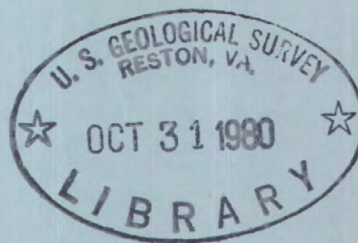


(200)
Ga 3
OHIO
1979
V. 1



Water Resources Data for Ohio

Volume 1. Ohio River Basin



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OH-79-1
WATER YEAR 1979

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

CALENDAR FOR WATER YEAR 1979

1 9 7 8

O C T O B E R

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

N O V E M B E R

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

D E C E M B E R

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

1 9 7 9

J A N U A R Y

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

F E B R U A R Y

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

M A R C H

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

A P R I L

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

M A Y

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

J U N E

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

J U L Y

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

A U G U S T

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

S E P T E M B E R

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



Water Resources Data for Ohio

Volume 1. Ohio River Basin

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OH-79-1
WATER YEAR 1979

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

UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY

H. William Menard, Director

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

1980

PREFACE

This report was prepared by personnel of the Ohio district of the Water Resources Division of the U.S. Geological Survey under the supervision of S.M. Hindall, District Chief, and J.E. Biesecker, Regional Hydrologist, Northeastern Region. It was done in cooperation with the State of Ohio and with other agencies.

This report is one of a series issued State by State under the general direction of P. Cohen, Chief Hydrologist, U.S. Geological Survey, and S. Lang, Acting Assistant Chief Hydrologist for Scientific Publications and Data Management.

III

Data for Ohio are in three volumes as follows:

- Volume 1. Ohio River basin
- Volume 2. St. Lawrence River basin
- Volume 3. Coal Hydrology

REPORT DOCUMENTATION PAGE		1. REPORT NO. USGS-WRD/HD-80/061	2.	3. Recipient's Accession No.
4. Title and Subtitle Water Resources Data for Ohio, 1979 Volume 1. Ohio River Basin				5. Report Date July 1980
7. Author(s)				6.
9. Performing Organization Name and Address U.S. Geological Survey, Water Resources Division 975 West Third Avenue Columbus, Ohio 43212				8. Performing Organization Rept. No. USGS-WDR-OH-79-1
12. Sponsoring Organization Name and Address U.S. Geological Survey, Water Resources Division 975 West Third Avenue Columbus, Ohio 43212				10. Project/Task/Work Unit No.
				11. Contract(C) or Grant(G) No. (C) (G)
				13. Type of Report & Period Covered Annual - Oct. 1, 1978 to Sept. 30, 1979
15. Supplementary Notes Prepared in cooperation with the State of Ohio and with other agencies.				14.
16. Abstract (Limit: 200 words) Water resources data for the 1979 water year for Ohio consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground-water wells. This report in three volumes contains records for water discharge at 197 gaging stations; stage and contents at 32 lakes and reservoirs; water quality at 54 gaging stations and 49 wells; and water levels at 157 observation wells. Also included are data for 58 crest-stage partial-record stations; 26 low-flow partial-record stations, and 311 coal hydrology synoptic sites. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data represent that part of the National Water 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, Benthic Fauna.				
b. Identifiers/Open-Ended Terms				
c. COSATI Field/Group				
18. Availability Statement No restriction on distribution. This report may be purchased from: National Technical Information Service, Springfield, VA 22161		19. Security Class (This Report)		21. No. of Pages 487
		20. Security Class (This Page)		22. Price

CONTENTS

	Page
Preface	III
List of gaging stations, in downstream order, for which records are published	VI
List of ground water stations for which records are published	VIII
Introduction	1
Cooperation	1
Hydrologic conditions	2
Definition of terms	2
Downstream order and station number	7
Numbering system for wells and miscellaneous sites	7
Special network and programs	8
Explanation of stage and water-discharge records	8
Collection and computation of data	8
Accuracy of field data and computed results	10
Other data available	10
Records of discharge collected by agencies other than the Geological Survey	10
Explanation of water-quality records	10
Collection and examination of data	10
Water analysis	10
Water temperature	11
Sediment	11
Explanation of ground-water level records	11
Collection of data	11
Publications on techniques of water-resources investigations	12
Station records	16
Partial-record stations and miscellaneous sites	319
Low-flow partial-record stations	319
Crest-stage partial-record stations	322
Discharge at partial-record stations and miscellaneous sites	326
Ground-water records	327
Ground-water records in strip-mines	433
Chemical characteristics and biological indices of selected lakes	482
Index	483
Factors for converting inch-pound units to International System units (SI) .. Inside back cover	

ILLUSTRATIONS

Figure 1. System for numbering wells and miscellaneous sites (latitude and longitude)	7
Figure 2. Map showing location of data collection stations	14

(Letter after station name designates type of data: (b) biological, (c) chemical, (d) discharge, (e) contents and (or) elevation, (HBM) hydrologic bench mark, (m) microbiological, (NASQAN) National stream-quality accounting network, (r) radiochemical, (s) sediment, (t) temperature.)

Page

OHIO RIVER BASIN

Ohio River:

BEAVER RIVER BASIN	
Mahoning River (head of Beaver River) at Alliance (d)	16
Mahoning River below Berlin Dam, near Berlin Center (d)	17
Mahoning River at Pricetown (d)	18
Kale Creek near Pricetown (d)	19
West Branch Mahoning River near Ravenna (dt)	20
West Branch Mahoning River below M. J. Kirwan Dam, at Wayland (d)	23
West Branch Mahoning River near Newton Falls (d)	24
Eagle Creek at Phalanx Station (d)	25
Mahoning River above Duck Creek at Leavittsburg (ct)	26
Mahoning River at Leavittsburg (d)	31
Mosquito Creek below Mosquito Creek Dam, near Cortland (d)	32
Mahoning River at Youngstown (d)	33
Mahoning River at Lowellville (d)	34
Mahoning River at OH-PA State line below Lowellville (ct)	35
Shenango River:	
Pymatuning Creek at Kinsman (d)	40
Reservoirs in Beaver River basin (e)	41
LITTLE BEAVER CREEK BASIN	
Middle Fork Little Beaver Creek (head of Little Beaver Creek):	
West Fork Little Beaver Creek:	
Stateline Creek near Negley (c)	43
Little Beaver Creek near East Liverpool (d)	45
YELLOW CREEK BASIN	
Yellow Creek near Hammondsville (d)	46
CROSS CREEK BASIN	
Consol Run near Bloomingdale (c)	47
SHORT CREEK BASIN	
Short Creek near Dillonvale (d)	49
CAPTINA CREEK BASIN	
Captina Creek at Armstrongs Mills (d)	50
LITTLE MUSKINGUM RIVER BASIN	
Little Muskingum River at Bloomfield (d)	51
MUSKINGUM RIVER BASIN	
Tuscarawas River, Chippewa Creek at Easton (d)	52
Tuscarawas River at Massillon (d)	53
Tuscarawas River at Navarre (ct)	54
Sandy Creek at Waynesburg (d)	59
Middle Branch Nimishillen Creek (head of Nimishillen Creek) at Canton (d)....	60
Nimishillen Creek at North Industry (d)	61
Conotton Creek:	
McQuire Creek below Leesville Dam, near Leesville (d)	62
Tuscarawas River below Dover Dam, near Dover (d)	63
Sugar Creek below Beach City Dam, near Beach City (d)	64
Sugar Creek at Strasburg (d)	65
Beaver Dam Creek:	
Home Creek near New Philadelphia (d)	66
Stillwater Creek at Piedmont (d)	67
Stillwater Creek at Tippecanoe (d)	68
Stillwater Creek at Uhrichsville (d)	69
Clear Fork Tributary near Hanover (c)	70
Little Stillwater Creek below Tappan Dam, at Tappan (d)	72
Tuscarawas River at Newcomerstown (d)	73
Black Fork (head of Walhonding River) below Charles Mill Dam, near Mifflin (d) .	74
Black Fork at Loudonville (d)	75
Clear Fork below Pleasant Hill Dam, near Perrysville (d)	76
Mohican River (continuation of Black Fork):	
Lake Fork below Mohicanville Dam, near Mohicanville (d)	77
Mohican River at Greer (d)	78
Kokosing River at Mount Vernon (d)	80
Walhonding River (continuation of Mohican River) below Mohawk Dam, at Nellie (d)	81
Killbuck Creek at Killbuck (d)	82
Mill Creek near Coshocton (d)	83
Muskingum River (continuation of Tuscarawas River) near Coshocton (d)	84
Wills Creek:	
Seneca Fork below Senecaville Dam, near Senecaville (d)	85
Wills Creek at Cambridge (d)	86
Salt Fork below Salt Fork Dam, near Cambridge (d)	87
Wills Creek below Wills Creek Dam, at Wills Creek (d)	88
Wakatomika Creek near Frazeyburg (dc)	89
Sand Fork near Wakatomika (c)	91
Opossum Run tributary near Wakatomika (c)	93
Muskingum River at Dresden (d)	95
South Fork Licking River (head of Licking River) near Hebron (d)	96
North Fork Licking River at Utica (d)	97
Licking River near Newark (dct)	98
Licking River below Dillon Dam, near Dillon Falls (d)	104
Muskingum River at McConnelsville (dcbmts) ... (NASQAN)	105
Reservoirs in Muskingum River basin (e)	115
HOCKING RIVER BASIN	
Hocking River:	
Hunters Run at Lancaster (d)	121
Clear Creek near Rockbridge (d)	122

Hocking River at Enterprise (d)	123
Sunday Creek:	
East Branch Sunday Creek:	
Burr Oak Reservoir at Burr Oak (e)	124
Hocking River below Athens (dcbts)	125
SHADE RIVER BASIN	
Shade River near Chester (dc)	137
RACCOON CREEK BASIN	
Raccoon Creek:	
Sandy Run above Big Four Hollow Creek near Lake Hope (dc)	139
Big Four Hollow Creek below East Fork near Lake Hope (dc)	145
Big Four Hollow Creek near Lake Hope (dct)	149
Hull Hollow Creek near Lake Hope (dc)	160
Sandy Run below Hull Hollow Creek near Lake Hope (cs)	165
Raccoon Creek at Adamsville (dct)	169
#88 Mine Drainage above Big Four Hollow Creek near Lake Hope (c)	175
SCIOTO RIVER BASIN	
Scioto River near Prospect (d)	177
Mill Creek near Bellepoint (d)	178
Scioto River below O'Shaughnessy Dam near Dublin (d)	179
Olentangy River at Claridon (d)	180
Olentangy River near Delaware (d)	181
Olentangy River near Worthington (d)	182
Rush Run at Worthington	183
Linworth Road Creek at Columbus (d)	184
Bethel Road Creek at Columbus (d)	185
Olentangy River at Henderson Road at Columbus (d)	186
Scioto River at Columbus (d)	187
Big Walnut Creek at Central College (d)	188
Alum Creek near Kilbourne (d)	189
Alum Creek at Africa (d)	190
Alum Creek at Columbus (d)	191
Big Walnut Creek at Rees (d)	192
Scioto River below Shadeville (ct)	193
Big Darby Creek at Darbyville (d)	198
Scioto River at Circleville (d)	199
Deer Creek at Mount Sterling (d)	200
Deer Creek near Pancoastburg (d)	201
Deer Creek at Williamsport (d)	202
Scioto River at Chillicothe (dct)	203
Paint Creek near Greenfield (d)	209
Rattlesnake Creek at Centerfield (dt)	210
Paint Creek below Paint Creek Dam, near Bainbridge (d)	211
Rocky Fork near Barretts Mills (d)	212
Paint Creek near Bourneville (d)	213
Scioto River at Higby (dcbmts) ... (NASQAN)	214
Reservoirs in Scioto River basin (e)	224
UPPER TWIN CREEK BASIN	
Upper Twin Creek at McGaw (dcmstr) ... (HBM)	227
OHIO BRUSH CREEK BASIN	
Ohio Brush Creek near West Union (d)	235
WHITEOAK CREEK BASIN	
Whiteoak Creek near Georgetown (d)	236
LITTLE MIAMI RIVER BASIN	
Little Miami River near Oldtown (d)	237
Massies Creek at Wilberforce (d)	238
Little Miami River near Spring Valley (dct)	239
Caesar Creek near Xenia (d)	245
Anderson Fork near New Burlington (d)	246
Little Miami River at Milford (dcbmts) ... (NASQAN)	247
East Fork Little Miami River near Marathon (d)	256
East Fork Little Miami River near Batavia (d)	257
East Fork Little Miami River at Perintown (d)	258
Reservoirs in Little Miami River Basin (e)	259
MILL CREEK BASIN	
Mill Creek at Reading (d)	260
West Fork Mill Creek Lake near Greenhills (e)	261
West Fork Mill Creek at Woodlawn (d)	262
Mill Creek at Carthage (d)	263
GREAT MIAMI RIVER BASIN	
Great Miami River:	
Bokengehalas Creek near De Graff (d)	264
Great Miami River at Sidney (d)	265
Loramie Creek near Newport (d)	266
Loramie Creek at Lockington (d)	267
Great Miami River at Troy (d)	268
Great Miami River at Tippi City (ct)	269
Great Miami River at Taylorsville (d)	274
Stillwater River:	
Greenville Creek near Bradford (d)	275
Stillwater River at Pleasant Hill (d)	276
Stillwater River at Englewood (d)	277
Mad River at Zanesfield (d)	278
Mad River near Urbana (d)	279
Mad River (at St. Paris Pike) at Eagle City (d)	280
C.J. Brown Reservoir near Springfield (e)	281
Mad River near Springfield (d)	282
Mad River near Dayton (dct)	283
Great Miami River at Dayton (d)	289
Wolf Creek at Trotwood (d)	290
Great Miami River near Stewart Street at Dayton (ct)	291
Great Miami River at Miamisburg (d)	296
Great Miami River near Linden Avenue at Miamisburg (ct)	297
Twin Creek near Ingomar (d)	302
Twin Creek near Germantown (d)	303

VIII GAGING STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED.--Continued

	Page
Great Miami River at Rockdale (ct)	304
Fourmile Creek:	
Sevenmile Creek at Camden (d)	309
Great Miami River at Hamilton (d)	310
Great Miami River at New Baltimore (cbmts) ... (NASQAN)	311

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
ATHENS COUNTY			
391934082065000	AT-10	Athens (c)	327
391940082070000	AT-4	Athens (l)	328
392004082071600	AT-2A	Athens (l)	329
ASHLAND COUNTY			
405303082170700	AS-2	Ashland (l)	330
405425082173000	AS-3	Jerome Fork (l)	331
AUGLAIZE COUNTY			
403233083574500	AU-3	Southwest of New Hampshire (l)	332
BELMONT COUNTY			
400619080423200	B-1	Martins Ferry (l)	333
BUTLER COUNTY			
391805084261800	BU-9	Northwest of Sharonville (l)	334
391904084371800	BU-12	East of Ross (l)	335
392017084345200	BU-7	Fairfield (l)	336
392021084340300	BU-56	Fairfield (l)	337
392048084311400	BU-8	East of Hamilton (l)	338
392445084333000	BU-36	Hamilton (c)	339
392515084322000	BU-5	North of Hamilton (l)	340
392939084231700	BU-3	Middletown (l)	341
393103084240900	BU-2	Middletown (l)	342
393202084241500	BU-15	Middletown (l)	343
CARROLL COUNTY			
403709081052800	C-1	North of Carrollton (l)	344
CHAMPAIGN COUNTY			
400638083453900	CH-3	Urbana (l)	345
CLARK COUNTY			
395639084012200	CL-9	New Carlisle (l)	346
395835083491700	CL-20	North of Springfield (c)	347
395840083495200	CL-7	Northwest of Springfield (l)	348
CLERMONT COUNTY			
385144084133900	CT-2	Moscow (l)	349
COSHOCOTON COUNTY			
401256081525100	CS-3	North of Conesville (l)	350
401735081523800	CS-2	Coshocoton (l)	351
DARKE COUNTY			
400514084345700	D-2	East of Greenville (l)	352
DELAWARE COUNTY			
402126083040400	DL-3	Delaware (l)	353
FAIRFIELD COUNTY			
394257082362900	F-6	Lancaster (l)	354
394544082271000	F-1	West Rushville (l)	355
395053082361900	F-5	Baltimore (l)	356
FAYETTE COUNTY			
393153083322000	FA-1	West of Washington Court House (l)	357
FRANKLIN COUNTY			
395118082573300	FR-3	Southwest of Reese (l)	358
395157083003500	FR-109	Columbus (l)	359
400101083021800	FR-10	Columbus (l)	360

<u>Well number</u>	<u>Local number</u>	<u>Location</u>	<u>Page</u>
GALLIA COUNTY			
383638082103300	G-2	East of Crown City (1)	361
GREENE COUNTY			
394411083561300	GR-1	North of Xenia (1)	362
394425083551100	GR-10	North of Xenia (1)	363
HAMILTON COUNTY			
390645084480500	H-21	South of Elizabethtown (c)	364
390653084485700	H-5	South of Elizabethtown (1)	365
391039084291500	H-11	Cincinnati (1)	366
391101084172100	H-3	Southeast of Miami (1)	367
391201084281600	H-10	Cincinnati (1)	368
391214084470100	H-1	Southeast of Harrison (1)	369
391324084272500	H-9	Cincinnati (1)	370
391341084275300	H-8	Wyoming (1)	371
391442084262900	H-7	Evendale (1)	372
391608084254400	H-6	Glendale (1)	373
391733084392400	H-2	South of Ross (1)	374
391748084393800	H-19	Southwest of Venice (c)	375
391817084393300	H-4	Southwest of Ross (1)	376
HARDIN COUNTY			
404218083503700	HN-1	Alger (1)	377
HOCKING COUNTY			
393200082235300	HK-1	Logan (1)	378
KNOX COUNTY			
402344082300700	K-1	Mt. Vernon (1)	379
LICKING COUNTY			
400159082282100	LI-2	Heath (1)	380
MADISON COUNTY			
395301083272200	M-2	London (1)	381
395740083255700	M-3	North of London (1)	382
MAHONING COUNTY			
410042080453800	MA-1	Canfield (1)	383
MARION COUNTY			
403413083170500	MN-4	Southeast of New Bloomington (1)	384
403443083230400	MN-1	LaRue (1)	385
403601083110400	MN-2	West of Marion (1)	386
MEDINA COUNTY			
410120081431800	MD-3	Wadsworth (1)	387
MERCER COUNTY			
402833084375200	MR-2	Coldwater (1)	388
MIAMI COUNTY			
395848084085500	MI-3	Northeast of Tipp City (1)	389
400208084112900	MI-44	Troy (c)	390
MONTGOMERY COUNTY			
393853084170700	MT-63	Miamisburg (c)	391
394012084151700	MT-55	West Carrollton (1)	392
394025084162800	MT-49	West Carrollton (1)	393
394418084113200	MT-56	Dayton (1)	394
394533084113800	MT-6	Dayton (1)	395
MUSKINGUM COUNTY			
395753081593500	MU-10	Zanesville (c)	396
395804081593200	MU-1A	Zanesville (1)	397
PICKAWAY COUNTY			
393327082571600	PK-7	South of Circleville (1)	398
393402082572500	PK-4	South of Circleville (1)	399
393638082572300	PK-6	Northwest of Circleville (1)	400
393639082564400	PK-3	Circleville (1)	401
PIKE COUNTY			
390359083015100	PI-2	West of Piketon (1)	402

X

GROUND-WATER STATIONS FOR WHICH RECORDS ARE PUBLISHED.--Continued

<u>Well number</u>	<u>Local number</u>	<u>Location</u>	<u>Page</u>
PORTAGE COUNTY			
411101081022000	PO-3	East of Ravenna (1)	403
411401081025000	PO-1	Windham (1)	404
PREBLE COUNTY			
394438084335900	PR-2	East of Eaton (1)	405
RICHLAND COUNTY			
404625082305100	R-4	Mansfield (1)	406
ROSS COUNTY			
391341083172200	RO-7	West of Bainbridge (1)	407
391922082580000	RO-3	Chillicothe (1)	408
SCIOTO COUNTY			
384451082561900	SC-1	New Boston (1)	409
STARK COUNTY			
404939081203800	ST-5A	Canton (1)	410
405051081244200	ST-28	Northwest of Canton (1)	411
405052081193700	ST-4	Northeast of Canton (1)	412
405211081253500	ST-27	North Canton (1)	413
SUMMIT COUNTY			
410141081315200	SU-4A	Akron (1)	414
TRUMBULL COUNTY			
411604080505600	T-3	Near Warren (1)	415
TUSCARAWAS COUNTY			
403207081293800	TU-3	Dover (1)	416
403210081293100	TU-10	Dover (c)	417
403557081313600	TU-4	Strasburg (1)	418
403653081321800	TU-1	North of Strasburg (1)	419
403813081325200	TU-2	Near Strasburg (1)	420
403823081324200	TU-5	Near Strasburg (1)	421
UNION COUNTY			
401826083255200	U-4	Southeast of Raymond (1)	422
VINTON COUNTY			
391452082282900	V-1	Vinton (1)	423
WARREN COUNTY			
392511084182500	W-14	East of Monroe (1)	424
392712084191700	W-5	East of Monroe (1)	425
WASHINGTON COUNTY			
392438081271100	WA-1	Marietta (1)	426
392553081281600	WA-2	Marietta (1)	427
392556081281500	WA-10	Marietta (c)	428
WAYNE COUNTY			
404655081553200	WN-3	Near Wooster (1)	429
404802081583100	WN-2A	Near Wooster (1)	430
405745081510200	WN-7	Near Sterling (1)	431
405805081462300	WN-6	Rittman (1)	432

INTRODUCTION

Water resources data for the 1979 water year for Ohio consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground water. This report, in three volumes, contains discharge records for 197 gaging stations; stage and contents for 32 lakes and reservoirs; water quality for 54 gaging stations, and 49 wells; and water levels for 157 observation wells. Also included are 58 crest-stage partial-record stations, 26 low-flow partial-record stations, and 311 coal hydrology synoptic sites. Additional water data were collected at various sites, not involved in the systematic data collection program, and are published as miscellaneous measurements. 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.

Records of discharge or stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground-Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, Va. 22202.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released either in separate reports or in conjunction with streamflow records. Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published as an official Survey report on a State-boundary basis. These official Survey reports carry 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 report is identified as "U.S. Geological Survey Water-Data Report OH-79-1." Water-Data reports are for sale by the National Technical Information Service, U.S. Department of Commerce, Springfield, Va. 22161.

COOPERATION

The U.S. Geological Survey and organizations of the State of Ohio have had cooperative agreements for the systematic collection of streamflow records since 1898, for ground-water levels since 1936, and for water-quality records since 1946. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

- Ohio Department of Natural Resources, R.W. Teater, director, through Division of Water, C.E. Call, chief.
- Ohio Environmental Protection Agency, J.F. McAvoy, director, through Division of Surveillance and Laboratory Services, Rex Sprague, chief.
- Ohio Department of Transportation, D.L. Weir, director, through Division of Highway, L.R. Talbert, engineer for research and development.
- Miami Conservancy District, L.B. Coy, general manager and secretary.
- Three Rivers Watershed District, G.H. Watkins, secretary-treasurer.
- City of Columbus Department of Public Service, R.C. Parkinson, director, through Division of Water, Jack Holt, superintendent.
- City of Canton Water Department, J.D. Williams, superintendent.
- U.S. Office of Surface Mining, Region 3, E.A. Imhoff, regional director.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army in collecting records for 140 hydrologic-data stations in this report, and by the Environmental Protection Agency for 18 stations.

Organizations that supplied data are acknowledged in station descriptions.

HYDROLOGIC CONDITIONS

At the start of the 1979 water year, streamflow was excessive throughout most of the State. The only exception was northwestern Ohio, where it was normal. The heavy rains in the middle of the month accounted for the greater than normal run-off. The month of November was normal throughout the State, except central Ohio where it was excessive. December streamflow was excessive except in northwest Ohio where it was normal. January streamflow was normal except the northeast, where it was excessive. The rains of December 9 produced high water and the heavy rains of December 31 and January 1, 1979 produced excessive flows during the first week of January. After the first week, flows were near normal. A sizable amount of runoff remained frozen on the ground at the end of the month.

Streamflow for February was normal throughout the State during the first three weeks of the month and excessive during the last week due to increased run-off from heavy rains and snow melt. Minor flooding was observed in many areas of the State and serious flooding occurred in the southern portion of the state and the Ohio River valley. The snow melt continued into March creating excessive runoff during the first and second weeks around most of the State, the exception being the northeast, where it was normal. The rest of March and through April was normal throughout the State, except for the central area which was moderately excessive for April.

Streamflow for May was below normal throughout most of the State and only slightly deficient for the northeastern part of the State.

June streamflow was normal throughout the State except eastern Ohio, where it was deficient, with the flow sustained by excessive precipitation during the last week of May. Streamflow for July was above normal throughout most of the State and excessive in the western portion. Generally, flows in the central and western portions of the State were excessive during the first half of the month and normal the last.

Streamflow for August was excessive throughout the State, except the eastern section which was normal. Flash flooding was reported throughout the State. Butler and Gallia Counties reported a shopping center, 300 homes, and an apartment complex were flooded. The reported precipitation in these areas was about 3 inches in one hour.

Streamflow for September was excessive throughout the State as the result of above normal precipitation for August and September. Heavy rains from the tail end of Hurricane Fredrick on September 13th and 14th caused major flooding of many streams in the State, with some major damage in low-lying areas and the loss of three lives in central Ohio.

Streamflow was generally normal to excessive throughout most of the State during the 1979 water year. The only exception was in the Maumee River basin, where streamflow was within the lower range of normal flow. Although streamflow was noticeably excessive in many areas throughout the year, there was only a few occurrences of major flooding or serious flood damage this year.

Source: Ohio Department of Natural Resources Monthly Water Inventory Report for Ohio and U.S. Geological Survey Water Resources Data Reports.

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.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant 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 which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as the organisms which produce colonies within 24 hours when incubated at 35°C \pm 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 intestines 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 which produce blue colonies within 24 hours when incubated at $44.5^{\circ}\text{C} \pm 0.2^{\circ}\text{C}$ 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 intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at $35^{\circ}\text{C} \pm 1.0^{\circ}\text{C}$ on M-enterococcus 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).

Bottom material: See Bed material and anthropogenic 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 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.

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 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.

Cubic foot per second (ft^3/s , ft^3/s , cfs) 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.

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 which 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.

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 river above the specified point. Figures of drainage area given herein include all closed basins, or noncontribution area, 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 equivalent calcium carbonate (CaCO_3).

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.

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 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.

Micrograms 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 sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) 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.

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 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.

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:

Classification	Size (mm)	Method of analysis
Clay.....	0.00024 - 0.004	Sedimentation.
Silt.....	.004 - .062	Sedimentation.
Sand.....	.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.

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.

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 and 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.

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.

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.

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 micromhos 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 micromhos). 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.

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.--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.--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.

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 day is the quantity of substance in solution or suspension that passes a stream section during a 24-hour day.

Total.--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.--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 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.--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.

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.

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.

DOWNSTREAM ORDER AND STATION NUMBER

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 on which a station is situated 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.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. 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 8-digit number for each station such as 04041000, which appears just to the left of the station name, includes the 2-digit part number "04" plus the 6-digit downstream order number "041000".

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The 8-digit downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The well and miscellaneous site numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) identify the wells or other sites within a 1-second grid. See figure 1.

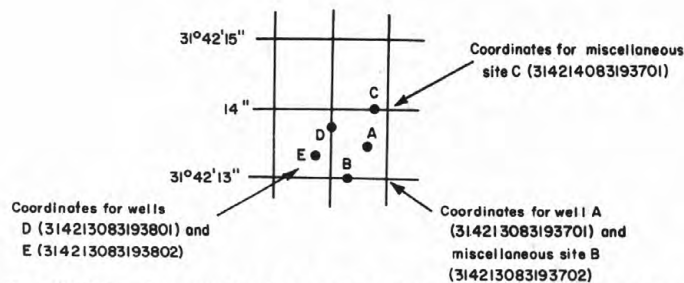


Figure 1.--System for numbering wells and miscellaneous sites (latitude and longitude)

SPECIAL NETWORKS AND PROGRAMS

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.

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.

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.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard text-books, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-back water techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage height and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. 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 computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

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.

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

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

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

For some 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 on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs, a monthly summary table of stage and contents is given. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from the most accurate maps available. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations 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 peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use, the datum of the present gage referred to National Geodetic Vertical Datum; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS" on page 2.

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS." For reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. Under "EXTREMES" are given first, the extremes for period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with "EXTREMES FOR THE CURRENT YEAR"; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

The daily table for stream-gaging stations gives the 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 also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion. In the yearly summary, below the monthly summary the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

Data collected at partial-record stations follow the information for continuous record sites. Data for partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage 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. Occasionally, a series of discharge measurements are made or water-quality samples are taken to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements and chemical analyses are also given in special tables following the tables of partial-record stations.

For gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents.

Accuracy of field data and computed results

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

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good", within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

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

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, 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 data available

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

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

Records of discharge collected by agencies other than the Geological Survey

Records of discharge not published by the Geological Survey were collected during water year 1979 at many sites in Ohio by the National Weather Service, NOAA, U.S. Department of Commerce, by the Corps of Engineers, U.S. Army and by other agencies. The National Water Data Exchange, Water Resources Division, U.S. Geological Survey, National Center, Reston, Va. 22092, maintains an index of such sites. Information on records available at specific sites can be obtained upon request.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and examination of data

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

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

For ground-water records, descriptive statements are given; the well number, depth of well, date of sampling and/or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed on a following page.

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.

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

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum and minimum values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the district office.

Water temperature

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, 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 sections.

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 discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily 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 observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

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

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

Ground-water level data from a basic network of observation wells are published herein. This basic network contains observation wells so located that the most significant data are obtained from the fewest wells in the most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is provided for local needs. See figure 2.

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

Water-level measurements in this report are given in feet with reference to land-surface datum (lstd). Land-surface datum is a datum plane that is approximately at land surface at each well; National Geodetic Vertical Datum of 1929 is the datum plane on which the national network of precise levels is based. If known, the altitude of the land-surface datum above National Geodetic Vertical Datum of 1929 is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description.

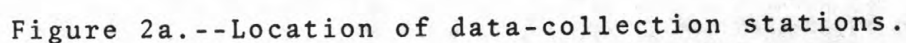
Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

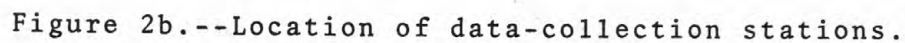
PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-four manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing 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) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 1200 South Eads Street, Arlington, VA 22202 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering 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-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-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-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-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.
- 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-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.





HYDROLOGIC-DATA STATION RECORDS

OHIO RIVER BASIN

BEAVER RIVER BASIN

03086500 MAHONING RIVER AT ALLIANCE, OH

LOCATION.--Lat 40°55'58", long 81°05'41", in SE 1/4 sec. 24, T.19 N., R.6 W., Stark County, Hydrologic Unit 05030103, on right bank 15 ft (5 m) upstream from Webb Avenue Bridge in Alliance, 0.2 mi (0.3 km) upstream from waterworks dam, and 4 mi (6 km) upstream from Beech Creek.

DRAINAGE AREA.--89.2 mi² (231 km²).

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 (316.17 m) National Geodetic Vertical Datum of 1912.

REMARKS.--Records good. Flow slightly regulated by Westville Reservoir 9.3 mi (15.0 km) upstream from station. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--38 years, 87.3 ft³/s (2.472 m³/s), 13.29 in/yr (338 mm/yr), unadjusted for diversion 1941-55.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,740 ft³/s (276 m³/s) Jan. 21, 1959, gage height, 9.11 ft (2.777 m), from rating curve extended above 3,300 ft³/s (93.5 m³/s) on basis of computation of peak flow over dam; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft³/s (25.5 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 4	2400	1020 28.9	3.42 1.042	Feb. 26	1600	*1710 48.4	*4.29 1.308
Dec. 9	1800	1310 37.1	3.79 1.155	Mar. 4	2000	1080 30.6	3.50 1.067
Jan. 2	0600	1150 32.6	3.59 1.094	Apr. 3	0300	1100 31.2	3.52 1.073
Feb. 24	1100	1690 47.9	4.26 1.298	May 26	0500	1230 34.8	3.69 1.125

Minimum daily discharge, 6.0 ft³/s (0.17 m³/s) Aug. 15-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	38	41	810	61	411	142	54	112	26	19	13
2	33	35	35	1020	55	689	613	45	104	28	26	12
3	23	35	105	411	50	670	845	48	79	26	17	8.6
4	56	21	705	137	48	958	389	72	57	64	10	8.6
5	47	23	761	101	46	831	575	57	48	75	10	10
6	33	21	245	90	44	411	258	48	42	33	10	10
7	28	19	125	72	40	210	137	42	39	24	10	12
8	25	21	225	60	39	163	108	36	64	21	10	10
9	23	21	1030	55	38	129	400	26	75	19	8.6	10
10	23	21	790	50	36	121	670	26	57	26	10	10
11	17	21	249	46	34	108	239	26	159	26	12	10
12	33	21	133	44	32	79	220	79	87	26	12	12
13	320	21	112	42	31	75	210	509	48	26	7.2	13
14	436	21	100	90	33	101	159	215	33	24	7.2	325
15	342	21	94	168	31	87	154	90	28	24	6.0	440
16	188	23	87	150	30	64	129	54	24	24	6.0	104
17	240	35	87	112	30	68	104	36	21	17	6.0	42
18	129	109	79	75	30	72	93	28	19	17	10	24
19	85	62	72	51	28	64	72	26	19	15	12	17
20	62	47	68	48	28	57	51	24	17	13	8.6	13
21	47	44	137	83	39	51	54	31	33	15	7.2	17
22	38	38	112	104	163	45	51	24	31	15	7.2	28
23	33	38	87	75	395	48	48	24	21	10	12	21
24	35	50	75	121	1490	121	42	129	19	13	13	15
25	33	41	60	368	973	253	42	632	17	12	12	15
26	56	38	55	253	1480	125	51	1070	17	15	10	15
27	121	44	50	146	887	90	284	581	15	15	15	13
28	81	97	45	112	451	72	191	423	17	19	24	90
29	53	65	42	94	---	112	104	253	26	19	24	181
30	44	50	48	79	---	177	75	150	31	15	17	87
31	44	---	181	70	---	142	---	116	---	15	15	---
TOTAL	2769	1141	6035	5137	6642	6604	6510	4976	1359	717	374.0	1586.2
MEAN	89.3	38.0	195	166	237	213	217	161	45.3	23.1	12.1	52.9
MAX	436	109	1030	1020	1490	958	845	1070	159	75	26	440
MIN	17	19	35	42	28	45	42	24	15	10	6.0	8.6
CFSM	1.00	.43	2.19	1.86	2.66	2.39	2.43	1.81	.51	.26	.14	.59
IN.	1.15	.48	2.52	2.14	2.77	2.75	2.71	2.08	.57	.30	.16	.66

CAL YR 1978 TOTAL 43066.0 MEAN 118 MAX 2240 MIN 13 CFSM 1.32 IN 17.96
WTR YR 1979 TOTAL 43850.2 MEAN 120 MAX 1490 MIN 6.0 CFSM 1.35 IN 18.29

BEAVER RIVER BASIN

17

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 (183 m) downstream from Berlin Dam, and 3.2 mi (5.1 km) northwest of Berlin Center.

DRAINAGE AREA.--248 mi² (642 km²).

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 (291.998 m) National Geodetic Vertical Datum of 1929, (levels by Corps of Engineers). Prior to Oct. 1, 1942, at site 1.8 mi (2.9 km) upstream at datum 966.15 ft (294.482 m) above mean sea level, adjustment of 1912, levels by Mahoning Valley Sanitary District. Oct. 1, 1942, to May 11, 1949, at site 200 ft (61 m) downstream from present site at datum 8.00 ft (2.438 m) lower than present datum.

REMARKS.--Records good. Flow regulated since 1942 by Berlin Lake (see station 03090000). Small diversion since 1958 from Berlin Lake to Meander Creek Reservoir (see station 03097000) by the Berlin pipeline. Water-quality data collected at this site 1965 to 1977.

COOPERATION.--Three discharge measurements furnished by Corps of Engineers.

AVERAGE DISCHARGE.--49 years, 234 ft³/s (6.627 m³/s) (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,630 ft³/s (244 m³/s) Jan. 25, 1937, gage height, 10.97 ft (3.344 m), site and datum then in use; no flow at times during 1948-49, 1967, 1970-71.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,050 ft³/s (29.7 m³/s) May 26, gage height, 3.60 ft (1.10 m); minimum daily, 102 ft³/s (2.89 m³/s) Oct. 4-9

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	427	375	162	175	165	451	155	444	762	175	182	178
2	277	370	189	182	165	480	162	326	671	165	182	178
3	104	320	189	192	165	511	168	226	663	147	182	178
4	102	273	196	364	165	632	172	226	671	130	182	178
5	102	273	358	480	165	593	419	192	671	130	182	178
6	102	273	542	473	165	745	671	158	671	130	182	178
7	102	273	542	465	165	815	671	162	480	144	151	178
8	102	273	526	480	165	889	663	162	315	158	178	178
9	102	273	559	488	165	872	746	165	320	168	178	178
10	128	268	648	488	168	855	830	151	320	182	178	178
11	149	254	762	473	165	847	838	140	320	182	182	178
12	191	244	779	472	165	830	838	144	320	182	182	178
13	233	222	770	458	165	814	830	162	263	182	182	178
14	340	207	770	334	165	814	822	203	207	182	182	185
15	412	207	762	240	158	652	822	231	207	182	182	185
16	466	207	753	235	158	518	814	231	207	182	182	240
17	571	203	745	222	158	511	814	231	207	182	182	393
18	610	203	745	235	155	511	805	182	207	182	182	503
19	610	203	745	235	155	495	796	137	207	182	182	503
20	610	172	728	218	155	360	550	137	214	182	182	503
21	610	137	711	218	151	249	310	137	207	182	182	503
22	610	137	584	184	151	249	310	137	207	182	182	503
23	458	134	495	155	151	244	310	137	207	182	182	503
24	375	134	310	151	151	199	310	144	207	182	182	437
25	375	134	155	155	158	140	305	593	207	182	178	381
26	375	134	168	162	155	140	299	995	207	182	178	381
27	375	134	172	158	290	144	305	1040	199	182	178	381
28	375	130	172	162	437	147	375	1040	189	182	178	381
29	375	130	172	162	---	151	451	1040	189	182	178	381
30	375	130	168	162	---	151	444	977	185	182	178	381
31	375	---	168	162	---	155	---	872	---	182	178	---
TOTAL	10418	6427	14745	8740	4896	15164	16005	11122	9907	5351	5571	9058
MEAN	336	214	476	282	175	489	534	359	330	173	180	302
MAX	610	375	779	488	437	889	838	1040	762	182	182	503
MIN	102	130	155	151	151	140	155	137	185	130	151	178

CAL YR 1978 TOTAL 116703 MEAN 320 MAX 918 MIN 57
WTR YR 1979 TOTAL 117404 MEAN 322 MAX 1040 MIN 102

Note: No diversion during the year by Mahoning Valley Sanitary District.

BEAVER RIVER BASIN

03091500 MAHONING RIVER AT PRICETOWN, OH

LOCATION.--Lat 41°07'53", long 80°58'17", in T.2 N., R.5 W., Mahoning County, Hydrologic Unit 05030103, on left bank 0.3 mi (0.5 km) downstream from Milton Dam, 0.5 mi (0.8 km) southwest of Pricetown, and 3 mi (5 km) upstream from Kale Creek.

DRAINAGE AREA.--273 mi² (707 km²).

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 (275.844 m) National Geodetic Vertical Datum of 1912. Prior to Aug. 14, 1929 nonrecording gage at same site and datum.

REMARKS.--Records fair. Flow regulated by Berlin Lake beginning 1942 and Milton Reservoir (see stations 03090000 and 03091000). 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 1965 to 1977.

COOPERATION.--Four discharge measurements furnished by Corps of Engineers.

AVERAGE DISCHARGE.--50 years, 257 ft³/s (7.278 m³/s) (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,770 ft³/s (192 m³/s) Jan. 25, 1937, gage height, 15.01 ft (4.575 m), from rating curve extended above 4,200 ft³/s (119 m³/s) on basis of velocity-area studies; minimum daily, 0.4 ft³/s (0.011 m³/s) Nov. 9, 1941, Feb. 19, 20, Oct. 11, 1945.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 943 ft³/s (26.7 m³/s) May 25, 26, 28, May 30 to June 3, gage height, 4.55 ft (1.387 m); minimum daily discharge, 86 ft³/s (2.44 m³/s) Oct. 6-11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	424	459	244	266	111	281	160	580	940	191	181	163
2	295	457	244	266	111	281	165	415	940	194	181	185
3	88	410	245	264	111	284	167	293	936	196	179	213
4	88	367	248	406	109	287	167	293	936	196	181	213
5	87	367	366	518	109	287	538	228	936	199	179	210
6	86	366	520	518	109	577	860	156	936	199	179	210
7	86	364	520	518	109	844	864	156	936	202	179	209
8	86	364	526	518	109	840	864	158	824	202	176	208
9	86	363	531	521	109	844	864	158	612	204	176	208
10	86	361	530	518	109	844	864	158	608	207	174	207
11	86	361	689	518	109	848	864	160	444	207	176	207
12	120	361	803	518	109	848	864	160	298	207	176	206
13	168	358	789	518	109	848	864	162	252	207	174	206
14	272	357	788	518	109	844	868	225	189	209	174	226
15	433	355	788	514	109	844	868	301	191	209	174	208
16	509	354	784	510	109	752	868	301	189	209	172	385
17	590	353	784	367	109	570	868	301	191	212	172	777
18	589	351	784	255	109	570	868	241	191	196	169	926
19	591	351	780	255	111	570	868	162	191	179	169	922
20	591	308	780	255	111	444	684	165	191	181	169	918
21	591	255	780	255	111	287	385	165	191	181	169	914
22	591	253	776	212	113	287	392	167	191	184	169	909
23	591	253	768	167	117	287	382	167	191	184	167	904
24	591	252	601	169	119	228	382	172	191	184	169	900
25	587	251	264	169	119	160	382	451	191	184	167	890
26	584	250	261	169	123	160	382	936	191	184	165	882
27	512	249	261	169	196	160	382	936	189	184	165	874
28	458	247	261	169	278	160	385	940	189	184	165	869
29	458	247	261	169	---	160	475	936	184	184	165	858
30	458	246	261	167	---	160	584	936	186	181	162	849
31	459	---	264	142	---	160	---	940	---	181	162	---
TOTAL	11241	9890	16501	10498	3366	14716	18118	11519	12825	6021	5335	15856
MEAN	363	330	532	339	120	475	604	372	428	194	172	529
MAX	591	459	803	521	278	848	868	940	940	212	181	926
MIN	86	246	244	142	109	160	160	156	184	179	162	163

CAL YR 1978 TOTAL 128923 MEAN 353 MAX 888 MIN 86
WTR YR 1979 TOTAL 135886 MEAN 372 MAX 940 MIN 86

BEAVER RIVER BASIN

19

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 (0.6 km) north of Mahoning-Trumbull County line, 1.5 mi (2.4 km) northwest of Pricetown, 2.2 mi (3.5 km) upstream from mouth, and 3.5 mi (5.6 km) south of Newton Falls.

DRAINAGE AREA.--21.9 mi² (56.7 km²).

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 (278.800 m) National Geodetic Vertical Datum of 1912. Prior to June 27, 1941, nonrecording gage at same site and datum.

REMARKS.--Records poor. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--39 years, 23.3 ft³/s (0.660 m³/s), 14.45 in/yr (367 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,890 ft³/s (110 m³/s) Jan. 21, 1959, gage height, 8.52 ft (2.597 m); no flow at times in 1952-55, 1962-66.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14.2 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 9	0900	650 18.4	4.72 1.439	Apr. 2	2030	604 17.1	4.60 1.402
Jan. 1	1200	630 17.8	4.67 1.423	May 25	1930	1360 38.5	5.95 1.814
Feb. 23	0900	827 23.4	5.09 1.551	Sept. 14	1600	*1420 40.5	*7.22 2.201

Minimum daily discharge, 1.1 ft³/s (0.031 m³/s) July 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	2.2	4.8	576	13	140	27	11	14	1.7	3.7	8.0
2	2.6	1.9	3.8	406	11	184	299	8.5	16	1.8	4.7	4.0
3	2.1	1.7	15	58	9.5	210	269	7.5	10	2.0	4.2	2.5
4	3.0	1.5	301	20	8.5	367	80	9.2	7.1	2.5	3.1	4.4
5	3.0	1.5	90	10	7.5	195	180	9.5	5.5	3.5	2.9	3.4
6	2.9	1.4	24	7.8	6.6	61	42	8.0	4.8	3.4	3.7	2.6
7	2.9	1.7	15	5.6	6.1	31	22	6.8	4.5	2.6	5.5	2.2
8	3.4	1.4	86	6.0	5.7	24	16	6.3	5.4	2.0	5.0	2.0
9	3.3	1.4	507	5.0	5.4	18	192	5.7	9.3	1.4	3.8	1.9
10	2.7	1.4	78	5.5	4.8	20	143	20	7.1	1.1	3.7	1.8
11	2.5	1.4	25	5.5	4.5	20	31	58	27	1.4	4.7	1.7
12	3.1	1.4	13	5.4	4.3	12	24	21	16	1.4	5.7	1.6
13	9.3	1.7	12	5.5	4.2	10	26	137	7.3	2.5	5.2	10
14	12	1.7	11	11	4.1	13	31	37	5.2	2.9	3.1	704
15	9.3	1.7	9.8	22	4.0	15	52	16	4.2	3.0	2.4	613
16	6.3	1.7	8.7	26	4.0	11	39	10	3.4	3.0	2.5	31
17	8.0	2.4	8.7	15	4.0	9.5	25	7.0	3.0	3.0	2.6	12
18	5.7	7.5	8.2	11	3.8	9.2	17	5.9	2.8	2.9	3.1	5.9
19	2.7	10	7.0	9.2	3.8	9.0	12	5.0	2.6	2.9	3.7	3.7
20	1.4	5.7	6.3	7.5	3.8	8.5	9.8	4.5	2.2	2.9	3.7	2.5
21	1.2	3.8	20	9.5	4.6	7.8	8.2	4.5	3.0	2.7	2.1	1.9
22	1.2	3.0	21	13	12	7.3	7.5	4.3	3.4	2.9	1.4	2.7
23	1.9	3.0	13	11	123	6.8	7.0	4.0	2.7	3.5	3.5	3.5
24	1.9	4.0	9.5	19	636	20	6.4	36	2.2	4.8	4.3	3.1
25	2.1	4.5	8.2	59	257	116	6.1	890	2.0	5.9	3.3	2.2
26	2.8	4.1	7.0	62	388	34	7.0	463	1.6	5.5	9.5	2.5
27	7.5	3.8	6.5	40	155	21	93	71	1.2	5.2	19	2.2
28	9.0	8.0	6.0	26	112	15	50	67	1.4	6.1	34	4.8
29	5.0	11	5.2	21	---	39	21	41	1.2	6.9	36	16
30	3.4	6.6	5.5	17	---	63	14	20	1.3	6.7	26	11
31	2.7	---	41	15	---	40	---	14	---	5.0	16	---
TOTAL	126.9	103.1	1377.2	1512.5	1806.2	1737.1	1757.0	2008.7	177.4	103.1	232.1	1468.2
MEAN	4.09	3.44	44.4	48.8	64.5	56.0	58.6	64.8	5.91	3.33	7.49	48.9
MAX	12	11	507	576	636	367	299	890	27	6.9	36	704
MIN	1.2	1.4	3.8	5.4	3.8	6.8	6.1	4.0	1.2	1.1	1.4	1.6
CFSM	.19	.16	2.03	2.23	2.95	2.56	2.68	2.96	.27	.15	.34	2.23
IN.	.22	.18	2.34	2.57	3.07	2.95	2.98	3.41	.30	.18	.39	2.49

CAL YR 1978 TOTAL 9210.02 MEAN 25.2 MAX 988 MIN .27 CFSM 1.15 IN 15.64
WTR YR 1979 TOTAL 12409.50 MEAN 34.0 MAX 890 MIN 1.1 CFSM 1.55 IN 21.08

BEAVER RIVER BASIN

03092090 WEST BRANCH MAHONING RIVER NEAR RAVENNA, OH

LOCATION.--Lat 41°09'41", long 81°11'50", in T.3 N., R.8 W., Portage County, Hydrologic Unit 05030103, on left bank at downstream side of bridge on Newton Falls Road, 2.5 mi (4.0 km) east of Ravenna.

DRAINAGE AREA.--21.8 mi² (56.5 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,011.8 ft (308.40 m) Portage County bench mark.

REMARKS.--Records fair. Water-quality data collected at this site 1966 to 1978.

AVERAGE DISCHARGE.--14 years, 27.6 ft³/s (0.782 m³/s), 17.19 in/yr (437 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,810 ft³/s (79.6 m³/s) Sept. 14, 1979, inside gage height 8.63 ft (2.630 m), outside gage height, 9.34 ft (2.847 m); minimum, 0.45 ft³/s (0.013 m³/s) Sept. 11, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 450 ft³/s (12.7 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 2	1830	635 18.0	5.42 1.652	Sept. 14	1100	a*2810 79.6	a*9.34 2.847

Minimum discharge, 1.9 ft³/s (0.054 m³/s) July 21, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	4.4	7.5	269	15	110	43	16	15	8.5	3.0	3.6
2	3.2	4.1	6.2	165	14	145	366	14	12	18	13	3.6
3	2.6	3.8	25	44	13	218	177	14	8.5	11	6.8	2.8
4	4.1	4.1	92	30	12	379	98	17	6.8	17	3.6	2.6
5	3.5	3.8	40	20	11	175	111	14	6.3	12	2.6	2.6
6	3.2	3.5	18	15	10	74	59	12	8.5	5.8	2.4	2.8
7	5.4	3.5	12	14	10	42	40	10	6.8	4.2	3.0	3.3
8	6.2	3.8	51	13	9.5	35	30	9.2	12	4.2	2.8	2.6
9	3.8	3.8	160	12	9.5	26	174	7.9	11	7.3	2.4	2.4
10	2.9	3.8	48	11	9.0	35	92	7.3	34	10	2.6	2.2
11	2.4	3.8	29	10	8.5	29	42	6.8	63	5.3	4.9	2.0
12	8.0	3.8	17	10	8.5	19	61	13	24	4.5	5.3	2.0
13	42	3.5	15	14	8.0	18	53	24	12	4.9	3.0	5.3
14	33	4.4	14	30	8.0	22	95	14	7.3	4.9	2.6	1590
15	17	4.7	12	37	8.0	19	78	9.9	5.3	4.2	2.4	261
16	12	4.7	12	22	7.5	17	61	7.3	4.2	3.6	2.2	58
17	17	7.5	14	18	7.5	17	43	5.8	3.9	3.0	2.2	29
18	9.5	12	13	15	7.5	16	30	8.5	3.3	2.8	3.0	15
19	6.6	8.4	12	13	7.5	17	23	4.9	3.3	2.6	3.3	8.6
20	5.4	6.6	12	12	8.0	18	19	4.5	3.0	2.2	2.8	5.3
21	4.4	5.4	27	18	11	13	16	6.8	7.3	2.0	3.6	4.5
22	3.8	5.1	19	16	24	11	16	5.8	5.3	1.9	2.8	4.2
23	3.8	6.2	14	15	40	12	23	4.5	3.9	4.2	4.9	4.5
24	3.8	7.5	12	27	100	59	18	8.5	3.0	3.3	10	5.8
25	3.8	6.6	10	47	210	104	14	154	2.8	2.6	6.3	4.5
26	8.4	5.8	9.0	43	150	44	22	114	2.6	2.4	4.2	2.8
27	15	10	8.0	39	160	34	96	54	2.4	2.2	5.3	2.2
28	9.5	25	7.5	29	130	30	42	39	3.3	4.9	11	15
29	6.6	14	8.0	25	---	120	26	27	8.5	4.5	18	20
30	5.1	9.5	13	21	---	95	20	18	8.5	2.8	8.5	13
31	4.7	---	57	18	---	62	---	14	---	2.6	4.9	---
TOTAL	261.1	193.1	794.2	1072	1017.0	2015	1988	565.7	297.8	169.4	153.4	2081.2
MEAN	8.42	6.44	25.6	34.6	36.3	65.0	66.3	21.5	9.93	5.46	4.95	69.4
MAX	42	25	160	269	210	379	366	154	63	18	18	1590
MIN	2.4	3.5	6.2	10	7.5	11	14	4.5	2.4	1.9	2.2	2.0
CFSM	.39	.30	1.17	1.59	1.67	2.98	3.04	.99	.46	.25	.23	3.18
IN.	.45	.33	1.36	1.83	1.74	3.44	3.39	1.14	.51	.29	.26	3.55

CAL YR 1978 TOTAL 8919.7 MEAN 24.4 MAX 440 MIN 1.1 CFSM 1.12 IN 15.22
WTR YR 1979 TOTAL 10707.9 MEAN 29.3 MAX 1590 MIN 1.9 CFSM 1.34 IN 18.27

a Outside gage height

BEAVER RIVER BASIN

21

03092090 WEST BRANCH MAHONING RIVER NEAR RAVENNA, OH--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1965 to September 1978 (discontinued).

INSTRUMENTATION.--Water temperature recorder since October 1965.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 28.0°C Aug. 24, 1968; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 25.5°C July 22, 23; minimum, 0.0°C on many days during winter period.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.5	15.0	10.0	8.0	---	---	4.5	2.0	.0	.0	.0	-0.5
2	16.0	13.5	---	---	---	---	3.5	.0	.0	.0	.5	.0
3	15.0	13.5	---	---	---	---	1.5	-1.0	.0	.0	1.5	-0.5
4	15.5	13.5	---	---	---	---	2.0	.0	.5	.0	3.0	.5
5	15.0	12.0	---	---	---	---	1.5	---	.5	.0	3.5	2.0
6	14.0	12.0	---	---	---	---	.0	.0	.5	---	3.0	1.5
7	14.5	11.5	---	---	---	---	.0	.0	.5	.0	4.5	.5
8	14.0	12.0	---	---	---	---	.0	.0	.5	.0	6.5	2.5
9	13.0	11.5	---	---	---	---	.0	---	.5	.0	6.0	2.5
10	13.5	11.0	---	---	---	---	.0	---	.5	-1.0	6.0	3.5
11	13.0	11.0	---	---	---	---	.0	---	.5	-4.0	3.5	.0
12	14.5	12.0	---	---	---	---	.0	---	.5	.0	4.0	.0
13	15.0	12.5	---	---	---	---	.0	.0	.5	---	6.0	.5
14	14.0	11.5	---	---	---	---	.5	-0.5	.0	---	5.5	2.0
15	13.0	11.5	---	---	---	---	.5	---	.5	.0	2.5	.0
16	12.0	8.0	---	---	---	---	.0	.0	.5	.0	3.5	.0
17	11.5	8.0	---	---	---	---	.5	.0	.0	---	6.0	.5
18	11.0	9.5	---	---	---	---	.0	.0	.0	-1.0	8.0	4.0
19	11.5	9.0	---	---	---	---	.5	---	.0	.0	8.5	6.0
20	12.0	10.0	---	---	---	---	.0	.0	.0	.0	10.0	5.5
21	12.5	9.5	---	---	1.5	.5	.0	.0	.0	-0.5	11.0	6.0
22	12.0	10.5	---	---	1.0	.0	.0	.0	.0	-0.5	11.5	6.0
23	12.0	11.0	---	---	1.0	.0	.0	.0	.0	-0.5	11.5	8.0
24	11.5	9.5	---	---	3.5	.0	.0	-0.5	.0	-0.5	10.5	7.5
25	11.0	9.0	---	---	.5	.0	.0	-0.5	.0	-0.5	7.5	5.0
26	12.5	10.0	---	---	1.0	.0	.0	.0	-0.5	-0.5	4.5	3.0
27	12.0	10.0	---	---	.5	.0	.0	.0	.0	-0.5	5.5	2.0
28	11.5	10.0	---	---	.5	.0	.0	.0	.0	-0.5	6.5	1.0
29	10.5	8.5	---	---	.5	.0	.0	.0	---	---	8.5	5.5
30	10.0	8.5	---	---	.5	.0	.0	.0	---	---	10.5	7.5
31	10.0	7.0	---	---	3.0	.0	.0	.0	---	---	11.0	9.0
MONTH	16.5	7.0	10.0	8.0	3.5	.0	4.5	-1.0	.5	-4.0	11.5	-0.5

BEAVER RIVER BASIN

03092090 WEST BRANCH MAHONING RIVER NEAR RAVENNA, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

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

BEAVER RIVER BASIN

23

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 (61 m) upstream from bridge on Wayland Road, 0.4 mi (0.6 km) downstream from Michael J. Kirwan Dam, and 0.2 mi (0.3 km) south of Wayland.

DRAINAGE AREA.--81.7 mi² (212 km²).

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 (282.379 m) National Geodetic Vertical Datum of 1929, (levels by Corps of Engineers). Prior to October 1971 at datum 0.89 ft (0.271 m) higher.

REMARKS.--Records fair. Flow completely regulated by Michael J. Kirwan Reservoir (see station 03092450). Water-quality data collected at this site 1969 to 1977.

COOPERATION.--Two discharge measurements furnished by Corps of Engineers.

AVERAGE DISCHARGE.--11 years, 106 ft³/s (3.002 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,380 ft³/s (39.1 m³/s) Feb. 25, 1971, gage height, 11.82 ft (3.603 m) present datum; minimum daily, 2.5 ft³/s (0.071 m³/s) Apr. 9, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 528 ft³/s (15.0 m³/s) Sept. 18-19, gage height, 7.61 ft (2.320 m); minimum daily, 18 ft³/s (0.51 m³/s) Feb. 17-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	49	84	186	20	23	20	42	297	95	120	87
2	80	49	101	120	20	26	44	42	255	96	121	87
3	127	48	106	75	20	29	22	42	173	85	121	87
4	128	48	115	127	20	31	26	42	96	74	121	86
5	127	48	127	167	19	23	79	42	51	74	122	86
6	127	48	165	168	19	52	238	42	46	73	123	86
7	128	48	165	169	19	105	359	43	48	73	114	86
8	127	47	178	168	19	105	359	43	50	73	123	86
9	126	47	180	168	19	105	382	43	49	73	123	86
10	125	46	166	167	19	106	414	43	50	83	124	85
11	125	46	167	168	19	106	477	43	52	95	125	85
12	126	45	164	168	19	106	480	45	49	95	125	84
13	132	45	164	164	19	106	477	47	48	95	125	84
14	111	44	163	164	19	106	480	43	48	95	126	265
15	64	44	163	164	19	107	482	43	48	95	126	92
16	46	57	163	165	19	106	477	43	47	95	127	145
17	46	78	164	138	18	106	472	43	47	95	127	302
18	45	78	163	104	18	106	469	42	69	105	127	483
19	44	76	163	104	18	69	414	42	93	117	128	527
20	44	76	164	102	18	19	278	42	103	117	128	525
21	44	76	164	102	19	19	128	43	115	117	130	524
22	45	75	162	79	20	19	80	42	115	117	130	522
23	46	74	161	54	30	19	63	42	106	118	131	519
24	47	74	161	58	28	24	43	43	94	118	123	515
25	47	74	160	56	26	21	43	63	94	118	111	511
26	50	73	161	55	26	19	44	47	94	119	112	509
27	50	74	165	39	21	19	49	90	104	119	112	507
28	49	74	165	21	22	19	44	175	115	119	113	508
29	49	73	165	21	---	23	43	260	115	120	113	505
30	49	66	163	20	---	21	42	296	106	120	101	501
31	49	---	173	20	---	20	---	296	---	114	88	---
TOTAL	2448	1800	4825	3481	572	1765	7028	2254	2777	3102	3740	8575
MEAN	79.0	60.0	156	112	20.4	56.9	234	72.7	92.6	100	121	286
MAX	132	78	180	186	30	107	482	296	297	120	131	527
MIN	44	44	84	20	18	19	20	42	46	73	88	84

CAL YR 1978 TOTAL 27144 MEAN 74.4 MAX 440 MIN 18
WTR YR 1979 TOTAL 42367 MEAN 116 MAX 527 MIN 18

BEAVER RIVER BASIN

03092500 WEST BRANCH MAHONING RIVER NEAR NEWTON FALLS, OH

LOCATION.--Lat 41°10'18", long 81°01'16", in T.3 N., R.6 W., Portage County, Hydrologic Unit 05030103, on right bank 250 ft (76 m) downstream from bridge on Newton Falls Road, 2.5 mi (4.0 km) southwest of Newton Falls, 6 mi (10 km) upstream from mouth, and 5 mi (8 km) downstream from Michael J. Kirwan Dam.

DRAINAGE AREA.--96.3 mi² (249 km²).

PERIOD OF RECORD.--June 1926 to current year.

REVISED RECORDS.--WSP 973: 1926-30, 1933, 1934(M), 1936-38, 1939(M), 1940. WSP 1385: 1929(M), 1945. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 912.2 ft (278.04 m) Corps of Engineers bench mark. Prior to Aug. 30, 1929, nonrecording gage at site 75 ft (23 m) upstream at same datum.

REMARKS.--Records good. Flow regulated by Michael J. Kirwan Reservoir (see station 03092450) since December 1966. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--53 years, 99.1 ft³/s (2.807 m³/s)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,340 ft³/s (236 m³/s) Jan. 22, 1959, gage height, 13.60 ft (4.145 m); minimum daily, 3.0 ft³/s (0.085 m³/s) Sept. 19, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,660 ft³/s (47.0 m³/s) Sept. 14, gage height, 8.37 ft (2.551 m); minimum daily, 25 ft³/s (0.70 m³/s) Feb. 17-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	45	91	421	29	95	46	49	248	81	94	60
2	56	45	115	267	29	129	225	47	227	84	97	59
3	115	45	140	127	29	145	136	47	161	79	95	59
4	121	45	260	173	28	210	86	49	102	67	95	59
5	119	46	165	222	28	129	141	48	49	66	95	60
6	117	45	181	174	27	83	229	47	45	63	95	60
7	119	46	178	174	26	134	350	46	43	63	88	60
8	119	46	225	174	26	127	347	46	55	63	94	60
9	117	46	366	172	26	124	481	45	53	63	94	60
10	115	46	203	171	26	129	443	60	49	67	94	59
11	115	46	181	171	26	124	470	67	66	86	97	59
12	117	46	176	171	26	119	484	57	50	81	95	59
13	145	46	176	169	26	117	479	109	47	80	94	60
14	129	46	174	169	26	122	497	63	46	80	94	903
15	83	46	173	169	26	121	521	52	45	80	94	263
16	54	53	173	169	26	117	487	48	45	79	94	109
17	59	83	173	160	25	115	471	47	45	79	92	216
18	50	91	171	114	25	115	460	46	52	83	94	371
19	47	86	171	110	25	100	427	46	80	95	94	438
20	46	83	171	109	25	31	303	46	84	95	94	437
21	45	81	185	110	26	29	154	46	104	95	94	437
22	45	81	176	102	34	28	88	46	100	97	94	437
23	45	83	173	63	112	28	77	45	95	95	97	435
24	45	86	171	74	225	50	48	47	81	95	95	433
25	45	84	171	94	124	95	47	251	81	97	80	430
26	49	83	169	86	156	47	49	174	81	97	79	429
27	57	84	169	68	92	38	124	109	86	97	77	427
28	52	95	171	38	84	34	74	196	99	99	83	441
29	48	89	171	30	---	77	57	216	100	99	86	441
30	46	80	169	29	---	73	52	248	95	97	77	432
31	46	---	207	29	---	55	---	246	---	91	60	---
TOTAL	2414	1927	5595	4309	1383	2940	7853	2689	2514	2593	2805	7853
MEAN	77.9	64.2	180	139	49.4	94.8	262	86.7	83.8	83.6	90.5	262
MAX	145	95	366	421	225	210	521	251	248	99	97	903
MIN	45	45	91	29	25	28	46	45	43	63	60	59
CAL. YR 1978	TOTAL	32275	MEAN	88.4	MAX	432	MIN	22				
WTR YR 1979	TOTAL	44875	MEAN	123	MAX	903	MIN	25				

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 (23 m) downstream from county road bridge, 1 mi (2 km) north of Phalanx Station, 2 mi (3 km) downstream from Tinkers Creek, and 4 mi (6 km) upstream from mouth.

DRAINAGE AREA.--97.6 mi² (253 km²).

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 (270.400 m) National Geodetic Vertical Datum of 1912, (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 (0.085 m) higher.

REMARKS.--Records fair. Low flow slightly regulated by mill several miles upstream from station. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--50 years, 108 ft³/s (3.059 m³/s), 15.03 in/yr (382 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,150 ft³/s (231 m³/s) Sept. 15, 1979, gage height, 13.71 ft (4.179 m); minimum daily, 0.9 ft³/s (0.025 m³/s) Aug. 4, 1939.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,300 ft³/s (36.8 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 4	1530	1990	56.4	May 26	1100	1320	37.4
Apr. 3	0730	2150	60.9	Sept. 15	0400	*8150	231
			11.29				10.30
			11.45				*13.71
			3.441				3.139
			3.490				4.179

Minimum daily discharge, 14 ft³/s (0.40 m³/s) Nov. 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	27	45	610	82	480	242	113	82	42	20	28
2	25	23	35	1080	73	505	459	94	78	52	52	25
3	16	23	56	511	64	721	1670	85	63	62	57	25
4	19	23	288	236	55	1510	495	95	53	47	31	46
5	26	26	361	140	50	1560	584	89	39	58	27	34
6	23	27	152	100	47	638	355	79	42	35	54	24
7	39	22	91	80	45	316	239	72	40	29	37	23
8	48	20	116	70	43	222	177	63	58	28	23	23
9	27	18	485	60	42	178	273	58	91	25	21	23
10	21	14	498	55	41	175	582	60	77	23	21	19
11	18	14	179	52	41	174	283	80	364	23	70	16
12	16	17	104	47	39	129	208	67	220	36	74	16
13	119	16	84	49	39	112	243	173	95	36	35	18
14	178	15	76	75	38	118	251	132	63	31	22	2600
15	131	15	67	145	38	118	316	83	49	33	19	5230
16	76	16	65	146	38	87	290	62	44	27	19	827
17	122	19	70	105	37	91	228	50	41	22	18	210
18	78	46	75	89	37	86	172	45	35	18	20	112
19	47	52	62	69	37	81	137	42	31	18	32	78
20	34	34	53	60	37	72	115	44	31	19	25	58
21	25	21	118	67	49	64	104	41	37	19	19	47
22	19	20	140	80	82	60	99	39	39	20	20	44
23	19	21	94	72	199	57	94	34	33	19	27	42
24	18	32	70	78	514	88	87	35	32	19	41	34
25	20	34	55	177	957	341	81	312	28	20	56	27
26	25	29	46	227	666	269	84	1100	23	20	38	29
27	84	28	40	191	723	168	311	496	23	19	33	25
28	67	83	38	152	581	136	384	251	24	22	37	36
29	44	101	36	130	---	333	188	177	30	34	74	104
30	37	63	37	109	---	502	140	123	46	25	64	66
31	29	---	87	94	---	356	---	92	---	19	35	---
TOTAL	1469	899	3723	5156	4694	9747	8891	4286	1911	900	1121	9889
MEAN	47.4	30.0	120	166	168	314	296	138	63.7	29.0	36.2	330
MAX	178	101	498	1080	957	1560	1670	1100	364	62	74	5230
MIN	16	14	35	47	37	57	81	34	23	18	18	16
CFSM	.49	.31	1.23	1.70	1.72	3.22	3.03	1.41	.65	.30	.37	3.38
IN.	.56	.34	1.42	1.97	1.79	3.72	3.39	1.63	.73	.34	.43	3.77

CAL YR 1978	TOTAL	42442.2	MEAN 116	MAX 2300	MIN 9.4	CFSM 1.19	IN 16.18
WTR YR 1979	TOTAL	52686.0	MEAN 144	MAX 5230	MIN 14	CFSM 1.48	IN 20.08

BEAVER RIVER BASIN

03093800 MAHONING RIVER ABOVE DUCK CREEK, AT LEAVITTSBURG, OH

LOCATION.--Lat 41°14'22", long 80°52'56", Trumbull County, Hydrologic Unit 05030103, on left bank 10 ft (3 m) upstream from Ohio Edison Company diversion dam, 30 ft (9 m) upstream from Duck Creek, and 330 ft (101 m) upstream from gaging station at bridge on Leavitt Road in Leavittsburg.

DRAINAGE AREA.--542 mi² (1,404 km²).

PERIOD OF RECORD.--Water years 1952-53, July 1967 to September 1968 (published as "at Leavittsburg"), October 1968 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1967 to current year.

pH: July 1967 to current year.

WATER TEMPERATURES: July 1967 to current year.

DISSOLVED OXYGEN: July 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 Leavittsburg (station 03094000).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 780 micromhos May 27, 1969; minimum, 107 micromhos July 12, 1976.

pH: Maximum, 8.5 units Aug. 5, 1968; minimum, 5.2 units Jan. 8, 1973.

WATER TEMPERATURES: Maximum, 28.0°C June 29, 30, 1952; minimum, 0.0°C on many days during winter periods.

DISSOLVED OXYGEN: Maximum, 15.0 mg/L Dec. 31, 1972, Jan. 1-3, 1973; minimum, 4.2 mg/L June 12, 13, 1971.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 600 micromhos Feb. 9; minimum, 132 micromhos Sept. 15.

pH: Maximum recorded, 8.3 units Dec. 15; minimum, 6.0 units Feb. 27.

WATER TEMPERATURES: Maximum, 24.5°C Sept. 1; minimum, 0.0°C on many days during winter period.

DISSOLVED OXYGEN: Maximum, 14.2 mg/L Dec. 29; minimum, 5.5 mg/L July 18, Aug. 12.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	507	497	542	510	480	471	450	305	470	459	371	353
2	515	497	552	515	482	474	302	260	488	456	354	320
3	522	495	548	510	483	468	317	276	491	468	326	287
4	509	485	548	507	480	419	390	323	515	479	287	235
5	500	468	545	512	416	345	420	393	521	495	237	221
6	489	479	536	515	420	342	432	405	522	491	273	227
7	513	482	558	536	446	423	432	420	519	503	393	281
8	513	495	569	528	449	431	453	428	584	521	423	395
9	498	471	564	525	426	332	461	440	600	537	444	414
10	500	464	558	537	333	306	459	447	545	515	444	422
11	498	465	560	527	398	329	474	437	560	512	426	419
12	482	470	552	543	455	401	458	435	546	522	431	414
13	524	476	554	468	456	446	453	438	557	527	435	414
14	515	474	494	468	492	458	471	444	555	527	437	398
15	521	504	498	489	497	483	480	456	530	515	419	402
16	537	524	507	480	501	482	477	452	546	522	417	393
17	546	501	498	483	494	479	455	449	558	516	405	390
18	542	510	500	488	488	476	455	441	555	534	411	401
19	530	516	503	477	483	470	458	456	546	519	416	401
20	533	498	509	501	494	473	471	453	560	528	417	395
21	533	495	512	504	495	473	457	452	548	530	414	392
22	527	495	510	474	476	456	471	459	572	543	417	398
23	525	510	480	471	462	444	486	461	588	503	419	404
24	536	509	477	462	461	440	518	491	495	332	426	414
25	539	507	473	461	446	438	503	468	327	293	426	389
26	533	515	477	470	449	435	509	461	291	279	390	368
27	540	513	483	471	452	440	504	423	284	275	383	356
28	542	519	489	476	444	429	428	420	285	282	390	359
29	554	521	482	467	459	441	446	426	---	---	416	372
30	555	515	483	476	467	450	455	446	---	---	369	330
31	549	509	---	---	474	456	459	447	---	---	383	347
MONTH	555	464	569	461	501	306	518	260	600	275	444	221

27

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

[illegible]

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH					
1	7.8	7.7	7.9	7.8	8.0	7.9	7.6	6.6	7.3	7.2	6.7	6.5				
2	7.8	7.7	7.9	7.8	8.0	7.9	7.1	6.6	7.4	6.5	6.6	6.4				
3	7.8	7.7	7.9	7.8	8.0	7.8	7.1	6.8	7.3	6.5	6.7	6.3				
4	7.7	7.6	7.9	7.7	7.9	7.6	7.3	7.0	7.4	7.0	6.7	6.5				
5	7.6	7.6	7.8	7.7	7.6	7.2	7.3	6.9	7.5	7.2	6.6	6.5				
6	7.7	7.6	7.8	7.7	7.7	7.0	7.5	6.8	7.5	6.8	6.7	6.6				
7	7.7	7.6	7.9	7.8	7.9	7.7	7.4	7.1	7.2	6.8	7.1	6.6				
8	7.7	7.7	7.9	7.8	8.0	7.7	7.6	7.2	7.6	7.2	7.2	7.0				
9	7.8	7.7	7.9	7.8	7.7	7.2	7.7	7.4	7.6	7.5	7.3	7.0				
10	7.8	7.6	7.9	7.9	7.3	7.1	7.6	7.5	7.5	7.2	7.3	7.2				
11	7.8	7.6	7.9	7.8	7.5	7.2	7.7	7.2	7.5	6.8	7.3	7.2				
12	7.7	7.7	7.9	7.9	8.0	7.3	7.5	7.0	7.4	6.9	7.3	7.1				
13	7.7	7.6	7.9	7.8	8.1	7.9	7.5	7.1	7.5	7.1	7.4	7.1				
14	7.6	7.6	7.8	7.8	8.1	7.9	7.5	7.1	7.5	7.2	7.4	7.2				
15	7.8	7.6	7.9	7.8	8.3	7.9	7.6	7.4	7.2	6.9	7.3	7.1				
16	7.8	7.8	8.0	7.9	8.2	7.8	7.4	7.1	7.5	7.0	7.4	7.2				
17	7.8	7.8	7.9	7.9	8.1	7.8	7.4	7.2	7.5	7.0	7.4	7.1				
18	7.9	7.6	7.9	7.9	8.2	7.8	7.4	6.9	7.5	7.3	7.4	7.3				
19	7.9	7.8	8.0	7.9	8.0	7.7	7.4	7.2	7.4	6.6	7.5	7.4				
20	7.9	7.8	8.0	7.9	8.2	7.8	7.3	7.1	7.5	7.0	7.5	7.4				
21	8.0	7.9	8.0	7.9	8.1	7.8	7.3	6.9	7.4	6.8	7.5	7.3				
22	8.1	7.9	7.9	7.9	8.0	7.5	7.3	7.2	7.0	6.5	7.4	7.3				
23	8.1	7.9	7.9	7.8	7.9	7.4	7.5	7.2	7.1	6.9	7.5	7.3				
24	8.0	7.9	7.9	7.8	8.1	7.4	7.6	7.2	7.0	6.5	7.4	7.4				
25	8.1	7.9	7.9	7.7	7.7	7.5	7.3	7.2	6.6	6.3	7.4	7.3				
26	7.9	7.8	7.9	7.8	7.7	7.1	7.5	7.0	6.6	6.2	7.2	7.2				
27	7.8	7.8	8.0	7.9	7.7	7.5	7.5	6.8	6.3	6.0	7.3	7.1				
28	7.9	7.8	7.9	7.8	7.6	6.9	7.0	6.7	6.3	6.2	7.4	7.1				
29	7.9	7.8	7.9	7.8	7.8	7.5	7.2	6.9	---	---	7.4	7.2				
30	7.9	7.8	8.0	7.8	7.7	7.4	7.2	7.0	---	---	7.2	7.0				
31	7.9	7.7	---	---	7.7	7.3	7.2	6.9	---	---	7.2	7.1				
MONTH	8.1	7.6	8.0	7.7	8.3	6.9	7.7	6.6	7.6	6.0	7.5	6.3				
DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER						
1	7.2	7.2	8.1	7.6	7.3	7.1	7.2	7.2	7.3	7.0	7.8	7.4				
2	7.2	6.7	8.2	7.7	7.3	6.9	7.3	7.2	7.4	7.2	7.7	7.4				
3	6.9	6.6	7.7	7.4	7.3	7.2	7.4	7.2	7.4	7.1	---	---				
4	7.0	6.8	7.5	7.3	7.3	7.0	7.4	7.2	7.4	7.2	7.5	7.3				
5	7.2	7.0	7.8	7.4	7.3	7.1	7.3	7.2	7.4	7.1	7.5	7.4				
6	7.5	7.1	7.7	7.4	7.2	7.1	7.4	7.2	7.4	7.2	7.5	7.4				
7	7.5	7.4	7.6	7.3	7.3	7.1	7.3	7.1	7.3	7.1	7.6	7.4				
8	7.5	7.5	7.6	7.3	7.2	7.0	7.3	7.1	7.3	7.0	7.6	7.4				
9	7.5	7.3	7.6	7.2	7.2	7.0	7.3	7.1	7.3	7.1	7.6	7.4				
10	7.3	6.9	7.5	7.2	7.2	6.9	7.2	7.0	7.4	7.2	7.5	7.4				
11	7.5	7.1	7.3	6.9	7.2	7.0	7.2	7.0	7.4	7.1	7.5	7.3				
12	7.5	7.3	7.2	7.0	7.2	6.9	7.2	7.0	7.5	7.4	7.5	7.3				
13	7.4	7.3	7.1	6.9	7.2	7.0	7.3	7.1	7.5	7.3	7.6	7.5				
14	7.4	7.2	7.2	7.0	7.2	6.9	7.3	7.1	7.5	7.2	7.6	6.6				
15	7.3	7.1	7.1	6.9	7.1	6.9	7.3	7.0	7.4	7.3	6.6	6.2				
16	7.2	7.1	7.3	7.1	7.1	6.9	7.3	7.1	7.4	7.3	7.0	6.4				
17	7.2	7.1	7.3	7.1	7.1	6.9	7.3	7.1	7.5	7.3	7.3	6.8				
18	7.3	7.0	7.3	7.0	7.2	7.1	7.3	7.1	7.4	7.3	7.5	7.3				
19	---	---	7.2	7.1	7.2	7.0	7.3	7.1	7.4	7.2	---	---				
20	7.9	7.7	7.2	7.0	7.2	7.0	7.3	7.1	7.4	7.3	7.6	7.4				
21	7.8	7.6	7.3	7.0	7.2	7.0	7.3	7.1	7.4	7.3	7.6	7.6				
22	7.8	7.5	7.4	7.2	7.2	7.0	7.3	7.1	7.5	7.3	7.7	7.6				
23	7.8	7.4	7.3	7.2	7.3	7.2	7.3	7.0	7.4	7.3	7.7	7.5				
24	7.8	7.3	7.3	7.1	7.3	7.2	7.3	7.1	7.5	7.3	7.7	7.5				
25	7.7	7.3	7.3	7.2	7.3	7.2	7.4	7.1	7.5	7.3	7.8	7.6				
26	7.6	7.4	7.1	6.8	7.3	7.1	7.3	7.2	7.6	7.4	7.8	7.5				
27	7.6	7.2	7.0	6.8	7.3	7.1	7.3	7.1	7.5	7.3	7.8	7.5				
28	7.2	7.1	7.2	7.0	7.3	7.1	7.3	7.2	7.4	7.2	7.6	7.5				
29	7.4	7.2	7.2	7.1	7.3	7.1	7.3	7.2	7.5	7.3	7.6	7.5				
30	7.7	7.4	7.3	7.1	7.2	7.1	7.4	7.1	7.5	7.3	7.6	7.4				
31	---	---	7.3	7.2	---	---	7.3	7.1	7.6	7.3	---	---				
MONTH	7.9	6.6	8.2	6.8	7.3	6.9	7.4	7.0	7.6	7.0	7.8	6.2				
YEAR	8.3	6.0														

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH					
1	6.9	6.4	9.6	9.4	11.9	11.3	12.8	11.9	12.0	11.8	11.9	11.8				
2	7.4	6.2	9.6	9.3	11.9	11.5	11.9	11.2	12.0	11.6	12.2	11.8				
3	7.2	6.5	9.5	9.4	11.7	11.2	12.2	11.9	11.8	11.5	12.4	12.0				
4	7.0	6.6	9.4	9.2	11.2	10.3	12.7	12.1	11.5	11.5	12.3	11.0				
5	7.6	5.9	9.3	9.0	10.3	10.0	13.2	12.7	11.5	11.4	11.5	11.0				
6	7.1	7.0	9.0	8.8	11.6	10.4	13.2	12.6	11.5	11.3	11.2	10.9				
7	7.3	7.1	8.8	8.5	11.8	11.5	12.8	12.5	11.4	11.1	12.2	11.3				
8	7.7	7.2	9.1	8.5	11.7	11.0	12.7	12.5	11.3	10.9	12.5	12.0				
9	7.9	7.7	9.4	9.1	11.0	10.8	12.8	12.5	11.2	10.7	12.4	11.8				
10	---	---	9.5	9.2	11.6	10.9	12.8	12.6	10.8	10.5	12.4	12.0				
11	---	---	9.6	9.2	12.2	11.6	13.5	12.6	10.9	10.6	12.5	11.9				
12	---	---	9.5	9.1	12.3	10.9	13.5	13.1	11.0	10.7	13.0	12.3				
13	---	---	9.6	8.9	13.1	12.3	13.0	12.7	11.1	10.7	12.9	12.4				
14	---	---	9.5	9.3	13.9	13.6	12.8	12.3	10.9	10.4	12.6	12.1				
15	---	---	9.4	9.0	13.9	13.3	12.9	12.5	10.5	10.2	13.0	12.2				
16	---	---	10.1	9.4	13.6	12.4	12.8	12.7	10.5	10.2	13.4	12.8				
17	---	---	10.0	9.8	13.4	12.8	12.8	12.5	10.5	10.2	13.2	12.7				
18	---	---	9.7	9.4	13.3	12.7	12.4	12.0	10.6	10.4	13.0	12.5				
19	9.5	9.0	10.0	9.4	13.2	12.8	12.2	12.0	11.0	10.6	12.7	11.6				
20	9.2	8.8	10.1	10.0	13.1	12.8	12.3	11.9	11.0	10.6	12.7	12.1				
21	9.4	8.9	10.2	10.0	12.8	12.4	11.9	11.3	11.1	10.5	12.5	12.1				
22	9.5	8.8	10.3	10.0	13.0	12.3	11.5	11.3	10.4	10.0	12.3	11.6				
23	9.1	8.5	10.2	9.8	13.1	12.6	11.9	11.5	11.1	10.0	12.1	11.5				
24	9.2	8.5	9.8	9.4	13.2	12.8	11.9	11.4	11.4	11.1	11.6	10.6				
25	9.3	8.9	10.0	9.4	12.8	12.2	11.4	11.2	11.1	10.8	10.5	10.1				
26	9.0	8.3	10.6	9.9	12.4	12.1	12.1	11.2	11.3	10.2	11.0	10.3				
27	8.6	8.2	---	---	12.6	12.3	12.2	11.7	10.1	9.6	11.8	11.0				
28	8.7	8.4	11.2	10.9	13.0	12.4	11.7	11.6	9.9	9.8	12.3	11.6				
29	8.9	8.6	11.3	10.9	14.2	12.7	11.8	11.6	---	---	12.2	10.7				
30	8.9	8.8	11.7	11.2	14.0	13.5	11.9	11.7	---	---	10.7	10.0				
31	9.7	8.8	---	---	13.4	12.9	12.1	11.8	---	---	10.4	10.2				
MONTH	9.7	5.9	11.7	8.5	14.2	10.0	13.5	11.2	12.0	9.6	13.4	10.0				

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER					
1	10.8	9.4	11.4	10.4	9.2	8.9	6.7	6.3	7.0	6.0	8.9	6.3				
2	10.7	9.8	13.5	10.5	9.1	8.8	6.8	6.2	6.7	6.0	8.1	6.7				
3	9.8	7.8	13.3	9.5	9.0	8.8	6.8	6.3	6.7	5.7	7.4	6.0				
4	10.3	8.9	10.0	8.9	8.9	8.6	6.7	6.2	6.8	6.0	7.3	6.1				
5	11.3	10.5	10.9	9.4	9.7	8.6	6.5	6.0	6.9	6.1	7.7	6.4				
6	12.1	11.4	11.0	10.2	9.1	8.4	6.6	6.1	6.7	6.0	8.0	6.5				
7	12.9	11.9	13.4	9.8	9.1	8.4	6.6	6.1	6.7	5.7	7.5	6.4				
8	12.8	12.2	12.7	10.2	8.8	7.8	6.8	6.0	6.6	6.0	7.3	6.3				
9	12.7	11.6	12.5	9.3	7.9	7.4	6.6	5.9	6.5	5.9	7.8	6.6				
10	11.7	9.9	10.3	7.8	7.8	7.3	6.4	5.6	6.2	5.7	7.6	6.8				
11	12.2	10.0	8.1	6.3	7.6	6.6	6.9	5.7	6.2	5.8	7.4	6.9				
12	11.2	10.6	7.6	6.9	6.9	6.7	6.8	5.9	6.4	5.5	7.5	6.7				
13	10.7	9.9	7.2	6.2	7.2	6.8	6.6	5.9	6.7	5.9	8.1	6.8				
14	10.3	9.6	7.9	7.2	7.4	7.0	6.2	5.6	7.4	6.2	7.4	6.4				
15	9.7	9.0	7.9	7.4	7.2	6.4	6.3	5.6	7.3	6.8	6.9	6.5				
16	9.1	7.0	8.6	7.7	6.7	6.2	6.5	5.6	7.4	6.8	7.2	6.9				
17	---	---	8.8	8.0	6.6	6.0	6.3	5.6	7.5	7.0	7.9	7.1				
18	---	---	8.8	8.1	6.4	6.0	6.4	5.5	7.4	7.1	8.3	7.9				
19	---	---	8.4	7.6	6.6	5.9	6.8	5.8	7.2	6.6	8.5	8.1				
20	12.2	11.8	8.2	7.1	7.2	6.5	7.0	6.2	7.2	6.6	8.5	7.9				
21	11.7	6.9	7.5	6.9	7.2	6.7	7.0	6.3	7.2	6.5	7.8	7.5				
22	7.1	6.5	7.1	6.5	6.8	6.2	6.8	6.3	7.1	6.5	8.2	7.7				
23	7.1	6.5	7.2	6.5	6.9	6.4	6.7	6.1	7.1	6.6	8.5	8.1				
24	7.1	6.7	7.1	6.7	7.2	6.4	6.7	6.0	6.9	6.5	8.6	8.3				
25	8.5	7.0	8.5	7.0	7.6	6.9	6.4	5.7	6.9	6.1	8.7	8.3				
26	8.7	7.8	8.7	7.8	7.6	6.9	6.3	5.8	6.9	6.3	8.5	8.2				
27	9.1	7.8	9.1	7.8	7.5	6.8	6.3	5.7	6.8	6.1	8.6	8.2				
28	9.7	9.3	9.7	9.3	7.3	6.6	6.3	5.9	7.2	6.2	8.5	8.2				
29	10.0	9.8	10.0	9.8	7.0	6.5	6.4	5.8	7.1	6.5	8.4	8.0				
30	10.2	9.1	10.2	9.1	6.7	6.3	6.6	5.9	7.0	6.3	8.5	8.2				
31	---	---	9.4	9.3	---	---	6.7	6.0	8.3	6.3	---	---				
MONTH	12.9	6.5	13.5	6.2	9.7	5.9	7.0	5.5	8.3	5.5	8.9	6.0				

YEAR	14.2	5.5
------	------	-----

BEAVER RIVER BASIN

31

03094000 MAHONING RIVER AT LEAVITTSBURG, OH

LOCATION.--Lat 41°14'21"N, long 80°52'51"W, 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 (91 m) downstream from Duck Creek and 1.2 mi (1.9 km) downstream from Eagle Creek.

