29.35	26.60	30.40	28.35	23.70	30.60	32.30
7	26.00	29.60	---	29.00	26.75	30.30	24.25	30.75	28.00	24.15	31.30	32.30
8	26.95	29.65	---	29.20	---	30.10	23.70	28.30	29.15	25.05	31.35	32.70
9	27.15	29.65	---	29.10	27.40	29.00	27.35	26.20	29.95	25.45	31.40	32.75
10	27.95	29.65	---	29.10	29.50	30.65	24.00	29.85	29.00	25.85	31.45	32.50
11	27.95	29.80	---	27.85	27.40	30.30	24.30	31.00	29.20	26.00	31.45	32.75
12	28.65	29.60	---	29.35	26.80	28.55	24.50	30.90	29.85	26.10	31.70	29.50
13	28.65	29.80	---	29.45	26.90	28.25	25.80	30.45	29.00	26.90	31.80	28.20
14	28.65	29.90	---	29.60	26.90	28.70	28.40	28.75	29.65	27.05	31.85	32.55
15	28.70	30.05	---	29.70	30.30	29.75	28.55	29.90	28.90	25.60	31.55	32.35
16	29.20	30.05	---	30.25	27.80	29.60	24.80	29.80	28.95	26.55	32.00	31.40
17	28.90	29.90	---	29.70	30.50	29.85	24.75	26.30	30.20	27.95	32.05	30.65
18	29.15	29.90	---	27.20	27.30	28.30	25.45	30.55	30.35	26.60	32.20	32.70
19	29.30	30.05	---	30.10	30.80	28.25	28.25	30.10	30.30	28.80	32.25	32.40
20	29.75	29.65	---	29.60	28.00	27.35	28.40	26.40	30.50	27.75	32.20	32.35
21	29.35	30.45	---	30.20	27.25	30.20	27.35	29.05	30.40	29.10	32.25	31.35
22	29.45	29.10	---	27.80	28.20	30.85	29.25	30.50	29.60	27.20	32.30	30.90
23	29.40	29.55	---	29.85	27.00	30.85	29.90	29.25	29.35	29.80	31.25	30.85
24	29.80	30.25	---	28.85	27.20	30.20	28.80	29.25	29.40	30.05	32.30	28.50
25	29.65	29.70	---	30.25	29.45	27.50	25.45	30.00	29.80	30.05	31.55	31.20
26	29.55	29.85	---	30.00	30.75	27.40	27.00	30.25	30.05	29.25	31.60	29.30
27	29.70	25.90	---	29.15	30.80	27.45	29.25	30.20	29.70	30.35	32.45	32.30
28	30.05	27.25	---	30.40	29.00	27.40	29.65	30.00	30.15	30.45	32.40	32.45
29	30.15	27.30	---	27.90	---	30.30	30.10	28.95	28.40	30.55	31.95	32.50
30	29.50	23.00	---	27.65	---	---	29.50	29.45	29.90	30.70	31.55	32.35
31	29.95	---	---	26.60	---	31.00	---	29.00	---	30.80	31.75	---
MAX	30.60	30.45	---	---	---	---	30.10	31.00	30.50	30.80	32.45	32.75</

GROUND-WATER RECORDS

291

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 12.35 ft below land-surface datum, Sept. 26, 27, 1986; minimum recorded daily low, 0.08 ft above land-surface datum, Mar. 29, 1984 and Nov. 29, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.02	10.72	9.05	8.95	10.40	11.20	11.92	9.49	8.85	8.34	9.60	11.37
2	11.92	10.76	8.93	8.96	10.45	11.22	11.92	9.63	9.28	8.38	9.72	11.35
3	11.78	10.73	7.45	8.94	10.45	11.25	11.90	9.70	8.50	8.38	10.05	11.39
4	11.69	10.78	6.87	8.97	10.62	11.26	11.82	9.83	8.43	8.19	10.04	11.48
5	11.70	10.78	6.73	8.99	10.72	11.28	11.68	9.87	7.90	8.39	10.03	11.49
6	11.77	10.80	6.73	8.98	10.74	11.28	11.57	9.81	7.57	7.85	10.00	11.50
7	11.80	10.70	6.80	8.94	10.77	11.14	11.35	9.64	7.17	7.65	10.01	11.54
8	11.87	10.65	7.08	9.01	10.87	11.20	10.35	9.36	7.00	7.55	10.13	11.63
9	11.70	10.72	7.23	9.05	11.00	11.30	9.78	9.30	7.03	7.79	10.23	11.68
10	11.10	10.77	7.54	8.64	11.05	11.37	9.66	9.38	7.15	7.95	10.25	11.75
11	10.79	10.74	7.55	9.46	11.05	11.40	9.64	9.32	7.16	8.13	10.28	11.77
12	10.75	10.75	7.53	9.55	11.12	11.46	9.75	9.32	7.29	8.33	10.29	11.80
13	10.78	10.69	7.35	9.42	11.10	11.47	9.80	9.30	7.32	8.45	10.37	11.83
14	10.83	10.67	7.42	9.42	11.21	11.52	9.80	9.30	7.43	8.37	10.45	11.91
15	10.87	10.48	7.45	9.34	11.27	11.62	9.81	9.18	7.45	8.19	10.54	11.91
16	10.82	10.30	7.51	9.37	11.30	11.67	9.74	8.99	7.68	8.11	10.66	11.91
17	10.68	10.31	7.52	9.65	11.43	11.70	9.64	8.70	7.77	8.05	10.75	11.91
18	10.76	10.17	7.50	9.65	11.56	11.70	9.31	8.44	7.80	8.07	10.82	11.91
19	10.81	10.08	7.60	9.68	11.56	11.74	9.15	8.40	7.86	8.25	10.87	11.87
20	10.91	10.16	7.75	9.70	11.43	11.78	8.82	8.18	7.95	8.40	10.96	11.85
21	10.97	10.21	7.75	9.68	11.27	11.85	8.83	8.20	7.97	8.55	11.02	11.70
22	11.02	10.25	7.96	9.69	11.15	11.90	8.98	8.13	8.07	8.63	11.01	11.75
23	11.06	10.30	8.07	9.84	11.05	11.92	9.18	7.91	8.06	8.78	11.05	11.58
24	11.03	10.33	8.10	9.95	11.05	12.00	9.19	7.62	8.05	8.92	11.13	11.23
25	11.04	10.33	8.18	10.10	11.05	12.00	9.26	7.28	8.13	8.97	11.18	10.88
26	11.09	10.37	8.41	10.22	11.12	---	9.28	7.27	8.06	9.07	11.15	10.53
27	11.11	10.08	8.47	10.09	11.15	---	9.36	7.23	8.15	9.09	11.16	10.83
28	11.04	9.80	8.60	10.09	11.18	---	9.36	7.80	8.22	9.20	11.21	11.05
29	10.88	9.48	8.70	10.17	---	---	9.33	8.82	8.27	9.32	11.20	10.92
30	10.73	9.18	8.75	10.23	---	---	9.49	9.26	8.40	9.39	11.24	10.72
31	10.68	---	8.77	10.32	---	11.90	---	8.03	---	9.50	11.31	---
MAX	12.02	10.80	9.05	10.32	11.56	---	11.92	9.87	9.28	9.50	11.31	11.91
WTR YR 1987 MEAN		9.86		HIGH	6.73	DEC 5 AND OTHERS		LOW	12.02	OCT 1		

394742083094800. Local number, PK-9.

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, 22.00 ft below land-surface datum, Sept. 28, 1987; minimum daily low, 12.95 ft above land-surface datum, Oct. 6, 1986.

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.30	16.25	16.00	---	17.05	18.80	16.95	17.65	17.15	18.45	18.75	18.65
2	17.40	16.45	16.00	---	17.60	18.50	16.45	17.70	17.70	18.45	17.50	19.10
3	15.65	16.55	14.25	---	18.20	18.25	17.40	17.75	17.75	16.00	18.20	19.15
4	16.00	16.55	14.20	---	18.00	17.95	18.60	17.05	17.10	14.65	18.45	19.10
5	14.55	16.35	13.75	---	18.05	18.65	17.45	16.90	17.05	15.35	18.50	19.10
6	12.95	16.35	14.05	---	18.60	18.75	16.70	17.90	17.20	15.75	18.50	19.10
7	13.80	16.30	14.05	---	18.95	18.30	16.30	18.55	17.20	16.75	18.50	18.75
8	14.85	16.25	14.70	---	17.75	17.60	16.30	18.80	17.15	17.30	18.15	18.85
9	14.90	16.25	15.55	---	17.80	18.00	16.50	18.45	18.20	17.20	17.60	19.00
10	15.05	16.30	16.05	---	17.80	18.15	16.55	17.90	18.35	17.70	17.75	19.00
11	15.20	16.20	15.85	---	17.45	18.20	16.70	17.80	18.35	17.75	17.80	19.40
12	15.30	16.80	16.00	---	17.45	17.80	16.95	18.00	18.35	17.40	18.45	20.00
13	15.40	16.90	16.15	---	18.25	17.50	17.35	18.10	18.80	17.40	19.05	20.25
14	17.00	16.65	15.95	---	18.35	17.55	17.15	18.10	18.95	18.05	19.10	20.30
15	17.00	16.80	16.80	---	17.40	18.20	16.85	17.70	19.65	18.25	19.15	20.35
16	16.15	16.60	16.00	---	18.00	18.00	---	17.55	18.70	18.00	19.15	20.60
17	15.70	16.70	16.00	---	19.10	17.95	---	19.60	18.40	17.75	19.20	20.90
18	15.75	17.00	15.50	---	19.80	18.35	---	19.95	18.30	17.35	19.60	21.00
19	15.75	18.60	17.55	---	19.70	18.20	---	19.15	18.30	17.50	19.80	20.80
20	15.60	18.00	17.60	---	19.15	18.10	---	19.20	17.60	18.35	19.75	20.70
21	16.10	17.40	17.15	---	19.05	18.05	---	18.15	18.00	18.75	19.75	20.50
22	16.05	17.05	18.00	---	19.65	17.85	---	17.75	18.05	18.15	19.80	20.65
23	16.10	16.45	17.40	---	20.40	18.35	---	17.45	18.30	18.10	19.80	20.75
24	16.10	16.70	16.80	---	18.80	18.15	---	17.20	18.35	18.10	19.80	20.70
25	16.10	16.70	17.05	---	18.85	17.70	---	17.00	18.40	18.15	20.00	20.65
26	16.05	16.50	16.70	---	18.90	17.60	---	17.05	16.95	18.15	20.00	20.55
27	15.75	---	16.75	---	18.90	17.40	---	17.35	17.60	18.15	19.80	20.75
28	15.80	---	16.20	16.90	18.90	17.45	---	17.85	17.80	18.15	19.85	22.00
29	15.95	---	15.60	17.65	---	17.45	---	18.30	17.75	18.20	17.80	20.65
30	16.10	---	15.65	18.80	---	17.40	---	18.50	18.30	18.20	18.40	20.75
31	16.15	---	---	17.50	---	17.10	---	18.10	---	18.60	17.85	---
MAX	17.40	---	---	---	20.40	18.80	---	19.95	19.65	18.75	20.00	22.00
WTR YR 1987	MEAN	17.72		HIGH	12.95	OCT 6	LOW	22.00	SEP 28			

GROUND-WATER RECORDS

293

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, 10.06 ft below land-surface datum, Mar. 1, 1979.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.02	24.99	24.23	22.26	23.97	24.76	25.19	22.33	23.85	24.07	23.69	25.42
2	25.94	25.02	24.02	22.37	24.01	24.77	25.19	22.43	23.82	24.11	23.78	25.46
3	25.86	25.04	23.60	22.45	24.06	24.78	25.16	22.52	23.80	24.15	23.87	25.49
4	25.79	25.07	---	22.53	24.09	24.78	25.08	22.62	23.78	24.16	23.96	25.51
5	25.67	25.09	---	22.60	24.12	24.77	25.00	22.70	23.77	24.16	24.04	25.54
6	25.55	25.13	---	22.67	24.15	24.75	24.85	22.79	23.74	24.08	24.10	25.58
7	25.42	25.16	---	22.77	24.17	24.72	24.65	22.88	23.68	23.99	24.17	25.59
8	25.27	25.16	---	22.85	24.20	24.68	24.45	22.97	23.61	23.81	24.23	25.62
9	25.07	25.12	---	22.90	24.23	24.66	24.26	23.06	23.53	23.62	24.29	25.64
10	24.87	25.12	21.17	22.99	24.25	24.67	23.79	23.14	23.48	23.41	24.34	25.66
11	24.67	25.12	21.05	23.09	24.26	24.67	23.15	23.22	23.44	23.21	24.39	25.69
12	24.52	25.10	20.92	23.16	24.29	24.69	22.67	23.29	23.43	23.02	24.47	25.72
13	24.41	25.08	20.83	23.24	24.31	24.70	22.41	23.37	23.47	22.87	24.51	25.74
14	24.34	25.08	20.74	23.29	24.33	24.71	22.33	23.44	23.50	22.77	24.59	25.76
15	24.32	25.06	20.67	23.37	24.36	24.75	22.27	23.52	23.53	22.71	24.65	25.78
16	24.32	25.04	20.68	23.44	24.38	24.78	22.17	23.59	23.55	22.66	24.70	25.80
17	24.37	25.03	20.71	23.49	24.42	24.79	22.10	23.64	23.58	22.64	24.76	25.82
18	24.39	25.03	20.82	23.56	24.46	24.81	22.06	23.69	23.60	22.62	24.82	25.84
19	24.41	25.03	20.90	23.62	24.48	24.84	22.00	23.75	23.62	22.61	24.87	25.86
20	24.45	25.03	21.01	23.66	24.50	24.87	21.94	23.79	23.64	22.65	24.93	25.88
21	24.48	25.04	21.12	23.68	24.53	24.89	21.91	23.85	23.68	22.71	24.97	25.90
22	24.54	25.05	21.22	23.68	24.55	24.92	21.88	23.90	23.72	22.77	25.02	25.92
23	24.59	25.05	21.31	23.70	24.62	24.95	21.78	23.93	23.77	22.85	25.07	25.94
24	24.64	25.05	21.41	23.71	24.65	24.98	21.79	23.95	23.80	22.93	25.12	25.96
25	24.68	25.04	21.56	23.72	24.67	25.01	21.85	23.95	23.83	23.03	25.17	25.98
26	24.74	25.00	21.68	23.76	24.69	25.04	21.93	23.94	23.87	23.12	25.20	25.99
27	24.81	24.74	21.79	23.78	24.72	25.07	21.99	23.93	23.91	23.22	25.24	26.02
28	24.86	24.67	21.89	23.82	24.73	25.11	22.08	23.91	23.95	23.30	25.28	26.03
29	24.90	24.56	21.98	23.83	---	25.14	22.14	23.90	23.98	23.40	25.31	26.05
30	24.94	24.42	21.99	23.89	---	25.16	22.24	23.89	24.03	23.50	25.35	26.07
31	24.97	---	22.18	23.95	---	25.19	---	23.88	---	23.60	25.39	---
MAX	26.02	25.16	---	23.95	24.73	25.19	25.19	23.95	24.03	24.16	25.39	26.07
WTR YR 1987 MEAN	24.02											
HIGH				20.67	DEC 15							
LOW							26.07	SEP 30				

411401081025000. Local number, PO-1.

LOCATION.--Lat 41° 14' 01", long 81° 02' 50" Hydrologic Unit 05030103. Bauer Street in Windham.

Owner: Edward Liddle.

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.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.42	21.54	21.47	20.94	20.63	20.38	20.12	19.80	19.90	20.16	20.27	20.34
2	21.40	21.54	21.41	20.92	20.57	20.40	20.09	19.78	19.91	20.13	20.26	20.36
3	21.39	21.54	21.24	20.96	20.63	20.42	20.09	19.82	19.93	20.02	20.20	20.38
4	21.26	21.54	21.27	20.94	20.64	20.42	20.06	19.83	19.94	20.04	20.17	20.36
5	21.29	21.54	21.30	20.90	20.64	20.40	19.94	19.82	19.95	20.05	20.18	20.36
6	21.33	21.56	21.29	20.85	20.60	20.39	19.95	19.78	19.98	20.05	20.23	20.36
7	21.33	21.56	21.27	20.80	20.55	20.36	19.84	19.79	19.96	20.06	20.24	20.36
8	21.33	21.56	21.24	20.79	20.60	20.34	19.84	19.79	19.97	20.06	20.23	20.35
9	21.39	21.61	21.20	20.77	20.62	20.36	19.85	19.78	20.03	20.06	20.20	20.38
10	21.40	21.62	21.19	20.70	20.59	20.37	19.85	19.78	20.04	20.06	20.18	20.39
11	21.39	21.59	21.18	20.73	20.57	20.34	19.85	19.78	20.04	20.05	20.22	20.39
12	21.38	21.60	21.20	20.73	20.55	20.31	19.88	19.83	20.00	20.05	20.22	20.39
13	21.38	21.64	21.24	20.75	20.56	20.30	19.90	19.83	20.01	20.04	20.21	20.40
14	21.40	21.64	21.17	20.73	20.55	20.29	19.87	19.81	20.02	20.08	20.23	20.43
15	21.41	21.59	21.15	20.75	20.56	20.30	19.83	19.83	20.05	20.08	20.24	20.43
16	21.40	21.59	21.14	20.76	20.55	20.30	19.82	19.83	20.07	20.12	20.24	20.41
17	21.45	21.62	21.13	20.74	20.50	20.30	19.81	19.82	20.11	20.14	20.24	20.40
18	21.47	21.63	21.08	20.68	20.53	20.28	19.84	19.83	20.13	20.13	20.27	20.37
19	21.45	21.64	21.08	20.70	20.54	20.26	19.85	19.81	20.12	20.13	20.27	20.37
20	21.43	21.60	21.10	20.70	20.53	20.25	19.84	19.84	20.12	20.14	20.34	20.37
21	21.41	21.59	21.12	20.68	20.50	20.24	19.81	19.84	20.08	20.16	20.34	20.38
22	21.42	21.58	21.09	20.63	20.48	20.23	19.80	19.85	20.09	20.16	20.34	20.38
23	21.44	21.56	21.06	20.66	20.52	20.20	19.79	19.87	20.13	20.17	20.33	20.38
24	21.46	21.60	21.03	20.68	20.52	20.19	19.82	19.89	20.15	20.19	20.35	20.40
25	21.44	21.60	21.04	20.68	20.52	20.19	19.83	19.88	20.14	20.20	20.35	20.42
26	21.42	21.56	21.04	20.63	20.52	20.20	19.83	19.88	20.15	20.19	20.34	20.42
27	21.46	21.48	21.01	20.64	20.50	20.22	19.79	19.89	20.15	20.20	20.32	20.43
28	21.48	21.46	20.99	20.64	20.46	20.22	19.77	19.88	20.16	20.21	20.31	20.43
29	21.49	21.45	20.98	20.63	---	20.17	19.77	19.87	20.17	20.22	20.34	20.42
30	21.54	21.47	20.98	20.58	---	20.14	19.80	19.87	20.18	20.24	20.34	20.37
31	21.54	---	20.98	20.63	---	20						

295

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.

REMARKS.--Station operated by Ohio Department
PERIOD OF RECORD.--May 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 15.28 ft below land-surface datum, Aug. 26, 1983; minimum daily low, 7.94 ft below land-surface datum, May 4, 1975.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.29	12.14	11.25	10.57	11.17	11.26	11.17	10.66	11.86	12.63	12.34	13.22
2	13.01	11.97	10.98	10.59	11.29	11.33	11.46	10.63	11.77	12.19	12.30	13.26
3	12.84	12.05	10.98	10.51	11.36	11.43	11.46	10.51	11.84	12.19	12.22	13.25
4	12.47	11.90	10.94	10.72	11.35	11.35	11.45	10.73	11.67	12.13	12.42	13.18
5	12.41	12.04	10.88	10.58	11.45	11.37	11.35	10.81	11.76	12.05	12.41	13.12
6	12.44	12.11	10.77	10.60	11.35	11.22	11.36	10.98	11.41	11.96	12.54	13.11
7	12.38	12.17	10.76	10.59	11.34	11.20	11.29	10.89	11.28	11.99	12.55	12.95
8	12.32	12.17	10.65	10.66	11.20	11.07	11.24	11.17	11.16	11.97	12.78	12.86
9	---	12.13	10.58	10.64	11.45	11.06	11.10	11.17	11.37	12.11	12.60	13.01
10	---	12.22	10.57	10.68	11.35	11.06	11.27	11.17	11.34	12.01	12.65	12.93
11	---	12.18	10.48	10.62	11.35	11.18	11.02	11.16	11.49	12.18	12.64	12.89
12	---	12.29	10.35	10.75	11.28	11.24	11.05	11.38	11.40	11.90	12.70	12.85
13	---	12.29	10.44	10.73	11.35	11.36	10.93	11.61	11.48	11.84	12.75	12.75
14	---	12.24	10.37	10.97	11.26	11.24	11.04	11.69	11.42	11.75	12.83	12.73
15	11.92	12.05	10.36	11.10	11.30	11.23	10.86	11.86	11.79	12.12	12.83	12.84
16	11.80	11.94	10.30	11.20	11.25	11.29	10.78	11.86	11.81	12.03	12.95	12.79
17	12.01	12.00	10.36	11.20	11.27	11.40	10.63	11.78	12.27	12.21	12.89	12.85
18	11.89	11.96	10.24	11.17	11.28	11.34	10.57	11.80	12.56	12.21	12.94	12.76
19	11.89	11.98	10.48	11.17	11.40	11.29	10.54	11.74	12.56	12.27	13.13	12.85
20	12.01	11.89	10.39	11.22	11.39	11.10	10.52	11.80	12.38	12.35	13.37	12.82
21	11.86	11.96	10.51	11.20	11.43	11.22	10.48	11.78	12.35	12.47	13.37	12.86
22	12.08	11.93	10.45	11.02	11.35	11.16	10.54	11.85	12.41	12.46	13.25	12.86
23	12.11	11.88	10.54	10.88	11.41	11.25	10.38	11.54	12.44	12.58	13.08	13.10
24	12.20	11.91	10.45	11.01	11.44	11.16	10.55	11.40	12.75	12.65	13.17	13.07
25	12.16	11.91	10.61	11.14	11.55	11.29	10.45	11.25	12.76	12.58	13.06	13.33
26	12.06	11.79	10.57	11.03	11.55	11.10	10.60	11.28	12.80	12.56	13.11	13.14
27	12.18	11.64	10.73	11.20	11.54	11.25	10.45	11.16	12.83	12.54	13.10	13.17
28	12.17	11.53	10.66	11.24	11.49	11.15	10.60	11.58	12.67	12.40	13.14	13.26
29	12.17	11.39	10.60	11.17	---	11.21	10.45	11.77	12.78	12.36	13.14	13.26
30	12.17	11.28	10.61	11.20	---	11.12	10.66	11.85	12.75	12.20	13.10	13.31
31	12.22	---	10.61	11.20	---	11.29	---	11.63	---	12		