DRAINAGE AREA.--575 mi² (1,489 km²).

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 (265.557 m) National Geodetic Vertical Datum of 1912. Prior to July 2, 1941, nonrecording gage, and July 2, 1941, to July 22, 1952, water-stage recorder, at site 50 ft (15 m) downstream at same datum.

REMARKS.--Records good. Flow regulated by Berlin Lake, 25 mi (40 km) upstream, beginning in 1942, by Milton Reservoir, 17 mi (27 km) upstream, and by Michael J. Kirwan Reservoir, 20 mi (32 km) upstream on West Branch, beginning in 1966 (see stations 030900000, 030910000 and 030924500). Diversion upstream from station from Berlin Lake for part of municipal supply of Mahoning Valley Sanitary District (see station 030905000). Water-quality data collected at this site 1943 to 1971.

COOPERATION.--Five discharge measurements furnished by Corps of Engineers.

AVERAGE DISCHARGE.--39 years, 572 ft³/s (16.20 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,300 ft³/s (575 m³/s) Jan. 22, 1959, gage height, 19.37 ft (5.904 m); minimum daily, 60 ft³/s (1.70 m³/s) July 6, 1952.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913 reached a stage of about 24 ft (7 m). Flood of Jan. 25 or 26, 1937 reached a stage of 17.8 ft (5.43 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,300 ft³/s (263 m³/s) Sept. 15, gage height, 15.91 ft (4.849 m); minimum daily, 190 ft³/s (5.38 m³/s) Feb. 13-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	526	548	426	2000	312	1610	746	816	1340	345	286	261
2	508	539	430	3110	282	1570	1300	743	1330	349	307	255
3	282	530	503	1690	265	1800	3010	488	1200	359	331	284
4	272	450	1160	1290	256	2770	1650	479	1070	338	296	296
5	265	442	1340	1000	235	3220	1600	465	950	338	293	306
6	262	442	1030	900	223	1980	1890	337	920	314	303	291
7	282	438	865	820	217	1660	1650	309	905	296	307	289
8	286	434	990	780	217	1440	1530	294	1070	289	279	283
9	268	434	2170	750	214	1310	1930	283	895	286	275	282
10	259	430	2140	730	208	1290	2700	295	790	289	282	281
11	256	430	1260	720	200	1300	2070	432	1000	303	317	276
12	272	434	1220	720	200	1200	1770	404	805	303	349	274
13	517	434	1170	750	190	1160	1800	832	526	314	303	281
14	665	438	1150	863	190	1170	1790	685	370	317	282	2540
15	825	434	1120	908	190	1180	1980	537	331	310	272	8480
16	760	434	1110	920	190	1130	1930	468	317	300	268	3010
17	935	470	1120	880	190	915	1780	434	314	293	268	1300
18	870	526	1120	760	190	860	1630	410	303	286	279	1370
19	790	548	1100	600	190	855	1540	289	324	275	296	1410
20	751	521	1090	530	190	770	1400	268	328	275	286	1370
21	724	414	1180	570	200	486	861	268	363	279	275	1350
22	710	390	1250	580	250	434	652	261	366	279	272	1340
23	697	394	1160	470	598	426	618	255	353	286	289	1320
24	692	414	1110	500	1970	462	575	269	335	289	310	1300
25	683	414	692	592	2420	770	552	1310	324	296	314	1290
26	701	406	566	665	2230	820	566	3820	317	286	293	1280
27	746	410	553	634	2000	539	1010	2720	310	282	289	1270
28	661	470	520	528	1870	442	1300	1780	331	289	303	1310
29	603	521	500	454	---	733	884	1580	342	303	359	1420
30	580	470	526	415	---	1150	873	1470	356	296	359	1370
31	562	---	656	385	---	1000	---	1370	---	282	286	---
TOTAL	17210	13659	31227	26514	15887	36452	43607	24371	18485	9346	9218	36389
MEAN	555	1007	1007	855	567	1176	1454	786	616	301	297	1213
MAX	935	548	2170	3110	2420	3220	3010	3820	1340	359	359	8480
MIN	256	390	426	385	190	426	552	255	303	275	268	255
CAL YR 1978	TOTAL	242288	MEAN 664	MAX 5060	MIN 233							
WTR YR 1979	TOTAL	282365	MEAN 774	MAX 8480	MIN 190							

BEAVER RIVER BASIN

03095500 MOSQUITO CREEK BELCW 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 (30 m) downstream from Mosquito Creek Dam, 0.8 mi (1.3 km) upstream from Confusion Run, and 2.5 mi (4.0 km) southwest of Cortland.

DRAINAGE AREA.--97.5 mi² (253 km²).

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 (266.389 m) 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 (274 m) downstream at datum 6.63 ft (2.021 m) lower.

REMARKS.--Records good. Flow completely regulated by Mosquito Creek Lake beginning 1943 (see station 03095000). 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.

COOPERATION.--One discharge measurements furnished by Corps of Engineers.

AVERAGE DISCHARGE.--39 years, 86.8 ft³/s (2.458 m³/s) (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,890 ft³/s (53.5 m³/s) Jan. 19, 1929, gage height, 11.5 ft (3.51 m), from floodmark, site and datum then in use; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 800 ft³/s (22.7 m³/s) Apr. 10, gage height, 3.50 ft (1.067 m); minimum daily 12 ft³/s (0.34 m³/s) Nov. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	15	32	194	16	18	18	23	220	29	46	31
2	14	16	57	148	16	18	18	23	220	28	46	31
3	15	15	57	94	16	18	18	23	161	37	46	32
4	15	14	57	148	15	18	18	24	54	46	46	32
5	15	14	57	194	15	18	103	27	19	46	46	32
6	15	14	78	194	15	82	213	27	20	46	46	32
7	15	14	96	194	15	207	330	25	19	46	46	32
8	15	14	96	194	15	207	406	25	19	46	46	32
9	15	14	98	194	16	207	402	27	19	46	46	34
10	14	14	98	194	16	207	571	27	19	46	46	34
11	14	14	98	194	16	207	781	27	19	48	46	34
12	14	14	96	194	17	207	774	27	137	48	46	34
13	14	14	137	194	17	207	768	27	220	48	46	34
14	14	14	200	194	18	207	774	27	220	48	46	34
15	14	12	197	194	18	207	774	27	217	46	46	35
16	14	14	197	194	18	207	768	27	217	48	46	119
17	14	14	197	194	18	207	768	27	217	46	46	303
18	14	14	197	194	15	207	752	28	217	46	46	514
19	14	14	90	194	15	88	755	27	217	48	46	592
20	14	14	15	194	15	20	555	27	156	48	46	581
21	14	14	15	194	15	20	260	27	96	48	46	581
22	14	14	15	94	15	20	101	27	59	48	48	571
23	14	14	15	14	16	18	59	23	29	48	48	571
24	14	14	72	15	17	18	22	23	29	46	40	565
25	14	14	194	15	17	18	22	23	29	46	30	565
26	14	14	194	15	17	18	22	24	28	46	31	560
27	14	14	194	15	17	18	23	112	28	46	31	560
28	14	14	194	15	18	18	23	223	28	46	31	555
29	14	14	194	15	---	19	23	223	28	46	31	555
30	14	14	194	15	---	19	23	223	29	46	31	555
31	14	---	194	16	---	18	---	223	---	46	31	---
TOTAL	440	422	3625	4111	454	2968	10164	1673	2990	1402	1318	8240
MEAN	14.2	14.1	117	133	16.2	95.7	339	54.0	99.7	45.2	42.5	275
MAX	15	16	200	194	18	207	781	223	220	48	48	592
MIN	13	12	15	14	15	18	18	23	19	28	30	31
CFSM	.15	.15	1.20	1.36	.17	.98	3.48	.55	1.02	.46	.44	2.82
IN.	.17	.16	1.38	1.57	.17	1.13	3.88	.64	1.14	.53	.50	3.14
(+)	24.5	23.5	22.4	24.7	26.6	25.2	23.2	24.5	25.4	25.4	25.4	23.7

CAL YR 1978 TOTAL 23748 MEAN 65.1 MAX 514 MIN 12 CFSM .67 IN 9.06
WTR YR 1979 TOTAL 37807 MEAN 104 MAX 781 MIN 12 CFSM 1.07 IN 14.42

(+) Diversion in cubic feet per second; furnished by city of Warren.

03098000 MAHONING RIVER AT YOUNGSTOWN, OH

LOCATION.--Lat 41°06'40", long 80°40'23", Mahoning County, Hydrologic Unit 05030103, on left bank 400 ft (122 m) upstream from Bridge Street bridge in Youngstown, and 0.8 mi (1.3 km) upstream from Mill Creek.

DRAINAGE AREA.--898 mi² (2,326 km²).

PERIOD OF RECORD.--October 1921 to current year. Records for May 1903 to July 1906, published in WSP 98, 128, 169, and 205, are unreliable and should not be used.

REVISED RECORDS.--WSP 623: 1924 (M). WSP 1907: Drainage area. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 826.53 ft (251.926 m) National Geodetic Vertical Datum of 1912. (levels by Mahoning Valley Sanitary District). Prior to Nov. 16, 1926, nonrecording gage at site 400 ft (122 m) downstream at same datum.

REMARKS.--Records good. Water diverted upstream from station for municipal supply for city of Youngstown. Some sewage returned to river upstream from station. Water also diverted upstream and downstream from station by a private company for industrial use, some of which is returned to river upstream from station. Flow regulated by Berlin Lake, 48 mi (77 km) upstream, beginning in 1942, by Milton Reservoir, 40 mi (64 km) upstream, by Michael J. Kirwan Reservoir, 43 mi (69 km) upstream on West Branch, beginning in 1966, by Mosquito Creek Lake, 22 mi (35 km) upstream, beginning in 1943, by Meander Creek Reservoir, 11 mi (18 km) upstream, beginning in 1929, and by reservoir on Squaw Creek, 5 mi (8 km) upstream. Water-quality data collected at this site 1951, 1965 to 1977.

COOPERATION.--One discharge measurement furnished by the Corps of Engineers.

AVERAGE DISCHARGE.--58 years, 866 ft³/s (24.53 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,600 ft³/s (498 m³/s) Jan. 25, 1937, gage height, 14.92 ft (4.548 m); maximum gage height, 18.62 ft (5.675 m) Jan. 22, 1959 (backwater from Mill Creek); minimum daily discharge, 30 ft³/s (0.85 m³/s) Aug. 16, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913 reached a stage of 26.5 ft (8.08 m), discharge, 42,500 ft³/s (1,200 m³/s), estimated by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,700 ft³/s (275 m³/s) Sept. 16; gage height, 12.75 ft (3.886 m); minimum daily discharge, 225 ft³/s (6.37 m³/s) Feb. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	810	679	552	3450	503	2840	1220	1120	1940	433	518	374
2	640	665	546	4810	424	3010	2460	1010	1880	449	519	344
3	483	658	895	3390	389	3260	4120	770	1750	436	456	354
4	511	598	2040	1580	372	4310	3440	661	1560	484	420	391
5	361	540	2270	1310	328	5100	2800	641	1330	435	421	418
6	358	546	1680	1380	306	3710	3010	516	1200	409	442	405
7	447	540	1330	1280	301	2720	2550	416	1170	380	423	393
8	363	534	1810	1260	295	2400	2330	387	1370	367	392	379
9	338	527	3230	1190	285	1970	3330	365	1280	377	380	371
10	314	521	3460	1190	270	1920	4330	415	1040	406	414	371
11	301	515	2150	1120	230	1910	3630	586	1290	421	507	374
12	379	527	1650	1170	240	1770	3130	666	1170	426	476	370
13	941	527	1540	1190	230	1680	3090	1170	828	482	431	396
14	1260	540	1500	1450	255	1710	3100	1180	680	463	402	3780
15	1170	527	1490	1480	265	1700	3270	751	573	422	374	7700
16	1240	521	1460	1450	240	1610	3250	621	539	400	364	7680
17	1370	598	1450	1380	225	1400	3000	538	524	397	361	2110
18	1230	679	1430	1050	235	1240	2770	499	512	391	427	1830
19	1010	672	1370	832	245	1430	2600	415	518	378	404	1990
20	895	644	1250	853	235	1210	2440	326	536	375	391	2120
21	825	572	1370	923	317	699	1930	324	595	374	392	2190
22	769	484	1450	895	460	533	1340	313	508	402	376	2170
23	734	503	1310	713	1310	520	1010	313	444	428	426	2120
24	692	521	1210	881	3280	624	839	517	390	401	519	2100
25	692	521	1140	1290	4040	909	734	3700	364	425	495	2080
26	881	509	825	1270	4850	1170	853	6480	360	407	427	2060
27	972	546	762	1170	3670	797	1840	5200	355	388	484	2040
28	895	631	713	993	2910	637	2170	3120	418	469	561	2440
29	769	679	671	825	---	1170	1550	2570	401	446	724	2410
30	706	631	699	720	---	1860	1210	2250	416	407	576	2290
31	699	---	1160	657	---	1670	---	2010	---	414	453	---
TOTAL	23055	17155	44413	43152	26710	57489	73346	39850	25941	12892	13955	54050
MEAN	744	572	1433	1392	954	1854	2445	1285	865	416	450	1802
MAX	1370	679	3460	4810	4850	5100	4330	6480	1940	484	724	7700
MIN	301	484	546	657	225	520	734	313	355	367	361	344

CAL YR 1978 TOTAL 366076 MEAN 1003 MAX 8030 MIN 301
WTR YR 1979 TOTAL 432008 MEAN 1184 MAX 7700 MIN 225

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 (30 m) upstream from First Street Bridge at Lowellville, 1 mi (2 km) upstream from Ohio-Pennsylvania State line, and 3 mi (5 km) downstream from Yellow Creek.

DRAINAGE AREA.--1,073 mi² (2,779 km²).

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 (242.877 m) National Geodetic Vertical Datum of 1912. Prior to Oct. 26, 1944, nonrecording gage at site 300 ft (91 m) downstream at same datum.

REMARKS.--Records good. Flow regulated by 5 flood control reservoirs at points 21 mi (34 km) to 58 mi (93 km) upstream (see REMARKS for station 03098000), and by reservoirs on Squaw Creek, 15 mi (24 km) upstream, on Dry Run, 9 mi (14 km) upstream, and on Yellow Creek, 5 mi (8 km) upstream. Water-quality data collected at this site 1949 to 1973.

AVERAGE DISCHARGE.--37 years, 1,089 ft³/s (30.84 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 21,000 ft³/s (595 m³/s) Jan. 21, 1959, gage height, 14.43 ft (4.398 m); minimum daily, 155 ft³/s (4.39 m³/s) Feb. 5, 1944.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 17.8 ft (5.43 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,150 ft³/s (259 m³/s) Sept. 16, gage height, 8.87 ft (2.704 m); minimum daily, 346 ft³/s (9.80 m³/s) Feb. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	907	739	695	4180	805	3530	1450	1240	2020	559	662	470
2	652	721	643	5360	670	3820	3370	1130	1940	615	678	437
3	555	713	1140	3830	600	4000	4760	963	1790	593	566	431
4	713	669	2580	1900	573	5140	4000	848	1610	670	532	477
5	457	603	2430	1470	498	5800	3260	805	1420	586	525	498
6	429	603	1870	1550	484	4270	3190	702	1280	545	593	491
7	578	603	1500	1430	484	2980	2690	579	1230	498	532	484
8	443	595	2210	1400	470	2620	2410	552	1470	470	504	457
9	415	595	4080	1320	444	2110	3900	518	1400	498	484	444
10	387	578	3560	1320	405	2030	4710	593	1210	655	511	450
11	367	578	2430	1240	375	1980	3850	736	1640	573	608	457
12	464	578	1870	1280	380	1830	3340	1010	1380	545	559	457
13	1140	586	1770	1320	386	1740	3260	1650	990	631	539	484
14	1470	603	1750	1700	386	1790	3230	1410	848	600	498	4490
15	1290	595	1740	1670	386	1760	3380	947	718	552	470	6960
16	1420	586	1700	1580	392	1650	3340	787	678	511	457	7980
17	1540	739	1690	1580	363	1510	3070	686	647	491	457	2350
18	1400	821	1680	1330	346	1340	2810	647	631	477	559	1780
19	1180	766	1630	1010	352	1460	2600	579	631	464	518	1890
20	1070	748	1540	1020	375	1380	2440	470	647	450	491	2030
21	996	695	1710	1230	457	922	2020	457	787	444	491	2210
22	927	603	1740	1130	710	710	1470	444	662	566	477	2200
23	907	652	1610	980	1750	694	1150	444	573	710	518	2110
24	898	660	1530	1230	4430	856	999	694	498	552	608	2090
25	888	643	1640	1830	5260	1090	889	5490	477	573	586	2070
26	1040	611	1270	1630	6980	1320	972	7870	470	559	525	2050
27	1040	704	1150	1510	4710	999	1980	6100	464	491	608	2030
28	976	831	1090	1340	3610	822	2270	3650	586	631	744	2810
29	840	840	1030	1160	---	1270	1690	2880	631	600	930	2570
30	775	785	1080	1010	---	1940	1330	2410	579	532	678	2350
31	757	---	1680	922	---	1800	---	2110	---	600	559	---
TOTAL	26921	20043	54038	51462	37081	65163	79860	49401	29907	17241	17467	56007
MEAN	868	668	1743	1660	1324	2102	2662	1594	997	556	563	1867
MAX	1540	840	4080	5360	6980	5800	4760	7870	2020	710	930	7980
MIN	367	578	643	922	346	694	889	444	464	444	457	431
CAL YR 1978 TOTAL	468716			1284	MAX 9210	MIN 367						
WTR YR 1979 TOTAL	504591			1382	MAX 7980	MIN 346						

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 (244 m) upstream from Ohio-Pennsylvania State line, just below Lowellville, 0.9 mi (1.4 km) downstream from gaging station at Lowellville, and 3.9 mi (6.3 km) downstream from Yellow Creek.

DRAINAGE AREA.--1,075 mi² (2,784 km²).

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 micromhos Feb. 22, 1979; minimum, 204 micromhos July 13, 1976.

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, 0.5°C Jan. 10, 1978.

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, 1,640 micromhos Feb. 22; minimum, 206 micromhos Sept. 16.

pH: Maximum, 8.3 units Feb. 26; minimum, 6.2 units Aug. 6.

WATER TEMPERATURES: Maximum, 32.5°C Aug. 8; minimum, 1.0°C Feb. 26.

DISSOLVED OXYGEN: Maximum, 13.4 mg/L Mar. 12; minimum, 1.9 mg/L Aug. 24.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	624	515	659	526	681	654	---	---	743	707	508	464
2	620	587	648	520	684	650	---	---	771	737	504	492
3	611	596	650	529	702	549	387	374	786	734	468	444
4	635	527	663	520	587	500	453	390	809	758	442	410
5	678	524	672	533	540	495	495	434	815	782	404	342
6	690	644	656	530	500	479	536	446	816	761	387	342
7	668	615	656	530	521	476	536	474	819	786	450	390
8	699	668	678	538	531	476	531	491	870	791	504	450
9	692	657	683	536	480	456	539	494	885	809	534	505
10	714	666	672	533	462	413	542	518	828	797	534	512
11	725	695	669	547	456	407	542	489	816	792	536	504
12	726	675	662	539	507	453	554	456	869	797	519	497
13	654	537	662	532	543	504	593	350	857	789	540	497
14	600	513	675	527	563	542	809	605	879	813	543	515
15	599	570	672	539	570	548	650	546	849	810	525	509
16	575	522	677	536	575	552	582	522	1030	854	513	494
17	569	533	690	506	591	548	738	465	915	852	528	504
18	612	563	668	500	566	542	693	506	873	840	509	498
19	608	582	650	515	561	542	623	603	854	828	536	479
20	621	593	641	617	570	539	780	570	1150	828	555	477
21	639	596	648	621	627	570	950	663	1290	1050	597	542
22	629	597	660	633	603	569	785	668	1640	1180	620	573
23	611	593	686	645	576	557	765	675	1250	932	656	615
24	615	591	674	636	564	551	993	708	909	542	693	635
25	620	596	671	541	669	558	752	695	524	432	678	611
26	621	582	681	533	650	599	752	609	458	434	609	566
27	599	573	986	645	654	587	717	669	538	428	582	548
28	627	579	992	663	---	---	755	654	516	465	618	572
29	629	593	698	671	573	542	752	699	---	---	728	590
30	651	593	698	557	581	554	735	704	---	---	591	540
31	647	608	---	---	---	---	741	695	---	---	537	505
MONTH	726	513	992	500	702	407	993	350	1640	428	728	342

BEAVER RIVER BASIN

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

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

[illegible]

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	7.6	7.4	7.0	6.9	7.3	7.0	---	---	7.4	7.0	7.4	7.1
2	7.5	7.5	7.1	6.9	7.3	7.1	---	---	7.4	7.1	7.4	7.3
3	7.5	7.4	7.0	6.9	7.5	7.3	7.2	7.0	7.3	6.7	7.4	7.2
4	7.5	7.4	7.0	6.9	7.7	7.5	7.3	7.0	7.3	7.2	7.4	7.3
5	---	---	7.0	6.8	7.6	7.4	7.2	6.9	7.4	7.3	7.4	7.2
6	---	---	7.0	6.9	7.5	7.2	7.2	6.9	7.4	7.2	7.3	7.1
7	---	---	7.1	7.0	7.4	7.1	7.4	6.9	7.3	7.0	7.3	7.1
8	---	---	7.0	6.8	7.4	7.1	7.5	7.3	7.2	6.9	7.3	7.1
9	---	---	7.1	6.9	7.5	7.0	7.4	7.1	7.3	7.2	7.5	7.2
10	---	---	7.1	7.0	7.4	7.0	7.4	7.1	7.3	7.0	7.6	7.2
11	---	---	7.0	6.9	7.3	6.9	7.3	7.1	7.2	7.1	7.5	7.0
12	---	---	7.1	6.9	7.5	7.2	7.3	7.1	7.2	7.1	7.5	7.1
13	---	---	7.1	6.8	7.5	7.3	7.3	7.2	7.3	6.9	7.3	7.2
14	---	---	7.1	7.0	7.6	7.2	7.4	6.9	7.2	7.0	7.3	7.1
15	---	---	7.1	6.9	7.6	7.3	7.5	7.3	7.2	6.8	7.6	7.2
16	---	---	7.1	6.9	7.7	7.3	7.2	7.0	7.1	7.0	7.4	7.0
17	---	---	7.0	6.8	7.8	7.3	7.2	7.0	7.1	6.8	7.4	7.3
18	7.2	7.0	7.3	7.0	7.5	7.2	7.3	7.2	7.2	7.1	7.4	7.4
19	7.2	7.1	7.3	7.2	7.4	7.1	7.3	7.1	7.2	6.9	7.6	7.3
20	7.1	6.9	7.4	7.3	7.5	7.2	7.6	7.0	7.2	6.4	7.6	7.2
21	7.1	6.9	7.3	7.2	7.4	7.2	7.2	7.0	7.1	6.8	7.4	7.2
22	7.0	6.9	7.3	7.1	7.4	7.1	7.5	7.1	7.2	7.0	7.2	6.9
23	7.1	7.0	7.2	7.0	7.4	7.2	7.4	7.2	7.3	7.1	7.2	6.9
24	7.1	7.0	7.3	7.0	7.6	7.2	7.3	7.1	8.1	7.2	7.2	7.0
25	7.1	6.8	7.3	7.3	7.6	7.4	7.3	7.0	7.9	7.8	7.4	7.1
26	7.2	6.8	7.4	7.3	7.6	7.3	7.3	7.0	8.3	7.7	7.4	7.3
27	7.1	7.0	7.4	7.1	7.4	7.2	8.1	7.3	7.8	7.5	7.4	7.1
28	7.0	6.9	7.3	7.1	---	---	7.5	7.3	7.7	7.1	7.3	7.2
29	7.2	6.8	7.3	7.1	7.5	7.1	7.4	7.2	---	---	7.3	7.0
30	7.2	6.9	7.3	7.1	7.7	7.1	7.3	7.0	---	---	7.5	7.1
31	7.2	6.9	---	---	---	---	7.3	7.0	---	---	7.6	7.2
MONTH	7.6	6.8	7.4	6.8	7.8	6.9	8.1	6.9	8.3	6.4	7.6	6.9
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	---	---	7.6	7.4	7.4	7.2	7.3	7.2	7.1	7.0	7.4	7.2
2	---	---	7.5	7.3	---	---	7.4	7.2	7.4	7.0	7.3	7.2
3	---	---	7.5	7.3	---	---	7.4	7.2	7.6	6.4	7.3	7.2
4	---	---	7.3	7.3	---	---	7.4	7.3	7.7	7.1	7.4	7.2
5	---	---	---	---	7.5	7.3	7.4	7.3	7.8	6.6	7.4	7.2
6	---	---	---	---	---	---	7.3	7.3	7.8	6.2	7.3	7.2
7	---	---	---	---	7.3	7.0	7.5	7.3	7.6	7.2	7.3	7.2
8	---	---	7.3	7.2	7.3	7.3	7.3	7.2	7.3	7.1	7.5	7.3
9	---	---	7.3	7.2	7.2	7.2	7.4	7.2	7.2	7.2	7.4	7.3
10	---	---	7.3	7.2	7.3	7.2	7.4	7.2	7.2	7.0	7.5	7.3
11	---	---	---	---	---	---	7.4	7.4	7.1	7.0	7.4	7.3
12	---	---	---	---	---	---	7.4	7.2	---	---	7.4	7.2
13	---	---	---	---	---	---	7.3	7.2	---	---	7.3	6.3
14	---	---	---	---	---	---	7.3	7.1	7.3	7.2	---	---
15	---	---	---	---	---	---	7.3	7.1	7.3	7.1	---	---
16	---	---	---	---	7.3	7.1	7.4	7.3	7.2	7.0	7.4	6.9
17	7.5	7.2	7.3	7.1	---	---	7.5	7.4	7.3	7.1	7.6	7.3
18	7.6	7.3	7.3	7.2	---	---	7.5	7.4	7.3	7.1	7.5	7.3
19	7.6	7.4	7.2	7.2	---	---	7.5	7.2	7.2	7.1	7.5	7.4
20	7.6	7.3	7.3	7.1	---	---	7.4	7.2	7.5	7.2	7.5	7.3
21	7.6	7.2	7.3	7.2	---	---	7.3	7.0	7.3	7.2	7.4	7.2
22	7.6	7.5	7.3	7.3	7.3	7.2	7.2	7.0	7.3	7.2	7.5	7.2
23	7.7	7.5	7.3	7.1	7.5	7.1	7.3	7.0	7.2	7.1	7.6	7.4
24	7.6	7.4	7.8	7.1	7.4	7.3	7.3	6.9	7.2	7.1	7.6	7.3
25	7.4	7.2	7.6	7.2	7.4	7.3	7.3	7.1	7.2	7.1	7.5	7.2
26	---	---	7.9	7.7	7.5	7.3	7.1	7.0	7.2	7.2	7.4	7.1
27	7.6	7.4	7.7	7.5	7.4	7.2	7.4	7.0	7.3	7.0	7.4	7.2
28	7.5	7.4	7.6	7.4	7.4	7.2	7.2	7.0	7.3	7.1	7.6	7.2
29	7.6	7.5	7.5	7.3	7.3	7.1	7.3	7.0	7.3	7.0	7.4	7.1
30	7.7	7.5	7.5	7.2	7.5	7.2	7.6	7.2	7.2	7.1	7.6	7.3
31	---	---	7.4	7.3	---	---	7.4	7.0	7.5	7.0	---	---
MONTH	7.7	7.2	7.9	7.1	7.5	7.0	7.6	6.9	7.8	6.2	7.6	6.3
YEAR	8.3	6.2										

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	26.0	23.0	18.5	17.5	12.0	10.5	---	---	8.0	7.0	3.5	3.5
2	24.5	23.5	18.5	17.0	12.5	11.5	---	---	8.5	7.5	3.5	3.5
3	25.0	23.0	18.0	16.0	11.5	10.0	1.5	1.5	10.0	8.5	4.5	3.0
4	24.5	22.5	19.5	18.0	10.0	8.0	3.5	1.5	10.0	8.5	4.5	4.0
5	24.0	22.5	19.5	18.0	8.0	7.0	4.5	3.5	8.5	7.0	4.0	3.5
6	22.5	21.0	20.5	19.0	8.0	7.0	5.0	4.0	9.0	7.0	5.0	4.0
7	21.0	19.5	20.0	19.0	9.5	8.0	4.0	3.5	11.0	8.5	6.5	5.0
8	22.5	21.0	19.5	18.5	10.0	8.0	4.5	4.0	10.5	9.0	7.0	5.5
9	23.0	21.0	18.5	18.0	7.5	5.5	4.5	3.5	9.5	8.0	8.5	6.5
10	24.5	22.0	18.5	17.5	5.5	3.5	5.0	4.5	8.5	7.5	8.5	7.0
11	25.5	23.0	19.0	17.0	4.0	3.5	5.0	4.0	10.0	7.5	7.0	5.5
12	24.5	23.5	19.0	15.5	6.0	4.5	5.5	4.5	10.0	9.0	6.5	5.0
13	23.5	21.0	17.5	16.5	6.5	6.0	6.5	5.0	9.5	8.5	8.0	5.0
14	21.5	17.0	17.5	16.5	6.5	6.0	5.5	3.5	11.0	9.0	8.0	7.0
15	16.5	16.0	17.0	16.0	6.0	5.5	3.5	3.0	12.5	10.5	8.0	6.0
16	16.0	14.0	18.0	16.5	5.5	5.0	5.0	3.5	12.0	11.0	8.5	6.0
17	15.5	14.0	18.0	16.0	5.5	5.0	5.0	4.5	11.0	9.0	10.0	8.5
18	16.0	15.0	16.0	15.0	5.5	4.5	5.5	4.5	9.5	9.0	10.0	10.0
19	17.0	16.5	15.5	14.0	5.5	5.0	7.0	5.0	11.0	9.5	10.5	10.0
20	18.5	17.0	15.0	14.0	7.0	5.0	8.0	6.5	12.5	10.0	11.0	8.5
21	19.5	17.5	15.0	14.5	7.0	6.0	8.0	5.5	13.5	12.5	13.0	10.5
22	20.0	18.5	15.5	14.5	6.0	6.0	6.0	5.5	13.0	12.0	16.0	12.5
23	19.0	18.5	15.5	15.0	6.5	5.5	8.0	6.0	12.0	6.0	17.0	15.0
24	19.5	18.0	15.5	13.0	6.5	5.5	8.0	6.5	5.5	2.0	17.0	15.5
25	19.0	17.5	13.0	12.5	5.5	4.5	6.0	5.5	2.0	1.5	15.5	13.5
26	19.0	18.0	12.5	12.0	6.0	4.0	5.5	5.5	1.5	1.0	13.0	10.5
27	18.0	17.0	12.5	11.0	6.0	5.0	6.5	5.5	3.0	1.5	10.5	10.0
28	17.5	16.5	13.0	11.5	---	---	6.5	6.0	4.0	2.5	12.5	10.0
29	17.0	15.5	12.0	11.5	6.5	6.5	7.0	6.0	---	---	13.5	12.5
30	16.5	15.0	12.0	11.5	7.5	6.5	8.0	6.5	---	---	13.0	11.5
31	18.5	16.0	---	---	---	---	8.5	7.5	---	---	13.0	12.0
MONTH	26.0	14.0	20.5	11.0	12.5	3.5	8.5	1.5	13.5	1.0	17.0	3.0
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.0	12.0	16.0	14.5	19.0	17.5	27.5	26.5	32.0	28.5	31.0	28.5
2	---	---	18.5	14.5	---	---	26.5	25.0	31.0	29.5	30.0	29.0
3	---	---	18.5	18.0	---	---	27.0	25.0	31.5	29.0	30.0	28.5
4	---	---	18.5	18.5	---	---	25.5	24.5	31.5	29.5	30.0	28.5
5	---	---	---	---	21.5	20.5	25.5	23.5	30.5	28.5	29.5	28.5
6	8.5	7.5	---	---	---	---	27.0	24.0	30.5	28.0	30.5	28.5
7	8.5	7.5	---	---	25.0	24.0	28.0	25.0	31.0	28.5	30.5	28.5
8	8.0	8.0	27.0	24.5	24.5	23.0	28.5	26.0	32.5	30.0	28.5	27.0
9	8.0	6.5	29.5	26.0	24.5	23.0	27.5	26.0	32.0	31.0	28.0	25.5
10	7.5	6.0	28.5	28.0	26.0	24.0	27.0	24.0	32.0	30.0	28.0	25.5
11	7.5	7.0	---	---	---	---	29.5	26.5	29.5	28.5	28.0	27.0
12	---	---	---	---	---	---	31.5	28.5	29.5	27.0	29.5	26.5
13	---	---	---	---	---	---	30.0	27.5	28.5	26.0	29.0	28.0
14	---	---	---	---	---	---	29.5	27.0	28.0	26.0	---	---
15	---	---	---	---	---	---	31.0	28.5	25.5	24.0	18.5	17.5
16	---	---	---	---	28.0	27.0	31.5	29.0	27.5	24.0	17.5	16.5
17	10.0	10.0	26.0	22.0	---	---	29.5	28.0	27.5	25.5	19.5	17.5
18	11.5	10.0	27.0	23.0	---	---	30.5	28.0	26.5	25.5	21.0	19.0
19	12.5	11.0	27.5	23.5	---	---	31.5	29.0	28.0	25.5	22.0	20.5
20	13.5	12.0	28.0	26.0	---	---	32.0	28.5	28.0	26.5	20.5	19.0
21	15.5	13.0	27.0	26.5	---	---	32.0	29.5	28.5	27.0	19.5	19.0
22	17.5	14.5	27.0	26.5	29.0	27.5	31.0	27.5	30.0	27.0	19.5	19.0
23	19.0	16.0	26.5	25.5	28.0	26.5	28.5	25.5	31.0	30.0	19.5	18.5
24	20.5	18.0	26.0	22.5	27.0	25.0	30.0	27.0	30.5	29.5	19.0	17.5
25	23.0	20.0	22.0	13.0	27.5	24.5	32.0	30.0	30.0	28.5	20.0	17.5
26	---	---	13.0	12.0	29.0	25.5	30.5	29.5	29.0	27.5	20.0	18.0
27	19.0	16.5	12.5	11.5	30.0	26.5	32.0	29.0	27.5	26.5	20.0	18.5
28	16.0	14.5	14.0	12.5	29.0	27.5	31.5	29.0	27.5	27.0	19.5	19.0
29	14.5	14.0	15.5	14.0	29.0	26.0	31.0	29.5	27.0	25.5	19.5	19.0
30	15.5	13.5	16.5	15.5	28.0	26.0	31.0	28.0	30.0	27.0	20.0	19.0
31	---	---	17.5	16.5	---	---	32.0	29.0	30.5	28.0	---	---
MONTH	23.0	6.0	29.5	11.5	30.0	17.5	32.0	23.5	32.5	24.0	31.0	16.5
YEAR	32.5	1.0										

39

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN					
	OCTOBER				NOVEMBER				DECEMBER				JANUARY				FEBRUARY				MARCH			
1	4.8	2.7	6.3	5.7	8.0	7.6	---	---	10.8	10.3	11.8	11.6												
2	4.4	3.9	6.3	5.5	7.7	7.2	---	---	10.6	10.3	11.9	11.8												
3	4.1	3.8	6.3	5.8	8.9	7.3	12.9	12.8	10.3	9.6	11.9	11.7												
4	4.7	3.3	5.9	5.2	9.8	8.0	13.0	12.3	---	---	11.8	11.5												
5	4.3	3.9	5.8	5.2	10.2	9.8	12.3	11.8	---	---	13.0	11.4												
6	4.2	3.2	5.4	4.7	10.7	10.2	12.1	11.6	11.1	---	13.0	12.9												
7	4.6	3.9	5.0	4.3	10.5	10.0	12.0	11.6	11.3	---	13.1	12.8												
8	4.2	3.7	5.0	4.7	10.1	9.8	12.0	11.6	11.2	---	12.8	12.6												
9	4.2	3.5	4.7	4.3	10.0	9.7	11.9	11.4	11.1	8.6	12.6	12.4												
10	3.9	3.1	4.6	4.2	11.3	10.0	11.6	11.4	11.3	8.8	12.6	12.4												
11	3.4	3.0	4.7	4.2	11.6	11.4	12.3	11.5	11.3	7.9	13.0	12.5												
12	4.0	3.0	4.6	3.8	11.5	11.2	12.1	11.7	8.5	7.9	13.4	12.8												
13	5.2	3.3	5.5	3.8	11.2	10.8	11.9	11.5	8.4	8.1	13.2	12.5												
14	6.0	4.6	6.0	4.8	12.3	10.9	12.2	11.4	8.4	7.7	12.4	12.2												
15	6.9	6.1	6.1	5.1	12.4	12.0	12.8	12.2	8.0	6.9	12.8	12.3												
16	7.0	6.6	6.1	5.2	12.5	12.2	12.4	12.0	7.7	6.9	13.0	12.8												
17	7.2	6.6	5.6	5.1	12.5	12.2	12.2	11.8	8.1	7.5	12.7	11.5												
18	8.2	6.6	7.1	5.3	12.7	12.1	12.0	11.7	7.7	7.5	11.7	11.5												
19	7.7	7.1	7.3	5.5	12.4	12.0	11.8	11.2	7.9	7.3	10.6	10.3												
20	7.5	6.9	7.3	5.3	12.1	11.5	11.3	10.7	7.6	6.2	10.8	9.9												
21	7.1	6.4	6.6	5.9	11.9	11.0	11.2	10.6	6.7	6.0	9.9	8.9												
22	6.4	5.9	6.6	5.8	12.2	11.6	11.5	11.1	8.0	6.5	8.8	7.8												
23	6.0	5.4	6.4	5.7	12.2	11.9	11.3	10.7	10.4	7.5	7.6	7.1												
24	5.9	5.3	7.0	5.6	12.1	11.7	10.6	9.1	11.6	10.6	7.4	6.6												
25	6.0	5.3	6.8	5.1	12.4	11.5	10.0	9.6	11.7	11.6	8.6	7.0												
26	5.6	4.9	6.7	6.0	12.2	11.6	12.3	11.9	11.6	11.5	10.0	8.5												
27	6.1	5.4	7.3	6.3	12.0	11.5	12.1	11.7	11.8	11.6	10.1	9.6												
28	6.4	5.7	8.0	5.5	---	---	11.8	10.0	11.8	11.6	9.6	8.8												
29	6.6	5.8	8.0	7.5	11.7	11.4	11.8	11.3	---	---	9.0	8.2												
30	6.4	5.9	8.1	7.6	11.4	11.0	11.5	9.2	---	---	9.9	8.7												
31	6.3	5.5	---	---	---	---	10.9	9.1	---	---	9.8	9.5												
MONTH	8.2	2.7	8.1	3.8	12.7	7.2	13.0	9.1	11.8	6.0	13.4	6.6												

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN									
	APRIL				MAY				JUNE				JULY				AUGUST				SEPTEMBER			
1	---	---	9.1	8.4	8.1	7.6	---	---	---	---	3.2	2.2												
2	---	---	8.6	7.5	---	---	4.4	3.9	---	---	3.1	2.2												
3	---	---	7.5	6.4	---	---	4.2	3.1	---	---	3.2	2.4												
4	---	---	6.4	6.4	---	---	4.3	3.5	---	---	3.2	2.5												
5	---	---	---	---	5.9	5.7	4.4	3.7	---	---	3.0	2.2												
6	11.1	10.6	---	---	---	---	4.0	3.4	---	---	3.3	2.2												
7	11.3	11.1	---	---	5.2	4.6	3.6	2.7	---	---	3.3	2.3												
8	11.2	10.8	4.9	4.7	5.2	4.2	3.6	2.7	---	---	3.2	2.5												
9	11.1	10.8	4.7	4.0	5.3	4.3	3.5	2.9	---	---	3.6	2.3												
10	11.3	11.1	4.3	3.4	4.7	4.2	3.5	2.6	---	---	3.7	2.6												
11	11.3	11.1	---	---	---	---	3.9	2.6	---	---	3.2	2.4												
12	---	---	---	---	---	---	3.4	2.4	---	---	3.5	2.5												
13	---	---	---	---	---	---	3.6	2.4	---	---	3.3	2.5												
14	---	---	---	---	---	---	3.4	2.5	3.4	3.0	---	---												
15	---	---	---	---	---	---	3.6	2.4	3.6	3.2	5.2	4.4												
16	---	---	---	---	4.2	3.5	3.7	2.5	3.6	3.2	6.0	4.8												
17	11.0	10.7	5.7	5.2	---	---	3.3	2.3	3.3	2.9	7.3	6.0												
18	10.9	10.5	5.5	4.9	---	---	3.4	2.3	3.0	2.4	7.0	6.5												
19	10.6	10.2	5.1	4.4	---	---	4.3	2.3	3.1	2.7	6.7	6.4												
20	10.3	9.9	4.8	3.6	---	---	4.4	2.4	3.0	2.6	7.4	6.5												
21	9.9	9.3	4.6	4.2	---	---	4.2	2.4	3.0	2.3	6.9	6.4												
22	9.2	8.5	4.1	4.0	4.5	3.9	3.4	2.3	3.0	2.4	7.0	6.6												
23	8.6	7.7	4.3	3.8	4.7	3.5	4.3	2.4	2.7	2.2	7.1	6.6												
24	8.0	6.9	5.1	3.7	4.3	3.6	3.6	2.3	2.8	1.9	7.2	6.7												
25	7.0	6.5	8.0	5.1	4.3	3.7	2.8	2.0	3.3	2.5	6.9	6.5												
26	---	---	8.4	7.9	4.4	3.3	2.7	2.0	3.1	2.4	6.8	6.5												
27	8.4	7.8	8.9	8.4	---	---	---	---	3.1	2.1	7.4	6.3												
28	9.4	8.5	9.2	8.9	---	---	---	---	3.6	2.6	6.9	5.9												
29	9.7	9.2	9.0	8.6	---	---	---	---	4.3	2.9	7.2	6.7												
30	9.3	8.7	8.8	8.4	---	---	---	---	3.6	3.0	7.3	6.7												
31	---	---	8.4	7.4	---	---	---	---	3.3	2.8	---	---												
MONTH	11.3	6.5	9.2	3.4	8.1	3.3	4.4	2.0	4.3	1.9	7.4	2.2												
YEAR	13.4	1.9																						

BEAVER RIVER BASIN

03102950 PYMATONING 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 (1.3 km) downstream from Sugar Creek, and 1.2 mi (1.9 km) upstream from Stratton Creek.

DRAINAGE AREA.--96.7 mi² (250 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 906.8 ft (276.39 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Water-quality data collected at this site 1966 to 1977.

AVERAGE DISCHARGE.--14 years, 121 ft³/s (3.427 m³/s), 16.99 in/yr (432 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,420 ft³/s (68.5 m³/s) Feb. 17, 1976, gage height, 12.27 ft (3.740 m) from rating curve extended above 800 ft³/s (22.7 m³/s); maximum gage-height, 12.32 ft (3.755 m) Sept. 15, 1979; minimum discharge, 0.10 ft³/s (0.003 m³/s) Aug. 8, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s (19.8 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	2000	847 24.0	10.55 3.216	Apr. 3	0200	842 23.8	10.54 3.213
Feb. 26	0900	1060 30.0	10.91 3.325	Sept. 15	1600	*2390 67.7	*12.32 3.755
Mar. 5	1000	1280 36.2	11.23 3.423				

Minimum daily discharge, 3.3 ft³/s (0.093 m³/s) Aug. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	15	24	450	120	624	432	115	109	22	52	29
2	5.2	12	18	788	99	614	533	79	72	30	68	23
3	5.2	11	22	750	82	679	826	61	50	34	127	18
4	12	9.3	102	603	69	1020	763	55	35	33	179	13
5	18	8.4	136	427	59	1250	635	52	25	30	184	10
6	23	9.1	110	288	50	1010	474	48	20	27	141	11
7	26	9.6	82	176	43	695	363	41	16	22	82	17
8	27	8.8	72	106	39	494	267	36	58	18	47	16
9	28	8.8	249	67	36	344	263	32	131	14	31	16
10	25	8.4	294	50	32	262	404	36	131	14	19	13
11	22	7.9	237	39	29	225	422	79	356	18	14	9.0
12	24	8.4	189	32	26	187	404	84	427	16	12	7.7
13	36	8.6	139	30	24	156	348	134	348	20	11	5.7
14	48	8.8	101	64	23	137	281	165	254	86	4.5	382
15	51	9.8	77	124	22	127	278	170	167	57	3.3	2020
16	43	9.8	68	138	23	117	301	145	94	41	6.8	1630
17	50	11	77	127	22	110	306	96	51	25	3.6	953
18	34	16	81	113	20	101	267	60	32	16	3.6	631
19	21	21	78	86	19	95	213	41	22	11	7.3	422
20	15	19	72	61	19	88	157	29	15	10	15	274
21	11	16	143	48	21	76	111	25	11	8.5	15	165
22	9.1	13	164	45	41	66	84	24	9.9	6.4	12	75
23	5.7	13	154	41	117	57	69	24	9.6	3.5	9.3	40
24	11	17	142	54	576	58	58	22	12	5.7	12	28
25	11	20	122	137	907	94	51	120	9.6	34	13	22
26	18	19	100	158	1010	111	50	358	9.0	41	15	18
27	40	18	86	168	901	123	183	338	6.6	31	19	14
28	38	33	68	171	754	125	238	320	8.5	27	19	20
29	30	37	55	171	---	273	215	293	13	36	21	33
30	23	32	44	163	---	418	157	226	15	57	27	37
31	18	---	83	142	---	439	---	164	---	64	32	---
TOTAL	733.0	438.7	3389	5817	5183	10175	9163	3472	2517.2	858.1	1205.4	6952.4
MEAN	23.6	14.6	109	188	185	328	305	112	83.9	27.7	38.9	232
MAX	51	37	294	788	1010	1250	826	358	427	86	184	2020
MIN	4.8	7.9	18	30	19	57	50	22	6.6	3.5	3.3	5.7
CFSM	.24	.15	1.13	1.94	1.91	3.39	3.15	1.16	.87	.29	.40	2.40
IN.	.28	.17	1.30	2.24	1.99	3.91	3.52	1.34	.97	.33	.46	2.67
CAL YR 1978 TOTAL	37024.8		MEAN 101	MAX 1560	MIN 1.9	CFSM 1.04	IN 14.24					
WTR YR 1979 TOTAL	49903.8		MEAN 137	MAX 2020	MIN 3.3	CFSM 1.42	IN 19.20					

RESERVOIRS IN BEAVER RIVER BASIN, OH

03090000 BERLIN LAKE NEAR BERLIN CENTER.--Lat 41°02'46", long 81°00'10", in T.1 N., R.6 W., Portage County, Hydrologic Unit 05030103, at dam on Mahoning River, 3.2 mi (5.1 km) northwest of Berlin Center. DRAINAGE AREA, 248 mi² (642 km²). PERIOD OF RECORD, December 1942 to current year. Prior to October 1971 published as Berlin Reservoir. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Lake is formed by earthfill dam with concrete spillway; storage began in December 1942. Usable capacity 91,150 acre-ft (112 hm³) between elevations 956.5 ft (291.54 m) (invert of lowest outlet) and 1,032 ft (315 m) (top of taintor gates on controlled section) of which 1,800 acre-ft (2.22 hm³) is in the conservation pool, elevation, 980.0 ft (298.70 m). No dead storage. Flow is normally controlled by sluiceways through dam but additional releases can be made through gates on controlled section of spillway. Lake is used for flood control and to augment flow of Mahoning River during periods of low flow. Water used for industrial purposes in vicinity of Warren and Youngstown. Gage-heights and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 91,150 acre-ft (112 hm³) July 9, 1943, elevation, 1,032.0 ft (315.51 m); minimum, 1,540 acre-ft (1.90 hm³) Jan. 10, 1944, elevation, 978.82 ft (298.344 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 71,280 acre-ft (87.9 hm³) May 28, elevation, 1,027.97 ft (313.325 m); minimum, 12,220 acre-ft (15.1 hm³) Dec. 30, elevation, 1,000.11 ft (304.834 m).

03091000 MILTON RESERVOIR NEAR PRICETOWN.--Lat 41°07'38", long 80°58'40", in T.2 N., R.5 W., Mahoning County, Hydrologic Unit 05030103, at dam on Mahoning River, 0.8 mi (1.3 km) southwest of Pricetown. DRAINAGE AREA, 273 mi² (707 km²). PERIOD OF RECORD, December 1923 to current year. Month-end contents for some periods published in WSP 1305. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by city of Youngstown). Prior to Oct. 7, 1941, nonrecording gage at same site and datum.

Reservoir is formed by earthfill dam with concrete spillway; storage began in 1916. Usable capacity 29,150 acre-ft (35.9 hm³) between elevations 906.0 ft (276.15 m) (bottom of gates) and 951.0 ft (289.86 m) (top of gates). No dead storage. Flow is regulated by two 16-inch and four 36-inch gates on spillway. Reservoir is used to augment flow of Mahoning River during periods of low flow. Water used for industrial purposes in vicinity of Warren and Youngstown. Capacity table computed from base data furnished by city of Youngstown, Division of Water.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 35,020 acre-ft (43.2 hm³) June 29, 1924, elevation, 953.8 ft (290.72 m), of which 5,870 acre-ft (7.24 hm³) was in uncontrolled storage; minimum, 1,220 acre-ft (1.50 hm³) Jan. 23, 1954, elevation, 924.27 ft (281.717 m), from graph based on gage readings.

EXTREMES FOR CURRENT YEAR: Maximum contents, 28,550 acre-ft (35.2 hm³) June 1 elevation, 950.69 ft (289.770 m); minimum, 13,220 acre-ft (16.3 hm³) Jan. 24, elevation, 940.81 ft (286.759 m)

03092450 MICHAEL J. KIRWAN RESERVOIR AT WAYLAND.--Lat 41°09'24", long 81°04'47", in T.3 N., R.6 W., Portage County, Hydrologic Unit 05030103, at dam on West Branch Mahoning River, 0.5 mi (0.8 km) southwest of Wayland. DRAINAGE AREA, 80.5 mi² (208 km²). PERIOD OF RECORD, December 1966 to current year. Prior to October 1971 published as West Branch Reservoir. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Reservoir is formed by earthfill dam with concrete spillway; storage began in December 1966. Usable capacity 78,660 acre-ft (97.0 hm³) between elevations 936.8 ft (285.54 m) (lowest outlet) and 993.0 ft (302.67 m) (crest of spillway) of which 3,740 acre-ft (4.61 hm³) is in conservation pool. Dead storage below elevation 936.8 ft (285.54 m), 85 acre-ft (105,000 m³). Figures given herein represent usable contents. Flow is controlled by gates in concrete conduits in dam. Reservoir is used for flood control and to augment flow of Mahoning River during periods of low flow. Gage-heights and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 66,940 acre-ft (82.5 hm³) Apr. 18, 1972, elevation, 989.19 ft (301.505 m); minimum, 5,370 acre-ft (6.62 hm³) Jan. 5, 1967, elevation, 953.50 ft (290.627 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 61,630 acre-ft (76.0 hm³) Apr. 6, elevation, 987.33 ft (300.938 m); minimum, 38,210 acre-ft (47.1 hm³) Jan. 24, elevation, 977.75 ft (298.018 m).

03095000 MOSQUITO CREEK LAKE NEAR CORTLAND.--Lat 41°17'58", long 80°45'31", in T.5 N., R.3 W., Trumbull County, Hydrologic Unit 05030103, at dam on Mosquito Creek, 3.0 mi (4.8 km) southwest of Cortland. DRAINAGE AREA, 97.5 mi² (253 km²). PERIOD OF RECORD, October 1943 to current year. Prior to October 1971 published as Mosquito Creek Reservoir. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Lake is formed by earthfill dam. A natural wasteway, elevation, 903.5 ft (275.39 m), discharges into the Grand River basin; storage began in October 1943. Usable capacity 102,200 acre-ft (126 hm³) between elevations 881.0 ft (268.53 m) (lowest outlet), and 904.00 ft (275.539 m), (lake-full level). Dead storage below 881.0 ft (268.53 m), 2,000 acre-ft (2.47 hm³). Figures given herein represent usable contents. Flow is controlled by gates in concrete conduits through dam. Lake is used for flood control and to augment flow of Mahoning River during periods of low flow. Water is used for industrial purposes in vicinity of Warren and Youngstown, and for municipal supply of city of Warren. Gage-heights and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 99,100 acre-ft (122 hm³) June 3, 1947, elevation, 903.65 ft (275.432 m); minimum, 8,600 acre-ft (10.6 hm³) Nov. 16, 1944, elevation, 886.97 ft (270.348 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 86,060 acre-ft (106 hm³) Apr. 5, elevation, 902.11 ft (274.963 m); minimum, 59,910 acre-ft (73.9 hm³) Jan. 22-24, elevation, 898.58 ft (273.887 m).

03097000 MEANDER CREEK RESERVOIR NEAR MINERAL RIDGE.--Lat 41°09'12", long 80°46'45", in T.3 N., R.3 W., Trumbull County, Hydrologic Unit 05030103, on right side of spillway near center of dam on Meander Creek, 0.8 mi (1.3 km) northwest of Mineral Ridge. DRAINAGE AREA, 83.9 mi² (217 km²). PERIOD OF RECORD, November 1929 to current year. Month-end contents for some periods published in WSP 1305. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Mahoning Valley Sanitary District).

Reservoir is formed by earthfill dam with concrete spillway; storage began in 1929. Usable capacity at spillway level, elevation, 905 ft (276 m), 32,410 acre-ft (40.0 hm³). No dead storage. Figures given herein represent usable contents. Water is used for municipal supply of cities of Niles and Youngstown. Gage-heights furnished by Mahoning Valley Sanitary District. Capacity table computed from base data furnished by Mahoning Valley Sanitary District.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 41,800 acre-ft (51.5 hm³) Jan. 21, 1959, elevation, 909.25 ft (277.139 m); minimum, 9,370 acre-ft (11.6 hm³) Feb. 28, 1954, elevation, 888.78 ft (270.900 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 38,300 acre-ft (47.2 hm³) May 26, elevation, 907.77 ft (276.688 m); minimum 22,620 acre-ft (27.9 hm³) Dec. 3, elevation, 899.45 ft (274.152 m).

BEAVER RIVER BASIN
RESERVOIRS IN BEAVER RIVER BASIN, OH--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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)
	03090000	BERLIN LAKE		03091000	MILTON RESERVOIR		03092450	MICHAEL J. KIRWAN RESERVOIR	
Sept. 30.....	1014.86	31800	--	947.43	22530	--	981.04	45500	--
Oct. 31.....	1009.10	22020	-9780	946.50	20980	-1550	980.13	43400	-2100
Nov. 30.....	1002.85	14660	-7360	941.86	14480	-6500	979.22	41370	-2030
Dec. 31.....	1001.37	13300	-1360	941.67	14250	-230	978.24	39240	-2130
CAL YR 1978	--	--	-17350	--	--	-6420	--	--	+5200
Jan. 31.....	1009.80	23040	+9740	941.17	13650	-600	978.29	39350	+110
Feb. 28.....	1020.53	45130	+22090	945.03	18700	+5050	980.99	45380	+6030
Mar. 31.....	1022.76	51750	+6620	948.20	23880	+5180	985.21	55890	+10510
Apr. 30.....	1024.42	57320	+5570	948.47	24370	+490	985.54	56760	+870
May 31.....	1027.09	67530	+10210	950.68	28530	+4160	986.15	58390	+1630
June 30.....	1024.17	56430	-11100	948.07	23650	-4880	985.06	55490	-2900
July 31.....	1022.37	50530	-5900	947.63	22880	-770	983.42	51280	-4210
Aug. 31.....	1019.74	42990	-7540	947.98	23490	+610	981.72	47120	-4160
Sept. 30.....	1018.73	40410	-2580	941.89	14520	-8970	982.03	47860	+740
WTR YR 1979	--	--	+8610	--	--	-8010	--	--	+2360
	03095000	MOSQUITO CREEK LAKE		03097000	MEANDER CREEK RESERVOIR				
Sept. 30.....	899.00	62710	--	901.98	26790	--			
Oct. 31.....	899.05	63060	+350	901.40	25790	-1000			
Nov. 30.....	898.75	61040	-2020	899.61	22870	-2920			
Dec. 31.....	898.74	60980	-60	903.47	29480	+6610			
CAL YR 1978	--	--	-6610	--	--	-3210			
Jan. 31.....	898.86	61780	+800	905.28	32980	+3500			
Feb. 28.....	899.95	69430	+7650	905.93	34290	+1310			
Mar. 31.....	901.34	79940	+10510	904.97	32350	-1940			
Apr. 30.....	901.23	79070	-870	905.53	33480	+1130			
May 31.....	901.65	82390	+3320	906.63	35780	+2300			
June 30.....	901.33	79860	-2530	905.07	32550	-3230			
July 31.....	900.68	74870	-4990	903.30	29160	-3390			
Aug. 31.....	900.09	70450	-4420	901.47	25910	-3250			
Sept. 30.....	899.36	65260	-5190	901.51	25980	+70			
WTR YR 1979	--	--	+2550	--	--	-810			

LITTLE BEAVER CREEK BASIN

43

03109320 STATELINE CREEK NEAR NEGLEY, OH

LOCATION.--Lat 40°47'33", long 80°31'23", Columbiana County, Hydrologic Unit 05030101, on left bank downstream side of bridge on Township Road 1024 (Darlington Road), 80 ft (24 m) downstream from confluence on East and West Fork, 500 ft (152 m) upstream from mouth, 800 ft (244 m) west of Pennsylvania State line, and 1.3 mi (2 km) east of Negley.

DRAINAGE AREA.--3.09 mi² (8.00 km²).

PERIOD OF RECORD.--

DISCHARGE: January 1977 to September 1978.

SPECIFIC CONDUCTANCE: January 1977 to July 1978.

pH: January 1977 to July 1978.

WATER TEMPERATURES: January 1977 to July 1978.

DISSOLVED OXYGEN: January 1977 to June 1978.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW- INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, AIR (DEG C)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	HARD- NESS (MG/L AS CaCO ₃)	HARD- NESS, NONCAR- BONATE (MG/L CaCO ₃)	CALCIUM DIS- SOLVED (MG/L AS Ca)
OCT												
02...	1230	1.7	6100	7.7	15.5	14.5	9.0	87	490	2700	2500	980
17...	1230	3.9	3600	7.8	11.5	10.0	10.8	95	270	1600	1500	530
NOV												
02...	1100	1.8	3050	7.8	4.5	4.5	12.7	98	140	1300	1200	390
13...	1115	1.8	5300	7.6	11.0	9.5	10.5	92	440	2400	2200	820
29...	1130	2.8	4950	7.6	2.5	2.5	13.2	96	490	2200	2100	790
DEC												
12...	1100	6.4	3000	7.5	1.0	4.0	12.6	95	130	1300	1200	430
27...	1100	3.9	3400	7.6	-4.0	1.0	14.0	96	450	1500	1400	480
JAN												
09...	1130	6.1	2800	7.3	4.0	.0	13.4	92	140	1200	1100	390
16...	1230	4.5	2900	7.7	-4.0	.5	13.4	93	140	1400	1300	420
31...	1230	5.2	2820	7.6	-7.0	2.4	13.4	98	96	1100	1000	340
FEB												
13...	1300	2.9	3000	7.7	11.0	.2	13.7	94	280	1400	1300	450
28...	1130	16	2250	7.4	6.0	4.0	12.4	94	55	870	800	270
MAR												
13...	1245	10	2600	7.6	18.6	8.6	11.0	92	67	1100	1000	350
26...	1230	5.6	2600	8.0	-1.0	5.0	13.0	102	46	1100	980	320
APR												
10...	1100	13	1900	7.6	6.5	7.0	12.0	100	50	810	730	240
MAY												
03...	1100	5.1	2650	7.9	5.0	12.0	9.6	87	63	1200	1100	380
15...	1100	4.7	2780	7.9	18.5	13.5	8.9	86	77	1200	1100	390
JUN												
05...	1130	6.7	2550	7.6	26.5	17.5	8.0	83	80	1200	1100	400
18...	1200	3.3	2900	8.0	15.0	16.5	8.3	85	64	1400	1300	410
28...	1100	3.9	2650	8.0	20.0	16.0	8.7	88	46	1200	1100	370
JUL												
17...	1200	4.6	3900	7.7	27.0	21.5	7.6	85	130	1500	1400	500
31...	1100	3.8	3700	7.6	29.5	20.5	6.9	75	150	1600	1500	540
AUG												
14...	1100	2.4	3150	7.9	19.5	18.0	7.2	75	98	1600	1500	530
28...	1230	3.2	4050	7.8	26.0	19.5	7.5	81	130	1900	1700	610
SEP												
20...	1230	2.0	6000	7.6	21.0	14.0	9.0	87	300	1700	1500	490

LITTLE BEAVER CREEK BASIN

03109320 STATELINE CREEK NEAR NEGLEY, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CaCO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
OCT												
02...	65	205	--	168	6.5	510	1900	4170	4560	390	2.2	6.3
17...	65	152	0	125	3.9	420	940	2780	2960	180	2.7	5.3
NOV												
02...	73	153	0	125	3.9	470	690	2290	2480	190	2.2	5.6
13...	91	240	0	197	9.6	500	1300	4490	4010	480	2.3	6.5
29...	64	220	0	180	8.8	440	1400	3690	4290	600	2.5	6.2
DEC												
12...	49	124	0	102	6.3	340	680	2040	2070	30	3.4	4.7
27...	68	136	0	112	5.5	420	840	2380	2430	50	4.0	5.4
JAN												
09...	62	120	0	98	9.6	410	650	1890	2030	140	5.0	5.5
16...	78	128	0	105	4.1	430	710	2050	2140	90	4.5	1.2
31...	69	118	0	97	4.7	400	680	1870	2140	270	4.9	5.9
FEB												
13...	69	130	0	107	4.2	460	780	2450	2490	40	5.6	6.9
28...	47	86	0	71	5.5	340	430	1390	1570	180	4.9	4.7
MAR												
13...	60	100	0	82	4.0	430	540	1810	1900	90	3.7	5.0
26...	68	120	0	98	1.9	460	520	1830	1930	100	4.0	5.7
APR												
10...	50	86	0	71	3.5	330	370	1340	1570	230	2.4	2.7
MAY												
03...	62	130	0	107	2.6	450	580	2130	2140	10	2.9	3.2
15...	51	140	0	115	2.8	420	600	2100	2130	30	2.5	3.8
JUN												
05...	60	129	0	106	5.2	820	620	2190	2480	290	2.4	4.2
18...	88	140	0	115	2.2	460	610	2410	2420	10	2.5	4.1
28...	70	130	0	107	2.1	480	520	1980	2130	150	2.7	4.0
JUL												
17...	61	160	0	131	5.1	400	970	3070	3080	10	2.2	5.6
31...	61	160	0	131	6.4	410	920	3000	5590	2590	1.5	4.7
AUG												
14...	69	160	0	131	3.2	470	760	102	2980	2880	2.3	3.6
28...	81	180	0	148	4.6	420	960	2950	3310	360	1.9	3.6
SEP												
20...	110	210	0	170	8.4	300	1600	3990	4590	600	1.4	--

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	CARBON, ORGANIC TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
OCT											
02...	2.6	8.9	11	49	5	5	1000	41	50	.02	97
17...	.00	5.3	8.0	35	36	0	1100	490	57	.01	39
NOV											
02...	3.9	9.5	12	52	16	1	950	78	21	.00	9
13...	4.5	11	13	59	17	1	1000	120	100	.02	81
29...	2.1	8.3	11	48	34	5	880	250	4.7	.02	110
DEC											
12...	.30	5.0	8.4	37	22	2	1000	240	45	.01	38
27...	2.4	7.8	12	52	31	4	1600	410	4.0	.01	50
JAN											
09...	1.3	6.8	12	52	24	0	1500	210	21	.01	13
16...	.00	1.2	5.7	25	17	0	1200	180	--	.01	27
31...	.00	5.9	11	47	11	8	830	48	30	.01	27
FEB											
13...	11	18	24	100	9	0	1000	53	2.5	.01	30
28...	.00	4.7	9.6	43	31	4	2000	180	15	.00	18
MAR											
13...	.00	5.0	8.7	39	0	0	100	0	14	.00	15
26...	.00	5.7	9.7	43	11	0	580	130	7.8	.00	4
APR											
10...	.20	2.9	5.3	23	17	1	1100	75	11	.00	13
MAY											
03...	2.2	5.4	8.3	37	23	7	690	240	14	.00	4
15...	.90	4.7	7.2	32	23	4	670	290	20	.01	8
JUN											
05...	.80	5.0	7.4	33	7	0	870	50	31	.01	3
18...	.70	4.8	7.3	32	14	3	980	250	22	.00	12
28...	.90	4.9	7.6	34	9	1	2000	270	8.3	.00	2
JUL											
17...	1.7	7.3	9.5	42	4	8	1300	70	54	.01	37
31...	.20	4.9	6.4	28	0	5	1000	10	41	.01	38
AUG											
14...	.60	4.2	6.5	29	15	8	1100	160	31	.01	12
28...	.90	4.5	6.4	28	17	2	1400	400	38	.01	27
SEP											
20...	--	7.8	9.2	41	15	1	1100	140	98	.01	75

LITTLE BEAVER CREEK BASIN

45

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 (2.4 km) upstream from Island Run, 4 mi (6 km) upstream from mouth, and 4 mi (6 km) northeast of East Liverpool.

DRAINAGE AREA.--496 mi² (1,285 km²).

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 (214.204 m) National Geodetic Vertical Datum of 1912. Prior to Sept. 22, 1926, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Water-quality data collected at this site 1964-1978. Sediment data collected at this site 1969 to 1974.

AVERAGE DISCHARGE.--64 years, 519 ft³/s (14.70 m³/s), 14.21 in/yr (361 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s (708 m³/s) July 19, 1941, gage height, 17.4 ft (5.30 m), from rating curve extended above 16,000 ft³/s (453 m³/s) on basis of slope-area measurement of peak flow; minimum, 12 ft³/s (0.34 m³/s) several days in 1918, 1930, 1932, 1936.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,000 ft³/s (142 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 9	0900	6150	174	May 25	1300	6360	180
Feb. 26	1100	*8970	254				9.61
			*11.08				2.929

Minimum discharge, 58 ft³/s (1.64 m³/s) Sept. 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	228	276	2760	556	2670	541	473	921	210	134	121
2	136	212	258	4220	500	2980	1450	430	790	212	161	102
3	185	194	570	2260	460	3140	2070	434	652	210	157	93
4	280	184	2670	1270	430	4060	1610	509	550	315	126	90
5	278	177	2210	922	410	3640	1720	457	479	368	107	81
6	224	172	1290	780	380	2430	1310	415	439	230	108	77
7	199	169	812	670	360	1740	938	378	436	177	130	75
8	187	172	1440	600	350	1390	803	351	454	152	108	70
9	171	165	5250	520	340	1180	2380	330	461	144	94	64
10	139	164	3350	480	330	1050	2940	323	388	302	92	61
11	131	160	1710	450	310	923	1830	339	427	312	153	60
12	138	157	1140	420	300	795	1680	387	419	217	151	59
13	448	158	929	470	290	725	1600	832	318	215	120	61
14	1010	158	805	560	290	774	1320	618	259	358	99	627
15	911	155	679	1260	280	705	1410	447	249	266	88	795
16	745	154	606	1130	280	582	1200	368	228	187	82	436
17	841	187	591	950	270	568	1030	315	214	152	78	227
18	612	408	530	700	270	522	874	284	203	134	90	163
19	442	360	479	540	270	492	753	264	196	124	119	135
20	362	266	450	480	270	462	668	249	184	110	117	118
21	305	230	599	620	300	428	612	237	232	105	124	126
22	265	214	564	866	600	402	571	223	251	108	105	175
23	237	217	461	682	2540	388	536	221	203	146	96	164
24	227	251	421	1230	4080	471	492	370	174	263	227	126
25	213	245	390	2670	4600	629	473	4290	159	187	216	109
26	263	222	370	2030	7730	520	472	3960	150	163	151	100
27	451	230	350	1210	4550	450	881	2620	140	142	153	95
28	365	362	330	940	2880	404	812	2250	150	140	158	383
29	298	365	320	820	---	433	620	1600	163	284	212	807
30	260	310	400	711	---	519	534	1210	210	227	219	445
31	239	---	643	663	---	538	---	886	---	142	156	---
TOTAL	10657	6646	30893	33984	34226	36010	34140	26070	10099	6302	4131	6045
MEAN	344	222	997	1096	1222	1162	1138	841	337	203	133	202
MAX	1010	408	5250	4220	7730	4060	2940	4290	921	368	227	807
MIN	95	154	258	420	270	388	472	221	140	105	78	59
CFSM	.69	.45	2.01	2.21	2.46	2.34	2.29	1.70	.68	.41	.27	.41
IN.	.80	.50	2.32	2.55	2.57	2.70	2.56	1.96	.76	.47	.31	.45

CAL YR 1978	TOTAL	232168	MEAN	636	MAX	9040	MIN	75	CFSM	1.28	IN	17.41
WTR YR 1979	TOTAL	239203	MEAN	655	MAX	7730	MIN	59	CFSM	1.32	IN	17.94

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 (305 m) upstream from Lowery Run, 0.9 mi (1.4 km) upstream from Brush Creek, and 1.6 mi (2.6 km) southwest of Hammondsville.

DRAINAGE AREA.--147 mi² (381 km²).

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 (210.952 m) Ohio State Highway Department bench mark.

REMARKS.--Records good. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--39 years, 159 ft³/s (4.503 m³/s), 14.69 in/yr (373 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,580 ft³/s (271 m³/s) Jan. 27, 1952, gage height, 12.17 ft (3.709 m); minimum, 0.8 ft³/s (0.023 m³/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 discharge, above base of 2,000 ft³/s (56.6 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)				
Dec. 5	1000	2690	76.2	6.82	2.079	Feb. 26	1400	*3410	96.6	*7.59	2.313
Jan. 2	0530	2040	57.8	6.04	1.841						

Minimum daily discharge, 13 ft³/s (0.37 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	66	98	895	200	900	303	148	285	51	30	140
2	18	59	85	1690	161	940	625	134	253	53	42	114
3	17	56	191	835	150	975	805	134	211	48	46	92
4	29	51	1160	508	140	1220	601	183	183	94	30	86
5	45	48	710	386	140	970	616	151	157	114	25	74
6	28	46	382	311	130	710	481	140	140	63	24	72
7	22	45	257	230	120	563	390	129	143	47	21	58
8	57	46	446	210	120	468	374	119	162	40	24	51
9	118	43	2190	179	110	394	1070	112	159	39	45	46
10	77	41	1090	160	110	358	1190	105	140	55	37	43
11	31	39	558	150	110	314	750	103	145	72	148	42
12	22	37	402	150	100	281	730	98	119	48	157	42
13	123	38	319	140	100	260	530	177	101	41	84	201
14	247	37	267	270	95	261	479	132	90	36	57	177
15	215	35	221	342	95	234	516	117	82	33	45	94
16	148	35	197	307	95	209	448	107	74	30	37	72
17	179	42	191	267	90	212	378	98	70	26	31	60
18	120	106	161	250	90	203	326	92	70	22	37	52
19	93	89	150	179	90	197	285	88	68	21	61	47
20	81	69	142	237	95	188	253	86	60	19	74	65
21	68	254	254	326	100	182	228	88	70	17	726	132
22	57	56	221	318	300	173	205	84	82	22	201	82
23	52	56	191	257	840	170	189	78	61	50	162	65
24	51	61	176	438	1380	200	174	140	52	68	949	57
25	48	56	160	910	1270	264	155	1310	47	46	638	51
26	52	49	150	563	2560	227	165	905	43	61	276	46
27	170	56	140	422	1210	209	243	660	40	48	352	326
28	123	132	130	363	905	194	205	683	42	36	291	418
29	98	123	130	296	---	215	177	507	49	43	341	460
30	79	109	164	250	---	224	162	374	55	52	266	266
31	69	---	200	227	---	250	---	298	---	36	183	---
TOTAL	2550	1980	11133	12066	10906	12165	13063	7580	3253	1431	5440	3531
MEAN	82.3	66.0	359	389	390	392	435	245	108	46.2	175	118
MAX	247	254	2190	1690	2560	1220	1190	1310	285	114	949	460
MIN	13	35	85	140	90	170	162	78	40	17	21	42
CFSM	.56	.45	2.44	2.65	2.65	2.67	2.96	1.67	.74	.31	1.19	.90
IN.	.65	.50	2.82	3.05	2.76	3.08	3.31	1.92	.82	.36	1.38	.89
CAL YR 1978	TOTAL	72241	MEAN 198	MAX 2190	MIN 12	CFSM 1.35	IN 18.28					
WTR YR 1979	TOTAL	85098	MEAN 233	MAX 2560	MIN 13	CFSM 1.59	IN 21.53					

03110983 CONSOL RUN NEAR BLOOMINGDALE, OH

LOCATION.--Lat 40°19'18", long 80°48'49", in SE 1/4 sec. 21, T.6 N., R3 W., Jefferson County, at bridge on Wayne Township Road 139 (Bloomfield Road), 0.9 mi (1.4 km) upstream from mouth (at McIntyre Creek) and 1.6 mi (2.6 km) south of Bloomingdale.

DRAINAGE AREA.--0.98 mi² (2.54 km²).

PERIOD OF RECORD.--December 1978 to September 1979.

REMARKS.--Discharge records are not available at this time; water-quality records are based on once-a-month sampling data.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,400 micromhos May 15, 1979 and Aug. 1, 1979; minimum, 725 micromhos Feb. 6, 1979.
 pH: Maximum, 8.4 units Apr. 3, 1979; minimum 7.1 units Aug. 1, 1979.
 WATER TEMPERATURES: Maximum, 22.0°C June 5, 1979 and Sept. 13, 1979; minimum, 1.5°C Jan. 9, 1979.
 DISSOLVED OXYGEN: Maximum, 79 mg/L Feb. 6, 1979; minimum, 2 mg/L June 5, 1979.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,4000 micromhos May 15 and Aug. 1; minimum, 725 micromhos Feb. 6.
 pH: Maximum, 8.4 units Apr. 3; minimum 7.1 units Aug. 1.
 WATER TEMPERATURES: Maximum, 22.0°C June 5 and Sept. 13; minimum, 1.5°C Jan. 9.
 DISSOLVED OXYGEN: Maximum, 79 mg/L Feb. 6; minimum, 2 mg/L June 5.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 to SEPTEMBER 1979

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (NTU)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	BICAR- BONATE (MG/L AS HC03)
DEC 01...	1200	1200	7.3	7.0	30	5.0	13	760	540	210	56	270
JAN 09...	0930	740	7.7	1.5	10	20	5	390	250	110	29	174
FEB 06...	1230	725	7.7	2.0	10	16	79	410	250	120	26	196
MAR 16...	1100	1150	7.7	6.0	5	5.0	8	640	430	180	47	254
APR 03...	1215	1200	8.4	11.0	15	15	10	660	470	180	52	240
MAY 15...	1015	1400	7.4	16.5	5	3.0	28	750	520	210	54	273
JUN 05...	1115	1080	7.5	22.0	5	2.0	2	610	440	170	45	210
JUL 10...	1157	1300	7.4	19.5	15	2.0	13	710	520	200	52	240
AUG 01...	1105	1400	7.1	20.0	3	2.0	8	830	600	250	49	276
SEP 13...	1230	1220	7.5	22.0	5	2.0	24	650	450	160	61	240

DATE	CAR- BONATE (MG/L AS C03)	ALKA- LINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	SULFATE DIS- SOLVED (MG/L AS S04)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN+NH4 TOTAL IN BOT. MAT. (MG/KG AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN+AM- MONIA + ORGANIC TOTAL (MG/L AS N)
DEC 01...	0	221	22	530	.1	5.3	.05	5.6	.09	47	.25	.34
JAN 09...	0	143	5.6	240	.2	3.9	.14	--	.19	--	.61	.80
FEB 06...	0	161	6.3	250	.1	4.3	.39	.6	.14	21	.81	.95
MAR 16...	0	208	8.1	500	.1	5.1	.25	--	.13	--	.05	.18
APR 03...	--	197	1.5	540	.1	3.1	.15	--	.05	--	.21	.26
MAY 15...	0	224	17	590	.1	4.1	.08	2.3	.07	16	.21	.28
JUN 05...	0	172	11	410	.2	3.3	.03	--	.04	--	.30	.34
JUL 10...	0	197	15	550	.1	4.4	.05	--	.10	--	.36	.46
AUG 01...	0	226	35	590	.1	8.1	.13	1.5	.18	32	.06	.24
SEP 13...	0	200	12	470	.2	4.7	.04	9.0	.07	2800	.18	.25

03110983 CONSOL RUN NEAR BLOOMINGDALE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO- GEN, NH ₄ + ORG. TOT IN BOT MAT (MG/KG AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO ₃)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS BA)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
DEC 01...	8200	.39	1.7	.02	420	120	7100	200	160	1	10	400
JAN 09...	--	.94	4.2	.06	--	140	--	200	--	6	--	450
FEB 06...	4100	1.3	5.9	.04	360	170	8800	0	140	3	10	570
MAR 16...	--	.43	1.9	.01	--	130	--	0	--	0	--	360
APR 03...	--	.41	1.8	.02	--	150	--	0	--	0	--	520
MAY 15...	11000	.36	1.6	.02	460	120	7100	0	120	3	20	350
JUN 05...	--	.37	1.6	.01	--	50	--	0	--	4	--	270
JUL 10...	--	.51	2.3	.01	--	110	--	100	--	20	--	280
AUG 01...	4200	.37	1.6	.01	500	280	6400	100	90	4	20	720
SEP 13...	8800	.29	1.3	.01	290	80	11000	0	140	17	20	290
DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR)	STRON- TIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C)
DEC 01...	100	<10	1100	<.5	.00	11	<10	870	20	19	23	4.4
JAN 09...	60	--	540	<.5	--	18	--	510	--	--	--	--
FEB 06...	0	40	730	<.5	.02	11	80	410	40	19	22	3.0
MAR 16...	20	--	1000	<.5	--	22	--	830	--	--	--	--
APR 03...	15	--	530	<.5	--	14	--	1400	--	--	--	--
MAY 15...	57	30	1100	<.5	.08	34	40	850	40	23	26	2.9
JUN 05...	56	--	330	<.5	--	36	--	720	--	--	--	--
JUL 10...	2	--	930	<.5	--	25	--	900	--	--	--	--
AUG 01...	4	10	2400	<.5	.43	0	40	570	40	.2	2.3	2.1
SEP 13...	1	20	580	<.5	.00	3	20	1200	30	47	50	2.7

SHORT CREEK BASIN

49

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 (3.4 km) east of Dillonvale, 2.2 mi (3.5 km) downstream from Jug Run, and 2.9 mi (4.7 km) upstream from Little Short Creek.

DRAINAGE AREA.--123 mi² (319 km²).

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

REVISED RECORDS.--WSP 1003: 1942-43. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 676.1 ft (206.08 m) State of Ohio bench mark. Prior to Oct. 21, 1941, nonrecording gage at same site and datum.