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.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.13	6.90	6.67	6.36	6.67	6.82	6.59	6.03	6.24	6.05	6.00	6.27
2	7.09	6.91	6.65	6.33	6.66	6.74	6.58	6.03	6.22	6.01	6.00	6.25
3	7.06	6.91	6.60	6.29	6.63	6.71	6.56	6.02	6.21	5.82	5.99	6.28
4	7.00	6.91	6.56	6.29	6.65	6.73	6.55	6.03	6.21	5.71	5.99	6.30
5	6.91	6.91	6.59	6.31	6.69	6.75	6.51	6.05	6.24	5.62	6.00	6.30
6	6.82	6.91	6.61	6.32	6.72	6.76	6.42	6.06	6.27	5.55	6.03	6.30
7	6.78	6.93	6.61	6.33	6.72	6.76	6.34	6.08	6.28	5.51	6.06	6.29
8	6.76	6.93	6.60	6.37	6.72	6.76	6.28	6.10	6.28	5.49	6.08	6.25
9	6.74	6.93	6.58	6.40	6.67	6.71	6.21	6.12	6.27	5.48	6.08	6.22
10	6.76	6.93	6.53	6.40	6.69	6.67	6.17	6.12	6.25	5.48	6.07	6.22
11	6.76	6.93	6.52	6.40	6.70	6.68	6.15	6.11	6.25	5.49	6.08	6.24
12	6.76	6.94	6.52	6.38	6.70	6.69	6.10	6.10	6.24	5.50	6.11	6.25
13	6.75	6.99	6.53	6.40	6.72	6.70	6.04	6.13	6.22	5.50	6.15	6.25
14	6.72	7.02	6.54	6.42	6.73	6.70	6.03	6.15	6.20	5.52	6.17	6.25
15	6.70	7.03	6.54	6.44	6.73	6.70	6.03	6.17	6.18	5.55	6.18	6.28
16	6.72	7.03	6.53	6.51	6.73	6.68	6.02	6.20	6.16	5.57	6.18	6.31
17	6.75	7.00	6.53	6.53	6.73	6.69	6.00	6.20	6.18	5.60	6.18	6.33
18	6.80	6.96	6.53	6.53	6.73	6.69	5.97	6.20	6.20	5.62	6.18	6.36
19	6.82	6.94	6.53	6.52	6.76	6.69	5.97	6.20	6.21	5.63	6.20	6.39
20	6.83	6.95	6.54	6.52	6.79	6.69	5.97	6.21	6.21	5.65	6.25	6.42
21	6.83	6.93	6.55	6.53	6.80	6.69	5.97	6.21	6.21	5.68	6.28	6.43
22	6.84	6.91	6.55	6.54	6.80	6.68	5.98	6.22	6.20	5.72	6.29	6.46
23	6.86	6.89	6.56	6.53	6.78	6.66	5.99	6.22	6.17	5.77	6.29	6.52
24	6.87	6.84	6.55	6.57	6.77	6.65	6.00	6.22	6.15	5.81	6.30	6.54
25	6.87	6.82	6.51	6.59	6.80	6.63	6.03	6.22	6.15	5.83	6.32	6.60
26	6.87	6.82	6.47	6.60	6.82	6.61	6.04	6.22	6.14	5.83	6.33	6.65
27	6.83	6.79	6.43	6.62	6.84	6.61	6.04	6.22	6.12	5.84	6.33	6.68
28	6.80	6.77	6.42	6.65	6.84	6.61	6.04	6.24	6.09	5.87	6.32	6.70
29	6.81	6.74	6.41	6.67	---	6.62	6.04	6.25	6.07	5.90	6.31	6.72
30	6.85	6.69	6.39	6.67	---	6.62	6.02	6.25	6.06	5.93	6.31	6.73
31	6.88	---	6.36	6.67	---	6.60	---	6.25	---	5.97	6.29	---
MAX	7.13	7.03	6.67	6.67	6.84	6.82	6.59	6.25	6.28	6.05	6.33	6.73
WTR YR 1987 MEAN	6.41			HIGH	5.48	JUL 9 AND OTHERS		LOW	7.13	OCT 1		

GROUND-WATER RECORDS

297

ROSS COUNTY

391341083172200. Local number, RQ-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, 44.56 ft below land-surface datum, Aug. 17, 1985; minimum daily low, 20.93 ft below land-surface datum, Feb. 28, 1971.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	40.56	38.27	36.82	37.39	36.93	37.73	39.83	42.92
2				---	40.53	38.31	37.17	37.67	36.63	37.91	39.66	43.08
3				---	40.54	38.43	37.35	37.98	36.25	38.15	39.81	43.28
4				---	40.48	38.52	37.29	38.11	36.11	38.31	39.93	43.53
5				---	40.53	38.68	36.63	38.12	35.95	38.48	39.93	43.56
6				---	40.41	38.28	36.17	38.18	35.81	38.39	40.04	43.76
7				---	40.26	38.22	36.55	38.43	35.69	38.66	39.83	43.92
8				---	40.30	38.32	36.82	38.57	35.55	38.90	39.78	44.01
9				---	40.35	38.24	36.46	38.75	---	39.07	39.31	44.02
10				---	40.36	38.21	35.93	38.93	---	39.22	39.54	44.07
11				---	40.35	38.15	36.49	38.80	---	39.24	39.88	44.08
12				---	40.36	38.31	36.70	37.88	---	39.23	39.68	44.14
13				---	39.99	38.09	36.31	37.41	---	39.09	39.78	44.31
14				---	40.21	37.93	36.29	36.82	---	39.20	40.51	44.33
15				---	40.24	38.43	36.45	37.18	---	39.30	40.96	43.48
16				---	40.32	38.29	36.69	37.29	---	39.06	41.41	43.58
17				---	40.33	38.08	36.90	37.25	---	39.32	41.42	42.37
18				---	39.88	37.30	37.08	37.21	35.37	39.56	41.06	41.64
19				---	39.64	37.32	37.13	37.63	35.91	39.65	41.58	41.82
20				40.30	39.52	37.12	37.13	37.77	35.76	39.78	41.79	42.19
21				40.37	38.98	37.22	36.32	37.16	36.13	39.79	42.02	42.24
22				40.38	38.98	37.12	35.62	37.42	36.29	39.90	42.40	41.80
23				40.32	38.96	37.03	35.34	37.53	36.64	40.00	42.40	41.22
24				40.21	39.08	36.96	35.43	37.66	36.94	40.01	41.67	41.25
25				40.23	39.12	37.37	36.10	38.10	37.24	40.04	41.98	40.57
26				40.29	38.85	37.17	36.20	38.12	37.39	39.85	42.18	40.18
27				40.43	38.70	37.14	36.56	37.81	37.54	40.03	42.45	39.81
28				40.56	38.34	37.04	36.79	37.92	37.69	40.04	42.37	39.85
29				40.59	---	36.89	37.09	38.27	37.55	40.13	42.60	39.44
30				40.69	---	37.14	37.36	38.30	37.56	39.94	42.63	39.21
31				40.70	---	36.90	---	37.26	---	39.98	42.95	---
MAX				---	40.56	38.68	37.36	38.93	---	40.13	42.95	44.33
WTR YR 1987	MEAN	39.07		HIGH	35.34	APR 23	LOW	44.33	SEP 14			

GROUND-WATER RECORDS

ROSS COUNTY--Continued.

391913082580500. Local number, RQ-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, 29.70 ft below land-surface datum, Nov. 3, 1984; minimum daily low, 21.79 ft below land-surface datum, May 29, 1984.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.06	25.93	25.10	22.98	23.45	24.41	24.65	23.24	23.58	24.31	23.48	23.82
2	25.93	25.93	25.10	22.94	23.47	24.41	24.49	23.29	23.55	24.29	23.32	23.87
3	25.90	25.92	24.70	22.95	23.56	24.41	24.48	23.35	23.54	24.22	23.27	23.92
4	25.90	25.92	24.44	22.95	23.67	24.41	24.46	23.36	23.60	24.23	23.07	23.94
5	25.88	25.92	24.43	22.94	23.72	24.41	24.45	23.39	23.67	24.22	22.97	23.83
6	25.86	25.90	24.34	22.93	23.75	24.40	24.33	23.42	23.71	24.19	22.87	23.83
7	25.83	25.90	24.24	22.92	23.77	24.38	24.23	23.47	23.74	24.13	22.78	23.89
8	25.79	25.87	24.16	22.92	23.84	24.37	23.94	23.52	23.77	24.08	22.68	23.93
9	25.78	25.79	24.17	22.89	23.90	24.36	23.61	23.56	23.83	24.08	22.75	23.98
10	25.76	25.79	24.17	22.84	23.93	24.43	23.52	23.58	23.90	24.09	22.95	24.03
11	25.76	25.73	24.11	22.89	23.95	24.43	23.55	23.59	23.93	24.09	23.05	24.07
12	25.76	25.69	23.95	22.93	24.00	24.45	23.58	23.65	23.97	24.10	23.13	24.08
13	25.76	25.65	23.77	22.93	24.02	24.48	23.60	23.69	24.00	24.14	23.21	23.98
14	25.78	---	23.64	22.95	24.05	24.48	23.60	23.74	24.03	24.14	23.27	---
15	25.79	---	23.54	23.05	24.10	24.50	23.61	23.74	24.06	24.10	23.33	---
16	25.79	---	23.46	23.10	24.11	24.53	23.60	23.76	24.10	24.12	23.37	---
17	25.82	---	23.41	23.12	24.14	24.56	23.38	23.79	24.12	24.15	23.41	---
18	25.83	---	23.34	23.14	24.20	24.57	23.25	23.81	24.15	24.16	23.44	---
19	25.84	---	23.32	23.17	24.23	24.58	23.18	23.83	24.17	24.17	23.46	---
20	25.84	---	23.27	23.17	24.25	24.60	23.09	23.81	24.19	24.19	23.49	---
21	25.86	---	23.25	23.13	24.27	24.62	22.98	23.82	24.19	24.18	23.48	---
22	25.88	---	23.25	23.08	24.28	24.64	22.90	23.79	24.18	24.11	23.48	---
23	25.89	---	23.36	23.16	24.33	24.66	22.93	23.76	24.20	24.07	23.48	---
24	25.91	---	23.42	---	24.35	24.68	22.96	23.75	24.21	23.94	23.50	---
25	25.93	---	23.42	---	24.37	24.72	23.00	23.73	24.22	23.83	23.55	---
26	25.93	---	23.32	---	24.42	24.75	23.02	23.70	24.24	23.75	23.58	---
27	25.92	---	23.22	---	24.42	24.77	23.05	23.69	24.24	23.55	23.64	---
28	25.91	---	23.14	23.32	24.42	24.81	23.08	23.71	24.25	23.62	23.67	---
29	25.91	---	23.08	23.33	---	24.83	23.17	23.73	24.28	23.61	23.67	---
30	25.92	---	23.02	23.37	---	24.87	23.23	23.73	24.30	23.55	23.72	---
31	25.93	---	23.02	23.44	---	24.76	---	23.62	---	23.59	23.76	---
MAX	26.06	---	25.10	---	24.42	24.87	24.65	23.83	24.30	24.31	23.76	---
WTR YR 1987 MEAN	24.06			HIGH	22.68	AUG 8	LOW	26.06	OCT 1			