REMARKS.--Records poor. Water-quality data collected at this site 1964 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--38 years, 127 ft³/s (3.597 m³/s), 14.02 in/yr (356 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,500 ft³/s (184 m³/s) Mar. 6, 1945, gage height, 8.77 ft (2.673 m); maximum gage height, 10.15 ft (3.094 m) Mar. 5, 1963, from graph based on gage readings; minimum daily discharge, 2.8 ft³/s (0.079 m³/s) Sept. 21, 27, 1947.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34.0 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 4	1100	1820 51.5	4.63 1.411	Jan. 24	2100	1730 49.0	4.45 1.356
Dec. 9	0500	3790 107	7.37 2.246	Feb. 26	---	*5500 156	---
Jan. 1	2400	1950 55.2	4.87 1.484				

Minimum daily discharge, 41 ft³/s (1.16 m³/s) Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	74	95	787	190	800	166	143	268	115	70	92
2	42	71	92	996	180	1100	314	138	241	110	69	78
3	58	68	332	479	160	1400	290	151	214	95	68	75
4	77	65	968	365	150	1800	238	176	195	186	64	68
5	62	63	449	310	150	1400	245	166	176	162	64	60
6	55	62	300	250	140	600	210	149	160	111	62	59
7	58	62	239	230	130	450	193	140	155	92	62	54
8	59	62	728	210	120	360	191	132	178	87	62	49
9	62	62	1980	190	120	320	517	128	186	83	62	46
10	63	62	612	170	110	280	433	123	184	87	73	48
11	66	61	402	160	110	250	298	125	254	87	366	44
12	71	58	325	150	100	230	283	130	176	78	205	44
13	88	58	284	229	100	210	254	155	153	77	105	44
14	194	58	254	429	100	190	254	130	138	73	77	102
15	122	58	224	317	95	180	250	120	127	73	65	98
16	100	58	212	284	95	170	250	115	118	70	53	60
17	118	77	209	254	95	160	234	107	115	66	45	53
18	82	111	189	267	90	150	216	102	111	62	65	48
19	74	82	177	212	90	140	201	97	107	59	66	46
20	68	72	182	277	90	140	191	97	100	53	44	41
21	63	71	547	621	150	130	182	132	147	51	84	115
22	58	68	322	397	350	120	176	110	136	51	57	236
23	57	68	274	312	800	120	174	120	108	51	50	113
24	65	75	220	705	1500	200	168	205	89	51	168	83
25	59	74	200	712	1700	470	160	551	93	53	164	69
26	158	69	180	442	2900	300	162	383	83	142	121	66
27	292	100	170	362	2000	250	199	406	81	93	266	59
28	135	219	160	300	1000	190	174	548	78	74	158	327
29	100	128	160	270	---	150	158	607	81	140	263	349
30	88	113	207	240	---	149	151	363	93	111	166	203
31	80	---	274	210	---	151	---	288	---	77	115	---
TOTAL	2716	2329	10967	11137	12815	12560	6932	6337	4345	2720	3359	2829
MEAN	87.6	77.6	354	359	458	405	231	204	145	87.7	108	94.3
MAX	292	219	1980	996	2900	1800	517	607	268	186	366	349
MIN	42	58	92	150	90	120	151	97	78	51	44	41
CFSM	.71	.63	2.88	2.92	3.72	3.29	1.88	1.66	1.18	.71	.88	.77
IN.	.82	.70	3.32	3.37	3.88	3.80	2.10	1.92	1.31	.82	1.02	.86

CAL YR 1978 TOTAL 71060 MEAN 195 MAX 2040 MIN 42 CFSM 1.59 IN 21.49
WTR YR 1979 TOTAL 79046 MEAN 217 MAX 2900 MIN 41 CFSM 1.76 IN 23.91

note: No gage-height record Feb. 28 to Mar. 29.

CAPTINA CREEK BASIN

03114000 CAPTINA CREEK AT ARMSTRONGS MILLS, OH

LOCATION.--Lat 39°54'31", long 80°55'27", in NE 1/4 sec. 10, T.5 N., R.4 W., Belmont County, Hydrologic Unit 05030106, on left bank at downstream side of bridge on State Highway 148, 0.5 mi (0.8 km) east of Armstrongs Mills, and 0.7 mi (1.1 km) downstream from Anderson Run.

DRAINAGE AREA.--134 mi² (347 km²).

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 (225.409 m) National Geodetic Vertical Datum of 1929. Aug. 20, 1926 to Sept. 30, 1935, nonrecording gage at same site, at datum 1.0 ft (0.30 m) higher.

REMARKS.--Records good. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--30 years, 163 ft³/s (4.616 m³/s), 16.52 in/yr (420 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft³/s (340 m³/s) Sept. 1, 1975, gage height, 13.61 ft (4.148 m); maximum gage height, 14.40 ft (4.389 m), present datum, Aug. 7, 1935; no flow at times during 1929-30, 1932, 1934, 1959, 1963-66, 1972-74.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85.0 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 4	0730	3340 94.6	7.13 2.173	Jan. 21	0300	3420 96.9	7.20 2.195
Dec. 9	0330	6040 171	9.47 2.886	Jan. 24	1430	4660 132	8.32 2.536
Jan. 1	2330	3580 101	7.35 2.240	Feb. 25	2230	*9500 269	*12.07 3.679

Minimum discharge, 1.3 ft³/s (0.037 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	25	75	1780	147	763	152	71	308	61	59	111
2	3.1	19	59	1820	140	775	581	66	240	55	40	91
3	2.1	16	460	540	120	657	445	163	191	38	44	85
4	5.5	15	1720	342	110	752	308	364	161	136	25	71
5	10	14	455	259	100	544	258	345	129	127	17	58
6	5.9	13	238	214	90	375	199	231	111	58	17	53
7	4.2	11	160	190	85	298	161	173	100	39	10	48
8	3.6	15	1610	160	80	240	152	140	142	28	9.8	38
9	2.7	14	3510	140	75	197	775	115	113	22	32	31
10	2.1	11	746	130	70	176	596	101	87	55	21	27
11	1.6	9.4	378	120	65	152	371	91	79	66	879	25
12	2.1	11	289	110	65	131	291	85	62	38	549	22
13	27	12	241	200	65	119	240	154	53	28	213	21
14	132	13	199	1390	60	125	337	94	44	22	115	109
15	56	13	167	500	60	105	265	76	39	17	82	101
16	26	19	147	363	60	94	219	65	35	13	58	49
17	22	35	157	438	60	89	183	54	33	10	45	33
18	15	93	127	410	60	89	154	49	31	6.3	243	27
19	9.4	56	118	335	60	82	136	44	27	4.3	319	38
20	9.4	39	118	872	65	76	121	43	19	3.5	231	31
21	8.2	31	560	1850	100	69	111	91	96	3.0	197	231
22	5.5	27	293	595	1200	64	103	61	84	2.5	140	500
23	5.9	26	220	374	1600	61	91	68	43	2.8	117	202
24	5.1	30	190	2100	2310	119	85	466	31	2.5	103	121
25	8.2	25	190	978	3780	228	80	950	24	2.3	109	89
26	116	23	170	485	2990	154	82	563	18	225	445	72
27	335	111	160	353	905	125	142	1100	14	87	1220	58
28	98	406	150	303	690	105	111	944	13	111	397	854
29	51	165	150	229	---	105	91	596	21	176	326	781
30	34	111	150	193	---	94	79	425	40	119	208	360
31	27	---	446	170	---	100	---	291	---	58	147	---
TOTAL	1036.3	1408.4	13653	17943	15212	7063	6919	8079	2388	1616.2	6417.8	4337
MEAN	33.4	46.9	440	579	543	228	231	261	79.6	52.1	207	145
MAX	335	406	3510	2100	3780	775	775	1100	308	225	1220	854
MIN	1.6	9.4	59	110	60	61	79	43	13	2.3	9.8	21
CFSM	.25	.35	3.28	4.32	4.05	1.70	1.72	1.95	.59	.39	1.55	1.08
IN.	.29	.39	3.79	4.98	4.22	1.96	1.92	2.24	.66	.45	1.78	1.20

CAL YR 1978 TOTAL 67837.50 MEAN 186 MAX 3570 MIN .80 CFSM 1.39 IN 18.83
WTR YR 1979 TOTAL 86072.70 MEAN 236 MAX 3780 MIN 1.6 CFSM 1.76 IN 23.89

LITTLE MUSKINGUM RIVER BASIN

51

03115400 LITTLE MUSKINGUM RIVER AT BLOOMFIELD, OH

LOCATION.--Lat 39°33'47", long 81°12'14", in sec. 22, T.3 N., R.6 W., Washington County, Hydrologic Unit 05030201, on left bank 400 ft (122 m) upstream from bridge on State Highway 260 at Bloomfield, 2.2 mi (3.5 km) downstream from Wilson Run.

DRAINAGE AREA.--210 mi² (544 km²).

PERIOD OF RECORD.--October 1958 to current year.

REVISED RECORDS.--WSP 1705: 1959.

GAGE.--Water-stage recorder. Datum of gage is 645.99 ft (196.898 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Water-quality data collected at this site 1964 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--21 years, 260 ft³/s (7.363 m³/s), 16.82 in/yr (427 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,200 ft³/s (600 m³/s) Mar. 5, 1963, gage height, 28.08 ft (8.559 m), from rating curve extended above 8,000 ft³/s (227 m³/s) on basis of velocity-area study and flow over road computations; no flow Sept. 18, 26, 27, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85.0 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s)	(m ³ /s)	Gage height (ft)	(m)	Date	Time	Discharge (ft ³ /s)	(m ³ /s)	Gage height (ft)	(m)
Dec. 4	1900	5150	146	19.74	6.017	Feb. 26	0600	*10200	289	*25.22	7.687
Dec. 9	1500	8820	250	24.05	7.330	Apr. 9	2000	3080	87.2	14.68	4.474
Jan. 2	1000	5860	166	20.20	6.157	May 27	2400	3080	87.2	15.74	4.798
Jan. 21	1100	3950	112	16.78	5.115	Aug. 27	0800	3420	96.9	16.53	5.038
Jan. 25	0200	4780	135	18.48	5.633						

Minimum discharge, 1.8 ft³/s (0.051 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	80	221	2480	267	1020	1120	181	292	62	145	284
2	2.8	66	175	4870	240	1070	1950	158	269	73	110	209
3	5.9	58	325	1140	220	891	1210	423	218	60	85	227
4	5.1	49	3850	559	200	991	642	1610	185	170	62	177
5	7.3	45	1670	403	180	996	459	1380	150	452	49	130
6	9.5	40	457	339	170	632	367	620	195	182	55	110
7	11	38	312	310	160	453	304	382	367	105	49	93
8	8.9	43	1920	280	150	370	284	300	197	71	39	74
9	6.9	45	7560	250	140	312	1690	242	192	56	45	60
10	5.3	39	2860	230	130	281	1520	200	145	580	35	52
11	3.8	34	676	210	120	257	678	172	152	527	260	45
12	3.5	32	456	200	110	221	503	177	121	239	587	40
13	6.6	31	389	257	110	197	423	387	89	155	342	37
14	211	32	336	1740	110	200	580	248	69	118	182	78
15	205	44	288	1340	110	192	536	182	59	93	121	197
16	97	248	250	851	110	161	426	152	49	74	87	97
17	67	275	284	649	110	158	354	123	44	60	63	62
18	49	427	267	753	110	152	304	105	39	48	290	48
19	36	297	247	380	110	146	260	93	34	36	645	44
20	30	200	231	737	178	141	227	85	29	30	590	36
21	25	152	1690	3170	393	130	203	330	197	26	757	239
22	21	123	812	1300	2150	120	186	248	312	24	417	988
23	15	105	456	653	2910	117	167	157	132	30	275	495
24	13	116	354	1890	4600	433	155	1540	81	68	206	278
25	13	110	330	3280	4440	766	143	1740	62	85	263	180
26	69	95	300	969	7850	406	138	964	49	218	615	132
27	1090	248	280	549	1500	309	318	1910	38	221	2490	103
28	337	970	270	465	986	257	315	1810	32	165	630	510
29	195	442	270	370	---	234	243	630	59	266	1790	956
30	132	297	257	321	---	209	206	375	58	340	752	455
31	99	---	670	295	---	697	---	290	---	167	387	---
TOTAL	2783.0	4781	28463	31240	27864	12519	15931	17214	3915	4801	12423	6436
MEAN	89.8	159	918	1008	995	404	531	555	131	155	401	215
MAX	1090	970	7560	4870	7850	1070	1950	1910	367	580	2490	988
MIN	2.4	31	175	200	110	117	138	85	29	24	35	36
CFSM	.43	.76	4.37	4.80	4.74	1.92	2.53	2.64	.62	.74	1.91	1.02
IN.	.49	.85	5.04	5.53	4.94	2.22	2.82	3.05	.69	.85	2.20	1.14

CAL YR 1978	TOTAL	121369.0	MEAN	333	MAX	7560	MIN	1.5	CFSM	1.59	IN	21.50
WTR YR 1979	TOTAL	168370.0	MEAN	461	MAX	7850	MIN	2.4	CFSM	2.20	IN	29.83

MUSKINGUM RIVER BASIN

03116200 CHIFFEWA CREEK AT EASTON. OH

LOCATION.--Lat 40°56'47", long 81°44'35", in SW 1/4 sec. 17, T.18 N., R.11 W., Wayne County, Hydrologic Unit 05040001, on left bank at downstream side of bridge on State Highway 585, 0.5 mi (0.8 km) southwest of Easton, and 1.5 mi (2.4 km) upstream from Red Run.

DRAINAGE AREA.--146 mi² (378 km²).

PERIOD OF RECORD.--January 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 934.40 ft (284.805 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1976; water-stage recorder and prior to June 10, 1960, nonrecording gage at datum 5.32 ft (1.622 m) higher.

REMARKS.--Records fair except those for winter periods, which are poor. Low flow slightly regulated by industry at Rittman 2.5 mi (4.0 km) upstream. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--19 years, 135 ft³/s (3.823 m³/s), 12.56 in/yr (319 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,500 ft³/s (354 m³/s) July 5, 1969, gage height, 16.02 ft (4.883 m); maximum gage height, 18.54 ft (5.651 m) Sept. 15, 1979; minimum daily, 3.2 ft³/s (0.091 m³/s) July 6, 1963.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959 reached a stage of 14.71 ft (4.319 m), discharge, 10,100 ft³/s (286 m³/s), by contracted-opening measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28.3 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
Jan. 1	2300	1260	35.7	11.43	3.484	Apr. 9	1700	1230	34.8	10.93	3.331
Feb. 26	0100	3500	99.1	14.61	4.453	May 26	1600	1680	47.6	12.21	3.722
Mar. 5	0200	1880	53.2	12.71	3.874	Sept. 15	0300	*4910	139	*18.54	5.651

Minimum daily discharge, 14 ft³/s (0.40 m³/s) Oct. 9-11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	19	22	802	90	823	264	73	311	60	30	104
2	17	18	21	1040	85	1150	707	63	249	50	174	80
3	16	18	99	599	80	1210	794	60	181	42	121	85
4	32	17	397	336	75	1750	704	69	124	127	58	110
5	21	16	194	150	70	1660	811	55	101	159	46	73
6	18	16	86	120	65	1050	536	49	100	73	45	59
7	15	17	62	100	65	677	344	46	84	43	39	120
8	15	17	201	95	65	485	285	43	84	34	38	76
9	14	16	614	90	60	348	956	40	72	95	50	55
10	14	16	287	85	60	322	883	39	70	143	40	46
11	14	16	171	80	60	268	579	37	71	69	104	42
12	18	16	95	75	55	203	467	37	55	46	71	41
13	114	16	80	75	55	179	398	57	43	62	43	36
14	118	16	68	90	55	178	625	41	36	350	36	2300
15	73	18	59	100	55	152	556	34	31	117	32	3980
16	45	19	55	95	55	123	429	31	29	61	30	1950
17	33	24	49	85	55	115	318	31	29	45	29	1240
18	25	30	46	80	55	108	227	30	30	37	65	785
19	22	21	45	75	55	103	184	28	30	32	84	465
20	20	19	45	75	60	96	155	28	27	29	70	230
21	20	20	96	75	130	89	133	57	80	27	64	129
22	18	21	69	75	300	80	124	32	51	26	46	102
23	18	28	54	85	760	81	113	28	33	28	281	76
24	25	27	48	253	1800	220	99	67	27	46	244	65
25	26	22	45	385	1750	425	79	899	28	31	169	56
26	40	20	44	242	2370	268	81	1610	26	34	99	48
27	57	26	42	165	1330	195	192	1310	24	29	114	43
28	28	40	48	128	775	155	138	844	27	33	231	95
29	21	28	38	107	---	305	98	537	30	31	632	138
30	20	24	38	98	---	431	82	317	37	26	332	89
31	20	---	87	95	---	378	---	233	---	25	152	---
TOTAL	975	621	3297	5955	10490	13627	11361	6825	2120	2010	3569	12718
MEAN	31.5	20.7	106	192	375	440	379	220	70.7	64.8	115	424
MAX	118	40	614	1040	2370	1750	956	1610	311	350	632	3980
MIN	14	16	21	75	55	80	79	28	24	25	29	36
CFSM	.22	.14	.73	1.32	2.57	3.01	2.60	1.51	.48	.44	.79	2.90
IN.	.25	.16	.84	1.52	2.67	3.47	2.89	1.74	.54	.51	.91	3.24

CAL YR 1978 TOTAL 7457 MEAN 130 MAX 2700 MIN 13 CFSM .89 IN 12.09
WTR YR 1979 TOTAL 73568 MEAN 202 MAX 3980 MIN 14 CFSM 1.38 IN 18.74

53

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 (1.1 km) south of Massillon, and 3 mi (5 km) downstream from Newman Creek.

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

GAGE.--Water-stage recorder. Datum of gage is 916.00 ft (279.197 m) National Geodetic Vertical Datum of 1912. Prior to Aug. 19, 1944, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--42 years, 435 ft³/s (12.32 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,700 ft³/s (303 m³/s) July 5, 1969, gage height, 16.43 ft (5.008 m); minimum daily, 57 ft³/s (1.61 m³/s) Oct. 13, 14, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,070 ft³/s (257 m³/s) Sept. 15, gage height, 15.34 ft (4.676 m); minimum daily, 108 ft³/s (3.06 m³/s) Nov. 10, 12, 13.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	492	131	144	1840	306	1880	717	279	855	281	222	350
2	275	129	133	2650	297	2530	1500	246	790	265	416	290
3	293	124	335	1780	279	2640	2180	232	596	267	426	260
4	304	120	1760	942	265	3230	1820	267	433	552	274	290
5	308	112	1010	528	234	3680	2070	241	355	675	234	260
6	215	114	495	405	236	3180	1540	215	336	357	232	240
7	179	118	366	357	239	2050	988	201	313	258	208	300
8	155	116	770	345	241	1310	753	194	345	194	244	290
9	151	112	2490	313	229	914	1750	189	306	192	246	240
10	146	108	1340	304	215	794	2320	189	297	499	239	210
11	142	110	676	290	205	704	1610	192	386	322	322	200
12	222	108	469	281	215	563	1180	222	336	236	316	190
13	591	108	408	272	220	502	1020	283	290	196	227	240
14	757	114	362	357	217	514	1400	244	248	767	201	5500
15	521	133	322	371	217	471	1430	217	203	479	187	8800
16	372	131	305	336	220	412	1140	208	187	320	178	7700
17	263	160	291	302	205	393	855	194	180	265	176	6000
18	283	234	272	295	199	376	631	194	176	236	267	4400
19	179	173	269	267	205	369	499	187	212	222	327	2550
20	164	140	266	260	208	355	431	192	199	215	309	1160
21	151	133	384	341	248	341	386	297	302	210	274	675
22	140	133	378	371	511	325	359	263	343	210	251	522
23	140	140	304	304	1360	322	343	222	232	217	450	419
24	224	182	272	428	3150	531	313	397	194	267	820	371
25	253	153	271	918	3310	1180	286	1980	180	251	530	343
26	244	131	244	628	4310	835	283	3230	176	229	360	320
27	353	140	231	465	3450	640	520	3450	166	222	350	295
28	227	244	225	414	2460	517	448	2790	173	210	490	438
29	155	203	212	386	---	666	336	1770	203	263	1280	634
30	138	168	224	352	---	1010	297	1100	220	217	960	468
31	135	77	375	339	---	967	---	757	---	208	490	---
TOTAL	8002	4222	15601	17441	23451	34201	29405	20642	9232	9302	11506	43955
MEAN	258	141	503	563	838	1103	980	666	308	300	371	1465
MAX.	757	244	2490	2650	4310	3680	2320	3450	855	767	1280	8800
MIN	135	108	133	260	199	322	283	187	166	192	176	190
CAL YR 1978	TOTAL	188392	MEAN	516	MAX	6010	MIN	108				
WTR YR 1979	TOTAL	226960	MEAN	622	MAX	8800	MIN					

MUSKINGUM RIVER BASIN

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 (244 m) upstream from bridge on Elton Road at Navarre, 3.5 mi (5.6 km) downstream from gaging station at Massillon, 1.2 mi (1.9 km) downstream from Pigeon Run, and just upstream from Wolf Creek.

DRAINAGE AREA.--534 mi² (1,383 km²).

PERIOD OF RECORD.--March 1968 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1968 to current year.

pH: March 1968 to current year.

WATER TEMPERATURES: March 1968 to current year.

DISSOLVED OXYGEN: March 1968 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 Massillon (station 03117000).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 16,700 micromhos Jan. 27, 1970; minimum, 210 micromhos Mar. 4, 1976.

pH: Maximum, 12.5 units July 23, 1979; 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, 15.5 mg/L Aug. 1, 1979; minimum, 0.0 mg/L on many days during 1971 to 1973.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 6,120 micromhos Oct. 17; minimum, 300 micromhos Sept. 17.

pH: Maximum, 12.5 units July 23, 1979; minimum, 6.6 units June 24.

WATER TEMPERATURES: Maximum, 28.0°C July 16; minimum, 0.0°C on many days during winter period.

DISSOLVED OXYGEN: Maximum, 15.5 mg/L Aug. 1; minimum, 2.3 mg/L July 14.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	3180	1470	2790	2550	---	---	1380	690	---	---	1110	900
2	3390	1770	3000	2520	---	---	1170	720	---	---	870	750
3	2340	1830	2940	2460	---	---	2280	1260	---	---	840	750
4	2880	2130	3120	2550	1830	1440	2820	2310	---	---	780	630
5	5310	2370	2940	2820	3210	1950	2670	1380	---	---	750	660
6	5490	4830	3000	2730	3150	1440	---	---	---	---	870	750
7	4740	2520	3090	2850	1650	1560	---	---	---	---	990	840
8	3030	2550	3180	2910	1770	1050	2100	1860	---	---	1140	960
9	3360	2820	2910	2820	1650	1050	2100	1890	---	---	1170	1020
10	3570	2820	3630	2820	2190	1410	2340	1830	---	---	1200	1080
11	3390	3000	3240	2910	2730	2220	2160	1980	---	---	1290	1200
12	3420	2070	3390	2820	2820	1530	2310	1950	---	---	1380	1260
13	2610	1590	3210	2640	1890	1590	2280	2040	---	---	1410	1290
14	3900	1680	3030	2820	1860	1710	2280	1890	---	---	1530	1350
15	4860	3990	3240	2910	1980	1740	2100	1800	---	---	1650	1470
16	5880	4980	---	---	2160	1830	2070	1800	---	---	1620	1470
17	6120	2310	2670	2310	2220	1920	2070	1860	---	---	1680	1530
18	2400	1950	2910	2220	2250	1890	2760	2010	---	---	1680	1500
19	2550	2190	2880	1860	2400	2160	2700	2490	---	---	1650	1560
20	2910	2250	2820	2040	2340	2070	2910	2490	2670	2430	1650	1590
21	2850	2400	2670	2310	2730	1980	2730	2310	2640	2340	1710	1560
22	2940	2490	2940	2580	4500	1770	2940	2280	2550	1710	1800	1590
23	2910	2550	2880	2460	2070	1770	3060	2820	2010	1110	2040	1680
24	3210	2670	3150	2790	2190	1890	---	---	1020	930	1890	1410
25	2910	1860	3360	2250	2430	2010	---	---	1110	960	1530	990
26	2400	1620	2580	2400	2400	2130	---	---	960	900	1290	1110
27	3810	1620	2700	2520	2580	2160	---	---	960	840	2520	1380
28	4260	3570	3120	2520	2730	2280	---	---	1080	960	2490	1890
29	3480	2190	2520	2040	2610	2340	---	---	---	---	2130	1620
30	2520	2220	---	---	2700	2430	---	---	---	---	1980	1170
31	2730	2430	---	---	2640	1380	---	---	---	---	1230	1080
MONTH	6120	1470	3630	1860	4500	1050	3060	690	2670	840	2520	630

55

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

[illegible]

PH (STANDARD UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.5	7.3	7.6	7.5	---	---	7.9	7.5	---	---	7.6	7.5
2	7.5	7.4	7.6	7.5	---	---	7.7	7.5	---	---	7.5	7.5
3	7.5	7.4	7.6	7.5	---	---	8.0	7.7	---	---	7.6	7.4
4	7.5	7.1	7.5	7.4	7.6	7.5	8.1	7.8	---	---	7.6	7.5
5	7.6	7.4	7.6	7.3	7.8	7.6	7.9	7.6	---	---	7.6	7.5
6	7.6	7.5	7.6	7.4	7.8	7.6	---	---	---	---	7.8	7.5
7	7.6	7.1	7.6	7.4	7.7	7.6	---	---	---	---	7.6	7.5
8	7.8	7.3	7.6	7.4	7.7	7.6	7.9	7.7	---	---	7.8	7.5
9	7.6	7.4	7.7	7.5	7.7	7.5	7.9	7.5	---	---	7.7	7.6
10	7.5	7.4	7.6	7.3	7.7	7.6	7.8	7.5	---	---	7.8	7.5
11	7.5	7.4	7.6	7.3	7.8	7.7	7.9	7.7	---	---	7.8	7.6
12	7.5	7.2	7.6	7.4	7.8	7.4	7.8	7.6	---	---	7.9	7.7
13	7.4	7.2	7.6	7.2	7.8	7.7	7.8	7.4	---	---	7.9	7.8
14	7.5	7.4	7.6	7.1	7.8	7.6	7.8	7.5	---	---	8.0	7.9
15	7.6	7.5	7.7	7.5	7.9	7.8	7.8	7.6	---	---	8.1	7.9
16	7.7	7.6	---	---	7.9	7.4	7.7	7.5	---	---	8.1	7.9
17	7.7	7.5	7.6	7.5	7.9	7.8	7.7	7.6	---	---	8.0	7.8
18	7.6	7.4	7.7	7.6	7.9	7.7	8.0	7.7	---	---	7.9	7.8
19	7.5	7.4	7.8	7.5	7.9	7.8	7.9	7.8	---	---	7.9	7.8
20	7.5	7.5	7.8	7.6	7.9	7.8	8.1	7.7	7.8	7.7	8.0	7.9
21	7.5	7.3	7.7	7.5	8.0	7.9	7.9	7.6	7.8	7.6	8.0	7.8
22	7.5	7.4	7.8	7.5	8.1	7.9	7.9	7.8	7.9	7.6	8.0	7.2
23	7.5	7.4	7.8	7.3	8.0	7.8	7.9	7.7	9.4	7.5	7.7	7.4
24	7.6	7.4	7.8	7.4	8.0	7.4	---	---	7.7	7.5	7.6	7.3
25	7.7	7.6	8.0	7.3	8.0	7.9	---	---	7.6	7.5	7.4	7.2
26	7.7	7.4	7.9	7.6	7.9	7.8	---	---	7.6	7.5	7.5	7.3
27	7.6	7.5	7.8	7.7	7.9	7.8	---	---	7.6	7.4	7.9	7.5
28	7.6	7.5	7.9	7.1	8.2	7.8	---	---	7.6	7.4	7.9	7.6
29	7.7	7.5	7.9	7.9	8.0	7.6	---	---	---	---	7.9	7.4
30	7.6	7.5	---	---	7.9	7.6	---	---	---	---	8.2	7.8
31	7.6	7.4	---	---	7.9	7.6	---	---	---	---	8.2	7.9
MONTH	7.8	7.1	8.0	7.1	8.2	7.4	8.1	7.4	9.4	7.4	8.2	7.2
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.1	7.7	7.7	7.3	7.5	7.4	---	---	8.5	7.6	7.6	7.4
2	8.0	7.5	7.6	7.2	7.4	7.2	---	---	7.9	7.5	7.7	7.5
3	7.6	7.2	7.5	7.3	7.5	7.4	---	---	7.5	7.3	7.7	7.6
4	7.6	7.4	7.6	7.4	7.5	7.3	---	---	7.5	7.3	7.7	7.5
5	7.6	7.1	7.7	7.3	7.5	7.3	---	---	7.4	7.2	7.6	7.3
6	7.6	7.4	7.8	7.6	7.5	7.3	7.5	7.2	7.7	7.3	7.7	7.5
7	7.7	7.2	7.7	7.3	7.5	7.2	7.5	6.8	7.8	7.1	7.7	7.5
8	7.7	7.5	7.7	7.4	7.3	7.2	7.5	7.3	7.7	7.4	7.6	7.5
9	7.5	7.3	7.7	7.5	7.5	7.3	7.6	7.3	7.6	7.4	7.7	7.6
10	7.4	7.2	7.7	7.2	7.5	7.3	7.6	7.4	7.6	7.4	7.7	7.6
11	7.6	7.4	7.6	7.2	7.4	7.3	7.5	7.2	7.5	7.3	7.8	7.6
12	7.6	7.3	---	---	7.6	7.2	7.4	7.1	7.5	7.3	7.7	7.5
13	7.5	7.3	---	---	7.7	7.5	7.4	7.1	7.4	7.3	7.8	7.5
14	7.4	7.2	---	---	7.7	7.5	7.4	7.1	7.5	7.2	7.7	7.3
15	7.4	7.4	---	---	7.6	7.3	7.2	6.9	7.5	7.4	7.6	7.2
16	7.5	7.3	7.7	7.4	7.5	7.2	7.2	6.9	7.6	7.2	7.2	7.1
17	7.6	7.3	7.7	7.5	7.5	7.3	7.4	7.2	7.7	7.5	7.1	7.0
18	7.7	7.1	7.6	7.3	7.7	7.2	7.5	7.3	7.6	7.3	7.1	7.0
19	7.7	7.1	7.7	7.5	7.6	7.3	7.5	7.3	7.5	7.0	7.3	7.0
20	7.6	7.4	7.8	7.5	7.7	7.3	7.6	7.4	7.6	7.4	7.4	7.3
21	7.6	7.2	7.6	7.4	7.6	7.4	8.0	7.5	7.5	7.4	7.6	7.4
22	7.8	7.5	7.6	7.3	7.5	7.4	8.1	7.3	7.6	7.5	7.7	7.5
23	7.8	7.5	7.6	7.3	7.4	7.3	12.5	7.3	7.6	7.3	7.7	7.6
24	7.7	7.5	7.6	7.5	7.5	6.6	9.0	7.4	7.4	7.2	7.8	7.6
25	7.8	7.5	7.6	7.5	7.6	6.8	7.4	7.3	7.5	7.3	7.7	7.6
26	7.6	7.4	7.5	7.5	7.6	7.4	7.7	7.3	7.6	7.4	7.8	7.7
27	7.5	7.3	7.6	7.5	7.5	7.4	7.9	7.5	7.6	7.4	7.8	7.3
28	7.6	7.5	7.6	7.5	---	---	8.0	7.6	7.6	7.4	7.7	7.5
29	7.7	7.5	7.6	7.4	---	---	7.8	7.2	8.8	7.3	7.7	7.5
30	7.7	7.5	7.5	7.3	---	---	8.1	7.5	7.5	7.3	7.6	7.5
31	---	---	7.5	7.4	---	---	8.3	7.6	7.5	7.3	---	---
MONTH	8.1	7.1	7.8	7.2	7.7	6.6	12.5	6.8	8.8	7.0	7.8	7.0
YEAR	12.5	6.6										

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

[illegible]

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	5.1	4.0	7.4	5.7	---	---	10.6	9.7	---	---	10.6	10.0
2	4.8	3.3	7.1	5.8	---	---	10.6	9.0	---	---	11.0	10.1
3	5.9	3.9	7.1	5.7	---	---	10.7	9.0	---	---	11.1	9.8
4	6.0	4.0	7.3	5.5	9.2	7.8	10.8	9.7	---	---	10.6	9.6
5	6.0	3.9	7.6	5.5	10.5	10.3	10.7	9.8	---	---	10.6	9.5
6	6.2	4.8	7.2	5.3	10.9	10.6	---	---	---	---	9.6	9.3
7	6.9	5.1	6.1	5.1	10.6	9.9	---	---	---	---	9.3	9.1
8	7.4	5.6	7.2	5.3	11.0	9.8	12.3	11.2	---	---	9.4	9.1
9	7.7	5.6	8.4	5.7	10.9	10.1	11.2	10.6	---	---	9.5	9.2
10	7.4	5.2	8.0	6.1	11.1	10.4	10.9	10.2	---	---	9.5	9.3
11	7.3	5.1	8.5	5.8	12.2	10.3	11.1	9.9	---	---	9.9	9.4
12	6.1	4.6	6.5	5.1	11.7	10.9	10.0	9.1	---	---	10.5	9.8
13	6.6	4.2	6.7	5.0	11.1	10.8	---	---	---	---	10.3	9.7
14	5.8	4.1	6.3	4.6	11.1	10.8	---	---	---	---	9.7	9.3
15	6.6	5.7	6.7	5.0	11.1	10.7	10.3	9.9	---	---	10.1	9.2
16	6.6	6.4	---	---	10.7	10.1	10.5	10.1	---	---	10.7	9.9
17	8.9	6.4	7.3	6.3	10.3	9.7	10.2	9.9	---	---	10.2	9.7
18	8.1	6.7	7.2	6.3	10.2	9.7	10.1	9.8	---	---	9.7	9.0
19	7.4	6.4	7.2	5.7	10.1	9.9	9.9	9.5	---	---	9.0	8.3
20	7.2	6.2	7.7	6.7	10.0	9.5	---	---	9.6	8.8	9.2	8.0
21	7.3	5.8	7.6	6.7	9.9	9.3	9.5	9.1	9.2	8.7	9.3	7.8
22	7.3	5.9	8.3	6.6	10.2	9.3	9.7	9.3	9.6	9.0	9.5	7.6
23	5.9	5.3	7.4	6.7	10.3	9.9	10.1	9.7	11.2	9.7	8.6	7.1
24	6.1	5.3	6.8	6.6	10.2	9.4	---	---	10.9	10.6	7.6	6.5
25	7.5	5.9	7.7	6.5	9.9	9.5	---	---	11.0	10.4	8.6	7.0
26	6.1	4.9	8.3	7.1	10.0	9.6	---	---	11.0	10.3	9.6	8.7
27	6.3	4.5	8.1	7.4	10.3	10.0	---	---	10.5	9.8	10.2	9.2
28	6.6	5.3	8.4	7.3	10.4	9.8	---	---	10.0	9.6	10.4	9.3
29	7.3	5.7	7.6	7.6	10.2	9.5	---	---	---	---	9.5	8.4
30	7.4	5.9	---	---	9.5	9.2	---	---	---	---	8.7	8.2
31	7.1	5.9	---	---	10.4	9.0	---	---	---	---	8.6	8.3
MONTH	8.9	3.3	8.5	4.6	12.2	7.8	12.3	9.0	11.2	8.7	11.1	6.5
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.7	8.1	10.4	8.0	7.0	6.6	---	---	15.5	4.2	5.5	4.0
2	9.4	8.5	10.4	7.3	6.5	6.0	---	---	7.6	2.6	5.9	4.1
3	9.2	8.9	7.1	5.9	6.9	6.0	---	---	3.2	2.9	6.1	4.0
4	9.8	9.1	7.4	5.7	7.1	5.8	---	---	4.0	2.6	6.0	4.2
5	10.1	9.8	9.8	5.9	6.8	5.1	---	---	4.8	3.2	5.1	3.7
6	10.5	9.9	10.5	6.2	6.1	4.5	5.6	4.8	6.5	5.4	5.7	3.8
7	10.9	10.4	10.6	5.9	7.1	4.4	6.8	4.5	8.2	5.7	5.6	3.6
8	10.4	9.8	10.6	4.9	6.0	4.5	7.6	4.8	7.0	4.1	5.3	3.9
9	10.3	9.8	10.5	4.5	5.9	4.1	6.9	5.0	6.4	4.1	6.3	4.9
10	10.6	10.1	10.7	4.2	5.4	3.6	4.8	3.2	6.6	3.2	6.8	5.0
11	10.4	9.9	11.5	4.6	5.1	3.9	5.1	3.3	4.8	3.2	6.5	4.8
12	10.1	9.5	10.0	3.9	5.4	3.7	6.8	4.0	5.5	3.4	7.3	4.9
13	9.5	8.6	6.8	3.9	6.2	4.0	7.1	4.3	6.4	4.1	8.1	4.6
14	9.1	8.6	6.6	3.8	6.5	4.2	6.4	2.3	6.3	4.4	7.0	5.3
15	8.9	8.7	5.3	4.3	8.1	4.3	4.4	4.2	7.1	4.7	5.4	5.1
16	9.7	9.0	---	---	7.8	4.6	5.3	4.0	8.2	5.0	5.1	4.6
17	10.0	9.5	---	---	8.3	4.6	6.5	4.1	7.5	4.7	4.6	4.5
18	10.0	8.9	---	---	7.2	4.5	8.0	4.5	6.2	4.9	4.6	4.3
19	9.5	8.3	---	---	7.8	4.7	8.6	4.9	5.9	4.3	4.6	4.2
20	9.5	7.7	---	---	7.2	4.1	10.5	5.4	6.1	3.8	5.0	4.0
21	9.9	7.4	---	---	6.4	3.7	13.9	5.6	5.1	3.9	5.7	5.0
22	10.1	7.0	---	---	5.7	2.9	13.9	5.8	5.5	3.7	6.2	5.4
23	10.9	6.9	---	---	6.2	3.3	12.3	4.8	4.6	3.6	6.6	5.6
24	10.2	6.9	---	---	7.1	4.2	9.1	4.9	4.1	2.7	6.6	6.0
25	10.6	6.2	---	---	8.5	4.8	5.2	3.1	4.8	4.0	6.5	5.9
26	7.6	5.7	---	---	8.6	4.7	7.0	3.3	5.0	4.2	6.7	5.7
27	7.0	6.3	---	---	6.5	4.4	10.1	3.5	5.2	4.7	6.3	5.5
28	8.4	6.7	---	---	---	---	9.8	3.8	5.3	4.5	6.0	5.1
29	9.1	7.6	---	---	---	---	9.1	3.3	5.9	4.2	5.8	4.5
30	10.1	7.7	---	---	---	---	12.1	3.3	5.0	4.6	5.7	5.2
31	---	---	7.0	6.6	---	---	13.5	3.8	4.8	4.3	---	---
MONTH	10.9	5.7	11.5	3.8	8.6	2.9	13.9	2.3	15.5	2.6	8.1	3.6
YEAR	15.5	2.3										

MUSKINGUM RIVER BASIN

59

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 (91 m) downstream from Little Sandy Creek, and 0.6 mi (1.0 km) upstream from Indian Run.

DRAINAGE AREA.--253 mi² (655 km²).

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 (291.084 m) National Geodetic Vertical Datum of 1912.

REMARKS.--Records good. Water-quality data collected at this site 1964 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--41 years, 267 ft³/s (7.561 m³/s), 14.33 in/yr (364 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,000 ft³/s (425 m³/s) Jan. 22, 1959, gage height, 10.05 ft (3.063 m), from rating curve extended above 8,000 ft³/s (227 m³/s) on basis of contracted-opening and flow-over-road measurement of peak flow; minimum, 6.9 ft³/s (0.20 m³/s) Sept. 12, 13, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,800 ft³/s (51.0 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 4	1700	1810	51.3	4.66	1.420	Feb. 26	1200	4400	125	7.67	2.338
Dec. 9	1800	2620	74.2	5.89	1.795	Mar. 4	2400	2270	64.3	5.40	1.646
Jan. 2	0630	2220	62.9	5.32	1.622	Apr. 9	2100	2010	56.9	5.01	1.527

Minimum discharge, 48 ft³/s (1.36 m³/s) Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	138	143	1450	285	1420	335	286	426	142	85	110
2	85	141	128	2040	270	1540	1020	259	388	136	115	95
3	72	136	248	1420	250	1520	1400	258	325	128	112	87
4	107	133	1450	1000	237	2010	1120	328	281	273	95	82
5	105	129	1230	780	220	2010	1340	288	250	327	85	80
6	89	126	856	580	200	1470	919	257	232	210	82	72
7	80	126	602	450	196	1040	656	234	235	165	80	87
8	75	120	776	380	191	776	549	224	333	147	87	87
9	71	118	2280	330	180	595	1300	218	318	143	95	80
10	66	117	2100	290	180	511	1740	205	252	175	90	64
11	63	112	1290	270	180	450	1330	192	288	196	123	70
12	79	110	816	260	175	391	1180	246	241	151	141	67
13	332	110	584	250	170	367	970	719	202	120	120	67
14	471	111	463	340	160	379	752	385	177	112	97	745
15	433	109	385	400	160	361	741	292	162	105	87	919
16	347	108	340	367	151	305	659	247	152	100	82	457
17	391	125	323	302	150	290	570	221	145	97	80	337
18	298	233	293	293	148	277	493	204	138	100	97	218
19	233	205	262	250	143	266	432	192	140	97	105	162
20	197	159	245	242	146	255	389	189	133	90	92	133
21	169	143	311	337	141	242	358	237	180	85	97	130
22	147	133	282	370	343	229	335	195	179	85	130	180
23	133	133	231	308	740	221	312	181	146	90	156	162
24	126	148	207	457	2130	321	288	298	130	90	164	130
25	127	143	226	790	2280	555	273	762	122	92	183	115
26	146	130	212	640	3850	398	270	1080	117	90	148	107
27	225	133	188	581	3190	341	555	900	112	87	143	100
28	222	191	164	489	1890	308	472	916	111	85	133	311
29	173	185	148	406	---	319	355	738	121	90	172	563
30	153	162	154	349	---	338	314	596	146	90	183	435
31	143	---	317	320	---	327	---	472	---	82	141	---
TOTAL	5457	4167	17254	16741	18356	19832	21457	11819	6182	3980	3600	6252
MEAN	176	139	557	540	656	640	715	381	206	128	116	208
MAX	471	233	2280	2040	3850	2010	1740	1080	426	327	183	919
MIN	63	108	128	242	141	221	270	181	111	82	80	64
CFSM	.70	.55	2.20	2.13	2.59	2.53	2.83	1.51	.81	.51	.46	.82
IN.	.80	.61	2.54	2.46	2.70	2.92	3.15	1.74	.91	.59	.53	.92
CAL YR 1978 TOTAL	124224				4190	MIN 50	CFSM 1.34	IN 18.27				
WTR YR 1979 TOTAL	135097				3850	MIN 63	CFSM 1.46	IN 19.86				

MUSKINGUM RIVER BASIN

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 (3.9 km) upstream from mouth, and 0.5 mi (0.8 km) northeast of Canton.

DRAINAGE AREA.--43.1 mi² (112 km²).

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 (319.004 m) National Geodetic Vertical Datum of 1912.

REMARKS.--Records good. 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. Mean pumpage for water year 1979, 13.5 ft³/s (0.38 m³/s). At times low flow regulated by small pools above station. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--38 years, 35.2 ft³/s (0.997 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,470 ft³/s (70.0 m³/s) Jan. 22, 1959, gage height, 6.50 ft (1.981 m), from rating curve extended above 1,600 ft³/s (45.3 m³/s) on basis of contracted-opening measurement of peak flow; minimum daily, 0.2 ft³/s (0.006 m³/s) Nov. 9, 1944, Sept. 19, 1962.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft³/s (11 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s)	(m ³ /s)	Gage height (ft)	(m)	Date	Time	Discharge (ft ³ /s)	(m ³ /s)	Gage height (ft)	(m)
Jan. 1	2300	412	11.7	4.66	1.420	Feb. 26	1900	441	12.5	4.80	1.463
Feb. 24	1000	600	17.0	5.39	1.643	Sept. 15	0600	*1240	35.1	*6.36	1.939

Minimum daily discharge, 11 ft³/s (0.31 m³/s) July 21, Sept. 11, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	15	15	309	32	151	52	37	55	18	15	16
2	16	14	13	374	30	268	200	34	48	19	22	15
3	14	14	48	123	30	248	253	36	39	19	18	14
4	28	13	241	65	28	345	154	41	33	38	15	13
5	22	13	136	48	26	296	234	35	30	31	14	13
6	17	14	56	42	26	152	111	32	30	19	14	13
7	15	13	39	38	24	105	77	31	27	16	14	17
8	15	12	113	35	24	89	67	31	43	15	14	13
9	14	13	336	31	24	74	200	30	42	16	14	12
10	14	12	158	28	22	74	213	30	39	17	14	12
11	14	12	63	28	22	62	104	28	68	16	16	11
12	17	12	45	28	22	49	105	32	48	15	14	11
13	47	12	40	28	22	46	96	41	28	14	13	13
14	54	12	37	62	20	56	108	31	24	13	13	530
15	41	12	32	72	20	49	92	27	22	13	13	980
16	27	12	31	51	20	41	77	24	20	12	12	349
17	27	16	30	39	20	40	77	23	19	12	13	120
18	22	28	28	35	19	39	64	22	18	12	16	86
19	20	18	26	30	19	39	53	21	18	12	16	61
20	18	15	25	29	19	38	47	23	18	12	13	109
21	17	14	52	44	28	36	43	41	27	11	13	45
22	15	13	39	43	99	34	42	24	23	19	12	44
23	15	14	31	33	235	33	39	22	18	62	15	38
24	15	15	26	50	530	68	36	72	17	88	28	31
25	15	14	26	139	310	146	36	225	16	46	26	28
26	22	13	23	68	404	72	40	283	16	26	18	26
27	31	13	22	49	202	53	95	183	16	21	18	24
28	22	17	21	43	130	44	56	130	18	19	22	37
29	17	17	20	39	---	61	45	93	24	22	37	67
30	15	16	21	35	---	96	40	70	22	18	30	50
31	15	---	57	34	---	75	---	55	---	16	19	---
TOTAL	670	428	1850	2072	2407	2979	2886	1807	866	687	531	2798
MEAN	21.6	14.3	59.7	66.8	86.0	96.1	96.2	58.3	28.9	22.2	17.1	93.3
MAX	54	28	336	374	530	345	263	283	68	88	37	980
MIN	14	12	13	28	19	33	36	21	16	11	12	11

CAL YR 1978 TOTAL 17727 MEAN 48.6 MAX 635 MIN 11
WTR YR 1979 TOTAL 19981 MEAN 54.7 MAX 980 MIN 11

MUSKINGUM RIVER BASIN

61

03118500 NIMISHILLEN CREEK AT NORTH INDUSTRY, OH

LOCATION.--Lat 40°44'03"N, long 81°21'08"W, in sec. 35, T.10 N., R.8 W., Stark County, Hydrologic Unit 05040001, on left bank just downstream from railroad bridge, 1 mi (2 km) southeast of North Industry, and 3 mi (5 km) downstream from Sherrick Run.

DRAINAGE AREA.--175 mi² (453 km²).

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 (295.891 m) National Geodetic Vertical Datum of 1912. Prior to Dec. 13, 1923, nonrecording gage at site 1 mi (2 km) upstream at different datum.

REMARKS.--Records good. Low flow slightly regulated by plants at Canton. Records include diversion from Sugar Creek well field. Mean pumpage for the 1979 water year, 16.7 ft³/s (0.47 m³/s). See REMARKS for station 03124500. Water-quality data collected at this site 1964 to 1969, 1975, 1977.

AVERAGE DISCHARGE.--58 years, 180 ft³/s (5.098 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,600 ft³/s (244 m³/s) Jan. 21, 1959, gage height, 11.29 ft (3.441 m), from rating curve extended above 6,500 ft³/s (184 m³/s) on basis of slope-area measurement of peak flow; minimum, 3.6 ft³/s (0.10 m³/s) Sept. 2, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42.5 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
Dec. 4	0100	1880	53.2	4.93	1.503	Mar. 4	1300	1500	42.5	4.37	1.332
Dec. 9	0430	2200	62.3	5.38	1.640	Apr. 2	1900	1620	45.9	4.56	1.390
Jan. 1	2000	2140	60.6	5.30	1.615	Apr. 9	1530	1710	48.4	4.69	1.430
Feb. 24	0100	2690	76.2	6.01	1.832	Sept. 14	1130	*7050	200	*10.31	3.142
Feb. 26	0400	2870	81.3	6.24	1.902						

Minimum daily, 104 ft³/s (2.95 m³/s) Nov. 5, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230	119	119	1640	184	730	308	200	271	145	152	119
2	130	119	112	1280	169	1050	1150	190	238	145	229	108
3	110	112	554	421	166	970	885	200	211	140	155	108
4	230	106	1470	268	169	1410	830	220	205	477	137	112
5	142	104	521	220	147	960	845	200	193	217	175	114
6	130	108	277	199	145	563	445	180	202	155	137	135
7	120	114	217	181	150	425	329	172	178	133	130	193
8	120	112	900	184	147	368	332	163	271	123	232	117
9	110	112	1660	150	137	318	1200	157	202	157	128	106
10	110	110	567	147	133	318	715	157	256	147	163	112
11	110	110	301	147	128	280	421	152	364	137	196	112
12	140	110	253	147	130	250	453	304	217	137	121	117
13	370	110	232	147	133	247	364	271	181	135	114	220
14	430	110	208	381	130	277	425	155	163	128	112	5010
15	370	110	187	262	130	244	378	137	160	121	114	2320
16	320	110	175	208	117	220	315	126	150	126	112	850
17	223	140	163	199	108	217	283	112	142	128	110	385
18	172	190	157	178	106	211	256	121	145	128	220	304
19	152	160	152	147	110	217	232	112	147	128	135	259
20	140	130	166	172	112	217	220	184	145	128	121	229
21	123	120	235	339	193	205	217	232	268	128	128	271
22	117	112	181	223	461	205	220	126	166	196	117	238
23	121	128	150	181	1300	217	229	128	140	214	175	195
24	117	119	137	581	1980	537	229	401	128	256	259	184
25	112	108	145	541	1370	517	220	1240	133	187	150	175
26	223	104	133	297	1920	311	265	850	133	150	142	166
27	214	157	126	244	750	262	465	603	133	142	178	163
28	147	166	117	223	572	238	250	453	152	130	241	541
29	119	137	114	208	---	287	230	350	208	157	311	357
30	117	128	155	199	---	329	210	301	157	142	166	253
31	117	---	485	193	---	301	---	268	---	147	137	---
TOTAL	5386	3675	10369	9907	11297	12901	12921	8465	5659	4984	4997	13574
MEAN	174	123	334	320	403	416	431	273	189	161	161	452
MAX	430	190	1660	1640	1980	1410	1200	1240	364	477	311	5010
MIN	110	104	112	147	106	205	210	112	128	121	110	106

CAL YR 1978 TOTAL 97573 MEAN 267 MAX 2850 MIN 80
WTR YR 1979 TOTAL 104135 MEAN 285 MAX 5010 MIN 104

MUSKINGUM RIVER BASIN

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 (2.1 km) upstream from mouth, and 1.4 mi (2.3 km) northeast of Leesville.

DRAINAGE AREA.--48.3 mi² (125 km²).

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 (278.892 m) National Geodetic Vertical Datum of 1929. Prior to May 27, 1942, nonrecording gage at site 100 ft (30 m) upstream at present datum.

REMARKS.--Records fair. Flow regulated by Leesville Lake (see station 03120000). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--41 years, 52.7 ft³/s (1.492 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 740 ft³/s (21.0 m³/s) Mar. 4, 1940; maximum gage height, 7.88 ft (2.402 m) Mar. 4, 1940 (backwater from Conotton Creek); no flow several days during 1939-41.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 352 ft³/s (9.97 m³/s) Feb. 27, gage height, 5.05 ft (1.539 m); minimum daily, 1.6 ft³/s (0.045 m³/s) Feb. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	19	99	101	28	111	49	60	172	19	9.4	25
2	5.3	17	99	95	50	111	77	53	168	18	23	18
3	5.2	16	99	136	38	111	101	52	156	17	20	17
4	6.3	15	102	156	38	111	138	55	118	30	16	14
5	6.6	14	122	150	38	113	166	52	72	33	13	13
6	6.1	13	164	150	38	113	164	48	63	25	11	11
7	5.8	13	166	150	38	113	156	44	59	18	10	11
8	5.5	13	170	148	38	127	146	40	60	15	10	10
9	4.9	12	148	148	38	209	136	35	58	13	11	9.1
10	4.5	12	156	146	38	228	111	33	53	29	11	7.9
11	4.3	12	135	146	38	227	111	31	46	34	18	7.6
12	5.2	12	111	146	14	225	140	31	38	29	23	7.3
13	12	12	129	127	7.3	223	152	41	30	20	18	7.5
14	37	12	198	136	19	223	152	36	24	17	14	48
15	45	12	219	146	29	219	162	31	20	15	11	71
16	46	11	213	135	26	190	162	25	18	13	9.9	64
17	49	16	219	109	22	152	162	21	17	11	8.8	52
18	41	29	215	82	22	117	162	19	15	10	9.9	40
19	33	29	223	41	22	111	150	17	13	9.4	11	29
20	28	26	227	52	22	109	150	19	12	8.5	11	20
21	22	40	227	57	36	108	158	39	20	7.9	11	26
22	18	64	223	79	33	42	156	32	20	7.5	11	37
23	17	61	221	89	1.7	15	142	28	17	7.9	15	30
24	16	60	219	124	1.6	32	117	41	14	9.1	32	22
25	14	57	217	150	24	42	76	77	12	9.1	33	18
26	23	56	213	150	221	42	64	104	11	9.4	29	16
27	39	61	213	148	270	43	73	111	10	9.1	30	15
28	37	117	221	148	126	43	73	113	10	9.1	27	51
29	31	154	158	146	---	43	68	113	13	9.6	43	89
30	26	58	51	122	---	44	64	113	20	9.1	41	91
31	21	---	64	77	---	45	---	149	---	8.5	33	---
TOTAL	620.3	1043	5241	3790	1316.6	3642	3778	1663	1359	480.2	574.0	977.4
MEAN	20.0	34.8	169	122	47.0	117	126	53.6	45.3	15.5	18.5	29.2
MAX	49	154	227	156	270	228	156	149	172	34	43	91
MIN	4.3	11	51	41	1.6	15	49	17	10	7.5	8.8	7.3
CAL YR 1978	TOTAL	21467.6	MEAN	58.8	MAX	227	MIN	1.3				
WTR YR 1979	TOTAL	24384.5	MEAN	66.8	MAX	270	MIN	1.6				

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 (3.5 km) downstream from Dover Dam, 1.5 mi (2.4 km) east of Dover, and 3.4 mi (5.5 km) upstream from Sugar Creek.

DRAINAGE AREA.--1,405 mi² (3,639 km²).

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 (262.588 m) National Geodetic Vertical Datum of 1912. Prior to Aug. 30, 1930, nonrecording gage at same site and datum.

REMARKS.--Records 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 1979 water year, 16.7 ft³/s (0.47 m³/s) (see REMARKS for station 03124500). Flow regulated by four flood-control reservoirs since 1936 at points 2.2 mi (3.5 km) to 25 mi (40 km) upstream (see stations 03119500, 03120000, 03121000, and 03122000). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--56 years, 1,416 ft³/s (40.10 m³/s)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,400 ft³/s (748 m³/s) Jan. 26, 1937, gage height, 15.51 ft (4.727 m); minimum daily, 6.5 ft³/s (0.18 m³/s) Oct. 26, 1948.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,920 ft³/s (168 m³/s) Mar. 11, 16, gage height, 7.08 ft (2.158 m); minimum daily, 461 ft³/s (13.1 m³/s) Oct. 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	850	645	778	3650	1390	5390	2150	1470	4770	939	568	1140
2	786	631	890	4860	1290	5470	3300	1380	4380	946	918	925
3	566	610	1010	4540	1200	5580	4920	1280	3570	897	1050	806
4	738	592	3730	4450	1100	5470	4840	1480	2640	1390	820	750
5	794	568	4290	4470	1000	5630	4640	1410	1720	2250	680	771
6	683	550	3610	3700	950	5710	4330	1270	1510	1480	645	673
7	559	550	3240	3190	900	5690	3950	1160	1530	1050	586	750
8	496	556	2720	3040	850	5670	3420	1080	1660	855	574	771
9	468	544	3080	2270	850	5700	4250	988	1830	764	806	624
10	461	526	562	1870	800	5710	4900	925	1530	1060	652	532
11	461	514	2100	1500	800	5800	4530	890	1910	1240	925	496
12	510	502	5180	1300	800	5750	3680	1010	1640	974	1090	484
13	1440	496	4940	1200	750	5680	4090	2050	1360	820	855	466
14	2280	514	5050	1400	750	5640	4300	1870	1170	890	680	1010
15	1860	520	5030	1600	750	5640	4930	1250	1020	1240	598	1650
16	1450	526	4040	1800	750	5730	4700	1040	939	771	538	3370
17	1430	538	2920	1690	750	5710	4510	925	883	666	514	3860
18	1210	890	1810	1520	750	5620	4410	848	834	592	645	4480
19	960	883	1750	1370	750	5590	4380	806	813	562	988	5260
20	848	722	1720	1190	750	5400	4210	778	820	538	820	5500
21	757	645	1850	1480	1370	5040	3850	1430	1050	520	820	5430
22	687	624	2000	1820	2300	3930	3390	1200	1250	490	757	5350
23	631	645	1590	1650	3350	2900	3110	918	981	631	1000	5390
24	638	701	1400	1720	3900	1860	2070	1170	799	631	1670	5260
25	708	708	1390	3410	562	3050	1520	3220	715	729	1740	5040
26	743	645	1370	3260	574	2770	1410	4250	694	624	1360	4930
27	1020	638	1300	2620	2690	2100	2090	4940	673	586	1160	3750
28	1060	641	1230	2250	5080	1780	2450	4850	666	562	1240	3230
29	848	995	1100	2040	---	1770	1850	4910	778	592	2370	3560
30	729	918	940	1930	---	2180	1590	4000	939	598	2400	3180
31	680	---	1050	1530	---	2300	---	4050	---	550	1650	---
TOTAL	27351	19237	73670	74320	37756	142260	107810	58848	45074	26437	31129	79438
MEAN	882	641	2376	2397	1348	4589	3594	1898	1502	853	1004	2648
MAX	2280	995	5180	4860	5080	5800	4930	4940	4770	2250	2400	5500
MIN	461	496	562	1190	562	1770	1410	778	666	490	514	466
CAL YR 1978	TOTAL	675720	MEAN	1851	MAX	5860	MIN	419				
WTR YR 1979	TOTAL	723330	MEAN	1982	MAX	5800	MIN	461				

MUSKINGUM RIVER BASIN

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 (305 m) downstream from Beach City Dam, 0.4 mi (0.6 km) downstream from South Fork, and 1.8 mi (2.9 km) southeast of Beach City.

DRAINAGE AREA.--300 mi² (777 km²).

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 (282.854 m) National Geodetic Vertical Datum of 1912. Prior to Mar. 23, 1939, nonrecording gage at site 500 ft (152 m) downstream at datum 1 ft (0.3 m) higher. Mar. 23, 1939, to Sept. 26, 1949, water-stage recorder at site 300 ft (91 m) downstream at present datum.

REMARKS.--Records good. Flood flow regulated by Beach City Lake (see station 03123500). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--41 years, 272 ft³/s (7.703 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,520 ft³/s (213 m³/s) July 6, 1969, gage height, 11.26 ft (3.432 m), from floodmark in well; no flow Oct. 7-30, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,080 ft³/s (58.9 m³/s) Feb. 24, gage height, 6.53 ft (1.990 m); minimum daily, 46 ft³/s (1.30 m³/s) Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	149	78	109	916	210	1410	367	253	402	198	47	458
2	212	73	97	1320	190	1750	725	210	394	183	128	309
3	103	68	136	1610	180	1730	1550	206	310	148	127	242
4	94	67	1130	1720	170	1730	1310	289	252	205	73	201
5	126	66	1700	1520	160	1730	1640	245	213	485	57	168
6	89	63	1460	573	150	1750	1430	211	187	279	69	147
7	73	61	616	370	141	1750	874	190	172	167	58	164
8	63	61	549	310	140	1730	634	173	180	122	53	145
9	55	62	848	254	130	1720	711	157	201	111	147	114
10	49	69	250	234	120	1690	1020	145	169	205	104	100
11	46	65	453	212	119	1290	1540	137	346	190	161	91
12	49	61	1050	185	112	1420	1680	138	293	132	251	85
13	298	56	1380	187	110	1760	1550	372	191	114	136	84
14	740	55	1630	270	110	1880	1160	385	142	178	87	485
15	573	56	1530	474	100	1830	1470	239	131	139	69	900
16	349	57	525	354	100	1180	1280	177	111	101	59	1740
17	334	62	313	281	100	419	983	145	102	82	52	1790
18	248	169	250	278	95	321	724	127	94	69	77	1570
19	183	167	216	218	98	290	560	118	87	60	275	992
20	151	112	197	201	102	269	438	111	82	55	365	1900
21	130	88	239	292	112	248	445	133	142	51	206	1830
22	112	79	243	414	444	223	372	138	343	51	147	1870
23	98	78	199	294	980	212	300	109	197	82	312	1930
24	91	99	174	285	1120	299	303	179	127	79	762	1930
25	86	103	172	724	252	834	274	629	99	60	976	1930
26	84	88	155	732	270	649	292	1100	85	65	610	1910
27	130	86	125	468	339	440	404	1300	77	61	458	1890
28	136	149	102	373	1040	360	438	1220	78	54	463	1350
29	105	152	112	320	---	376	312	875	134	57	1090	1260
30	87	125	109	267	---	400	243	578	158	62	1780	1700
31	80	---	190	245	---	378	---	425	---	50	990	---
TOTAL	5123	2575	16259	15901	7194	32068	24999	10714	5499	3895	10189	29285
MEAN	165	85.8	524	513	257	1034	833	346	183	126	329	976
MAX	740	169	1700	1720	1120	1880	1680	1300	402	485	1780	1930
MIN	46	55	97	185	95	212	243	109	77	50	47	84
CAL YR 1978	TOTAL	125374	MEAN	343	MAX	2250	MIN	31				
WTR YR 1979	TOTAL	163701	MEAN	448	MAX	1930	MIN	46				

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 (46 m) upstream from bridge on State Highway 21, 0.8 mi (1.3 km) upstream from Broad Run, and 0.1 mi (0.2 km) southeast of Strasburg.

DRAINAGE AREA.--311 mi² (805 km²).

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 (273.174 m) National Geodetic Vertical Datum of 1912. 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 (0.610 m) higher.

REMARKS.--Records poor. Flood flow regulated by Beach City Lake 5.0 mi (8.0 km) upstream, since August 1937 (see station 03123500). Part of municipal water supply for city of Canton, starting May 1962, is pumped from well field 4.3 mi (6.9 km) upstream; pumpage is returned to Nimishillen Creek. Mean pumpage for water year 1979, 16.7 ft³/s (0.47 m³/s). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--22 years (1931-32, 1935-38, 1961-79), 304 ft³/s (8.609 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,700 ft³/s (558 m³/s) Aug. 7, 1935, gage height, 14.70 ft (4.48 m) (present datum), from rating curve extended above 8,400 ft³/s (238 m³/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, 3,590 ft³/s (102 m³/s) Sept. 14, gage height, 7.25 ft (2.210 m); minimum daily, 50 ft³/s (1.42 m³/s) Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	85	118	891	220	1410	337	282	411	216	55	550
2	220	80	106	1380	200	1890	650	238	411	213	130	330
3	110	75	121	1710	190	1890	1560	225	328	173	160	250
4	100	70	1050	1900	180	1910	1400	299	274	213	80	210
5	130	70	1770	1760	170	1890	1650	274	238	501	65	180
6	95	65	1590	660	160	1850	1510	240	211	316	75	160
7	80	65	638	391	150	1840	874	220	195	197	65	170
8	65	65	501	322	140	1800	612	204	195	147	60	150
9	60	65	963	290	140	1800	723	188	220	128	160	130
10	55	70	240	260	130	1780	974	179	195	211	120	110
11	50	70	391	240	130	1320	1550	171	340	220	180	95
12	55	65	1000	200	120	1460	1720	179	319	159	270	90
13	300	60	1390	210	120	1820	1680	384	218	132	140	90
14	750	60	1680	300	110	1950	1200	435	157	195	90	1020
15	588	65	1680	480	110	1890	1550	282	173	169	75	848
16	360	170	555	400	110	1270	1390	213	147	127	65	1810
17	340	72	296	320	100	418	1040	182	130	106	60	1890
18	250	145	238	300	100	308	755	163	115	90	80	1740
19	190	167	209	250	100	280	596	151	108	70	290	874
20	160	121	190	230	110	258	460	145	165	65	398	1950
21	140	98	209	320	110	238	475	159	384	60	220	1940
22	120	91	228	450	308	218	391	173	269	55	160	1970
23	110	87	190	350	784	209	319	149	173	90	302	2050
24	100	98	169	320	1200	266	331	204	138	85	794	2060
25	90	108	165	730	288	760	305	669	120	70	1070	2060
26	85	100	157	770	302	629	291	1190	105	70	651	2060
27	130	95	130	505	296	418	411	1430	108	65	550	2030
28	140	134	110	385	991	340	471	1350	100	60	570	1580
29	115	151	120	325	---	340	334	953	149	65	1200	1220
30	97	130	110	270	---	372	256	621	184	65	1860	1810
31	89	---	200	250	---	349	---	449	---	60	1080	---
TOTAL	5314	2797	16514	17169	7069	33173	25845	12001	6280	4393	11075	31427
MEAN	171	93.2	533	554	252	1070	862	387	209	142	357	1048
MAX	750	170	1770	1900	1200	1950	1720	1430	411	501	1860	2060
MIN	50	60	106	200	100	209	266	145	100	55	55	90
CAL YR 1978	TOTAL	136336	MEAN	374	MAX	2300	MIN	46				
WTR YR 1979	TOTAL	173057	MEAN	474	MAX	2060	MIN	50				

Note.--No gage height record Oct. 1-26, Dec. 28 to Feb. 7.

MUSKINGUM RIVER BASIN

03125000 HOHE CREEK NEAR NEW PHILADELPHIA, OH

LOCATION.--Lat 40°28'06", long 81°24'10", Tuscarawas County, Hydrologic Unit 05040001, on right bank 100 ft (30 m) downstream from highway bridge, 0.5 mi (0.8 km) upstream from the mouth, and 1.5 mi (2.4 km) southeast of New Philadelphia.

DRAINAGE AREA.--1.64 mi² (4.25 km²).

PERIOD OF RECORD.--December 1936 to September 1979 (discontinued).

REVISED RECORDS.--WSP 1173: 1941(M). WSP 1385: 1951-53(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 872.49 ft (265.935 m) National Geodetic Vertical Datum of 1912.

REMARKS.--Records good. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--42 years, 1.28 ft³/s (0.036 m³/s) 10.60 in/yr (269 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 378 ft³/s (10.7 m³/s) July 7, 1969, gage height, 5.77 ft (1.759 m); no flow at times in 1938-40, 1942-68, 1970-75.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft³/s (1.42 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
Jan. 1	1130	51	1.44	2.46	0.750	Aug. 28	2330	52	1.47	2.48	0.756
Feb. 25	2015	101	2.86	3.19	0.972	Sdept. 14	1000	*103	2.92	*3.22	0.981
June 6	2100	69	1.95	2.75	0.838						

Minimum discharge, 0.06 ft³/s (0.002 m³/s) July 22, 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	.46	.45	24	1.4	4.7	4.2	.95	1.4	.47	.91	.36
2	.45	.42	.44	8.3	1.3	4.4	15	.84	1.0	.37	1.2	.30
3	.45	.41	7.6	3.5	1.2	3.8	4.7	1.6	.84	.27	.26	.26
4	1.6	.41	14	2.5	1.1	5.2	9.1	1.2	.68	1.5	.16	.21
5	.49	.50	3.8	2.0	1.0	5.2	4.6	1.0	.60	.36	1.2	.20
6	.42	.35	2.5	1.8	.94	3.5	2.8	.88	4.9	.25	.26	.21
7	.34	.43	2.1	1.7	.90	2.8	2.0	.77	2.0	.20	.17	.17
8	.27	.36	18	1.6	.85	2.4	3.7	.68	9.1	.18	.95	.14
9	.23	.32	18	1.5	.85	2.0	15	.63	2.0	.33	.31	.14
10	.20	.31	4.2	1.4	.77	1.7	5.1	.60	1.5	3.5	.22	.13
11	.44	.30	2.8	1.3	.73	1.4	4.1	.60	1.0	.47	1.8	.12
12	4.4	.31	2.5	1.4	.70	1.2	4.6	.84	.84	.31	.45	.12
13	8.5	.31	2.4	1.8	.70	1.1	3.0	.65	.63	.36	.22	.74
14	8.2	.32	2.0	4.9	.65	.99	4.1	.53	.49	.24	.18	16
15	2.9	.32	1.9	2.3	.65	.84	3.7	.47	.36	.20	.16	1.8
16	3.6	.32	1.8	1.8	.65	.81	3.7	.43	.33	.17	.14	1.1
17	1.9	1.5	1.7	1.7	.60	.74	3.2	.39	.33	.14	.12	.87
18	1.3	.77	1.5	1.6	.60	.81	2.5	.39	.30	.14	1.1	.79
19	1.1	.46	1.5	1.3	.55	.74	1.6	.39	.26	.11	.27	.73
20	.81	.41	2.0	2.3	.55	.68	1.5	1.1	.34	.10	.20	.63
21	.64	.40	2.0	4.7	2.5	.65	1.4	1.1	1.9	.09	.20	1.2
22	.53	.38	1.6	2.3	5.7	.60	1.2	.49	.43	.09	.53	.84
23	.56	.72	1.4	2.0	20	.88	1.1	.77	.30	.11	2.5	.68
24	.48	.47	1.5	8.2	16	3.8	1.0	3.4	.25	.08	2.1	.63
25	.43	.39	1.7	4.1	30	1.9	.99	10	.22	.15	.60	.63
26	2.7	.36	1.3	2.7	17	1.4	1.5	5.8	.19	.15	.55	.60
27	1.3	1.4	1.1	2.4	5.6	1.2	3.4	7.0	.18	.11	.88	.58
28	.80	.86	.92	2.1	4.6	1.2	1.5	3.7	.60	.26	2.4	7.8
29	.60	.57	.98	1.8	---	1.9	1.2	2.3	.99	.29	5.1	2.9
30	.53	.53	1.6	1.6	---	1.4	1.1	1.6	.81	.11	.91	1.6
31	.50	---	8.6	1.5	---	2.1	---	1.4	---	.08	.51	---
TOTAL	48.87	15.07	113.89	102.1	118.09	62.04	112.59	52.50	34.77	11.19	26.56	42.48
MEAN	1.58	.50	3.67	3.29	4.22	2.00	3.75	1.69	1.16	.36	.86	1.42
MAX	8.5	1.5	18	24	30	5.2	15	10	9.1	3.5	5.1	16
MIN	.20	.30	.44	1.3	.55	.60	.99	.39	.18	.08	.12	.12
CFSM	.96	.31	2.24	2.01	2.57	1.22	2.29	1.03	.71	.22	.52	.87
IN.	1.11	.34	2.58	2.31	2.68	1.41	2.55	1.19	.79	.25	.60	.96
CAL YR 1978	TOTAL 562.84	MEAN 1.54	MAX 25	MIN .05	CFSM .94	IN 12.76						
WTR YR 1979	TOTAL 740.15	MEAN 2.03	MAX 30	MIN .08	CFSM 1.24	IN 16.78						

MUSKINGUM RIVER BASIN

67

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 (122 m) downstream from outlet of Piedmont Dam and Boggs Fork, and 0.7 mi (1.1 km) northwest of Piedmont.

DRAINAGE AREA.--122 mi² (316 km²).

PERIOD OF RECORD.--October 1938 to current year. Prior to February 1939 monthly discharge only, published in WSP 1305.

GAGE.--Water-stage recorder. Datum of gage is 872.00 ft (265.785 m) National Geodetic Vertical Datum of 1912. Prior to Sept. 9, 1949, at site 1,000 ft (305 m) downstream at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good. Flow regulated by Piedmont Lake (see station 03125500). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--41 years, 135 ft³/s (3.823 m³/s)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,470 ft³/s (41.6 m³/s) Dec. 4, 1950; maximum gage height, 11.44 ft (3.487 m) Mar. 5, 1963; minimum daily discharge, 0.2 ft³/s (0.006 m³/s) Sept. 3, 4, 10, 1953.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 922 ft³/s (26.1 m³/s) Dec. 9, gage height 8.59 ft (2.618 m); maximum gage height, 10.35 ft (3.155 m) Feb. 26 (backwater from unnamed tributary); minimum daily, 17 ft³/s (0.48 m³/s) June 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	65	172	310	489	311	170	90	414	95	62	285
2	27	61	169	497	272	286	242	87	418	87	58	268
3	26	58	263	279	110	251	244	95	442	80	53	253
4	35	55	374	215	110	278	214	109	449	139	50	215
5	34	53	223	327	119	305	213	113	436	158	47	132
6	30	50	120	418	168	352	193	104	427	107	44	103
7	29	47	173	411	217	430	178	103	419	91	42	99
8	27	47	334	414	227	500	177	104	440	83	41	90
9	26	45	843	398	80	538	276	99	429	80	44	82
10	25	41	621	397	50	539	266	96	398	82	42	74
11	26	39	309	400	49	583	203	95	420	77	185	69
12	32	36	273	408	82	656	179	95	382	72	203	66
13	55	37	442	407	120	708	237	112	186	70	136	67
14	105	35	687	332	130	702	285	107	95	60	107	106
15	91	103	711	333	129	690	274	98	89	55	97	114
16	77	172	666	351	131	663	260	91	84	53	89	88
17	76	178	642	367	127	659	245	83	81	51	83	76
18	67	185	623	536	125	649	229	77	75	48	142	70
19	61	177	611	670	125	414	213	75	56	44	159	66
20	58	172	609	643	125	159	140	73	36	44	127	52
21	54	170	732	514	151	119	100	99	63	42	129	104
22	60	167	703	430	184	99	99	88	65	36	120	177
23	50	169	611	439	246	99	97	95	54	32	163	147
24	51	170	573	469	421	122	99	218	51	26	191	115
25	48	167	597	348	556	172	94	452	49	30	194	105
26	82	166	576	520	786	169	98	422	32	67	164	99
27	136	185	504	543	623	162	118	380	17	76	243	92
28	109	178	210	500	402	156	112	390	42	58	209	183
29	84	188	102	513	---	157	100	396	86	91	249	223
30	75	178	104	515	---	155	95	323	91	109	284	184
31	70	---	148	503	---	158	---	334	---	73	310	---
TOTAL	1751	3394	13725	13407	6354	11241	5450	5103	6326	2216	4067	3814
MEAN	56.5	113	443	432	227	363	182	165	211	71.5	131	127
MAX	136	188	843	670	786	708	285	452	449	158	310	285
MIN	25	35	102	215	49	99	94	73	17	26	41	62
CAL YR 1978	TOTAL	69884	MEAN 191	MAX 866	MIN 24							
WTR YR 1979	TOTAL	76848	MEAN 211	MAX 843	MIN 17							

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 (0.6 km) downstream from Brushy Fork, 3.6 mi (5.8 km) upstream from Weaver Run, 6 mi (10 km) upstream from Laurel Creek, and 9 mi (14 km) south of Dennison.

DRAINAGE AREA.--282 mi² (730 km²).

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 (258.775 m) National Geodetic Vertical Datum of 1912. Prior to Feb. 9, 1939, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated by Clendening Lake on Brushy Fork, 1.9 mi (3.1 km) upstream, a. Piedmont Lake, 16 mi (26 km) upstream (see stations 03126500 and 03125500). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--41 years, 313 ft³/s (8.864 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,410 ft³/s (125 m³/s) Mar. 7, 1945, Mar. 5, 1963; maximum gage height, 17.29 ft (5.270 m) Mar. 5, 1963; minimum daily discharge, 1.1 ft³/s (0.031 m³/s) Oct. 4, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,240 ft³/s (91.8 m³/s) Feb. 27, gage height, 16.01 ft (4.880 m); minimum daily, 35 ft³/s (0.99 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	160	456	960	631	1580	336	256	730	99	123	720
2	37	145	370	1500	548	1280	539	239	877	143	102	638
3	37	132	443	1500	281	1100	752	242	914	148	88	593
4	45	124	1110	890	266	1060	659	315	922	232	75	547
5	55	119	1060	758	230	1040	647	331	893	403	70	395
6	49	113	668	931	263	934	558	309	870	260	68	213
7	44	109	342	926	285	958	470	280	864	188	53	192
8	42	111	762	972	271	1110	439	264	899	154	59	170
9	39	108	1840	1050	229	1170	786	245	866	138	62	149
10	39	101	2370	958	126	1170	1240	226	778	137	67	128
11	38	92	1910	689	99	1150	1040	213	710	135	370	113
12	51	88	988	490	152	1190	800	199	592	124	781	106
13	85	87	803	434	232	1240	755	228	421	120	615	102
14	224	87	1150	559	282	1210	806	222	186	110	341	254
15	248	112	1230	847	227	1140	813	197	164	95	205	399
16	194	228	1220	986	179	1090	854	173	152	84	166	252
17	177	239	1180	727	213	965	956	152	143	75	147	187
18	153	275	1110	553	190	795	750	137	135	72	222	153
19	134	272	1050	345	172	725	450	129	124	66	391	133
20	119	256	1050	318	214	315	395	124	86	62	307	117
21	107	246	1210	543	261	255	297	157	130	61	321	144
22	104	242	1330	761	518	205	282	180	204	56	277	480
23	103	242	1180	944	552	182	271	157	164	55	480	471
24	100	306	1000	1060	1220	240	252	332	139	51	1160	318
25	103	341	984	1200	1770	494	256	1140	118	47	1120	242
26	124	332	1040	1170	2700	524	247	1430	102	67	695	210
27	353	365	1040	1180	3010	496	361	1350	72	133	722	185
28	326	634	832	1090	2250	447	367	1370	67	101	774	377
29	242	550	467	988	---	389	307	1360	95	149	823	912
30	196	513	363	974	---	290	277	1070	99	224	811	759
31	173	---	427	836	---	285	---	698	---	161	855	---
TOTAL	3776	6729	30985	27139	17371	25029	16972	13725	12516	3950	12360	9659
MEAN	122	224	1000	875	620	807	556	443	417	127	399	322
MAX	353	634	2370	1500	3010	1580	1240	1430	922	403	1160	912
MIN	35	87	342	318	99	182	247	124	67	47	59	102
CAL YR 1978	TOTAL	151392	MEAN	415	MAX	2610	MIN	34				
WTR YR 1979	TOTAL	180211	MEAN	494	MAX	3010	MIN	35				

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 (3.5 km) upstream from Little Stillwater Creek.

DRAINAGE AREA.--367 mi² (951 km²).

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 (255.840 m) National Geodetic Vertical Datum of 1912. Prior to Oct. 1, 1936, nonrecording gage at site 1.7 mi (2.7 km) upstream at same datum. Auxiliary water-stage recorder below concrete dam at datum 10.00 ft (3.048 m) lower.

REMARKS.--Records fair except for June through September, which are poor. Flow regulated by Piedmont Lake, 35 mi (56 km) upstream, and Clendenen Lake on Brushy Fork, 22 mi (35 km) upstream, beginning in 1938 (see stations 03125500 and 03126500). Water is diverted from Dennison water-supply dam 1.7 mi (2.7 km) 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.--57 years, 428 ft³/s (12.12 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,650 ft³/s (217 m³/s) Aug. 8, 9, 1935, gage height, 14.2 ft (4.33 m) at former site, 12.8 ft (3.90 m) 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 (5.33 m) at former site, and about 15.5 ft (4.72 m) at present site.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,120 ft³/s (117 m³/s) Feb. 26; gage height, 6.99 ft (2.131 m); minimum daily discharge, 42 ft³/s (1.19 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	205	697	1410	956	2630	481	412	935	140	170	904
2	44	186	597	2230	852	2280	725	369	966	190	140	763
3	44	166	555	2280	606	1930	1150	348	1030	210	120	688
4	55	157	1550	1830	435	1770	1070	412	1020	330	110	606
5	65	148	1890	1250	376	1730	1070	513	998	550	100	521
6	60	130	1490	1130	335	1480	935	513	966	320	90	304
7	55	135	773	1170	435	1270	763	481	956	240	85	212
8	50	135	914	1150	397	1330	651	427	987	200	81	191
9	48	135	2520	1230	390	1410	812	376	1010	190	75	166
10	48	126	2700	1220	233	1420	1590	335	935	180	75	148
11	46	122	2400	1040	181	1370	1630	310	894	170	166	135
12	59	114	2000	773	166	1340	1430	291	763	160	925	110
13	110	110	1610	624	250	1390	1180	348	642	150	863	103
14	329	110	1290	753	342	1410	1080	342	369	140	633	267
15	465	114	1470	1050	397	1310	1110	297	206	130	342	688
16	362	157	1470	1370	291	1220	1070	261	162	120	239	473
17	322	285	1430	1160	239	1150	1120	222	148	100	196	291
18	261	383	1370	925	244	987	1140	196	130	90	212	233
19	217	412	1290	669	250	894	883	176	114	90	473	191
20	186	376	1250	521	250	633	615	157	85	85	400	166
21	162	342	1340	734	355	369	521	166	106	85	420	166
22	143	329	1460	1050	734	304	427	206	273	80	380	450
23	135	316	1470	1140	1100	273	397	196	256	80	802	624
24	126	342	1340	1340	2000	304	376	279	201	75	1250	505
25	122	442	1230	1640	2400	725	362	1230	171	75	1540	355
26	130	450	1220	1610	3740	744	355	1780	148	120	1120	291
27	310	457	1240	1510	3760	706	390	2020	122	170	873	261
28	465	687	1160	1460	3000	624	589	2010	95	140	946	481
29	376	883	852	1340	---	580	546	1880	130	220	1080	1390
30	279	744	563	1250	---	481	457	1650	140	280	1140	1210
31	233	77	597	1200	---	420	---	1220	---	200	1010	---
TOTAL	5349	8699	41738	38059	24714	34484	24925	19423	14958	5310	16056	12893
MEAN	173	290	1346	1228	883	1112	831	627	499	171	518	430
MAX	465	683	2700	2280	3760	2630	1630	2020	1030	550	1540	1390
MIN	42	110	555	521	166	273	355	157	85	75	75	103
+	1.81	1.76	1.86	1.91	2.00	2.02	1.81	1.87	1.96	1.89	1.89	1.87

CAL YR 1978 TOTAL 199031 MEAN 545 MAX 2970 MIN 40 + 1.91
WTR YR 1979 TOTAL 246608 MEAN 676 MAX 3760 MIN 42 + 1.89

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

MUSKINGUM RIVER BASIN

03127970 CLEAR FORK TRIBUTARY NEAR HANOVER, OH

LOCATION.--Lat 40°21'07", long 81°04'14", in NE 1/4 sec. 28, T.12 N., R.5 W., Harrison County, at bridge on Archer Township R.239-A, 1.1 mi (1.8 km) south of Hanover, 1.2 mi (1.9 km) upstream from mouth and 3.6 mi (5.8 km) southwest of Jewett.

DRAINAGE AREA.--0.68 mi² (1.76 km²).

PERIOD OF RECORD.--October 1978 to September 1979.

REMARKS.--Discharge records are not available at this time. Water-quality records are based on once-a-month sampling data.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 270 micromhos Aug. 1, 1979; minimum, 170 micromhos April 3, 1979.

pH: Maximum, 7.6 units June 5, 1979; minimum, 6.4 units Jan. 9, 1979.

WATER TEMPERATURES: Maximum, 23.5°C Aug. 1, 1979; minimum, 0.2°C Jan. 9, 1979.

DISSOLVED OXYGEN: Maximum, 69 mg/L Feb. 6, 1979; minimum, mg/L Mar. 16, 1979.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 270 micromhos Aug. 1; minimum, 170 micromhos Apr. 3.

pH: Maximum, 7.6 units June 5; minimum, 6.4 units Jan. 9.

WATER TEMPERATURES: Maximum, 23.5°C Aug. 1; minimum, 0.2°C Jan. 9.