GROUND-WATER RECORDS

299

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, 62.55 ft below land-surface datum, Aug. 10, 1986

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73.97	65.71	73.24	64.01	69.44	68.74	71.40	70.31	69.05	69.19	70.88	73.22
2	74.85	68.44	72.46	62.93	74.67	74.52	71.11	69.66	69.17	69.23	66.56	72.77
3	74.37	73.58	72.78	69.61	75.03	75.95	71.52	66.27	70.80	70.50	71.44	72.88
4	71.67	74.86	74.78	66.74	74.25	74.74	72.00	70.83	69.06	63.79	71.23	72.00
5	70.63	74.23	73.63	72.32	73.66	74.70	66.23	70.44	70.93	64.66	71.24	69.29
6	73.67	74.23	70.91	72.95	74.64	74.97	70.94	69.31	70.93	71.63	71.59	62.99
7	71.66	75.16	71.14	73.27	70.83	72.50	70.57	69.19	66.62	69.50	73.39	64.47
8	75.39	72.41	72.03	73.70	68.81	67.49	71.48	70.11	70.20	72.02	70.93	71.11
9	74.03	70.76	72.15	74.22	72.71	72.04	70.44	70.30	70.20	71.30	66.48	70.83
10	71.92	73.63	73.32	71.53	74.23	71.82	70.46	66.14	70.67	70.82	71.22	70.75
11	70.08	73.65	74.74	68.31	75.43	70.69	66.63	69.79	70.69	69.85	72.21	70.32
12	67.27	74.07	72.83	75.18	74.22	71.03	65.99	69.61	72.14	66.17	73.13	71.12
13	73.67	74.06	74.74	75.52	71.94	70.25	72.28	71.38	68.91	71.40	72.12	65.48
14	76.43	74.05	69.95	75.05	68.88	70.27	68.89	69.28	65.92	70.20	70.82	69.98
15	75.45	71.78	74.30	75.23	66.78	66.61	68.64	69.59	71.65	70.37	70.46	71.14
16	75.06	70.31	74.19	75.21	73.55	70.83	68.44	67.77	70.62	69.68	67.92	71.30
17	75.46	73.91	74.05	72.99	75.21	70.98	67.98	71.47	69.89	70.37	72.32	70.40
18	74.72	73.69	75.68	68.37	74.94	71.11	65.09	70.36	71.23	71.85	72.45	71.13
19	68.33	74.76	75.14	73.59	75.53	71.35	67.51	71.41	71.81	66.88	72.50	68.51
20	71.25	74.17	73.48	74.59	75.56	71.73	70.96	73.38	70.49	70.40	70.71	66.40
21	71.42	74.75	70.14	74.74	72.47	70.04	71.06	67.45	67.73	72.17	75.81	70.61
22	71.39	73.09	72.35	72.92	69.14	67.59	72.26	70.92	70.62	70.29	74.50	69.18
23	73.80	71.41	72.54	73.55	74.77	72.25	71.92	68.52	70.70	71.73	68.07	71.38
24	75.01	74.67	69.93	70.56	75.66	70.88	72.62	65.08	68.73	70.71	72.45	70.80
25	72.95	75.70	62.82	70.25	74.62	70.47	70.48	65.27	69.74	70.40	71.39	71.77
26	69.51	74.05	63.24	73.58	73.69	71.79	68.14	69.07	69.57	66.04	70.87	71.07
27	73.94	69.25	64.70	73.94	74.26	72.62	69.67	69.92	70.79	71.85	71.17	65.39
28	74.81	65.38	68.34	74.70	71.94	69.30	70.93	69.46	71.65	72.12	71.16	70.38
29	76.21	65.30	72.39	75.15	---	68.07	69.86	70.38	70.87	73.19	71.00	70.10
30	73.53	68.47	73.56	74.73	---	69.22	71.16	70.69	70.06	72.14	65.73	69.10
31	68.73	---	72.71	72.13	---	69.66	---	65.44	---	70.69	70.84	---
MAX	76.43	75.70	75.68	75.52	75.66	75.95	72.62	73.38	72.14	73.19	75.81	73.22
WTR YR 1987 MEAN	71.15		HIGH		62.82	DEC 25	LOW		76.43	OCT 14		

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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35.63	34.83	35.52	33.90	34.24	35.43	---	35.36	35.99	36.65	36.92	36.95
2	35.26	34.85	35.06	33.85	34.29	35.60	36.76	35.30	36.01	36.68	36.63	37.17
3	35.16	35.03	35.00	33.90	34.65	35.71	---	35.31	36.05	36.43	36.65	37.27
4	35.09	34.92	34.95	33.96	34.82	35.78	---	35.31	35.78	36.55	36.50	37.07
5	35.09	35.22	34.91	34.01	34.82	35.83	---	35.06	36.05	36.53	36.50	37.18
6	35.03	34.98	35.04	34.00	34.86	35.87	---	35.29	35.70	36.50	36.84	36.70
7	35.03	35.00	35.76	34.05	34.86	35.91	---	35.34	35.61	36.48	36.90	37.03
8	35.02	35.00	35.11	34.05	34.87	35.88	---	35.39	35.63	36.19	36.70	37.16
9	35.01	35.00	35.78	34.04	34.94	35.96	---	35.44	35.60	35.98	36.58	37.83
10	35.19	35.05	34.67	34.00	35.01	36.00	---	35.70	35.59	36.28	36.50	37.35
11	35.11	35.07	34.51	34.02	35.01	36.05	---	35.70	35.61	36.16	36.80	37.40
12	35.01	35.15	34.42	34.06	35.10	36.06	---	35.75	35.78	36.11	36.49	37.44
13	35.00	35.23	34.75	34.05	35.14	35.85	---	35.65	35.84	36.08	36.75	37.06
14	34.83	35.15	34.35	34.05	35.17	36.07	---	35.37	35.87	35.85	36.93	37.79
15	34.84	35.13	34.65	33.90	35.21	35.78	---	35.33	35.85	36.03	36.95	37.45
16	34.96	35.14	34.60	33.93	35.22	36.14	---	35.26	35.87	36.29	36.50	37.74
17	35.13	35.15	34.13	33.95	35.27	36.15	---	35.24	35.93	36.30	36.50	37.45
18	34.92	35.33	34.05	33.95	35.31	36.21	---	35.33	35.93	35.89	37.06	37.56
19	34.92	35.35	34.04	34.32	35.38	36.23	---	35.42	35.84	35.82	37.04	37.40
20	34.91	35.33	34.04	34.15	35.42	36.30	---	35.63	36.10	36.10	36.83	37.33
21	34.91	35.34	34.05	34.05	35.37	36.33	---	35.63	36.13	36.78	36.85	37.10
22	34.74	35.33	34.04	34.16	35.45	36.42	---	35.63	36.03	36.78	36.83	37.49
23	34.54	35.30	34.03	34.20	35.46	36.47	---	35.65	36.03	36.79	36.86	37.33
24	34.49	35.26	34.00	34.12	35.55	36.50	---	35.69	36.30	36.54	36.94	37.35
25	34.46	35.25	34.02	34.12	35.58	36.50	---	35.70	36.50	36.47	36.92	37.32
26	34.73	35.20	33.95	34.20	35.60	36.51	---	35.54	36.18	36.34	37.05	37.64
27	34.80	35.20	33.93	34.14	35.61	36.52	---	35.46	36.46	36.31	37.13	37.17
28	34.92	35.16	33.74	34.15	35.25	36.55	---	35.46	36.52	36.78	37.23	37.40
29	34.92	35.12	33.80	34.15	---	36.57	35.30	35.53	36.13	36.80	36.75	37.38
30	34.97	35.46	33.89	34.14	---	36.72	35.39	35.61	36.57	36.69	36.62	37.66
31	34.80	---	33.95	34.16	---	---	---	35.94	---	37.07	36.82	---
MAX	35.63	35.46	35.78	34.32	35.61	---	---	35.94	36.57	37.07	37.23	37.83
WTR YR 1987 MEAN	35.63			HIGH	33.74	DEC 28	LOW	37.83	SEP 9			

GROUND-WATER RECORDS

301

STARK COUNTY--Continued

405051081244200. Local number, ST-28.

LOCATION.--Lat 40°50'51", long 81°24'42", Hydrologic Unit 05040001, Salway St., northwest of Canton.

Owner: North Canton Water Dept.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water table well, diameter 8 in., depth 70 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 1.50 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--September 1975 to January 18, 1985 continuous, periodic thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 16.00 ft below land-surface datum, July 27, 28, 1978; minimum daily low, 9.00 ft below land-surface datum, June 29, 1984.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATION

DATE	WATER LEVEL
OCT. 31, 1986	11.33

GROUND-WATER RECORDS

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, 50.10 ft below land-surface datum, Oct. 4, 1986; minimum daily low, 7.10 ft below land-surface datum, June 15, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48.35	47.70	24.10	36.75	44.15	20.05	---	20.75				
2	48.75	47.95	29.00	36.90	43.95	19.75	36.30	20.20				
3	49.25	47.95	31.40	37.40	43.45	19.50	---	19.70				
4	50.10	47.90	32.65	37.85	43.00	19.35	---	19.25				
5	---	---	33.50	38.00	40.00	19.10	---	18.90				
6	---	---	34.10	37.15	31.70	18.90	---	---				
7	---	---	36.25	38.15	29.80	18.70	---	---				
8	---	---	37.35	38.40	28.50	18.45	---	---				
9	---	---	36.30	38.75	27.40	18.20	---	26.85				
10	---	45.50	36.00	39.10	26.75	18.20	---	---				
11	---	46.70	35.30	39.25	25.95	18.05	---	---				
12	---	47.70	36.25	39.50	25.20	17.90	---	---				
13	---	49.20	36.50	39.85	24.60	17.80	---	---				
14	---	49.75	36.60	40.90	24.00	17.70	---	---				
15	---	---	36.70	41.90	23.55	17.50	---	---				
16	---	---	37.05	41.30	22.95	17.40	---	---				
17	---	---	37.20	41.25	25.50	17.35	---	---				
18	---	---	37.45	41.10	23.80	17.25	---	---				
19	---	---	36.40	41.05	22.70	17.10	---	---				
20	---	---	38.35	41.25	22.70	17.00	---	---				
21	---	---	38.70	41.20	21.75	16.95	---	---				
22	---	---	---	41.15	21.35	16.90	---	---				
23	---	26.50	---	41.30	25.10	22.20	---	---				
24	---	25.30	---	41.25	30.35	27.20	---	---				
25	---	24.70	---	41.40	24.80	29.50	---	---				
26	---	24.10	---	41.55	22.45	31.00	---	---				
27	---	23.50	---	41.55	21.00	32.00	---	---				
28	---	23.00	---	41.55	20.50	33.10	---	---				
29	---	22.40	---	44.35	---	33.80	21.75	---				
30	---	21.95	38.20	44.60	---	---	21.30	---				
31	47.30	---	34.20	44.15	---	---	---	---				
MAX	---	---	---	44.60	44.15	---	---	---				
WTR YR 1987	MEAN	31.86		HIGH	16.90	MAR 22		LOW	50.10	OCT 4		

GROUND-WATER RECORDS

303

SUMMIT COUNTY

410141081315200. Local number, SU-4A.

LOCATION.--Lat 41°01'41", long 81°31'52", Hydrologic Unit 05040001, Firestone well field, Akron.

Owner: Firestone Tire and Rubber Co.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 6 in., depth 60 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 970 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 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 42.60 ft below land-surface datum, Oct. 21, 1966; minimum daily low, 3.45 ft below land-surface datum, Jan. 23, 1959.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.85	16.99	14.24	12.14	11.94	12.10	11.99	11.33	14.01	16.23	16.83	17.73
2	17.81	17.02	14.11	12.13	11.94	12.09	11.96	11.45	14.12	16.24	16.90	17.77
3	17.74	17.05	13.97	12.12	11.94	12.07	11.91	11.57	14.22	16.11	16.96	17.80
4	17.67	17.08	13.80	12.12	11.94	12.05	11.86	11.69	14.33	15.89	17.01	17.85
5	17.38	17.10	13.63	12.11	11.95	12.02	11.81	11.81	14.45	15.69	17.06	17.89
6	17.07	17.10	13.49	12.11	11.95	12.00	11.74	11.92	14.57	15.56	17.12	17.93
7	16.89	17.06	13.35	12.09	11.95	11.97	11.58	12.04	14.68	15.48	17.19	17.97
8	16.78	17.00	13.23	12.09	11.94	11.94	11.38	12.16	14.79	15.44	17.25	18.01
9	16.71	16.92	13.13	12.09	11.94	11.91	11.20	12.25	14.90	15.43	17.31	18.06
10	16.67	16.83	13.02	12.08	11.94	11.90	11.06	12.37	15.00	15.42	17.33	18.11
11	16.65	16.74	12.92	12.07	11.94	11.89	10.96	12.47	15.09	15.44	17.33	18.16
12	16.64	16.63	12.82	12.06	11.94	11.88	10.87	12.59	15.17	15.47	17.30	18.17
13	16.63	16.52	12.73	12.05	11.94	11.88	10.80	12.68	15.23	15.51	17.26	18.17
14	16.63	16.41	12.65	12.05	11.94	11.89	10.77	12.82	15.27	15.57	17.23	18.15
15	16.63	16.31	12.59	12.05	11.93	11.89	10.73	12.90	15.30	15.63	17.19	18.14
16	16.62	16.20	12.53	12.04	11.93	11.89	10.69	13.00	15.34	15.70	17.17	18.15
17	16.63	16.10	12.48	12.04	11.93	11.89	10.65	13.09	15.37	15.76	17.16	18.18
18	16.64	16.00	12.42	12.03	11.94	11.89	10.63	13.17	15.44	15.82	17.18	18.21
19	16.66	15.90	12.37	12.02	11.95	11.89	10.62	13.19	15.50	15.89	17.21	18.25
20	16.67	15.80	12.34	12.00	11.97	11.89	10.62	13.20	15.57	15.95	17.25	18.28
21	16.70	15.68	12.31	11.99	11.99	11.89	10.62	13.21	15.61	16.01	17.31	18.31
22	16.73	15.56	12.30	11.97	12.00	11.90	10.62	13.22	15.66	16.08	17.36	18.35
23	16.76	15.43	12.28	11.94	12.02	11.91	10.63	13.24	15.71	16.16	17.40	18.39
24	16.79	15.30	12.27	11.93	12.05	11.92	10.64	13.28	15.77	16.23	17.43	18.43
25	16.83	15.19	12.25	11.93	12.07	11.93	10.68	13.31	15.83	16.30	17.47	18.47
26	16.85	15.09	12.24	11.93	12.09	11.94	10.78	13.38	15.90	16.37	17.51	18.51
27	16.87	14.95	12.22	11.93	12.10	11.95	10.87	13.49	15.97	16.44	17.55	18.56
28	16.89	14.76	12.20	11.93	12.10	11.97	10.98	13.60	16.04	16.52	17.59	18.60
29	16.91	14.57	12.18	11.94	---	11.99	11.08	13.72	16.10	16.60	17.63	18.66
30	16.93	14.39	12.16	11.94	---	12.00	11.20	13.82	16.17	16.67	17.67	18.71
31	16.97	---	12.14	11.94	---	12.00	---	13.92	---	16.76	17.70	---
MAX	17.85	17.10	14.24	12.14	12.10	12.10	11.99	13.92	16.17	16.76	17.70	18.71
WTR YR 1987 MEAN	14.37		HIGH		10.62	APR 19 AND OTHERS			LOW	18.71	SEP 30	

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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.25	28.09	26.16	25.17	24.86	24.67	23.05	27.68	28.65	26.36	29.53	27.21
2	26.26	28.02	25.67	24.91	24.51	24.35	22.91	25.87	29.81	26.09	28.61	28.01
3	26.46	27.21	25.09	24.55	24.60	24.49	22.87	24.78	29.19	25.09	27.27	27.77
4	26.04	28.67	25.05	24.71	24.71	24.26	22.76	23.83	27.99	25.10	27.63	28.30
5	24.54	28.50	25.61	25.43	24.82	24.52	22.59	26.88	27.10	24.83	27.80	27.70
6	24.43	28.27	25.56	25.63	25.23	24.08	21.15	28.65	26.74	26.04	30.07	27.14
7	24.69	27.58	25.14	26.32	25.36	23.75	26.16	25.38	28.61	28.84	30.45	27.08
8	26.60	28.15	25.67	26.57	24.81	23.06	23.28	26.18	30.57	27.87	29.07	27.88
9	27.57	27.99	25.38	26.42	25.02	23.56	22.79	25.35	28.94	27.97	28.07	31.79
10	27.50	26.97	25.26	26.00	25.20	23.58	22.57	24.12	28.43	29.38	27.59	33.84
11	26.69	27.98	24.93	25.76	24.75	23.55	22.43	25.10	26.78	29.61	27.22	34.39
12	26.39	27.82	26.32	26.43	24.55	23.70	22.18	28.31	28.05	30.49	28.18	34.30
13	27.21	27.77	25.94	26.84	24.59	23.75	23.44	27.41	28.14	30.63	30.18	32.68
14	27.37	27.75	25.61	27.00	24.40	23.66	24.43	26.33	27.06	30.66	30.55	31.59
15	27.09	26.28	26.16	26.97	24.07	23.26	24.43	26.47	28.16	29.55	30.19	30.18
16	26.22	25.82	27.36	26.93	24.59	23.54	24.68	26.42	29.84	28.79	30.55	31.02
17	26.36	26.40	28.20	27.16	25.11	23.55	26.18	27.75	30.37	29.91	31.59	31.01
18	26.38	27.34	27.63	26.62	25.71	23.79	26.73	27.85	30.91	29.79	31.81	30.76
19	26.92	27.84	27.52	25.02	25.79	23.97	26.68	26.26	31.10	30.66	30.98	30.43
20	26.73	25.73	27.42	24.76	25.88	24.56	26.98	25.71	31.30	31.90	31.92	30.01
21	26.97	25.68	26.88	24.48	26.59	24.59	26.30	26.94	27.86	32.18	32.05	29.98
22	26.99	25.58	27.25	24.22	26.75	24.88	25.33	27.92	28.26	32.39	30.17	29.90
23	27.14	25.40	27.21	24.21	26.93	24.04	25.02	28.06	27.42	32.09	28.15	28.66
24	27.75	26.29	27.03	24.50	27.66	24.20	24.88	29.38	29.25	32.05	26.87	29.59
25	27.70	26.85	25.28	24.82	27.05	24.26	24.86	27.98	29.25	31.37	26.82	30.21
26	27.48	26.60	25.38	23.92	26.12	25.03	24.59	30.23	28.88	29.40	26.49	28.49
27	26.88	26.11	25.40	24.18	25.90	25.25	26.54	30.76	28.44	29.95	26.17	27.23
28	26.33	25.74	25.27	24.26	25.15	24.16	25.75	31.46	27.00	30.84	26.10	29.89
29	26.97	25.70	25.51	24.51	---	23.30	24.32	30.50	26.97	29.25	27.16	30.56
30	27.64	25.34	25.71	25.00	---	23.96	27.22	29.35	27.00	30.28	27.06	28.25
31	27.87	---	25.62	24.95	---	23.83	---	28.63	---	30.64	27.66	---
MAX	28.25	28.67	28.20	27.16	27.66	25.25	27.22	31.46	31.30	32.39	32.05	34.39
WTR YR 1987 MEAN	26.93											
HIGH				21.15	APR 6							
LOW								34.39	SEP 11			

GROUND-WATER RECORDS

305

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, 1986	11.96	Jan. 30, 1987	10.20	Apr. 30, 1987	9.04	July 31, 1987	10.70
Nov. 30, 1986	11.44	Feb. 27, 1987	10.99	May 29, 1987	9.96	Aug. 31, 1987	11.01
Dec. 31, 1986	9.39	Mar. 31, 1987	11.28	June 30, 1987	10.16	Sept. 30, 1987	11.68

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, 10.68 ft below land-surface datum, Nov. 3, 1982; minimum daily low, 4.05 ft below land-surface datum, July 13, 1969.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.99	10.00	9.52	8.91	8.81	9.27	---	8.63	9.00	9.34	9.53	9.77
2	9.90	10.00	9.44	8.96	8.87	9.28	9.33	8.67	8.94	9.20	9.49	9.75
3	9.83	10.00	9.05	8.97	8.90	9.25	9.30	8.58	8.91	8.80	9.45	9.80
4	9.74	---	8.80	8.99	8.89	9.23	9.18	8.59	8.94	8.73	9.58	9.78
5	9.75	---	8.71	9.03	8.90	9.24	9.16	8.57	8.97	8.72	9.53	9.91
6	9.69	---	8.63	9.04	8.91	9.23	9.00	8.56	9.10	8.62	9.55	9.82
7	9.68	---	8.66	9.06	8.99	9.29	8.70	8.60	9.01	8.60	9.55	9.84
8	9.69	---	8.73	9.08	8.91	9.17	8.44	8.61	9.08	8.61	9.57	9.88
9	9.71	---	8.72	9.08	8.97	9.25	8.37	8.69	9.03	8.65	9.58	9.92
10	9.73	---	8.72	9.04	9.01	9.30	8.28	8.62	8.95	8.67	9.60	10.00
11	9.70	---	8.67	9.03	9.00	9.30	8.19	8.68	8.97	8.80	9.69	9.94
12	9.73	---	8.70	9.09	9.00	9.33	8.11	8.71	8.95	8.75	9.61	10.01
13	9.77	10.00	8.71	9.09	9.03	9.32	8.15	8.73	9.04	8.81	9.68	9.90
14	9.79	10.00	8.71	9.10	9.12	9.39	8.20	8.75	8.95	8.85	9.67	9.91
15	9.79	10.00	8.77	9.09	9.03	9.30	8.20	8.76	9.02	8.88	9.78	9.98
16	9.79	10.00	8.78	9.08	9.06	9.36	8.25	8.86	9.05	8.95	9.70	9.93
17	9.81	10.00	8.81	8.99	9.11	9.38	8.23	8.80	9.09	8.95	9.75	9.96
18	9.90	10.00	8.89	8.95	9.12	9.37	8.28	8.85	9.15	9.09	9.85	9.94
19	9.81	10.00	8.87	8.97	9.16	9.38	8.30	8.84	9.15	9.01	9.78	10.01
20	9.88	10.00	8.89	8.87	9.17	9.38	8.37	8.84	9.17	9.08	9.85	9.97
21	9.89	9.94	8.90	8.78	9.27	9.48	8.43	8.87	9.15	9.19	9.84	9.98
22	9.91	9.86	8.95	8.74	9.15	9.42	8.45	8.87	9.20	9.15	9.80	9.99
23	9.93	9.86	8.97	8.75	9.23	9.45	8.50	8.98	9.26	9.20	9.72	9.99
24	9.98	9.86	8.98	8.76	9.30	9.47	8.49	8.90	9.28	9.25	9.75	10.00
25	9.93	9.85	8.94	8.74	9.29	9.47	8.46	8.93	9.25	9.34	9.78	10.01
26	9.96	9.83	8.94	8.78	9.30	9.50	8.46	8.98	9.30	9.27	9.73	9.98
27	9.98	9.70	8.90	8.81	9.30	9.50	8.50	8.99	9.39	9.32	9.67	10.02
28	9.98	9.59	8.87	8.83	9.37	9.58	8.65	9.03	9.32	9.37	9.62	10.02
29	9.98	9.48	8.92	8.88	---	9.50	8.63	9.03	9.37	9.37	9.75	10.02
30	9.99	9.45	8.93	8.89	---	9.53	8.62	9.13	9.39	9.40	9.72	10.02
31	10.00	---	8.94	8.94	---	9.49	---	9.00	---	9.46	9.69	---
MAX	10.00	---	9.52	9.10	9.37	9.58	---	9.13	9.39	9.46	9.85	10.02
WTR YR 1987 MEAN	9.24			HIGH	8.11	APR 12	LOW	10.02	SEP 27	AND OTHERS		