DISSOLVED OXYGEN: Maximum, 69 mg/L Feb. 6; minimum, mg/L Mar. 16.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (NTU)	OXYGEN DEMAND. CHEM- ICAL (HIGH LEVEL) (MG/L)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	BICAR- BONATE (MG/L AS HC03)
DEC 01...	1715	200	7.3	4.0	20	3.0	10	89	30	27	5.3	72
JAN 09...	1400	180	6.4	2	5	4.0	9	78	43	23	4.9	42
FEB 06...	1515	195	6.8	1.0	5	6.0	69	73	0	22	4.5	130
MAR 16...	0915	190	7.0	5	5	4.0	0	84	38	25	5.2	55
APR 03...	0930	170	7.2	7.0	15	10	3	65	32	19	4.3	40
MAY 15...	1430	230	7.5	17.0	5	3.0	26	86	26	26	5.0	73
JUN 05...	1430	210	7.6	18.5	5	3.0	5	83	31	25	5.0	63
JUL 10...	1415	230	7.5	17.0	10	3.0	6	99	20	30	5.8	96
AUG 01...	1400	270	7.5	23.5	10	3.0	6	110	21	35	6.5	114
SEP 13...	1545	220	7.2	20.5	8	2.0	14	94	12	28	5.8	100
DATE	CAR- BONATE (MG/L AS C03)	ALKA- LITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	SULFATE DIS- SOLVED (MG/L AS S04)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)
DEC 01...	0	59	5.8	34	.1	11	1.0	1.0	.00	4.3	.05	.05
JAN 09...	0	34	27	38	.1	10	1.4	--	.01	--	--	.01
FEB 06...	0	107	33	36	.0	9.0	1.2	1.1	.01	3.8	.23	.24
MAR 16...	0	46	9.0	42	.0	9.8	1.3	--	.02	--	.00	.02
APR 03...	0	33	4.0	35	.0	9.4	1.6	--	.00	--	.14	.14
MAY 15...	0	60	3.7	33	.1	9.5	.57	2.1	.00	13	.14	.14
JUN 05...	0	52	2.5	34	.1	11	.92	--	.00	--	.16	.16
JUL 10...	0	79	4.9	28	.1	10	.42	--	.00	--	.14	.14
AUG 01...	0	94	5.8	27	.1	11	.17	1.5	.01	13	.10	.11
SEP 13...	0	82	10	28	.1	11	.36	24	.00	2700	.00	.00

03127970. CLEAR FORK TRIBUTARY NEAR HANOVER, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO- GEN, NH ₄ + ORG. TOT IN BOT MAT (MG/KG AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO ₃)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS BA)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
DEC 01...	1500	1.0	4.6	.01	160	80	3000	0	50	2	<10	280
JAN 09...	--	1.4	6.2	.03	--	130	--	0	--	4	--	500
FEB 06...	920	1.4	6.4	.01	120	140	4400	0	60	2	10	570
MAR 16...	--	1.3	5.8	.06	--	80	--	0	--	0	--	190
APR 03...	--	1.7	7.7	.02	--	240	--	0	--	2	--	1000
MAY 15...	2400	.71	3.1	.01	220	140	3300	0	40	3	<10	360
JUN 05...	--	1.1	4.8	.00	--	70	--	0	--	5	--	410
JUL 10...	--	.56	2.5	.01	--	140	--	100	--	17	--	480
AUG 01...	420	.28	1.2	.02	220	120	2300	100	40	16	<10	430
SEP 13...	2700	.36	1.6	.01	250	70	4000	0	50	16	<10	400
DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR)	STRON- TIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INORG. + ORG. TOT. IN BOT MAT (G/KG AS C)	CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C)
DEC 01...	160	20	130	<.5	.00	13	<10	70	<10	5.1	5.1	.0
JAN 09...	57	--	100	<.5	--	10	--	90	--	--	--	--
FEB 06...	4	20	90	<.5	.02	12	30	100	<10	4.3	4.4	.1
MAR 16...	36	--	60	<.5	--	19	--	70	--	--	--	--
APR 03...	14	--	70	<.5	--	6	--	120	--	--	--	--
MAY 15...	65	10	70	<.5	.00	16	10	170	<10	5.5	5.5	.0
JUN 05...	16	--	50	<.5	--	23	--	130	--	--	--	--
JUL 10...	3	--	40	<.5	--	30	--	110	--	--	--	--
AUG 01...	2	10	70	<.5	.06	3	10	140	<10	4.6	4.6	.0
SEP 13...	1	<10	40	<.5	.00	2	<10	150	10	5.7	5.8	.1

HUSKINGUM 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 (46 m) downstream from outlet of lake at Tappan Dam, 1 mi (2 km) west of Tappan, and 2 mi (3 km) upstream from Plum Run.

DRAINAGE AREA.--71.1 mi² (184 km²).

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 (262.433 m) National Geodetic Vertical Datum of 1912. Prior to Jan. 30, 1939, water-stage recorder at gate house of Tappan Dam at datum 9 ft (3 m) higher. Jan. 30 to Mar. 24, 1939, nonrecording gage and Mar. 25, 1939, to Aug. 6, 1944, water-stage recorder, at site 150 ft (46 m) downstream at present datum.

REMARKS.--Records good except those below 3.0 ft³/s (0.085 m³/s), which are fair. Flow completely regulated by Tappan Lake (see station 03128000). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--41 years, 75.8 ft³/s (2.147 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,050 ft³/s (29.7 m³/s) Mar. 13, 1939, gage height, 10.00 ft (3.048 m); no flow Sept. 12-15, 18, 19, 21-29, Oct. 13-21, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 649 ft³/s (18.4 m³/s) Mar. 8, gage height, 6.68 ft (2.036 m); minimum daily, 1.5 ft³/s (0.042 m³/s) Nov. 10-12, Dec. 10, Feb. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.8	206	276	4.5	3.5	33	3.2	163	434	30	16	149
2	9.8	203	276	4.7	3.7	73	3.1	68	450	30	16	58
3	9.3	200	272	80	4.7	91	4.5	43	450	25	15	56
4	10	200	276	226	6.3	103	6.0	53	469	23	14	52
5	10	200	276	292	8.4	105	16	56	445	29	13	44
6	9.8	229	276	288	10	105	31	58	414	27	13	36
7	9.3	257	288	288	88	284	46	58	133	24	12	30
8	8.8	79	300	288	91	536	56	58	35	22	12	25
9	8.4	4.7	171	284	88	542	77	56	48	22	13	22
10	7.1	1.5	1.5	254	88	510	97	55	53	22	13	20
11	7.1	1.5	89	200	86	500	99	53	56	22	15	18
12	7.9	1.5	440	133	82	489	146	52	49	21	26	17
13	11	3.1	538	55	80	489	206	56	35	20	36	19
14	28	2.9	532	53	88	394	229	55	33	18	30	49
15	39	123	527	138	89	152	229	50	36	18	26	61
16	43	265	521	226	50	11	375	46	36	16	22	56
17	45	296	515	243	32	18	464	41	38	15	21	52
18	44	292	510	222	32	46	455	35	38	14	23	46
19	41	292	504	125	32	77	257	30	38	13	24	36
20	38	236	141	55	19	88	48	28	33	13	26	32
21	34	168	3.5	55	11	86	52	58	33	13	73	43
22	31	157	4.0	160	24	68	55	58	34	13	77	61
23	28	154	4.0	272	3.7	34	58	58	33	13	80	59
24	27	154	4.0	338	3.7	14	58	73	32	12	191	55
25	22	154	4.0	370	3.9	13	58	105	31	13	232	52
26	29	154	32	370	2.1	6.7	59	109	31	14	232	48
27	44	50	174	365	1.5	3.6	68	109	30	15	265	44
28	45	125	365	365	6.3	3.6	70	109	30	15	280	64
29	44	254	141	321	---	3.3	70	109	30	16	280	86
30	95	280	4.3	123	---	3.3	143	272	30	17	312	91
31	203	---	4.5	21	---	3.2	---	409	---	16	304	---
TOTAL	998.3	4743.2	7469.8	6219.2	1037.8	4884.7	3538.8	2583	3637	581	2712	1481
MEAN	32.2	158	241	201	37.1	158	118	83.3	121	18.7	87.5	49.4
MAX	203	296	538	370	91	542	464	409	469	30	312	149
MIN	7.1	1.5	1.5	4.5	1.5	3.2	3.1	28	30	12	12	17
CAL YR 1978	TOTAL	34709.9	MEAN	95.1	MAX	538	MIN	1.0				
WTR YR 1979	TOTAL	39885.8	MEAN	109	MAX	542	MIN	1.5				

MUSKINGUM RIVER BASIN

73

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 (46 m) upstream from highway bridge, 0.2 mi (0.3 km) south of Newcomerstown, 2 mi (3 km) upstream from Buckhorn Creek, and 4 mi (6 km) downstream from Dunlap Creek.

DRAINAGE AREA.--2,443 mi² (6,327 km²).

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 (237.744 m) National Geodetic Vertical Datum of 1912. 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 (2.4 km) upstream at datum 5.03 ft (1.533 m) higher prior to Oct. 1, 1934, and 0.03 ft (0.009 m) higher Oct. 1, 1934, to Feb. 13, 1939.

REMARKS.--Records good. Diversion from basin at Portage 03117000). Flow regulated by eight flood-control reservoirs at points 40 mi (64 km) to 64 mi (103 km) upstream. Water-quality data collected at this site 1946 to 1949, 1955 to 1977.

AVERAGE DISCHARGE.--58 years, 2,496 ft³/s (70.69 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,800 ft³/s (1,330 m³/s) Jan. 26, 1937, gage height, 20.65 ft (6.294 m), site and datum then in use; minimum daily, 170 ft³/s (4.81 m³/s) Aug. 6, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of about 21.5 ft (6.55 m), at site and datum used prior to Oct. 1, 1934, discharge, 83,000 ft³/s (2,350 m³/s) computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,700 ft³/s (331 m³/s) Mar. 1, gage height, 8.78 ft (2.676 m) minimum daily, 613 ft³/s (17.4 m³/s) Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	685	1320	2040	5440	3140	11600	3940	3060	7000	1650	989	3820
2	1190	1250	1950	10700	2720	11500	5250	2890	7100	1640	1270	2770
3	968	1200	2080	9890	2490	11200	8310	2650	6460	1580	1440	2320
4	852	1160	5770	9390	2290	11100	9000	2910	5610	1630	1340	2080
5	1060	1120	9040	8910	2110	11000	9270	3060	4270	3130	1150	1940
6	1020	1090	8240	7620	1780	10500	8770	2810	3640	3050	1040	1730
7	861	1110	6540	6080	1800	10100	7560	2580	3600	2090	926	1470
8	739	1120	5350	5380	1700	10100	6300	2410	3460	1650	852	1510
9	666	910	10400	4600	1600	10200	7440	2270	3710	1430	1010	1380
10	631	842	6800	4000	1500	10300	9800	2140	3340	1540	1100	1220
11	613	823	4530	3370	1470	10200	9420	2030	3260	1990	1430	1100
12	676	795	8080	2760	1450	9800	9090	1940	3490	1740	2150	1040
13	1590	776	9300	2520	1400	9910	8360	3130	2810	1500	2270	1000
14	3290	776	8650	3120	1400	10200	8410	3650	2340	1350	1760	3310
15	3850	786	9220	3730	1400	10100	8760	2830	1940	1710	1360	4810
16	3090	968	8490	4000	1400	9580	8980	2230	1750	1470	1120	5620
17	2700	1230	6510	4050	1300	8600	8600	1960	1620	1000	989	6290
18	2390	1590	4690	3470	1300	7850	8170	1770	1540	926	1120	6640
19	1940	1890	4120	2970	1300	7590	7540	1680	1470	884	1540	6720
20	1630	1710	3960	2450	1300	7290	6740	1570	1410	842	1920	7160
21	1450	1460	3720	2840	1300	6690	6050	1980	1570	884	1770	7810
22	1290	1320	3960	3660	2000	6090	5520	2410	2000	947	1700	7950
23	1170	1320	3790	3830	4470	4820	4930	1950	2030	968	2810	8220
24	1100	1370	3320	3950	6370	3910	4480	1980	1620	1030	4390	8190
25	1090	1460	3090	6050	7430	4650	3250	4580	1380	936	5180	7800
26	1160	1470	3010	7190	10400	5650	2990	7850	1250	1010	4680	7660
27	1470	1460	2960	6100	7500	4450	3460	9090	1190	905	3560	7280
28	1910	1640	2800	5250	10300	3740	4450	9880	1140	958	3470	6720
29	1730	2220	2500	4670	---	3470	3980	9340	1200	978	4490	7650
30	1420	2240	2290	4280	---	3610	3300	8190	1470	988	5940	7510
31	1330	---	2040	3640	---	3910	---	7050	---	1070	5460	---
TOTAL	45561	38426	159240	155910	84620	249710	202140	113870	84670	43476	70226	140730
MEAN	1470	1281	5137	5029	3022	8055	6738	3673	2822	1402	2265	4691
MAX	3850	2240	10400	10700	10400	11600	9800	9880	7100	3130	5940	8220
MIN	613	776	1950	2450	1300	3470	2990	1570	1140	842	852	1000
CAL YR 1978	TOTAL	1155824	MEAN	3167	MAX	11500	MIN	590				
WTR YR 1979	TOTAL	1388579	MEAN	3804	MAX	11600	MIN	613				

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 (213 m) downstream from Charles Mill Dam, 2.5 mi (4.0 km) south of Mifflin, and 4 mi (6 km) upstream from Rocky Fork.

DRAINAGE AREA.--217 mi² (562 km²).

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 (299.179 m) National Geodetic Vertical Datum of 1912. Dec. 3, 1941, to Dec. 5, 1944, water-stage recorder at site 300 ft (91 m) downstream at same datum.

REMARKS.--Records good. Flow regulated by Charles Mill Lake (see station 03129500). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--41 years, 197 ft³/s (5.579 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,800 ft³/s (79.3 m³/s) Mar. 13, 1964 from rating curve extended above 1,900 ft³/s (53.8 m³/s); maximum gage height, 8.45 ft (2.576 m) Mar. 14, 1939; minimum daily discharge, 0.9 ft³/s (0.025 m³/s) Apr. 21, 1940.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a discharge of 11,700 ft³/s (331 m³/s), computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,390 ft³/s (39.4 m³/s) Mar. 7, gage height, 5.71 ft (1.740 m); minimum daily, 14 ft³/s (0.40 m³/s) Oct. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	23	119	74	139	600	244	111	449	284	47	236
2	14	21	100	130	135	696	256	109	369	359	42	202
3	14	21	102	230	135	489	275	113	300	426	161	170
4	20	20	151	339	130	404	362	115	247	430	213	99
5	18	19	170	404	124	411	442	113	173	438	191	58
6	20	21	173	407	119	419	510	111	111	453	156	62
7	21	20	173	355	115	838	551	109	94	449	128	62
8	20	19	158	294	109	1350	576	86	96	376	78	62
9	17	18	26	244	104	1360	612	69	94	297	55	57
10	17	17	20	207	88	1360	645	76	94	250	106	54
11	16	17	77	186	62	1350	696	79	109	205	173	50
12	19	19	309	178	46	1350	730	90	119	165	158	49
13	33	18	326	173	57	1350	700	102	111	104	186	49
14	41	19	259	168	70	1320	55	107	102	81	139	324
15	42	20	213	168	58	1300	620	107	94	100	59	32
16	44	20	188	165	49	1320	1180	100	88	117	34	26
17	41	21	178	163	44	1320	1270	94	83	142	32	25
18	36	28	173	160	41	1330	1260	90	63	137	46	462
19	33	28	165	158	40	1340	1230	85	49	86	62	735
20	31	28	165	156	40	1320	1230	83	47	47	171	717
21	27	28	163	156	55	1190	1210	81	111	37	309	709
22	25	28	163	156	74	819	1150	74	269	37	322	691
23	25	30	160	151	81	568	1030	70	404	40	345	670
24	21	112	158	153	36	430	761	76	514	41	322	649
25	20	173	156	153	35	352	572	94	612	44	272	584
26	25	165	156	153	34	303	442	137	572	52	233	415
27	24	163	151	151	25	256	359	224	442	52	164	275
28	24	151	102	151	60	221	290	345	335	54	117	227
29	24	151	62	149	---	265	253	449	269	52	148	191
30	24	146	60	146	---	272	153	530	247	46	232	170
31	24	---	62	144	---	256	---	543	---	41	265	---
TOTAL	776	1564	4638	6022	2105	26159	19674	4572	6667	5442	4966	8112
MEAN	25.0	52.1	150	194	75.2	844	656	147	222	176	160	270
MAX	44	173	326	407	139	1360	1270	543	612	453	345	735
MIN	14	17	20	74	25	221	55	69	47	37	32	25

CAL YR 1978 TOTAL 76082.0 MEAN 208 MAX 1410 MIN 9.0
WTR YR 1979 TOTAL 90697.0 MEAN 248 MAX 1360 MIN 14

75

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 upstream side of bridge on State Highway 3 at Loudonville, 1.5 mi (2.4 km) downstream from Big Run.

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

GAGE.--Water-stage recorder. Datum of gage is 929.16 ft (283.208 m) National Geodetic Vertical Datum of 1929.
Prior to Oct. 23, 1941, nonrecording gage at same site and datum.

REMARKS.--Records fair. Flow regulated since 1936 by Charles Mill Lake, 16 mi (26 km) upstream from station (see station 03129500). 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.

AVERAGE DISCHARGE.--48 years, 345 ft³/s (9.770 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,460 ft³/s (240 m³/s) July 5, 1969, gage height, 14.11 ft (4.301 m), from rating curve extended above 4,000 ft³/s (113 m³/s) on basis of contracted-opening measurement of peak flow; minimum daily, 29 ft³/s (0.82 m³/s) Aug. 7, 8, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,620 ft³/s (131 m³/s) Sept. 15, gage height, 11.44 ft (3.487 m); minimum daily, 61 ft³/s (1.73 m³/s) Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	79	208	1090	241	973	426	286	661	647	152	420
2	69	75	166	1050	231	1620	640	274	560	503	411	414
3	61	75	357	475	227	1490	600	277	475	557	244	383
4	133	73	1020	490	221	2700	758	324	406	627	343	280
5	81	71	429	531	199	1790	1040	280	350	603	340	178
6	85	69	333	547	193	951	827	271	258	570	301	159
7	83	71	301	509	196	1000	788	258	211	573	251	166
8	75	71	525	444	187	1620	827	248	231	521	234	166
9	67	67	707	391	178	1590	1340	196	218	459	371	156
10	65	67	234	363	156	1630	1050	193	211	593	159	136
11	65	67	146	347	110	1570	967	205	237	406	149	130
12	112	67	268	340	80	1520	1040	218	241	311	149	130
13	371	67	471	340	92	1530	1030	254	231	261	149	127
14	234	71	391	438	115	1530	2550	244	211	178	190	846
15	181	75	337	350	100	1480	1140	237	196	184	163	3900
16	146	73	301	300	90	1460	1500	202	178	211	95	2100
17	136	81	283	280	75	1500	1590	208	178	224	88	800
18	110	184	271	270	70	1490	1540	199	166	251	531	350
19	99	97	265	260	70	1500	1490	196	136	205	330	277
20	92	85	261	260	70	1500	1450	211	130	127	261	764
21	88	83	414	260	90	1450	1430	215	701	102	534	895
22	81	81	298	260	150	1090	1380	184	550	99	487	870
23	77	92	277	260	250	788	1270	176	550	130	613	876
24	79	173	265	350	400	693	1010	205	550	110	563	835
25	75	254	261	521	550	607	788	320	600	124	567	804
26	124	234	248	391	770	499	658	347	550	178	459	703
27	149	237	241	350	391	447	600	347	450	142	426	497
28	92	317	211	310	330	400	503	521	444	130	420	551
29	83	241	121	280	---	432	447	567	406	127	734	611
30	77	227	121	261	---	471	380	672	453	118	503	419
31	79	---	142	254	---	450	---	728	---	110	475	---
TOTAL	3376	3024	9873	12572	5832	37771	31059	9063	10739	9381	10692	18943
MEAN	109	117	318	406	208	1218	1035	292	358	303	345	631
MAX	371	317	1020	1090	770	2700	2550	728	701	647	734	3900
MIN	61	67	121	254	70	400	380	176	130	99	88	127
CAL YR 1978	TOTAL	147646	MEAN	405	MAX	2340	MIN	52				
WTR YR 1979	TOTAL	162825	MEAN	446	MAX	3900	MIN	61				

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 (0.3 km) downstream from Pleasant Hill Dam, 2.8 mi (4.5 km) south of Perryville, and 4.7 mi (7.6 km) upstream from the confluence of Clear Fork and Black Fork.

DRAINAGE AREA.--198 mi² (513 km²).

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 (294.741 m) National Geodetic Vertical Datum of 1912. Prior to May 1, 1947, water-stage recorder at site 0.5 mi (0.8 km) downstream at datum 4.88 ft (1.487 m) lower.

REMARKS.--Records good. Flow regulated by Pleasant Hill Lake (see station 03133000). Water diverted from Clear Fork Reservoir (upstream from Pleasant Hill Lake) for municipal supply of city of Mansfield since 1953; diversion not included in figures of daily discharge. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--41 years, 196 ft³/s (5.551 m³/s)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,340 ft³/s (66.3 m³/s) Jan. 23, 1959, gage height, 4.89 ft (1.490 m); minimum daily, 0.6 ft³/s (0.017 m³/s) Nov. 2, 4, 1938.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,400 ft³/s (39.6 m³/s) Mar. 5, gage height, 3.86 ft (1.177 m); minimum daily, 32 ft³/s (0.906 m³/s) Oct. 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	42	109	120	108	722	241	208	180	157	57	286
2	35	41	110	125	82	738	331	195	180	200	95	225
3	33	39	109	361	97	583	446	193	171	195	108	195
4	40	39	576	520	118	1140	458	206	161	173	97	175
5	40	38	702	513	118	1380	715	200	139	152	85	154
6	40	37	580	507	100	1390	906	190	130	133	81	137
7	39	37	305	501	83	1340	599	183	122	114	73	124
8	36	38	254	495	93	1250	462	178	130	99	67	112
9	33	39	261	382	105	1120	589	173	126	93	67	99
10	32	38	242	182	105	906	752	171	120	105	64	88
11	32	37	441	120	105	882	830	168	116	139	70	83
12	39	37	810	120	89	900	694	171	108	139	68	78
13	88	37	572	120	80	888	512	171	99	124	61	78
14	110	38	272	120	80	882	699	164	92	110	54	678
15	108	37	196	130	75	830	1140	159	86	97	50	1300
16	95	37	195	168	70	402	1190	150	81	88	47	1300
17	82	42	195	188	70	262	1050	143	78	76	45	1220
18	71	52	176	160	70	219	824	137	74	68	164	906
19	62	52	168	97	70	219	813	126	68	61	380	663
20	56	50	168	66	70	216	876	126	65	58	418	579
21	52	48	212	66	70	208	876	145	124	55	402	561
22	48	48	212	137	70	203	847	124	200	59	334	547
23	46	48	181	178	71	198	807	112	168	88	295	530
24	42	53	180	178	184	208	579	116	137	83	250	508
25	40	53	180	250	474	225	292	150	114	76	227	487
26	47	50	180	255	531	225	271	211	101	74	198	454
27	52	52	179	205	549	216	268	265	90	70	183	331
28	52	58	178	179	547	195	256	259	81	68	175	260
29	48	63	153	144	---	200	236	233	79	65	324	321
30	46	65	116	144	---	216	219	208	93	59	410	305
31	44	---	116	144	---	233	---	188	---	57	365	---
TOTAL	1636	1345	8328	6875	4284	18596	18778	5423	3513	3135	5314	12792
MEAN	52.8	44.8	269	222	153	600	626	175	117	101	171	426
MAX	110	65	810	520	549	1390	1190	265	200	200	418	1300
MIN	32	37	109	66	70	195	219	112	65	55	45	78
+	13.0	13.2	12.2	13.6	14.4	13.0	11.9	12.5	13.4	12.6	13.6	12.6
CAL YR 1978	TOTAL	80600	MEAN	221	MAX	1270	MIN	31				
WTR YR 1979	TOTAL	90019	MEAN	247	MAX	1390	MIN	32				

+ Diversion in cubic feet per second, from Clear Fork Reservoir for municipal supply; furnished by city of Mansfield.

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 05040002, on right bank 800 ft (244 m) downstream from Mohicanville Dam, 2 mi (3 km) east of Mohicanville, and 2.4 mi (3.9 km) downstream from the confluence of Jercoe and Muddy Forks.

DRAINAGE AREA.--271 mi² (702 km²).

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 (283.464 m) National Geodetic Vertical Datum of 1912. Prior to July 25, 1949, water-stage recorder at site 500 ft (152 m)

REMARKS.--Records good, except those for the winter period, which are fair. Flow regulated by Mohicanville Reservoir (see station 03134500). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--41 years, 235 ft³/s (6.655 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,490 ft³/s (155 m³/s) July 5, 1969, gage height, 14.32 ft (4.365 m); minimum daily, 1 ft³/s (0.028 m³/s) June 10, 1947, Jan. 25, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,340 ft³/s (37.9 m³/s) Sept. 14, gage height, 8.49 ft (2.588 m); minimum daily, 7.2 ft³/s (0.20 m³/s) Sept. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	34	48	892	110	676	1110	136	381	475	45	145
2	26	33	43	883	100	643	1090	125	288	237	429	110
3	21	32	164	759	95	438	1070	128	202	170	174	95
4	54	32	806	399	85	433	1050	142	154	348	86	78
5	35	30	585	276	80	430	1050	126	125	708	57	69
6	30	29	278	205	75	430	1040	115	125	422	56	62
7	27	30	184	160	70	719	1050	105	110	187	47	63
8	24	30	347	150	65	924	987	99	116	128	45	53
9	22	29	640	140	65	985	987	92	102	105	71	48
10	20	27	8.4	130	60	984	1030	88	145	130	72	45
11	21	27	352	120	59	997	1010	89	128	105	95	42
12	25	26	846	120	55	991	1010	92	94	82	118	41
13	162	27	433	143	55	984	1050	123	79	89	64	41
14	143	28	264	194	55	984	1090	96	71	145	46	400
15	101	34	190	200	55	991	1060	85	65	102	38	26
16	81	33	152	159	55	978	1050	76	59	71	35	12
17	83	38	123	126	55	984	1050	69	57	58	32	7.2
18	58	82	104	100	51	1030	936	67	58	49	71	262
19	46	53	99	91	54	1090	594	64	53	46	135	552
20	40	41	93	89	56	1090	403	65	50	45	352	705
21	36	37	196	90	74	1080	297	136	282	39	155	816
22	32	35	154	85	360	1070	243	88	237	37	105	816
23	30	38	123	97	884	1080	200	72	120	68	205	922
24	32	61	105	233	873	1070	180	133	83	131	241	819
25	33	47	85	551	347	1080	172	492	69	82	261	822
26	48	40	80	357	51	1070	164	737	59	72	169	816
27	82	41	73	246	41	1110	198	778	54	60	155	828
28	53	91	62	200	126	1150	182	766	56	50	183	922
29	40	71	105	169	---	1140	150	737	73	47	579	816
30	35	57	873	145	---	1140	149	700	180	39	513	837
31	34	---	870	130	---	1140	---	565	---	36	216	---
TOTAL	1534	1213	8485.4	7739	4111	28911	21692	7186	3675	4363	4850	11070.2
MEAN	49.5	40.4	274	250	147	933	723	232	123	141	156	369
MAX	162	91	873	892	884	1150	1110	778	381	708	579	837
MIN	20	26	8.4	85	41	430	149	64	50	36	32	7.2
CAL YR 1978	TOTAL	105521.4	MEAN	289	MAX	1120	MIN	8.4				
WTR YR 1979	TOTAL	104829.6	MEAN	287	MAX	1150	MIN	7.2				

MUSKINGUM RIVER BASIN

03136000 MOHICAN RIVER AT GREER, OH

LOCATION.--Lat 40°30'53", long 82°11'44", in NW 1/4 sec. 10, T.8 N., R.10 W., Knox County, Hydrologic Unit 05040002, on left bank 3,000 ft (914 m) downstream from bridge on State Highway 514 at Greer, 5 mi (8 km) upstream from Negro Run, and 7 mi (11 km) downstream from Lake Fork.

DRAINAGE AREA.--948 mi² (2.455 km²).

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

REVISED RECORDS.--WSP 623: 1924(M). WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 872.91 ft (266.063 m) National Geodetic Vertical Datum of 1912. Prior to July 22, 1931, nonrecording gage at site 3,000 ft (914 m) upstream at same datum.

REMARKS.--Records good except those for the winter period, which are fair. Flow regulated by Charles Hill Lake on Black Fork, 30 mi (48 km) upstream, Pleasant Hill Lake on Clear Fork, 17 mi (27 km) upstream, and Mohicanville Reservoir on Lake Fork, 19 mi (31 km) upstream, beginning August 1936. (See stations 03129500, 03133000, and 03134500). Water-quality data collected at this site 1965 to 1976.

AVERAGE DISCHARGE.--58 years, 901 ft³/s (25.52 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,500 ft³/s (581 m³/s) July 5, 1969, gage height, 14.59 ft (4.47 m) from rating curve extended above 14,000 ft³/s (396 m³/s) on basis of contracted-opening measurement of peak flow; minimum daily, 73 ft³/s (2.07 m³/s) Sept. 26, 27, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 27.0 ft (8.23 m), discharge, 55,000 ft³/s (1,560 m³/s) (estimated).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,400 ft³/s (295 m³/s) Sept. 14, gage height 9.54 ft (2.908 m); maximum gage height, 11.90 ft (3.627 m) Feb. 23, (ice jam); minimum daily, 189 ft³/s (5.35 m³/s) Oct. 11.

REVISIONS.--The daily discharges for water year 1978 have been revised as shown in the following table. They supersede figures published in OH-78-1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	342	207	2540	2000	1400	480	3720	1800	1370	555	214	250
2	530	213	2400	1800	1300	470	3550	1710	981	537	220	230
3	399	216	1860	1710	1200	460	3700	1690	810	726	250	210
4	342	215	1610	1240	1100	460	3650	1620	706	686	320	190
5	297	309	1650	747	1000	443	3900	1640	637	591	300	180
6	297	247	2090	609	900	430	3730	1460	555	529	270	170
7	334	247	1740	564	850	412	3700	1080	560	477	280	170
8	366	380	1510	1380	800	400	3550	922	650	452	310	170
9	882	365	1180	2000	750	390	3400	1160	710	419	290	150
10	750	338	1100	1400	700	410	3450	1320	600	389	747	150
11	602	441	1000	1490	680	480	3570	1050	520	366	628	150
12	520	406	900	1960	660	686	3080	922	500	352	419	150
13	453	344	822	1690	640	1050	2510	1380	520	331	345	259
14	408	311	4520	1040	620	4080	2310	2150	500	324	304	219
15	374	305	5910	778	600	4720	2050	2060	460	345	278	204
16	350	326	3120	660	590	2270	1920	2100	430	310	259	194
17	358	825	2830	618	580	1860	1830	2010	410	291	241	214
18	326	1110	3070	600	570	2780	1830	1970	400	272	230	204
19	318	849	3510	560	560	3610	3180	1920	2690	259	219	194
20	318	730	3720	540	560	4150	3190	1620	1990	253	219	189
21	297	695	3790	520	560	5030	3590	1400	1720	247	209	184
22	278	727	3470	510	550	4380	3220	1160	1170	247	189	180
23	264	547	3350	500	550	4620	3030	1030	843	247	184	184
24	252	597	3280	480	540	4180	3130	2000	647	297	184	170
25	245	542	3930	500	520	3830	3270	2440	573	265	180	166
26	245	539	3400	2460	500	4480	3080	2400	546	230	180	166
27	252	494	3130	1600	490	5280	2750	2100	832	241	180	166
28	245	453	3320	1400	480	4690	2240	1860	1570	291	189	166
29	235	465	3160	1300	---	4510	1990	1610	1140	259	209	161
30	225	579	2930	1200	---	4030	1900	1280	637	230	214	175
31	215	---	2280	1300	---	3740	---	1410	---	219	260	---
TOTAL	11319	14122	83122	35256	20250	78811	90040	50274	25677	11237	8521	5605
MEAN	365	471	2681	1137	723	2542	3001	1622	856	362	275	187
MAX	882	1110	5910	2460	1400	5280	3900	2440	2690	726	747	259
MIN	215	207	822	480	480	390	1830	922	400	219	180	150
CAL YR 1977	TOTAL	329640	MEAN	903	MAX	5910	MIN	137				
WTR YR 1978	TOTAL	434234	MEAN	1190	MAX	5910	MIN	160				

MUSKINGUM RIVER BASIN

79

03136000 MOHICAN RIVER AT GREER, OH--Continued

EXTREMES FOR CURRENT YEAR.--Maximum discharge 6,440 ft³/s (182 m³/s) Dec. 15 gage height 6.94 ft (2.115 m);
maximum gage height, 7.52 ft (2.292 m) Jan. 27 (ice jam); minimum daily, 160 ft³/s (4.53 m³/s) Sept. 9-12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	389	247	477	2200	810	2520	1900	778	1420	1380	310	1120
2	253	241	460	2870	810	4120	2340	726	1210	1090	876	922
3	194	230	609	2000	800	3260	2570	706	1010	1040	716	821
4	284	230	2890	2360	736	5330	2570	778	854	1070	609	696
5	291	219	2170	2500	706	4850	3470	726	747	1580	537	529
6	247	219	1610	1940	700	3360	3240	676	618	1330	502	485
7	247	219	1090	1710	650	3160	2810	637	564	1010	443	485
8	230	219	1310	1620	650	4180	2490	609	573	843	404	443
9	204	219	2610	1440	600	4040	3510	555	564	726	494	404
10	194	214	981	1240	550	3860	3420	529	573	876	389	374
11	189	209	865	1200	500	3720	3240	529	609	747	628	359
12	199	209	2140	1200	300	3660	3210	520	546	618	618	345
13	854	209	1880	1100	350	3610	2890	600	511	555	494	338
14	789	214	1220	1200	400	3610	4800	564	468	502	485	7430
15	676	230	922	1400	350	3520	4100	529	435	502	359	6850
16	502	225	832	1500	300	2970	4340	502	412	452	272	2720
17	494	241	767	1200	270	2840	4290	485	389	435	241	2050
18	404	435	716	1000	240	2760	3790	460	374	443	767	1840
19	352	324	676	900	230	2890	3270	435	338	396	1080	2390
20	324	284	656	850	230	2890	2970	419	317	310	1210	2300
21	297	265	899	550	260	2840	2840	618	1030	272	1350	2470
22	272	259	865	821	500	2480	2650	511	1260	272	1130	2430
23	253	259	726	854	800	2130	2490	452	957	345	1490	2340
24	247	366	696	1090	1500	2040	2100	511	899	412	1410	2270
25	241	460	676	1760	2300	2000	1410	1160	922	381	1450	2190
26	278	427	647	1450	3280	1910	1240	2000	934	381	1110	2050
27	452	435	618	1170	1840	1830	1220	1950	810	374	1030	1800
28	324	382	600	1090	1600	1830	1120	1820	696	331	934	1790
29	284	311	550	934	---	1830	1010	1780	628	324	2050	2000
30	259	477	412	876	---	1900	922	1740	736	310	1870	1750
31	253	---	494	854	---	1910	---	1670	---	284	1440	---
TOTAL	10476	8878	32064	42879	22262	33850	82182	25975	21404	19591	26708	54001
MEAN	338	296	1034	1383	795	3027	2739	838	713	632	862	1800
MAX	854	382	2890	2870	3280	5330	4800	2000	1420	1580	2050	7430
MIN	189	209	412	550	230	1830	922	419	317	272	241	338
CAL YR 1978	TOTAL	377089	MEAN	1033	MAX	5280	MIN	160				
WTR YR 1979	TOTAL	440270	MEAN	1206	MAX	7430	MIN	189				

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 at downstream side of Tilden Avenue Bridge at Mount Vernon, 0.8 mi (1.3 km) downstream from North Branch, and 2.7 mi (4.3 km) upstream from Dry Creek.

DRAINAGE AREA.--202 mi² (523 km²).

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 (299.972 m) National Geodetic Vertical Datum of 1929. (levels by Corps of Engineers). Prior to Apr. 3, 1953, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods which are fair. Some regulation by Knox Lake, capacity, 3,750 acre-ft (4.62 hm³), 8.2 mi (13.2 km) upstream on East Branch of North Branch Kokosing River beginning in 1954 and North Branch Kokosing River Lake 10.0 mi (16.1 km) upstream on North Branch Kokosing River, beginning in June 1972. (see station 03136300). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--26 years, (1954-79), 209 ft³/s (5.919 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,000 ft³/s (1,080 m³/s) Jan. 21, 1959, gage height, 18.19 ft (5.544 m), from rating curve extended above 9,000 ft³/s (255 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 13 ft³/s (0.37 m³/s) Sept. 29, 30, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,840 ft³/s (222 m³/s) Sept. 14, gage height 9.70 ft. (2.957 m); minimum daily, 29 ft³/s (0.82 m³/s) Oct. 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	41	52	1220	139	906	306	176	173	217	50	255
2	35	38	49	1740	130	1440	792	165	198	214	77	198
3	32	37	83	717	125	1510	792	176	179	170	125	165
4	40	36	594	379	119	2610	770	217	145	151	80	143
5	38	35	580	257	110	2130	1190	201	119	148	70	122
6	37	34	309	204	110	1340	737	179	105	112	65	110
7	34	34	205	181	100	912	500	162	95	91	55	100
8	32	34	305	162	98	601	424	145	105	78	53	89
9	30	33	1110	160	94	482	1030	137	110	77	55	82
10	29	33	584	154	92	442	965	130	102	80	50	77
11	29	33	318	135	90	398	612	140	100	84	65	73
12	30	33	233	112	90	333	673	132	100	80	63	72
13	96	34	192	111	88	306	814	130	84	86	58	75
14	117	34	163	159	86	302	3650	122	75	78	50	5590
15	102	36	140	229	82	280	2190	112	70	72	47	3760
16	82	36	127	234	80	248	1300	105	66	65	45	1470
17	64	42	118	168	80	241	1000	95	65	58	43	1030
18	53	51	106	153	80	234	612	91	63	52	207	866
19	48	53	99	132	80	227	450	89	60	47	514	519
20	44	50	97	122	78	217	377	84	56	46	548	321
21	41	46	134	137	80	204	333	82	162	45	321	265
22	39	44	144	144	98	191	302	77	269	45	210	255
23	37	45	123	129	450	185	276	75	173	46	201	220
24	36	48	109	215	2910	217	255	91	117	47	230	185
25	35	47	105	389	2450	251	237	122	91	52	269	165
26	41	46	91	310	2710	227	227	148	112	53	207	151
27	53	50	83	243	1560	201	244	230	107	52	191	137
28	54	53	80	212	923	185	224	237	68	50	455	237
29	51	58	71	182	---	227	207	185	75	52	1290	496
30	46	56	72	159	---	258	191	156	125	50	663	394
31	42	77	139	149	---	295	---	130	---	49	377	---
TOTAL	1488	1250	6615	8998	13132	17600	21680	4321	3369	2547	6734	17622
MEAN	48.0	41.7	213	290	469	568	723	139	112	82.2	217	587
MAX	117	58	1110	1740	2910	2610	3650	237	269	217	1290	5590
MIN	29	33	49	111	78	185	191	75	56	45	43	72
CAL YR 1978	TOTAL	78438	MEAN 215	MAX 3510	MIN 21							
WTR YR 1979	TOTAL	105356	MEAN 289	MAX 5590	MIN 29							

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 (0.8 km) upstream from Mohawk Creek, and 1.7 mi (2.7 km) downstream from Mohawk Dam.

DRAINAGE AREA.--1,505 mi² (3,898 km²).

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 (240.792 m) National Geodetic Vertical Datum of 1912. Prior to Nov. 7, 1925, nonrecording gage and Nov. 7, 1925, to Sept. 30, 1937, water-stage recorder at site 3.8 mi (6.1 km) upstream at datum 15.53 ft (4.734 m) higher. Oct. 1, 1937, to Sept. 30, 1938, nonrecording gage at present site at datum 2.09 ft (0.637 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated beginning 1936 by 5 flood-control reservoirs at points 1.7 mi (2.7 km) to 54 mi (87 km) upstream (see stations 03129500, 03133000, 03134500, 03136300, and 03138000). Water-quality data collected at this site 1964 to 1977.

AVERAGE DISCHARGE.--58 years, 1,469 ft³/s (41.60 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge at site at Pomerene, 43,800 ft³/s (1,240 m³/s) Jan. 25, 1937; maximum discharge at present site since regulation began at Mohawk Dam, 24,000 ft³/s (680 m³/s) Jan. 25, 26, 1937, gage height, 18.8 ft (5.73 m), present datum (from floodmarks), from rating curve extended above 13,000 ft³/s (368 m³/s); minimum daily discharge, 19 ft³/s (0.54 m³/s) Feb. 27 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 26.9 ft (8.20 m), discharge, 102,000 ft³/s (2,890 m³/s), present site and datum, from information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,800 ft³/s (249 m³/s) Mar. 10, 17, gage height, 12.15 ft (3.703 m); minimum daily, 271 ft³/s (7.67 m³/s) Dec. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	491	386	622	3660	1100	4620	2870	1370	2180	2200	448	2290
2	464	374	626	5280	1020	3720	3820	1240	1950	2030	860	1820
3	334	362	650	5430	950	2620	5350	1240	1640	1710	1170	1540
4	325	356	3940	5110	900	3950	4540	1470	1400	1570	860	1320
5	430	348	4510	3280	840	4550	6440	1380	1200	2090	764	1100
6	371	339	2950	2500	779	5540	6070	1260	1030	1980	702	936
7	358	337	2030	2000	750	7190	4850	1180	936	1510	637	876
8	341	336	1960	1600	700	7780	4010	1100	927	1250	574	812
9	317	331	3670	1400	650	7720	5200	1020	950	1100	658	725
10	295	327	271	1300	600	8000	6850	937	872	1140	588	672
11	287	323	1640	1200	600	7990	5600	913	1040	1220	900	630
12	302	325	5610	1150	600	8010	5340	922	913	990	1140	602
13	792	318	5950	1160	550	8540	4850	1050	812	909	812	595
14	1380	321	2500	1300	550	8660	6550	988	740	812	695	2120
15	1100	329	1710	1640	500	8650	7230	902	687	788	602	318
16	838	399	1500	1600	500	8630	7420	842	651	702	486	340
17	747	445	1370	1500	480	8690	7340	787	616	651	407	927
18	638	374	1270	1400	470	8600	7030	744	588	637	1090	2150
19	555	338	1180	1300	460	8600	5720	719	560	602	2180	2930
20	504	337	1130	1100	460	8320	5840	697	512	532	1840	4920
21	467	305	1230	1120	500	7870	5190	866	1830	460	2040	5350
22	429	484	1410	1200	1100	6640	4390	820	2940	436	1710	5320
23	404	485	1170	1320	2700	3180	3650	710	1800	486	2040	5740
24	387	351	1070	1480	2720	3030	3200	705	1430	532	3860	6050
25	373	331	1040	3470	478	3050	2410	1150	1330	574	2960	6050
26	380	358	987	2800	519	2860	2090	2590	1310	532	2190	6050
27	523	347	911	2110	707	2680	2090	2890	1200	560	2120	6020
28	524	371	850	1700	3070	2610	1940	2840	1040	532	1890	6030
29	449	730	800	1400	---	2680	1710	2620	963	525	5230	5980
30	412	361	736	1300	---	2810	1550	2500	1240	512	5500	5940
31	395	---	720	1200	---	2860	---	2380	---	454	3200	---
TOTAL	15612	13728	56013	64010	25253	180650	141180	40832	35287	30026	50153	86153
MEAN	504	458	1807	2065	902	5827	4706	1317	1176	969	1618	2872
MAX	1380	730	5950	5430	3070	8690	7420	2890	2940	2200	5500	6050
MIN	287	318	271	1100	460	2610	1560	697	512	436	407	318
CAL YR 1978 TOTAL	643707			1764	MAX 7670	MIN 233						
WTR YR 1979 TOTAL	738897			MEAN 2024	MAX 8690	MIN 271						

MUSKINGUM RIVER BASIN

03139000 KILLBUCK CREEK AT KILLBUCK, OH

LOCATION (REVISED).--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 (1.9 km) downstream from Black Creek. Prior to Oct. 5, 1976, at site 0.9 mi (1.4 km) upstream.

DRAINAGE AREA.--464 mi² (1,202 km²), revised. Area at site used prior to Oct. 5, 1976, 462 mi² (1,197 km²).

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

REVISED RECORDS.--WSP 873: 1935. WSP 1555: 1935. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 788.05 ft (240.198 m) National Geodetic Vertical Datum of 1912. 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 (1.4 km) upstream at same datum.

REMARKS.--Records fair. Water-quality data collected at this site 1962 to 1977. Sediment data collected 1962 to 1969.

AVERAGE DISCHARGE.--49 years, 407 ft³/s (11.53 m³/s), 11.96 in/yr (304 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,500 ft³/s (1,350 m³/s) July 5, 1969, gage height, 26.40 ft (8.047 m) (from floodmarks), from rating curve extended above 11,000 ft³/s (312 m³/s) on basis of slope-area measurement of peak flow at site then in use; minimum, 23 ft³/s (0.65 m³/s) Sept. 10-15, 28-30, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s (56.6 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
Dec. 9	1430	2850	80.7	14.84	4.523	Apr. 15	0100	2030	57.5	14.77	4.502
Jan. 2	0830	3100	87.8	14.98	4.566	Sept. 16	0430	*9880	280	*18.51	5.642
Feb. 26	1800	4540	129	15.65	4.770						

Minimum discharge 102 ft³/s (2.89 m³/s) Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	613	146	163	1500	375	2370	606	382	980	426	124	525
2	224	141	149	2830	350	2340	970	355	813	352	212	382
3	141	140	349	2030	320	2230	1230	376	658	303	313	313
4	178	135	1610	1400	290	2420	1220	426	539	338	209	264
5	180	130	1550	1000	270	2490	1570	377	440	522	150	235
6	148	124	1140	800	260	2370	1450	348	375	458	146	228
7	138	119	877	700	250	2240	1350	327	342	334	127	269
8	123	116	978	590	240	2010	1220	311	342	260	129	224
9	112	115	2510	520	240	1650	1450	289	321	285	222	195
10	105	112	2070	470	230	1350	1830	275	318	359	157	184
11	102	108	1500	430	230	1130	1590	263	482	281	289	181
12	112	106	1160	410	220	956	1550	269	338	234	235	157
13	817	107	937	400	220	823	1420	319	284	216	182	152
14	734	112	718	608	210	750	1870	272	253	278	152	4440
15	562	112	584	574	210	659	1930	253	235	340	137	8090
16	401	110	487	514	210	587	1630	233	219	258	125	4660
17	346	128	427	466	210	544	1400	212	207	198	118	4070
18	278	224	369	446	210	507	1200	202	196	171	271	3690
19	237	183	350	376	222	474	1050	194	193	153	315	3250
20	207	160	333	399	229	447	919	188	186	143	353	2310
21	183	143	405	491	339	416	778	233	518	135	288	1620
22	163	131	393	463	742	391	655	238	473	130	219	1290
23	150	134	357	361	1070	378	579	196	303	265	291	972
24	150	168	317	578	2850	488	522	220	244	152	389	760
25	147	155	314	1050	2580	696	480	590	214	153	470	641
26	164	142	284	812	4130	653	458	972	201	154	370	558
27	247	147	252	698	2980	606	557	1110	190	144	445	500
28	210	201	255	620	2560	537	514	1230	181	139	454	1000
29	188	197	240	522	---	573	461	1340	203	147	1310	1900
30	163	184	228	449	---	579	416	1330	266	141	1050	1100
31	154	---	335	411	---	606	---	1160	---	129	768	---
TOTAL	7677	4230	21641	22918	22247	34270	32915	14490	10514	7598	10020	44180
MEAN	248	141	698	739	795	1105	1097	467	350	245	323	1473
MAX	817	224	2510	2830	4130	2490	1930	1340	980	522	1310	8090
MIN	102	106	149	361	210	378	416	188	181	129	118	162
CFSM	.53	.30	1.50	1.59	1.71	2.38	2.36	1.01	.75	.53	.70	3.18
IN.	.62	.34	1.74	1.84	1.78	2.75	2.64	1.16	.84	.61	.80	3.54

CAL YR 1978 TOTAL 200694 MEAN 550 MAX 4000 MIN 70 CFSM 1.19 IN 15.09
WTR YR 1979 TOTAL 232700 MEAN 638 MAX 8090 MIN 102 CFSM 1.38 IN 18.66

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 (0.8 km) downstream from Little Mill Creek and 6 mi (10 km) north of Coshocton.

DRAINAGE AREA.--27.2 mi² (70.4 km²).

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 (238.354 m) National Geodetic Vertical Datum of 1912.

REMARKS.--Records good. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--43 years, 28.4 ft³/s (0.804 m³/s), 14.18 in/yr (360 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,720 ft³/s (247 m³/s) July 5, 1969, gage height, 13.92 ft (4.243 m), from rating curve extended above 2,200 ft³/s (62.3 m³/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 above base of 700 ft³/s (19.8 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
Dec. 4	0500	782	22.1	8.71	2.655	Feb. 25	2145	1540	43.6	10.63	3.240
Dec. 9	0200	813	23.0	8.81	2.685	Apr. 9	1145	860	24.4	8.96	2.731
Jan. 1	1800	722	20.4	8.51	2.594	Sept. 14	1030	*6590	187	*15.38	4.688
Feb. 23	2200	894	25.3	9.06	2.761						

Minimum discharge 2.6 ft³/s (0.074 m³/s) Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	7.2	15	407	26	194	49	22	52	25	8.2	31
2	3.6	6.7	14	221	24	174	289	19	41	20	47	26
3	2.8	6.5	115	98	22	172	176	59	34	16	15	23
4	8.1	6.4	390	68	20	212	271	54	29	34	11	19
5	4.6	6.1	99	47	18	133	215	39	24	25	11	17
6	4.2	5.9	56	40	16	88	142	31	21	18	15	15
7	3.9	5.7	44	34	15	68	103	25	32	15	9.7	14
8	3.8	5.8	280	28	14	57	108	20	26	13	8.5	12
9	3.6	5.3	419	26	13	46	432	17	21	41	9.7	11
10	3.3	5.1	120	25	12	43	214	15	19	40	7.9	10
11	3.2	4.9	70	22	12	36	175	14	28	30	61	9.4
12	66	4.9	58	22	14	33	236	58	17	22	42	8.7
13	131	5.3	50	23	14	30	180	61	14	20	23	27
14	61	5.1	40	79	14	32	303	25	12	17	18	1800
15	41	5.1	35	46	14	25	215	18	11	14	15	159
16	41	5.0	32	34	13	22	156	12	10	12	13	74
17	31	21	29	34	11	22	120	12	9.6	10	11	52
18	24	29	25	31	11	21	94	11	8.6	9.4	90	41
19	22	15	23	24	10	20	76	10	7.7	8.2	42	34
20	18	12	23	29	12	19	52	9.0	6.9	7.6	27	29
21	15	11	27	75	38	18	51	10	154	6.9	23	34
22	13	9.9	20	41	135	17	45	7.7	39	6.6	20	30
23	12	13	18	36	370	17	38	10	24	50	40	23
24	11	15	17	134	389	64	32	24	18	13	97	20
25	10	12	19	101	508	51	29	69	14	11	51	18
26	12	11	15	57	442	36	41	84	12	11	50	16
27	13	18	13	49	164	31	77	132	10	8.8	73	15
28	9.8	24	11	46	156	29	42	88	9.5	9.4	61	168
29	8.6	17	11	38	---	43	32	62	27	12	86	90
30	7.9	17	15	34	---	39	28	69	33	9.4	50	57
31	7.5	---	107	30	---	38	---	48	---	7.1	39	---
TOTAL	603.3	315.9	2210	1979	2507	1830	4031	1134.7	764.3	542.4	1075.0	2983.1
MEAN	19.5	10.5	71.3	63.8	89.5	59.0	134	36.6	25.5	17.5	34.7	96.1
MAX	131	29	419	407	508	212	432	132	154	50	97	1800
MIN	2.8	4.9	11	22	10	17	28	7.7	6.9	6.6	7.9	8.7
CFSM	.72	.39	2.62	2.35	3.29	2.17	4.93	1.35	.94	.64	1.28	3.53
IN.	.83	.43	3.02	2.71	3.43	2.50	5.51	1.55	1.05	.74	1.47	3.94

CAL YR 1978 TOTAL 13221.9 MEAN 36.2 MAX 464 MIN 1.5 CFSM 1.33 IN 18.08
WTR YR 1979 TOTAL 19875.7 MEAN 54.5 MAX 1800 MIN 2.8 CFSM 2.00 IN 27.18

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 (2 km) southwest of Coshocton, and 2 mi (3 km) downstream from confluence of Tuscarawas and Walhonding Rivers.

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

GAGE.--Water-stage recorder. Datum of gage is 725.00 ft (222.980 m) National Geodetic Vertical Datum of 1912. 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 (1.524 m) higher.

AVERAGE DISCHARGE.--43 years, 4,909 ft³/s (139.0 m³/s).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of about 28.8 ft (8.78 m), discharge, 202,000 ft³/s (5,720 m³/s), computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25,700 ft³/s (728 m³/s) Sept. 14, gage height, 16.65 ft (5.075 m); minimum daily, 1,090 ft³/s (30.9 m³/s) Oct. 11.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1330	2040	3130	10100	5380	20100	7550	5200	10300	4120	1750	7610
2	2030	1970	2960	27000	4620	19600	10400	4890	10100	4250	2820	5760
3	1700	1890	3250	17700	4280	17300	14800	4720	9070	3780	3060	4750
4	1470	1820	10600	16500	4270	18700	15400	5130	7900	3600	2760	4150
5	1650	1760	14800	14200	3720	19400	17900	5220	6440	4990	2340	3720
6	1690	1720	12900	12300	3360	19100	17100	4870	5440	5690	2200	3330
7	1500	1680	10300	9980	3270	20100	15000	4530	5150	4350	1930	2950
8	1330	1700	9110	8570	3000	20500	12600	4250	5010	3480	1740	2820
9	1210	1580	17300	8060	2900	20100	14700	4010	5190	3180	1770	2600
10	1120	1420	11900	7000	2700	19800	19200	3750	4800	3240	2090	2330
11	1090	1390	8530	6190	2600	19400	17900	3570	4750	4040	2790	2140
12	1140	1350	13500	4980	2500	18500	17200	3550	4980	3390	3860	2010
13	2900	1330	16100	4560	2400	18600	15700	4550	4250	2960	3630	1980
14	5580	1320	12700	5100	2300	18900	18000	5100	3710	2680	2950	15300
15	6060	1320	11100	6150	2200	18700	18400	4510	3190	2760	2460	15400
16	5040	1450	10600	6360	2200	18200	19300	3750	2880	2850	2000	15100
17	4300	1810	8810	6340	2100	17600	18400	3360	2650	2290	1730	14100
18	3800	2360	7100	5780	2000	16500	17300	3080	2490	2040	3220	13500
19	3220	2880	6100	5130	2000	16200	15200	2890	2340	1880	4410	13700
20	2750	2680	5820	4510	2200	15800	14100	2750	2230	1740	4280	14600
21	2440	2380	5650	4800	2500	14800	12500	2900	3830	1600	4350	15500
22	2200	2150	5950	5550	3500	13600	11000	3610	6100	1520	4010	15000
23	2010	2130	5740	5800	8600	9130	9530	3220	4560	1930	4750	14800
24	1880	2230	5150	6210	15400	8000	8610	3050	3640	1830	8700	14800
25	1810	2370	4840	10100	14000	8340	6850	4770	3160	1830	9050	14100
26	1870	2480	4630	11100	19100	9240	6020	9960	2930	1870	7940	13800
27	2200	2460	4450	9600	15000	8170	6290	12200	2760	1750	6990	13400
28	2750	2630	4180	8380	17000	7240	7020	13300	2530	1750	6320	14100
29	2670	3180	4180	7430	---	6890	6590	12800	2640	2050	10100	15300
30	2290	3360	3960	6670	---	7040	5710	12100	2930	1870	13000	14300
31	2060	---	3580	6020	---	7390	---	10800	---	1810	10600	---
TOTAL	75090	60840	248920	268270	155100	472940	396270	172390	137950	87120	139600	292950
MEAN	2422	2028	8030	8554	5539	15260	13210	5561	4598	2810	4503	9765

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 (198 m) downstream from Senecaville Dam, and 1.5 mi (2.4 km) southeast of Senecaville.

DRAINAGE AREA.--118 mi² (306 km²).

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

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 799.00 ft (243.535 m) National Geodetic Vertical Datum of 1912. Prior to Jan. 24, 1942, at site 150 ft (46 m) downstream at same datum.

REMARKS.--Records fair. Flow regulated by Senecaville Lake (see station 03141000). Water is diverted from Senecaville Lake for U.S. Fish Hatchery; diversion not included in figures of daily discharge. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--41 years, 131 ft³/s (3.710 m³/s) (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 914 ft³/s (25.9 m³/s) Apr. 7, 1964, gage height, 9.35 ft (2.850 m); maximum gage height, 10.35 ft (3.155 m) Feb. 1, 1949; no flow May 3, 4, 1939, Jan. 28, 29, Feb. 4, 5, Apr. 25, 1952.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 694 ft³/s (19.7 m³/s) Dec. 21, gage height, 8.61 ft (2.624 m); minimum daily, 1.1 ft³/s (0.031 m³/s) July 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	266	304	67	599	8.2	221	3.6	395	12	554	615
2	2.8	172	319	3.9	485	8.5	168	56	389	64	552	590
3	8.5	9.1	322	3.9	356	8.8	86	55	392	61	545	587
4	9.5	9.1	135	343	381	8.8	284	95	366	6.0	539	573
5	8.8	9.1	4.0	605	129	9.5	316	126	360	67	506	584
6	8.8	36	356	589	123	9.8	315	132	360	100	154	589
7	9.1	67	573	592	94	166	315	129	384	100	6.8	584
8	9.1	42	501	600	80	426	316	123	398	95	6.8	581
9	9.1	9.8	38	600	80	587	213	123	212	41	64	583
10	9.1	8.8	2.1	597	80	593	5.6	120	262	13	52	478
11	9.1	8.8	2.6	590	80	593	98	118	376	76	36	437
12	9.1	8.8	326	526	80	592	290	115	200	105	12	596
13	9.1	8.8	609	484	80	593	349	110	66	102	191	433
14	9.1	8.8	600	475	80	592	383	107	36	46	308	191
15	9.1	161	596	412	80	592	383	58	12	12	313	154
16	9.1	295	597	577	84	592	494	36	1.9	12	313	74
17	8.2	340	597	584	84	593	599	20	1.5	12	313	9.8
18	9.5	344	596	477	84	593	592	13	7.6	6.3	217	2.4
19	11	371	595	135	84	593	573	13	11	3.4	11	2.4
20	9.5	336	602	168	84	593	421	13	9.8	2.4	11	2.6
21	8.5	306	275	84	84	593	187	13	12	2.2	226	38
22	8.5	306	389	7.6	74	592	9.8	13	11	1.7	393	74
23	8.5	308	612	415	17	370	46	13	7.1	1.1	151	74
24	8.8	310	609	405	2.0	273	93	40	6.8	49	98	250
25	8.5	310	615	9.8	4.0	107	86	67	58	76	252	393
26	8.8	308	603	432	6.3	252	56	67	86	78	329	132
27	78	318	599	639	7.9	321	144	69	88	78	148	168
28	123	460	595	618	8.2	318	86	22	88	80	14	172
29	120	597	597	596	---	315	80	53	67	45	12	14
30	191	433	599	600	---	275	40	144	12	4.0	332	15
31	266	---	611	605	---	217	---	297	---	299	438	---
TOTAL	999.8	6167.1	13778.7	12840.2	3430.4	11384.6	7249.4	2363.6	4675.7	1650.1	7107.6	8996.2
MEAN	32.3	206	444	414	123	367	242	76.2	156	53.2	229	300
MAX	266	597	615	639	599	593	599	297	398	299	554	615
MIN	2.6	8.8	2.1	3.9	2.0	8.2	5.6	3.6	1.5	1.1	6.8	2.4
+	3.04	1.50	1.96	1.72	1.92	1.30	2.34	1.51	2.52	3.15	2.98	2.10

CAL YR 1978 TOTAL 57510.2 MEAN 158 MAX 615 MIN 1.2 + 2.14

WTR YR 1979 TOTAL 80643.4 MEAN 221 MAX 639 MIN 1.1 + 2.17

+ Diversion for water supply for U.S. Fish Hatchery; furnished by Senecaville National Fish Hatchery.

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 (1.4 km) downstream from Leatherwood Creek.

DRAINAGE AREA.--406 mi² (1,052 km²).

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 (235.409 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 6, 1927, nonrecording gage at site 1.5 mi (2.4 km) 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.--Records good. Flow regulated by Senecaville Lake on Seneca Fork, 22 mi (35 km) upstream, beginning in 1937 (see station 03141000). Water is diverted 2.7 mi (4.3 km) 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.--44 years, 447 ft³/s (12.66 m³/s) (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 8,500 ft³/s (241 m³/s) June 6 or 7, 1963; maximum gage height, 22.55 ft (6.873 m) June 6, 1963 (backwater from tributaries); minimum daily discharge, 0.7 ft³/s (0.020 m³/s) Oct. 6, 1960.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 8, 1935, reached a stage of 25.4 ft (7.74 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,230 ft³/s (176 m³/s) Feb. 27, gage height, 20.83 ft (6.349 m); minimum daily, 35 ft³/s (0.99 m³/s) Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	274	498	1710	944	4220	567	215	792	207	753	826
2	42	268	383	2500	895	3340	970	145	797	177	688	831
3	35	206	469	2830	783	2680	1520	168	695	211	652	770
4	48	76	1500	2360	649	2110	1120	453	636	342	609	732
5	57	58	2070	1310	607	1670	954	661	574	672	604	686
6	61	57	1870	1030	376	1110	863	627	531	371	728	667
7	61	74	1060	944	367	679	711	455	596	258	307	658
8	57	104	1180	961	307	679	649	376	907	215	114	642
9	54	104	2540	963	260	854	992	322	1440	197	117	636
10	56	61	3660	992	250	942	1910	288	886	140	149	627
11	45	50	3470	921	242	918	1810	267	1080	142	661	486
12	64	49	2570	829	223	872	1030	276	1080	175	1620	512
13	111	47	1530	744	225	842	849	358	517	258	1436	618
14	369	49	1050	902	213	829	1000	374	258	344	642	777
15	364	51	911	1340	215	829	1070	284	170	154	462	1090
16	162	179	861	1350	225	797	881	207	125	90	398	510
17	107	295	842	1110	232	788	888	132	97	73	360	238
18	89	473	822	1200	223	790	918	109	89	56	737	129
19	67	514	786	1050	232	786	855	89	79	48	1570	109
20	62	473	774	607	221	768	813	87	76	41	1530	94
21	60	364	1130	1390	246	758	622	94	479	45	1160	170
22	51	314	1720	1920	868	746	315	157	1430	66	1140	1280
23	47	306	1240	1680	1620	749	188	122	925	128	1350	1360
24	48	314	989	1300	2350	732	203	203	284	256	1640	556
25	49	328	1060	1700	3390	1470	238	951	159	147	1280	582
26	81	312	1150	1700	5380	1410	221	1260	192	175	877	569
27	450	346	975	1450	6130	779	290	1330	215	385	1530	309
28	537	745	826	1320	5290	658	477	1600	201	351	1980	847
29	280	876	801	1170	---	600	324	1670	196	1090	1990	1810
30	208	771	792	1020	---	569	253	1140	199	2060	1840	1740
31	240	---	982	975	---	503	---	881	---	1540	1190	---
TOTAL	4009	8138	40511	41278	32963	35477	23521	15301	15705	10414	30108	20861
MEAN	129	271	1307	1332	1177	1144	734	494	524	336	971	695
MAX	537	876	3660	2830	6130	4220	1910	1670	1440	2060	1990	1810
MIN	35	47	383	607	213	503	188	87	76	41	114	94
+	5.66	5.53	4.99	5.29	5.20	5.14	4.96	5.92	6.57	5.82	5.81	5.46

CAL YR 1978 TOTAL 188837 MEAN 517 MAX 4340 MIN 10 + 5.91
WTR YR 1979 TOTAL 278286 MEAN 762 MAX 6130 MIN 35 + 5.53

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

LOCATION.--Lat 40°06'15", long 81°33'15", T.3 N., R.3 W., Guernsey County, Hydrologic Unit 05040005, at outlet works near left end of Salt Fork Dam, 0.8 mi (1.3 km) upstream from the mouth and 5.0 mi (8.0 km) north of Cambridge.

REVISID RECORDS.--WDR OH-76-1: 1975.

GAGE.--Water-stage recorder and morning-glory spillway control. Datum of gage is 700.00 ft (213.360 m) National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD. Same gage and elevations as Salt Fork Reservoir (station 03142290).

REMARKS.--Records poor. Flow completely regulated by Salt Fork Reservoir (see station 03142290). Water-quality data collected at this site 1971 to 1977.

AVERAGE DISCHARGE.--9 years, 183 ft³/s (5.183 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,440 ft³/s (40.8 m³/s) Feb. 27, 1979, elevation, 806.65 ft (245.867 m) from theoretical rating of morning-glory above 1310 ft³/s (18.4 m³/s); no flow at times in 1970-71, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,440 ft³/s (40.8 m³/s) Feb. 27, elevation, 806.65 ft (245.867 m) from theoretical rating of morning-flory above 1,310 ft³/s (37.1 m³/s); minimum daily, 4.7 ft³/s (0.13 m³/s) Oct. 8-11.

REVISIONS.--Revised maximum discharge for the water year 1975 has been revised to 1,400 ft³/s (39.6 m³/s); revised daily discharges for the 1975 water year are given below. These figures supersede those published in the report for 1976.

Feb. 25.....	1400	Feb. 26.....	1390	Feb. 27.....	1380
Month	Total	Mean	Max	Min	
February 1975	15566	556	1400	275	
Cal Yr 1975	100191	274	1400	19	
Wtr Yr 1975	99275	272	1400	16	

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	67	72	239	332	1440	231	167	512	84	52	456
2	6.4	62	72	441	287	1430	257	167	465	84	50	398
3	5.9	58	75	740	262	1420	326	165	421	80	45	348
4	6.4	56	118	791	246	1410	352	172	381	89	38	303
5	7.1	53	287	719	213	1410	375	169	343	112	37	265
6	6.4	50	398	604	179	1390	359	172	311	116	36	225
7	5.9	48	401	528	151	1350	345	174	287	114	35	191
8	4.7	45	364	506	139	1080	326	174	290	98	32	163
9	4.7	44	628	465	122	882	373	169	303	89	29	139
10	4.7	41	1260	421	108	715	500	163	293	82	27	120
11	4.7	41	1320	381	98	587	548	151	280	79	91	104
12	7.7	40	1070	324	93	506	544	139	275	75	205	93
13	16	38	855	260	86	432	500	134	249	70	218	82
14	27	37	744	246	75	373	478	132	228	67	200	114
15	37	35	687	267	74	324	459	124	205	55	172	147
16	42	35	577	277	72	287	427	112	181	48	147	149
17	45	37	441	262	65	257	392	100	163	44	126	143
18	45	40	404	260	58	228	367	93	147	34	134	128
19	44	41	520	257	59	205	356	86	132	26	169	114
20	42	42	594	252	61	186	316	82	120	21	179	98
21	41	42	528	306	65	169	293	80	132	19	181	102
22	40	42	450	370	122	151	270	72	143	14	176	136
23	37	44	401	412	223	145	249	75	141	24	220	156
24	36	42	359	432	541	169	228	87	130	22	370	158
25	34	42	337	512	1160	225	213	156	114	20	441	151
26	38	42	321	528	1420	255	198	267	102	23	441	139
27	59	46	298	522	1440	257	200	378	95	26	484	126
28	65	58	287	506	1440	246	205	490	86	26	503	169
29	64	62	272	465	---	239	203	551	79	40	554	272
30	67	64	233	412	---	228	176	581	82	55	561	332
31	69	---	213	370	---	220	---	554	---	55	522	---
TOTAL	919.0	1394	14586	13075	9191	18216	10086	6136	6690	1791	6475	5521
MEAN	29.6	45.5	471	422	328	588	336	198	223	57.8	209	184
MAX	69	67	1320	791	1440	1440	548	581	512	116	561	456
MIN	4.7	35	72	239	58	145	176	72	79	14	27	82
CAL YR 1978	TOTAL	75415.6	MEAN	207	MAX	1320	MIN	4.7				
WTR YR 1979	TOTAL	94080.0	MEAN	258	MAX	1440	MIN	4.7				

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 (366 m) downstream from Wills Creek Dam, 1.3 mi (2.1 km) southeast of town of Wills Creek, 2.7 mi (4.3 km) southeast of Conesville, and 6.2 mi (10.0 km) upstream from mouth.

DRAINAGE AREA.--842 mi² (2,181 km²).

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 (218.542 m) National Geodetic Vertical Datum of 1912. Prior to Feb. 18, 1939, nonrecording gage and Feb. 18, 1939, to Sept. 30, 1949, water-stage recorder, at site 1,500 ft (457 m) downstream at same datum.

REMARKS.--Records good. Flow regulated by Senecaville Lake on Seneca Fork, 80 mi (129 km) upstream, Salt Fork Reservoir, 43 mi (69 km) upstream, and Wills Creek Lake, 0.2 mi (0.3 km) upstream (see stations 03141000, 03142290, and 03143000). Water-quality data collected at this site 1957, 1965 to 1977.

AVERAGE DISCHARGE.--41 years, 922 ft³/s (26.11 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,930 ft³/s (196 m³/s) Mar. 7, 1940, gage height, 17.40 ft (5.304 m); maximum gage height, 17.50 ft (5.334 m) Mar. 22, 1964 (backwater from Muskingum River); minimum daily discharge, 1.0 ft³/s (0.028 m³/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 (632 m³/s), computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,390 ft³/s (153 m³/s) Mar. 10, gage height, 15.61 ft (4.758 m); minimum daily, 64 ft³/s (1.81 m³/s) Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	468	1170	2210	1880	3300	1110	743	1840	424	2270	2540
2	69	439	1010	3860	1740	3620	1450	657	1600	457	1730	1930
3	64	438	828	4400	1630	4490	2120	594	1430	453	1170	1580
4	75	428	1410	4430	1500	4870	2420	617	1260	462	937	1370
5	80	375	2580	4370	1300	4920	2810	772	1120	628	840	1220
6	79	295	3000	3970	1100	5020	2350	996	1020	908	802	1110
7	78	239	3040	3010	974	5330	2040	1050	1010	868	824	1030
8	77	203	2860	2200	906	5290	1740	940	1190	682	760	969
9	75	189	2790	1900	850	5280	1810	821	1620	583	533	917
10	73	192	321	1550	750	5310	2610	732	1840	545	371	877
11	71	199	383	1500	700	5090	3250	657	1690	553	455	846
12	92	189	2850	1500	644	5080	3500	625	1460	581	1190	794
13	127	172	4830	1500	620	5090	3070	623	1480	501	1890	707
14	245	158	4930	1550	600	5110	2550	625	1170	484	2010	1320
15	478	149	4980	1700	579	5100	2430	646	832	526	1590	1470
16	687	143	4780	1830	574	5080	2410	596	617	504	1050	1350
17	628	147	4410	2000	580	5010	2210	518	494	395	821	1340
18	468	218	4610	2040	580	4950	2000	427	411	306	843	2140
19	352	402	4670	1990	560	5000	1840	360	347	249	1290	1730
20	287	513	2760	1900	560	4880	1700	311	306	207	1860	873
21	241	557	1790	1810	557	3850	1550	291	413	175	2080	501
22	208	521	1940	2200	812	1820	1330	277	799	155	1930	546
23	188	554	2330	2710	1660	1220	1050	291	1470	197	1920	1230
24	173	516	2240	2950	2590	1170	810	325	1500	259	2470	1770
25	160	498	1930	3120	561	1440	637	393	966	292	3330	1520
26	156	492	1780	3170	1080	1790	660	911	613	349	3000	1110
27	172	503	1780	3100	680	1940	715	1690	450	364	2290	1030
28	329	570	1650	2920	2090	1640	799	2080	406	420	2230	1140
29	694	512	1450	2550	---	1310	891	2260	395	758	2790	2000
30	709	1140	1330	2350	---	1150	843	2340	397	1790	3410	2470
31	563	---	1370	2080	---	1090	---	2170	---	2220	3310	---
TOTAL	7764	12019	77802	78670	28657	116240	54775	26338	30146	17295	51996	39430
MEAN	250	401	2510	2538	1023	3750	1826	850	1005	558	1677	1314
MAX	709	1140	4980	4430	2590	5330	3500	2340	1840	2220	3410	2540
MIN	64	143	321	1500	557	1090	660	277	306	155	371	501
CAL YR 1978	TOTAL	438130	MEAN	1200	MAX	5250	MIN	50				
WTR YR 1979	TOTAL	541132	MEAN	1483	MAX	5330	MIN	64				

03144000 WAKATOMIKA CREEK NEAR FRAZEYSBURG, OH

LOCATION.--Lat 40°07'57"N, long 82°08'53"W, in NW 1/4 sec. 13, T.3 N., R.9 W., Muskingum County, Hydrologic Unit 05040004, on right bank 2.0 mi (3.2 km) northwest of Frazeysburg, 2.0 mi (3.2 km) downstream from Fivemile Run, and 2.5 mi (4.0 km) upstream from Black Run.

DRAINAGE AREA.--140 mi² (363 km²).

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 (228.027 m) National Geodetic Vertical Datum of 1912. Prior to Oct. 31, 1936, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1970 to 1974.

AVERAGE DISCHARGE.--43 years, 151 ft³/s (4.276 m³/s), 14.65 in/yr (372 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,800 ft³/s (476 m³/s) Sept. 14, 1979, gage height, 14.07 ft (4.289 m), from rating curve extended above 7,700 ft³/s (218 m³/s) on basis of contracted-opening measurement of peak flow; minimum, 2.0 ft³/s (0.057 m³/s) Oct. 3, 1963, gage height, 0.94 ft (0.287 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,600 ft³/s (45.3 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 4	1800	1810 51.3	5.72 1.743	July 29	0830	2980 84.4	7.36 2.243
Dec. 9	1415	2860 81.0	7.21 2.198	Aug. 24	1800	4550 129	9.03 2.752
Jan. 2	0645	2420 68.5	6.62 2.018	Sept. 14	2100	*16800 476	*14.07 4.289
Feb. 26	0830	5390 153	9.55 2.911				

Minimum discharge, 18 ft³/s (0.51 m³/s) Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	46	78	1130	112	749	130	94	273	304	233	254
2	37	44	70	1660	110	831	639	87	210	192	1030	204
3	26	42	154	517	110	749	718	150	166	124	444	169
4	36	41	1360	308	110	1010	625	244	138	131	233	143
5	30	40	713	203	100	747	986	189	117	145	158	122
6	27	38	338	170	95	475	538	161	108	85	186	111
7	27	39	222	140	90	347	343	143	100	65	122	96
8	25	39	517	125	80	279	287	126	158	55	100	83
9	23	36	2380	110	80	218	526	113	126	92	102	74
10	21	34	782	95	75	189	551	102	96	207	85	68
11	21	33	391	85	70	158	374	98	87	247	742	63
12	32	33	287	75	70	134	399	135	73	122	550	60
13	79	33	238	80	70	120	332	198	62	100	279	68
14	110	33	186	173	70	123	1170	124	56	81	186	8200
15	99	37	153	235	65	105	661	100	51	65	140	4640
16	81	34	134	192	60	89	424	85	47	53	111	608
17	68	53	123	137	60	86	311	73	44	44	92	365
18	59	131	103	151	60	85	242	68	43	37	832	276
19	56	87	97	144	60	83	204	65	38	33	514	214
20	53	68	93	117	60	82	186	63	35	29	358	166
21	49	61	122	209	70	78	163	74	405	27	372	169
22	45	57	97	177	100	71	145	60	417	26	273	192
23	43	68	83	129	200	72	131	59	135	65	298	133
24	46	92	70	404	600	123	119	83	90	55	2530	108
25	43	77	65	804	1580	174	113	106	71	65	1220	98
26	53	69	60	379	3840	121	122	270	59	74	581	88
27	76	83	50	263	903	102	174	324	56	69	948	79
28	61	122	45	224	653	91	131	369	47	198	620	545
29	55	103	40	173	---	99	113	261	50	2340	963	733
30	50	92	40	138	---	97	102	264	155	759	493	376
31	48	---	100	124	---	107	---	217	---	288	334	---
TOTAL	1522	1765	9191	8871	9553	7794	10959	4505	3513	6177	15129	18505
MEAN	49.1	58.8	296	286	341	251	365	145	117	199	488	617
MAX	110	131	2380	1660	3840	1010	1170	369	417	2340	2530	8200
MIN	21	33	40	75	60	71	102	59	35	26	85	60
CFSM	.35	.42	2.11	2.04	2.44	1.79	2.61	1.04	.84	1.42	3.49	4.41
IN.	.40	.47	2.44	2.36	2.54	2.07	2.91	1.20	.93	1.64	4.02	4.92

CAL YR 1978 TOTAL 98510 MEAN 188 MAX 3340 MIN 16 CFSM 1.34 IN 18.20
WTR YR 1979 TOTAL 97484 MEAN 267 MAX 8200 MIN 21 CFSM 1.91 IN 25.90

MUSKINGUM RIVER BASIN

03144000 WAKATOMIKA CREEK NEAR FRAZEYSBURG, OH.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)
AUG 01...	1215	198	315	7.4	20.0	60	0	49	3.8	21
SEP 05...	1400	119	305	7.4	20.5	80	0	66	5.1	21

DATE	SOLIDS, RESIDUE AT 100 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDED RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
AUG 01...	194	.26	104	1100	930	170	150	20	130
SEP 05...	207	.28	66.5	670	--	270	90	0	90

MUSKINGUM RIVER BASIN

91

03144400 SAND FORK NEAR WAKATOMIKA, OH

LOCATION.--Lat 40°13'37", long 81°59'36", Coshocton County, on right bank 15 ft (4.6 m) upstream from bridge on County Road 4, 3.5 mi (5.6 km) northeast of Wakatomika, and 6.8 mi (10.9 km) southwest of Coshocton.

DRAINAGE AREA.--2.34 mi² (3.47 km²).

PERIOD OF RECORD.--December 1978 to September, 1979.

REMARKS.--Discharge records are not available at this time. Water-quality records are based on once-a-month sampling data.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,200 micromhos, July 11, 1979; minimum, 461 micromhos, Sept. 19, 1979.

pH: Maximum, 7.8 units Mar. 15, 1979; minimum, 6.9 units, June 5, 1979.

WATER TEMPERATURE: Maximum, 24.0°C July 31, 1979; minimum, 1.0°C Feb. 7, 1979.

DISSOLVED OXYGEN: Maximum, 40 mg/L May 16, 1979; minimum, 5 mg/L Feb. 7, 1979.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,200 micromhos, July 11, 1979; minimum, 461 micromhos, Sept. 19.

pH: Maximum, 7.8 units Mar. 15; minimum, 6.9 units, June 5.

WATER TEMPERATURE: Maximum, 24.0°C July 31; minimum, 1.0°C Feb. 7.

DISSOLVED OXYGEN: Maximum, 40 mg/L May 16, 1979; minimum, 5 mg/L Feb. 7.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (NTU)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DISSOLVED (MG/L AS Ca)	MAGNESIUM DISSOLVED (MG/L AS Mg)	BICARBONATE (MG/L AS HCO3)
DEC 07...	1200	570	7.3	5.5	50	25	29	250	190	63	23	70
JAN 08...	1445	670	7.0	1.5	0	17	13	380	300	100	32	94
FEB 07...	0915	900	7.2	1.0	5	4.0	5	430	340	120	31	112
MAR 15...	1030	790	7.8	2.5	5	1.0	7	400	320	110	30	94
APR 02...	1415	875	7.4	12.5	20	35	18	440	380	120	35	82
MAY 16...	1000	1100	7.5	16.0	15	2.0	40	560	500	150	46	84
JUN 05...	1115	1100	6.9	22.0	20	4.0	12	600	520	160	49	102
JUL 11...	0945	1200	7.5	21.0	30	3.0	18	590	510	160	46	93
JUL 31...	1345	750	7.3	24.0	15	25	20	360	310	94	31	66
SEP 19...	0945	461	7.3	16.5	25	30	22	230	180	59	19	56

DATE	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE DISSOLVED (MG/L AS CO2)	SULFATE DISSOLVED (MG/L AS SO4)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SiO2)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, NH4 TOTAL IN BOT. MAT. (MG/KG AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)
DEC 07...	0	57	5.6	220	.2	4.2	.32	1.3	.08	3.6	.38	.46
JAN 08...	0	77	15	240	.2	6.7	.33	--	.14	--	.25	.39
FEB 07...	0	92	11	370	.2	8.5	.97	1.4	.73	3.0	.27	1.0
MAR 15...	0	77	2.4	350	.1	8.9	1.7	--	.95	--	.05	1.0
APR 02...	0	67	5.2	380	.1	6.9	1.5	--	.27	--	.33	.60
MAY 16...	0	69	4.3	530	.2	6.2	.50	.8	.03	7.1	.26	.29
JUN 05...	0	84	21	510	.3	7.2	.44	--	.22	--	.51	.73
JUL 11...	0	76	4.7	510	.3	5.7	.32	--	.07	--	.35	.42
JUL 31...	0	54	5.3	310	.3	4.9	.22	2.0	.07	8.0	.66	.73
SEP 19...	0	46	4.5	170	.2	5.5	.17	3.9	.13	16	.30	.43

MUSKINGUM RIVER BASIN

03144400 SAND FORK NEAR WAKATOMIKA, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO- GEN, NH ₄ + ORG. TOT IN BOT MAT (MG/KG AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO ₃)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS BA)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
DEC 07...	1400	.78	3.5	.10	170	770	4800	0	70	3	<10	3400
JAN 08...	--	.72	3.2	.04	--	180	--	100	--	4	--	960
FEB 07...	850	2.0	8.7	.01	150	90	2700	0	60	1	10	310
MAR 15...	--	2.7	12	.01	--	110	--	0	--	1	--	190
APR 02...	--	2.1	9.3	.06	--	1200	--	0	--	1	--	2400
MAY 16...	2300	.79	3.5	.03	260	110	2500	0	50	3	<10	220
JUN 05...	--	1.2	5.2	.01	--	170	--	0	--	7	--	610
JUL 11...	--	.74	3.3	.03	--	250	--	100	--	16	--	760
SEP 31...	1000	.95	4.2	.12	480	670	2500	0	40	16	<10	2400
SEP 19...	2000	.60	2.7	.05	260	280	5000	0	110	9	10	1400
DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR)	STRON- TIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)	CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C)
DEC 07...	160	<10	2500	<.5	.00	31	<10	200	10	6.5	6.7	.2
JAN 08...	17	--	4000	<.5	--	30	--	300	--	--	--	--
FEB 07...	5	10	5600	<.5	.02	31	30	390	<10	4.4	5.0	.6
MAR 15...	12	--	4700	<.5	--	35	--	270	--	--	--	--
APR 02...	20	--	4600	<.5	--	30	--	360	--	--	--	--
MAY 16...	15	10	5600	<.5	.14	45	20	520	<10	7.8	7.8	.0
JUN 05...	82	--	6000	<.5	--	41	--	470	--	--	--	--
JUL 11...	3	--	4500	<.5	--	33	--	680	--	--	--	--
SEP 31...	1	10	4000	<.5	.07	1	20	320	<10	8.0	8.7	.7
SEP 19...	2	20	2700	<.5	.00	12	20	200	70	18	18	.2

03144450 OPOSSUM RUN TRIBUTARY NEAR WAKATOMIKA, OH

LOCATION.--Lat 40°10'10", long 82°03'52", Coshocton County, at bridge on Washington Township Road 71, 0.1 mi (0.2 km) upstream from mouth, 1.7 mi (2.7 km) southeast of Graham Corners, and 2.1 mi (3.4 km) southwest of Wakatomika.

DRAINAGE AREA.--1.27 mi² (3.3 km²).