GROUND-WATER RECORDS

307

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, 15.64 ft below land-surface datum, Nov. 3, 1985; minimum daily low, 6.64 ft below land-surface datum, July 14, 1969.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.01	15.00	14.38	13.39	13.23	13.83	---	12.70	13.41	13.91	13.87	14.48
2	14.98	15.00	14.25	13.42	13.20	13.83	14.03	12.72	13.36	13.86	13.92	14.50
3	14.94	15.01	13.87	13.44	13.22	13.78	13.96	12.73	13.37	---	13.98	14.52
4	14.89	15.02	13.54	13.45	13.23	13.76	13.83	12.72	13.41	---	13.98	14.54
5	14.82	15.03	13.31	13.48	13.23	13.75	13.76	12.66	13.44	---	13.99	14.56
6	14.73	15.04	13.20	13.48	13.23	13.76	13.67	12.62	13.47	---	14.02	14.59
7	14.68	15.04	13.17	13.52	13.24	13.76	13.42	12.64	13.50	---	14.05	14.60
8	14.66	15.05	13.16	13.52	13.30	13.78	13.05	12.71	13.55	12.73	14.09	14.63
9	14.67	15.05	---	13.53	13.32	13.83	12.78	12.74	13.52	12.78	14.11	14.65
10	14.68	15.05	---	13.52	13.36	13.84	12.59	12.77	13.41	12.84	14.14	14.67
11	14.69	15.05	---	13.54	13.37	13.86	12.40	12.81	13.37	12.90	14.17	14.68
12	14.70	15.05	---	13.56	13.41	13.87	12.27	12.89	13.39	12.96	14.20	14.69
13	14.72	15.05	---	13.57	13.41	13.88	12.19	12.94	13.41	13.00	14.23	14.69
14	14.74	15.05	---	13.58	13.44	13.89	12.19	12.99	13.44	13.08	14.27	14.69
15	14.74	15.05	---	13.58	13.47	13.91	12.23	13.01	13.47	13.11	14.29	14.71
16	14.75	15.05	---	13.57	13.49	13.93	12.26	13.05	13.52	13.18	14.32	14.73
17	14.78	15.05	13.19	13.50	13.52	13.93	12.30	13.10	13.55	13.22	14.35	14.75
18	14.80	15.05	13.23	13.45	13.56	13.94	12.35	13.10	13.58	13.26	14.37	14.75
19	14.81	15.05	13.24	13.41	13.59	13.96	12.40	13.11	13.60	13.33	14.42	14.75
20	14.83	15.04	13.29	13.36	13.60	13.98	12.45	13.13	13.63	13.38	14.45	14.75
21	14.85	15.00	13.33	13.22	13.63	14.00	12.50	13.17	13.66	13.43	14.47	14.74
22	14.87	14.95	13.35	13.10	13.65	14.01	12.55	13.20	13.67	13.45	14.48	14.74
23	14.89	14.90	13.37	13.08	13.70	14.03	12.58	13.23	13.70	13.50	14.43	14.74
24	14.91	14.88	13.37	13.09	13.73	14.04	12.59	13.25	13.73	13.54	14.42	14.75
25	14.91	14.87	13.40	13.09	13.75	14.06	12.59	13.31	13.74	13.58	14.45	14.75
26	14.92	14.84	13.39	13.12	13.80	14.08	12.57	13.34	13.78	13.63	14.46	14.78
27	14.93	14.78	13.33	13.15	13.81	14.10	12.57	13.37	13.83	13.68	14.41	14.79
28	14.94	14.60	---	13.20	13.83	14.12	12.57	13.38	13.86	13.72	14.39	14.80
29	14.95	14.47	---	13.20	---	14.14	12.63	13.41	13.90	13.76	14.38	14.80
30	14.97	14.40	13.36	13.22	---	14.14	12.67	13.45	13.92	13.81	14.40	14.82
31	14.99	---	13.39	13.23	---	14.10	---	13.45	---	13.83	14.45	---
MAX	15.01	15.05	---	13.58	13.83	14.14	---	13.45	13.92	---	14.48	14.82
WTR YR 1987 MEAN	13.83			HIGH	12.19	APR 13 AND OTHERS		LOW	15.05	NOV 8 AND OTHERS		

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, 1.05 ft below land-surface datum, July 9, 1969.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.22	9.18	8.95	7.42	8.50	8.65	8.58	6.24	7.60	8.05	9.38	9.00
2	9.99	9.21	8.90	7.12	8.50	8.67	8.60	6.24	7.55	7.77	9.45	9.17
3	10.07	9.56	8.62	7.37	8.53	8.54	8.51	5.92	7.33	7.00	9.42	9.20
4	9.49	9.71	7.17	7.50	8.53	8.61	---	5.92	7.75	6.39	9.14	9.27
5	9.14	9.85	6.68	7.74	8.53	8.55	---	6.62	7.87	5.78	9.39	9.27
6	9.30	9.93	6.10	7.98	8.57	8.50	---	6.61	7.45	5.11	9.37	8.83
7	9.09	9.95	6.39	8.05	8.51	8.61	---	6.76	7.40	5.36	9.40	8.87
8	9.29	9.82	6.77	8.13	8.38	8.60	---	6.90	7.35	5.50	9.62	9.12
9	9.19	9.44	6.97	8.10	8.48	8.62	---	7.05	7.71	5.97	9.31	9.36
10	9.29	9.88	7.10	8.18	8.36	8.79	---	6.88	7.70	6.06	8.97	9.30
11	9.13	9.57	7.07	8.25	8.60	8.90	---	6.78	7.38	6.38	9.05	9.15
12	9.30	9.94	7.20	8.18	8.57	8.96	---	7.24	7.50	6.50	9.44	9.17
13	9.63	10.01	7.16	8.36	8.73	8.98	---	7.23	7.59	6.50	9.06	9.15
14	9.74	9.78	6.85	8.45	8.51	9.03	---	7.21	7.68	6.78	9.35	9.16
15	9.80	9.65	7.33	8.71	8.32	8.68	---	7.32	7.92	6.75	9.55	9.31
16	9.77	9.75	7.47	8.66	8.42	8.69	---	7.45	8.12	7.10	9.70	9.46
17	9.79	10.03	7.54	8.60	8.57	9.05	---	7.42	8.15	7.42	9.67	9.46
18	9.61	9.94	7.54	8.10	8.65	9.13	---	7.24	7.86	7.57	9.93	9.25
19	9.35	10.23	7.64	8.10	8.70	8.95	---	7.48	8.21	7.87	9.85	9.11
20	9.85	10.18	7.45	7.97	8.60	8.85	---	7.57	8.62	7.67	9.70	8.86
21	9.92	10.14	7.48	8.31	8.66	8.55	---	7.58	8.07	7.95	9.70	9.00
22	9.88	9.83	7.47	7.97	8.23	8.71	---	7.58	7.89	8.07	9.82	9.05
23	9.96	9.65	7.69	7.98	8.40	9.10	---	7.56	8.26	8.32	9.97	8.99
24	10.14	10.00	7.75	7.95	8.55	9.18	---	7.42	8.25	8.60	9.90	9.08
25	10.16	9.91	7.68	---	8.65	8.86	---	7.30	8.50	8.68	9.79	9.29
26	9.80	9.66	7.01	8.28	8.80	9.15	---	7.88	8.48	8.60	9.83	9.08
27	9.73	9.13	6.99	8.22	8.65	9.10	---	8.09	8.68	8.65	9.83	9.03
28	9.89	9.02	7.06	8.55	8.72	8.82	---	8.21	8.34	8.95	9.60	9.30
29	9.91	8.82	7.15	8.51	---	8.78	6.14	8.21	8.50	8.50	9.39	9.35
30	9.76	8.94	7.55	8.63	---	8.68	6.63	7.90	8.60	9.55	9.33	9.42
31	9.86	---	7.72	8.54	---	8.62	---	7.93	---	9.50	9.41	---
MAX	10.22	10.23	8.95	---	8.80	9.18	---	8.21	8.68	9.55	9.97	9.46
WTR YR 1987 MEAN	8.48		HIGH		5.11	JUL 6	LOW		10.23	NOV 19		

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UNION COUNTY

LOCATION.--Lat 40°18'26", long 83°25'52", Hydrologic Unit 05060001, 2.6 mi southeast of Raymond.

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, 24.69 ft below land-surface datum, Oct. 17, 1985; minimum daily low, 19.32 ft below land-surface datum, Feb. 24, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

WTR YR 1987	MEAN	22.09	HIGH	20.38	DEC 3	LOW	24.08	SEP 28
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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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81.48	81.75	81.11	80.72	80.82	81.03	82.90	82.96	83.34	---	85.90	86.62
2	81.43	81.58	80.96	80.59	80.63	81.19	82.91	82.85	83.25	---	85.93	86.77
3	81.34	81.55	80.89	80.67	80.96	81.43	82.91	82.83	83.24	---	86.10	86.81
4	81.35	81.44	81.00	80.72	80.97	81.47	82.79	83.04	83.33	---	86.14	86.83
5	81.40	81.50	81.17	80.75	80.99	81.41	82.90	83.10	83.42	---	86.18	86.76
6	81.43	81.41	81.15	80.69	80.99	81.45	82.94	83.01	83.42	---	86.41	86.72
7	81.41	81.48	81.13	80.64	80.86	81.41	82.93	83.01	83.28	---	86.39	86.70
8	81.39	81.37	80.94	80.64	80.78	81.36	82.81	83.08	83.33	---	86.49	86.56
9	81.43	81.30	80.81	80.51	80.95	81.56	82.79	83.18	83.44	---	86.36	86.66
10	81.55	81.38	80.84	80.32	80.97	81.70	82.74	83.10	83.48	---	86.38	86.68
11	81.62	81.30	80.86	80.31	80.96	81.96	82.79	83.15	83.56	---	86.65	86.69
12	81.58	81.33	80.86	80.31	81.09	82.11	82.73	83.24	83.38	---	86.52	86.71
13	81.36	81.44	81.10	80.41	81.11	82.12	82.78	83.45	83.44	---	86.55	86.54
14	81.51	81.43	80.98	80.48	81.06	82.15	82.82	83.36	83.30	---	86.84	86.64
15	81.56	81.35	80.96	80.51	81.46	82.18	82.73	83.33	83.32	---	86.71	86.83
16	81.60	81.13	80.99	80.58	81.58	82.29	82.45	83.55	83.43	---	86.66	86.73
17	81.70	81.12	80.98	80.60	81.52	82.33	82.36	83.42	83.53	---	86.63	86.74
18	81.81	81.15	80.93	80.46	81.58	82.33	82.51	83.35	83.48	---	86.73	86.78
19	81.75	81.23	80.95	80.36	81.84	82.35	82.59	83.35	83.54	---	86.89	86.72
20	81.67	81.15	80.93	80.45	81.82	82.41	82.70	83.45	83.73	---	86.97	86.72
21	81.54	81.14	80.98	80.42	81.64	82.59	82.73	83.45	83.64	---	86.88	86.77
22	81.51	81.18	80.92	80.37	81.54	82.57	82.75	83.50	83.60	85.32	86.90	86.72
23	81.52	81.13	80.95	80.54	81.56	82.57	82.71	83.46	---	85.37	86.97	86.80
24	81.58	81.09	80.76	80.50	81.66	82.59	82.92	83.40	---	85.66	87.00	86.76
25	81.58	81.11	80.92	80.50	81.58	82.65	83.07	83.50	---	85.74	86.95	86.85
26	81.48	80.99	80.92	80.64	81.53	82.69	82.95	83.38	---	85.85	86.85	86.86
27	81.42	81.08	80.93	80.69	81.38	82.67	82.91	83.51	---	85.95	86.78	86.81
28	81.48	81.06	80.99	80.78	81.34	82.94	82.97	83.32	---	85.83	86.89	86.73
29	81.64	81.09	80.99	80.82	---	82.85	82.95	83.38	---	85.91	86.85	86.76
30	81.64	81.04	80.91	80.68	---	82.67	83.01	83.43	---	85.95	86.82	86.68
31	81.71	---	80.94	80.82	---	82.86	---	83.43	---	85.89	86.54	---
MAX	81.81	81.75	81.17	80.82	81.84	82.94	83.07	83.55	---	---	87.00	86.86
WTR YR 1987 MEAN	82.86		HIGH		80.31	JAN 11 AND OTHERS		LOW	87.00		AUG 24	

311

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.

REMARKS.--Station operated by Ohio Department
PERIOD OF RECORD.--March 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 44.60 ft below land-surface datum, Oct. 29, 1983; minimum daily low, 17.70 ft below land-surface datum, Apr. 30, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43.35	43.85	43.30	42.40	42.15	42.05	42.20	41.95	42.00	41.75	42.45	43.40
2	43.50	43.90	42.90	42.80	42.20	42.30	42.35	41.95	41.90	41.50	42.50	43.50
3	43.30	43.50	43.05	42.85	42.40	42.50	42.25	42.15	41.90	41.55	42.60	43.60
4	43.55	43.65	43.30	42.85	42.65	42.30	42.20	42.30	41.90	41.55	42.60	43.65
5	43.60	43.30	43.40	42.85	42.35	42.15	42.20	42.30	41.90	41.55	42.60	43.85
6	43.70	43.60	43.20	42.50	42.15	42.25	42.10	42.15	41.80	41.60	42.80	43.70
7	43.65	43.70	42.95	42.70	42.05	42.15	42.00	42.20	41.75	41.50	42.85	43.70
8	43.50	43.75	42.80	42.70	42.30	41.90	41.95	42.35	41.70	41.65	42.80	43.70
9	43.70	43.65	42.70	42.50	42.50	42.10	42.05	42.20	41.75	41.70	42.75	43.70
10	43.70	43.75	42.95	42.50	42.35	42.30	41.95	42.25	41.80	41.60	42.80	43.85
11	43.70	43.50	42.80	42.70	42.15	42.15	41.90	42.45	41.60	41.60	42.75	43.80
12	43.60	43.65	42.85	42.60	42.25	42.25	41.95	42.55	41.40	41.50	42.80	43.65
13	43.50	43.90	43.25	42.65	42.35	42.30	42.15	42.60	41.45	41.50	42.95	43.65
14	43.55	43.55	42.90	42.55	42.15	41.95	41.80	42.60	41.40	41.60	43.10	43.80
15	43.80	43.40	42.95	42.55	42.35	42.05	41.70	42.65	41.55	41.55	43.15	43.80
16	43.75	43.35	42.70	42.70	42.15	42.25	41.80	42.45	41.70	41.65	42.95	43.70
17	43.70	43.45	42.75	42.55	42.15	42.25	41.85	42.65	41.80	41.60	43.25	43.55
18	44.00	43.65	42.80	42.35	42.60	42.05	42.05	42.55	41.85	41.60	43.20	43.70
19	43.85	43.65	42.75	42.35	42.55	42.10	42.10	42.40	41.80	41.50	43.15	43.75
20	43.85	43.40	42.85	42.55	42.45	42.15	42.20	42.45	41.60	41.65	43.35	43.80
21	43.55	43.80	43.00	42.50	42.15	42.20	42.10	42.55	41.50	41.85	43.30	43.90
22	43.65	43.65	42.85	42.10	42.10	42.20	42.15	42.55	41.65	41.80	43.25	43.90
23	43.55	43.55	42.80	42.45	42.45	42.10	42.20	42.55	41.70	41.85	43.35	43.90
24	43.55	43.65	42.50	42.55	42.35	42.15	42.15	42.50	41.75	42.20	43.45	43.85
25	43.35	43.50	42.70	42.45	42.35	42.15	42.20	42.25	41.65	42.20	43.35	44.05
26	43.45	43.35	42.95	42.40	42.30	42.25	42.10	42.35	41.90	42.15	43.10	44.10
27	43.55	43.65	42.90	42.45	42.15	42.15	41.95	42.35	42.05	42.10	43.35	44.00
28	43.60	43.45	42.75	42.30	42.00	42.35	42.00	42.15	42.05	42.00	43.60	44.15
29	43.75	43.40	42.50	42.30	---	42.15	41.80	42.30	42.05	42.10	43.45	44.05
30	43.65	43.25	42.70	42.30	---	42.15	41.90	42.20	42.05	42.45	43.20	43.95
31	43.75	---	42.70	42.45	---	42.35	---	42.05	---	42.45	43.25	---
MAX	44.00	43.90	43.40	42.85	42.65	42.50	42.35	42.65	42.05	42.45	43.60	44.15
WTR YR 1987	MEAN	42.66		HIGH	41.40	JUN 12 AND OTHERS		LOW	44.15	SEP 28		

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, 38.70 ft below land-surface datum, Feb. 26, 1987; minimum daily low, 18.72 ft below land-surface datum, June 28, 1972.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34.30	34.00	32.45	34.50	37.55	38.15	36.85	33.75	36.00	36.00	37.10	36.45
2	34.05	33.90	32.25	34.75	37.40	38.20	36.70	33.90	36.00	35.90	37.15	36.55
3	34.05	33.80	31.35	34.85	37.30	38.25	36.10	33.95	36.00	35.60	37.25	36.55
4	34.05	33.95	31.25	34.90	37.30	38.35	35.70	33.80	35.90	34.80	37.25	36.65
5	33.90	33.85	31.05	35.05	37.10	38.20	34.85	33.75	35.90	34.10	37.30	36.70
6	32.55	33.75	31.35	35.55	36.85	38.40	34.80	33.70	35.80	34.00	37.25	36.70
7	32.70	33.85	31.35	35.75	37.05	38.30	33.90	33.85	36.05	34.05	37.30	36.75
8	32.45	33.65	31.55	35.90	37.10	38.20	32.55	34.20	35.95	34.00	37.40	36.85
9	32.35	33.30	31.65	36.00	37.55	38.45	31.35	34.75	36.20	34.10	37.15	36.80
10	32.45	32.80	31.65	36.00	37.55	38.50	31.05	34.75	36.00	34.05	37.15	36.90
11	32.45	32.45	31.25	36.10	37.45	38.45	31.00	34.90	36.20	34.15	37.00	37.05
12	32.50	32.25	31.45	36.30	37.50	38.15	30.95	35.00	36.20	34.40	37.00	37.15
13	32.55	---	31.55	36.45	37.75	37.85	31.15	35.35	36.10	34.85	37.00	37.25
14	32.65	---	31.80	36.50	37.80	37.60	31.30	35.50	36.10	35.35	37.00	37.25
15	32.75	---	32.20	36.60	37.55	37.45	31.50	35.60	35.70	35.50	37.05	37.30
16	33.15	---	32.65	36.75	37.60	37.35	31.95	35.75	35.95	35.70	36.85	37.30
17	33.25	---	33.00	36.80	37.70	37.30	32.10	35.45	35.80	35.95	36.85	37.40
18	33.30	---	33.35	36.80	38.00	37.30	32.00	35.50	35.75	36.05	37.10	37.40
19	33.35	---	33.75	36.90	38.00	37.40	32.20	35.65	36.15	36.10	36.85	37.25
20	33.25	---	33.85	36.85	38.10	37.55	32.50	35.70	36.35	36.20	36.90	37.15
21	33.35	---	33.95	36.70	38.20	37.65	32.85	35.60	36.40	36.30	36.85	37.00
22	33.90	---	34.15	36.30	38.05	37.70	33.05	35.60	36.30	36.45	36.85	36.75
23	33.90	---	34.30	36.00	38.40	37.55	33.55	35.55	35.85	36.55	36.75	36.75
24	33.60	---	34.50	36.50	38.45	37.60	33.60	35.75	35.40	36.60	36.85	36.65
25	33.90	---	34.30	36.65	38.65	37.15	33.50	35.75	35.05	36.65	36.85	36.85
26	33.85	---	33.85	36.95	38.70	37.15	32.60	35.90	34.90	36.75	36.85	37.00
27	33.90	---	33.80	37.10	38.50	36.90	32.85	35.90	34.90	36.85	37.05	37.05
28	33.90	---	33.60	37.35	38.10	36.85	33.10	35.65	34.90	36.90	37.05	37.20
29	34.00	---	33.60	37.30	---	36.85	33.35	35.60	35.40	37.00	36.75	37.25
30	33.80	---	33.90	37.45	---	36.80	33.60	35.90	35.85	37.10	36.70	37.35
31	33.90	---	34.30	37.10	---	36.80	---	35.80	---	37.10	36.60	---
MAX	34.30	---	34.50	37.45	38.70	38.50	36.85	35.90	36.40	37.10	37.40	37.40
WTR YR 1987 MEAN		35.50			30.95	APR 12		LOW	38.70	FEB 26		

GROUND-WATER RECORDS

313

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 for 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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---		---	11.46			---		
2				---		---	11.19			---		
3				---		---	11.34			---		
4				---		---	11.69			---		
5				---		---	11.76			---		
6				---		---	10.43			---		
7				---		---	10.73			---		
8				---		---	11.11			---		
9				---		---	11.36			---		
10				---		---	11.64			---		
11				---		---	11.86			---		
12				---		---	11.94			---		
13				---		---	12.01			---		
14				13.49		---	12.09			---		
15				---		---	12.17			---		
16				---		---	12.23			---		
17				---		14.31	12.30			---		
18				---		14.32	12.38			---		
19				---		14.34	12.47			---		
20				---		14.35	12.57			---		
21				---		14.37	12.61			---		
22				---		14.39	---			---		
23				---		14.40	---			---		
24				---		14.42	---			13.58		
25				---		14.44	---			---		
26				---		14.46	---			---		
27				---		14.49	---			---		
28				---		14.51	---			---		
29				---		14.53	---			---		
30				---		14.54	---			---		
31				---		11.64	---			---		
MAX				---		---	---			---		
WTR YR 1987	MEAN	12.84		HIGH	10.43	APR 6	LOW	14.54	MAR 30			