PERIOD OF RECORD: December 1978 to September 1979.

REMARKS.--Discharge data is not available at this time. Water-quality records are based on once-a-month sampling data.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 480 micromhos May 16, 1979; minimum, 170 micromhos Apr. 2, 1979.

pH: Maximum, 8.2 units May 16, 1979; minimum, 6.5 units Jan. 8, 1979.

WATER TEMPERATURES: Maximum, 24.0°C June 5, 1979; minimum, 1.0°C, Jan. 8, 1979 and Feb. 7, 1979.

DISSOLVED OXYGEN: Maximum, 69 mg/L Feb. 7, 1979; minimum, 2 mg/L Jan. 8, 1979 and July 31, 1979.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 480 micromhos May 16; minimum, 170 micromhos Apr. 2.

pH: Maximum, 8.2 units May 16; minimum, 6.5 units Jan. 8.

WATER TEMPERATURES: Maximum, 24.0°C June 5; minimum, 1.0°C Jan. 8 and Feb. 7.

DISSOLVED OXYGEN: Maximum, 69 mg/L Feb. 7; minimum, 2 mg/L Jan. 8 and July 31.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (NTU)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	BICAR- BONATE (MG/L AS HC03)
DEC 07...	1015	375	6.9	6.0	5	1.0	7	150	54	50	7.0	122
JAN 08...	1230	400	6.5	1.0	0	1.0	2	180	60	58	7.7	142
FEB 07...	1345	420	7.3	1.0	5	1.0	69	180	51	58	7.4	152
MAR 15...	1500	390	7.4	4.0	5	1.0	1	170	64	55	7.3	126
APR 02...	1100	170	8.1	11.0	100	40	44	69	28	22	3.3	50
MAY 16...	1315	480	8.2	20.0	0	1.0	29	190	67	61	8.3	146
JUN 05...	1400	400	7.9	24.0	5	1.0	4	190	77	63	8.5	141
JUL 11...	1410	420	7.3	22.5	10	15	14	160	39	53	7.1	150
31...	1705	360	7.6	23.0	5	3.0	2	150	58	51	6.3	116
SEP 18...	1530	381	7.2	17.0	5	1.0	9	170	66	58	7.1	132

DATE	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN+NH4 TOTAL IN BOT. MAT. (MG/KG AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN+AM- MONIA + ORGANIC TOTAL (MG/L AS N)
DEC 07...	0	100	25	37	.1	8.8	1.2	1.5	.02	4.8	.04	.06
JAN 08...	0	116	72	34	.1	8.7	1.0	--	.01	--	.31	.32
FEB 07...	0	125	12	39	.1	7.2	.83	1.9	.01	6.8	.27	.28
MAR 15...	0	103	8.0	42	.1	7.4	.72	--	.00	--	.02	.02
APR 02...	0	41	.6	24	.1	8.6	1.0	--	.04	--	1.3	1.3
MAY 16...	0	120	1.5	41	.1	7.0	.27	2.9	.00	9.9	.18	.18
JUN 05...	0	116	2.8	41	.1	8.5	.39	--	.01	--	.13	.14
JUL 11...	0	123	12	31	.1	8.6	.53	--	.04	--	.81	.85
31...	0	95	4.7	32	.1	10	.96	.3	.01	8.3	.13	.14
SEP 18...	0	110	13	30	.1	9.6	.72	.5	.11	7.0	.11	.22

MUSKINGUM RIVER BASIN

03144450 OPOSSUM RUN TRIBUTARY NEAR WAKATOMIKA, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO- GEN, NH ₄ + ORG. TOT IN BOT MAT (MG/KG AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO ₃)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS BA)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
DEC 07...	1300	1.3	5.6	.01	200	70	4000	0	70	1	<10	100
JAN 08...	--	1.3	5.8	.00	--	30	--	100	--	6	--	160
FEB 07...	1500	1.1	4.9	.00	180	20	5000	100	100	4	20	60
MAR 15...	--	.74	3.3	.00	--	30	--	0	--	0	--	50
APR 02...	--	2.3	10	.19	--	7000	--	100	--	7	--	9600
MAY 16...	2000	.45	2.0	.00	380	100	4200	100	80	3	20	70
JUN 05...	--	.53	2.3	.00	--	50	--	0	--	5	--	110
JUL 11...	--	1.4	6.1	.05	--	290	--	100	--	18	--	590
31...	1200	1.1	4.9	.03	270	120	2900	100	60	14	10	240
SEP 18...	1600	.94	4.2	.01	210	50	5000	0	70	11	10	110
DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR)	STRON- TIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INORG. + ORG. TOT. IN BOT MAT (G/KG AS C)	CARBON, INOR- GANIC, TOT IN BOT MAT (G/KG AS C)
DEC 07...	180	<10	20	<.5	.00	15	<10	200	<10	5.3	5.5	.2
JAN 08...	0	--	20	<.5	--	14	--	230	--	--	--	--
FEB 07...	4	30	0	<.5	.02	12	50	230	10	5.2	5.4	.2
MAR 15...	20	--	10	<.5	--	16	--	140	--	--	--	--
APR 02...	15	--	510	<.5	--	18	--	100	--	--	--	--
MAY 16...	66	30	20	<.5	.00	19	40	320	10	6.1	6.9	.8
JUN 05...	120	--	10	<.5	--	27	--	260	--	--	--	--
JUL 11...	3	--	40	<.5	--	23	--	260	--	--	--	--
31...	6	20	10	<.5	.11	2	20	190	<10	5.3	5.5	.2
SEP 18...	1	<10	20	<.5	.00	1	20	220	10	4.0	4.3	.3

MUSKINGUM RIVER BASIN

95

03144500 MUSKINGUM RIVER AT DRESDEN, OH

LOCATION.--Lat 40°07'13", long 81°59'59", Muskingum County, Hydrologic Unit 05040004, on left bank 70 ft (21 m) downstream from bridge on State Highway 208, 0.5 mi (0.8 km) east of Dresden, and 0.5 mi (0.8 km) downstream from Wakatomika Creek.

DRAINAGE AREA.--5,993 mi² (15,522 km²).

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

REVISED RECORDS.--WSP 728: 1927(M). WSP 803: 1935. WSP 1385: 1922-23, 1928(M), 1929, 1930(M). WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 693.15 ft (211.272 m) National Geodetic Vertical Datum of 1912. Prior to Aug. 24, 1925, nonrecording gage at about same site and datum.

REMARKS.--Records good. Flow regulated by 16 flood-control reservoirs at points 15 mi (24 km) to 105 mi (169 km) upstream. Water-quality data collected at this site 1966, 1969 to 1977; Water temperatures collected 1952-61, 1963 to 1974; Sediment data collected 1952 to 1974.

AVERAGE DISCHARGE.--58 years, 6,265 ft³/s (177.4 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 100,000 ft³/s (2,830 m³/s) Aug. 9, 1935, gage height, 31.6 ft (9.63 m); minimum daily, 335 ft³/s (9.49 m³/s) June 25, 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 46.0 ft (14.02 m), present site and datum, from floodmark, discharge, 228,000 ft³/s (6,460 m³/s), computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 29,800 ft³/s (844 m³/s) Sept. 15, gage height, 17.61 ft (5.368 m); minimum daily, 1,410 ft³/s (39.9 m³/s) Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1460	2880	4850	12000	8380	25100	10300	7290	14000	5140	5560	13000
2	2360	2750	4520	23500	7300	26300	13100	6760	13400	5710	7260	9930
3	2210	2670	4500	24700	6820	25000	18900	6470	12300	5100	6180	8050
4	1880	2590	11100	22600	6710	26400	20000	7000	10900	4800	4990	6990
5	1890	2480	18500	20600	5920	27400	23400	7250	9290	5870	4210	6250
6	2100	2330	17500	18400	5420	26700	22600	7150	7830	7460	3960	5650
7	1890	2220	15200	15200	4860	27400	20100	6860	7340	6370	3640	5070
8	1710	2190	13600	12600	4600	27900	17200	6390	7390	5090	3340	4750
9	1580	2160	22100	11700	4400	27700	17700	5930	8010	4590	3010	4480
10	1460	1890	17800	10300	4200	27200	23200	5510	8010	4530	3150	4090
11	1410	1850	10700	9270	4000	26900	23700	5180	7570	5780	4140	3800
12	1490	1810	15400	7640	3800	26100	23100	5000	7570	4980	6660	3580
13	2750	1760	21800	7090	3700	25700	21800	6010	6930	4320	6840	3390
14	5860	1720	20300	7470	3600	25900	23000	6750	6020	3950	5410	14400
15	7120	1710	17800	8790	3400	25800	24100	6320	5010	3810	5330	28800
16	6530	1760	17300	9320	3300	25400	24200	5370	4330	4120	4110	21300
17	5580	2120	15300	9360	3200	24900	23200	4790	3910	3420	3420	17800
18	4900	2950	13500	9080	3100	23700	21700	4350	3600	2940	4940	17100
19	4180	3610	12400	8090	3020	23200	19800	4040	3360	2670	7520	17700
20	3560	3740	10200	7550	3170	22800	18000	3830	3160	2450	7380	16400
21	3180	3520	8690	7670	3560	21400	16400	3760	4450	2240	8000	17500
22	2850	3220	8820	8860	5070	18100	14700	4540	8360	2100	7600	17300
23	2580	3100	9180	9580	9950	13500	12800	4330	7230	2540	7510	17000
24	2400	3220	8520	10400	20000	11000	11400	4090	6360	2610	12900	17900
25	2280	3280	7770	14800	19100	11400	9710	5090	5160	2640	16800	17300
26	2300	3390	7300	16000	25600	12700	8280	10800	4350	2910	14300	16300
27	2640	3420	7040	14500	21800	12400	8280	14700	3930	2720	12600	15800
28	3310	3690	6590	13000	20100	10900	9100	16700	3610	2970	11600	16500
29	3760	4290	6350	11700	---	9890	9150	16800	3620	5860	13800	19800
30	3500	4980	6120	10400	---	9750	8100	16400	3800	7320	18000	19100
31	3050	---	5650	9430	---	9950	---	15000	---	5970	16500	---
TOTAL	93770	83240	366400	381700	218080	658490	517020	230460	200800	132980	241660	387020
MEAN	3025	2775	11820	12310	7789	21240	17230	7434	6593	4290	7795	12900
MAX	7120	4980	22100	24700	25600	27900	24200	16800	14000	7460	18000	28800
MIN	1410	1710	4500	7090	3020	9750	8100	3760	3160	2100	3010	3390
CAL YR 1978 TOTAL	2871700		MEAN 7868		MAX 27500		MIN 1220					
WTR YR 1979 TOTAL	3511620		MEAN 9621		MAX 28800		MIN 1410					

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 left bank at upstream side of bridge on county road, 800 ft (244 m) downstream from Beaver Run, 2.3 mi (3.7 km) north of Hebron, and 2.5 mi (4.0 km) upstream from Ramp Creek.

DRAINAGE AREA.--133 mi² (344 km²).

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

REMARKS.--Records good except those for winter periods, which are fair, and those for periods of no gage-height record, June 29-July 30, which are poor. Occasional regulation by Buckeye Lake, capacity, 27,300 acre-ft (33.7 km³), on unnamed tributary 5.6 mi (9.0 km) 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.--20 years, 151 ft³/s (4.276 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,120 ft³/s (117 m³/s) Mar. 6, 1945, gage height, 12.1 ft (3.69 m), 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 (3.78 m) present datum, from floodmarks; discharge 5,880 ft³/s (167 m³/s), by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,160 ft³/s (89.5 m³/s) Sept. 15, gage height, 11.16 ft (3.402 m); minimum daily, 9.9 ft³/s (0.280 m³/s) Oct. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	34	322	1130	150	955	67	44	130	640	577	355
2	20	32	310	1230	140	1200	536	38	90	320	920	328
3	14	29	471	753	112	1060	404	60	70	160	556	316
4	17	28	1260	525	90	1020	358	184	51	230	409	194
5	18	27	1070	427	75	866	633	140	44	250	377	48
6	15	26	664	399	58	669	230	103	36	150	412	42
7	13	24	487	276	45	602	139	72	120	80	110	36
8	12	23	872	84	40	460	110	57	270	50	67	32
9	11	23	1650	117	40	106	369	49	180	50	58	29
10	9.9	23	1460	96	38	90	390	42	110	140	51	26
11	11	22	686	63	37	79	179	38	80	150	1060	24
12	88	21	606	52	36	66	201	42	57	100	1190	22
13	319	19	624	56	35	63	188	61	44	60	593	51
14	384	19	573	195	35	63	830	51	36	45	363	4500
15	328	20	405	331	35	57	415	41	33	40	308	2540
16	265	22	90	233	35	54	191	34	28	35	188	2530
17	71	44	87	153	35	52	136	31	25	30	54	1170
18	52	206	76	197	35	55	99	28	24	25	68	633
19	45	87	70	133	34	56	82	27	21	20	66	487
20	41	171	74	105	32	51	72	25	19	20	60	426
21	38	344	234	286	40	48	64	25	150	20	742	422
22	30	331	203	209	80	45	61	22	640	20	464	444
23	27	333	167	133	200	44	57	23	300	20	523	409
24	29	377	154	390	400	56	55	30	120	50	1070	382
25	30	344	150	595	1100	94	50	33	50	100	977	285
26	37	324	140	298	1870	63	51	52	32	75	568	52
27	98	389	127	244	1570	51	78	94	27	110	1250	46
28	70	496	139	222	968	46	64	156	25	2000	755	677
29	51	374	113	201	---	46	52	75	35	1700	797	1170
30	42	339	115	190	---	46	47	64	230	1610	547	532
31	37	---	283	170	---	48	---	48	---	979	405	---
TOTAL	2242.9	4551	13682	9493	7365	8211	6208	1789	3077	9279	15585	18208
MEAN	72.4	152	441	306	263	265	207	57.7	103	299	503	607
MAX	384	496	1650	1230	1870	1200	830	184	640	2000	1250	4500
MIN	9.9	19	70	52	32	44	47	22	19	20	51	22
CAL YR 1978	TOTAL	81538.5	MEAN	223	MAX	1920	MIN	8.9				
WTR YR 1979	TOTAL	99690.9	MEAN	273	MAX	4500	MIN	9.9				

MUSKINGUM RIVER BASIN

97

03146000 NORTH FORK LICKING RIVER AT UTICA, OH

LOCATION.--Lat 40°13'41", long 82°27'06", in T.4 N., R.12 W., Licking County, Hydrologic Unit 05040006, on left bank at upstream side of bridge on State Highway 13 at south edge of Utica, 0.2 mi (0.3 km) downstream from unnamed right bank tributary, and 2.0 mi (3.2 km) upstream from Lake Fork.

DRAINAGE AREA.--116 mi² (300 km²).

PERIOD OF RECORD.--October 1939 to September 1948, October 1969 to current year.

REVISED RECORDS.--WRD Ohio 1970: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 934 ft (285 m) from topographic map. Prior to September 30, 1948, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Water-quality data collected at this site 1969 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--19 years, 138 ft³/s (3.908 m³/s), 16.16 in/yr (410 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,200 ft³/s (289 m³/s) Sept. 14, 1979, gage height, 15.20 ft (4.633 m); minimum, 0.6 ft³/s (0.017 m³/s) Aug. 13, Oct. 2, 1944.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959 reached a stage of 15.8 ft (4.82 m), from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft³/s (70.8 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 9	0500	2730 77.3	8.55 2.606	Apr. 14	0800	3610 102	9.60 2.926
Jan. 1	2300	2840 80.4	8.69 2.649	Aug. 24	0300	4010 114	10.04 3.060
Feb. 24	0030	3780 107	9.79 2.984	Aug. 29	0600	3250 92.0	9.19 2.801
Feb. 26	0400	4640 131	10.69 3.258	Sept. 14	1600	*10200 289	*15.20 4.633

Minimum discharge, 4.9 ft³/s (0.14 m³/s) Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	17	32	2030	100	1000	126	46	96	533	87	190
2	6.6	16	27	1450	80	1040	770	42	95	241	471	149
3	5.1	15	158	367	70	950	459	53	59	120	150	110
4	6.8	15	1250	191	58	1390	712	91	44	207	78	85
5	6.5	15	385	127	52	790	707	75	37	233	52	67
6	7.2	15	185	97	46	422	334	60	31	92	95	57
7	7.4	14	125	81	44	286	206	50	31	56	51	48
8	6.7	14	874	72	42	225	174	44	47	42	35	40
9	6.0	14	1830	78	40	173	824	39	55	38	32	36
10	6.0	13	444	54	38	161	498	36	48	312	46	32
11	6.0	13	206	47	38	134	314	36	40	217	1090	29
12	8.1	13	144	45	37	104	499	38	35	87	429	27
13	38	13	126	49	36	97	367	52	28	54	158	47
14	54	13	101	117	36	101	2160	42	22	40	83	6740
15	72	13	82	156	35	87	610	34	19	32	57	2760
16	37	14	73	112	37	72	332	29	17	26	44	560
17	28	21	67	87	38	72	218	25	16	21	35	286
18	22	45	58	99	40	71	165	23	15	18	211	200
19	19	39	55	70	42	71	130	21	14	15	131	151
20	16	28	54	63	44	67	106	21	13	14	87	115
21	14	22	99	116	50	62	93	21	422	12	272	101
22	13	19	85	111	130	56	81	19	339	14	156	108
23	13	20	66	76	300	55	73	18	120	21	791	89
24	12	32	57	616	800	82	67	21	61	19	2980	74
25	12	33	57	1370	1680	119	63	26	42	19	806	66
26	15	27	46	1090	2710	81	62	39	32	16	419	59
27	20	28	39	848	739	65	80	87	24	21	577	54
28	23	54	40	407	531	57	70	138	20	98	480	436
29	23	50	32	227	---	69	59	75	30	430	2080	510
30	20	39	34	170	---	79	52	51	276	125	603	229
31	18	---	215	130	---	97	---	43	---	54	307	---
TOTAL	552.4	684	7046	10553	7893	8135	10411	1395	2128	3227	12893	13455
MEAN	17.8	22.8	227	340	282	262	347	45.0	70.9	104	416	449
MAX	72	54	1830	2030	2710	1390	2160	138	422	533	2980	6740
MIN	5.1	13	27	45	35	55	52	18	13	12	32	27
CFSM	.15	.20	1.96	2.93	2.43	2.26	2.99	.39	.61	.90	3.59	3.87
IN.	.18	.22	2.26	3.38	2.53	2.61	3.34	.45	.68	1.03	4.13	4.31

CAL YR 1978 TOTAL 54707.2 MEAN 150 MAX 3170 MIN 3.0 CFSM 1.29 IN 17.54
WTR YR 1979 TOTAL 78372.4 MEAN 215 MAX 6740 MIN 5.1 CFSM 1.85 IN 25.13

MUSKINGUM RIVER BASIN

03146500 LICKING RIVER NEAR NEWARK, OH

LOCATION.--Lat 40°03'33", long 82°20'23", in SW 1/4 T.2 N., R.11 W., Licking County, Hydrologic Unit 05040006, on right bank at downstream side of Stadden Bridge, 1.0 mi (1.6 km) downstream from Shawnee Run, 1.5 mi (2.4 km) upstream from Equality Run, and 3.5 mi (5.6 km) east of Newark.

DRAINAGE AREA.--537 mi² (1,391 km²).

WATER-DISCHARGE RECORDS

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

REMARKS.--Records good except those for winter periods, which are fair. Occasional regulation by Buckeye Lake, capacity, 27,300 acre-ft (33.7 hm³), on South Fork 15.2 mi (24.5 km) upstream.

AVERAGE DISCHARGE.--40 years, 580 ft³/s (16.43 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 45,000 ft³/s (1,270 m³/s) Jan. 21, 1959, gage height, 20.3 ft (6.19 m) (from high-water mark), from rating curve extended above 24,000 ft³/s (680 m³/s) on basis of flood-routing studies from station at Toboso; minimum daily, 28 ft³/s (0.79 m³/s) Sept. 27, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 6,500 ft³/s (184 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 4	0930	7100 201	10.35 3.155	July 29	1230	9570 271	12.10 3.688
Dec. 9	0630	9470 268	12.04 3.670	Aug. 24	1630	11200 317	13.06 3.981
Jan. 1	2230	8030 227	11.04 3.365	Aug. 29	1400	7140 202	10.38 3.164
Feb. 24	0830	8950 252	11.66 3.554	Sept. 15	0100	*25700 728	*17.21 5.246
Feb. 26	0500	11800 334	13.35 4.069				

Minimum daily discharge, 120 ft³/s (3.40 m³/s) Oct. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	175	180	599	5650	580	3860	512	406	626	2380	1380	1250
2	154	165	557	5800	500	4600	1910	385	578	1060	4150	1090
3	133	162	1130	2250	450	3810	2190	547	424	642	1790	999
4	148	154	5860	1420	420	4630	2140	845	360	758	1180	870
5	143	151	2920	1150	390	3400	3250	698	319	976	970	604
6	140	148	1710	1030	340	2250	1540	567	315	547	1020	542
7	133	148	1270	923	320	1840	1110	483	527	402	636	493
8	128	148	3140	609	290	1590	959	433	1020	339	502	451
9	125	143	7990	522	270	1070	2250	398	794	339	517	419
10	120	143	3470	497	265	959	2220	372	522	693	474	398
11	128	138	1860	451	265	877	1340	372	424	807	3400	376
12	165	138	1470	437	260	764	1570	364	376	451	3130	368
13	552	135	1420	455	260	710	1330	455	315	368	1510	502
14	794	138	1280	838	260	704	5250	398	282	319	982	15200
15	687	138	1110	964	250	653	2490	347	260	282	788	15200
16	583	138	693	758	250	593	1480	319	247	257	648	5350
17	364	221	642	676	250	567	1130	300	230	237	437	2950
18	282	593	593	788	240	572	936	282	224	221	648	1830
19	247	376	562	609	240	567	794	271	211	205	687	1470
20	224	327	557	593	240	542	698	296	205	196	636	1250
21	208	332	877	953	415	512	631	282	953	189	1380	1210
22	189	512	813	877	1300	488	578	254	2300	183	1210	1220
23	180	552	681	648	3530	478	542	264	838	196	2150	1110
24	174	704	631	1450	8140	552	512	293	483	300	9630	1030
25	162	609	620	2270	6340	734	483	323	368	537	4670	959
26	211	552	572	1250	9870	604	497	419	308	442	2170	631
27	323	698	532	1010	4430	517	588	588	275	1060	3720	567
28	282	1110	493	897	3050	474	537	782	250	2020	2280	2610
29	233	782	493	788	---	474	474	522	237	7070	5720	3430
30	208	659	497	716	---	483	437	376	819	3190	2520	1820
31	192	---	1010	630	---	493	---	381	---	1980	1580	---
TOTAL	7787	10594	46052	37909	43415	40367	40378	13022	15090	28646	62515	56199
MEAN	251	353	1486	1223	1551	1302	1346	420	503	924	2017	2207
MAX	794	1110	7990	5800	9870	4630	5250	845	2300	7070	9630	15200
MIN	120	135	493	437	240	474	437	254	205	183	437	358

CAL YR 1978 TOTAL 279118 MEAN 765 MAX 10200 MIN 76
WTR YR 1979 TOTAL 411974 MEAN 1129 MAX 15200 MIN 120

03146500 LICKING RIVER NEAR NEWARK, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1962 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1968 to current year.

pH: July 1968 to current year.

WATER TEMPERATURES: June 1962 to current year.

DISSOLVED OXYGEN: July 1968 to current year.

INSTRUMENTATION.--Water quality monitor since July 1968. Temperature recorder June 1962 to July 1968.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,650 micromhos Feb. 4, 1971; minimum, 100 micromhos Aug. 18, 1969.

pH: Maximum, 10.2 units Mar. 8, 1974; minimum, 4.5 units May 24, 1970.

WATER TEMPERATURES: Maximum, 31.5°C July 14, 15, 1972; minimum, 0.0°C on many days during winter periods.

DISSOLVED OXYGEN: Maximum, 15.2 mg/L Mar. 9, 11, 1978; minimum, 0.0 mg/L Sept. 1, 1970.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,150 micromhos Oct. 11; minimum, 150 micromhos Sept. 14.

pH: Maximum recorded, 8.4 units Nov. 4-6; minimum recorded, 7.1 units Sept. 30.

WATER TEMPERATURES: Maximum, 26.0°C July 16; minimum, 0.5°C Jan. 14-16, 19, 24, 25, Feb. 2, 4, 9-14, 17, 18, 25, 26.

DISSOLVED OXYGEN: Maximum, 14.2 mg/L Mar. 30; minimum, 3.8 mg/L Oct. 1.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	834	723	747	714	543	504	354	234	570	546	369	282
2	843	777	801	738	537	507	303	231	582	543	312	270
3	951	804	918	741	549	336	405	306	603	549	342	309
4	801	723	837	735	345	255	453	408	609	573	321	288
5	930	771	852	756	390	297	483	456	645	576	393	321
6	840	750	807	735	447	393	507	483	690	624	414	387
7	939	795	885	750	477	450	573	492	717	639	447	405
8	912	822	867	750	483	252	606	552	735	663	495	435
9	930	801	882	762	276	219	660	603	813	657	624	501
10	885	807	870	756	366	282	720	609	786	690	561	545
11	1150	783	774	747	441	372	657	639	717	693	624	561
12	957	714	861	762	459	444	693	654	747	663	588	570
13	798	444	837	759	480	453	807	648	765	672	609	588
14	558	483	843	759	471	462	897	537	732	684	642	594
15	516	504	843	762	528	471	555	516	720	678	624	597
16	624	501	882	756	672	537	552	519	837	705	648	624
17	744	528	861	573	627	600	786	555	774	702	648	624
18	702	633	678	573	636	618	606	549	741	720	702	618
19	729	663	681	600	645	624	606	555	774	687	642	621
20	735	678	654	603	723	642	795	588	879	705	648	621
21	762	702	576	498	687	549	633	498	894	705	729	633
22	924	723	543	495	636	537	534	489	810	453	690	635
23	783	723	---	---	564	537	576	543	438	219	687	630
24	804	720	---	---	570	558	600	306	234	195	666	594
25	831	744	---	---	573	561	351	294	279	192	591	573
26	855	633	---	---	597	573	435	357	243	183	612	588
27	729	642	---	---	594	585	489	441	333	243	678	603
28	744	675	507	486	627	591	534	483	387	336	639	609
29	816	672	516	492	759	597	549	522	---	---	648	600
30	969	720	534	501	663	600	543	525	---	---	624	588
31	795	714	---	---	603	321	558	540	---	---	627	579
MONTH	1150	444	918	486	759	219	897	231	894	183	729	270

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

[illegible]

MUSKINGUM RIVER BASIN

101

03146500 LICKING RIVER NEAR NEWARK, OH---Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

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

MUSKINGUM RIVER BASIN

03146500 LICKING RIVER NEAR NEWARK, OH--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

103

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH					
1	8.0	3.8	11.2	7.2	11.8	10.9	11.6	11.1	13.0	12.5	12.3	11.7				
2	9.2	5.4	11.4	7.5	---	---	11.9	11.2	13.1	12.6	12.4	11.9				
3	7.9	5.3	12.1	7.5	10.8	10.0	12.3	12.0	12.9	12.3	12.1	11.5				
4	9.2	4.3	12.0	7.1	10.5	10.1	12.4	12.2	12.8	12.3	11.6	11.2				
5	9.4	5.9	12.1	6.9	11.1	10.5	12.4	12.1	12.9	12.5	11.2	11.1				
6	8.6	5.5	11.7	6.6	11.3	10.8	12.3	11.9	12.7	12.4	11.6	11.2				
7	9.5	6.1	9.1	5.3	11.9	10.6	12.2	11.6	12.5	12.1	11.6	11.2				
8	9.9	6.4	13.0	7.1	11.5	10.2	11.7	11.5	12.7	12.1	11.4	10.9				
9	9.5	6.5	13.2	7.9	11.6	11.1	11.7	11.5	12.7	12.3	11.3	10.9				
10	9.4	6.2	13.0	7.7	12.4	11.5	11.8	11.6	12.8	12.4	11.3	10.9				
11	9.3	6.0	13.3	7.4	12.4	11.8	11.8	11.6	12.8	12.5	11.8	11.2				
12	9.0	4.9	8.8	6.6	11.9	11.2	11.6	11.2	12.6	12.2	12.0	11.2				
13	7.5	5.8	11.1	6.8	11.4	11.2	11.3	10.7	12.7	12.4	11.7	10.8				
14	8.7	7.5	9.0	6.5	11.7	11.4	12.1	10.7	12.7	12.2	11.2	10.7				
15	10.8	8.2	10.8	6.9	11.9	11.1	13.5	12.2	12.3	11.9	12.0	11.0				
16	9.7	8.3	12.5	7.5	11.6	10.5	13.4	13.0	12.9	11.7	12.2	11.1				
17	9.5	8.3	8.8	6.6	11.0	10.5	13.1	12.5	13.0	12.5	11.8	10.7				
18	9.7	8.3	9.7	7.5	11.1	10.6	13.3	12.8	13.0	12.5	11.0	10.0				
19	9.3	7.6	10.9	9.3	10.9	10.7	13.2	12.8	12.9	12.2	11.0	9.9				
20	9.7	7.7	11.2	9.2	10.7	9.9	12.7	12.1	12.9	12.1	11.1	9.7				
21	10.0	7.6	11.1	9.6	11.1	10.0	12.6	12.0	12.1	11.5	11.1	9.5				
22	10.0	7.3	11.4	9.7	11.5	11.1	12.9	12.6	13.1	12.1	11.6	9.4				
23	8.4	6.7	---	---	11.6	11.2	12.8	12.2	13.4	12.9	11.2	9.1				
24	10.5	7.0	---	---	11.5	10.9	13.2	12.1	13.4	13.2	11.5	9.0				
25	10.6	7.6	---	---	11.4	10.8	13.3	13.1	13.2	12.9	12.8	10.1				
26	7.6	6.1	---	---	11.5	11.3	13.1	12.8	13.1	12.6	13.3	10.9				
27	10.4	7.1	---	---	11.8	11.4	12.8	12.3	12.5	11.8	13.9	11.2				
28	10.7	8.0	11.2	10.8	11.9	11.6	12.6	12.4	11.9	11.5	13.8	10.6				
29	11.0	8.1	11.7	10.9	11.8	11.2	12.8	12.4	---	---	13.2	9.7				
30	11.1	8.2	11.9	10.9	11.3	10.9	12.9	12.5	---	---	14.2	9.4				
31	11.1	7.7	---	---	11.6	10.7	12.8	12.5	---	---	12.6	8.8				
MONTH	11.1	3.8	13.3	6.3	12.4	9.9	13.5	10.7	13.4	11.5	14.2	8.8				
DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER						
1	12.8	9.3	12.6	9.1	8.9	6.9	9.0	8.7	---	---	8.8	8.1				
2	10.6	9.4	12.6	8.7	9.1	7.0	9.2	8.8	---	---	8.9	8.2				
3	10.9	10.6	9.6	7.5	9.2	6.8	9.1	8.2	---	---	9.2	8.2				
4	11.6	10.8	10.0	8.6	9.3	6.6	8.9	8.0	7.7	6.7	9.2	8.1				
5	11.7	11.2	12.5	9.4	8.7	6.2	9.2	8.5	7.3	6.7	8.7	8.0				
6	11.9	11.2	12.6	9.2	8.6	6.0	9.2	8.1	---	---	8.6	8.1				
7	12.2	11.4	12.8	8.2	7.7	6.0	9.1	8.0	---	---	8.8	8.0				
8	11.7	10.6	12.6	7.4	7.8	6.5	8.9	7.7	---	---	9.6	8.3				
9	11.7	10.4	12.1	6.7	7.7	7.1	8.4	5.8	---	---	10.1	9.0				
10	12.1	11.2	11.5	5.0	7.5	6.8	8.9	7.9	---	---	10.0	8.6				
11	11.5	11.0	11.2	6.2	8.2	6.7	8.8	7.7	---	---	10.1	8.3				
12	11.3	10.4	10.2	5.2	8.4	6.7	8.0	7.5	---	---	10.5	8.3				
13	10.3	9.6	10.1	6.1	9.0	7.1	7.8	7.4	---	---	9.9	7.6				
14	10.9	9.9	11.3	7.8	8.9	7.2	8.0	7.2	---	---	8.8	7.5				
15	10.7	10.2	11.2	7.1	9.3	6.5	8.0	6.7	---	---	---	---				
16	11.1	10.7	11.0	7.0	9.7	5.8	8.2	6.2	---	---	---	---				
17	11.2	10.6	11.1	7.0	11.1	5.9	8.9	5.9	---	---	---	---				
18	11.1	10.2	11.4	5.6	11.6	5.5	9.9	6.1	---	---	---	---				
19	11.0	10.0	11.8	6.2	13.2	6.2	10.7	6.4	---	---	8.9	7.8				
20	10.8	9.7	10.6	4.7	14.1	6.1	11.3	6.1	---	---	9.4	8.0				
21	10.8	9.6	9.1	4.8	8.1	4.0	11.8	5.9	---	---	9.0	8.3				
22	11.0	9.3	9.6	6.0	8.5	7.9	11.2	5.5	---	---	9.3	8.5				
23	11.5	9.3	8.6	6.1	8.2	7.7	11.5	5.2	8.6	8.3	8.9	7.7				
24	11.7	8.9	8.3	6.7	8.7	7.9	9.3	4.5	8.6	8.4	9.4	7.5				
25	11.9	8.5	9.1	7.5	8.9	7.7	7.6	5.7	8.6	8.4	9.2	8.0				
26	10.2	7.9	10.2	8.2	8.8	7.6	7.7	6.6	8.7	8.5	9.3	8.5				
27	11.8	7.8	9.7	8.6	8.8	7.3	7.6	6.1	8.9	8.4	9.3	8.5				
28	11.7	8.8	9.4	8.4	8.7	7.2	7.8	7.4	8.6	7.8	9.2	8.5				
29	12.5	9.5	9.8	7.9	8.7	6.5	8.2	7.8	8.8	8.5	---	---				
30	12.2	9.3	9.8	7.5	8.7	6.7	7.9	7.7	8.6	8.4	---	---				
31	---	---	8.6	6.8	---	---	---	---	8.8	8.4	---	---				
MONTH	12.8	7.8	12.8	4.7	14.1	4.0	11.8	4.5	8.9	6.7	10.5	7.5				
YEAR	14.2	3.8														

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 (152 m) downstream from Dillon Dam, 2.0 mi (3.2 km) northwest of Dillon Falls, and 5.8 mi (9.3 km) upstream from mouth.

DRAINAGE AREA.--742 mi² (1,922 km²).

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 (213.36 m) Corps of Engineers bench mark. Prior to Oct. 27, 1940, water-stage recorder at site 2.3 mi (3.7 km) downstream at different datum. Oct. 27, 1940, to Sept. 30, 1962, water-stage recorder at site 2.6 mi (4.2 km) downstream at datum 16.3 ft (4.97 m) lower.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Dillon Lake since December 1960 (see station 03147300). Water-quality data collected at this site 1965 to 1977. Water-temperature data collected 1961 to 1975.

AVERAGE DISCHARGE.--40 years, 808 ft³/s (22.88 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,000 ft³/s (1,330 m³/s) Jan. 22, 1959, gage height, 32.46 ft (9.894 m); minimum daily, 19 ft³/s (0.54 m³/s) Dec. 22, 1960.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 37.0 ft (11.28 m) site and datum in use 1940-62, from floodmark, backwater from Muskingum River.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,610 ft³/s (131 m³/s) Aug. 5, gage height, 9.55 ft (2.911 m); minimum daily, 75 ft³/s (2.12 m³/s) Mar. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	214	258	802	1060	700	2390	80	611	601	780	4020	4090
2	305	280	752	1340	600	3910	1010	476	704	1890	4020	4110
3	298	258	965	2000	550	3950	2320	518	824	2110	4110	3980
4	248	248	2130	3380	500	3980	2550	971	631	1620	4140	3840
5	248	238	3760	3940	450	4000	2630	983	439	1550	4320	2230
6	248	218	4030	3900	430	3990	2670	802	400	769	4380	836
7	211	218	3910	3900	410	4240	2690	715	400	586	3700	631
8	192	218	3070	3950	380	4440	2850	616	785	422	1780	508
9	146	218	508	3740	360	4410	2840	561	1570	527	791	444
10	125	218	301	1780	340	4410	2890	489	911	847	631	444
11	155	214	611	571	320	4480	2850	471	611	1220	2140	444
12	258	214	2920	537	310	4440	2810	471	471	1290	3870	370
13	527	214	4120	601	300	4410	2790	566	422	709	3880	395
14	990	214	4120	802	300	4410	2850	601	331	621	2830	503
15	959	294	4070	1110	290	4440	3020	430	280	621	1210	513
16	813	301	3840	1080	290	4390	3020	383	248	499	905	2160
17	616	347	3820	1030	280	4420	3450	350	248	161	631	3920
18	347	581	3810	1010	280	4390	3910	305	265	131	888	3910
19	309	736	3810	977	280	4430	2950	305	234	185	1050	3920
20	339	542	3150	824	280	4390	2090	309	188	248	941	3940
21	339	631	1640	935	422	4390	935	309	704	265	1530	3940
22	339	688	1100	1380	1080	4300	796	309	2120	265	1920	3910
23	276	752	747	1000	1750	2990	802	324	2190	272	2430	3870
24	248	824	736	893	1190	1400	709	453	965	370	3630	3840
25	248	853	791	2100	309	971	662	532	457	566	4170	3870
26	287	758	704	2660	125	808	662	631	269	791	4120	3860
27	385	774	616	2580	195	652	662	824	335	941	4160	3880
28	383	1120	499	1910	1070	576	471	1120	335	1930	4170	3880
29	413	1080	444	1330	---	527	802	1040	272	3370	4200	3900
30	316	971	571	947	---	241	774	678	305	4050	4260	3880
31	221	---	646	800	---	75	---	503	---	4410	4180	---
TOTAL	10953	14480	62993	54067	13791	100850	59575	17656	18515	34016	89007	80018
MEAN	353	483	2032	1744	493	3253	1986	570	617	1097	2871	2667
MAX	990	1120	4120	3950	1750	4480	3910	1120	2190	4410	4380	4110
MIN	125	214	301	537	125	75	80	305	188	131	631	370
CAL YR 1978 TOTAL	432399			1185	MAX	4160	MIN	103				
WTR YR 1979 TOTAL	555921			1523	MAX	4480	MIN	75				

MUSKINGUM RIVER BASIN

105

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 (5.6 km) downstream from Oilspring Run.

DRAINAGE AREA.--7,422 mi² (19,223 km²).

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 (198.214 m) National Geodetic Vertical Datum of 1929. Prior to July 27, 1922, nonrecording gage at site 0.5 mi (0.8 km) 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 (0.8 km) upstream at same datum.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by 17 flood-control reservoirs 36.6 mi (58.9 km) to 148 mi (238 km) upstream from station. Some regulation at low flow by powerplant 19 mi (31 km) upstream from station.

AVERAGE DISCHARGE.--58 years, 7,454 ft³/s (211.1 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 126,000 ft³/s (3,570 m³/s) Jan. 26, 1937, gage height, 21.14 ft (6.443 m); minimum daily, 325 ft³/s (9.20 m³/s) Oct. 12, 1930, may have been lower during August 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 27, 1913 reached a stage of 33.5 ft (10.21 m), discharge, 270,000 ft³/s (7,650 m³/s), computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 46,500 ft³/s (1,320 m³/s) Feb. 26, gage height, 11.78 ft (3.591 m); minimum daily, 1,650 ft³/s (46.7 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1650	3500	6440	18500	10200	29400	10900	8750	15900	5350	10700	18700
2	2150	3380	5840	28800	8920	33100	15400	7950	15000	7570	11000	15500
3	2680	3260	6800	28100	8190	32000	21700	7710	14200	7910	11300	13200
4	2540	3160	15100	26400	8110	31900	23600	8760	12800	7300	9920	11800
5	2290	3070	22000	25500	6810	32900	26400	9360	10900	7580	9030	10100
6	2380	2930	22200	23100	5620	32000	26700	8930	9190	8410	8840	7570
7	2380	2800	20100	20700	5200	32000	24300	8500	9130	7990	8310	6500
8	2160	2710	22500	17600	4700	32000	21600	7880	11800	6310	6470	5830
9	1970	2640	33300	16000	4500	32000	22300	7330	11500	5610	4780	5410
10	1790	2520	25400	12600	4200	31500	26400	6750	10300	6190	4130	5090
11	1690	2380	14600	9600	4100	31200	27500	6290	10000	7160	9150	4780
12	2040	2360	15600	8650	4000	30400	26600	5940	8890	7410	13300	4460
13	3170	2320	24500	8410	3900	29600	25800	6410	8300	5860	11800	4200
14	6780	2260	25100	9280	3800	29800	26900	7400	7250	5170	10800	14500
15	8620	2260	21900	10100	3700	29800	28300	7500	6200	4790	8080	30600
16	8180	2350	21400	10500	3600	29400	27400	6550	5240	4900	6160	25400
17	7160	2650	20200	10900	3500	28900	26900	5740	4670	4350	4990	22500
18	6060	3830	18000	11600	3500	28100	26100	5210	4320	3580	5770	20500
19	5180	4430	16800	10300	3500	27400	24100	4720	4040	3230	9680	21400
20	4540	4830	15300	9640	3500	27000	20800	4590	3740	3050	9780	20000
21	3990	4510	14500	12100	3700	25000	18700	4980	8410	2860	13000	21200
22	3620	4490	12100	11900	4500	22000	16700	4870	12900	2690	11400	22300
23	3330	4140	11800	11600	9500	19400	14800	5220	11200	2680	13000	20900
24	3050	4410	11200	13200	18000	14400	13200	5810	8890	3480	17200	21100
25	2890	4440	10700	17900	32200	13900	11800	6440	6890	3720	22700	21100
26	3200	4490	9820	19800	43500	13700	9950	11300	5410	4180	21100	20200
27	4260	4500	9170	18800	29900	14000	9760	16700	4880	4660	22300	19600
28	3830	4900	8530	16800	23600	12700	9870	18900	4460	7070	18100	23100
29	4340	5600	8090	14400	---	11400	10400	19000	4220	16600	20700	26300
30	4390	6200	8200	12700	---	10800	9820	18100	4400	15400	22800	24100
31	3840	---	9350	11400	---	10400	---	16800	---	12300	22100	---
TOTAL	116210	107320	486540	476880	268450	778100	604700	270390	255030	195360	378390	487940
MEAN	3749	3377	15690	15380	9588	25100	20160	8722	8501	6302	12210	16260
MAX	8620	6200	33300	28800	43500	33100	28300	19000	15900	16600	22800	30600
MIN	1650	2260	5840	8410	3500	10400	9760	4590	3740	2680	4130	4200
CAL YR 1978	TOTAL	3612510	MEAN	9897	MAX	34700	MIN	1450				
WTR YR 1979	TOTAL	4425310	MEAN	12120	MAX	43500	MIN	1650				

MUSKINGUM RIVER BASIN

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

WATER-QUALITY RECORDS

LOCATION.--Water-quality monitor on left bank, 1.0 mi (1.6 km) upstream from discharge station. Samples collected at bridge on State Highways 37 and 78, 240 ft (73 m) downstream from water-quality monitor. Prior to January 1973, sampling site at discharge station.

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: February 1973 to current year.

pH: February 1973 to current year.

WATER TEMPERATURES: February 1973 to current year.

DISSOLVED OXYGEN: February 1973 to current year.

SUSPENDED SEDIMENT DISCHARGE: November 1978 to September 1979.

INSTRUMENTATION.--Water-quality monitor since February 1973.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. Samples were collected each month as part of the National Stream Quality Accounting Network.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,440 micromhos July 7, 1974; minimum, 240 micromhos Feb. 26, 1979.

pH: Maximum, 9.3 units Feb. 16, 1974; minimum, 5.4 units Apr. 15, 1973.

WATER TEMPERATURES: Maximum, 33.5°C Aug. 8, 1973; minimum, 0.0°C on many days during winter periods.

DISSOLVED OXYGEN: Maximum, 15.0 mg/L Dec. 20-27, 1975 (revised); minimum, 2.4 mg/L June 19, 1976.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 845 mg/L Dec. 5, 1978; minimum daily mean 3 mg/L Feb. 15-17, 1979.

SEDIMENT LOADS: Maximum daily 62,700 tons (56,900 tonnes) Sept. 15, 1979; minimum daily, 104 tons (94 tonnes) Nov. 15, 1978.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum 1,280 micromhos Jan. 21; minimum, 240 micromhos Feb. 26.

pH: Maximum, 8.6 units May 20-22; minimum, 6.8 units Jan. 14.

WATER TEMPERATURES: Maximum, 27.5°C July 23, minimum, 0.0°C on many days during winter period.

DISSOLVED OXYGEN: Maximum, 13.6 mg/L Jan. 16; minimum, 5.7 mg/L July 1, 25.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 845 mg/L Dec. 5; minimum daily mean, 3 mg/L Feb. 15-17.

SEDIMENT LOADS: Maximum daily, 62,700 tons (56,900 tonnes) Sept. 15; minimum daily, 104 tons (94 tonnes) Nov. 15.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED CENT SATUR- ATION	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT 03...	1315	2710	941	8.0	19.5	3.0	8.1	87	19	570	240
NOV 07...	1700	2800	795	7.4	12.0	9.0	9.6	89	5	110	45
DEC 05...	1530	22600	--	--	--	--	--	--	--	--	--
DEC 06...	1430	22000	448	7.1	6.0	95	10.9	87	64	7200	16500
JAN 03...	1500	27300	375	7.7	3.5	80	12.1	91	48	4400	110000
FEB 06...	1300	5290	640	8.0	.5	11	13.1	91	80	700	140
MAR 07...	1300	31000	346	7.5	3.5	45	12.5	94	15	420	1000
APR 11...	1300	27400	390	7.7	6.0	55	12.2	98	27	3000	10000
MAY 01...	1400	8760	606	7.8	12.5	15	11.3	100	17	1000	42
JUN 05...	1300	10800	565	7.6	19.5	20	8.2	88	18	460	1120
JUL 05...	1400	7480	606	7.4	19.0	30	8.0	85	56	620	980
AUG 01...	1600	10600	390	7.3	23.5	55	8.0	93	47	1600	1500
SEP 04...	1145	11800	470	7.6	23.0	25	8.3	95	17	400	220

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	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)	ALKA- LINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT 03...	370	230	100	28	60	5.4	140	--	180	110	.4
NOV 07...	360	240	100	26	36	4.8	120	--	170	72	.3
DEC 05...	--	--	--	--	--	--	--	--	--	--	--
06...	170	98	45	14	20	4.0	72	--	85	41	.2
JAN 03...	140	92	38	11	16	3.5	48	--	80	33	.1
FEB 06...	250	150	68	19	33	2.8	100	--	130	58	.2
MAR 07...	120	74	31	9.7	15	3.0	43	--	69	28	.1
APR 11...	160	100	41	13	15	2.9	52	--	83	31	.1
MAY 04...	240	140	65	19	23	3.1	98	--	130	48	.2
JUN 05...	240	160	65	20	22	3.2	82	--	130	41	.2
JUL 05...	240	140	65	18	24	4.4	100	--	110	49	.2
AUG 01...	160	86	42	13	17	3.7	72	7.0	83	29	.2
SEP 04...	200	110	55	16	22	3.7	98	4.8	84	33	.2

DATE	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M
OCT 03...	5.1	601	573	.66	.96	1.7	7.3	.08	--	--	--
NOV 07...	6.6	567	488	.41	.50	1.6	7.1	.08	4.9	11000	55.4
DEC 05...	--	--	--	--	--	--	--	--	--	--	--
06...	6.4	296	259	1.6	1.7	3.6	16	.66	13	--	--
JAN 03...	6.9	247	218	1.2	1.4	3.1	14	.29	--	--	--
FEB 06...	8.2	431	379	.61	.92	2.4	11	.08	3.9	--	--
MAR 07...	6.3	211	188	.82	.98	2.8	12	.15	4.1	--	--
APR 11...	7.0	244	225	.82	.92	2.6	12	.15	--	--	--
MAY 01...	6.2	402	353	.40	.43	1.7	7.7	.08	4.6	4900	--
JUN 05...	7.4	354	338	.91	1.0	3.4	15	.16	3.3	4900	122
JUL 05...	6.8	425	338	.88	.95	3.5	15	.11	--	2000	--
AUG 01...	7.4	254	239	.75	.84	1.8	8.1	.17	12	3900	--
SEP 04...	9.4	338	287	.90	.91	2.0	8.9	.14	3.9	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

		ARSENIC TOTAL (UG/L AS AS)		ARSENIC DIS- SOLVED (UG/L AS AS)		BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)		BARIUM, DIS- SOLVED (UG/L AS BA)		CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)		CADMIUM DIS- SOLVED (UG/L AS CD)		CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)		CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	
DATE	TIME																
OCT 03...	1315	1		1		100		100		4		1		10		4	
JAN 03...	1500	2		1		100		0		14		14		40		1	
APR 11...	1300	1		1		100		0		9		9		<10		<10	
JUL 05...	1400	1		1		100		50		3		3		30		<10	

DATE	MANGANESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 03...	100	<.5	<.5	0	0	1	1	30	0
JAN 03...	290	.7	.5	0	0	0	0	80	10
APR 11...	190	<.5	<.5	0	0	0	0	140	50
JUL 05...	100	<.5	<.5	0	0	0	0	50	10

[illegible][illegible]

MUSKINGUM RIVER BASIN

109

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM
DEC 05...	1530	22600	933	56900	40	51	65	80	91	98	99	100

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
OCT 03...	1315	2710	19.5	22	161
NOV 07...	1700	2800	12.0	22	166
DEC 05...	1530	22600	--	933	56900
DEC 06...	1430	22000	6.0	566	33600
JAN 03...	1500	27300	3.5	250	18400
FEB 06...	1300	5290	.5	14	200
MAR 07...	1300	31000	3.5	246	20600
APR 11...	1300	27400	6.0	143	10600
MAY 01...	1400	8760	12.5	40	946
JUN 05...	1300	10800	19.5	68	1980
JUL 05...	1400	7480	19.0	68	1370
AUG 01...	1600	10600	23.5	163	4670
SEP 04...	1145	11800	23.0	74	2360

MUSKINGUM RIVER BASIN

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)	
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			30	283	11	191	251	13400	21	578	165	13100
2			30	274	14	221	367	28500	16	385	202	18100
3			30	264	57	1230	263	20000	11	243	206	17800
4			25	213	322	13100	158	11300	10	219	179	15400
5			25	207	845	50200	103	7090	11	202	176	15600
6			25	198	645	38700	90	4990	10	152	120	10400
7			21	159	295	16000	58	3240	8	112	156	13500
8			20	146	255	15500	42	2000	9	114	110	9500
9			24	171	620	55700	30	1300	8	97	90	7780
10			23	156	250	17100	26	885	9	102	78	6630
11			18	116	133	5240	20	518	8	89	52	4380
12			17	108	110	4630	22	514	4	43	55	4510
13			20	125	240	15900	17	386	8	84	56	4480
14			19	116	163	11000	15	376	6	62	67	5390
15			17	104	92	5440	22	600	3	30	53	4260
16			17	108	73	4220	32	907	3	29	42	3330
17			17	122	68	3710	29	853	3	28	39	3040
18			18	186	52	2530	33	1030	5	47	38	2880
19			18	215	36	1630	32	890	4	38	38	2810
20			16	209	30	1240	23	599	7	66	42	3060
21			17	207	195	7630	25	817	10	100	43	2900
22			14	170	62	2030	38	1220	70	850	44	2610
23			12	134	27	860	38	1190	473	20600	48	2510
24			14	167	22	665	53	2550	810	39400	82	3190
25			19	228	31	896	157	8070	492	42800	108	4050
26			13	158	35	928	107	5720	344	40400	108	3990
27			17	207	23	569	96	4870	346	27900	79	2990
28			13	172	15	345	75	3400	240	15300	55	1890
29			8	121	18	393	52	2020	---	---	48	1480
30			10	167	18	399	29	994	---	---	45	1310
31			---	---	57	1620	20	616	---	---	43	1210
TOTAL			---	5211	---	279817	---	130845	---	190070	---	194080
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	46	1350	39	921	84	3610	71	1030	163	4710	102	5150
2	79	3460	23	494	85	3440	51	1250	123	3650	93	3890
3	285	16700	28	583	96	3680	56	1200	159	4850	91	3240
4	215	13700	39	922	72	2490	57	1120	121	3240	74	2360
5	168	12000	38	960	61	1800	56	1150	95	2320	58	1580
6	105	7570	32	772	35	868	45	1020	83	1980	47	961
7	94	6170	26	597	40	986	36	777	69	1550	47	825
8	75	4370	22	468	172	6140	35	596	58	1010	44	693
9	82	4940	19	376	193	5990	40	606	51	658	57	833
10	153	10900	21	383	105	2920	42	702	70	781	45	618
11	145	10800	30	509	101	2730	49	947	145	4680	23	297
12	104	7470	28	449	95	2280	53	1260	223	8010	20	241
13	93	6480	28	485	167	3740	58	1080	138	4400	24	272
14	154	11200	28	559	63	1230	39	544	110	3210	165	8810
15	238	18200	28	567	41	686	46	595	70	1530	759	52700
16	142	10500	30	531	35	495	50	661	49	815	361	24800
17	104	7550	27	418	44	555	54	634	44	593	160	9720
18	88	6200	27	380	39	455	50	483	53	826	264	14600
19	82	5340	39	497	63	687	44	384	93	2430	174	10100
20	79	4440	50	520	133	1340	50	412	117	3090	134	7240
21	78	3940	52	599	432	13000	55	425	181	6350	108	6180
22	75	3380	37	487	465	16200	39	283	115	3540	88	5300
23	74	2960	26	366	492	14900	45	326	221	7760	85	4800
24	69	2460	28	439	90	2160	51	479	420	19500	88	5010
25	67	2130	46	800	86	1600	55	552	388	23800	78	4440
26	53	1420	76	2440	74	1080	54	609	439	25000	67	3650
27	43	1130	221	9960	74	975	39	491	504	30300	66	3490
28	49	1310	255	13000	61	735	49	935	204	9970	157	10700
29	51	1430	156	8000	49	558	335	16900	240	13400	192	13600
30	48	1270	117	5720	75	891	335	13900	336	20700	118	7690
31	---	---	91	4130	---	---	188	6240	240	14300	---	---
TOTAL	---	190770	---	57532	---	98221	---	57591	---	228953	---	223780
TOTAL LOAD FOR YEAR:			1656870 TONS.									

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	924	888	848	800	728	716	570	414	579	561	339	303
2	951	924	800	740	717	692	408	370	591	576	---	---
3	951	932	820	744	702	630	408	348	627	594	---	---
4	962	927	861	826	633	508	417	330	642	624	---	---
5	965	945	873	846	536	452	393	321	654	639	348	336
6	953	842	842	784	466	430	447	387	672	640	336	330
7	953	830	824	782	442	420	---	---	684	663	348	330
8	1000	950	800	795	438	370	429	399	687	660	348	339
9	1000	962	819	798	364	312	495	414	678	645	354	348
10	986	908	826	819	348	318	540	459	666	645	366	354
11	900	825	840	826	370	352	549	483	684	669	366	363
12	920	837	848	840	360	334	570	537	705	678	378	366
13	879	834	854	848	414	340	591	564	717	705	384	369
14	932	837	855	842	408	390	585	567	705	696	387	375
15	953	665	843	836	424	390	597	573	714	696	387	375
16	728	654	874	843	384	376	606	579	720	702	---	---
17	722	645	885	874	408	382	606	594	717	705	---	---
18	756	689	880	864	442	408	---	---	720	717	---	---
19	827	791	890	856	460	444	741	558	738	720	393	381
20	866	830	886	852	478	460	1190	591	744	732	426	393
21	950	869	846	786	502	478	1280	774	753	723	435	420
22	950	911	831	786	544	496	966	522	723	696	456	438
23	912	891	834	772	558	544	645	561	696	579	489	459
24	896	810	770	747	576	558	738	555	570	459	534	489
25	803	741	766	758	574	564	738	468	462	339	558	534
26	753	734	756	717	622	558	540	453	321	240	561	546
27	771	750	729	716	622	564	513	456	267	258	606	561
28	752	712	730	724	582	568	501	456	318	264	576	531
29	783	752	732	700	588	574	516	462	---	---	537	528
30	826	790	723	696	616	586	558	489	---	---	606	537
31	880	830	---	---	616	570	558	519	---	---	633	609
MONTH	1000	645	890	696	728	312	1280	321	753	240	633	303
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	630	609	---	---	528	504	699	681	441	390	423	402
2	639	543	---	---	531	516	702	684	444	408	456	423
3	531	462	---	---	540	531	678	603	432	408	465	432
4	462	447	---	---	561	543	600	594	432	396	---	---
5	456	381	---	---	582	558	609	594	462	438	---	---
6	396	381	---	---	597	582	645	588	465	435	---	---
7	399	387	---	---	609	582	678	645	492	462	---	---
8	423	399	---	---	600	522	750	681	528	492	---	---
9	429	417	645	636	573	498	693	651	543	510	---	---
10	420	393	648	636	624	576	648	594	690	528	---	---
11	396	384	648	648	612	582	621	585	702	537	---	---
12	390	378	660	648	618	594	690	612	498	390	---	---
13	399	384	654	648	642	597	636	561	495	447	---	---
14	420	399	669	648	645	618	636	570	495	456	---	---
15	405	381	699	627	642	630	717	633	531	474	---	---
16	390	381	699	648	---	---	744	720	510	486	---	---
17	393	381	654	627	---	---	714	687	525	492	---	---
18	402	390	624	615	810	744	687	669	528	465	---	---
19	417	402	672	669	855	813	735	690	516	414	---	---
20	462	417	687	657	867	849	807	732	483	387	---	---
21	459	438	705	684	855	642	867	780	462	372	---	---
22	480	459	711	666	633	522	771	699	501	435	---	---
23	501	483	723	714	633	498	705	693	492	444	---	---
24	525	504	750	723	579	507	738	705	483	444	---	---
25	549	525	747	642	723	579	762	735	438	372	---	---
26	558	549	678	627	720	663	780	738	---	---	---	---
27	585	555	732	625	672	651	753	561	---	---	---	---
28	600	588	531	489	681	657	585	294	---	---	---	---
29	605	588	516	507	690	675	390	288	---	---	---	---
30	---	---	540	513	681	669	414	375	429	366	---	---
31	---	---	534	519	---	---	393	372	456	378	---	---
MONTH	639	378	750	489	867	498	867	288	702	366	465	402
YEAR	1280	240										

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

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

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH					
1	8.5	6.8	9.0	8.8	11.9	11.5	12.9	12.1	12.9	12.8	11.6	10.1				
2	9.1	6.9	8.9	8.7	12.0	11.8	12.1	11.3	13.0	12.8	---	---				
3	8.6	7.4	8.8	8.6	11.8	11.5	12.5	11.5	13.0	12.9	---	---				
4	8.4	7.8	8.8	8.5	11.5	10.9	13.1	12.5	13.0	12.8	---	---				
5	9.8	8.2	8.8	8.6	10.9	10.6	13.3	13.0	12.9	12.9	11.0	10.7				
6	9.0	8.1	8.8	8.6	11.6	10.7	13.3	13.1	13.1	12.9	10.9	10.7				
7	8.1	7.8	9.6	8.5	12.0	11.7	13.2	13.0	13.0	12.8	12.7	10.7				
8	8.4	7.9	9.7	9.5	12.0	11.3	13.1	12.9	12.9	12.8	12.7	12.4				
9	9.2	8.0	9.8	9.6	11.3	10.9	13.2	13.1	12.9	12.8	12.6	12.3				
10	8.8	8.0	9.9	9.7	12.2	11.3	13.2	13.1	13.1	12.9	12.6	12.4				
11	8.9	8.3	10.1	9.8	12.5	12.3	13.2	13.1	13.1	12.9	12.7	12.5				
12	10.3	8.5	10.1	9.9	12.8	12.5	13.1	12.8	13.1	12.9	12.9	12.6				
13	9.0	8.5	10.0	9.8	12.7	12.4	12.9	12.7	12.8	12.7	12.8	12.3				
14	8.5	8.2	9.9	9.8	12.8	12.5	12.7	12.5	12.8	12.7	12.4	12.2				
15	8.7	8.2	9.9	9.7	12.9	12.6	13.4	12.5	12.8	12.7	12.6	11.3				
16	8.8	8.5	10.0	9.8	13.0	12.8	13.6	12.8	12.7	12.6	12.3	11.4				
17	8.9	8.7	10.0	9.8	13.1	12.8	13.5	13.1	12.9	12.7	12.4	12.1				
18	8.9	8.9	10.0	9.9	13.1	12.6	13.2	13.0	13.1	12.9	12.2	12.0				
19	8.9	8.8	10.1	9.8	12.7	12.6	13.2	12.7	13.2	13.0	12.0	11.8				
20	8.8	8.5	10.7	10.1	12.6	12.2	13.2	12.7	13.1	13.0	---	---				
21	8.7	8.5	10.9	10.6	12.3	11.8	12.7	12.3	13.0	12.9	---	---				
22	8.7	8.5	11.0	10.7	12.3	12.0	12.7	12.3	13.0	12.9	12.6	12.1				
23	8.5	8.2	10.9	10.6	12.4	12.2	12.9	12.5	13.0	12.9	12.1	11.5				
24	8.4	8.2	10.7	10.6	12.6	12.4	13.1	12.8	13.0	12.7	11.4	11.1				
25	8.7	8.3	10.7	10.5	12.5	12.2	13.2	12.8	12.7	12.1	11.6	11.1				
26	8.5	8.1	11.0	10.7	12.5	12.2	13.3	13.0	12.0	11.2	12.2	11.6				
27	8.5	8.4	11.1	10.9	12.8	12.5	13.2	13.0	12.2	10.3	12.9	12.3				
28	8.4	7.9	11.2	11.2	13.0	12.8	13.0	12.9	12.2	11.6	13.1	12.8				
29	8.9	8.1	11.4	11.2	13.4	13.0	13.0	12.8	---	---	12.8	12.4				
30	9.0	8.7	11.7	11.4	13.4	13.1	13.3	12.7	---	---	12.5	12.0				
31	9.1	8.7	---	---	13.1	12.9	12.9	12.8	---	---	12.1	11.9				
MONTH	10.3	6.8	11.7	8.5	13.4	10.6	13.6	11.3	13.2	10.3	13.1	10.1				

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER					
1	11.9	11.8	---	---	9.7	9.5	7.8	5.7	8.0	7.9	---	---				
2	11.9	11.8	---	---	9.5	9.4	8.4	7.7	8.1	7.8	---	---				
3	12.2	11.8	---	---	9.4	9.2	8.7	8.2	8.3	7.6	---	---				
4	12.2	12.1	---	---	9.2	7.8	8.3	7.8	8.7	7.9	8.6	8.3				
5	12.4	11.9	---	---	9.5	8.2	8.9	7.6	9.1	8.2	9.4	8.3				
6	12.8	12.3	---	---	9.8	8.9	9.7	8.8	9.1	8.0	8.8	8.1				
7	13.0	12.3	---	---	9.8	8.6	9.6	9.1	9.4	8.3	9.1	8.3				
8	13.0	12.8	---	---	9.3	8.7	9.0	8.7	8.9	8.1	9.2	8.3				
9	12.8	12.1	11.6	10.1	9.4	8.9	8.8	8.5	9.3	7.5	9.8	8.3				
10	12.7	12.2	11.6	10.3	9.3	8.9	8.6	8.3	9.9	7.7	---	---				
11	12.8	12.2	11.9	10.2	10.3	8.7	9.2	8.5	9.0	7.2	---	---				
12	12.4	12.1	11.9	10.3	---	---	8.7	8.3	8.1	7.3	---	---				
13	12.2	11.6	10.1	9.4	---	---	8.2	7.8	8.5	7.8	---	---				
14	11.5	11.2	11.0	9.0	---	---	8.3	7.7	8.4	8.2	---	---				
15	11.2	11.1	10.9	9.2	---	---	8.8	7.8	8.3	8.0	---	---				
16	11.4	10.9	10.1	9.2	---	---	9.0	7.8	8.6	7.6	---	---				
17	11.6	11.3	10.7	9.2	---	---	9.4	7.9	8.8	8.1	8.9	8.7				
18	11.7	11.6	10.2	9.8	11.3	10.0	10.9	8.2	8.7	7.9	9.0	8.7				
19	11.6	11.4	12.8	12.0	12.6	9.4	11.0	8.3	8.0	7.1	9.0	8.9				
20	11.4	11.1	11.6	10.0	12.1	10.2	10.7	7.4	8.3	6.7	9.0	8.9				
21	11.2	10.7	10.7	8.6	11.0	7.7	10.0	7.3	8.6	7.8	9.1	9.0				
22	10.6	10.3	11.9	7.9	8.4	7.6	9.1	7.1	8.6	8.4	9.1	9.0				
23	10.3	10.1	11.1	10.1	8.2	8.0	8.8	6.8	8.4	8.3	9.3	9.1				
24	10.2	10.1	10.0	9.0	8.3	8.0	8.4	6.1	8.4	8.2	9.4	9.3				
25	---	---	9.2	8.7	8.7	8.0	7.9	5.7	8.2	7.9	9.3	9.3				
26	---	---	10.1	8.9	9.3	8.3	9.0	6.1	8.8	8.2	9.3	9.2				
27	---	---	10.2	10.1	10.6	8.9	8.4	6.7	8.8	8.6	9.2	9.1				
28	---	---	10.3	10.2	10.3	9.0	7.4	6.9	---	---	9.2	8.8				
29	---	---	10.4	10.2	9.7	7.3	8.1	7.2	---	---	9.0	8.8				
30	---	---	10.2	9.7	7.3	5.9	8.1	7.8	---	---	9.0	8.9				
31	---	---	9.9	9.7	---	---	8.0	7.9	---	---	---	---				
MONTH	13.0	10.1	12.8	7.9	12.6	5.9	11.0	5.7	9.9	6.7	9.8	8.1				
YEAR	13.6	5.7														

RESERVOIRS IN MUSKINGUM RIVER BASIN, OH

03119500 BOLIVAR RESERVOIR NEAR BOLIVAR.--Lat 40°38'56", long 81°25'57", Tuscarawas County, #03136300 NORTH BRANCH KOKOSING RIVER LAKE NEAR FREDERICKTOWN.--Lat 40°30'24", long 82°34' Hydrologic Unit 05040001, in gate house of dam on Sandy Creek, 1.1 mi (1.8 km) east of Bolivar. DRAINAGE AREA, 504 mi² (1,305 km²). PERIOD OF RECORD, June 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 895.0 ft (272.80 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.

Reservoir is formed by earthfill dam completed Nov. 15, 1937. Usable capacity 149,500 acre-ft (184 hm³) between elevations 895.0 ft (272.80 m) (lowest outlet), and 962.0 ft (293.22 m) (crest of spillway). Dead storage below elevation 895.0 ft (272.80 m), 113 acre-ft (139,000 m³). Figures given herein represent usable contents. Reservoir is used for flood control only. There are no gates on spillway and all regulation is done by gates in conduits through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum content, 66,440 acre-ft (81.9 hm³) Mar. 8, 1979, elevation, 944.90 ft (288.006 m); minimum, 62 acre-ft (76,400 m³) Oct. 9, 1933, elevation, 896.30 ft (273.192 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 66,440 acre-ft (81.9 hm³) Mar. 8, elevation, 944.90 ft (288.006 m); minimum, 144 acre-ft (178,000 m³) Oct. 11, elevation, 897.48 ft (273.552 m).

03120000 LEESVILLE LAKE NEAR LEESVILLE.--Lat 40°28'15", long 81°11'40", in E 1/2 sec. 36, T.13 N., R.6 W., Carroll County, Hydrologic Unit 05040001, in gate house of dam on McGuire Creek, 1.4 mi (2.3 km) northeast of Leesville. DRAINAGE AREA, 48.3 mi² (125 km²). PERIOD OF RECORD, April 1938 to current year. Prior to October 1971 published as Leesville Reservoir. Month-end contents prior to September 1939, published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 928.0 ft (282.85 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.

Lake is formed by earthfill dam completed Oct. 22, 1937. Usable capacity 37,070 acre-ft (45.7 hm³) between elevations 928.0 ft (282.85 m) (lowest outlet), and 977.5 ft (297.94 m) (crest of spillway), of which 19,170 acre-ft (23.6 hm³) is in the conservation pool. Dead storage below elevation 928.0 ft (282.85 m), 329 acre-ft (406,000 m³). Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in conduit through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 26,430 acre-ft (32.6 hm³) Apr. 17, 1948, elevation, 969.59 ft (295.531 m); minimum, 41 acre-ft (50,600 m³) Oct. 9-25, 1939, elevation, 928.38 ft (282.970 m), but may have been less during period Sept. 18-24, 1940.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 21,970 acre-ft (27.1 hm³) Mar. 7, 8, elevation, 965.68 ft (294.339 m); minimum, 13,650 acre-ft (16.8 hm³) Feb. 12, elevation, 956.97 ft (291.684 m).

03121000 ATWOOD LAKE NEAR NEW CUMBERLAND.--Lat 40°31'34", long 81°17'09", in SE 1/4 sec. 28, T.15 N., R.7 W., Tuscarawas County, Hydrologic Unit 05040001, in gate house of dam on Indian Fork, 1.5 mi (2.4 km) southeast of New Cumberland. DRAINAGE AREA, 69.9 mi² (181 km²). PERIOD OF RECORD, June 1938 to current year. Prior to October 1971 published as Atwood Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 890.0 ft (271.27 m) National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD. Prior to Oct. 11, 1938, nonrecording gage at same site and datum.

Lake is formed by earthfill dam completed Sept. 23, 1937. Usable capacity 49,690 acre-ft (61.3 hm³) between elevations 890.0 ft (271.27 m) (lowest outlet), and 941.0 ft (286.82 m) (crest of spillway), of which 23,590 acre-ft (29.1 hm³) is in the conservation pool. Dead storage below elevation 890.0 ft (271.27 m), 8 acre-ft (9,860 m³). Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in conduits through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 35,210 acre-ft (43.4 hm³) Feb. 8, 1952, elevation, 934.51 ft (284.839 m); minimum, 2.2 acre-ft (2,710 m³) Jan. 8, 9, 1940, elevation, 890.36 ft (271.382 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 29,800 acre-ft (36.7 hm³) Mar. 8, elevation, 931.67 ft (283.973 m); minimum, 15,870 acre-ft (19.6 hm³) Feb. 13, 14, elevation, 922.40 ft (281.148 m).

03122000 DOVER LAKE NEAR DOVER.--Lat 40°33'29", long 81°24'46", in SW 1/4 sec. 6, T.9 N., R.1 W., Tuscarawas County, Hydrologic Unit 05040001, in gate house of dam on Tuscarawas River, 4.2 mi (6.8 km) northeast of Dover. DRAINAGE AREA, 1,404 mi² (3,636 km²). PERIOD OF RECORD, June 1938 to current year. Prior to October 1971 published as Dover Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 858.0 ft (261.52 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD. Prior to Sept. 22, 1938, nonrecording gage at same site and datum.

Lake is formed by concrete dam completed Nov. 29, 1937. Usable capacity 203,000 acre-ft (250 hm³) between elevations 862.0 ft (262.74 m) (lowest outlet), and 916.0 ft (279.20 m) (crest of spillway), of which 1,000 acre-ft (1.23 hm³) is in conservation pool. No dead storage. Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in conduits through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 109,000 acre-ft (134 hm³) July 12, 1969, elevation, 905.00 ft (275.844 m); no contents several days during most years.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 52,400 acre-ft (64.6 hm³) Sept. 19, elevation, 895.80 ft (273.040 m); minimum, 0.5 acre-ft (616 m³) Oct. 10, 11, 12, elevation, 865.10 ft (263.682 m).

03123500 BEACH CITY LAKE NEAR BEACH CITY.--Lat 40°38'06", long 81°33'30", in T.10 N., R.3 W., Tuscarawas County, Hydrologic Unit 05040001, in gate house of dam on Sugar Creek, 1.6 mi (2.6 km) southeast of Beach City. DRAINAGE AREA, 300 mi² (777 km²). PERIOD OF RECORD, June 1938 to current year. Prior to October 1971 published as Beach City Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 931.0 ft (283.77 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD. Prior to Feb. 4, 1939, nonrecording gage at same site and datum.

Lake is formed by earthfill dam completed Aug. 13, 1937. Usable capacity 71,650 acre-ft (88.3 hm³) between elevations 931.0 ft (283.77 m) (lowest outlet), and 976.5 ft (297.64 m) (crest of spillway), of which 1,700 acre-ft (2.10 hm³) is in conservation pool. No dead storage. Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in conduits through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 70,120 acre-ft (86.5 hm³) July 6, 1969, elevation, 976.25 ft (297.561 m); minimum, 1.1 acre-ft (1,360 m³) several days in September and October 1939, elevation, 931.60 ft (283.952 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 48,680 acre-ft (60.0 hm³) Sept. 16, 17, elevation, 972.23 ft (296.336 m); minimum, 1,960 acre-ft (2.42 hm³) Oct. 1, elevation, 948.56 ft (289.121 m).

RESERVOIRS IN MUSKINGUM RIVER BASIN, OH--Continued

03125500 PIEDMONT LAKE AT PIEDMONT.--Lat 40°11'31", long 81°12'57", in SE 1/4 sec. 35, T.10 N., R.6 W., Harrison County, Hydrologic Unit 05040001, in gate house of dam on Stillwater Creek, 0.4 mi (0.6 km) west of Piedmont. DRAINAGE AREA, 85.9 mi² (222 km²). PERIOD OF RECORD, May 1938 to current year. Prior to October 1971 published as Piedmont Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 881.75 ft (268.757 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.

Lake is formed by earthfill dam completed May 22, 1937. Usable capacity 64,990 acre-ft (80.1 hm³) between elevations 881.75 ft (lowest outlet), and 924.6 ft (281.82 m) (crest of spillway), of which 33,500 acre-ft (41.3 hm³) is in the conservation pool. Dead storage below elevation 881.75 ft (268.757 m), 71 acre-ft (87,500 m³). Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in tunnel through abutment of dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 46,650 acre-ft (57.5 hm³) June 11, 12, 1947, elevation, 918.33 ft (279.907 m); minimum, 26 acre-ft (32,100 m³) Sept. 18-25, 1939, elevation, 882.25 ft (268.910 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 41,310 acre-ft (50.9 hm³) Mar. 6, 7, elevation, 916.26 ft (279.276 m); minimum, 24,910 acre-ft (30.7 hm³) Feb. 21, elevation, 908.94 ft (277.045 m).

03126500 CLENDENING LAKE NEAR TIPPECANOE.--Lat 40°16'10", long 81°16'43", in NW 1/4 sec. 16, T.12 N., R.7 W., Harrison County, Hydrologic Unit 05040001, in gate house of dam on Brushy Fork, 0.6 mi (1.0 km) east of Tippecanoe. DRAINAGE AREA, 69.3 mi² (179 km²). PERIOD OF RECORD, June 1938 to current year. Prior to October 1971 published as Clendenning Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 862.00 ft (262.738 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD. Prior to July 11, 1938, nonrecording gage at same site and datum.

Lake is formed by earthfill dam completed Nov. 1, 1937. Usable capacity 53,970 acre-ft (66.5 hm³) between elevations 862.0 ft (262.74 m) (lowest outlet), and 910.5 ft (277.52 m) (crest of spillway), of which 26,470 acre-ft (32.6 hm³) is in the conservation pool. Dead storage below elevation 862.0 ft (262.74 m) 27 acre-ft (33,300 m³). Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in tunnel through abutment of dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 38,060 acre-ft (46.9 hm³) Feb. 7, 1952, elevation, 903.85 ft (275.493 m); minimum, 5.9 acre-ft (7,220 m³) Nov. 4, 1938, elevation, 862.33 ft (262.838 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 31,830 acre-ft (39.2 hm³) June 1, elevation, 900.82 ft (274.570 m); minimum, 18,460 acre-ft (22.8 hm³) Feb. 15, elevation, 892.99 ft (272.183 m).

03128000 TAPPAN LAKE NEAR TAPPAN.--Lat 40°21'24", long 81°13'38", in NW 1/4 sec. 4, T.13 N., R.7 W., Harrison County, Hydrologic Unit 05040001, in gate house of dam on Little Stillwater Creek, 0.9 mi (1.4 km) west of Tappan. DRAINAGE AREA, 71.1 mi² (184 km²). PERIOD OF RECORD, May 1938 to current year. Prior to October 1971 published as Tappan Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 870.0 ft (265.18 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.

Lake is formed by earthfill dam completed Oct. 24, 1936. Usable capacity 61,500 acre-ft (75.8 hm³) between elevations 870.0 ft (265.18 m) (lowest outlet), and 909.0 ft (277.06 m) (crest of spillway), of which 35,070 acre-ft (43.2 hm³) is in conservation pool. Dead storage below elevation 870.0 ft (265.18 m), 46 acre-ft (56,700 m³). Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in tunnel through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 48,440 acre-ft (59.7 hm³) Feb. 5, 6, 1952, elevation, 904.53 ft (275.701 m); no contents Sept. 29, 1939.

EXTREMES FOR CURRENT YEAR: Maximum contents, 39,750 acre-ft (49.0 hm³) May 30-31, elevation, 901.23 ft (274.695 m); minimum, 23,390 acre-ft (28.8 hm³) Dec. 20, 21, elevation, 893.86 ft (272.449 m).

03129500 CHARLES MILL LAKE NEAR MIFFLIN.--Lat 40°44'26", long 82°21'47", in NE 1/4 sec. 35, T.23 N., R.17 W., Ashland County, Hydrologic Unit 05040002, in gate house of dam on Black Fork, 2.5 mi (4.0 km) south of Mifflin. DRAINAGE AREA, 215 mi² (557 km²). PERIOD OF RECORD, April 1938 to current year. Prior to October 1971 published as Charles Mill Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 987.0 ft (300.84 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.

Lake is formed by earthfill dam completed Aug. 17, 1936. Usable capacity 87,690 acre-ft (108 hm³) between elevations 987.0 ft (300.84 m) (lowest outlet), and 1,020.0 ft (310.90 m) (crest of spillway), of which 7,090 acre-ft (8.74 hm³) is in the conservation pool. Dead storage below elevation 987.0 ft (300.84 m), 310 acre-ft (382,000 m³). Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in conduits through dam or through bypass gate around conservation weir. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 53,480 acre-ft (65.9 hm³) Jan. 25, 1959, elevation, 1,013.53 ft (308.924 m); minimum, 733 acre-ft (904,000 m³) Dec. 24, 1965, elevation, 989.89 ft (301.718 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 40,540 acre-ft (50.0 hm³) Mar. 7, elevation, 1,010.45 ft (307.985 m); minimum, 2,540 acre-ft (3.13 hm³) Feb. 15-16, elevation, 992.94 ft (302.648 m).

03133000 PLEASANT HILL LAKE NEAR PERRYVILLE.--Lat 40°37'26", long 82°19'33", in NE 1/4 sec. 7, T.19 N., R.16 W., Ashland County, Hydrologic Unit 05040002, in gate house of dam on Clear Fork, 2.5 mi (4.0 km) south of Perryville. DRAINAGE AREA, 197 mi² (510 km²). PERIOD OF RECORD, May 1938 to current year. Prior to October 1971 published as Pleasant Hill Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 971.75 ft (296.189 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.

Lake is formed by earthfill dam completed Feb. 1, 1938. Usable capacity 87,640 acre-ft (108 hm³) between elevations 971.75 ft (296.189 m) (lowest outlet), and 1,065.0 ft (324.61 m) (crest of spillway), of which 13,510 acre-ft (16.7 hm³) is in the conservation pool. Dead storage below elevation 971.75 ft (296.189 m), 12 acre-ft (14,800 m³). Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in tunnel through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 43,530 acre-ft (53.7 hm³) Jan. 23, 1959, elevation, 1,044.01 ft (318.214 m); minimum, 74 acre-ft (91,200 m³) May 8, 1938, elevation, 976.63 ft (297.677 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 26,290 acre-ft (32.4 hm³) Mar. 6, elevation, 1,032.25 ft (314.630 m); minimum, 7,950 acre-ft (9.80 hm³) Feb. 12, elevation, 1,012.36 ft (308.567 m).

RESERVOIRS IN MUSKINGUM RIVER BASIN, OH--Continued

- 03134500 MOHICANVILLE RESERVOIR NEAR MOHICANVILLE.--Lat 40°43'28", long 82°09'08", in SE 1/4 sec. 34, T.21 N., R.15 W., Ashland County, Hydrologic Unit 05040002, in gate house of dam on Lake Fork, 2 mi (3 km) east of Mohicanville. DRAINAGE AREA, 271 mi² (702 km²). PERIOD OF RECORD, May 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 932.0 ft (284.07 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.
- Reservoir is formed by earthfill dam completed Dec. 24, 1936. Usable capacity 102,000 acre-ft (126 hm³) between elevations 932.0 ft (284.07 m) (lowest outlet), and 963.0 ft (293.52 m) (crest of spillway). Dead storage below elevation 932.0 ft (284.07 m), 18 acre-ft (22,200 m³). Figures given herein represent usable contents. Reservoir is used for flood control only. There are no gates on spillway and all regulation is done by gates in conduits through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- EXTREMES FOR PERIOD OF RECORD: Maximum contents, 96,330 acre-ft (919 hm³) July 7, 1969, elevation, 962.35 ft (293.324 m); minimum, 9.9 acre-ft (12,200 m³) several days in 1941, 1944, 1945; minimum elevation, 932.38 ft (284.189 m) several days in August, September, October, 1941.
- EXTREMES FOR CURRENT YEAR: Maximum contents, 51,010 acre-ft (62.9 hm³) Mar. 7, elevation, 956.23 ft (291.459 m); minimum, 32 acre-ft (39,500 m³) Oct. 3, 11, 12, elevation, 933.15 ft (284.424 m).
- 03136300 NORTH BRANCH KOKOSING RIVER LAKE NEAR FREDERICKTOWN.--Lat 40°30'24", long 82°34'36", in SW 1/4 sec. 19, T.8 N., R.14 W., Knox County, Hydrologic Unit 05040003, at dam on North Branch Kokosing River, 2.5 mi (4.0 km) northwest of Fredericktown, and 3.0 mi (4.8 km) upstream from East Branch Kokosing River. DRAINAGE AREA, 44.5 mi² (115 km²). PERIOD OF RECORD, July 1973 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. (levels by Corps of Engineers).
- Lake is formed by earthfill dam, with uncontrolled saddle spillway; storage began June 1972. Usable capacity, 940 acre-ft (1.16 hm³) between elevation, 1,108.0 ft (337.72 m) (invert of lowest outlet), and 1,121.0 ft (341.68 m) (uncontrolled entrance to outlet works). Dead storage below elevation, 1,108.0 ft (337.72 m), 103 acre-ft (127,000 m³). Additional flood retention capacity 13,840 acre-ft (17.1 hm³) between 1,121.0 ft (341.68 m) and 1,146.0 ft (349.30 m) (crest of spillway). Figures given herein represent usable contents. Reservoir is used for flood control, recreation, and conservation. Lowest outlet is normally closed to maintain a pool elevation of 1,121.0 ft (341.68 m). Capacity table furnished by Corps of Engineers.
- EXTREMES FOR PERIOD OF RECORD: Maximum contents, 5,620 acre-ft (6.93 hm³) Feb. 24, 1975; elevation, 1,134.98 ft (345.942 m); minimum, 761 acre-ft (0.94 hm³) Mar. 28, 1978, elevation, 1,119.72 ft (341.291 m).
- EXTREMES FOR CURRENT YEAR: Maximum contents, 5,370 acre-ft (6.62 hm³) Sept. 14, elevation, 1,134.52 ft (345.802 m); minimum, 830 acre-ft (1.02 hm³) June 27, elevation, 1,120.23 ft (341.446 m).
- 03138000 MOHAWK RESERVOIR NEAR NELLIE.--Lat 40°21'12", long 82°05'12", in SW 1/4 sec. 6, T.6 N., R.8 W., Coshocton County, Hydrologic Unit 05040003, in gate house of dam on Walhonding River, 1.5 mi (2.4 km) northwest of Nellie. DRAINAGE AREA, 1,504 mi² (3,895 km²). PERIOD OF RECORD, April 1938 to current year. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 799.2 ft (243.60 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.
- Reservoir is formed by earthfill dam completed Sept. 22, 1937. Usable capacity 284,900 acre-ft (351 hm³) between elevations 799.2 ft (243.60 m) (lowest outlet), and 890.0 ft (271.27 m) (crest of spillway). Dead storage below elevation 799.2 ft (243.60 m), 59 acre-ft (72,700 m³). Figures given herein represent usable contents. Reservoir is used for flood control only. There are no gates on spillway and all regulation is done by gates in tunnels through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- EXTREMES FOR PERIOD OF RECORD: Maximum contents, 176,000 acre-ft (217 hm³) Jan. 25, 1959, elevation, 873.94 ft (266.377 m); minimum, 44 acre-ft (54,300 m³) Sept. 21, Oct. 4, 1955; minimum elevation, 800.35 ft (243.947 m) Oct. 4, 1955, from graph based on gage readings.
- EXTREMES FOR CURRENT YEAR: Maximum contents, 120,240 acre-ft (148 hm³) Mar. 6, elevation, 863.43 ft (263.173 m); minimum, 75 acre-ft (92,500 m³) Oct. 10, 11, 12, elevation, 801.04 ft (244.157 m).
- 03141000 SENECAVILLE LAKE NEAR SENECAVILLE.--Lat 39°55'31", long 81°26'06", Guernsey County, Hydrologic Unit 05040005, in gate house of dam on Seneca Fork, 1.5 mi (2.4 km) southeast of Senecaville. DRAINAGE AREA, 118 mi² (306 km²). PERIOD OF RECORD, June 1938 to current year. Prior to October 1971 published as Senecaville Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 812.05 ft (247.513 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations above mean sea level. Prior to Sept. 21, 1938, nonrecording gage at same site and datum.
- Lake is formed by earthfill dam completed May 14, 1937. Usable capacity 86,340 acre-ft (106 hm³) between elevations 812.05 ft (247.513 m) (lowest outlet), and 842.5 ft (256.79 m) (top of taintor gates), of which 41,300 acre-ft (50.9 hm³) is in conservation pool. Usable capacity at elevation 831.0 ft (253.29 m) (crest of spillway), 37,180 acre-ft (45.8 hm³). Dead storage below elevation 812.05 ft (247.513 m), 1,950 acre-ft (2.40 hm³). Figures given herein represent usable contents. Taintor gates normally remain closed to maintain conservation pool at elevation 832.2 ft (253.65 m) and outflow is controlled by gates in conduits through dam. Lake is used for flood control and conservation. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.
- EXTREMES FOR PERIOD OF RECORD: Maximum contents, 61,430 acre-ft (75.7 hm³) Mar. 24, 1945, elevation, 837.27 ft (255.200 m); minimum, 360 acre-ft (444,000 m³) Oct. 22, 23, 1939, elevation, 812.53 ft (247.659 m).
- EXTREMES FOR CURRENT YEAR: Maximum contents, 58,560 acre-ft (72.2 hm³) Mar. 7 elevation, 836.60 ft (254.996 m); minimum, 28,370 acre-ft (35.0 hm³) Feb. 20, 21, elevation, 828.16 ft (252.423 m).
- REVISIONS.--The change in contents for Sept. 30, 1978 is revised to -930 acre ft, 1978 water year total is revised to -640 acre ft superceding figures published in reports to 1978.

MUSKINGUM RIVER BASIN

RESERVOIRS IN MUSKINGUM RIVER BASIN, OH--Continued

03142290 SALT FORK LAKE NEAR CAMBRIDGE.--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 (1.3 km) upstream from mouth, 5.0 mi (8.0 km) north of Cambridge, and 3.5 mi (5.6 km) south of Kimbolton. DRAINAGE AREA, 159 mi² (412 km²). PERIOD OF RECORD, September 1968 to current year. GAGE, water-stage recorder. Datum of gage is 700.00 ft (213.360 m) National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD.

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 (51.7 hm³) between elevations 772.5 ft (235.46 m) (invert of lowest outlet), and 800.0 ft (243.84 m) (crest of morning-glory spillway). Dead storage below elevation 772.5 ft (235.46 m), 1,250 acre-ft (1.54 hm³). Additional flood-retention capacity, 28,600 acre-ft (35.3 hm³) between elevations 800.0 ft (243.84 m) and 808.0 ft (246.28 m) (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. Capacity curve furnished by State Department of Natural Resources.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 65,080 acre-ft (80.2 hm³) Feb. 27, 1979, elevation, 806.65 ft (245.867 m); minimum, 12,200 acre-ft (15.0 hm³) Oct. 17, 1968, elevation, 786.53 ft (239.734 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 65,080 acre-ft (80.2 hm³) Feb. 27, elevation, 806.65 ft (245.867 m); minimum, 42,350 acre-ft (52.2 hm³) Oct. 8, 11, elevation, 800.13 ft (243.880 m).

03143000 WILLS CREEK LAKE NEAR WILLS CREEK.--Lat 40°09'25", long 81°51'00", in SE 1/4 sec. 23, T.4 N., R.6 W., Coshocton County, Hydrologic Unit 05040005, in gate house of dam on Wills Creek, 1.3 mi (2.1 km) south of village of Wills Creek, and 4.0 mi (6.4 km) southwest of Conesville. DRAINAGE AREA, 842 mi² (2,181 km²). PERIOD OF RECORD, April 1938 to current year. Prior to October 1971 published as Wills Creek Reservoir. Month-end contents prior to September 1939 published in WSP 1305. GAGE, water-stage recorder. Datum of gage is 733.0 ft (223.42 m) National Geodetic Vertical Datum of 1912; gage readings have been reduced to elevations NGVD.

Lake is formed by earthfill dam completed Oct. 13, 1937. Usable capacity, 194,400 acre-ft (240 hm³) between elevations 733.0 ft (223.42 m) (lowest outlet), and 779.0 ft (237.44 m) (crest of spillway), of which 4,420 acre-ft (5.45 hm³) is in conservation pool. Dead storage below elevation 733.0 ft (223.42 m), 1,580 acre-ft (1.95 hm³). Figures given herein represent usable contents. Lake is used for flood control and conservation. There are no gates on spillway and all regulation is done by gates in conduits through dam. Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 169,700 acre-ft (209 hm³) Mar. 15, 1964, elevation, 776.73 ft (236.747 m); minimum, 300 acre-ft (370,000 m³) Oct. 22, 23, 1939, elevation, 734.10 ft (223.754 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 122,220 acre-ft (151 hm³) Mar. 5, elevation, 771.58 ft (235.178 m); minimum, 4,060 acre-ft (5.01 hm³) Oct. 1, elevation, 741.57 ft (226.031 m).

03147300 DILLON LAKE NEAR DILLON FALLS.--Lat 39°59'32", long 82°04'57", in T.1 N., R.8 W., muskingum County, Hydrologic Unit 05040006, in outlet works of control tower at dam on Licking River, 2 mi (3 km) northwest of Dillon Falls, and 5.8 mi (9.3 km) upstream from mouth at Zanesville. DRAINAGE AREA, 742 mi² (1,922 km²). PERIOD OF RECORD, January 1961 to current year. Prior to October 1971 published as Dillon Reservoir. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Lake formed by earth dam with concrete spillway; closure of dam made July 29, 1959; storage to maintain conservation pool began Dec. 17, 1960. Usable capacity 274,000 acre-ft (338 hm³) between elevations 704.0 ft (214.58 m) (lowest outlet), and 790.0 ft (240.79 m) (crest of spillway), of which 13,170 acre-ft (16.2 hm³) is in conservation pool. Dead storage below elevation 704.0 ft (214.58 m), 30 acre-ft (37,000 m³). Figures given herein represent usable contents. Lake is used primarily for flood control. There are no gates on spillway and all regulation is done by gates in conduits through abutment of dam. Capacity curve furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 142,600 acre-ft (176 hm³) Mar. 13, 1964, elevation, 772.88 ft (235.574 m); minimum observed, 208 acre-ft (256,000 m³) Mar. 31, 1961, elevation, 710.94 ft (216.694 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 127,000 acre-ft (157 hm³) Mar. 5, elevation, 769.89 ft (234.662 m); minimum, 12,900 acre-ft (15.9 hm³) Jan. 20; elevation, 733.85 ft (223.677 m).

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acra- feet)	Change in contents (acre-feet)
	03119500	BOLIVAR RESERVOIR			03120000	LEESVILLE LAKE		03121000	ATWOOD LAKE
Sept. 30.....	897.59	153	--	962.57	18740	--	927.75	23220	---
Oct. 31.....	898.53	242	+89	962.77	18940	+200	927.84	23350	+130
Nov. 30.....	898.82	272	+30	961.69	17880	-1060	927.84	23350	0
Dec. 31.....	906.03	1880	+1608	957.82	14370	-3510	922.86	16420	-6930
CAL YR 1978	--	--	+1397	--	--	+40	--	--	+460
Jan. 31.....	900.61	516	-1364	957.05	13710	-660	922.56	16060	-360
Feb. 28.....	935.97	39920	+39404	963.76	19930	+6220	929.39	25820	+9760
Mar. 31.....	900.37	478	-39442	962.59	18760	-1170	928.32	24100	-1720
Apr. 30.....	900.30	467	-11	963.00	19170	+410	928.25	23990	-110
May 31.....	920.40	12330	+11863	963.80	19970	+800	928.64	24620	+630
June 30.....	898.54	243	-12087	962.78	18950	-1020	927.85	23370	-1250
July 31.....	897.82	171	-72	962.65	18820	-130	927.73	23190	-180
Aug. 31.....	898.78	268	+97	962.81	18980	+160	928.20	23910	+720
Sept. 30.....	907.65	2540	+2272	963.25	19420	+440	928.44	24300	+390
WTR YR 1979	--	--	+2387	--	--	+680	--	--	+1080

MUSKINGUM RIVER BASIN

119

RESERVOIRS IN MUSKINGUM RIVER BASIN, OH--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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)
03122000 DOVER LAKE				03123500 BEACH CITY LAKE			03125500 PIEDMONT LAKE		
Sept. 30.....	865.11	0.6	--	948.56	1960	--	912.52	32440	--
Oct. 31.....	865.96	4.8	+4.2	948.78	2060	+100	912.84	33150	+710
Nov. 30.....	866.82	23	+18.2	949.00	2160	+100	910.71	28480	-4670
Dec. 31.....	868.57	91	+68	949.74	2560	+400	909.27	25570	-2910
CAL YR 1978	--	--	+17	--	--	+230	--	--	+400
Jan. 31.....	868.16	72	-19	949.28	2310	-250	909.46	25950	+380
Feb. 28.....	894.95	48160	+48088	968.73	34680	+32370	914.84	37780	+11830
Mar. 31.....	869.56	150	-48010	949.84	2610	-32070	912.23	31790	-5990
Apr. 30.....	868.91	106	-44	949.60	2480	-130	913.05	33620	+1830
May 31.....	872.88	664	+558	949.83	2610	+130	915.29	38880	+5260
June 30.....	867.90	61	-603	949.10	2210	-400	913.03	33570	-5310
July 31.....	865.27	1.4	-59.6	948.61	1980	-230	912.89	33260	-310
Aug. 31.....	867.94	63	+61.6	950.37	2930	+950	913.72	35160	+1900
Sept. 30.....	870.57	248	+185	955.74	7570	+4640	913.44	34520	-640
WTR YR 1979	--	--	+247.4	--	--	+5610	--	--	+2080
03126500 CLENDENING LAKE				03128000 TAPPAN LAKE			03129500 CHARLES MILL LAKE		
Sept. 30.....	897.70	25960	--	899.02	34400	--	996.96	7040	--
Oct. 31.....	897.96	26400	+440	899.24	34930	+530	997.14	7290	+250
Nov. 30.....	896.74	24330	-2070	895.60	26910	-8020	995.99	5770	-1520
Dec. 31.....	894.06	19970	-4360	894.05	23750	-3160	995.17	4780	-990
CAL YR 1978	--	--	+1450	--	--	+910	--	--	-4600
Jan. 31.....	893.11	18630	-1340	893.88	23430	-320	994.76	4320	-460
Feb. 28.....	899.28	28900	+10270	898.99	34330	+10900	1003.93	19820	+15500
Mar. 31.....	897.27	25230	-3670	898.11	32310	-2020	997.69	8060	-11760
Apr. 30.....	898.10	26660	+1430	899.41	35340	+3030	997.25	7440	-620
May 31.....	900.80	31790	+5130	901.22	39730	+4390	998.37	9040	+1600
June 30.....	897.84	26200	-5590	899.08	34550	-5180	997.55	7860	-1180
July 31.....	897.82	26170	-30	899.01	34380	-170	997.26	7450	-410
Aug. 31.....	899.22	28790	+2620	899.47	35480	+1100	997.63	7970	+520
Sept. 30.....	898.45	27330	-1460	899.55	35670	+190	997.46	7730	-240
WTR YR 1979	--	--	+1370	--	--	+1270	--	--	+690
03133000 PLEASANT HILL LAKE				03134500 MOHICANVILLE RESERVOIR			03136300 KOKOSING RIVER LAKE		
Sept. 30.....	1019.28	12920	--	933.41	42	--	1121.12	960	--
Oct. 31.....	1019.43	13040	+120	933.45	44	+2	1121.33	994	+34
Nov. 30.....	1019.53	13130	+90	933.51	46	+2	1121.41	1010	+16
Dec. 31.....	1012.96	8320	-4810	935.14	130	+84	1123.01	1300	+290
CAL YR 1978	--	--	-1320	--	--	-7310	--	--	+340
Jan. 31.....	1012.58	8090	-230	934.28	80	-50	1121.74	1060	-240
Feb. 28.....	1025.12	18260	+10170	951.05	24200	+24120	1122.64	1230	+170
Mar. 31.....	1020.20	13690	-4570	947.23	10950	-13250	1122.06	1120	-110
Apr. 30.....	1020.07	13580	-110	934.13	72	-10878	1121.72	1060	-60
May 31.....	1020.02	13530	-50	936.90	257	+185	1121.62	1040	-20
June 30.....	1019.76	13320	-210	940.08	657	+400	1121.34	1000	-40
July 31.....	1019.44	13050	-270	933.33	39	-618	1121.31	991	-9
Aug. 31.....	1020.49	13950	+900	934.43	89	+50	1121.86	1080	+89
Sept. 30.....	1020.37	13850	-100	944.33	4510	+4421	1122.04	1110	+30
WTR YR 1979	--	--	+930	--	--	+4468	--	--	+150
03138000 MOHAWK RESERVOIR				03141000 SENECAVILLE LAKE			03142290 SALT FORK RESERVOIR		
Sept. 30.....	801.30	90	--	832.03	40690	--	800.18	42510	--
Oct. 31.....	801.53	103	+13	832.43	42120	+1430	800.73	44210	+1700
Nov. 30.....	802.60	170	+67	830.14	34360	-7760	800.75	44280	+70
Dec. 31.....	804.10	288	+118	829.36	31920	-2440	801.39	46300	+2020
CAL YR 1978	--	--	-1012	--	--	+3460	--	--	+1220
Jan. 31.....	803.98	277	-11	829.34	31860	-60	801.95	48090	+1790
Feb. 28.....	853.03	75000	+74723	835.44	53750	+21890	806.52	64580	+16490
Mar. 31.....	808.00	734	-74266	832.43	42120	-11630	801.47	46550	-18030
Apr. 30.....	805.12	386	-348	832.23	41410	-710	801.24	45820	-730
May 31.....	806.92	589	+203	833.82	47280	+5870	802.57	50190	+4370
June 30.....	810.47	1150	+561	832.28	41590	-5690	800.95	44900	-5290
July 31.....	802.83	185	-965	833.50	46060	+4470	800.82	44490	-410
Aug. 31.....	808.94	876	+691	835.49	53960	+7900	802.61	50320	+5830
Sept. 30.....	845.87	50420	+49544	833.03	44280	-9680	802.20	48930	-1390
WTR YR 1979	--	---	+50330	--	--	+3590	--	--	+6420

MUSKINGUM RIVER BASIN

RESERVOIRS IN MUSKINGUM RIVER BASIN, OH--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)
	03143000	WILLS CREEK LAKE		03147300	DILLON LAKE	
Sept. 30.....	741.56	4050	--	737.22	17800	--
Oct. 31.....	742.97	5370	+1320	737.09	17600	-200
Nov. 30.....	744.18	6800	+1430	735.43	15100	-2500
Dec. 31.....	744.70	7490	+690	734.79	14200	-900
CAL YR 1978	--	--	+1960	--	--	-3600
Jan. 31.....	745.23	8240	+750	734.07	13200	-1000
Feb. 28.....	767.10	89390	+81150	766.32	110000	+96800
Mar. 31.....	744.18	6800	-82590	735.59	15300	-94700
Apr. 30.....	743.68	6190	-610	737.15	17700	+2400
May 31.....	745.66	8900	+2710	737.24	17800	+100
June 30.....	742.85	5250	-3650	737.81	18800	+1000
July 31.....	746.87	10810	+5560	748.91	43900	+25100
Aug. 31.....	746.32	9930	880	748.36	42200	-1700
Sept. 30.....	746.30	9900	-30	751.82	53200	+11000
WTR YR 1979	--	--	+5850	--	--	+35400

LOCATION.--Lat 39°41'57", long 82°37'18", in NE 1/4 sec. 11, T.14N., R.19W., Fairfield County, Hydrologic Unit 05030204, on right bank at downstream side of bridge on U.S. Highway 22, 1.0 mi (1.6 km) southwest of Lancaster, and 1.5 mi (2.4 km) upstream from mouth.

REMARKS.--Records fair except those for winter periods and no gage height record, May 30 to Aug. 23, which are poor. Flood peaks affected by temporary retention in four retarding basins upstream from station, combined capacity, 2,820 acre-ft (3.48 km³). Controlled drainage area is 8.49 mi² (22.0 km²). Water-quality data collected at this site 1965 to 1977.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,820 ft³/s (51.5 m³/s) May 27, 1968, gage height, 8.00 ft (2.438 m), from rating curve extended above 600 ft³/s (17.0 m³/s) on basis of slope-area measurement at gage height, 7.09 ft (2.161 m) and 6.53 ft (1.990 m); minimum daily, 0.08 ft³/s (0.002 m³/s) July 8, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 21 or 22, 1948 reached a stage of 15.4 ft (4.69 m), discharge, 11,200 ft³/s (317 m³/s), on basis of contracted-opening measurement of peak flow at Pennsylvania Railroad bridge, 0.8 mi (1.3 km) upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,300 ft³/s (36.8 m³/s) Sept. 14, gage height 7.33 ft (2.234 m); minimum daily, 1.7 ft³/s (0.048 m³/s) Oct. 10.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	4.1	5.6	186	10	46	13	8.5	20	8.5	12	17
2	2.3	3.9	5.3	54	10	39	57	8.5	12	7.0	10	15
3	2.2	3.9	28	27	10	31	24	18	10	5.5	9.0	15
4	3.3	3.7	53	22	10	27	37	18	8.5	6.0	7.2	14
5	2.3	3.7	16	17	10	20	28	18	8.0	5.0	6.6	11
6	2.2	3.7	11	13	10	16	18	13	25	4.5	32	11
7	2.0	3.9	8.9	11	10	15	14	11	14	4.0	100	10
8	1.9	3.7	221	10	10	14	14	11	110	4.0	25	10
9	1.9	3.5	172	10	10	13	39	10	45	5.0	12	9.5
10	1.7	3.3	31	10	10	12	24	9.9	20	18	9.5	9.2
11	2.2	3.3	20	10	9.0	11	18	9.2	15	12	85	9.2
12	6.4	3.3	18	10	9.0	10	16	9.9	13	8.2	45	8.9
13	27	3.3	17	10	9.0	10	20	9.2	11	5.4	25	19
14	18	3.3	15	36	9.0	10	48	7.6	9.5	4.5	11	397
15	11	3.5	13	19	9.0	9.2	23	7.0	8.0	4.2	9.0	39
16	8.2	3.9	12	19	9.0	8.9	18	6.4	7.5	3.8	7.8	19
17	6.7	8.9	12	30	9.0	8.5	15	6.1	7.0	3.7	7.2	13
18	5.3	9.9	11	26	9.0	8.9	13	6.1	6.5	3.6	7.4	11
19	6.1	6.4	10	19	9.0	8.5	13	5.9	6.0	3.5	13	9.9
20	5.1	5.3	21	33	9.0	8.2	12	5.6	19	3.4	30	8.2
21	4.6	4.8	35	53	13	8.2	11	5.6	10	3.4	69	19
22	4.1	4.6	16	27	53	7.9	11	5.1	7.0	3.4	23	24
23	4.3	5.1	13	22	338	7.9	10	5.9	6.5	3.5	27	17
24	5.3	4.8	12	67	141	12	10	11	6.0	4.3	46	13
25	4.8	4.1	12	33	289	10	9.9	10	5.5	17	34	11
26	12	4.1	10	20	112	8.5	11	15	5.0	37	131	8.9
27	10	11	8.9	15	36	7.9	11	25	4.5	12	195	7.3
28	6.7	9.5	9.2	15	34	7.6	9.9	17	4.0	45	40	160
29	5.3	7.3	9.5	13	---	7.6	9.5	12	4.0	105	38	39
30	4.8	6.4	13	12	---	7.3	9.2	9.0	10	24	25	20
31	4.6	---	75	12	---	7.9	---	13	---	14	20	---
TOTAL	186.2	150.2	914.4	861	1206.0	419.0	566.5	327.5	437.5	388.4	1111.7	975.1
MEAN	6.01	5.01	29.5	27.8	43.1	13.5	18.9	10.6	14.6	12.5	35.9	32.5
MAX	27	11	221	186	338	46	57	25	110	105	195	397
MIN	1.7	3.3	5.3	10	9.0	7.3	9.2	5.1	4.0	3.4	6.6	7.3
CAL YR 1978	TOTAL	5214.3	MEAN	14.3	MAX	363	MIN	1.4				
WTR YR 1979	TOTAL	7543.5	MEAN	20.7	MAX	397	MIN	1.7				

HOCKING RIVER BASIN

03157000 CLEAR CREEK NEAR ROCKBRIDGE, OH

LOCATION.--Lat 39°35'18", long 82°34'43", in NE 1/4 sec. 20, T.13 N., R.18 W., Hocking County, Hydrologic Unit 05030204, on left bank at upstream side of county road bridge, 400 ft (122 m) downstream from unnamed right bank tributary, 2.0 mi (3.2 km) upstream from mouth, and 3 mi (5 km) west of Rockbridge.

DRAINAGE AREA.--89.0 mi² (231 km²).

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 (231.688 m) National Geodetic Vertical Datum of 1912. Prior to May 2, 1940, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--40 years, 88.6 ft³/s (2.509 m³/s), 13.52 in/yr (343 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft³/s (453 m³/s) July 22, 1948, gage height, 17.68 ft (5.389 m) (from high-water mark in well), from rating curve extended above 4,300 ft³/s (122 m³/s) on basis of slope-area measurement of peak flow; minimum, 3.0 ft³/s (0.085 m³/s) Dec. 29, 1947, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,900 ft³/s (42.5 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s)	(m ³ /s)	Gage height (ft)	(m)	Date	Time	Discharge (ft ³ /s)	(m ³ /s)	Gage height (ft)	(m)
Dec. 9	0400	1940	54.9	7.96	2.426	Aug. 27	0145	1970	55.8	8.01	2.441
Feb. 22	2245	2060	58.3	8.22	2.505	Sept. 14	1115	2520	71.4	9.17	2.795
Feb. 23	2030	2290	64.9	8.73	2.661	Sept. 28	1445	2120	60.0	8.36	2.548
Feb. 25	1800	*3250	90.4	*10.19	3.106						

Minimum discharge, 20 ft³/s (0.57 m³/s) Oct. 2, 3, 6-11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	36	47	1090	78	438	180	64	184	77	110	107
2	21	34	43	690	74	417	520	61	108	55	99	94
3	20	32	170	310	70	351	220	152	90	45	75	88
4	26	31	640	250	70	315	330	191	78	54	63	78
5	22	31	266	200	68	232	240	212	69	44	58	73
6	21	30	150	170	66	189	197	143	238	39	56	70
7	20	29	110	140	66	170	144	116	117	37	1500	65
8	20	30	805	110	64	155	134	105	980	36	330	61
9	20	29	1450	100	64	120	377	96	320	40	110	58
10	20	28	416	90	62	100	292	88	197	88	81	56
11	20	27	218	85	62	94	193	82	145	147	791	55
12	31	27	159	85	60	88	166	86	106	69	506	53
13	132	27	143	100	60	84	162	87	82	53	190	58
14	113	27	115	130	60	82	486	73	79	47	115	1420
15	86	28	99	110	60	80	244	66	71	42	89	624
16	61	34	90	96	58	78	177	58	66	37	73	216
17	60	51	88	130	58	76	148	54	62	33	62	137
18	49	107	79	160	58	74	124	51	58	32	64	110
19	46	63	75	101	58	72	112	53	55	31	119	97
20	43	49	78	187	60	72	107	51	54	31	79	86
21	37	43	254	416	130	70	100	48	173	30	598	152
22	33	39	120	199	719	70	96	45	73	30	206	229
23	32	40	95	142	1480	70	90	53	58	30	214	154
24	34	41	87	424	1280	80	86	108	52	39	261	111
25	32	36	86	290	1860	110	84	90	49	128	229	96
26	65	34	74	174	1330	90	84	148	44	158	667	85
27	112	65	64	130	505	78	90	266	42	98	1280	78
28	68	81	59	110	397	72	80	210	40	311	426	994
29	51	62	62	100	---	68	74	121	39	948	286	620
30	43	54	67	90	---	66	59	92	98	246	177	265
31	38	77	279	85	---	64	---	109	---	157	130	---
TOTAL	1405	1245	6488	6494	8977	4125	5386	3179	3827	3212	9044	6390
MEAN	45.3	41.5	209	209	321	133	180	103	128	104	292	213
MAX	132	107	1450	1090	1860	438	520	266	980	948	1500	1420
MIN	20	27	43	85	58	64	59	45	39	30	56	53
CFSM	.51	.47	2.35	2.35	3.61	1.49	2.02	1.16	1.44	1.17	3.28	2.39
IN.	.59	.52	2.71	2.71	3.75	1.72	2.25	1.33	1.60	1.34	3.78	2.67

CAL YR 1978 TOTAL 42905 MEAN 118 MAX 2200 MIN 18 CFSM 1.33 IN 17.93
WTR YR 1979 TOTAL 59772 MEAN 164 MAX 1860 MIN 20 CFSM 1.84 IN 24.98

03157500 HOCKING RIVER AT ENTERPRISE, OH

LOCATION.--Lat 39°33'54", long 82°28'29", in NW 1/4 sec. 5, T.14 N., R.17 W., Hocking County, Hydrologic Unit 05030204, at right bank at upstream side of abandoned bridge at Enterprise, 4.0 mi (6.4 km) downstream from Buck Run, and 4.3 mi (6.9 km) upstream from Scott Creek.

DRAINAGE AREA.--459 mi² (1,189 km²).

WATER-DISCHARGE RECORDS

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

REMARKS.--Records poor Oct. 1 to Feb. 28, good thereafter. Flood flow affected by temporary retention in eight retarding basins, combined capacity, 8,710 acre-ft (10.7 hm³) constructed between 1955 and 1961 upstream from station. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--49 years, 455 ft³/s (12.89 m³/s), 13.46 in/yr (342 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,000 ft³/s (736 m³/s) Mar. 10, 1964, gage height, 21.31 ft (6.495 m), from rating curve extended above 17,000 ft³/s (481 m³/s) on basis of contracted-opening and slope-area measurement of peak flow; minimum daily, 23 ft³/s (0.65 m³/s) Aug. 12, 13, 1944.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1907, reached a stage of 22.0 ft (6.71 m), from floodmark, discharge, 36,000 ft³/s (1,020 m³/s), from reports of Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,500 ft³/s (99.1 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 9	---	6000 170	---	Aug. 27	1200	4280 121	10.24 3.121
Jan. 2	---	5000 142	---	Sept. 15	0130	5170 146	11.50 3.505
Feb. 25	---	*15000 425	---	Sept. 28	2300	4230 120	10.16 3.097
Aug. 11	2030	3600 102	9.12 2.780				

Minimum daily discharge, 79 ft³/s (2.24 m³/s) Oct. 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	131	190	380	2000	350	2630	456	306	827	416	744	859
2	107	170	320	4000	320	2450	2030	284	852	296	515	682
3	82	150	450	3350	300	2220	2150	452	626	237	396	556
4	113	140	2500	1870	280	1990	1690	814	506	221	310	479
5	105	130	2600	1310	270	1570	1850	933	416	209	266	401
6	96	120	1700	733	260	1160	1230	693	565	185	948	366
7	89	120	1100	666	250	947	867	554	460	168	549	333
8	83	120	1800	591	240	820	767	469	2060	156	393	297
9	79	110	5180	455	230	712	1450	406	1500	180	415	273
10	79	100	4870	484	230	654	1820	382	829	352	333	255
11	82	100	2530	414	220	589	1230	472	862	527	2390	241
12	150	95	1270	403	220	528	1010	472	583	331	2650	230
13	340	95	970	414	210	497	891	797	448	241	1860	240
14	760	95	779	480	210	493	2170	521	374	220	870	3370
15	540	120	641	900	200	453	1820	415	326	194	583	4500
16	370	210	561	900	200	407	1190	348	288	175	439	3260
17	270	370	531	660	200	401	893	303	263	167	363	1450
18	180	620	473	560	200	400	737	276	242	148	377	824
19	130	660	441	900	200	409	639	257	226	136	506	642
20	120	430	434	1700	220	387	570	247	208	129	438	507
21	110	300	1310	2700	560	368	520	234	549	123	1940	589
22	110	230	954	2000	1500	344	479	218	1320	120	1710	1340
23	110	200	659	1900	4700	341	447	231	1000	123	1490	1060
24	110	190	565	1900	7600	439	426	454	493	179	1290	723
25	100	180	557	2100	11500	544	405	556	358	472	1580	583
26	300	180	491	1600	10500	423	406	874	283	581	1610	499
27	740	320	421	1200	8000	372	461	1240	241	403	4160	442
28	800	700	338	920	4000	346	408	1470	220	1100	2610	2510
29	520	740	341	680	---	344	356	840	210	2820	2360	2960
30	310	540	367	540	---	337	329	586	356	1520	2090	2150
31	230	---	760	410	---	348	---	509	---	794	1340	---
TOTAL	7346	7725	36293	38740	53170	23923	29697	16613	17491	12923	37525	32621
MEAN	237	258	1171	1250	1899	772	990	536	583	417	1210	1087
MAX	800	740	5180	4000	11500	2630	2170	1470	2060	2820	4160	4500
MIN	79	95	320	403	200	337	329	218	208	120	266	230
CFSM	.52	.56	2.55	2.72	4.14	1.68	2.16	1.17	1.27	.91	2.64	2.37
IN.	.60	.63	2.94	3.14	4.31	1.94	2.41	1.35	1.42	1.05	3.04	2.64

CAL YR 1978 TOTAL 216871 MEAN 594 MAX 7580 MIN 70 CFSM 1.29 IN 17.58
WTR YR 1979 TOTAL 314067 MEAN 860 MAX 11500 MIN 79 CFSM 1.87 IN 25.45

HOCKING RIVER BASIN

03158500 BURR OAK RESERVOIR AT BURR OAK, OH

LOCATION.--Lat 39°32'30", long 82°03'27", near center of sec. 6, T.11 N., R.14 W., Athens County, Hydrologic Unit 05030204, in control house of Tom Jenkins Dam on East Branch Sunday Creek, 0.2 mi (0.3 km) upstream from mouth, 0.4 (0.6 km) southeast of Burr Oak, and 3.0 mi (4.8 km) northeast of Gloucester.

DRAINAGE AREA.--33.1 mi² (85.7 km²).

PERIOD OF RECORD.--February 1952 to current year. Published as Tom Jenkins Reservoir at Burr Oak October 1952 to September 1962.

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

REMARKS.--Reservoir is formed by earth dam with emergency spillway; storage began Feb. 2, 1952. Capacity at spillway level, elevation, 740 ft (226 m), 26,900 acre-ft (33.2 hm³), of which 9,220 acre-ft (11.4 hm³) is in water supply pool. Dead storage, 35 acre-ft (43,200 m³). Figures given herein represent usable contents. Reservoir is used for flood control, although water supply pool is operated for increased low flow for recreation and conservation of fish and wildlife. Outflow is controlled by operation of gates in conduit through dam.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 17,820 acre-ft (22.0 hm³) May 31, 1968, elevation, 731.53 ft (222.970 m); minimum, 3,450 acre-ft (4.25 hm³) Nov. 20, 1953, elevation, 709.89 ft (216.374 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 15,800 acre-ft (19.5 hm³) Feb. 28, elevation, 729.34 ft (222.303 m); minimum, 9,160 acre-ft (11.3 hm³) Oct. 29, elevation, 720.90 ft (219.730 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	720.97	9210	---
Oct. 31.....	720.96	9200	-10
Nov. 30.....	721.05	9260	+60
Dec. 31.....	721.80	9770	+510
CAL YR 1978.....			+560
Jan. 31.....	721.11	9300	-470
Feb. 28.....	728.78	15300	+6000
Mar. 31.....	721.21	9370	-5930
Apr. 30.....	721.22	9370	0
May 31.....	721.13	9310	-60
June 30.....	721.43	9520	+210
July 31.....	721.57	9610	+90
Aug. 31.....	721.09	9290	-320
Sept. 30.....	721.78	9760	+470
WTR YR 1979.....	---	---	+550

HOCKING RIVER BASIN

125

03159510 HOCKING RIVER BELOW ATHENS, OH

LOCATION.--Lat 39°19'39", long 82°00'18", Athens County, Hydrologic Unit 05030204, at downstream side of Harmony Lane Bridge, 3.5 mi (5.6 km) east of Athens, 1.1 mi (1.8 km) downstream from Strouds Run, and 2.8 mi (4.5 km) upstream from Scott Creek.

DRAINAGE AREA.--957 mi² (2,479 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 600.00 ft (182.880 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 17, 1931, nonrecording gage at site 5.3 mi (8.5 km) upstream at datum 11.26 ft (3.432 m) higher, Aug. 18, 1931 to June 18, 1970, at datum 14.81 ft (4.514 m) higher, and Oct. 1, 1971 to Sept. 30, 1976, at datum 11.26 ft (3.432 m) higher.

REMARKS.--Records good except those for winter period, which are fair. Some regulation by Burr Oak Reservoir on East Branch Sunday Creek 34.3 mi (55.2 km) upstream beginning 1952 (see station 03158500); by Hocking Lake, capacity 3,080 acre-ft (3.80 hm³), on Clear Fork 44.7 mi (71.9 km) upstream beginning in 1949; by temporary retention in eight retarding basins, combined capacity, 8,710 acre-ft (10.7 hm³), constructed between 1955 and 1961 upstream from Lancaster, and Dow Lake capacity 1,884 acre-ft (2.3 hm³), on Strouds Run, 1.1 mi (1.8 km) upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,600 ft³/s (725 m³/s) Feb. 27, 1979, gage height, 25.45 ft (7.757 m); minimum daily, 81 ft³/s (2.29 m³/s) Aug. 9, 1977.

EXTREMES OUTSIDE PERIOD RECORD.--Flood of Mar. 11, 1964 reached a stage of 24.18 ft (7.370 m) at site and datum then in use, discharge, 32,900 ft³/s (932 m³/s). Flood in March 1907 reached a stage of 27 ft (8 m), site and datum then in use, discharge 50,000 ft³/s (1,420 m³/s), estimated by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25,600 ft³/s (725 m³/s) Feb. 27, gage height, 25.45 ft (7.757 m); minimum daily, 96 ft³/s (2.72 m³/s) Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	400	793	4890	720	7730	1710	714	1920	797	1710	2120
2	152	354	653	8050	680	6230	3790	659	2040	707	1490	1530
3	138	318	804	8100	640	5640	5870	700	1550	538	970	1260
4	144	290	4990	5150	600	4970	4050	2180	1190	489	704	1050
5	130	271	5950	2920	560	4520	3110	4180	986	435	553	878
6	130	256	3340	2280	550	3600	2710	2820	860	383	659	742
7	122	251	2240	1820	540	2830	1970	1890	1120	323	1320	650
8	113	246	4140	1780	520	2040	1620	1430	1240	290	782	586
9	105	242	9270	1340	500	1710	1850	1110	2880	313	607	521
10	98	220	13300	1180	480	1520	3320	959	1880	386	592	475
11	96	211	8720	1100	470	1380	2940	959	1490	598	1110	441
12	115	202	4950	970	460	1240	2210	1000	1430	735	4500	413
13	410	195	3160	901	450	1130	1830	1280	1010	544	3740	400
14	2350	195	2650	1510	440	1100	2450	1320	797	421	2290	1510
15	1630	223	2000	2160	430	1060	3350	982	662	362	1280	5330
16	1060	400	1430	1500	420	951	2590	808	577	316	916	5690
17	672	466	1240	1400	420	882	1930	675	518	280	707	3810
18	571	1370	1130	1300	420	863	1610	598	469	251	610	1870
19	480	1360	1030	2100	420	863	1390	544	435	225	793	1270
20	461	909	974	4000	420	837	1220	506	400	202	974	1020
21	455	635	1690	5800	450	786	1120	509	653	188	2590	1350
22	313	503	2500	4630	2000	735	1040	461	2740	180	3530	4230
23	273	449	1700	2920	5150	707	978	438	2340	225	2860	4310
24	251	444	1320	2730	8400	994	920	647	1300	285	2880	2440
25	246	433	1320	4500	11800	1620	871	1460	1010	370	3530	1590
26	373	397	1250	3460	21700	1450	841	1810	924	845	3860	1260
27	1850	735	1080	2450	21800	1110	932	2980	613	1180	7980	1070
28	1680	1450	901	1940	9790	928	1030	4520	463	1210	6940	2280
29	1080	1540	782	1660	---	871	878	2810	413	2740	5970	5610
30	659	1090	797	1200	---	833	778	1790	461	3920	4490	5230
31	463	---	1290	950	---	955	---	1250	---	2100	3410	---
TOTAL	16720	16055	87394	86891	91230	62085	61028	43989	34371	21838	74347	50936
MEAN	539	535	2819	2803	3258	2003	2034	1419	1146	704	2398	2031
MAX	2350	1540	13300	8100	21800	7730	5870	4520	2880	3920	7980	5690
MIN	96	195	653	901	420	707	778	438	400	180	553	400
CAL YR 1978	TOTAL	454390	MEAN	1245	MAX	13300	MIN	82				
WTR YR 1979	TOTAL	656884	MEAN	1800	MAX	21800	MIN	96				

HOCKING RIVER BASIN

03159510 HOCKING RIVER BELOW ATHENS, OH--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1966 to current year.

pH: May 1966 to current year.

WATER TEMPERATURES: May 1966 to current year.

DISSOLVED OXYGEN: May 1966 to current year.

SUSPENDED SEDIMENT DISCHARGE: November 1978 to September 1979.

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, 1,500 micromhos July 12, 1966, Oct. 3, 1968, Aug. 6, 1975; minimum, 140 micromhos July 13, 1966, Mar. 5, 1967.

pH: Maximum, 8.9 units Sept. 30, 1977, Oct. 1, 1978; minimum, 3.3 units Aug. 6, 1975.

WATER TEMPERATURES: Maximum, 33.5°C July 18, 19, 21, 1977; minimum, 0.0°C on many days during winter periods.

DISSOLVED OXYGEN: Maximum, 15.0 mg/L or higher Jan. 31, Feb. 1, 16-20, 1973, Dec. 26, 1975, July 20, 1979; minimum, 0.3 mg/L August 12, 14, 1978.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,290 mg/L Feb. 24, 1979; minimum daily mean, 10 mg/L July 17, 1979.

SEDIMENT LOADS: Maximum daily, 52,200 tons (47,400 tonnes) Feb. 24, 1979; minimum daily 6.8 tons (6.2 tonnes) July 22, 1979.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,250 micromhos Oct. 1, 9; minimum, 212 micromhos Dec. 9.

pH: Maximum, 8.5 units July 20; minimum, 6.4 units Mar. 1, 4.

WATER TEMPERATURES: Maximum, 30.5°C July 16; minimum, 0.0°C on many days during winter period.

DISSOLVED OXYGEN: Maximum, 15.0 mg/L July 20; minimum, 5.8 mg/L Aug. 30.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,290 mg/L Feb. 24; minimum daily mean 10 mg/L July 17.

SEDIMENT LOADS: Maximum daily 52,200 tons (47,400 tonnes) Feb. 24; minimum daily 6.8 tons (6.2 tonnes) July 22.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT 12...	1330	107	1000	7.9	14.0	20	9.4	90	24	9600	1500
NOV 07...	1200	252	880	7.6	9.0	15	10.0	86	1	10800	410
DEC 13...	1300	3120	415	7.3	3.5	40	12.3	92	47	1130	1730
JAN 16...	1200	1610	480	7.3	.0	23	13.7	94	6	670	330
FEB 13...	1300	559	695	7.1	.5	25	12.8	89	63	270	120
MAR 13...	1200	1120	672	6.8	6.5	5.0	11.1	90	11	120	K35
APR 10...	1800	3500	402	7.0	8.0	65	11.3	95	32	6000	7600
MAY 02...	1300	665	695	7.1	14.0	25	9.9	95	13	440	260
JUN 05...	1800	947	560	7.1	23.0	20	8.7	100	11	4900	1000
JUL 10...	1300	371	747	7.3	20.0	6.0	8.8	96	41	2400	730
AUG 08...	1900	694	497	7.3	26.0	50	7.5	91	17	1300	880
SEP 05...	0830	905	578	7.4	21.5	25	7.7	86	1	6400	3400

03159510 HOCKING RIVER BELOW ATHENS, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	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)	ALKA- LINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT 12...	340	250	85	31	80	4.0	92	--	250	110	.2
NOV 07...	360	260	96	30	47	3.6	100	--	190	89	.2
DEC 13...	160	99	39	14	15	2.8	56	--	90	30	.1
JAN 16...	210	160	51	20	24	2.3	46	--	110	50	.2
FEB 13...	290	200	70	27	39	2.7	84	--	200	63	.1
MAR 13...	260	210	64	25	26	2.3	57	--	190	46	.1
APR 10...	160	110	39	15	16	2.4	45	--	95	33	.1
MAY 02...	270	200	66	26	29	2.6	74	--	190	51	.2
JUN 05...	230	170	57	22	26	2.6	56	--	140	45	.2
JUL 10...	320	240	77	30	49	3.6	79	--	240	70	.2
AUG 08...	200	120	51	17	25	4.0	73	--	100	43	.2
SEP 05...	250	150	65	22	25	2.9	99	6.1	120	41	.2

DATE	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M
OCT 12...	6.8	646	623	.46	.76	2.2	9.6	.21	--	--	7.56
NOV 07...	8.1	582	524	.23	.37	1.3	5.8	.08	2.7	720	--
DEC 13...	8.0	255	233	.37	.46	1.8	7.8	.09	4.8	--	--
JAN 16...	8.5	310	295	.92	1.1	2.4	11	.05	--	--	--
FEB 13...	11	494	463	.64	.98	2.3	10	.06	4.3	--	--
MAR 13...	10	437	398	.25	.42	1.7	7.6	.07	3.4	350	--
APR 10...	7.8	255	236	1.1	1.2	2.5	11	.20	--	--	--
MAY 02...	7.5	462	417	.13	.19	.93	4.1	.07	2.0	1900	--
JUN 05...	10	370	342	.58	.67	2.7	12	.11	4.0	39	15.5
JUL 10...	9.5	608	527	.28	.35	1.2	5.3	.05	--	640	7.01
AUG 08...	9.8	348	294	.71	.75	1.9	8.2	.14	6.6	--	32.1
SEP 05...	11	409	351	.30	.35	1.3	5.6	.08	3.3	--	--

03159510 HOCKING RIVER BELOW ATHENS, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)
MAY										
22...	1030	459	730	7.2	18.5	101	0	83	10	210
JUN										
05...	1820	943	560	7.3	23.0	94	0	77	7.5	140
JUL										
02...	1300	694	660	7.2	18.0	117	0	96	12	160
AUG										
08...	1915	694	497	7.3	26.0	102	0	84	8.2	100
SEP										
05...	0835	905	578	7.5	21.5	140	0	110	7.1	120

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
MAY									
22...	512	.70	635	2700	2600	60	800	80	720
JUN									
05...	358	.49	912	3000	3000	30	490	110	380
JUL									
02...	475	.65	890	2300	2300	20	570	90	480
AUG									
08...	357	.49	669	3400	3300	70	330	250	80
SEP									
05...	409	.56	999	3100	--	70	370	180	190

03159510 HOCKING RIVER BELOW ATHENS, OH--Continued

ANALYSES OF MINOR ELEMENTS

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)
OCT									
12...	1330	1	0	100	100	5	1	<10	3
JAN									
16...	1200	1	1	0	0	10	2	<10	2
APR									
10...	1800	1	0	0	0	8	6	<10	<10
MAY									
22...	1030	--	--	--	--	--	--	--	--
JUN									
05...	1820	--	--	--	--	--	--	--	--
JUL									
02...	1300	--	--	--	--	--	--	--	--
10...	1300	0	0	100	60	8	8	20	<10
AUG									
08...	1915	--	--	--	--	--	--	--	--
SEP									
05...	0835	--	--	--	--	--	--	--	--

DATE	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
OCT									
12...	4	4	5	5	1300	40	7	4	670
JAN									
16...	9	7	6	6	2800	470	100	15	930
APR									
10...	9	5	14	2	8700	20	85	56	700
MAY									
22...	--	--	--	--	2700	60	--	--	800
JUN									
05...	--	--	--	--	3000	30	--	--	490
JUL									
02...	--	--	--	--	2300	20	--	--	570
10...	3	2	5	2	1200	20	48	48	520
AUG									
08...	--	--	--	--	3400	70	--	--	330
SEP									
05...	--	--	--	--	3100	70	--	--	370

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT									
12...	670	<.5	<.5	2	0	0	0	50	30
JAN									
16...	900	<.5	<.5	0	0	0	0	100	50
APR									
10...	490	<.5	<.5	0	0	0	0	90	10
MAY									
22...	720	--	--	--	--	--	--	--	--
JUN									
05...	380	--	--	--	--	--	--	--	--
JUL									
02...	480	--	--	--	--	--	--	--	--
10...	430	<.5	<.5	0	0	0	0	70	6
AUG									
08...	80	--	--	--	--	--	--	--	--
SEP									
05...	190	--	--	--	--	--	--	--	--

03159510 HOCKING RIVER BELOW ATHENS, OH--Continued

PESTICIDE ANALYSES

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL (UG/L)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL (UG/L)
NOV 07...	1200	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB 13...	1200	ND	--	ND	--	ND	--	ND	--	ND
MAY 02...	1300	ND	--	ND	--	ND	--	ND	--	ND

DATE	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- AZINON, TOTAL (UG/L)	DI- AZINON, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN, TOTAL (UG/L)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
NOV 07...	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB 13...	--	ND	--	ND	--	ND	--	ND	--
MAY 02...	--	ND	--	ND	--	ND	--	ND	--

DATE	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/L)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	MALA- THION, TOTAL (UG/L)	MALA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METHYL PARA- THION, TOTAL (UG/L)
NOV 07...	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB 13...	ND	--	ND	--	ND	--	ND	--	ND
MAY 02...	ND	--	ND	--	ND	--	ND	--	ND

DATE	METHYL PARA- THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI- THION, TOTAL (UG/L)	METHYL TRI- THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA- THION, TOTAL (UG/L)	PARA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOX- APHENE, TOTAL (UG/L)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TRI- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
NOV 07...	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB 13...	--	ND	--	ND	--	ND	--	ND	--
MAY 02...	--	ND	--	ND	--	ND	--	ND	--

03159510 HOCKING RIVER BELOW ATHENS, OH--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
DEC 04...	1530	6130	508	8410	34	45	57

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
DEC 04...	70	81	89	95	99	100

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 12...	1330	107	14.0	33	9.5
NOV 07...	1200	252	9.0	24	16
DEC 04...	1530	6130	--	508	8410
13...	1300	3120	3.5	124	1050
JAN 16...	1200	1610	.0	52	226
FEB 13...	1300	559	.5	47	71
MAR 13...	1200	1120	6.5	86	260
APR 10...	1800	3500	8.0	240	2270
MAY 02...	1300	665	14.0	32	57
22...	1030	459	18.5	--	--
JUN 05...	1800	947	23.0	56	143
05...	1820	943	23.0	--	--
JUL 02...	1300	694	18.0	--	--
10...	1300	371	20.0	16	16
AUG 08...	1900	694	26.0	79	148
08...	1915	694	26.0	--	--
SEP 05...	0830	905	21.5	54	132
05...	0835	905	21.5	--	--

03159510 HOCKING RIVER BELOW ATHENS, OH--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)		MEAN CONCENTRATION (MG/L)	
	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	LOADS (T/DAY)	
OCTOBER												
1			20	21	16	34	1080	14300	63	122	235	4960
2			25	24	14	25	240	5260	55	101	249	4220
3			25	21	115	364	75	1650	78	135	215	3300
4			25	19	638	8030	50	698	53	86	198	2670
5			25	18	260	4200	50	394	37	56	203	2480
6												
7			25	17	160	1440	40	246	37	55	186	1810
8			24	16	102	617	40	197	35	51	152	1160
9			24	16	482	5390	40	192	33	46	127	700
10			23	15	626	16600	40	145	29	39	112	517
11			22	13	200	6860	40	127	26	34	100	410
12												
13			22	12	146	3450	40	119	48	61	88	328
14			22	12	126	1690	40	105	54	67	83	278
15			22	12	122	1040	50	122	49	60	83	253
16			21	11	100	715	50	217	65	77	68	202
17			47	31	80	432	50	292	48	56	103	295
18												
19			98	105	68	263	60	259	23	26	77	198
20			125	184	54	181	70	265	18	20	45	107
21			267	948	42	128	56	232	27	31	58	135
22			84	308	34	95	59	391	33	37	59	137
23			41	101	32	84	650	7020	35	40	54	122
24												
25			24	41	134	677	1190	18600	90	109	47	100
26			17	23	270	1820	300	3760	1750	7090	50	99
27			19	23	128	588	150	1260	1380	15300	55	105
28			24	28	44	157	229	1980	2290	52200	95	255
29			21	24	33	118	2240	27300	720	22900	162	709
30												
31			21	22	30	101	230	2150	355	16600	84	329
32			108	236	29	85	140	926	348	16300	49	147
33			140	548	27	66	119	623	222	6290	38	95
34			55	229	25	53	112	502	---	---	47	111
35			25	74	25	54	109	353	---	---	54	121
36			---	---	285	993	103	264	---	---	114	357
TOTAL			---	3152	---	56350	---	89949	---	137989	---	26710
APRIL												
MAY												
JUNE												
JULY												
AUGUST												
SEPTEMBER												
1	214	988	35	67	260	1350	55	140	280	1290	127	727
2	590	6020	32	57	129	711	49	94	265	1070	100	413
3	530	8470	51	96	93	389	37	53	82	215	73	248
4	235	2580	280	1550	80	257	157	212	49	93	56	159
5	214	1800	242	2730	63	168	56	65	34	50	47	111
6	223	1630	132	1010	51	118	18	18	89	178	35	70
7	139	739	73	373	140	423	15	13	307	1090	29	51
8	85	372	53	205	107	434	12	9.3	97	205	30	47
9	112	562	45	135	690	5370	28	23	55	90	29	40
10	249	2230	37	96	261	1320	24	25	55	88	27	34
11	149	1180	49	127	179	720	26	42	166	635	22	26
12	113	674	97	262	180	695	37	73	578	7020	14	15
13	87	430	165	624	120	327	32	47	277	2800	18	19
14	170	1230	168	599	65	140	19	21	178	1100	346	2620
15	454	4120	86	228	50	89	15	14	102	353	782	11300
16	236	1650	49	107	52	81	13	11	63	156	204	3160
17	98	524	44	80	36	50	10	7.5	43	82	157	1720
18	75	326	39	63	24	30	11	7.4	39	64	134	677
19	71	266	36	53	18	21	12	7.3	72	154	89	305
20	76	250	32	43	14	15	14	7.6	112	295	64	176
21	79	239	28	38	70	123	15	7.6	332	2530	203	1070
22	59	166	25	31	682	5170	14	6.8	372	3550	468	5350
23	42	111	25	29	578	3650	20	12	287	2220	144	1680
24	42	104	70	122	196	688	38	29	310	2410	114	751
25	38	89	210	828	109	297	46	45	286	2730	74	318
26	36	82	120	586	82	205	92	210	838	11600	55	187
27	52	138	234	1880	62	102	143	456	788	17100	47	136
28	42	117	182	2230	28	35	97	365	244	4620	438	2700
29	30	71	148	1120	26	29	301	2570	224	3640	535	8150
30	33	69	85	411	36	44	592	6270	251	3050	223	3170
31	---	---	62	209	---	---	225	1280	200	1840	---	---
TOTAL	---	37227	---	16089	---	23051	---	12141.5	---	72318	---	45440
TOTAL LOAD FOR YEAR: 520416.5 TONS.												

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1250	1160	797	737	623	561	---	---	599	522	---	---
2	1240	1150	837	777	651	603	---	---	590	566	---	---
3	1220	1120	858	816	672	462	---	---	632	591	---	---
4	1190	998	911	833	426	311	---	---	635	612	---	---
5	1160	1070	939	854	393	315	---	---	651	624	---	---
6	1190	1000	957	855	411	396	---	---	722	629	---	---
7	1080	999	936	866	440	411	---	---	711	657	455	432
8	1110	1010	935	864	434	297	---	---	696	668	539	428
9	1250	1050	911	864	281	212	---	---	740	672	590	539
10	1230	1040	990	917	264	219	---	---	732	674	626	582
11	1170	1080	962	911	336	269	620	588	746	677	642	623
12	1140	975	977	912	404	339	645	597	768	714	665	633
13	1100	909	998	923	429	389	705	632	764	695	678	651
14	1000	494	1030	935	438	423	711	498	747	704	702	656
15	596	509	984	834	494	432	576	470	1130	726	708	690
16	584	561	818	714	564	495	521	470	1080	815	719	692
17	660	596	858	699	603	561	549	449	840	680	761	713
18	729	659	698	599	635	611	656	438	951	701	765	738
19	752	710	654	527	660	632	512	464	882	767	771	726
20	795	654	617	540	662	608	528	440	1120	708	755	684
21	833	668	642	596	599	495	---	---	---	---	747	668
22	851	794	696	648	546	413	---	---	---	---	749	731
23	897	822	735	707	470	407	---	---	---	---	761	746
24	912	858	762	717	575	476	---	---	---	---	750	662
25	936	867	783	738	588	527	---	---	---	---	672	569
26	930	633	798	752	570	531	---	---	---	---	572	522
27	753	501	753	518	560	527	---	---	---	---	624	549
28	597	491	639	582	593	554	---	---	---	---	672	618
29	579	540	605	522	---	---	513	501	---	---	671	641
30	696	554	591	522	---	---	530	482	---	---	683	657
31	725	671	---	---	---	---	615	494	---	---	696	522
MONTH	1250	491	1030	518	672	212	711	438	1130	522	771	428
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	530	462	695	678	516	435	771	720	428	393	435	351
2	524	384	704	681	473	396	725	624	515	393	504	437
3	371	341	720	683	528	474	711	660	528	477	542	495
4	395	353	669	414	540	491	719	593	588	533	581	531
5	413	383	395	354	605	548	732	701	633	575	614	569
6	441	408	429	372	626	573	776	735	662	591	645	606
7	483	447	443	431	641	519	782	762	663	452	680	632
8	525	483	500	443	560	482	810	767	500	438	710	678
9	524	480	548	489	524	344	807	768	---	---	732	696
10	482	392	597	555	480	446	794	747	612	564	780	717
11	417	389	639	588	524	485	---	---	615	476	768	737
12	453	408	608	564	530	485	698	591	567	299	806	741
13	494	461	590	536	572	497	644	599	351	306	798	756
14	495	411	516	468	602	549	678	629	399	351	776	528
15	408	374	584	489	665	599	701	656	474	407	479	230
16	438	392	617	569	683	659	734	698	495	480	275	236
17	479	434	665	612	711	684	798	738	575	510	357	279
18	512	474	675	642	755	696	863	780	629	546	423	359
19	546	515	704	677	764	722	855	836	638	560	503	425
20	567	552	722	687	792	743	846	732	614	554	557	506
21	596	557	749	719	765	629	818	539	534	326	599	350
22	620	590	785	723	770	344	669	539	371	335	398	281
23	659	606	737	717	470	372	---	---	396	354	362	303
24	657	624	1040	654	480	381	---	---	416	342	416	363
25	684	632	729	533	554	479	---	---	405	359	485	416
26	702	656	537	495	507	488	807	720	393	231	554	471
27	669	629	510	420	530	498	710	495	269	228	576	531
28	671	621	423	332	---	---	528	420	299	264	557	315
29	668	621	410	372	726	716	521	333	311	290	387	249
30	701	648	444	407	743	701	357	296	326	300	338	281
31	---	---	515	435	---	---	401	357	350	309	---	---
MONTH	702	341	1040	332	792	344	863	296	663	228	806	230
YEAR	1250	212										

03159510 HOCKING RIVER BELOW ATHENS. OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	8.2	7.8	---	---	7.7	7.6	7.2	6.9	7.5	7.3	6.6	6.4
2	8.1	7.8	---	---	7.8	7.3	7.2	7.0	7.3	7.2	6.6	6.5
3	7.8	7.6	---	---	7.6	7.5	7.2	7.0	7.3	7.2	6.6	6.5
4	7.9	7.6	---	---	7.5	7.1	7.2	7.0	7.3	7.2	6.6	6.4
5	7.8	7.8	---	---	7.3	7.2	7.3	7.2	7.4	7.3	6.6	6.5
6	7.9	7.6	7.6	7.5	7.4	7.3	7.3	7.2	7.4	7.2	6.7	6.5
7	7.9	7.8	7.7	7.5	7.4	7.4	7.3	7.2	7.2	7.1	6.8	6.7
8	8.2	7.8	7.6	7.6	7.5	7.1	7.3	7.2	7.3	7.2	6.9	6.8
9	8.2	8.1	7.7	7.6	7.1	7.0	7.5	7.2	7.2	7.2	6.9	6.8
10	8.2	7.9	7.7	7.7	7.2	7.1	7.4	7.2	7.3	7.1	6.9	6.8
11	8.1	7.9	7.7	7.6	7.3	7.2	7.4	7.3	7.3	7.1	7.0	6.9
12	8.1	7.7	7.6	7.6	7.3	7.1	7.4	7.4	7.1	7.1	7.0	6.8
13	7.8	6.9	7.7	7.6	7.4	7.3	7.4	7.3	7.2	7.1	7.0	6.8
14	7.2	6.6	7.7	7.6	7.5	7.4	7.3	7.1	7.1	7.0	7.0	6.9
15	7.3	7.2	7.7	7.6	7.5	7.4	7.4	7.2	7.0	6.9	7.0	6.9
16	7.4	7.3	7.7	7.5	7.5	7.4	7.3	7.1	7.1	7.0	7.0	6.9
17	7.5	7.4	7.5	7.4	7.5	7.4	7.2	7.1	7.1	7.0	7.0	6.8
18	7.5	7.4	7.5	7.1	7.5	7.4	7.4	7.2	7.1	7.0	6.9	6.8
19	7.5	7.5	7.5	7.3	7.5	7.4	7.4	7.3	7.1	7.0	6.9	6.8
20	7.5	7.4	7.6	7.5	7.4	7.3	7.3	7.2	7.1	6.8	6.9	6.8
21	7.6	7.5	7.7	7.6	7.4	7.2	7.2	7.0	7.0	6.8	6.9	6.8
22	7.6	7.6	7.7	7.6	7.4	7.3	7.1	7.0	6.9	6.7	6.9	6.8
23	7.6	7.5	7.6	7.6	7.4	7.4	7.2	7.0	7.0	6.8	7.0	6.9
24	7.6	7.6	7.7	7.6	7.5	7.4	7.1	7.1	6.9	6.8	7.0	6.9
25	7.6	7.5	7.7	7.6	7.5	7.4	7.2	7.1	7.0	6.8	7.0	6.7
26	7.6	7.5	7.7	7.7	7.5	7.4	7.2	7.1	6.8	6.7	7.1	7.0
27	7.5	6.8	7.7	7.5	7.5	7.4	7.2	7.1	6.9	6.6	7.0	7.0
28	7.3	7.2	7.5	7.2	7.5	7.5	7.2	7.1	6.7	6.6	7.1	6.9
29	7.4	7.3	7.5	7.5	---	---	7.2	7.2	---	---	6.9	6.8
30	---	---	7.6	7.5	7.3	7.2	7.2	7.2	---	---	6.9	6.8
31	---	---	---	---	7.3	7.1	7.3	7.2	---	---	7.1	6.9
MONTH	8.2	6.6	7.7	7.1	7.8	7.0	7.5	6.9	7.5	6.6	7.1	6.4
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	7.0	6.8	7.2	7.0	7.1	6.7	7.3	6.9	7.2	7.1	7.3	7.2
2	6.9	6.7	7.2	6.9	6.9	6.8	7.3	7.1	7.4	7.1	7.3	7.2
3	6.9	6.8	7.1	7.0	7.1	6.9	7.2	7.1	7.3	7.1	7.3	7.2
4	6.9	6.8	7.1	6.6	7.1	7.0	7.3	7.1	7.4	7.2	7.4	7.3
5	7.0	6.9	7.0	6.7	7.1	6.9	7.3	7.2	7.5	7.3	7.4	7.3
6	7.1	7.0	6.9	6.8	7.1	7.0	7.3	7.3	7.4	7.2	7.5	7.3
7	7.1	7.0	6.9	6.8	7.1	7.0	7.5	7.3	7.3	7.2	7.4	7.3
8	7.1	6.9	6.9	6.8	7.2	6.9	7.6	7.3	7.3	7.1	7.5	7.4
9	7.1	6.8	7.0	6.9	7.1	6.9	7.5	7.4	7.4	7.3	7.5	7.3
10	7.0	6.8	7.0	6.9	7.1	7.0	7.4	7.2	7.5	7.3	7.4	7.3
11	7.0	6.9	7.0	6.9	7.2	7.0	7.3	7.1	7.5	7.1	7.4	7.3
12	7.0	6.9	7.1	6.9	7.2	7.0	7.2	7.2	7.2	7.0	7.4	7.3
13	7.0	6.9	7.0	6.9	7.2	7.2	7.2	7.1	7.2	7.1	7.5	7.4
14	7.0	6.7	7.1	6.9	7.3	7.1	7.3	7.2	7.3	7.2	7.5	6.8
15	7.0	6.9	7.0	6.9	7.3	7.0	7.6	7.2	7.5	7.3	7.2	6.9
16	7.0	7.0	7.1	7.0	7.3	7.2	7.8	7.3	7.5	7.4	7.2	7.0
17	7.0	6.9	7.1	7.0	7.3	7.2	8.1	7.4	7.5	7.4	7.2	7.1
18	7.0	6.9	7.2	7.0	7.5	7.2	8.4	7.5	7.5	7.4	7.3	7.2
19	7.0	6.9	7.2	7.0	7.6	7.3	8.4	7.6	7.5	7.2	7.4	7.3
20	7.0	6.9	7.2	7.1	7.6	7.4	8.5	7.6	7.3	7.2	7.5	7.4
21	7.0	6.9	7.2	7.1	7.4	7.1	8.3	7.6	7.4	6.7	7.5	7.2
22	7.0	6.9	7.3	7.0	7.1	6.6	8.3	7.6	7.1	7.0	7.2	7.0
23	7.0	6.9	7.5	7.2	6.9	6.6	8.1	7.4	7.1	7.1	7.3	7.2
24	7.0	6.9	7.3	7.0	7.1	6.9	7.7	7.4	7.2	7.1	7.4	7.3
25	7.0	6.9	7.1	6.6	7.2	6.9	7.3	7.0	7.2	7.0	7.5	7.4
26	7.0	7.0	7.2	6.8	7.2	7.1	7.3	7.1	7.4	7.1	7.6	7.5
27	7.1	6.9	7.0	6.8	7.3	7.2	7.2	6.9	7.1	6.9	7.6	7.5
28	7.1	7.0	6.9	6.8	---	---	7.1	6.8	7.1	7.0	7.6	7.3
29	7.1	7.0	6.9	6.9	7.3	7.3	7.1	6.9	7.1	7.0	7.5	7.3
30	7.1	7.1	7.0	6.9	7.3	7.3	7.1	7.0	---	---	7.5	7.4
31	---	---	7.1	7.0	---	---	7.2	7.1	---	---	---	---
MONTH	7.1	6.7	7.5	6.6	7.6	6.6	8.5	6.8	7.5	6.7	7.6	6.8
YEAR	8.5	6.4										

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

YEAR

03159510 HOCKING RIVER BELOW ATHENS, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER					
1	8.9	8.7	10.2	9.8	8.9	8.7	8.7	8.4	7.9	7.5	7.2	6.8				
2	9.0	8.8	10.1	9.5	8.9	8.7	8.9	8.7	7.8	7.7	7.1	6.1				
3	9.0	8.9	9.4	9.2	8.8	8.5	8.8	8.4	7.9	7.7	6.9	6.4				
4	10.8	9.0	9.9	9.1	8.8	8.6	8.6	7.9	8.1	7.8	7.1	6.4				
5	11.0	10.7	10.4	9.9	8.7	8.5	9.0	8.5	8.4	7.7	8.2	6.8				
6	11.2	11.0	10.3	10.1	8.6	8.4	9.3	8.6	8.4	7.4	8.2	7.9				
7	11.3	11.1	10.0	9.6	8.5	8.3	9.4	8.6	7.8	7.3	8.3	7.8				
8	11.3	11.0	9.6	9.1	8.4	8.1	10.4	8.6	7.6	7.3	8.7	8.2				
9	10.9	10.7	9.3	8.9	8.3	7.3	9.2	8.3	8.1	7.5	8.6	8.4				
10	11.6	10.8	9.0	8.6	8.3	8.1	9.3	8.4	8.4	7.4	8.9	8.4				
11	11.4	11.2	8.9	8.5	8.5	8.4	9.5	8.6	7.6	7.0	9.1	8.3				
12	11.2	10.7	8.7	8.3	8.7	8.4	9.1	8.4	8.5	7.0	9.1	8.3				
13	10.7	10.1	8.9	8.3	8.9	8.6	8.7	8.0	8.1	7.8	9.1	8.2				
14	10.2	10.0	9.0	8.8	9.0	8.8	8.9	8.1	8.2	8.1	8.3	7.8				
15	10.4	9.9	9.2	9.0	8.9	8.5	9.6	7.8	8.4	8.2	8.0	7.5				
16	10.8	10.4	9.4	9.1	8.6	8.4	10.5	7.8	8.7	8.4	8.4	8.0				
17	10.9	10.8	9.4	9.0	8.7	8.3	11.8	7.7	8.9	8.4	8.7	8.4				
18	10.8	10.6	9.3	8.9	10.6	8.5	13.2	7.9	8.4	8.2	8.6	8.5				
19	10.6	10.2	9.2	8.8	10.8	8.6	14.3	8.2	8.2	7.8	8.8	8.5				
20	10.2	9.9	9.5	8.6	10.5	8.7	15.0	8.0	7.9	7.8	8.8	8.6				
21	10.0	9.7	9.5	8.4	9.1	8.0	13.9	8.0	7.9	7.4	8.7	8.4				
22	9.7	9.4	10.3	8.5	8.4	7.9	13.4	7.7	7.7	7.3	9.0	8.5				
23	9.5	9.4	11.5	8.9	8.4	8.1	13.4	6.6	7.8	7.6	9.2	9.0				
24	9.6	9.3	9.8	8.7	8.6	8.3	10.2	7.1	7.7	7.4	9.2	9.1				
25	9.4	9.0	9.4	8.7	9.1	8.6	8.3	7.2	7.9	7.0	9.1	9.0				
26	9.2	8.9	9.9	9.4	9.3	9.0	9.1	7.8	7.9	7.5	9.0	8.8				
27	9.5	8.8	10.0	9.8	9.1	8.8	8.3	7.4	7.6	6.4	8.8	8.7				
28	9.8	9.3	9.8	9.6	---	---	7.9	7.5	7.1	6.1	8.8	8.7				
29	10.2	9.7	9.7	9.5	9.0	8.7	7.6	7.2	7.1	6.5	8.8	8.5				
30	10.3	9.9	9.5	9.2	8.9	8.3	7.7	7.1	7.0	5.8	8.6	8.5				
31	---	---	9.2	8.8	---	---	7.9	7.8	7.3	6.2	---	---				
MONTH	11.6	8.7	11.5	8.3	10.8	7.3	15.0	6.6	8.9	5.8	9.2	6.1				

YEAR	15.0	5.8														
------	------	-----	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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 (61 m) upstream from Sugar Run, 2.8 mi (4.5 km) southeast of Chester, and 8.5 mi (13.7 km) northeast of Pomeroy.

DRAINAGE AREA.--156 mi² (404 km²), 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 (175.842 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for period of no gage-height record, Dec. 8 to Jan. 4, Jan. 20 to Feb. 22, which are poor. Water-quality data collected at this site 1965 to 1977, 1979. Sediment data collected 1970 to 1974.

AVERAGE DISCHARGE.--14 years, 175 ft³/s (4.956 m³/s), 15.23 in/yr (387 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,170 ft³/s (231 m³/s) May 25, 1968, gage height, 27.39 ft (8.348 m); minimum, 0.30 ft³/s (0.008 m³/s) Sept. 7, 8, 9, 10, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,400 ft³/s (68.0 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 5	0300	*3390 96.0	*18.61 5.672	Feb. 25	---	3300 93.5	unknown
Dec. 8	---	4400 125	unknown	Aug. 27	1000	2710 76.7	16.54 5.041
Jan. 2	---	2700 76.5	unknown	Sept. 23	1400	2460 69.7	15.71 4.788

Minimum discharge, 7.0 ft³/s (0.20 m³/s) Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	40	107	1000	130	300	1080	68	299	54	103	110
2	11	35	84	1700	110	250	1370	61	192	63	71	107
3	11	31	393	800	95	230	854	76	110	48	62	99
4	13	28	2770	300	90	210	339	767	91	39	45	69
5	17	26	2320	215	85	190	255	936	71	51	69	58
6	15	25	328	176	80	182	195	376	59	41	55	52
7	12	24	208	191	80	154	147	207	62	29	57	46
8	9.6	26	2400	451	75	139	133	146	282	24	41	40
9	8.2	29	2300	271	70	124	478	112	541	27	34	34
10	7.4	25	1200	247	70	116	717	92	160	37	36	31
11	7.1	22	600	207	65	111	275	79	118	34	138	29
12	11	21	320	183	60	94	209	82	82	27	532	27
13	49	20	220	158	60	87	179	157	64	31	176	26
14	280	21	180	769	60	91	289	82	54	36	85	97
15	145	60	160	828	60	93	260	65	49	31	63	202
16	59	428	150	385	60	75	190	55	43	27	51	67
17	42	345	140	384	60	72	151	48	40	25	40	45
18	33	842	130	607	60	73	127	43	38	19	34	37
19	25	248	130	304	60	75	109	40	38	16	50	32
20	22	129	120	780	60	71	97	37	35	13	69	30
21	21	89	300	1000	60	68	98	34	79	12	1100	386
22	20	72	540	680	130	63	82	31	269	12	403	1650
23	17	67	400	430	350	62	79	31	221	157	144	2100
24	17	89	300	280	900	340	78	585	90	477	115	356
25	17	75	210	980	2400	642	73	778	61	405	368	172
26	67	63	160	740	1700	239	69	670	49	299	632	117
27	717	622	120	540	900	155	172	860	40	275	2490	93
28	190	655	110	410	500	121	131	1180	35	167	1400	656
29	87	233	100	300	---	110	91	327	32	521	619	824
30	59	150	130	230	---	98	76	173	36	199	365	253
31	47	---	350	180	---	147	---	115	---	97	159	---
TOTAL	2053.3	4540	16980	15726	8430	4782	8393	8313	3340	3293	9606	7845
MEAN	66.2	151	548	507	301	154	280	268	111	106	310	262
MAX	717	842	2770	1700	2400	642	1370	1180	541	521	2490	2100
MIN	7.1	20	84	158	60	62	69	31	32	12	34	26
CFSM	.42	.97	3.51	3.25	1.93	.99	1.80	1.72	.71	.68	1.99	1.68
IN.	.49	1.08	4.05	3.75	2.01	1.14	2.00	1.98	.80	.79	2.29	1.87

CAL YR 1978	TOTAL	70962.4	MEAN 194	MAX 3030	MIN 7.1	CFSM 1.24	IN 16.92
WTR YR 1979	TOTAL	93301.3	MEAN 256	MAX 2770	MIN 7.1	CFSM 1.64	IN 22.25

SHADE RIVER BASIN

03159540 SHADE RIVER NEAR CHESTER, OH.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)
MAY 21...	1345	35	365	7.0	20.0	124	0	102	20	78
JUN 05...	1330	69	345	7.5	19.0	103	0	84	5.2	71
JUL 02...	1500	63	380	7.5	19.0	116	0	95	5.9	73
AUG 08...	1530	39	420	7.5	24.0	96	0	79	4.9	110
SEP 04...	1730	67	335	7.5	22.5	120	0	98	6.1	60

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDED RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
MAY 21...	232	.32	21.9	1300	1100	160	390	20	370
JUN 05...	198	.27	36.9	1700	1700	30	280	40	240
JUL 02...	254	.35	43.2	2300	2300	40	380	100	280
AUG 08...	306	.42	32.2	1500	1400	80	840	70	770
SEP 04...	231	.31	41.8	1400	1500	100	350	50	300

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH

LOCATION.--Lat 39°21'45", long 82°18'47", in NE 1/4, SE 1/4, sec. 11, T.11 N., R.16 W., Vinton County, Hydrologic Unit 05090101, on right bank 250 ft (76 m) upstream from Big Four Hollow Creek, 150 ft (46 m) downstream from Morgan Hollow Creek, 2.5 mi (4.0 km) southwest of Carbondale, and 3.7 mi (6.0 km) northeast of Lake Hope.

DRAINAGE AREA.--0.98 mi² (2.54 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder with concrete weir and 6-inch Parshall flume. Datum of gage is 756.04 (230.441 m) National Geodetic Vertical Datum of 1929. Prior to October 1, 1978 at datum 17.55 ft (5.349 m) higher.

REMARKS.--Records poor. Recording rain gage at station.

AVERAGE DISCHARGE.--9 years, 1.12 ft³/s (0.0317 m³/s), 15.52 in/yr (394 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 990 ft³/s (28.0 m³/s) June 22, 1974, gage-height, 22.56 ft (6.876 m) (current datum) from rating curve extended above 30 ft³/s (0.85 m³/s); minimum, 0.02 ft³/s (0.001 m³/s) Sept. 24, 25, 1971, June 30, July 1, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 42 ft³/s (1.19 m³/s) Dec. 8, gage height, 19.85 ft (6.050 m), no peaks above base of 50 ft³/s (1.42 m³/s); minimum, 0.03 ft³/s (0.001 m³/s) Oct. 2-3.

DISCHARGE, STREAM (CUBIC FEET PER SECOND), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.12	.33	15	.58	4.0	5.7	.70	1.0	.25	.13	.46
2	.03	.10	.26	6.8	.51	3.8	8.9	.66	.55	.18	.53	.32
3	.03	.10	5.2	2.2	.40	3.0	3.2	1.6	.48	.13	.15	.25
4	.09	.10	11	1.5	.30	3.2	2.5	7.8	.41	.55	.11	.22
5	.04	.08	1.9	1.2	.30	3.5	1.7	6.1	.31	.19	.12	.28
6	.04	.08	.92	1.1	.30	2.5	1.3	2.6	.63	.13	.55	.19
7	.04	.09	.97	1.7	.20	2.1	1.1	1.8	.29	.12	.18	.14
8	.04	.06	25	.97	.20	1.8	1.3	1.4	4.7	.13	.14	.11
9	.05	.08	18	.71	.20	.93	2.4	1.1	1.5	.48	.11	.11
10	.07	.07	3.3	.61	.20	.90	1.6	1.0	1.1	.26	.13	.13
11	.13	.06	1.2	.57	.20	.76	1.4	.88	.68	.16	2.8	.11
12	.11	.07	.99	.64	.10	.59	1.3	.74	.42	.14	1.0	.10
13	1.6	.08	.92	1.6	.10	.74	1.6	.74	.29	.18	.32	.46
14	1.1	.09	.67	5.4	.10	.72	2.1	.61	.26	.13	.22	3.8
15	.25	.32	.73	2.0	.10	.41	1.5	.49	.25	.10	.15	.47
16	.19	.55	.74	1.4	.10	.37	1.2	.45	.23	.08	.12	.25
17	.11	2.7	.69	1.9	.10	.48	1.1	.32	.22	.08	.13	.21
18	.10	1.1	.63	1.5	.10	.53	.95	.32	.16	.08	.18	.21
19	.15	.41	.60	1.4	.10	.46	.88	.32	.15	.07	1.4	.14
20	.11	.28	.90	4.0	.10	.42	.81	.26	.22	.07	1.2	.21
21	.09	.24	2.0	8.3	1.5	.50	.72	.22	1.4	.07	3.6	6.5
22	.09	.20	.96	2.9	5.7	.41	.59	.18	.48	.07	.90	5.3
23	.11	.30	.75	2.2	22	.86	.59	.29	.25	.06	1.3	2.2
24	.10	.19	.97	4.7	19	3.3	.53	.63	.18	.12	1.2	1.0
25	.10	.14	.77	2.7	19	1.9	.59	.44	.14	.36	1.1	.65
26	1.9	.17	.55	1.9	19	1.2	.72	1.2	.14	.19	3.6	.46
27	.90	2.9	.39	1.7	10	.86	.81	3.1	.15	.12	3.0	.41
28	.31	1.6	.34	1.3	4.0	.93	.61	3.3	.14	.28	2.2	6.0
29	.18	.72	.39	.90	---	.79	.55	1.2	.16	.57	2.7	2.4
30	.15	.45	.81	.79	---	.70	.63	.61	.41	.18	1.0	1.3
31	.15	---	4.6	.81	---	3.2	---	.86	---	.15	.61	---
TOTAL	8.45	13.45	87.48	80.40	104.49	45.86	49.08	41.92	17.30	5.68	30.88	34.39
MEAN	.27	.45	2.82	2.59	3.73	1.48	1.64	1.35	.58	.18	1.00	1.15
MAX	1.9	2.9	25	15	22	4.0	8.9	7.8	4.7	.57	3.6	6.5
MIN	.03	.06	.26	.57	.10	.37	.55	.18	.14	.06	.11	.10
CFSM	.28	.46	2.88	2.64	3.81	1.51	1.57	1.38	.59	.18	1.02	1.17
IN.	.32	.51	3.32	3.05	3.96	1.74	1.86	1.59	.66	.22	1.17	1.30

CAL YR 1978 TOTAL 391.01 MEAN 1.07 MAX 25 MIN .02 CFSM 1.09 IN 14.83
WTR YR 1979 TOTAL 519.38 MEAN 1.42 MAX 25 MIN .03 CFSM 1.45 IN 19.70

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: January 1971 to September 1978.

pH: January 1971 to September 1978.

WATER TEMPERATURES: January 1971 to September 1978.