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, 34.45 ft below land-surface datum, Feb. 17, 1972; minimum daily low, 2.35 ft below land-surface datum, Jan. 28, 1952.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.75	29.77		---	30.89	31.79	33.74	29.26	30.57	33.02	28.12	30.28
2	30.50	29.69		---	30.82	31.97	33.89	29.27	30.44	32.93	27.73	30.28
3	29.50	30.04		---	31.21	32.31	33.98	28.65	30.67	31.04	27.98	30.32
4	29.78	30.21		---	31.33	32.49	33.64	28.95	30.55	28.38	28.03	30.48
5	29.61	30.42		---	31.40	32.72	33.47	29.16	30.68	25.77	28.46	30.48
6	28.95	30.53		---	31.44	32.72	33.55	29.33	30.52	25.29	28.45	29.60
7	29.07	30.57		---	31.46	32.64	33.52	29.50	30.40	25.18	28.77	29.33
8	29.16	30.35		---	31.01	32.29	33.36	29.88	30.52	25.35	28.84	29.91
9	29.13	30.17		---	31.16	32.54	32.42	29.94	30.88	25.75	28.38	30.24
10	29.13	30.68		---	31.42	32.76	31.29	29.45	31.07	25.78	28.40	30.79
11	28.96	31.31		---	31.42	32.83	30.07	29.70	31.14	25.71	28.39	31.00
12	28.94	31.16		---	31.50	33.00	29.04	29.90	31.31	25.34	28.94	31.00
13	29.01	31.36		---	31.43	32.97	28.76	29.94	31.31	25.73	29.25	30.76
14	29.26	31.28		30.92	31.24	32.75	28.83	30.09	31.16	25.93	29.65	30.98
15	29.21	31.14		31.21	31.06	32.67	28.95	30.28	31.82	25.96	29.64	31.26
16	29.26	30.90		31.21	30.93	32.87	28.87	30.29	32.29	26.17	29.17	31.46
17	29.31	31.35		30.99	31.42	32.90	28.40	29.88	32.38	25.95	29.23	31.38
18	29.13	31.49		30.70	31.67	32.93	28.27	29.95	32.14	26.03	29.75	31.46
19	29.10	31.62		30.79	31.77	33.22	28.10	30.17	32.18	26.47	30.15	31.25
20	29.09	31.78		30.95	31.81	33.24	28.58	30.35	31.80	26.74	30.29	30.84
21	29.09	31.51		31.13	31.83	33.25	29.35	30.36	31.62	26.93	30.25	31.19
22	29.13	31.37		31.13	31.58	32.93	29.16	30.27	31.74	27.14	30.11	31.38
23	29.39	31.40		31.21	31.87	33.19	29.46	30.22	31.92	28.22	29.82	31.55
24	29.46	31.78		30.89	32.07	33.33	29.59	30.06	32.29	28.55	29.91	31.55
25	29.34	31.95		30.66	32.16	33.44	29.04	30.14	32.67	28.55	30.26	31.39
26	29.13	32.10		30.99	32.19	33.50	28.53	30.66	32.78	27.34	30.31	31.27
27	29.45	31.71		31.07	32.21	33.58	29.00	30.89	32.91	27.54	30.39	31.15
28	29.71	31.55		31.25	32.05	33.46	29.04	30.70	32.94	27.85	29.97	32.13
29	30.06	31.43		31.19	---	33.33	29.61	30.65	32.76	28.42	30.11	32.64
30	30.19	31.25		31.11	---	33.65	29.30	30.59	32.99	28.20	29.70	32.79
31	30.07	---		30.91	---	33.73	---	30.55	---	28.34	29.99	---
MAX	30.75	32.10		---	32.21	33.73	33.98	30.89	32.99	33.02	30.39	32.79
WTR YR 1987 MEAN	30.47				25.18	JUL 7	LOW	33.98	APR 3			

GROUND-WATER RECORDS

315

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, 24.25 ft below land-surface datum, Jan. 1, 1984; minimum daily low, 5.38 ft below land-surface datum, Jan. 17, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.15	22.20	---	19.80	20.90	19.60	18.70	18.40	20.10	18.70	19.75	19.10
2	19.75	20.50	19.40	19.90	20.50	19.65	18.70	18.45	18.90	18.50	19.60	19.15
3	21.30	20.75	19.40	19.85	20.45	19.50	18.60	18.25	18.90	20.00	19.50	19.25
4	20.25	21.90	19.40	18.40	20.75	18.40	18.50	18.40	18.90	18.75	20.65	19.25
5	19.60	21.85	19.35	20.70	20.95	20.90	18.45	18.45	18.95	18.50	19.45	19.20
6	19.80	20.45	20.90	20.40	20.40	21.15	18.50	20.15	18.95	18.25	19.50	19.15
7	19.90	22.05	20.00	20.45	20.45	20.85	18.45	20.25	18.90	18.35	20.75	19.00
8	20.00	21.40	19.50	20.00	20.15	20.30	18.50	18.80	20.40	18.40	19.15	20.05
9	20.00	20.85	19.40	20.60	19.80	18.70	18.45	18.85	18.95	18.40	19.05	20.10
10	20.10	21.05	19.45	20.30	20.20	18.65	18.45	18.85	18.85	21.20	18.70	19.00
11	20.05	20.65	19.25	20.30	21.10	18.60	18.30	20.35	18.70	20.05	18.80	19.00
12	19.80	21.50	18.95	20.30	20.35	18.50	18.10	19.15	18.70	18.60	18.85	18.85
13	20.75	20.35	19.10	20.50	20.15	18.40	19.50	19.15	18.70	20.15	20.40	18.80
14	20.30	20.00	18.95	18.75	20.25	19.90	18.15	19.10	18.70	19.10	20.30	20.05
15	19.95	20.05	20.50	18.60	20.15	18.40	18.05	19.00	20.30	18.85	19.05	18.85
16	20.00	21.15	19.00	18.70	20.30	20.55	18.00	19.05	20.35	18.70	20.20	18.80
17	19.90	19.95	20.15	21.15	20.15	20.95	17.95	19.05	20.35	18.75	20.15	18.80
18	21.00	21.05	18.65	21.60	20.30	19.00	18.20	19.00	20.45	18.85	20.20	18.90
19	19.70	19.90	19.00	21.60	20.10	18.65	18.15	18.60	19.10	18.85	20.55	18.95
20	21.50	21.25	19.15	21.35	20.85	18.70	19.65	21.25	18.90	18.95	19.15	19.00
21	20.40	19.85	19.20	21.60	21.05	20.00	18.10	18.75	18.65	20.50	20.50	19.30
22	21.45	21.15	20.45	21.60	19.35	19.90	18.05	18.75	18.65	20.90	19.15	20.30
23	20.35	19.85	19.50	21.65	19.55	18.50	17.90	20.15	18.70	20.50	18.85	19.35
24	20.25	22.25	19.20	21.95	18.90	18.80	17.90	18.50	18.75	20.75	18.70	19.35
25	21.45	21.85	18.90	21.40	20.40	18.85	19.60	19.95	20.20	19.35	18.95	19.35
26	21.15	19.85	19.00	21.30	20.20	18.85	18.00	18.70	18.90	19.30	19.00	19.30
27	21.20	21.60	19.00	21.20	20.10	18.80	18.30	20.35	18.80	19.35	18.90	19.40
28	20.50	21.05	18.90	19.30	19.80	18.80	18.25	18.85	18.60	20.40	18.90	19.40
29	20.20	20.90	18.50	20.85	---	18.85	18.20	20.50	18.75	19.50	18.80	19.10
30	20.80	20.10	18.55	20.70	---	18.75	18.30	20.35	18.80	20.90	18.85	19.05
31	21.45	---	18.55	18.70	---	18.65	---	18.75	---	21.00	18.95	---
MAX	21.50	22.25	---	21.95	21.10	21.15	19.65	21.25	20.45	21.20	20.75	20.30
WTR YR 1987 MEAN	19.63		HIGH		17.90	APR 23 AND OTHERS		LOW	22.25		NOV 24	

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.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78.08	79.00	78.43	77.22	77.57		---	83.21	84.01	78.49	77.68	77.46
2	78.08	78.95	78.19	77.14	83.67		---	83.15	83.73	83.56	77.56	77.50
3	78.05	78.89	77.97	77.49	---		---	83.44	84.17	78.36	77.55	77.63
4	77.83	78.80	78.25	77.58	85.44		---	83.59	84.20	78.48	77.55	77.63
5	77.96	78.80	78.42	77.64	---		---	83.60	84.24	78.49	77.66	77.57
6	78.20	78.84	78.40	77.44	---		---	83.46	78.51	78.07	77.73	77.48
7	78.25	78.88	78.34	77.44	---		---	83.41	76.94	78.57	77.75	77.40
8	78.12	78.81	78.09	77.49	---		---	83.49	77.29	77.92	77.70	77.27
9	78.32	79.00	77.86	77.45	---		---	83.45	77.52	77.98	77.57	77.36
10	78.36	79.15	78.10	77.07	---		---	83.38	78.18	77.95	77.69	77.38
11	78.25	78.94	78.10	77.16	---		---	83.34	78.16	77.93	77.73	77.31
12	78.15	78.94	78.05	77.35	---		---	83.55	77.94	77.87	77.60	77.31
13	77.99	79.24	78.49	77.52	---		---	83.58	77.98	77.78	77.62	77.39
14	85.97	78.96	78.41	77.33	---		---	83.46	77.28	77.84	77.66	77.52
15	---	78.81	78.15	77.58	---		---	83.56	78.14	77.90	77.64	77.53
16	---	78.60	78.09	77.77	---		---	83.57	78.24	77.99	77.52	77.40
17	---	78.57	78.01	77.76	---		---	83.41	78.43	78.09	77.48	77.26
18	---	78.64	77.80	77.43	---		---	83.35	78.44	78.05	77.59	77.23
19	---	78.97	77.92	77.40	---		---	83.34	78.22	77.95	77.57	77.36
20	---	78.76	78.05	77.58	---		---	83.48	78.14	77.98	77.70	77.37
21	78.76	78.86	78.20	77.58	---		77.73	83.52	78.05	78.01	77.70	77.44
22	78.74	78.90	78.09	77.43	---		77.73	83.51	78.05	77.97	77.57	77.46
23	78.73	78.76	77.80	77.45	---		77.64	83.59	78.26	77.85	77.70	77.46
24	78.02	78.97	77.58	77.73	---		77.91	83.60	78.36	77.93	77.82	77.32
25	78.77	78.98	77.44	77.75	---		77.97	83.56	78.27	77.91	77.73	77.46
26	78.52	78.68	77.57	77.67	---		77.92	83.48	78.18	77.78	77.66	82.87
27	78.55	78.39	77.58	77.67	---		77.85	83.38	78.25	77.72	77.44	81.94
28	78.76	78.34	77.54	77.71	---		83.28	82.90	78.37	77.71	77.46	77.67
29	78.75	78.33	77.43	77.72	---		83.12	82.82	78.40	77.71	77.63	77.57
30	79.05	78.39	77.21	77.27	---		83.22	82.80	78.47	77.69	77.62	77.35
31	79.08	---	77.36	77.61	---		---	82.64	---	77.74	77.44	---
MAX	---	79.24	78.49	77.77	---		---	83.60	84.24	83.56	77.82	82.87
WTR YR 1987	MEAN	78.84		HIGH	76.94	JUN 7	LOW	85.97	OCT 14			

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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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