CHEMICAL ANALYSES: October 1978 to September 1979.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	pH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
OCT											
12...	1030	.90	1800	2.7	13.0	32	600	600	7.5	372	130
12...	1615	.05	--	--	--	--	--	--	--	--	--
24...	1530	.70	1500	2.8	11.5	17	450	450	5.8	288	100
NOV											
06...	1000	.80	1400	2.7	10.0	13	480	480	5.5	273	110
22...	1000	.20	1000	2.9	7.0	6	300	300	3.3	164	69
30...	0930	.46	550	3.3	4.5	13	210	210	1.5	74	48
DEC											
08...	1400	34	--	--	--	--	--	--	--	--	--
09...	1145	10	--	--	--	--	--	--	--	--	--
21...	1330	1.6	270	4.4	4.5	27	94	94	.5	25	22
21...	1620	1.5	--	--	--	--	--	--	--	--	--
JAN											
04...	1500	1.4	410	3.7	1.0	17	120	120	1.0	50	26
16...	1500	1.3	375	3.7	2.0	1	110	110	1.0	50	26
FEB											
01...	1400	.59	450	3.5	.5	8	140	140	1.0	50	31
14...	0900	.26	640	3.2	.0	7	210	210	2.0	99	46
27...	1500	3.0	330	3.9	6.5	11	77	77	.6	30	18
MAR											
13...	1100	.76	675	3.3	6.0	12	190	190	2.5	124	42
26...	1430	1.0	355	4.0	5.0	8	110	110	.4	20	26
APR											
09...	1130	2.9	--	--	--	--	--	--	--	--	--
11...	1100	1.3	350	4.0	7.0	13	110	110	.6	30	25
30...	1200	.61	750	3.4	12.5	10	210	210	2.2	109	46
MAY											
15...	1300	.40	730	3.4	17.0	24	190	190	1.6	79	43
30...	1100	.61	695	3.5	12.0	0	190	190	1.6	79	42
JUN											
11...	1430	.59	500	4.0	18.0	3	150	150	.8	40	37
28...	1100	.14	1300	3.0	17.5	12	350	360	4.0	199	77
JUL											
10...	1130	.25	900	3.4	16.5	4	270	270	2.5	124	60
26...	1300	.20	1000	3.4	20.5	2	270	270	2.2	109	60
AUG											
08...	0845	.13	1100	2.9	18.5	50	320	320	3.3	164	73
23...	1200	1.0	314	5.0	18.0	39	120	110	--	--	28
SEP											
05...	1400	.24	950	3.1	19.0	12	300	300	3.3	164	67
17...	1230	.19	790	3.5	14.0	7	220	220	2.0	99	51

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT											
12...	67	32	10	.6	--	3.0	0	0	0	.0	910
12...	--	--	--	--	--	--	--	--	--	--	--
24...	49	29	12	.6	--	3.0	0	0	0	.0	660
NOV											
06...	50	26	10	.5	--	3.0	0	0	0	.0	540
22...	32	20	12	.5	--	2.6	0	0	0	.0	470
30...	21	14	13	.4	--	2.3	0	0	0	.0	280
DEC											
08...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
21...	9.4	6.8	13	.3	--	1.7	0	0	0	.0	110
21...	--	--	--	--	--	--	--	--	--	--	--
JAN											
04...	13	6.1	10	.2	--	1.4	0	0	0	.0	170
16...	12	6.8	11	.3	--	1.3	0	0	0	.0	150
FEB											
01...	14	11	15	.4	--	1.6	0	0	0	.0	180
14...	22	15	14	.5	--	2.0	0	0	0	.0	280
27...	7.8	13	26	.6	--	1.4	0	0	0	.0	96
MAR											
13...	20	13	13	.4	--	2.0	0	0	0	.0	280
26...	11	9.6	16	.4	--	1.5	0	0	0	.0	130
APR											
09...	--	--	--	--	--	--	--	--	--	--	--
11...	11	8.6	15	.4	--	1.6	0	0	0	.0	130
30...	23	15	13	.5	--	2.3	0	0	0	.0	300
MAY											
15...	21	15	14	.5	--	2.2	0	0	0	.0	270
30...	21	13	13	.4	15	2.0	0	0	0	.0	260
JUN											
11...	15	11	13	.4	--	1.9	0	0	0	.0	200
28...	41	26	13	.6	29	2.7	0	0	0	.0	560
JUL											
10...	30	24	16	.6	--	2.9	0	0	0	.0	390
26...	29	25	17	.7	28	2.7	0	0	0	.0	400
AUG											
08...	34	26	15	.6	29	2.7	0	0	0	.0	480
23...	11	8.8	14	.4	11	2.0	3	0	2	48	120
SEP											
05...	32	20	13	.5	23	2.6	0	0	0	.0	430
17...	22	11	10	.3	13	2.4	0	0	0	.0	320

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N03)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHATE, TOTAL (MG/L AS P04)	PHOS- PHORUS, TOTAL (MG/L AS P04)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ANTI- MONY, TOTAL (UG/L AS SB)
OCT											
12...	24	1320	1.80	.08	39	170	.00	--	--	110	3
12...	--	--	--	--	--	--	--	--	--	--	--
24...	24	992	1.35	.13	.63	2.8	.05	--	--	14000	1
NOV											
06...	23	981	1.33	.12	--	--	.00	--	--	15000	0
22...	17	671	.91	.09	.41	1.8	.00	--	--	8200	0
30...	14	374	.51	.12	.36	1.6	.00	--	--	1000	0
DEC											
08...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
21...	6.3	174	.24	.11	.20	.89	.00	--	--	1500	0
21...	--	--	--	--	--	--	--	--	--	--	--
JAN											
04...	6.4	251	.34	.16	.23	1.0	.00	--	--	4700	0
16...	7.4	233	.32	.11	.57	2.5	.00	--	--	2000	0
FEB											
01...	12	275	.37	.09	.27	1.2	.00	--	--	4000	0
14...	14	445	.61	.13	.62	2.7	.00	--	--	5400	0
27...	23	185	.25	.18	.40	1.8	.01	--	--	310	0
MAR											
13...	11	424	.58	.08	.41	1.8	.00	--	--	6600	0
26...	11	219	.30	.09	.44	1.9	.04	--	--	3500	0
APR											
09...	--	--	--	--	--	--	--	--	--	--	--
11...	10	213	.29	.04	.19	.84	.00	--	--	4100	0
30...	11	453	.62	.03	.31	1.4	.00	.00	.00	7200	0
MAY											
15...	13	470	.64	.06	.37	1.6	.00	.00	.00	6200	0
30...	13	416	.57	.05	.05	.22	.00	.00	.00	7600	0
JUN											
11...	14	341	.46	.06	.36	1.6	.01	.03	.03	5000	0
28...	21	905	1.23	.11	.55	2.4	.00	.00	.00	13000	0
JUL											
10...	21	648	.88	.09	.46	2.0	.00	--	.00	8300	0
26...	23	620	.84	.12	.35	1.6	.03	--	.09	9000	0
AUG											
08...	24	802	1.09	.11	.45	2.0	.01	--	.03	9300	0
23...	7.2	217	.30	.07	.30	1.3	.01	--	.03	2000	0
SEP											
05...	15	702	.95	.02	.36	1.6	.00	--	.00	12000	0
17...	13	490	.67	.11	.92	4.1	.00	--	.00	890	0

RACCOON CREEK BASIN

143

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ARSENIC TOTAL (UG/L AS AS)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)
OCT											
12...	0	100	5	4	12	90000	--	44000	39	4900	--
12...	--	--	--	--	--	--	--	--	--	--	--
24...	0	10	2	5	16	24000	--	24000	84	4200	--
NOV											
06...	0	10	1	3	10	30000	--	30000	46	3900	--
22...	0	10	5	4	6	28000	--	26000	15	2600	--
30...	0	5	77	4	3	14000	--	8200	41	1400	--
DEC											
08...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
21...	1	0	3	2	4	58000	--	1900	39	520	--
21...	--	--	--	--	--	--	--	--	--	--	--
JAN											
04...	0	0	0	3	6	9300	--	6600	7	850	--
16...	1	0	1	6	4	7400	--	6100	29	800	--
FEB											
01...	1	0	7	0	5	8300	--	4900	140	990	--
14...	0	10	1	4	6	12000	--	11000	11	1800	--
27...	0	0	0	1	5	1400	--	1400	0	450	--
MAR											
13...	1	10	1	0	6	19000	--	17000	12	1400	--
26...	1	0	0	0	4	5900	--	980	7	670	--
APR											
09...	--	--	--	--	--	--	--	--	--	--	--
11...	0	0	1	6	4	5700	--	830	34	630	--
30...	0	10	5	9	7	17000	4000	13000	32	1500	0
MAY											
15...	0	10	2	5	6	11000	4800	6200	25	1500	100
30...	0	0	4	12	6	12000	4700	7300	92	1400	0
JUN											
11...	1	0	7	8	6	7400	6100	1300	21	1100	0
28...	1	20	0	9	10	22000	0	22000	3	3400	300
JUL											
10...	1	10	1	17	9	15000	3000	12000	4	2100	0
26...	1	10	0	19	1	12000	6200	5800	4	2200	100
AUG											
08...	2	10	3	20	9	26000	10000	16000	5	3000	100
23...	2	0	1	13	4	5800	4600	1200	5	660	20
SEP											
05...	0	0	0	6	9	18000	--	16000	0	2800	500
17...	0	10	0	19	8	10000	7400	3	3800	400	3400

RACCOON CREEK BASIN

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MANGANESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)	PHENOLS (JG/L)
OCT											
12...	4900	<.5	180	0	0	--	520	520	3.0	.3	1
12...	--	--	--	--	--	--	--	--	--	--	--
24...	4200	<.5	160	0	0	--	350	360	1.9	.1	0
NOV											
06...	3600	<.5	150	0	0	--	470	470	1.2	.3	1
22...	2300	<.5	100	0	0	--	220	2200	2.8	.6	0
30...	1400	<.5	61	0	0	--	120	120	8.3	.3	0
DEC											
08...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
21...	520	<.5	35	0	0	--	50	80	2.1	1.0	2
21...	--	--	--	--	--	--	--	--	--	--	--
JAN											
04...	100	<.5	48	0	0	--	1000	1000	1.8	.2	0
16...	800	<.5	26	0	0	--	110	110	1.7	.2	0
FEB											
01...	990	<.5	56	0	0	--	80	90	1.5	.1	0
14...	1800	<.5	79	0	0	--	170	170	1.6	.2	0
27...	450	<.5	4	0	0	--	50	50	4.4	--	2
MAR											
13...	1400	<.5	69	0	0	--	130	160	4.7	.2	0
26...	670	<.5	41	0	0	--	50	80	4.6	.2	0
APR											
09...	--	--	--	--	--	--	--	--	--	--	--
11...	630	<.5	57	0	0	--	80	90	1.1	.2	0
30...	1500	<.5	98	0	0	20	170	190	2.9	.1	0
MAY											
15...	1400	<.5	84	0	0	0	150	160	3.7	.2	1
30...	1400	<.5	60	0	0	0	220	220	2.0	.2	0
JUN											
11...	1100	<.5	66	0	0	30	90	120	2.0	.2	0
28...	3100	<.5	130	0	0	10	330	340	2.7	.1	2
JUL											
10...	2100	<.5	110	0	0	60	210	270	1.1	.2	0
26...	2100	<.5	0	0	0	70	200	270	3.1	.0	0
AUG											
08...	2900	<.5	110	0	0	0	250	250	1.9	.1	0
23...	640	<.5	22	0	1	0	60	60	4.1	.5	0
SEP											
05...	2300	<.5	110	0	0	60	250	320	2.0	.1	2
17...	3400	<.5	75	0	0	20	150	170	5.2	.1	2

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT					MAR				
12...	1030	.90	13.0	--	26...	1430	1.0	5.0	15
12...	1615	.05	--	16	APR				
24...	1530	.70	11.5	8.0	09...	1130	2.9	--	25
NOV					11...	1100	1.3	7.0	--
06...	1000	.80	10.0	5.0	30...	1200	.61	12.5	--
22...	1000	.20	7.0	39	MAY				
30...	0930	.46	4.5	--	15...	1300	.40	17.0	--
DEC					30...	1100	.61	12.0	24
08...	1400	34	--	689	JUN				
09...	1145	10	--	42	11...	1430	.59	18.0	--
21...	1330	1.6	4.5	--	28...	1100	.14	17.5	--
21...	1620	1.5	--	19	JUL				
JAN					10...	1130	.25	16.5	--
04...	1500	1.4	1.0	--	26...	1300	.20	20.5	--
16...	1500	1.3	2.0	--	AUG				
FEB					08...	0845	.13	18.5	--
01...	1400	.59	.5	--	23...	1200	1.0	18.0	--
14...	0900	.26	.0	--	SEP				
27...	1500	3.0	6.5	--	05...	1400	.24	19.0	--
MAR					17...	1230	.19	14.0	--
13...	1100	.76	6.0	40					

03201660 BIG FOUR HOLLOW CREEK BELOW EAST FORK NEAR LAKE HOPE, OH.

LOCATION.--Lat 39°22'12", long 82°19'06", in NW 1/4 NE 1/4 sec. 11, T. 11 R. 16 W., Vinton County, Hydrologic Unit 05090101, on left bank 200 ft (61 m) downstream from East Fork, and 6 mi (1.0 km) upstream from State Route 278, 2.5 mi (4.0 km) southwest of Carbondale, and 3.7 mi (6.0 km) northeast of Lake Hope.

DRAINAGE AREA.--0.73 mi² (1.89 km²)

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1978 to September 1979.

GAGE.--Water-stage recorder. Datum of gage is 812.30 ft (247.589 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 193.0 ft³/s (5.47 m³/s) August 21, 1979, gage height, 53.16 ft (16.203 m), from rating curve extended above 57.0 ft³/s (1.61 m³/s); no flow July 23, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 193.0 ft³/s (5.47 m³/s) Aug. 21, 1979, gage height, 53.16 ft (16.203 m) from rating curve extended above 57.0 ft³/s (1.61 m³/s); no flow July 23.

DISCHARGE, STREAM (CUBIC FEET PER SECOND), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	.02	.07	12	.40	1.9	3.9	.28	.58	.25	.07	.09
2	.02	.02	.06	1.7	.30	1.6	6.8	.25	.29	.10	.22	.06
3	.02	.02	4.8	.90	.30	1.1	5.0	.97	.23	.07	.09	.05
4	.07	.02	9.5	.80	.20	1.2	1.6	5.1	.18	.96	.09	.05
5	.03	.02	1.3	.72	.20	1.3	.98	2.7	.15	.22	.09	.04
6	.04	.02	.55	.60	.20	.85	.69	1.1	.29	.09	.29	.05
7	.03	.03	.90	.50	.20	.68	.64	.67	.16	.06	.09	.03
8	.02	.03	23	.50	.20	.58	.52	.51	1.8	.04	.07	.03
9	.02	.03	12	.40	.10	.48	1.3	.41	.33	.33	.06	.03
10	.02	.02	1.7	.40	.10	.45	8.5	.39	.47	.14	.06	.02
11	.04	.02	.62	.40	.10	.42	.76	.33	.33	.09	.96	.02
12	.07	.02	.55	.30	.10	.37	.70	.30	.12	.07	.33	.04
13	2.1	.02	.50	1.4	.10	.35	.86	.26	.07	.07	.10	.10
14	1.1	.03	.35	5.8	.10	.45	1.4	.22	.06	.06	.06	4.1
15	.06	.06	.42	2.5	.10	.38	.92	.18	.04	.05	.03	1.0
16	.07	.69	.28	1.2	.10	.40	.73	.16	.03	.04	.02	.57
17	.02	3.3	.50	1.6	.10	.35	.61	.14	.27	.03	.02	.42
18	.02	1.3	.50	1.3	.10	.36	.54	.13	.22	.03	.03	.33
19	.05	.35	.50	1.2	.10	.33	.48	.12	.03	.02	.62	.29
20	.03	.06	.56	5.0	.20	.33	.43	.12	.04	.03	.37	.22
21	.02	.05	1.6	8.0	1.0	.33	.40	.11	.29	.02	19	12
22	.02	.03	.80	4.0	3.5	.31	.37	.10	.07	.02	.37	11
23	.03	.04	.49	1.8	10	.47	.33	.17	.04	.00	.22	3.1
24	.04	.03	.49	4.3	14	2.1	.33	.23	.03	.04	.33	1.0
25	.03	.02	.55	1.1	32	1.1	.31	.20	.03	.19	.42	.51
26	2.6	.02	.42	.90	3.7	.68	.34	.37	.03	.10	4.1	.29
27	1.3	3.8	.35	.70	1.6	.55	.44	2.7	.03	.07	2.0	.17
28	.21	1.9	.42	.60	1.9	.47	.37	.95	.03	.14	.62	17
29	.06	.62	.21	.50	---	.47	.33	.39	.04	.37	.88	5.9
30	.04	.35	.49	.47	---	.44	.31	.24	.57	.09	.33	2.0
31	.03	---	4.8	.45	---	2.1	---	.47	---	.07	.17	---
TOTAL	8.28	12.94	69.28	62.04	71.00	22.90	40.99	20.27	6.85	3.86	32.11	60.52
MEAN	.27	.43	2.23	2.00	2.54	.74	1.37	.65	.23	.12	1.04	2.02
MAX	2.6	3.8	23	12	32	2.1	8.6	5.1	1.8	.96	19	17
MIN	.02	.02	.06	.30	.10	.31	.31	.10	.03	.00	.02	.02
CFSM	.37	.59	3.06	2.74	3.48	1.01	1.98	.89	.32	.16	1.43	2.77
IN.	.42	.66	3.53	3.16	3.61	1.17	2.09	1.03	.35	.20	1.63	3.09

WTR YR 1979 TOTAL 411.04 MEAN 1.13 MAX 32 MIN .00 CFSM 1.55 IN 20.92

RACCOON CREEK BASIN

03201660 BIG FOUR HOLLOW CREEK BELOW EAST FORK NEAR LAKE HOPE, OH--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--October 1978 to September 1979.
 WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
NOV											
06...	1230	.96	--	--	--	--	--	--	--	--	--
20...	1230	1.6	--	--	--	--	--	--	--	--	--
30...	1500	2.0	--	--	--	--	--	--	--	--	--
DEC											
08...	1315	21	--	--	--	--	--	--	--	--	--
08...	1316	21	--	--	--	--	--	--	--	--	--
09...	1030	11	--	--	--	--	--	--	--	--	--
18...	1615	26	--	--	--	--	--	--	--	--	--
22...	1100	2.7	--	--	--	--	--	--	--	--	--
FEB											
25...	2100	16	--	--	--	--	--	--	--	--	--
MAR											
12...	1530	.42	--	--	--	--	--	--	--	--	--
APR											
02...	1400	6.2	--	--	--	--	--	--	--	--	--
MAY											
31...	1130	.19	--	--	--	--	--	--	--	--	--
JUN											
08...	1200	4.5	--	--	--	--	--	--	--	--	--
JUL											
10...	0900	.37	265	5.9	19.0	3	110	98	26	11	6.0
26...	1515	.29	300	5.5	21.0	2	110	90	26	10	5.4
AUG											
08...	1200	.25	300	5.5	22.5	41	110	100	26	11	6.0
23...	1400	.62	245	5.8	19.0	37	91	65	22	8.7	5.6
SEP											
05...	1500	.17	258	5.6	20.5	2	100	83	24	9.7	5.6
17...	1300	.81	280	5.5	15.5	6	99	81	24	9.6	5.1

DATE	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
NOV											
06...	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
DEC											
08...	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
FEB											
25...	--	--	--	--	--	--	--	--	--	--	--
MAR											
12...	--	--	--	--	--	--	--	--	--	--	--
APR											
02...	--	--	--	--	--	--	--	--	--	--	--
MAY											
31...	--	--	--	--	--	--	--	--	--	--	--
JUN											
08...	--	--	--	--	--	--	--	--	--	--	--
JUL											
10...	10	.2	--	2.1	15	0	12	3.0	110	4.3	213
26...	10	.2	7.5	2.1	20	0	16	10	110	3.9	205
AUG											
08...	10	.2	8.1	2.1	12	0	10	6.1	110	4.0	233
23...	12	.3	7.6	2.0	32	0	26	8.1	75	4.7	148

03201660 BIG FOUR HOLLOW CREEK BELOW EAST FORK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS TOTAL (MG/L AS PO4)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ANTI- MONY, TOTAL (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)
NOV										
06...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
DEC										
08...	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
FEB										
25...	--	--	--	--	--	--	--	--	--	--
MAR										
12...	--	--	--	--	--	--	--	--	--	--
APR										
02...	--	--	--	--	--	--	--	--	--	--
MAY										
31...	--	--	--	--	--	--	--	--	--	--
JUN										
08...	--	--	--	--	--	--	--	--	--	--
JUL										
10...	.29	.09	.22	.97	.00	.00	300	0	1	0
26...	.28	.12	.30	1.3	.03	.09	700	0	1	0
AUG										
08...	.32	.08	.19	.84	.00	.00	220	0	2	0
23...	.20	.09	.23	1.0	.01	.03	260	0	2	0
SEP										
05...	.28	.06	.06	.27	.00	.00	310	0	0	0
17...	.25	.08	.65	2.9	.01	.03	800	0	1	0

DATE	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
NOV										
06...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
DEC										
08...	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
FEB										
25...	--	--	--	--	--	--	--	--	--	--
MAR										
12...	--	--	--	--	--	--	--	--	--	--
APR										
02...	--	--	--	--	--	--	--	--	--	--
MAY										
31...	--	--	--	--	--	--	--	--	--	--
JUN										
08...	--	--	--	--	--	--	--	--	--	--
JUL										
10...	0	16	2	1600	400	1200	3	1600	0	1600
26...	0	14	0	1300	350	950	3	1600	100	1500
AUG										
08...	1	16	4	1500	400	1100	5	2000	200	1800
23...	1	19	3	1200	720	480	5	850	50	800
SEP										
05...	0	2	2	2200	--	950	5	1800	100	1700
17...	0	3	3	3000	--	1300	2	1800	100	1700

RACCOON CREEK BASIN

03201660 BIG FOUR HOLLOW CREEK BELOW EAST FORK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)	PHENOLS (UG/L)
NOV										
06...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
DEC										
08...	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
FEB										
25...	--	--	--	--	--	--	--	--	--	--
MAR										
12...	--	--	--	--	--	--	--	--	--	--
APR										
02...	--	--	--	--	--	--	--	--	--	--
MAY										
31...	--	--	--	--	--	--	--	--	--	--
JUN										
08...	--	--	--	--	--	--	--	--	--	--
JUL										
10...	<.5	37	0	0	10	20	30	3.9	.1	0
26...	<.5	2	0	0	30	30	60	2.6	.0	0
AUG										
08...	<.5	10	0	0	10	30	40	3.1	.3	0
23...	<.5	7	0	1	0	20	20	6.4	.4	0
SEP										
05...	<.5	10	0	0	0	30	30	2.9	.2	1
17...	<.5	10	0	0	30	0	30	7.0	.6	0

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
NOV					MAY				
06...	1230	.96	--	5.0	31...	1130	.19	--	4.0
20...	1230	1.6	--	6.0	JUN				
30...	1500	2.0	--	3.0	08...	1200	4.5	--	36
DEC					JUL				
08...	1315	21	--	131	10...	0900	.37	19.0	--
08...	1316	21	--	171	26...	1515	.29	21.0	--
09...	1030	11	--	30	AUG				
18...	1615	26	--	193	08...	1200	.25	22.5	--
22...	1100	2.7	--	7.0	23...	1400	.62	19.0	--
FEB					SEP				
25...	2100	16	--	162	05...	1500	.17	20.5	--
MAR					17...	1300	.81	15.5	--
12...	1530	.42	--	5.0					
APR									
02...	1400	6.2	--	21					

RACCOON CREEK BASIN

149

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH

LOCATION.--Lat 39°21'48", long 82°18'51", in NE 1/4 SE 1/4 sec. 11, T.11 N., R.16 W., Vinton County, Hydrologic Unit 05090101, on right bank 200 ft (61 m) upstream from State Route 278 crossing, 300 ft (91 m) upstream from Sandy Run, 2.5 mi (4.0 km) southwest of Carbondale, and 3.7 mi (6.0 km) northeast of Lake Hope.

DRAINAGE AREA.--1.01 mi² (2.62 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder with concrete weir and 6-inch Parshall flume. Datum of gage is 756.04 ft (230.441 m), National Geodetic Vertical Datum of 1929. Prior to October 1, 1978, at datum 20.00 ft (6.096 m) higher.

REMARKS.--Records fair..

AVERAGE DISCHARGE.--9 years, 1.12 ft³/s (0.032 m³/s), 15.06 in/yr (383 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,200 ft³/s (34.0 m³/s) June 22, 1974, gage height, 24.72 ft (7.535 m) on basis of culvert and flow-over road measurement; no flow July 30 to Aug. 3, 1975, Sept. 8-14, 27-30, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft³/s (1.42 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 8	2345	50.6 1.43	22.47 6.849	Feb. 25	1245	*93.0 2.63	*22.99 7.007

Minimum discharge, 0.02 ft³/s (0.001 m³/s), Oct. 1, 3, 9, 10.

DISCHARGE, STREAM (CUBIC FEET PER SECOND), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.14	.50	20	.60	4.5	7.8	.43	1.4	.31	.15	.48
2	.03	.12	.41	6.0	.50	3.9	10	.41	.68	.22	.89	.37
3	.03	.11	8.3	2.6	.40	2.7	4.2	1.6	.52	.15	.24	.30
4	.09	.10	16	1.6	.30	3.0	2.7	9.0	.41	.54	.17	.24
5	.04	.09	3.0	1.1	.30	3.5	1.9	5.7	.31	.44	.14	.20
6	.03	.09	1.6	.90	.30	2.1	1.4	2.6	.66	.20	.58	.17
7	.03	.08	1.4	.80	.20	1.6	1.1	1.7	.36	.12	.23	.29
8	.03	.08	30	.70	.20	1.3	1.1	1.2	6.4	.09	.16	.29
9	.02	.08	20	.70	.20	1.0	2.4	.97	1.7	.30	.14	.19
10	.02	.07	4.8	.60	.20	.93	1.8	.90	1.7	.25	.12	.26
11	.05	.07	3.3	.60	.10	.79	1.4	.77	1.5	.18	3.4	.25
12	.10	.07	2.7	.50	.10	.72	1.3	.66	.72	.13	1.4	.32
13	2.7	.07	1.9	1.6	.10	.64	1.5	.58	.48	.11	.49	.50
14	1.5	.07	.93	8.0	.10	.75	2.6	.48	.36	.10	.31	4.5
15	.38	.24	.81	2.4	.10	.58	1.7	.41	.28	.08	.23	.74
16	.22	.70	.77	1.6	.20	.52	1.3	.34	.23	.06	.17	.44
17	.17	4.0	.75	2.3	.20	.52	1.1	.28	.20	.05	.14	.28
18	.12	2.1	.66	1.9	.20	.54	.90	.25	.17	.04	.19	.23
19	.13	.75	.62	1.5	.10	.52	.79	.24	.19	.03	1.9	.18
20	.10	.46	1.2	5.0	.35	.50	.70	.21	.22	.03	1.7	.15
21	.10	.28	3.2	11	1.5	.46	.64	.18	1.6	.03	7.3	8.6
22	.11	.36	1.4	3.8	4.0	.41	.58	.17	.52	.03	1.3	7.7
23	.21	.31	1.1	2.5	20	.75	.36	.33	.31	1.5	.92	3.0
24	.16	.26	1.0	5.9	22	4.6	.54	.50	.23	.83	1.6	1.2
25	.11	.21	1.1	3.3	39	2.3	.48	.41	.18	.77	1.5	.80
26	3.1	.21	.86	2.0	17	1.4	.54	.86	.14	.43	7.5	.68
27	1.6	5.1	.64	1.6	5.3	1.0	.77	6.0	.12	.24	5.0	1.8
28	.50	2.9	.54	1.4	4.3	.88	.60	2.4	.57	.29	2.4	9.9
29	.30	1.1	.50	1.0	---	.83	.54	.97	.18	.88	3.2	3.4
30	.22	.72	1.0	.88	---	.72	.46	.58	.42	.28	1.3	1.5
31	.17	---	7.5	.60	---	4.0	---	1.0	---	.18	.69	---
TOTAL	12.46	20.94	118.49	94.38	117.85	47.96	53.40	42.13	22.76	8.89	45.46	48.95
MEAN	.40	.70	3.82	3.04	4.21	1.55	1.78	1.36	.76	.29	1.47	1.63
MAX	3.1	5.1	30	20	39	4.6	10	9.0	6.4	1.5	7.5	9.9
MIN	.02	.07	.41	.50	.10	.41	.46	.17	.12	.03	.12	.15
CFSM	.40	.69	3.78	3.01	4.17	1.54	1.76	1.35	.75	.29	1.46	1.61
IN.	.46	.77	4.36	3.47	4.34	1.76	1.96	1.55	.84	.33	1.67	1.80

CAL YR 1978 TOTAL 420.35 MEAN 1.15 MAX 30 MIN .01 CFSM 1.14 IN 15.47
WTR YR 1979 TOTAL 633.67 MEAN 1.74 MAX 39 MIN .02 CFSM 1.72 IN 23.32

RACCOON CREEK BASIN

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970 to 1974, 1975 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1971 to current year.

pH: January 1971 to current year.

WATER TEMPERATURES: January 1971 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument.
Sediment samples collected daily and on events by observer.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 3,530 micromhos Sept. 13, 1973; minimum, 72 micromhos Oct. 17, 1975.

pH: Maximum, 6.7 units Jan. 8, 1978; minimum, 2.1 units on several days during October and December 1971, February and March 1972, December 1973.

WATER TEMPERATURES: Maximum, 34.5°C Aug. 12, 1973; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 2900 micromhos Aug. 2; minimum, 111 micromhos Jan. 1.

pH: Maximum, 6.4 units Nov. 27, Aug. 26, Sept. 22; minimum, 2.8 units Aug. 2, 20.

WATER TEMPERATURES: Maximum, 28.5°C July 16; minimum 0.0°C Feb. 2-4, 6-22.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MMOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
OCT											
13...	1000	4.3	280	4.8	12.5	41	97	97	.0	.0	23
24...	1400	.11	850	3.3	13.0	10	310	310	2.6	129	68
NOV											
06...	1600	.08	830	3.2	13.0	15	280	280	2.3	114	63
22...	0900	.26	490	3.5	7.0	8	180	180	1.0	50	43
30...	1530	.66	390	3.9	6.5	13	140	140	.6	30	31
DEC											
21...	1030	3.2	270	4.0	4.0	42	99	99	.5	25	23
21...	1300	--	--	--	--	--	--	--	--	--	--
21...	1330	--	--	--	--	--	--	--	--	--	--
JAN											
04...	1600	1.6	330	3.9	.5	17	110	110	.8	40	25
16...	1130	1.7	285	4.0	1.0	1	130	130	.6	30	29
FEB											
01...	1430	.66	395	3.6	.5	10	130	130	.8	40	30
14...	1030	.33	520	3.5	.5	8	160	160	1.3	65	38
26...	1130	11	160	4.1	2.0	12	60	60	.4	20	14
MAR											
13...	1230	.66	390	3.7	7.0	9	130	130	.8	40	31
24...	1530	1.2	345	3.9	5.0	10	110	110	.5	25	26
APR											
11...	1200	1.4	300	4.5	7.5	13	110	110	.3	15	25
30...	1000	.52	400	3.6	7.5	7	130	130	.5	25	32
MAY											
15...	1400	.39	425	3.8	20.5	25	140	140	.6	30	32
30...	1330	.64	520	3.7	18.0	4	150	150	1.1	55	35
JUN											
11...	1530	1.2	420	3.9	19.5	6	130	130	.8	40	30
28...	1000	.11	565	3.9	15.5	9	190	190	1.0	50	43
JUL											
10...	1030	.20	500	3.8	17.0	10	180	180	.8	40	43
26...	1400	.43	1200	3.5	19.0	16	380	380	4.6	228	86
AUG											
08...	1300	.16	1050	3.0	21.5	32	310	310	3.2	159	73
23...	1300	.88	370	4.5	19.0	35	130	130	.6	30	32
SEP											
05...	1600	.18	535	3.6	21.0	2	180	180	1.4	70	44
17...	1400	.30	755	3.7	17.0	12	230	230	2.5	124	54

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	SODIUM+ POTAS- SIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT											
13...	9.5	5.4	11	.2	--	2.7	0	0	0	.0	100
24...	33	6.8	5	.2	--	2.7	0	0	0	.0	410
NOV											
06...	29	7.0	5	.2	--	2.4	0	0	0	.0	380
22...	18	6.2	7	.2	--	2.3	0	0	0	.0	220
30...	14	5.5	8	.2	--	2.0	0	0	0	.0	150
DEC											
21...	10	4.2	8	.2	--	1.7	0	0	0	.0	110
21...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
JAN											
04...	12	3.8	7	.2	--	1.5	0	0	0	.0	140
16...	13	4.5	7	.2	--	1.4	0	0	0	.0	130
FEB											
01...	14	5.0	7	.2	--	1.6	0	0	0	.0	170
14...	17	5.8	7	.2	--	1.7	0	0	0	.0	220
26...	6.1	2.3	7	.1	--	1.4	0	0	0	.0	71
MAR											
13...	13	4.8	7	.2	--	1.6	0	0	0	.0	160
26...	12	4.9	8	.2	--	1.7	0	0	0	.0	130
APR											
11...	11	4.9	9	.2	--	1.7	0	0	0	.0	120
30...	13	5.5	8	.2	--	1.9	0	0	0	.0	170
MAY											
15...	14	5.8	8	.2	--	1.9	0	0	0	.0	180
30...	16	5.4	7	.2	7.2	1.8	0	0	0	.0	200
JUN											
11...	13	4.6	7	.2	--	1.8	0	0	0	.0	150
28...	19	6.5	7	.2	8.5	2.0	0	0	0	.0	220
JUL											
10...	18	6.2	7	.2	--	2.2	0	0	0	.0	220
26...	39	9.7	5	.2	13	3.6	0	0	0	.0	550
AUG											
08...	30	7.8	5	.2	11	2.9	0	0	0	.0	430
23...	13	5.8	8	.2	7.9	2.1	0	0	0	.0	150
SEP											
05...	18	6.2	7	.2	8.6	2.4	0	0	0	.0	210
17...	23	6.7	6	.2	9.3	2.6	0	0	0	.0	330

RACCOON CREEK BASIN

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOT. IN BOT MAT (MG/KG AS N)	NITRO- GEN,NH4 TOTAL IN BOT. MAT. (MG/KG AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,NH4 + ORG. TOT IN BOT MAT (MG/KG AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, TOTAL (MG/L AS P)
OCT											
13...	4.6	172	.23	.55	--	--	.78	--	1.3	5.9	.07
24...	2.5	585	.80	.12	--	--	.13	--	.25	1.1	.00
NOV											
06...	3.1	521	.71	.13	--	--	.03	--	.16	.71	.00
22...	4.5	340	.46	.16	--	--	.00	--	.16	.71	.00
30...	4.4	252	.34	.15	--	--	.00	--	.15	.66	.00
DEC											
21...	3.1	175	.24	.13	--	--	.08	--	.21	.93	.00
21...	--	--	--	--	.6	3.7	--	1200	--	--	--
21...	--	--	--	--	.9	5.0	--	1300	--	--	--
JAN											
04...	2.6	216	.29	.12	--	--	.00	--	.12	.53	.00
16...	3.3	198	.27	.13	--	--	.22	--	.35	1.6	.00
FEB											
01...	4.3	246	.33	.11	--	--	.16	--	.27	1.2	.00
14...	3.5	330	.45	.13	--	--	.25	--	.38	1.7	.00
26...	2.9	117	.16	.13	--	--	.18	--	.31	1.4	.00
MAR											
13...	3.2	231	.31	.13	--	--	.07	--	.20	.89	.00
26...	3.6	211	.29	.11	--	--	.17	--	.28	1.2	.00
APR											
11...	2.7	188	.26	.07	--	--	.14	--	.21	.93	.00
30...	2.9	252	.34	.06	--	--	.17	--	.23	1.0	.00
MAY											
15...	2.4	289	.39	.07	--	--	.11	--	.18	.80	.00
30...	2.4	321	.44	.10	--	--	.04	--	.14	.62	.01
JUN											
11...	3.1	271	.37	.07	--	--	.10	--	.17	.75	.01
20...	2.4	402	.55	.07	--	--	.10	--	.17	.75	.00
JUL											
10...	3.1	361	.49	.07	--	--	.01	--	.08	.35	.00
26...	2.0	1000	1.36	.05	--	--	.27	--	.32	1.4	.02
AUG											
08...	2.9	835	1.14	.04	--	--	.36	--	.40	1.8	.00
23...	3.8	253	.34	.10	--	--	.34	--	.44	1.9	.03
SEP											
05...	2.6	385	.52	.06	--	--	.06	--	.12	.53	.01
17...	3.0	544	.74	.09	--	--	.17	--	.26	1.2	.00

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	PHOS- PHATE, TOTAL (MG/L AS P04)	PHOS- PHORUS TOTAL (MG/L AS P04)	PHOS- PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ANTI- MONY, TOTAL (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS BA)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)
OCT											
13...	--	--	--	540	--	3	1	--	0	3	--
24...	--	--	--	10000	--	1	0	--	10	11	--
NOV											
06...	--	--	--	--	--	0	0	--	--	--	--
22...	--	--	--	4400	--	0	0	--	0	3	--
30...	--	--	--	3000	--	0	0	--	0	4	--
DEC											
21...	--	--	--	1400	--	0	1	--	0	6	--
21...	--	--	150	--	840	--	--	20	--	--	<10
21...	--	--	98	--	650	--	--	20	--	--	<10
JAN											
04...	--	--	--	880	--	0	0	--	0	2	--
16...	--	--	--	860	--	0	1	--	0	7	--
FEB											
01...	--	--	--	3100	--	0	1	--	10	10	--
14...	--	--	--	3900	--	0	0	--	10	1	--
26...	--	--	--	1400	--	0	0	--	0	8	--
MAR											
13...	--	--	--	3100	--	0	1	--	0	3	--
26...	--	--	--	1900	--	0	0	--	0	0	--
APR											
11...	--	--	--	1900	--	0	0	--	0	2	--
30...	.00	.00	--	2000	--	0	0	--	0	15	--
MAY											
15...	.00	.00	--	2400	--	0	0	--	10	4	--
30...	.03	.03	--	3600	--	0	0	--	10	4	--
JUN											
11...	.03	.03	--	2800	--	0	0	--	0	10	--
28...	.00	.00	--	4100	--	0	1	--	10	0	--
JUL											
10...	--	.00	--	3200	--	0	1	--	0	0	--
26...	--	.06	--	13000	--	0	2	--	10	0	--
AUG											
08...	--	.00	--	11000	--	0	2	--	10	1	--
23...	--	.09	--	2400	--	0	2	--	0	1	--
SEP											
05...	--	.03	--	4000	--	0	0	--	0	1	--
17...	--	.00	--	5900	--	0	1	--	10	0	--

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUS- PENDED RECOVERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, RECOVERABLE FM BOT- TOM MA- TERIAL (UG/G AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUS- PENDED RECOVERABLE (UG/L AS MN)	MANGANESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)
OCT											
13...	3	8	8100	--	730	26	--	1300	--	1200	<.5
24...	1	18	2700	--	2700	100	--	6400	--	6400	<.5
NOV											
06...	--	--	1800	--	1800	270	--	5500	--	5500	<.5
22...	2	6	1300	--	1300	16	--	3300	--	2800	<.5
30...	1	4	2000	--	1500	35	--	2400	--	2200	<.5
DEC											
21...	4	5	4300	--	2300	87	--	860	--	860	<.5
21...	--	--	--	--	--	--	20	--	--	--	--
21...	--	--	--	--	--	--	<10	--	--	--	--
JAN											
04...	2	5	7000	--	6000	30	--	1200	--	1200	<.5
16...	5	3	5600	--	4000	95	--	1000	--	1000	<.5
FEB											
01...	30	5	7200	--	6600	200	--	1500	--	1500	<.5
14...	2	5	7800	--	7000	8	--	2200	--	2200	<.5
26...	0	4	4400	--	3000	68	--	460	--	460	<.5
MAR											
13...	0	5	6400	--	4600	43	--	1500	--	1400	<.5
26...	0	4	5000	--	3600	7	--	1000	--	1000	<.5
APR											
11...	7	3	2700	--	1300	17	--	840	--	840	<.5
30...	5	6	2500	500	2000	150	--	1300	0	1300	<.5
MAY											
15...	3	6	2300	200	2100	54	--	1400	100	1300	<.5
30...	8	6	9100	800	8300	60	--	1600	0	1600	<.5
JUN											
11...	9	5	10000	3700	6300	42	--	1100	0	1100	<.5
28...	10	8	2000	1100	950	1	--	2000	0	2000	<.5
JUL											
10...	15	8	570	0	570	5	--	2100	0	2100	<.5
26...	9	0	66000	0	66000	0	--	5700	0	5700	<.5
AUG											
08...	19	19	29000	10000	19000	8	--	6400	100	6300	<.5
23...	1	11	5400	0	5400	8	--	2000	200	1800	<.5
SEP											
05...	2	6	6800	--	5900	8	--	3600	300	3300	<.5
17...	4	9	28000	--	23000	4	--	4700	400	4300	<.5

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	STRON- TIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)	PHENOLS (UG/L)
OCT											
13...	--	--	0	0	--	--	40	60	6.9	2.5	1
24...	--	--	0	0	--	--	220	230	2.5	.2	2
NOV											
06...	--	--	0	--	--	--	30	260	1.1	.2	0
22...	--	--	0	0	--	--	100	120	2.1	.4	0
30...	--	--	0	0	--	--	70	90	1.2	.4	0
DEC											
21...	--	--	0	0	--	--	50	70	2.8	.7	5
21...	.00	<10	--	--	10	--	--	--	--	--	--
21...	.00	<10	--	--	10	--	--	--	--	--	--
JAN											
04...	--	--	0	0	--	--	70	80	1.1	.2	0
16...	--	--	0	0	--	--	90	90	4.3	.2	0
FEB											
01...	--	--	0	0	--	--	70	100	1.3	.1	0
14...	--	--	0	0	--	--	120	310	1.6	.5	2
26...	--	--	0	0	--	--	20	50	4.4	--	1
MAR											
13...	--	--	0	0	--	--	50	80	3.2	.1	0
26...	--	--	0	0	--	--	50	50	1.7	.1	0
APR											
11...	--	--	0	0	--	--	50	60	2.0	.1	0
30...	--	--	0	0	--	10	80	90	4.2	.1	0
MAY											
15...	--	--	0	0	--	0	80	80	1.8	.1	1
30...	--	--	0	0	--	0	90	90	7.5	.2	0
JUN											
11...	--	--	0	0	--	40	40	80	5.0	.2	0
28...	--	--	0	0	--	0	170	170	7.6	.1	2
JUL											
10...	--	--	0	0	--	50	220	270	2.0	.1	0
26...	--	--	0	0	--	40	380	420	3.0	.0	0
AUG											
08...	--	--	0	0	--	0	320	320	2.9	.1	0
23...	--	--	0	1	--	0	80	80	3.3	.5	0
SEP											
05...	--	--	0	0	--	10	130	140	5.2	.2	2
17...	--	--	0	0	--	60	140	200	4.4	.1	170

RACCOON CREEK BASIN

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1570	984	699	663	411	375	225	111	465	393	264	234
2	1350	1220	702	569	438	393	642	180	459	417	279	249
3	1370	1230	849	587	483	153	318	267	444	429	309	279
4	---	---	894	593	243	135	459	324	558	438	318	234
5	---	---	1090	741	384	228	432	354	522	471	---	---
6	1190	1150	876	735	501	363	393	351	606	474	---	---
7	1190	1110	771	741	558	240	393	258	489	468	351	276
8	1220	1120	1440	738	201	120	---	---	486	468	342	309
9	1280	1160	1180	795	288	144	---	---	498	483	348	288
10	1280	1160	1650	903	507	246	458	438	522	483	366	264
11	1340	1180	1700	804	720	294	483	441	522	507	369	231
12	1220	1060	1160	810	396	372	483	429	522	498	399	315
13	549	255	1060	855	651	381	477	255	519	498	411	375
14	---	---	903	798	471	450	294	186	528	516	408	360
15	651	630	864	567	489	435	327	276	546	459	396	348
16	747	633	564	498	567	459	354	315	465	432	414	381
17	765	738	798	204	801	462	354	267	495	459	444	402
18	858	753	906	279	525	507	390	276	507	474	432	411
19	855	777	987	423	558	504	393	321	504	468	438	420
20	822	789	699	423	564	255	350	174	519	495	447	435
21	891	798	840	489	342	240	249	162	519	267	462	444
22	918	870	534	438	519	339	288	249	264	144	486	450
23	915	828	534	492	432	426	309	291	213	153	483	297
24	879	792	666	489	804	411	306	183	225	147	318	216
25	981	888	1040	591	549	411	276	213	207	120	297	243
26	972	267	1150	549	447	435	318	279	240	147	339	303
27	951	297	540	189	534	465	339	315	273	237	375	342
28	528	213	315	225	534	468	356	327	273	240	387	363
29	1140	225	351	315	534	495	393	360	---	---	411	387
30	699	276	387	339	558	372	399	351	---	---	426	405
31	669	654	---	---	396	150	459	363	---	---	420	189
MONTH	1570	255	1700	189	804	120	642	111	606	120	486	189

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	252	162	438	414	405	285	459	387	972	903	453	417
2	243	174	462	432	450	405	492	444	2900	453	471	453
3	285	243	456	270	465	444	525	492	1350	1250	507	471
4	294	282	276	156	504	465	522	237	1350	1290	552	501
5	327	303	273	192	537	498	789	372	1320	1070	570	531
6	330	300	330	273	597	339	645	558	1090	519	606	558
7	321	297	366	330	558	516	582	558	1010	846	1760	564
8	336	309	390	360	450	171	600	573	1060	981	1670	1370
9	324	243	414	381	462	312	597	360	1200	1060	1370	1220
10	303	270	420	375	543	225	780	420	1530	1130	1970	1130
11	318	291	411	384	474	273	650	300	1390	213	1950	1640
12	360	321	432	384	540	471	606	600	579	279	1730	717
13	360	246	414	402	582	534	600	300	747	588	1320	396
14	279	243	438	411	606	558	618	300	837	750	594	156
15	303	279	456	435	600	516	630	600	1100	840	591	441
16	321	303	477	450	585	555	650	600	1310	1130	687	597
17	339	318	489	468	606	564	690	630	1410	1270	732	600
18	354	327	501	483	621	585	717	690	1400	1120	846	600
19	366	339	525	498	612	531	752	720	1230	192	870	807
20	378	351	537	519	624	345	732	720	2650	171	864	828
21	387	363	549	531	399	258	732	714	291	132	903	129
22	390	381	567	549	480	396	753	720	387	294	264	147
23	396	387	567	450	558	483	1540	750	411	321	354	234
24	411	396	480	429	606	558	1600	1490	420	243	429	357
25	420	405	486	387	639	597	1590	894	342	264	570	372
26	423	405	426	336	744	564	1210	1140	354	150	531	351
27	387	348	435	186	558	531	1240	1140	267	183	2750	387
28	396	372	387	243	759	543	1240	522	330	270	651	159
29	411	396	516	387	627	576	720	420	309	267	294	234
30	426	405	552	495	543	336	882	732	1860	312	339	288
31	---	---	546	255	---	---	942	870	414	375	---	---
MONTH	426	162	567	156	759	171	1600	237	2900	132	2750	129

YEAR	2900	111										
------	------	-----	--	--	--	--	--	--	--	--	--	--

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH					
1	18.5	14.0	13.0	6.5	5.5	1.0	7.5	5.0	1.0	.5	5.5	2.5				
2	17.0	11.5	12.5	5.0	6.0	2.0	5.0	.5	1.0	.0	7.0	3.5				
3	16.5	10.5	13.0	5.5	8.5	4.5	1.0	.5	1.0	.0	9.5	3.0				
4	15.5	12.5	13.0	6.0	9.0	5.5	1.0	.5	2.5	.0	10.5	6.5				
5	15.0	10.5	13.0	5.0	6.0	4.0	1.0	.5	1.0	.5	---	---				
6	12.5	11.0	12.0	6.5	6.0	3.0	1.5	1.0	1.0	.0	---	---				
7	12.5	10.0	8.5	7.5	6.5	3.5	1.5	.5	.0	.0	8.5	2.0				
8	11.0	8.0	10.5	5.0	---	---	1.0	.5	.5	.0	8.0	3.5				
9	13.5	6.5	7.0	4.0	6.0	4.0	1.0	.5	.5	.0	6.5	2.5				
10	14.0	7.0	10.0	4.5	4.0	1.0	1.0	.5	.5	.0	8.0	4.0				
11	13.0	8.0	11.5	4.5	3.5	.5	1.0	.5	.5	.0	5.0	1.5				
12	16.5	11.0	9.0	7.5	5.0	2.0	1.0	.5	.5	.0	9.5	2.0				
13	13.5	11.5	12.0	9.0	5.0	2.0	1.0	.5	.5	.0	8.0	1.0				
14	12.0	10.5	10.5	8.0	3.5	1.0	2.0	.5	.5	.0	6.5	4.5				
15	11.5	9.5	9.5	7.5	4.5	1.0	1.0	.5	.5	.0	5.5	1.0				
16	12.0	9.0	8.5	7.5	5.0	1.5	1.0	.5	.5	.0	7.0	1.0				
17	12.0	8.0	11.5	8.5	5.0	1.5	1.5	1.0	.5	.0	9.5	.5				
18	13.5	6.5	10.0	8.0	3.5	1.0	2.0	.5	.5	.0	12.0	3.5				
19	13.5	9.5	9.5	5.5	3.0	2.5	1.0	.5	.5	.0	11.5	4.0				
20	14.0	7.5	8.0	4.5	8.0	3.0	2.0	1.0	.5	.0	12.5	7.0				
21	14.0	7.0	8.0	5.5	7.0	3.0	3.5	2.0	.0	.0	15.5	6.0				
22	14.5	7.5	9.0	6.0	4.5	1.5	3.5	1.5	.5	.0	14.5	5.0				
23	12.0	9.0	9.0	7.0	3.5	.5	4.0	1.0	---	---	11.5	8.0				
24	12.5	7.0	8.0	5.0	3.5	1.0	3.5	1.0	---	---	9.0	6.0				
25	11.5	9.5	6.5	4.0	3.5	1.5	2.0	1.0	---	---	7.5	4.0				
26	12.5	10.5	5.5	4.0	3.0	1.0	2.0	1.0	---	---	5.5	3.5				
27	11.5	7.5	8.0	4.5	2.5	.5	3.5	1.0	5.5	2.5	8.5	3.0				
28	12.0	6.0	7.5	4.0	1.0	.5	2.5	1.5	5.5	1.0	12.0	1.5				
29	12.0	6.5	5.0	3.0	1.5	.5	2.0	1.0	---	---	12.5	7.5				
30	13.0	9.5	6.5	2.5	2.0	1.0	1.5	.5	---	---	15.0	8.5				
31	13.5	9.5	---	---	6.5	2.0	1.5	.5	---	---	11.5	9.0				
MONTH	18.5	9.5	13.0	2.5	9.0	.5	7.5	.5	5.5	.0	15.5	.5				
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN				
APRIL MAY JUNE JULY AUGUST SEPTEMBER																
1	9.0	8.0	19.5	5.5	19.5	14.0	18.0	14.0	24.5	19.0	22.0	17.0				
2	11.5	8.5	21.5	7.0	20.0	14.0	22.5	15.0	20.5	12.5	21.0	18.0				
3	11.5	7.0	14.5	12.0	18.0	14.5	25.5	14.0	23.0	16.5	23.0	18.5				
4	8.5	6.5	12.0	9.0	22.5	12.0	18.5	15.5	22.5	16.5	23.5	18.0				
5	10.5	7.0	16.0	7.5	23.5	13.5	20.0	12.5	24.0	17.5	21.5	18.0				
6	11.5	3.5	18.5	7.5	22.5	15.0	23.0	11.5	22.5	18.5	22.5	18.5				
7	9.0	2.0	21.0	9.5	22.0	15.5	23.0	12.0	24.5	18.5	22.0	14.0				
8	12.0	4.5	21.5	11.0	17.5	16.0	25.0	13.5	24.5	19.5	15.5	13.0				
9	8.5	9.0	23.5	12.5	19.0	15.5	17.5	17.0	26.0	18.5	18.0	11.5				
10	12.5	3.5	22.0	15.0	23.0	16.0	20.0	16.0	26.0	19.5	18.5	11.5				
11	10.5	4.5	23.5	14.0	20.0	14.5	22.5	15.0	20.0	17.5	18.5	12.0				
12	14.0	8.0	23.5	15.0	21.5	12.5	21.5	17.5	19.5	16.5	22.0	14.0				
13	13.0	9.0	16.0	12.5	18.5	13.0	19.5	15.0	20.0	14.0	18.5	15.5				
14	15.0	7.0	21.5	10.5	23.0	12.5	25.0	15.0	19.5	15.0	18.5	15.0				
15	9.5	7.0	20.0	12.5	24.5	14.0	25.0	18.5	19.5	14.0	16.5	13.0				
16	9.0	9.5	21.5	9.5	22.5	15.0	28.5	15.0	20.5	12.0	17.0	11.5				
17	14.5	5.0	21.5	9.0	23.5	16.0	27.0	18.0	21.0	12.0	18.5	10.0				
18	16.5	5.0	23.0	9.5	24.0	16.5	27.0	17.0	19.5	15.5	19.0	10.0				
19	17.5	4.5	23.5	10.5	25.5	15.5	25.0	15.0	21.0	17.0	18.0	13.0				
20	19.0	6.0	22.0	14.0	26.0	15.0	23.5	15.0	20.0	14.5	18.0	11.0				
21	17.5	7.0	23.5	15.5	19.0	17.0	25.0	18.0	19.5	17.5	15.5	15.0				
22	16.5	10.5	22.5	12.5	23.5	16.0	27.0	18.5	20.5	17.5	15.0	13.5				
23	15.0	11.0	16.5	15.0	21.5	16.5	21.5	11.5	20.0	18.0	15.5	12.0				
24	19.5	11.0	15.5	13.5	19.5	14.5	16.0	12.0	20.5	18.0	16.5	11.0				
25	20.0	12.5	13.5	10.5	23.0	11.5	18.0	14.0	19.5	17.5	16.5	12.0				
26	15.0	13.0	15.5	10.0	24.0	12.0	19.5	16.0	18.5	17.0	17.5	12.0				
27	16.5	10.5	12.5	11.0	23.0	13.0	20.5	16.0	19.0	17.5	15.5	12.5				
28	14.5	9.0	16.0	11.0	20.5	14.5	19.0	17.0	20.5	17.0	15.5	15.0				
29	14.0	7.5	19.0	9.5	18.5	14.5	22.5	18.0	20.5	18.5	17.5	15.0				
30	18.5	7.0	21.0	10.5	17.5	15.5	23.5	17.0	20.5	15.5	17.5	14.0				
31	---	---	16.5	14.0	---	---	24.5	18.0	22.0	16.5	---	---				
MONTH	20.0	2.0	23.5	6.5	26.0	11.5	28.5	11.5	26.0	12.0	23.5	10.0				
YEAR	28.5	.0														

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

TOTAL LOAD FOR YEAR: 278.71 TONS.

RACCOON CREEK BASIN

03201720 HULL HOLLOW CREEK NEAR LAKE HOPE, OH

LOCATION.--Lat 39°21'32", long 82°19'05" in SW 1/4 SE1/4 sec. 11, T.11 N., R.16 W., Vinton County, Hydrologic Unit 05090101, on left bank 60 ft (18 m) upstream from Sandy Run, 3.0 mi (4.81 km) southwest of Carbondale and 3.2 mi (5.1 km) northeast of Lake Hope.

DRAINAGE AREA.--0.22 mi² (0.57 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1978 to September 1979.

GAGE.--Water-stage recorder. Datum of gage is 763.22 ft (232.629 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23 ft³/s (0.65 m³/s) Feb. 25, 1979, gage height, 5.57 ft (1.698 m); no flow many days during 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 23 ft³/s (0.65 m³/s) Feb. 25, gage height, 5.57 ft (1.698 m); no flow many days.

DISCHARGE, STREAM (CUBIC FEET PER SECOND), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.10	3.0	.05	.77	1.9	.20	.23	.17	.08	.20
2	.00	.00	.05	.84	.04	.58	2.4	.20	.17	.17	.15	.10
3	.00	.00	.70	.44	.03	.37	.70	.53	.15	.15	.10	.10
4	.00	.00	3.3	.37	.02	.33	.49	2.2	.14	.18	.07	.10
5	.00	.00	2.4	.30	.02	.44	.37	.77	.12	.17	.05	.14
6	.00	.00	1.0	.30	.01	.27	.33	.40	.18	.15	.10	.14
7	.00	.00	2.4	.37	.01	.20	.30	.33	.14	.14	.17	.10
8	.00	.00	6.9	.25	.00	.13	.30	.25	1.6	.10	.10	.10
9	.00	.00	4.1	.18	.00	.10	.77	.23	.53	.13	.07	.08
10	.00	.00	1.7	.17	.00	.08	.70	.20	.37	.17	.04	.04
11	.04	.00	.17	.30	.00	.06	.49	.18	.30	.10	.53	.02
12	.10	.00	.14	1.1	.00	.27	.20	.17	.23	.10	.30	.01
13	.45	.00	.12	1.0	.00	.25	.49	.17	.20	.08	.23	.25
14	.40	.00	.11	.53	.00	.33	1.0	.15	.18	.07	.18	.92
15	.10	.10	.10	.23	.00	.27	.70	.15	.17	.06	.10	.25
16	.05	.22	.09	.22	.00	.20	.49	.14	.17	.05	.00	.17
17	.02	.64	.08	.49	.00	.15	.40	.12	.15	.04	.00	.10
18	.00	.30	.08	.33	.00	.13	.33	.12	.14	.04	.10	.05
19	.00	.20	.07	.30	.00	.11	.30	.11	.15	.03	.24	.01
20	.00	.10	.12	.64	.10	.09	.25	.11	.15	.03	.40	.09
21	.00	.03	.23	1.3	.25	.08	.25	.11	.40	.03	1.6	.49
22	.00	.00	.11	.49	1.6	.07	.23	.10	.23	.02	.30	1.9
23	.00	.00	.08	.37	6.0	.30	.23	.12	.18	.02	.25	.70
24	.05	.00	.06	.84	3.5	1.1	.20	.17	.17	.02	.30	.33
25	.22	.00	.05	.49	11	.64	.20	.15	.15	.10	.33	.25
26	.43	25	.05	.33	3.0	.40	.20	.23	.14	.17	.92	.20
27	.30	92	.04	.30	1.0	.33	.37	1.0	.14	.17	.70	.18
28	.20	53	.04	.20	.77	.30	.30	.40	.11	.18	.49	2.4
29	.10	33	.05	.10	---	.27	.25	.23	.12	.25	.64	.70
30	.03	.20	.11	.08	---	.27	.23	.17	.15	.18	.33	.18
31	.00	---	.53	.06	---	1.0	---	.25	---	.10	.23	---
TOTAL	2.49	204.79	25.08	15.92	27.40	9.89	15.37	9.66	7.26	3.37	9.10	10.30
MEAN	.080	6.83	.81	.51	.98	.32	.51	.31	.24	.11	.29	.34
MAX	.45	92	6.9	3.0	11	1.1	2.4	2.2	1.6	.25	1.6	2.4
MIN	.00	.00	.04	.06	.00	.06	.20	.10	.11	.02	.00	.01
CFSM	.36	31.0	3.68	2.32	4.46	1.46	2.32	1.41	1.09	.50	1.32	1.55
IN.	.42	34.47	4.22	2.68	4.61	1.66	2.59	1.63	1.22	.57	1.53	1.73

WTR YR 1979 TOTAL 340.63 MEAN .93 MAX 92 MIN .00 CFSM 4.23 IN 57.34

03201720 HULL HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--October 1978 to September 1979.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
NOV											
06...	1400	.15	190	5.9	12.5	11	65	50	16	6.0	2.8
21...	1000	.23	130	5.9	7.5	7	56	45	14	5.2	2.4
30...	1230	.32	150	5.8	2.5	13	56	56	14	5.2	2.6
DEC											
09...	1115	1.5	--	--	--	--	--	--	--	--	--
22...	1200	.11	130	6.0	5.0	36	48	37	12	4.4	1.8
JAN											
04...	1330	.44	110	6.2	2.5	13	44	32	11	4.0	1.6
17...	1600	.44	130	6.6	1.5	4	52	41	13	4.8	2.0
FEB											
01...	1200	.22	100	6.1	.5	14	48	39	12	4.3	1.8
15...	1630	.22	120	6.1	-1.0	3	50	40	12	4.8	2.0
27...	1300	2.2	90	6.3	5.0	7	35	30	8.7	3.3	1.2
MAR											
13...	0900	.70	95	6.3	2.0	7	45	44	11	4.3	1.6
26...	1130	1.1	115	7.0	5.5	6	49	32	12	4.6	2.1
APR											
02...	1430	3.8	--	--	--	--	--	--	--	--	--
10...	1400	1.7	120	6.3	11.5	13	49	32	12	4.5	2.0
11...	1000	1.4	--	--	--	--	--	--	--	--	--
27...	1100	1.0	150	6.9	13.5	7	57	44	14	5.3	2.3
MAY											
15...	1100	.58	135	6.3	16.5	25	50	39	12	4.9	2.3
31...	1100	.49	140	7.1	14.0	7	52	38	13	4.8	2.2
JUN											
11...	0930	.70	120	7.3	14.5	10	52	34	13	4.7	2.0
28...	1430	.27	150	7.0	19.5	9	50	36	12	4.8	2.4
JUL											
09...	1230	.44	185	6.8	17.0	8	54	39	13	5.2	2.5
26...	1030	.37	130	6.6	19.5	0	53	38	13	5.0	2.3
AUG											
08...	0945	.44	150	6.7	19.5	37	53	42	13	5.0	2.5
23...	0900	.53	129	7.1	18.0	42	52	32	13	4.7	2.2
SEP											
05...	1300	.30	160	7.1	20.0	3	49	32	12	4.5	2.2
17...	1100	.37	125	6.9	14.5	5	48	32	12	4.4	2.0

03201720 HULL HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	POTAS- SIUM DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
NOV											
06...	8	.2	--	2.0	18	0	15	36	57	1.6	102
21...	8	.1	--	1.8	14	0	11	28	45	1.6	93
30...	9	.2	--	1.7	1	0	1	2.5	51	1.6	90
DEC											
09...	--	--	--	--	--	--	--	--	--	--	--
22...	7	.1	--	1.5	14	0	11	22	42	1.2	85
JAN											
04...	7	.1	--	1.3	14	0	11	14	38	1.0	76
17...	8	.1	--	1.2	14	0	11	5.6	38	1.2	84
FEB											
01...	7	.1	--	1.4	10	0	8	13	42	1.4	79
15...	8	.1	--	1.4	12	0	10	15	44	1.2	85
27...	7	.1	--	1.3	6	0	5	4.8	32	.9	64
MAR											
13...	7	.1	--	1.3	1	0	1	.8	40	.9	75
26...	8	.1	--	1.3	21	0	17	3.4	40	.9	78
APR											
02...	--	--	--	--	--	--	--	--	--	--	--
10...	8	.1	--	1.6	20	0	16	16	35	.8	75
11...	--	--	--	--	--	--	--	--	--	--	--
27...	8	.1	--	1.8	16	0	13	3.2	50	1.1	98
MAY											
15...	9	.1	--	1.7	13	0	11	10	44	.7	92
31...	8	.1	3.8	1.6	17	0	14	2.2	45	.8	88
JUN											
11...	7	.1	--	1.7	22	0	18	1.8	41	.8	92
28...	9	.1	--	1.5	17	0	14	2.7	51	.9	88
JUL											
09...	9	.1	--	1.8	18	0	15	4.6	48	3.1	112
26...	8	.1	4.0	1.7	18	0	15	7.2	46	1.0	100
AUG											
08...	9	.2	4.2	1.7	13	0	11	4.2	48	.9	110
23...	8	.1	4.0	1.8	24	0	20	3.1	44	.3	85
SEP											
05...	9	.1	3.8	1.6	20	0	16	2.5	39	.9	104
17...	8	.1	3.5	1.5	20	0	16	4.0	47	1.2	86
DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHATE, TOTAL (MG/L AS PO4)	PHOS- PHORUS TOTAL (MG/L AS PO4)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ANTI- MONY, TOTAL (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)
NOV											
06...	.14	.03	.04	.18	.00	--	--	90	0	0	0
21...	.13	.17	.17	.75	.00	--	--	80	0	0	0
30...	.12	.17	.25	1.1	.00	--	--	110	0	0	0
DEC											
09...	--	--	--	--	--	--	--	--	--	--	--
22...	.12	.08	.15	.66	.00	--	--	130	0	0	0
JAN											
04...	.10	.09	.09	.40	.00	--	--	170	0	1	0
17...	.11	.10	.15	.66	.00	--	--	80	0	1	0
FEB											
01...	.11	.09	.17	.75	.00	--	--	180	0	1	0
15...	.12	.23	.57	2.5	.00	--	--	90	0	0	0
27...	.09	.18	.18	.80	.00	--	--	170	0	1	0
MAR											
13...	.10	.07	.09	.40	.00	--	--	50	0	1	0
26...	.11	.09	.24	1.1	.00	--	--	130	0	1	0
APR											
02...	--	--	--	--	--	--	--	--	--	--	--
10...	.10	.04	.16	.71	.01	--	--	130	0	0	0
11...	--	--	--	--	--	--	--	--	--	--	--
27...	.13	.02	.08	.35	.00	.00	.00	80	0	0	0
MAY											
15...	.13	.03	.15	.66	.01	.03	.03	90	0	0	0
31...	.12	.06	.20	.89	.00	.00	.00	160	0	0	0
JUN											
11...	.13	.05	.35	1.6	.01	.03	.03	130	0	0	0
28...	.12	.03	.15	.66	.03	.09	.09	280	0	1	0
JUL											
09...	.15	.07	.10	.44	.00	--	.00	100	0	1	0
26...	.14	.06	.06	.27	.04	--	.12	70	0	0	0
AUG											
08...	.15	.03	.29	1.3	.01	--	.03	90	0	2	0
23...	.12	.08	.18	.80	.00	--	.00	150	0	2	0
SEP											
05...	.14	.06	.06	.27	.01	--	.03	190	0	0	0
17...	.12	.21	.58	2.6	.01	--	.03	140	0	0	0

03201720 HULL HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
NOV										
06...	2	0	1	130	--	130	41	130	--	110
21...	15	1	2	100	--	10	76	300	--	20
30...	4	1	2	210	--	210	24	30	--	30
DEC										
09...	--	--	--	--	--	--	--	--	--	--
22...	1	1	2	250	--	80	10	30	--	30
JAN										
04...	2	0	1	100	--	70	24	30	--	30
17...	22	3	1	100	--	90	190	30	--	30
FEB										
01...	68	0	1	150	--	10	900	30	--	20
15...	1	2	2	70	--	10	13	30	--	30
27...	8	0	2	210	--	30	92	30	--	30
MAR										
13...	2	0	1	120	--	20	19	20	--	20
26...	0	0	1	100	--	20	5	20	--	10
APR										
02...	--	--	--	--	--	--	--	--	--	--
10...	9	6	1	150	--	10	110	20	--	10
11...	--	--	--	--	--	--	--	--	--	--
27...	7	6	2	40	30	10	72	20	10	10
MAY										
15...	4	3	7	90	80	10	40	60	30	30
31...	5	9	1	400	400	0	38	40	10	30
JUN										
11...	12	9	1	100	90	10	28	20	0	20
28...	0	11	6	890	860	30	4	70	60	10
JUL										
09...	0	16	3	160	140	20	4	30	0	30
26...	0	5	0	250	240	10	5	10	0	10
AUG										
08...	1	20	3	440	420	20	5	50	30	20
23...	1	18	3	230	220	10	7	40	10	30
SEP										
05...	0	4	2	560	--	40	6	60	30	30
17...	0	2	3	310	--	0	1	30	0	30
DATE	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)	PHENOLS (UG/L)
NOV										
06...	<.5	27	0	0	--	30	30	1.7	1.2	2
21...	<.5	16	0	0	--	0	0	5.4	.4	1
30...	<.5	14	0	0	--	10	10	1.6	.3	0
DEC										
09...	--	--	--	--	--	--	--	--	--	--
22...	<.5	14	0	0	--	0	30	2.9	.3	2
JAN										
04...	<.5	13	0	0	--	20	20	2.4	.2	1
17...	<.5	4	0	0	--	10	20	1.0	.1	0
FEB										
01...	<.5	5	0	0	--	10	20	2.7	.1	0
15...	<.5	18	0	0	--	10	70	1.3	1.6	4
27...	<.5	9	0	0	--	0	20	3.1	--	1
MAR										
13...	<.5	12	0	0	--	10	20	5.0	.0	0
26...	<.5	7	0	0	--	10	10	2.0	.0	5
APR										
02...	--	--	--	--	--	--	--	--	--	--
10...	<.5	23	0	0	--	10	20	7.7	.1	0
11...	--	--	--	--	--	--	--	--	--	--
27...	<.5	20	0	0	40	0	40	6.4	.1	0
MAY										
15...	<.5	30	0	0	0	30	30	3.8	.2	1
31...	<.5	15	0	0	10	10	20	11	.2	0
JUN										
11...	<.5	16	0	0	10	8	20	2.1	.1	0
28...	<.5	15	0	0	40	5	40	3.6	.3	2
JUL										
09...	<.5	24	0	0	20	6	30	3.4	.4	0
26...	<.5	0	0	0	2	8	10	3.9	.0	0
AUG										
08...	<.5	3	0	0	0	10	10	2.0	.2	0
23...	<.5	3	0	1	0	20	20	8.0	.2	0
SEP										
05...	<.5	3	0	0	110	10	120	6.1	.2	2
17...	<.5	3	0	0	20	0	20	2.9	.0	1

RACCOON CREEK BASIN

03201720 HULL HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
NOV					APR				
06...	1400	.15	12.5	1.0	11...	1000	1.4	--	2.0
21...	1000	.23	7.5	2.0	27...	1100	1.0	13.5	--
30...	1230	.32	2.5	--	MAY				
DEC					15...	1100	.58	16.5	--
09...	1115	1.5	--	28	31...	1100	.49	14.0	.00
22...	1200	.11	5.0	5.0	JUN				
JAN					11...	0930	.70	14.5	1.0
04...	1330	.44	2.5	--	28...	1430	.27	19.5	--
17...	1600	.44	1.5	--	JUL				
FEB					09...	1230	.44	17.0	--
01...	1200	.22	.5	--	26...	1030	.37	19.5	--
15...	1630	.22	-1.0	--	AUG				
27...	1300	2.2	5.0	--	08...	0945	.44	19.5	--
MAR					23...	0900	.53	18.0	--
13...	0900	.70	2.0	2.0	SEP				
26...	1130	1.1	5.5	--	05...	1300	.30	20.0	--
APR					17...	1100	.37	14.5	--
02...	1430	3.8	--	10					
10...	1400	1.7	11.5	--					

03201722 SANDY RUN BELOW HULL HOLLOW CREEK NEAR LAKE HOPE, OH

LOCATION.--Lat 39°21'30", long 82°19'04", in SW 1/4 SE 1/4, sec. 11, T.11 N., R.16 W., Vinton County, Hydrologic Unit 05090101, 100 ft (30 m) downstream from Hull Hollow Creek at State Highway 278, 3.0 mi (4.8 km) southwest of Carbondale and 3.3 mi (5.3 km) northeast of Lake Hope.

DRAINAGE AREA.--2.30 mi² (5.96 km²).

PERIOD OF RECORD.--October 1978 to September 1979.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 to SEPTEMBER 1979

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT											
13...	1300	410	4.6	13.0	27	130	130	.4	20	32	13
24...	1300	1100	3.1	9.0	15	390	390	3.6	179	88	41
NOV											
06...	1500	1100	3.2	12.0	14	340	340	3.0	149	77	36
21...	1100	720	3.1	7.5	3	210	210	1.5	74	48	23
30...	1130	470	3.3	5.0	13	170	170	1.0	50	40	18
DEC											
21...	1430	275	4.1	4.5	27	94	94	.5	25	22	9.5
JAN											
04...	1430	350	3.6	1.0	25	110	110	.8	40	24	12
16...	1400	320	3.9	1.0	2	120	120	.6	30	27	13
FEB											
01...	1300	430	3.5	.5	10	140	140	.8	40	31	14
15...	1530	620	3.4	.0	4	190	190	1.8	89	42	20
27...	1400	270	3.9	5.0	13	76	76	.5	25	18	7.6
MAR											
13...	1000	450	3.5	2.5	12	140	140	1.3	65	33	15
26...	1330	350	4.1	6.0	17	110	110	.4	20	25	11
APR											
11...	1000	285	4.2	6.5	14	100	100	.4	20	24	10
30...	1100	480	3.4	10.0	9	150	150	1.0	50	35	16
MAY											
15...	1200	540	3.6	15.5	17	160	160	.9	45	36	16
30...	1230	570	3.6	14.5	4	160	160	1.0	50	36	16
JUN											
11...	1330	390	4.2	17.0	12	130	130	.6	30	31	12
28...	1330	780	3.3	18.5	10	250	250	2.5	124	55	27
JUL											
09...	1300	500	4.1	17.0	6	160	160	.5	25	37	16
26...	1100	1100	3.4	19.5	11	340	340	3.7	184	77	36
AUG											
08...	1015	1000	3.0	20.5	28	280	280	2.6	129	66	29
23...	1030	320	4.6	18.0	40	120	120	.4	20	30	12
SEP											
05...	1200	710	3.3	20.0	9	220	220	1.9	94	51	22
17...	1130	740	3.5	13.0	5	220	220	1.9	94	50	23

RACCOON CREEK BASIN

03201722 SANDY RUN BELOW HULL HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT											
13...	9.6	13	.4	--	2.5	0	0	0	.0	160	9.0
24...	20	10	.4	--	3.2	0	0	0	.0	540	16
NOV											
06...	18	10	.4	--	2.8	0	0	0	.0	470	15
21...	12	11	.4	--	2.4	0	0	0	.0	260	13
30...	9.5	10	.3	--	2.2	0	0	0	.0	200	9.5
DEC											
21...	5.1	10	.2	--	1.7	0	0	0	.0	110	4.6
JAN											
04...	5.1	9	.2	--	1.6	0	0	0	.0	140	4.7
16...	6.0	10	.2	--	1.4	0	0	0	.0	120	5.3
FEB											
01...	8.2	12	.3	--	1.7	0	0	0	.0	170	8.4
15...	11	11	.4	--	1.9	0	0	0	.0	270	8.6
27...	5.0	12	.3	--	1.4	0	0	0	.0	94	6.8
MAR											
13...	8.4	11	.3	--	1.7	0	0	0	.0	190	9.2
26...	7.3	13	.3	--	1.4	0	0	0	.0	120	8.5
APR											
11...	6.7	12	.3	--	1.6	0	0	0	.0	110	7.4
30...	9.1	11	.3	--	2.1	0	0	0	.0	220	8.2
MAY											
15...	11	13	.4	--	2.1	0	0	0	.0	200	9.4
30...	9.1	11	.3	11	1.9	0	0	0	.0	220	8.7
JUN											
11...	7.0	11	.3	--	1.8	0	0	0	.0	150	8.4
28...	18	13	.5	20	2.3	0	0	0	.0	350	15
JUL											
09...	15	17	.5	--	2.3	0	0	0	.0	190	14
26...	16	9	.4	19	3.2	0	0	0	.0	510	10
AUG											
08...	16	11	.4	19	2.8	0	0	0	.0	400	15
23...	8.2	12	.3	10	2.0	2	0	2	80	140	7.1
SEP											
05...	14	12	.4	16	2.4	0	0	0	.0	280	13
17...	16	14	.5	18	2.1	0	0	0	.0	280	18
DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHATE, TOTAL (MG/L AS PO4)	PHOS- PHORUS TOTAL (MG/L AS PO4)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ANTI- MONY, TOTAL (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)
OCT											
13...	241	.33	.49	.79	3.5	.01	--	--	2900	3	0
24...	794	1.08	.20	.39	1.7	.12	--	--	10000	1	0
NOV											
06...	683	.93	.18	.27	1.2	.00	--	--	12000	0	0
21...	404	.55	.16	.27	1.2	.00	--	--	5800	0	0
30...	303	.41	.15	.26	1.2	.01	--	--	3900	0	0
DEC											
21...	173	.24	.11	.18	.80	.00	--	--	1600	0	1
JAN											
04...	219	.30	.12	.13	.58	.00	--	--	3100	0	1
16...	193	.26	.12	.16	.71	.00	--	--	1400	0	1
FEB											
01...	256	.35	.10	.34	1.5	.00	--	--	3300	0	0
15...	395	.54	.19	.57	2.5	.00	--	--	4500	0	0
27...	153	.21	.19	.26	1.2	.00	--	--	2300	0	0
MAR											
13...	292	.40	.11	.27	1.2	.00	--	--	4000	0	1
26...	201	.27	.12	.32	1.4	.00	--	--	2400	0	1
APR											
11...	193	.26	.06	.18	.80	.01	--	--	2700	0	0
30...	311	.42	.08	.28	1.2	.00	.00	.00	3800	0	0
MAY											
15...	325	.44	.10	.26	1.2	.00	.00	.00	3800	0	1
30...	315	.43	.08	.19	.84	.00	.00	.00	4700	0	0
JUN											
11...	266	.36	.08	.17	.75	.01	.03	.03	3000	0	0
28...	575	.78	.13	.21	.93	.00	.00	.00	8300	0	1
JUL											
09...	341	.46	.14	.34	1.5	.00	--	.00	2700	0	2
26...	839	1.14	.12	.37	1.6	.03	--	.09	13000	0	2
AUG											
08...	647	.88	.11	.30	1.3	.00	--	.00	9200	0	2
23...	237	.32	.10	.32	1.4	.01	--	.03	2300	0	3
SEP											
05...	496	.67	.02	.12	.53	.00	--	.00	6500	0	0
17...	470	.64	.12	.28	1.2	.00	--	.00	7200	0	0

03201722 SANDY RUN BELOW HULL HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDED RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT											
13...	0	7	0	6	2200	--	500	43	1600	--	1600
24...	10	12	1	20	5400	--	5000	71	5600	--	5600
NOV											
06...	10	14	3	12	3800	--	3500	200	4600	--	10
21...	5	3	4	7	5000	--	4500	22	3000	--	2400
30...	0	3	2	4	4900	--	2800	22	1900	--	1900
DEC											
21...	0	3	1	7	3500	--	1200	10	710	--	710
JAN											
04...	10	1	0	5	5500	--	3700	11	1000	--	1000
16...	0	1	6	4	4700	--	2300	16	880	--	880
FEB											
01...	10	6	0	4	5900	--	3900	93	1300	--	1300
15...	10	1	2	8	8400	--	7900	4	2000	--	2000
27...	0	19	2	5	3900	--	2000	220	600	--	600
MAR											
13...	0	1	0	6	7700	--	7000	10	1300	--	1300
26...	0	1	0	4	3800	--	1500	16	830	--	830
APR											
11...	0	7	6	3	3000	--	680	60	720	--	720
30...	0	13	6	5	6100	1800	4300	170	1300	100	1200
MAY											
15...	10	4	4	5	3700	1400	2300	37	1400	0	1400
30...	0	2	11	6	5700	1600	4100	16	1400	0	1400
JUN											
11...	0	10	6	5	5300	3000	2300	42	1100	0	1100
28...	10	0	9	9	4300	300	4000	3	2700	0	2700
JUL											
09...	0	0	16	6	1200	870	330	4	1400	0	1400
26...	10	0	17	0	24000	0	24000	2	5500	0	5500
AUG											
08...	10	1	14	14	6100	0	6100	6	4900	300	4600
23...	0	1	1	5	3800	1700	2100	6	1400	100	1300
SEP											
05...	0	0	0	8	4200	--	3700	10	3000	300	2700
17...	10	0	5	7	12000	--	3400	4	2000	100	1900

DATE	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	ZINC, SUS- PENDED RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	PHENOLS (UG/L)
OCT										
13...	<.5	49	0	0	--	80	90	4.3	.8	1
24...	<.5	150	0	0	--	350	350	1.9	.4	0
NOV										
06...	<.5	150	0	0	--	310	320	1.1	.1	0
21...	<.5	81	0	0	--	130	160	2.3	.3	0
30...	<.5	53	0	0	--	100	100	.8	.2	4
DEC										
21...	<.5	36	0	0	--	50	110	3.7	.7	3
JAN										
04...	<.5	44	0	0	--	90	90	1.2	.0	3
16...	<.5	19	0	0	--	90	110	2.9	.2	0
FEB										
01...	<.5	39	0	0	--	80	80	2.2	.1	0
15...	<.5	76	0	0	--	140	190	1.0	--	0
27...	<.5	32	0	0	--	30	60	8.7	--	0
MAR										
13...	<.5	57	0	0	--	300	300	2.9	.2	4
26...	<.5	34	0	0	--	70	70	1.4	.2	2
APR										
11...	<.5	46	0	0	--	70	70	3.9	.2	0
30...	<.5	70	0	0	20	120	140	1.4	.1	0
MAY										
15...	<.5	76	0	0	0	120	120	4.6	.1	1
30...	<.5	43	0	0	0	120	120	1.7	--	0
JUN										
11...	<.5	48	0	0	10	60	70	1.8	.2	0
28...	<.5	90	0	0	0	190	190	6.7	.1	0
JUL										
09...	<.5	58	0	0	30	120	150	2.0	.3	0
26...	<.5	0	0	0	30	330	360	3.4	.0	0
AUG										
08...	<.5	100	0	0	0	260	260	1.8	.1	0
23...	<.5	26	0	1	0	70	70	4.7	.5	0
SEP										
05...	<.5	75	0	0	0	180	180	2.4	.1	2
17...	<.5	79	0	0	40	130	170	3.8	.0	480

RACCOON CREEK BASIN

03201722 SANDY RUN BELOW HULL HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPER- ATURE (DEG C)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	TEMPER- ATURE (DEG C)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT				MAR			
13...	1300	13.0	24	26...	1330	6.0	8.0
24...	1300	9.0	2.0	APR			
NOV				11...	1000	6.5	--
06...	1500	12.0	.00	30...	1100	10.0	--
21...	1100	7.5	6.0	MAY			
30...	1130	5.0	7.0	15...	1200	15.5	--
DEC				30...	1230	14.5	--
08...	1410	--	602	JUN			
08...	1411	--	551	11...	1330	17.0	--
08...	1615	--	141	28...	1330	18.5	--
08...	1616	--	126	JUL			
21...	1430	4.5	15	09...	1300	17.0	--
JAN				26...	1100	19.5	--
04...	1430	1.0	--	AUG			
16...	1400	1.0	--	08...	1015	20.5	--
FEB				23...	1030	18.0	--
01...	1300	.5	--	SEP			
15...	1530	.0	--	05...	1200	20.0	--
27...	1400	5.0	--	17...	1130	13.0	--
MAR							
13...	1000	2.5	--				

03202000 RACCOON CREEK AT ADAMSVILLE, OH

LOCATION.--Lat 38°52'25", long 82°21'22", in SE 1/4 sec. 26, T.6N., R.16W., Gallia County, Hydrologic Unit 05090101, on left bank at downstream side of U.S. Highway 35 bridge at Adamsville, 1.3 mi (2.1 km) upstream from Ryan Run, and 1.4 mi (2.3 km) downstream from Indian Creek.

DRAINAGE AREA.--585 mi² (1,515 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1915 to December 1935, October 1938 to current year. Monthly discharge only for December 1935, published in WSP 1305.

REVISED RECORDS.--WSP 873: 1916-18, 1920, 1922, 1924, 1926-27, 1931, 1933, 1935(M). WSP 1908: Drainage area. WSP 2108: 1968-70(M).

GAGE.--Water-stage recorder. Datum of gage is 570.04 ft (173.748 m) National Geodetic Vertical Datum of 1929. Prior to June 13, 1940, nonrecording gage, June 13, 1940 to Oct. 27, 1970 water-stage recorder 480 ft (146 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Sediment data collected at this site 1969 to 1974.

AVERAGE DISCHARGE.--61 years, 652 ft³/s (18.46 m³/s), 15.13 in/yr (384 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,000 ft³/s (566 m³/s) May 28, 1968, gage height 28.69 ft (8.745 m), from rating curve extended above 13,000 ft³/s (368 m³/s) on basis of slope-conveyance estimate of peak flow; minimum, 1.1 ft³/s (0.031 m³/s) Oct. 17-19, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in January 1937 reached a stage of 25.2 ft (7.68 m), from floodmark, discharge, 16,000 ft³/s (453 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85.0 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 10	2400	8300 235	20.67 6.300	Apr. 4	2100	3360 95.2	14.02 4.273
Dec. 21	0600	3280 92.9	13.85 4.221	Aug. 19	1200	3780 107	14.79 4.508
Jan. 4	1500	4090 116	15.35 4.679	Aug. 23	1600	3480 98.6	14.24 4.340
Jan. 21	2200	3250 92.0	13.78 4.200	Aug. 27	0700	3700 105	14.65 4.465
Feb. 28	0900	*9170 260	*21.49 6.550	Sept. 23	2100	4950 140	16.89 5.148

Minimum discharge, 32 ft³/s (0.91 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	OCT	NOV	DEC	JAN	FEB	MEAN VALUES		APR	MAY	JUN	JUL	AUG	SEP
						MAR							
1	36	256	773	1990	660	7920	1200	298	665	145	432	1810	
2	37	213	551	3490	551	6140	2000	269	735	151	276	773	
3	48	185	771	3830	480	4410	2800	269	922	169	211	527	
4	54	168	3110	4060	430	2070	3300	583	714	196	194	424	
5	49	157	3780	3790	400	1400	3160	1320	454	181	182	347	
6	48	145	4080	2810	370	1350	2350	1730	341	164	171	298	
7	45	137	3830	1360	350	1270	1260	1710	283	151	165	258	
8	46	133	4140	1330	330	987	866	1300	571	146	166	226	
9	44	130	6690	1140	310	805	949	789	1050	150	201	202	
10	40	125	8010	993	300	694	1140	587	1160	142	179	182	
11	37	122	8170	898	300	610	1090	484	922	147	472	169	
12	41	119	7370	789	290	544	935	430	558	151	1030	158	
13	78	119	6150	707	280	482	802	462	444	164	1290	153	
14	310	115	4770	1300	280	458	840	442	368	149	1030	338	
15	576	147	1850	1720	280	446	940	388	277	135	569	732	
16	747	444	826	1740	280	416	971	328	229	124	341	1290	
17	495	750	702	1750	280	384	829	276	199	114	254	1090	
18	279	1280	631	1600	280	360	675	240	178	111	208	592	
19	182	1310	578	1340	280	350	573	214	164	102	2640	355	
20	162	1200	648	1620	280	340	505	196	150	94	2460	277	
21	140	824	2650	3110	350	320	452	182	291	88	2800	832	
22	126	501	1830	3230	700	310	412	175	717	81	3330	3010	
23	115	391	1460	3180	1400	300	384	181	712	77	3450	4850	
24	109	380	1080	3080	3200	400	370	560	560	239	3010	4820	
25	106	343	971	2910	5250	750	355	448	327	414	2020	4240	
26	124	312	874	2550	7270	820	338	576	234	426	2410	2580	
27	478	837	758	2090	8500	758	366	658	190	503	3590	895	
28	829	1260	613	1500	9010	580	374	1020	168	464	3180	1590	
29	906	1320	499	1110	---	489	376	1270	151	393	2960	2160	
30	589	1120	456	911	---	440	343	1170	143	454	3050	2370	
31	349	77	802	768	---	470	---	747	---	414	3030	---	
TOTAL	7225	14543	79423	62696	42691	37073	30955	19302	13877	6439	45301	37548	
MEAN	233	485	2562	2022	1525	1196	1032	623	463	208	1461	1252	
MAX	906	1320	8170	4060	9010	7920	3300	1730	1160	503	3590	4850	
MIN	36	115	456	707	280	300	338	175	143	77	165	153	
CFSM	.40	.83	4.38	3.46	2.61	2.04	1.76	1.07	.79	.36	2.50	2.14	
IN.	.46	.92	5.05	3.99	2.71	2.36	1.97	1.23	.88	.41	2.88	2.39	
CAL YR 1978	TOTAL	290600	MEAN	796	MAX	8170	MIN	30	CFSM	1.36	IN	18.48	
WTR YR 1979	TOTAL	397073	MEAN	1088	MAX	9010	MIN	36	CFSM	1.86	IN	25.25	

RACCOON CREEK BASIN

03202000 RACCOON CREEK AT ADAMSVILLE, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951-54, 1964 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1967 to current year.

pH: May 1967 to current year.

WATER TEMPERATURES: October 1951 to September 1954, October 1964 to current year.

DISSOLVED OXYGEN: May 1967 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, 2,930 micromhos Nov. 20, 1964; minimum, 95 micromhos Aug. 1, 1976.

pH: Maximum, 8.8 units Feb. 16, 1972; minimum, 2.0 units May 6, 1972.

WATER TEMPERATURES: Maximum, 29.0°C June 16, 1952; minimum, 0.0°C on many days during winter periods.

DISSOLVED OXYGEN: Maximum, 15.0 mg/L or higher on several days during 1968-69, 1971; minimum recorded, 2.5 mg/L May 6, 1972.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,230 micromhos Oct. 17; minimum, 99 micromhos Aug. 19.

pH: Maximum, 7.2 units Dec. 25, Jan. 2, 7, 8, 10, Feb. 19, 22; minimum, 4.1 units July 24.

WATER TEMPERATURES: Maximum, 26.5°C Aug. 10; minimum, 0.0°C on several days during winter period.

DISSOLVED OXYGEN: Maximum, 13.5 mg/L Feb. 22, 23; minimum, 5.5 mg/L June 20, Aug. 25, Sept. 1.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS C03)	ALKA- LINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	SULFATE DIS- SOLVED (MG/L AS S04)
MAY 21...	1215	245	370	5.2	18.5	1	0	1	10	130
AUG 08...	1100	159	447	5.3	24.5	3	0	2	24	170
SEP 04...	1530	504	288	6.4	23.0	15	0	12	9.6	91

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDED RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
MAY 21...	254	.35	168	700	150	550	2300	0	2300
AUG 08...	345	.47	148	260	170	90	3600	3200	360
SEP 04...	198	.27	269	840	790	50	1900	100	1800

03202000 · RACCOON CREEK AT ADAMSVILLE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH					
1	776	747	406	396	340	330	---	---	---	---	195	174				
2	744	705	414	400	330	322	---	---	---	---	324	198				
3	762	690	408	400	---	---	---	---	---	---	267	228				
4	714	660	496	390	---	---	---	---	---	---	291	264				
5	735	669	826	394	---	---	---	---	---	---	297	276				
6	791	738	436	412	216	210	---	---	---	---	321	288				
7	783	774	438	432	246	216	---	---	---	---	315	294				
8	782	744	444	418	244	192	---	---	---	---	324	303				
9	744	735	454	442	174	144	---	---	---	---	333	321				
10	771	738	460	454	174	160	---	---	---	---	339	330				
11	792	765	---	---	---	---	438	297	---	---	351	327				
12	773	711	---	---	---	---	303	294	---	---	360	318				
13	750	546	---	---	---	---	---	---	405	357	360	336				
14	540	429	---	---	---	---	---	---	483	387	363	354				
15	528	432	---	---	286	264	279	246	465	423	387	363				
16	717	519	514	360	300	288	264	252	423	381	393	372				
17	1230	675	406	330	---	---	270	243	426	387	390	378				
18	648	477	402	312	---	---	261	240	456	426	390	363				
19	495	486	414	354	---	---	276	255	459	444	399	381				
20	500	483	412	396	---	---	264	195	468	453	402	394				
21	491	477	388	334	---	---	201	180	483	330	405	396				
22	504	489	348	342	264	244	204	198	330	252	408	399				
23	531	504	348	342	288	258	207	192	288	237	417	369				
24	537	528	354	346	310	270	207	192	285	228	357	294				
25	546	537	376	352	274	262	228	207	267	216	384	288				
26	570	372	384	364	---	---	231	219	219	138	387	357				
27	408	336	348	270	---	---	234	222	138	120	393	381				
28	498	387	340	282	---	---	243	228	174	117	387	348				
29	513	396	354	306	---	---	258	243	---	---	366	339				
30	504	438	346	306	---	---	321	261	---	---	366	345				
31	438	406	---	---	---	---	348	273	---	---	390	309				
MONTH	1230	336	826	270	340	144	438	180	483	117	417	174				

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER					
1	306	279	432	375	285	270	402	387	462	375	246	219				
2																

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	6.7	6.5	6.8	5.2	7.0	6.8	7.1	6.3	---	---	6.4	6.2
2	6.8	6.6	6.9	5.0	6.9	6.6	7.2	7.0	---	---	6.2	5.9
3	6.8	6.4	6.9	5.4	---	---	7.0	6.8	---	---	5.9	5.7
4	6.6	6.4	6.9	5.3	---	---	6.9	6.7	---	---	5.7	5.4
5	6.4	6.0	6.9	6.3	---	---	7.0	6.8	---	---	5.4	5.1
6	5.9	5.2	6.9	6.6	6.5	6.4	7.0	6.9	---	---	5.3	5.1
7	5.5	5.4	6.8	6.4	6.5	5.7	7.2	6.7	---	---	5.4	5.2
8	6.2	5.5	7.0	6.4	6.5	4.9	7.2	7.1	---	---	5.5	5.3
9	6.3	5.6	7.0	6.7	6.6	6.5	7.1	6.9	---	---	5.5	5.3
10	6.2	5.6	6.9	6.4	6.5	6.2	7.2	7.0	---	---	5.5	5.4
11	6.2	5.9	6.8	6.4	6.4	6.4	---	---	---	---	5.7	5.3
12	6.5	6.1	6.7	6.2	---	---	---	---	---	---	6.0	5.5
13	7.0	6.6	6.5	5.9	---	---	---	---	6.3	6.0	5.6	5.4
14	7.1	6.2	6.6	6.5	---	---	---	---	6.4	6.2	5.5	5.4
15	6.4	5.3	7.0	6.6	6.1	6.0	---	---	6.7	6.4	5.4	5.3
16	6.4	5.5	7.0	5.9	6.8	5.9	---	---	6.8	6.6	5.6	5.4
17	6.3	5.0	6.4	5.8	6.7	6.4	---	---	6.7	6.5	5.8	5.5
18	5.7	5.3	6.9	5.6	---	---	---	---	6.9	6.6	5.6	5.5
19	5.8	5.7	6.9	5.6	---	---	---	---	7.2	6.4	5.4	5.3
20	5.9	5.7	7.0	6.7	---	---	---	---	6.6	6.2	5.3	5.1
21	5.9	5.6	6.8	6.7	---	---	---	---	7.1	6.4	5.1	5.0
22	5.8	5.5	6.9	6.7	---	---	---	---	7.2	6.9	5.1	5.0
23	5.8	5.6	6.9	5.1	7.1	6.9	---	---	7.1	6.9	5.4	4.9
24	5.7	5.5	6.9	6.2	7.1	6.9	---	---	7.0	6.8	6.2	5.5
25	5.8	5.5	6.9	6.8	7.2	7.0	---	---	7.0	6.7	6.0	5.1
26	7.0	5.7	6.8	6.7	---	---	---	---	6.9	6.5	5.7	5.1
27	7.0	6.4	6.8	5.2	---	---	---	---	6.7	6.5	5.7	5.4
28	6.4	5.2	6.7	5.4	---	---	---	---	6.6	6.4	5.7	5.4
29	6.7	6.5	6.9	6.7	---	---	---	---	---	---	5.6	5.4
30	6.7	6.4	7.0	6.7	---	---	---	---	---	---	5.4	5.2
31	---	---	---	---	---	---	---	---	---	---	6.2	5.2
MONTH	7.1	5.0	7.0	5.1	7.2	4.9	7.2	6.3	7.2	6.0	6.4	4.9
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.2	5.7	5.7	5.3	6.4	6.2	6.0	5.9	6.1	5.6	6.1	6.0
2	6.0	5.6	5.4	5.3	6.2	5.4	6.0	5.8	5.8	5.6	6.0	6.0
3	5.8	5.6	5.9	5.3	6.1	5.8	5.8	5.6	5.6	4.7	6.1	6.0
4	5.7	5.7	6.4	5.9	6.0	5.8	5.8	5.7	4.7	4.6	6.5	6.1
5	5.7	5.6	6.3	5.8	6.0	5.9	5.8	5.7	4.8	4.7	6.5	6.5
6	5.8	5.6	5.9	5.7	5.9	5.8	5.9	5.8	5.0	4.8	6.6	6.5
7	5.8	5.6	5.9	5.6	5.9	5.8	5.9	5.9	5.1	4.9	6.6	6.5
8	5.8	5.6	5.9	5.8	6.3	5.8	5.9	5.7	6.0	5.1	6.6	6.6
9	6.2	5.6	5.8	5.7	6.2	5.4	6.1	5.7	6.3	5.8	6.6	6.6
10	6.2	5.7	5.7	5.5	6.1	5.5	6.1	5.8	6.0	5.9	6.6	6.6
11	6.0	5.6	5.5	5.4	6.1	6.0	5.8	5.6	6.5	5.9	6.6	6.6
12	6.0	5.8	5.7	5.4	6.0	6.0	5.7	5.5	6.5	5.1	6.6	6.6
13	5.8	5.7	5.9	5.6	6.0	5.9	5.9	5.5	6.2	5.3	6.7	6.6
14	5.8	5.6	5.5	4.8	6.0	6.0	5.7	5.5	6.3	5.8	6.9	6.6
15	5.8	5.4	5.6	4.8	6.0	6.0	5.6	5.3	6.1	5.8	6.8	5.5
16	5.9	5.6	5.6	5.5	6.0	5.9	5.6	5.2	6.1	6.1	6.7	6.4
17	5.8	5.7	5.7	5.6	5.9	5.9	5.6	5.5	6.1	6.0	6.5	6.3
18	5.8	5.7	5.6	5.5	5.8	5.8	5.6	5.5	6.1	6.0	6.5	6.4
19	5.7	5.6	5.5	5.5	5.9	5.8	5.6	5.5	6.6	6.0	6.6	6.0
20	5.7	5.6	5.5	5.4	5.9	5.8	5.7	5.6	6.1	5.8	6.6	6.6
21	5.7	5.6	5.5	5.4	6.2	5.8	5.7	5.6	6.3	6.0	6.9	6.6
22	5.6	5.5	5.4	5.2	6.1	4.8	5.7	5.6	6.0	5.9	6.8	6.6
23	5.5	5.4	5.4	5.0	5.8	5.2	5.7	5.7	6.0	5.9	6.7	6.5
24	5.4	5.4	6.5	5.5	6.0	5.7	5.8	4.1	6.0	5.9	6.5	6.4
25	5.4	5.3	6.4	6.1	6.0	5.8	5.7	4.5	6.1	6.0	6.5	6.4
26	5.5	5.2	6.3	6.0	6.0	6.0	5.8	4.9	6.4	6.0	6.4	6.4
27	5.8	5.5	6.5	6.3	6.0	5.9	5.1	4.8	6.4	6.1	6.5	6.4
28	5.8	5.6	6.4	5.8	6.0	5.9	5.1	4.9	6.2	6.1	6.7	6.5
29	5.7	5.3	6.0	5.6	5.9	5.8	5.7	5.0	6.2	6.1	6.7	6.3
30	5.7	5.5	5.9	5.7	5.9	5.8	5.7	4.9	6.1	6.0	6.7	6.6
31	---	---	6.3	5.8	---	---	5.4	4.9	6.1	6.0	---	---
MONTH	6.2	5.2	6.5	4.8	6.4	4.8	6.1	4.1	6.6	4.6	6.9	5.5
YEAR	7.2	4.1										

RACCOON CREEK BASIN

03202000 RACCOON CREEK AT ADAMSVILLE, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.8	8.0	10.4	10.3	11.7	11.4	---	---	---	---	13.0	12.7
2	8.8	8.2	10.4	10.3	11.8	11.6	11.3	11.2	---	---	12.7	12.4
3	9.1	8.4	10.4	10.3	---	---	11.8	11.4	---	---	12.4	11.9
4	9.0	8.3	10.4	10.2	---	---	12.2	11.8	---	---	11.9	11.8
5	9.3	8.6	10.4	10.2	---	---	12.4	12.2	---	---	11.8	11.7
6	9.3	8.6	10.4	10.2	10.0	9.8	12.4	11.7	---	---	11.8	11.7
7	9.5	8.9	10.3	10.1	10.1	10.0	12.2	11.6	---	---	11.9	11.8
8	10.0	9.2	10.4	10.1	10.2	9.8	12.4	12.2	---	---	12.0	11.8
9	10.1	9.6	10.5	10.3	9.9	9.8	12.5	12.4	---	---	12.2	12.0
10	10.1	9.6	10.7	10.5	10.3	9.9	12.5	12.4	---	---	12.2	12.0
11	10.0	9.6	10.8	10.7	---	---	13.0	12.5	---	---	12.4	12.2
12	9.7	9.1	10.6	10.4	---	---	12.5	12.3	---	---	12.6	12.3
13	9.4	8.9	10.3	10.1	---	---	---	---	13.0	12.6	12.6	12.5
14	9.8	8.9	10.2	10.0	---	---	---	---	13.0	12.8	12.4	12.3
15	10.0	9.8	10.2	9.7	13.1	12.7	10.7	10.3	12.8	12.7	12.7	12.4
16	10.3	10.0	10.3	9.7	13.3	13.1	10.8	10.7	13.3	12.7	12.9	12.7
17	10.7	10.3	10.2	9.6	---	---	10.8	10.4	13.4	13.3	13.1	12.8
18	10.8	10.6	9.8	9.5	---	---	10.6	10.4	13.3	13.2	12.8	12.4
19	10.8	10.5	10.0	9.7	---	---	10.7	10.6	13.4	12.9	12.4	12.0
20	10.5	10.2	10.4	10.0	---	---	10.6	10.2	13.4	13.2	12.0	11.6
21	10.3	9.9	10.6	10.4	---	---	10.2	10.0	13.3	12.9	11.6	11.3
22	10.0	9.6	10.8	10.1	11.7	11.3	10.3	10.1	13.5	13.4	11.3	11.1
23	9.8	9.3	10.8	10.6	12.1	11.7	10.3	10.2	13.5	13.2	11.1	10.6
24	10.0	8.9	10.8	10.6	12.1	12.0	10.2	10.0	13.4	13.2	11.0	10.6
25	10.2	9.7	11.1	10.8	12.1	12.0	10.1	10.1	13.4	12.9	11.4	11.0
26	9.8	8.7	11.2	11.1	---	---	10.2	10.1	12.9	12.8	12.0	11.5
27	9.4	8.7	11.1	10.8	---	---	10.2	10.1	12.9	12.8	12.4	12.0
28	10.2	9.1	10.9	10.8	---	---	10.0	9.9	13.1	12.9	12.5	12.3
29	10.3	9.9	11.1	10.9	---	---	10.1	10.0	---	---	12.3	11.9
30	10.6	10.3	11.4	11.1	---	---	10.2	10.1	---	---	11.8	11.4
31	10.7	10.4	---	---	---	---	10.2	10.1	---	---	11.4	10.9
MONTH	10.8	8.0	11.4	9.5	13.3	9.8	13.0	9.9	13.5	12.6	13.1	10.6
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.0	10.8	10.3	10.2	9.2	8.6	8.5	7.9	7.9	7.1	6.3	5.5
2	10.9	10.8	10.2	9.9	9.2	8.4	8.5	8.1	7.8	7.3	6.7	6.3
3	10.8	10.5	9.9	9.6	9.1	8.1	8.4	8.0	7.9	7.5	6.9	6.7
4	10.6	9.5	10.2	9.6	9.1	8.1	8.3	8.0	8.0	7.6	8.0	6.8
5	10.3	9.0	10.5	10.2	9.0	8.7	8.5	8.1	8.0	7.6	8.2	8.0
6	10.7	9.8	10.5	10.3	8.8	7.6	8.6	8.3	8.0	7.5	8.2	8.1
7	11.4	9.7	10.4	10.3	7.6	7.2	8.7	8.4	8.1	7.6	8.2	8.1
8	11.6	9.8	10.3	9.6	7.4	6.9	8.7	8.2	7.9	6.9	8.5	8.2
9	11.3	10.2	9.6	9.4	7.3	6.6	8.5	6.8	7.8	6.8	8.9	8.4
10	11.4	10.3	9.3	9.0	7.3	6.5	8.4	7.3	7.9	7.3	9.0	8.7
11	11.0	9.9	9.0	8.8	7.3	6.7	8.6	8.0	7.5	6.1	8.9	8.7
12	10.2	9.5	8.8	8.4	7.5	6.6	8.3	8.0	7.5	7.3	8.8	8.6
13	---	---	8.8	8.4	7.5	7.1	8.1	7.4	7.9	7.6	8.7	8.1
14	---	---	9.1	8.9	7.5	6.9	8.3	7.5	8.1	7.9	8.2	7.3
15	---	---	9.2	9.1	7.5	6.9	8.2	7.6	8.4	8.1	8.8	8.2
16	---	---	9.9	9.2	7.2	6.5	8.3	7.5	8.6	8.3	8.8	8.4
17	---	---	10.0	9.8	6.7	6.2	8.2	7.5	8.6	8.4	8.9	8.7
18	---	---	9.9	9.8	6.6	5.9	8.2	7.3	8.5	7.5	9.0	8.8
19	---	---	9.9	9.7	6.4	6.0	8.4	7.5	7.6	5.9	8.8	8.7
20	---	---	9.7	9.5	8.2	5.5	8.5	7.6	6.2	5.9	8.9	8.4
21	---	---	9.5	9.2	8.0	7.3	8.4	7.6	6.3	6.0	8.7	8.0
22	---	---	9.5	9.3	8.0	7.6	8.4	7.4	6.1	5.7	8.6	8.0
23	---	---	9.4	9.2	8.2	7.9	8.4	7.3	5.8	5.7	8.4	7.5
24	---	---	9.4	8.5	8.4	7.9	8.0	7.4	5.8	5.6	8.1	7.9
25	---	---	9.4	8.7	8.6	8.3	7.7	7.3	6.5	5.5	8.3	7.9
26	---	---	9.6	9.2	8.7	8.4	7.5	7.3	6.6	6.5	8.3	7.5
27	---	---	9.8	9.1	8.6	8.3	7.7	7.4	6.4	6.2	8.9	8.1
28	---	---	9.7	9.0	8.4	8.2	7.8	7.6	6.5	6.3	8.9	8.4
29	---	---	9.5	9.0	8.3	8.0	7.9	7.4	6.3	6.2	8.9	8.4
30	---	---	9.1	8.8	8.2	7.9	7.9	7.6	6.3	6.1	8.6	8.3
31	---	---	9.5	8.5	---	---	8.0	7.6	6.2	6.0	---	---
MONTH	11.6	9.0	10.5	8.4	9.2	5.5	8.7	6.8	8.6	5.5	9.0	5.5
YEAR	13.5	5.5										

RACCOON CREEK BASIN

175

#88 MINE DRAINAGE ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH

LOCATION.--Lat 39°21'50" long 82°18'54", in SE 1/4 NE 1/4 sec. 11, T. 11 N., R. 16 W., Vinton County, Hydrologic Unit 05090101, 400 ft (120 m) upstream from State Route 278 Crossing of Big Four Hollow Creek, 2.5 mi (4.0 km) southwest of Carbondale and 3.7 mi (6.0 km) northeast of Lake Hope.

PERIOD OF RECORD.--October 1978 to September 1979.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	HARDNESS (MG/L AS CAC03)	HARDNESS, NONCARBONATE (MG/L AS CAC03)	ACIDITY TOTAL HEATED (MG/L AS H)	ACIDITY (MG/L AS CAC03)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)
OCT 25...	1300	--	2.2	11.0	130	1700	1700	39	1940	320	230
JAN 04...	1700	2000	2.9	10.5	36	800	800	16	794	180	86
MAR 13...	1500	2300	2.8	11.0	53	1000	1000	21	1040	200	130
MAY 30...	1430	5400	2.8	11.0	85	1100	1100	36	1790	58	230

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HC03)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT 25...	21	3	.2	2.6	0	0	0	.0	3400	1.5	5760
JAN 04...	15	4	.2	3.2	0	0	0	.0	1500	1.4	2240
MAR 13...	16	3	.2	2.6	0	0	0	.0	1800	1.1	3080
MAY 30...	21	4	.3	1.5	0	0	0	.0	3700	1.5	6050

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS NO3)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHATE, TOTAL (MG/L AS PO4)	PHOSPHORUS, TOTAL (MG/L AS PO4)	ALUMINUM, TOTAL RECOVERABLE (MG/L AS AL)	ANTIMONY, TOTAL (MG/L AS SB)	ARSENIC TOTAL (MG/L AS AS)
OCT 25...	7.83	.00	1.5	1.5	6.6	.09	--	--	14000	1	1
JAN 04...	3.05	.00	.74	.74	3.3	.02	--	--	32000	0	1
MAR 13...	4.19	.00	.84	.84	3.7	.01	--	--	53000	0	2
MAY 30...	8.23	.00	1.3	1.3	5.8	.03	.09	.09	110000	0	2

DATE	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	CADMIUM, TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOVERABLE (UG/L AS MN)
OCT 25...	70	1	2	95	730000	--	720000	23	1600	--
JAN 04...	30	0	0	32	230000	--	230000	0	6600	--
MAR 13...	40	0	2	44	310000	--	310000	22	8800	--
MAY 30...	80	1	18	210	630000	0	630000	0	17000	0

RACCOON CREEK BASIN

#88 MINE DRAINAGE ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	MANGANESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)	PHENOLS (UG/L)
OCT 25...	1600	<.5	2	0	--	300	300	3.5	.3	0
JAN 04...	6600	.6	0	0	--	760	760	1.4	.3	2
MAR 13...	8800	<.5	0	0	--	1100	1100	2.1	.2	0
MAY 30...	17000	<.5	2	0	0	2500	2500	9.4	.2	0

03219500 SCIOTO RIVER NEAR PROSPECT, OH

LOCATION.--Lat 40°25'10", long 83°11'50", Delaware County, Hydrologic Unit 05060001, on downstream side of pier of Hoskins Bridge, 1.5 mi (2.4 km) upstream from Ottawa Creek, 2.0 mi (3.2 km) south of Prospect, and 2.5 mi (4.0 km) downstream from Patton Run.

DRAINAGE AREA.--567 mi² (1,469 km²).

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 (270.33 m) National Geodetic Vertical Datum of 1912 (levels by Corps of Engineers). July 24, 1925, to Oct. 31, 1932, nonrecording gage at site 2.5 mi (4.0 km) upstream at datum 4.8 ft (1.46 m) higher. Oct. 16 to Dec. 5, 1939, nonrecording gage at present site and datum.

REMARKS.--Records good except those for period of no gage-height record Jan. 2 to Feb. 21, which are fair. Water-quality data collected at this site 1964 to 1977. Sediment data collected 1951 to 1953.

AVERAGE DISCHARGE.--47 years, 453 ft³/s (12.83 m³/s), 10.85 in/yr (276 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,100 ft³/s (286 m³/s) Mar. 22, 1927, gage-height, 15.0 ft (4.57 m), from graph based on gage readings at site and datum then in use, and Jan. 21, 1959, gage height, 15.30 ft (4.663 m); minimum, 3.5 ft³/s (0.099 m³/s) Sept. 13, 1953.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 25, 1913, reached a stage of 21.1 ft (6.43 m), discharge, 27,000 ft³/s (765 m³/s), computed by Franklin County Conservancy District, at site and datum used 1925-32.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,600 ft³/s (102 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 25	1200	4000 113	9.16 2.792	Apr. 16	0700	5700 161	11.27 3.435
Mar. 6	1400	*7310 207	*13.09 3.990				

Minimum discharge, 12 ft³/s (0.34 m³/s) Oct. 1, 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	18	25	498	60	1790	257	188	404	150	81	891
2	12	19	24	2000	56	1840	385	171	336	118	244	465
3	13	21	33	1500	53	2230	675	170	273	93	314	333
4	23	21	134	900	51	4100	861	179	226	83	247	263
5	21	20	148	530	49	6240	1440	172	193	80	138	268
6	19	21	160	380	46	7230	1850	165	170	61	94	300
7	16	21	129	300	44	6760	1740	153	157	48	72	205
8	14	20	116	250	45	5370	1050	142	217	41	64	141
9	13	20	202	210	44	3680	877	133	227	57	73	105
10	14	20	273	180	43	2610	1170	146	224	162	54	80
11	14	20	247	150	42	2080	1070	410	242	182	76	60
12	14	19	179	120	41	1610	1020	404	181	146	89	48
13	39	16	131	130	40	1020	1500	286	137	101	66	40
14	48	18	101	140	39	805	3730	219	115	128	47	561
15	36	24	72	130	39	850	4820	176	100	294	33	1330
16	30	23	57	120	39	757	5600	149	90	212	25	1260
17	25	26	45	115	39	584	4540	129	81	121	20	731
18	18	48	41	105	38	525	2750	116	75	77	37	388
19	16	33	39	98	38	533	1470	108	66	51	106	251
20	15	35	37	92	38	551	847	100	60	41	202	170
21	15	31	50	86	200	496	622	94	94	35	265	132
22	15	28	50	82	800	425	502	86	118	29	264	114
23	16	27	46	76	2000	373	420	78	152	26	189	91
24	15	31	45	86	3110	360	368	79	112	25	268	75
25	16	24	44	100	3370	352	333	143	84	38	339	59
26	21	22	44	92	3010	309	311	990	60	45	361	50
27	29	23	45	85	2730	252	288	1830	49	52	292	42
28	23	30	47	80	2290	209	259	2260	42	51	526	52
29	18	27	44	74	---	207	231	1810	53	52	1680	128
30	16	26	34	68	---	220	209	996	108	46	1950	155
31	16	---	49	64	---	248	---	551	---	51	1720	---
TOTAL	612	732	2691	8841	18394	54616	41205	12633	4446	2696	9936	8790
MEAN	19.7	24.4	86.8	285	657	1762	1374	408	148	87.0	321	293
MAX	48	48	273	2000	3370	7230	5600	2260	404	294	1950	1330
MIN	12	16	24	64	38	207	209	78	42	25	20	40
CFSM	.04	.04	.15	.50	1.16	3.11	2.42	.72	.26	.15	.57	.52
IN.	.04	.05	.18	.58	1.21	3.58	2.70	.83	.29	.18	.65	.58

CAL YR 1978 TOTAL 168305 MEAN 461 MAX 7730 MIN 11 CFSM .81 IN 11.04
WTR YR 1979 TOTAL 165592 MEAN 454 MAX 7230 MIN 12 CFSM .80 IN 10.86

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 (1.9 km) west of Bellepoint, 1.5 mi (2.4 km) upstream from mouth, and 2.3 mi (3.7 km) downstream from Blues Creek.

DRAINAGE AREA.--178 mi² (461 km²).

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 (263.695 m) (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.--Records good except those for winter periods, which are fair. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--37 years, 151 ft³/s (4.276 m³/s) 11.52 in/yr (293 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,300 ft³/s (575 m³/s) Jan. 21, 1959, gage height, 13.85 ft (4.221 m), from rating curve extended above 14,000 ft³/s (396 m³/s); no flow Sept. 25, 26, 1944, Sept. 19, 1948.

EXTREMES OUTSIDE PERIOD OF RECORD.--A stage of 18.0 ft (5.49 m) occurred in March 1913.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,500 ft³/s (70.8 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	0515	2680 75.9	6.71 2.045	Aug. 28	2215	4880 138	8.44 2.573
Mar. 5	0245	4760 135	8.36 2.548	Sept. 14	0845	*6310 179	*9.32 2.841
Apr. 13	2315	4910 139	8.46 2.579				

Minimum daily discharge, 3.2 ft³/s (0.091 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	8.4	9.7	1040	35	826	84	40	73	89	183	143
2	6.0	8.4	9.7	2540	30	1270	499	36	98	60	751	389
3	7.4	8.8	14	1120	25	1950	621	46	69	33	426	201
4	16	8.0	313	233	25	3950	630	67	42	25	138	100
5	12	8.8	423	131	20	3950	1140	67	33	21	73	62
6	8.4	8.8	132	96	20	1240	574	59	29	18	77	45
7	5.8	8.2	71	109	20	591	266	51	29	13	73	33
8	6.8	4.9	165	159	20	461	177	46	41	11	54	25
9	5.8	6.1	912	120	15	355	454	41	46	61	31	21
10	5.2	8.8	392	92	15	406	383	38	60	46	41	17
11	4.9	7.2	138	69	15	284	229	35	43	24	396	15
12	6.1	8.0	81	53	15	143	370	34	29	76	307	15
13	12	7.6	59	47	15	114	1450	34	21	41	127	15
14	41	7.2	47	61	15	125	3780	30	17	26	57	4110
15	18	8.8	36	98	15	141	1550	30	15	23	32	2590
16	20	8.5	33	92	15	101	444	29	13	29	22	433
17	12	9.3	29	86	15	83	238	25	12	15	16	187
18	8.8	24	25	79	15	80	161	24	12	12	18	108
19	6.5	16	22	84	15	83	119	23	12	8.8	18	71
20	5.5	10	23	75	15	81	96	21	12	7.6	140	52
21	5.8	12	35	76	25	73	81	18	129	6.5	1230	43
22	5.2	10	43	103	80	66	71	16	201	6.1	546	45
23	4.9	9.7	45	86	200	61	54	18	93	5.5	247	35
24	4.6	8.8	35	73	450	66	52	21	39	5.5	349	29
25	4.3	8.8	30	173	1500	69	59	45	22	7.2	209	25
26	6.8	7.6	27	163	1190	66	56	430	15	15	109	22
27	9.7	7.2	20	114	680	54	57	554	13	34	245	19
28	21	8.4	18	83	484	46	53	332	11	554	1430	52
29	11	14	18	65	---	54	46	177	11	566	2030	109
30	7.6	10	17	50	---	62	42	100	18	451	689	75
31	8.0	---	23	40	---	73	---	71	---	151	226	---
TOTAL	300.3	267.3	3245.4	7410	4984	16924	13856	2558	1258	2441.2	10290	9088
MEAN	9.69	8.91	105	239	178	546	462	82.5	41.9	78.7	332	303
MAX	41	24	912	2540	1500	3950	3780	554	201	566	2030	4110
MIN	3.2	4.9	9.7	40	15	46	42	16	11	5.5	16	15
CFSM	.05	.05	.59	1.34	1.00	3.07	2.50	.46	.24	.44	1.97	1.70
IN.	.06	.06	.68	1.55	1.04	3.54	2.90	.53	.26	.51	2.15	1.90

CAL YR 1978 TOTAL 60833.8 MEAN 167 MAX 3790 MIN 2.8 CFSM .94 IN 12.71
WTR YR 1979 TOTAL 72632.2 MEAN 199 MAX 4110 MIN 3.2 CFSM 1.12 IN 15.18

SCIOTO RIVER BASIN

179

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 (0.3 km) north of county line, 0.8 mi (1.3 km) downstream from O'Shaughnessy Dam, and 3.0 mi (4.8 km) north of Dublin.

DRAINAGE AREA.--980 mi² (2,538 km²).

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 (236.220 m) National Geodetic Vertical Datum of 1912. Prior to Aug. 26, 1921, nonrecording gage at site 0.8 mi (1.3 km) upstream at same datum. Aug. 26, 1921, to Oct. 13, 1924, nonrecording gage at site 100 ft (30 m) downstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated since 1924 by O'Shaughnessy Reservoir 0.8 mi (1.3 km) upstream (see station 03220500). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--58 years, 783 ft³/s (22.17 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,200 ft³/s (1,560 m³/s) Jan. 22, 1959, gage height, 22.04 ft (6.718 m), from floodmark; minimum daily, 0.4 ft³/s (0.011 m³/s) Nov. 8, 1924.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 25, 1913 reached a stage of 24.6 ft (7.50 m), discharge, 74,500 ft³/s (2,110 m³/s) at Griggs Dam, 9 mi (4 km) downstream from gage, computed by C.E. Sherman, Ohio State University.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16,300 ft³/s (462 m³/s) Mar. 5, gage height, 12.68 ft (3.865 m); minimum daily, 7.4 ft³/s (0.210 m³/s) Nov. 30, Dec. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	38	7.4	2410	140	3450	414	302	634	214	285	1430
2	48	14	7.6	5180	130	4500	1040	273	575	251	970	1200
3	56	20	11	3060	120	5500	1800	302	444	176	1030	805
4	55	17	11	1690	110	11100	2240	324	346	166	593	543
5	49	17	8.9	1120	100	15500	3340	307	282	132	401	409
6	45	51	23	682	100	12400	3300	294	261	108	311	397
7	44	102	24	523	95	9560	2590	274	234	88	221	358
8	45	113	83	421	95	7440	1830	256	274	72	196	270
9	44	122	1090	351	90	5280	1930	238	301	85	153	206
10	44	136	913	359	90	3960	2040	226	311	215	154	167
11	46	134	509	304	90	3180	1820	282	294	208	432	145
12	47	131	369	226	80	2300	1810	525	266	237	498	122
13	28	126	285	206	75	1600	4190	440	204	220	291	127
14	9.2	103	204	234	75	1220	11700	365	164	158	191	7630
15	9.1	87	163	260	75	1220	8930	308	141	174	131	5720
16	9.1	71	154	240	75	1160	7330	254	124	270	92	2690
17	8.9	56	128	233	75	922	5780	217	112	209	81	1480
18	9.1	48	108	232	75	766	3750	197	109	128	85	851
19	9.5	48	101	209	75	745	2220	181	86	86	91	553
20	9.8	48	102	193	75	766	1350	173	80	65	203	400
21	10	62	110	214	96	721	973	162	193	53	1330	335
22	10	67	120	220	236	632	777	126	344	47	1070	293
23	35	57	124	205	2840	563	642	126	268	41	628	230
24	67	56	119	232	7800	543	565	170	196	38	607	203
25	85	56	113	307	8230	521	506	206	127	52	626	180
26	65	56	100	294	6430	482	482	926	96	63	541	157
27	50	35	77	259	4500	410	448	2710	79	103	547	137
28	51	7.6	77	241	3570	351	405	2940	69	449	1760	224
29	53	7.5	78	209	---	340	355	2430	60	762	5090	341
30	54	7.4	82	183	---	347	329	1510	113	650	3220	362
31	53	---	180	150	---	386	---	880	---	351	2290	---
TOTAL	1193.7	1893.5	5481.9	20647	35542	97865	74896	17924	6787	5871	24118	27965
MEAN	38.5	63.1	177	666	1269	3157	2497	578	226	189	778	932
MAX	85	136	1090	5180	8230	15500	11700	2940	634	762	5090	7630
MIN	8.9	7.4	7.4	150	75	340	329	126	60	38	81	122

CAL YR 1978 TOTAL 285248.1 MEAN 782 MAX 12600 MIN 7.4
WTR YR 1979 TOTAL 320184.1 MEAN 877 MAX 15500 MIN 7.4

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 (274 m) downstream from bridge on State Highway 95, 0.5 mi (0.8 km) east of Claridon, 0.8 mi (1.3 km) downstream from Otter Creek, and 1.4 mi (2.3 km) upstream from Beaver Run.

DRAINAGE AREA.--157 mi² (407 km²).

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 (293.132 m) National Geodetic Vertical Datum of 1929. (levels by Corps of Engineers). Prior to Aug. 18, 1969 water-stage recorder at site 1,000 ft (305 m) upstream at same datum.

REMARKS.--Records good except those for winter periods and periods of no gage-height record, which are poor. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--33 years, 150 ft³/s (4.248 m³/s), 12.98 in/yr 330 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,900 ft³/s (422 m³/s) Jan. 22, 1959, gage height, 16.77 ft (5.111 m), from rating curve extended above 4,700 ft³/s (133 m³/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 above base of 1,500 ft³/s (42.5 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	1230	1550	43.9	Apr. 14	1400	*3730	106
Mar. 4	---	1700	48.1	Sept. 15	---	2100	59.5
			unknown				*11.82
							3.603
							unknown

Minimum daily discharge, 2.0 ft³/s (0.057 m³/s) Oct. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	4.6	12	900	37	320	120	46	70	517	40	183
2	2.0	4.0	9.4	1450	35	450	268	40	70	330	72	119
3	2.0	3.2	21	1020	34	800	389	42	59	260	100	94
4	5.1	3.4	260	340	33	1660	338	49	49	190	130	103
5	4.8	4.0	330	179	32	1300	735	50	41	150	70	81
6	12	4.0	111	122	32	1000	465	43	36	120	56	58
7	6.0	4.0	60	88	31	860	220	39	33	95	52	44
8	4.8	4.3	88	70	30	700	168	35	33	80	80	37
9	4.9	4.3	461	60	30	580	480	32	37	140	68	30
10	4.4	4.3	349	54	30	460	715	29	74	120	54	28
11	3.5	4.3	107	48	30	350	366	35	69	90	47	24
12	3.4	4.4	76	42	29	270	292	50	41	100	42	22
13	9.2	4.9	55	40	29	200	432	47	28	120	40	20
14	17	5.5	42	38	28	160	2880	41	22	90	38	250
15	34	6.0	39	36	28	166	2850	34	19	76	35	2000
16	22	5.7	33	38	28	150	1160	28	17	64	34	500
17	14	10	31	38	28	120	437	25	17	54	32	250
18	8.9	11	23	38	28	98	284	22	16	48	32	170
19	7.2	12	24	37	29	80	201	22	14	42	140	120
20	5.5	15	25	36	32	72	153	21	13	38	410	100
21	4.3	10	42	35	45	70	122	19	118	36	280	92
22	3.7	7.6	68	35	70	68	101	17	539	35	220	100
23	3.0	7.2	53	35	100	64	87	16	324	35	180	92
24	3.2	8.5	38	35	180	74	76	17	105	37	141	75
25	3.4	9.7	38	35	320	84	71	62	54	45	201	50
26	4.0	14	29	35	1100	76	67	428	36	58	177	34
27	5.3	11	25	35	1000	69	65	522	29	52	132	25
28	15	12	24	36	620	64	61	282	23	56	497	36
29	14	11	19	38	---	76	55	150	31	60	1030	160
30	8.7	16	20	40	---	100	50	96	136	52	880	175
31	6.2	---	69	38	---	123	---	78	---	42	349	---
TOTAL	243.7	225.9	2581.4	5071	4048	10664	13708	2417	2153	3232	5659	5072
MEAN	7.86	7.53	83.3	164	145	344	457	78.0	71.8	104	183	169
MAX	34	16	461	1450	1100	1660	2880	522	539	517	1030	2000
MIN	2.0	3.2	9.4	35	28	64	50	16	13	35	32	20
CFSM	.05	.05	.53	1.05	.92	2.19	2.91	.50	.46	.66	1.17	1.08
IN.	.06	.05	.61	1.20	.96	2.53	3.25	.57	.51	.77	1.34	1.20

CAL YR 1978 TOTAL 57778.7 MEAN 158 MAX 3780 MIN 1.1 CFSM 1.01 IN 13.69
WTR YR 1979 TOTAL 55075.0 MEAN 151 MAX 2880 MIN 2.0 CFSM .96 IN 13.05

Note: No gage-height record Jan. 11 to Mar. 27, July 1, to August 23, Sept. 14-27.

SCIOTO RIVER BASIN

181

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 (152 m) upstream from highway bridge, 1,000 ft (305 m) downstream from Delaware Dam, 1,300 ft (396 m) upstream from Norfolk and Western Railway bridge, and 4.0 mi (6.4 km) north of Delaware.

DRAINAGE AREA.--393 m² (1,018 km²).

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 799.58 ft (243.712 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Oct. 1, 1950, water-stage recorder at site 500 ft (152 m) downstream at datum 76.7 ft (23.38 m) higher.

REMARKS.--Records good. Flow completely regulated by Delaware Lake since 1951 (see station 03225000). Water-quality data collected at this site 1965 to 1977. Water-temperature data collected 1946 to 1961.

AVERAGE DISCHARGE.--52 years, 347 ft³/s (9.827 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,100 ft³/s (399 m³/s) Mar. 21, 1927, gage height, 16.9 ft (5.15 m), site and datum then in use; minimum daily, 0.1 ft³/s (0.003 m³/s) Sept. 14-29, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,600 ft³/s (130 m³/s) Mar. 9, gage height, 87.11 ft (26.551 m); minimum daily, 5.3 ft³/s (0.15 m³/s) Dec. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	19	43	1150	90	2040	350	152	329	361	39	633
2	18	19	43	1290	90	4310	42	141	522	943	50	257
3	18	19	45	757	90	4210	58	144	253	1020	566	155
4	18	19	169	1550	90	2410	618	172	190	900	496	151
5	18	19	162	1890	115	420	1730	152	109	464	275	199
6	18	19	97	1840	116	44	1920	141	82	220	109	191
7	18	19	97	1480	78	1590	1080	140	59	59	71	112
8	18	19	105	482	68	4420	552	99	81	59	50	87
9	19	19	67	224	58	4500	706	82	82	68	40	87
10	19	19	6.4	182	44	4480	1690	82	83	277	40	56
11	19	19	5.3	146	44	4460	1800	80	108	251	41	30
12	19	19	708	81	44	4470	913	85	137	251	40	25
13	20	76	1790	53	45	4430	895	88	145	153	40	27
14	19	80	1650	60	45	3810	803	128	79	108	40	233
15	19	56	846	306	45	2050	1180	145	33	108	40	61
16	19	44	177	348	62	641	1630	101	25	108	40	29
17	19	45	116	222	68	325	2300	85	25	108	37	443
18	19	45	65	220	67	325	2810	66	25	108	36	1120
19	19	44	42	144	67	325	3620	45	25	76	36	2420
20	19	44	42	104	67	281	3630	45	25	41	1300	3710
21	19	44	57	104	69	262	3520	45	65	35	1890	3400
22	19	44	102	133	102	199	2600	45	680	35	1010	1090
23	19	45	116	148	420	74	457	45	896	34	359	335
24	19	45	116	151	263	24	246	46	417	35	232	229
25	19	44	116	202	72	25	174	110	167	35	274	107
26	19	44	116	321	51	26	142	236	75	34	274	22
27	19	44	78	370	26	26	158	807	48	35	274	21
28	19	69	64	256	21	26	181	1130	48	34	287	28
29	19	100	62	165	---	27	181	1010	49	34	1060	302
30	19	74	62	162	---	64	181	329	56	34	1890	576
31	19	---	71	113	---	585	---	187	---	34	1510	---
TOTAL	582	1215	7235.7	14754	2417	50879	36197	6163	4918	6062	12456	16127
MEAN	18.8	40.5	233	476	86.3	1641	1207	199	164	196	402	538
MAX	20	100	1790	1890	420	4500	3630	1130	896	1020	1890	3710
MIN	18	19	5.3	53	21	24	42	45	25	34	36	21
CAL YR 1978	TOTAL	123244.7	MEAN	338	MAX	4430	MIN	5.3				
WTR YR 1979	TOTAL	159005.7	MEAN	436	MAX	4500	MIN	5.3				

SCIOTO RIVER BASIN

03226800 OLENTANGY RIVER NEAR WORTHINGTON, OH

LOCATION.--Lat 40°06'37", long 83°01'55", in NW 1/4 T.2N., R.18W., Franklin County, Hydrologic Unit 05060001, on left bank 350 ft (107 m) downstream from Interstate Highway 270 bridge, 1.5 mi (2.4 km) northwest of Worthington and 2.8 mi (4.5 km) upstream from Rush Run.

DRAINAGE AREA.--497 mi² (1,287 km²).

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

REVISED RECORDS.--WSP 1625: 1952(M). WSP 1908: Drainage area. WRD Ohio 1972: 1971(M).

GAGE.--Water-stage recorder. Datum of gage is 743.20 ft (226.527 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods and no gage height record, which are fair. Flow regulated by Delaware Lake 21 mi (34 km) upstream (see station 03225000). Water-quality data collected at this site 1965 to 1977. Water-temperature records collected 1955 to 1968. Daily suspended sediment data collected 1978 to current year.

AVERAGE DISCHARGE.--24 years, 451 ft³/s (12.77 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft³/s (467 m³/s) Jan. 21, 1959, gage height, 15.68 ft (4.779 m), from high-water mark in well; minimum daily, 8.5 ft³/s (0.24 m³/s) Sept. 26, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in January 1952 reached a stage of 15.3 ft (4.66 m), discharge, 15,100 ft³/s (428 m³/s), from information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,350 ft³/s (265 m³/s) Sept. 14, gage height, 11.45 ft (3.490 m); minimum daily 19 ft³/s (0.54 m³/s) Oct. 9.

REVISIONS.--The maximum discharges for the water years 1976 and 1978 have been revised to 6,890 ft³/s (195 m³/s) Feb. 18, 1976, gage height, 8.65 ft (2.637 m) and 6,360 ft³/s (180 m³/s) Mar. 26, 1978, gage height 8.24 ft (2.512 m), superseding figures published in reports for 1976 and 1978.

DISCHARGE, STREAM (CUBIC FEET PER SECOND), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	31	91	1850	116	1800	607	189	362	400	360	952
2	21	31	63	2750	113	5120	660	154	798	840	240	522
3	20	31	91	991	118	5400	333	204	374	900	620	244
4	27	31	261	1740	113	4460	1090	211	257	700	400	196
5	29	30	322	2260	91	1510	1860	211	189	350	340	185
6	24	31	145	2020	142	465	2260	171	158	200	200	227
7	23	32	127	1770	145	860	1400	161	136	120	110	171
8	20	32	328	800	100	4530	747	158	148	72	86	108
9	19	31	645	640	87	4570	1270	108	121	140	72	96
10	20	29	204	470	71	4580	1720	102	110	225	65	93
11	22	29	91	360	66	4480	2080	96	100	260	185	70
12	23	29	66	270	65	4500	1380	145	118	240	142	50
13	66	32	1880	220	64	4440	2420	127	142	245	79	98
14	51	71	1840	233	62	4170	1870	108	148	248	64	5220
15	41	87	1320	261	62	2480	1600	154	87	250	58	1040
16	31	68	350	1090	62	860	1530	142	59	248	53	392
17	32	63	151	537	62	374	2420	98	40	238	51	232
18	27	83	142	399	62	380	2580	91	37	180	64	1130
19	30	73	71	317	62	368	3720	81	36	90	59	1810
20	30	50	71	170	63	345	3690	61	37	78	833	3780
21	25	50	91	160	66	295	3620	58	171	82	2140	3590
22	26	48	93	170	204	270	3180	54	399	53	1200	1820
23	26	53	136	190	2530	189	773	54	1020	64	645	362
24	30	56	145	220	1700	105	295	59	568	92	232	333
25	27	50	148	280	1300	81	266	81	240	65	317	200
26	30	48	139	345	740	70	182	240	145	165	295	105
27	44	54	145	458	500	64	185	615	79	195	311	54
28	36	56	85	431	322	59	211	1140	61	220	1810	219
29	32	68	93	211	---	71	204	1100	63	170	2650	295
30	32	110	93	196	---	73	200	545	103	80	2200	683
31	33	---	285	185	---	584	---	185	---	130	1780	---
TOTAL	918	1487	9712	21994	9088	57553	44353	6903	6306	7340	17661	24277
MEAN	29.6	49.6	313	709	325	1857	1478	223	210	237	570	809
MAX	66	110	1880	2750	2530	5400	3720	1140	1020	900	2650	5220
MIN	19	29	63	160	62	59	182	54	36	53	51	50
CAL YR 1978	TOTAL	178883	MEAN 490	MAX 5590	MIN 17							
WTR YR 1979	TOTAL	207592	MEAN 569	MAX 5400	MIN 19							

03226865 RUSH RUN AT WORTHINGTON, OH

LOCATION.--Lat 40°05'06" long 83°00'34", Franklin County, Hydrologic Unit 05060001, on right bank, northwest corner of culvert entrance, 0.21 mi (0.34 km) north of Colonial Hills School in Worthington, 0.52 mi (0.84 km) southeast of Rts 161 and 23 intersection and 1.60 mi (2.57 km) upstream of confluence with Olentangy River.

DRAINAGE AREA.--1.65 mi² (4.27 km²).

PERIOD OF RECORD.--October 1978 to September 1979.

GAGE.--Water stage recorder. Altitude of gage is 850.0 ft (259.08 m) from topographic map.

REMARKS.--Records good except those for winter periods, which are fair. Daily suspended-sediment data collected October 1978 to September 1979.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 443 ft³/s (12.55 m³/s) Sept. 14, 1979; gage height, 42.88 ft (13.070 m); minimum 0.14 ft³/s (0.004 m³/s) July 21, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 443 ft³/s (12.55 m³/s) Sept. 14, gage height, 42.88 ft (13.070 m); minimum, 0.14 ft³/s (0.004 m³/s) July 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	3.8	4.4	30	4.2	12	10	.25	4.7	1.1	4.3	1.3
2	1.6	4.1	4.7	17	3.8	8.8	11	.25	1.3	.75	2.8	1.2
3	3.8	3.8	21	9.0	3.5	8.4	3.5	1.9	1.1	.53	1.1	1.1
4	3.8	4.4	18	5.5	3.2	8.8	9.2	.84	.84	.84	.75	1.1
5	3.1	4.4	7.0	4.0	3.0	5.8	1.9	.53	3.5	.47	1.7	.95
6	3.6	3.8	5.8	3.1	2.8	5.5	.95	.41	5.2	.32	1.3	.95
7	3.1	3.6	5.0	2.5	2.6	6.4	.47	.36	7.8	.25	.67	.75
8	3.1	3.3	23	2.0	2.4	5.8	.95	.28	1.7	.17	.95	.75
9	2.9	3.3	16	1.8	2.2	4.7	10	.25	1.5	2.3	.53	.57
10	2.9	3.3	10	1.6	2.1	6.1	1.2	.28	2.6	1.7	1.2	.59
11	3.3	3.3	7.7	1.5	1.9	4.1	5.8	.32	.75	.53	9.7	.75
12	3.6	3.3	8.0	8.0	1.8	4.7	1.5	3.5	.53	.41	1.2	.53
13	10	3.3	8.0	23	1.7	4.4	21	11	.53	.53	.75	23
14	5.3	3.6	7.7	18	1.6	4.7	9.2	10	.41	.41	.47	107
15	4.1	4.4	6.7	19	1.5	4.1	1.7	2.8	.41	.32	.36	12
16	4.1	3.8	5.8	11	1.4	3.8	1.2	.41	.41	.28	.28	3.9
17	4.1	11	5.5	9.0	1.4	3.1	1.2	.36	.67	.28	.28	2.3
18	4.1	3.8	5.3	8.4	1.4	4.7	.84	.36	.41	.25	2.1	1.7
19	4.7	3.6	5.3	7.6	1.3	3.6	.75	.32	.36	.25	.53	.95
20	4.7	3.8	7.3	7.2	1.3	3.1	.57	.32	.59	.21	21	.95
21	4.4	3.8	7.0	7.0	8.0	3.3	.59	.32	8.3	1.2	14	3.5
22	3.6	3.8	5.3	7.0	28	3.1	.59	.32	1.1	2.8	2.3	1.5
23	3.8	7.3	5.3	7.3	29	5.3	.47	.75	.67	.75	21	.84
24	3.8	3.6	5.5	16	13	6.7	.41	1.5	.47	2.1	8.3	.53
25	3.8	3.8	7.0	10	26	3.6	.41	2.3	.47	2.1	2.3	.41
26	4.7	4.1	5.3	8.0	9.2	2.9	.75	2.1	.36	.47	3.1	.41
27	4.1	11	6.4	7.0	7.7	2.1	.59	4.3	.32	5.2	2.1	.32
28	2.9	5.3	5.3	6.2	8.0	2.7	.41	1.2	.28	8.3	28	17
29	3.8	4.1	5.0	5.6	---	3.8	.28	.84	.25	7.8	16	3.9
30	3.8	4.1	8.0	5.0	---	4.7	.28	.75	1.9	1.3	2.8	2.3
31	4.1	---	19	4.5	---	6.4	---	5.2	---	.84	1.9	---
TOTAL	120.3	132.6	261.3	272.8	174.0	157.2	97.91	54.32	49.43	44.76	153.77	193.15
MEAN	3.88	4.42	8.43	8.80	6.21	5.07	3.26	1.75	1.65	1.44	4.96	6.44
MAX	10	11	23	30	29	12	21	11	8.3	8.3	28	107
MIN	1.6	3.3	4.4	1.5	1.3	2.1	.28	.25	.25	.17	.28	.32
CFSM	2.35	2.68	5.11	5.33	3.76	3.07	1.98	1.06	1.00	.87	3.01	3.90
IN.	2.71	2.99	5.89	6.15	3.92	3.54	2.21	1.22	1.11	1.01	3.46	4.35

WTR YR 1979 TOTAL 1711.54 MEAN 4.69 MAX 107 MIN .17 CFM 2.84 IN 38.56

03226870 LINWORTH ROAD CREEK AT COLUMBUS, OH

LOCATION.--Lat 40°04'34", long 83°02'47", Franklin County, Hydrologic Unit 05060001, on left bank, northwest corner of culvert, 10 ft (3.0 m) upstream of Linworth Road, 0.1 mi (0.2 km) south of Rocky Hill Rd, 0.7 mi (1.1 km) north of Old 315 and Linworth Rd split, 0.84 mi (1.4 km) upstream from confluence of Olentangy River.

DRAINAGE AREA.--2.03m² (5.26 km²).

PERIOD OF RECORD.--October 1978 to September 1979.

GAGE.--Water-stage recorder. Datum of gage is 799.77 ft (243.770 m) National Vertical Datum of 1929 (levels by Franklin County Engineering Dept.) Daily suspended-sediment data collected Oct. 1978 to September 1979.

REMARKS.--Record fair except those below 0.9 ft³/s, (.02 m³/s) which are poor.

EXREMES FOR PERIOD OF RECORD.--Maximum discharge, 449 ft³/s (12.7 m³/s) Sept. 14, 1979, gage height 32.29 ft (11.976 m); minimum 0.10 ft³/s (0.003 m³/s) Oct. 9, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 449 ft³/s (12.7 m³/s) Sept. 14, gage height 32.29 ft (11.976 m); minimum 0.10 ft³/s (0.003 m³/s) Oct. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	.33	.59	27	3.0	21	1.1	.44	1.5	1.5	4.0	1.8
2	.13	.20	.51	4.7	2.7	14	4.9	.41	.67	.92	2.6	1.5
3	.81	.28	4.7	5.8	2.5	16	3.7	2.1	.55	.72	1.0	1.3
4	.44	.33	3.7	2.2	2.2	15	14	1.4	.44	1.4	.76	1.2
5	.72	.33	.67	3.0	2.0	6.4	6.2	.92	.35	.76	1.5	.85
6	.44	.35	.51	2.2	1.8	2.7	2.5	.72	2.9	.59	1.5	.81
7	.12	.47	.44	1.7	1.7	1.8	1.5	.55	4.7	.47	.81	.72
8	.11	.41	11	1.3	1.6	1.5	2.0	.51	6.0	.47	.98	.63
9	.10	.44	6.2	1.1	1.5	1.0	12	.44	3.2	.81	.76	.59
10	.13	.44	1.5	.90	1.4	1.2	3.7	.44	2.9	.86	.76	.59
11	.24	.44	1.2	.80	1.3	1.0	7.4	.41	1.9	.63	4.0	.59
12	.26	.47	.72	1.5	1.2	.81	4.9	4.2	1.4	.59	1.4	.59
13	2.8	.44	.63	16	1.1	.92	26	1.9	1.1	.59	.98	7.4
14	1.3	.44	.47	13	1.0	.81	19	1.0	1.0	.51	.72	100
15	.72	.63	.47	14	.92	.72	6.4	.76	.92	.47	.63	5.2
16	.51	.98	.44	9.0	.86	.72	3.3	.51	.81	.35	.55	2.2
17	.47	2.1	.44	5.0	.82	.67	2.2	.41	1.0	.18	.28	1.5
18	.35	.72	.38	4.5	.80	.81	1.7	.38	1.0	.18	1.5	1.2
19	2.3	.51	.35	4.0	.77	1.1	1.3	.35	.67	.16	.72	1.0
20	.63	.44	.38	3.5	.76	.72	1.2	.33	.72	.24	12	.98
21	.28	.47	.67	2.8	7.1	.63	1.0	.26	2.7	.67	9.7	1.4
22	.14	.51	.44	2.2	17	.47	.98	1.4	1.0	.67	2.2	1.1
23	.30	1.2	.41	1.8	37	.72	.81	.38	.67	.55	3.2	.92
24	.47	.92	.44	11	16	.81	.91	.76	.44	1.6	3.4	.81
25	.44	.63	.67	4.5	21	.44	.76	1.5	.35	1.5	1.9	.75
26	.59	1.3	.55	5.4	14	.35	1.0	1.6	.20	.63	1.9	.75
27	.63	1.8	.51	4.1	6.0	.26	.98	2.7	.22	3.2	2.1	.72
28	.41	1.0	.55	4.5	6.0	.26	.72	1.4	.30	3.1	17	5.2
29	.30	.67	.55	2.6	---	.30	.55	.81	.81	3.4	13	2.3
30	.35	.63	.86	2.8	---	.24	.47	.59	4.2	.98	3.4	1.5
31	.33	---	11	3.2	---	.38	---	1.5	---	.76	2.1	---
TOTAL	16.96	19.88	51.95	166.10	154.03	93.74	133.58	31.08	44.62	29.46	97.35	146.13
MEAN	.55	.66	1.68	5.36	5.50	3.02	4.46	1.00	1.49	.95	3.14	4.87
MAX	2.8	2.1	11	27	37	21	26	4.2	6.0	3.4	17	100
MIN	.10	.20	.35	.80	.76	.24	.47	.26	.20	.16	.28	.59
CFSM	.27	.33	.83	2.64	2.71	1.49	2.20	.49	.73	.47	1.55	2.40
IN.	.31	.36	.95	3.04	2.82	1.72	2.45	.57	.82	.54	1.78	2.68

WTR YR 1979 TOTAL 984.98 MEAN 2.70 MAX 100 MIN .10 CFSM 1.33 IN 18.04

03226875 BETHEL ROAD CREEK AT COLUMBUS, OH

LOCATION.--Lat 40°03'54", long 83°02'21", in Franklin County, Hydrologic Unit 05060001 on left bank, northwest corner of culvert entrance, 0.1 mi (0.16 km) north of Bethel Rd. and Old 315 Hwy intersection.

DRAINAGE AREA.--0.22 mi² (0.57 km²).

PERIOD OF RECORD.--October 1978 to September 1979.

GAGE.--Water stage recorder. Altitude of gage is 770.0 ft (234.70 m), from topographic map.

REMARKS.--Records good except those for winter periods, which are fair. Daily suspended-sediment data collected Oct. 1978 to September 1979.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 188 ft³/s (5.32 m³/s) Sept. 14, 1979, gage height 46.64 ft (14.216 m); minimum, no flow Oct. 9, 10, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 188 ft³/s (5.32 m³/s) Sept. 14, gage height 46.64 ft (14.216 m); minimum, no flow Oct. 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.19	.50	2.6	.17	2.5	1.3	.38	.42	.51	1.1	.70
2	.11	.19	.54	.23	.16	1.5	1.9	.42	.40	.60	.60	.55
3	.13	.22	4.0	.18	.15	1.4	.55	1.8	.38	.55	.42	.60
4	.16	.24	2.0	.16	.14	1.3	1.9	.87	.38	1.1	.36	.46
5	.15	.29	.38	.14	.13	.99	.81	.55	.38	.40	1.9	.39
6	.11	.27	.34	.12	.12	.87	.55	.51	2.2	.40	.76	.38
7	.04	.38	.42	.11	.11	.81	.51	.51	1.2	.40	.51	.38
8	.04	.15	4.2	.10	.10	.76	.55	.51	.70	.38	.65	.39
9	.00	.11	.76	.09	.10	.76	1.8	.51	.81	.42	.34	.38
10	.00	.11	.38	.08	.09	.81	.60	.55	.70	.51	.46	.38
11	.11	.15	.36	.13	.09	.70	1.1	.38	.40	.40	1.2	.39
12	.22	.27	.34	.25	.09	.70	.50	.60	.40	.38	.42	.38
13	.76	.24	.34	.23	.08	.70	7.5	.38	.40	.38	.36	19
14	.42	.27	.34	.20	.08	.70	2.1	.38	.38	.40	.36	39
15	.24	.24	.31	.19	.08	.70	.91	.38	.38	.40	.38	2.5
16	.24	.24	.34	.17	.08	.65	.51	.36	.38	.38	.38	2.4
17	.22	.46	.34	.16	.07	.65	.55	.34	.42	.36	.42	2.3
18	.19	.23	.31	.15	.07	.70	.55	.36	.40	.36	.76	2.2
19	.27	.20	.31	.14	.07	.65	.55	.36	.81	.38	.38	2.1
20	.11	.19	.46	.14	.07	.65	.55	.40	1.3	.38	2.6	.42
21	.11	.22	.31	.14	6.9	.60	.55	.42	1.1	.87	.87	1.2
22	.11	.24	.29	.33	5.4	.60	.55	.42	.42	.42	.55	.87
23	.15	.55	.60	.30	4.8	.81	.51	.60	.40	.38	1.5	.87
24	.15	.27	.34	.28	1.6	.87	.42	.99	.40	1.7	.81	.87
25	.11	.24	.40	.26	7.3	.65	.51	.99	.38	.55	.60	.87
26	.24	.22	.31	.25	1.5	.60	.81	.70	.38	.40	.70	.91
27	.19	.70	.34	.24	1.3	.60	.51	1.2	.36	2.7	.70	.91
28	.11	.70	.31	.22	1.3	.65	.55	.42	.34	1.7	.65	2.5
29	.08	.54	.38	.21	---	.70	.46	.40	1.3	1.1	.81	1.2
30	.08	.48	.55	.20	---	.70	.42	.40	1.7	.51	.76	1.2
31	.19	---	2.6	.18	---	1.2	---	1.1	---	.42	.65	---
TOTAL	5.13	8.80	23.40	8.18	32.15	26.48	30.58	18.19	19.62	19.84	23.06	96.57
MEAN	.17	.29	.75	.26	1.15	.85	1.02	.59	.65	.64	.74	2.89
MAX	.76	.70	4.2	2.6	7.3	2.5	7.6	1.8	2.2	2.7	2.6	.39
MIN	.00	.11	.29	.08	.07	.60	.42	.34	.36	.36	.34	.38
CFSM	.77	1.32	3.41	1.18	5.23	3.86	4.64	2.68	2.96	2.91	3.36	13.1
IN.	.86	1.48	3.94	1.38	5.41	4.46	5.16	3.06	3.30	3.34	3.88	14.59

WTR YR 1979 TOTAL 302.20 MEAN .83 MAX 39 MIN .00 CFSM 3.77 IN 50.87

SCIOTO RIVER BASIN

03226885 OLENTANGY RIVER AT HENDERSON ROAD AT COLUMBUS, OH

LOCATION.--Lat 40°03'06", long 83°01'50", Franklin County, Hydrologic Unit 05060001, on left bank, S.E. corner of Henderson Road bridge on west side of Whetstone High School, and 6.7 mi (10.8 km) upstream from confluence with Scioto River.

DRAINAGE AREA.--518 mi² (1342 km²).

PERIOD OF RECORD.--October 1978 to September 1979.

GAGE.--Water-stage recorder, altitude of gage is 740 ft (226 m) from topographic map.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Delaware Dam 25.6 mi (41 km) upstream (see station 03225000). Daily suspended-sediment data collected 1978 to September 1979.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,900 ft³/s (309 m³/s) Sept. 14, 1979, gage height, 76.74 ft (23.390 m); minimum daily, 21 ft³/s (0.59 m³/s) Oct. 1-10, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,900 ft³/s (309 m³/s) Sept. 14, gage height, 76.74 ft (23.390 m); minimum daily, 21 ft³/s (0.59 m³/s) Oct. 1-10.

DISCHARGE, STREAM (CUBIC FEET PER SECOND), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	31	104	1980	197	1500	667	176	345	185	114	1090
2	21	31	67	2900	188	6400	774	146	826	785	395	581
3	21	26	151	715	194	5200	375	176	431	1040	246	279
4	21	27	483	1860	182	2500	1090	204	282	1110	774	224
5	21	28	334	2480	141	1000	1920	210	231	630	367	188
6	21	30	176	2360	217	800	2310	170	224	440	352	243
7	21	31	129	2100	260	2000	1500	151	200	146	131	182
8	21	31	465	1010	191	5100	759	146	217	82	108	122
9	21	31	774	859	164	5100	1390	116	154	100	90	100
10	21	30	272	875	148	5100	1750	98	141	190	73	98
11	23	30	120	540	136	5050	2150	86	120	322	243	80
12	28	30	88	431	128	5000	1550	96	127	295	170	55
13	77	30	1730	304	124	4700	2340	146	151	292	96	200
14	84	43	1830	317	120	3600	3540	94	159	290	71	6540
15	51	102	1370	258	118	1750	1710	98	108	290	64	1260
16	43	86	390	837	113	780	1530	146	68	282	58	443
17	38	110	167	607	113	304	2450	112	51	266	55	241
18	35	110	159	497	112	297	3000	100	49	266	88	1030
19	35	80	106	427	112	321	4200	94	43	158	67	1570
20	32	70	80	301	113	345	4250	68	49	82	754	3990
21	31	65	84	328	120	301	4050	65	221	82	2450	3830
22	28	58	88	285	200	285	3000	64	291	88	1380	2230
23	29	71	120	275	750	224	700	70	1060	56	966	339
24	32	75	139	479	2450	146	350	86	634	70	304	334
25	31	68	148	550	1500	106	250	108	266	100	356	200
26	35	65	143	497	1000	80	200	228	162	66	342	114
27	39	102	143	663	600	78	191	461	106	191	356	55
28	42	84	154	658	360	73	204	1190	68	243	1340	263
29	34	73	94	360	---	82	197	1130	88	265	3360	272
30	31	106	104	311	---	92	179	720	197	134	2400	613
31	30	---	321	294	---	324	---	266	---	80	2040	---
TOTAL	1018	1754	10533	26358	10051	58638	48596	7021	7069	8626	19610	26765
MEAN	32.8	58.5	340	850	359	1892	1620	226	236	278	633	892
MAX	84	110	1830	2900	2450	6400	4250	1190	1060	1110	3360	6540
MIN	21	26	67	258	112	73	179	64	43	56	55	55
CFSM	.06	.11	.66	1.64	.69	3.65	3.13	.44	.46	.54	1.22	1.72
IN.	.07	.13	.76	1.89	.72	4.21	3.49	.50	.51	.62	1.41	1.92

WTR YR 1979 TOTAL 226039 MEAN 619 MAX 6540 MIN 21 CFSM 1.20 IN 16.23

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 (0.6 km) downstream from bridge on Frank Road, 2.8 mi (4.5 km) upstream from Scioto Big Run, and 5 mi (8 km) downstream from Olentangy River.

DRAINAGE AREA.--1,629 mi² (4,219 km²).

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 (207.264 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1924, nonrecording gage at site 200 ft (61 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Griggs Reservoir 10.4 mi (16.7 km) upstream (see station 03221500), O'Shaughnessy Reservoir 20.4 mi (32.8 km) upstream (see station 03220500), and Delaware Lake 35 mi (56 km) upstream from station (see station 03225000). 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.--58 years, 1,381 ft³/s (39.1 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 68,200 ft³/s (1,930 m³/s) Jan. 22, 1959, gage height, 27.22 ft (8.297 m), from high-water mark in well, from rating curve extended above 46,000 ft³/s (1,300 m³/s); minimum daily, 47 ft³/s (1.33 m³/s) Sept. 6, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 25, 1913 reached a stage of 25.9 ft (7.89 m), discharge, 138,000 ft³/s (3,910 m³/s), estimated by Franklin County Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 34,400 ft³/s (974 m³/s) Sept. 14, gage height, 23.41 ft (7.135 m); minimum daily, 153 ft³/s (4.33 m³/s) Oct. 9, Nov. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	259	166	255	4010	400	4960	1270	669	1360	561	507	3110
2	162	170	215	9060	380	10600	2260	611	1520	866	1180	1930
3	166	166	502	4800	360	11200	2530	928	1190	1260	1470	1440
4	367	182	1190	3360	330	15000	3330	854	854	1270	1490	985
5	206	166	518	3410	300	16300	5540	751	692	1010	1130	788
6	224	162	443	2840	300	13500	6260	663	692	698	1090	739
7	174	170	316	2480	290	10500	4650	611	794	426	583	698
8	162	170	1150	1620	280	11800	3140	561	959	259	470	572
9	153	166	2380	818	270	10600	3910	518	710	268	394	432
10	162	170	1720	674	260	9300	4070	432	716	556	378	378
11	186	170	972	634	250	8410	4410	437	634	710	866	331
12	211	153	710	545	250	7450	4010	721	539	606	959	268
13	454	158	1550	529	250	6580	4670	836	507	634	645	415
14	297	170	2040	698	240	6020	16600	634	460	507	443	21300
15	232	224	1680	589	240	4330	11400	583	383	357	311	10700
16	215	259	891	704	230	2550	9330	529	302	415	264	4900
17	206	481	491	812	230	1710	8900	460	250	454	219	2620
18	182	352	378	692	230	1370	6970	383	278	357	362	2290
19	206	237	347	628	230	1300	6440	347	250	283	292	2170
20	182	206	302	567	240	1290	5400	302	190	246	454	4380
21	174	194	357	663	449	1210	4860	273	567	190	4090	4410
22	162	190	302	594	812	1120	4450	259	757	202	3100	3460
23	162	228	331	539	3910	1010	2250	326	1300	194	2450	991
24	178	237	367	966	11800	953	1190	415	1060	246	1860	848
25	166	211	410	972	10500	818	1020	502	645	645	1210	674
26	198	202	347	842	7200	745	934	763	410	237	1110	545
27	198	352	316	854	5300	663	916	2960	307	357	1130	410
28	190	273	273	872	4170	572	824	4030	232	680	1660	1300
29	162	219	246	680	---	550	763	3770	283	1530	9890	1210
30	162	241	316	545	---	561	716	2680	640	1030	6410	1240
31	158	---	763	450	---	745	---	1660	---	710	4850	---
TOTAL	6316	6445	22078	47447	49701	163717	133013	29468	19481	17764	51267	75534
MEAN	204	215	712	1531	1775	5281	4434	951	649	573	1654	2518
MAX	454	481	2380	9060	11800	16300	16600	4030	1520	1530	9890	21300
MIN	153	153	215	450	230	550	716	259	190	190	219	268

CAL YR 1978 TOTAL 501479 MEAN 1374 MAX 14700 MIN 130
WTR YR 1979 TOTAL 622231 MEAN 1705 MAX 21300 MIN 153

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 (0.3 km) east of Central College, 0.4 mi (0.6 km) downstream from Hoover Dam, and 3 mi (5 km) southeast of Westerville.

DRAINAGE AREA.--190 mi² (492 km²).

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 (248.461 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods which are fair, and period of no gage-height record Mar. 28 to June 3, which are poor. Flow completely regulated by Hoover Reservoir since September 1954 (see station 03228400). Water-quality data collected at this site 1965 to 1977. 03228400). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--41 years, 185 ft³/s (5.239 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,800 ft³/s (674 m³/s) Jan. 21, 1959, gage height, 19.75 ft (6.020 m), from rating curve extended above 7,200 ft³/s (204 m³/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, 3,810 ft³/s (108 m³/s) Sept. 14, gage height, 10.31 ft (3.142 m); minimum daily, 77 ft³/s (2.181 m³/s) Dec. 20. 24. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	121	114	97	175	100	808	110	110	120	145	126	757
2	118	118	81	128	100	1980	120	110	120	145	222	734
3	121	121	88	98	100	1750	210	110	120	131	135	630
4	123	120	123	101	100	1640	190	110	121	128	125	590
5	120	120	89	104	100	1860	190	110	129	126	125	628
6	120	120	85	105	100	1030	140	110	125	125	125	430
7	120	120	89	105	100	450	120	110	126	125	126	213
8	120	120	160	111	100	260	110	110	143	125	126	168
9	120	120	106	184	100	204	210	110	123	125	124	142
10	120	120	100	106	100	190	190	110	122	162	121	169
11	97	133	98	99	100	178	140	120	121	191	188	212
12	135	133	98	104	100	146	120	120	118	162	149	211
13	169	123	94	103	100	132	115	120	116	125	115	224
14	116	101	97	108	100	132	500	120	118	125	122	2850
15	116	103	98	129	100	128	560	120	128	125	139	3080
16	123	103	91	103	100	126	390	120	133	123	127	1750
17	118	123	88	103	100	126	260	120	126	128	126	1640
18	106	121	95	103	100	127	150	120	116	138	125	1650
19	103	91	89	103	100	128	120	120	114	138	125	689
20	114	98	77	103	100	117	120	120	125	136	143	177
21	109	97	89	104	190	112	110	120	131	145	178	166
22	105	95	97	103	250	110	110	120	133	154	130	173
23	118	97	83	103	350	111	110	120	135	173	326	164
24	138	95	77	110	500	113	110	120	131	147	911	155
25	156	88	77	100	998	112	110	120	131	126	991	149
26	131	85	80	100	1840	111	110	120	131	126	914	149
27	126	95	92	100	726	109	110	120	131	140	906	149
28	126	89	97	100	370	110	110	120	131	198	955	210
29	126	87	97	100	---	130	110	120	135	187	1860	252
30	116	97	97	100	---	110	110	120	143	128	1400	267
31	121	---	116	100	---	110	---	120	---	126	829	---
TOTAL	3772	3247	2945	3395	7224	12750	5165	3620	3796	4378	12114	18778
MEAN	122	108	95.0	110	258	411	172	117	127	141	391	626
MAX	169	133	160	184	1840	1980	560	120	143	198	1860	3080
MIN	97	85	77	98	100	109	110	110	114	123	115	142
CAL YR 1978	TOTAL	85906	MEAN	235	MAX	2670	MIN	77				
WTR YR 1979	TOTAL	81184	MEAN	222	MAX	3080	MIN	77				

SCIOTO RIVER BASIN

189

03228750 ALUM CREEK NEAR KILBOURNE, OH

LOCATION.--Lat 40°21'24", long 82°55'18", T.5 W., R.17 W., Delaware County, Hydrologic Unit 05060001, on left bank at upstream side of bridge on County Road 34, 100 ft (30 m) downstream from West Branch Alum Creek, and 2.6 mi (4.2 km) northeast of Kilbourne.

DRAINAGE AREA.--64.9 mi² (168 km²).

PERIOD OF RECORD.--November 1973 to current year.

REVISED RECORDS.--WDR OH-75-1: 1974 (M).

GAGE.--Water-stage recorder. Datum of gage is 900.99 ft (274.622 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Water-quality data collected at this site 1973 to 1977.

AVERAGE DISCHARGE.--5 years, 66.6 ft³/s (1.886 m³/s) 13.94 in/yr (354 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,850 ft³/s (137 m³/s) Feb. 24, 1975, gage height, 12.05 ft (3.673 m); minimum, 0.56 ft³/s (0.016 m³/s) Aug. 1, 2, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28.3 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 24	---	2300 65.1	ice jam	Aug. 28	2115	2100 59.5	8.67 2.643
Mar. 3	2315	1180 33.4	6.72 2.048	Sept. 14	1015	*4230 120	*11.49 3.502
Apr. 13	2345	3600 102	10.67 3.252				

Minimum discharge, 1.1 ft³/s (0.031 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	3.5	6.2	760	35	270	55	23	39	91	5.4	31
2	2.3	3.3	5.4	300	30	500	338	21	45	101	4.0	22
3	2.0	3.3	50	90	25	700	144	35	32	50	18	18
4	3.3	3.3	273	70	25	931	352	45	23	30	20	14
5	3.5	3.3	92	60	25	399	298	36	18	26	9.4	11
6	2.5	3.3	44	58	23	173	121	29	15	29	8.0	9.1
7	2.2	3.3	30	56	22	112	70	25	14	17	6.0	8.0
8	2.0	3.1	150	50	21	91	54	22	17	12	11	6.9
9	1.9	3.1	340	45	20	70	533	20	16	10	10	6.3
10	1.7	3.3	200	45	20	83	198	19	13	11	5.4	6.0
11	1.6	3.3	120	44	20	60	121	22	12	21	7.8	5.4
12	1.9	3.3	70	42	19	44	173	24	12	18	5.6	5.4
13	52	3.3	45	50	19	42	1020	28	9.8	12	4.5	6.6
14	23	3.5	30	68	18	46	1590	22	8.4	18	4.0	2230
15	15	3.5	25	202	18	37	405	19	7.3	14	3.7	450
16	8.7	4.0	20	156	18	32	154	17	6.6	11	3.3	164
17	7.3	6.0	19	115	17	31	104	15	6.3	8.4	3.1	82
18	5.4	19	18	107	17	32	77	13	6.3	6.6	13	45
19	4.5	11	15	89	17	32	61	12	5.7	5.1	17	30
20	4.0	7.6	14	92	30	29	51	12	4.8	4.5	15	22
21	3.5	6.0	16	127	90	27	44	11	44	4.5	33	26
22	2.9	3.1	17	140	300	24	40	11	298	4.0	18	29
23	2.7	3.4	15	105	1000	25	36	11	73	4.0	13	24
24	2.7	8.4	13	200	1900	36	34	15	31	4.0	22	16
25	2.9	7.6	12	349	1400	42	32	27	18	3.7	22	13
26	6.0	6.3	12	219	900	32	32	79	14	5.4	12	12
27	15	6.6	12	164	600	26	34	105	12	6.9	18	11
28	8.4	9.1	12	110	380	22	31	82	9.1	6.3	581	95
29	6.0	9.1	12	80	---	37	28	44	8.4	6.9	728	190
30	4.5	8.0	13	55	---	44	26	29	19	6.9	146	149
31	4.0	---	130	40	---	56	---	24	---	8.4	59	---
TOTAL	204.8	168.9	1830.6	4088	7009	4085	6276	897	837.7	556.6	1926.2	3737.7
MEAN	6.61	5.63	59.1	132	250	132	209	28.9	27.9	18.0	58.9	125
MAX	52	19	340	760	1900	931	1530	105	298	101	728	2230
MIN	1.4	3.1	5.4	40	17	22	26	11	4.8	3.7	3.1	5.4
CFSM	.10	.09	.91	2.03	3.85	2.03	3.22	.45	.43	.28	.91	1.93
IN.	.12	.10	1.05	2.34	4.02	2.34	3.60	.51	.48	.32	1.05	2.14

CAL YR 1978 TOTAL 25516.16 MEAN 69.9 MAX 1410 MIN .93 CFSM 1.08 IN 14.63
WTR YR 1979 TOTAL 31517.50 MEAN 86.3 MAX 2230 MIN 1.4 CFSM 1.33 IN 18.07

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 (122 m) upstream of bridge on Lewis Center Road, 1,200 ft (366 m) downstream from outlet of Alum Creek dam, 0.3 mi (0.5 km) west of Africa, 2.8 mi (4.5 km) upstream from Westerville Reservoir outlet, and 4.2 mi (6.8 km) northwest of Westerville.

DRAINAGE AREA.--122 mi² (316 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 800.00 ft (243.840 m) National Geodetic Vertical Datum of 1929. (levels by Corps of Engineers). Oct. 17, 1973 to July 9, 1974 nonrecording gage at bridge 400 ft (121.920 m) downstream at same datum. Prior to Oct. 17, 1973 water-stage recorder 600 ft (182.880 m) downstream at datum 17.37 ft (5.294 m) higher.

REMARKS.--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 (3.257 m³/s), 6 years (water years 1974-79), 98.3 ft³/s (2.784 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,160 ft³/s (174 m³/s) Mar. 10, 1964, gage height, 13.95 ft (4.252 m), 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 (4.33 m), from floodmarks, discharge, 6,460 ft³/s (183 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,310 ft³/s (65.4 m³/s) Sept. 19, gage height, 27.74 ft (8.455 m); minimum daily, 6.9 ft³/s (0.20 m³/s) Mar. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	33	173	27	165	843	14	44	89	59	23	1110
2	9.6	33	12	24	165	1470	17	44	89	101	18	957
3	9.2	33	14	228	162	1440	35	45	89	101	17	335
4	8.4	33	15	484	160	1450	51	45	87	103	16	52
5	8.8	33	62	587	64	767	131	44	87	102	16	31
6	8.8	33	119	656	19	10	167	44	89	99	135	31
7	8.4	35	121	656	15	10	167	44	76	66	393	29
8	8.4	35	107	581	13	219	167	44	75	27	20	21
9	8.0	35	19	278	13	989	173	44	66	27	17	16
10	8.0	35	17	76	13	1450	384	44	64	27	17	16
11	8.4	35	19	15	13	1450	522	44	64	26	23	12
12	8.4	35	201	13	13	1440	522	43	66	25	20	11
13	10	35	489	13	13	1530	484	42	43	26	19	14
14	8.4	24	489	15	13	1250	219	42	22	26	18	61
15	8.0	16	310	15	10	489	264	42	20	26	17	9.7
16	7.7	16	165	14	10	254	16	42	20	17	16	8.8
17	222	16	162	14	10	6.9	15	43	19	8.3	16	8.8
18	348	16	75	26	10	9.6	479	22	20	8.6	16	225
19	162	16	39	42	10	10	1470	13	16	8.6	16	1130
20	298	16	38	42	10	9.2	1470	12	12	8.6	16	1730
21	150	16	38	43	10	9.2	1470	12	15	8.7	17	1570
22	264	16	27	42	14	9.2	1420	13	13	9.6	16	1440
23	24	16	21	42	81	9.2	760	12	16	9.1	17	1760
24	28	16	21	44	19	9.6	47	13	17	9.3	18	905
25	32	16	21	43	27	10	47	13	17	9.2	18	17
26	32	16	21	43	17	10	47	13	17	16	18	17
27	32	160	21	43	17	10	47	24	17	23	18	17
28	32	286	21	43	19	398	45	56	16	23	29	19
29	33	286	21	43	---	356	44	78	16	25	137	18
30	33	286	21	115	---	13	44	78	20	22	635	17
31	33	---	21	165	---	13	---	79	---	22	1080	---
TOTAL	1860.7	1677	2900	4472	1105	15943.9	10738	1178	1277	1069.0	2852	11588.3
MEAN	60.0	55.9	93.5	144	39.5	514	358	38.0	42.6	34.5	92.0	386
MAX	348	286	489	556	165	1530	1470	79	89	103	1080	1760
MIN	7.7	16	12	13	10	6.9	14	12	12	8.3	16	8.8
CAL YR 1978	TOTAL	31934.8	MEAN	87.5	MAX	1510	MIN	7.3				
WTR YR 1979	TOTAL	56660.9	MEAN	155	MAX	1760	MIN	6.9				

SCIOTO RIVER BASIN

191

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 (0.3 km) downstream from Livingston Avenue bridge in Columbus, and 6 mi (10 km) upstream from mouth.

DRAINAGE AREA.--189 mi² (490 km²).

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 (223.629 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Alum Creek Lake 19 mi (31 km) upstream, since Aug. 1973. Water-quality data collected at this site 1960 to 1977. Sediment data collected 1960 to 1965.

AVERAGE DISCHARGE.--53 years, 169 ft³/s (4.786 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,400 ft³/s (748 m³/s) Jan. 22, 1959, gage height, 19.59 ft (5.971 m) (from high-water mark in well), from rating curve extended above 17,000 ft³/s (481 m³/s) on basis of contracted-opening measurement of peak flow; no flow Sept. 21-29, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,600 ft³/s (244 m³/s) Sept. 14, gage height, 12.50 ft (3.810 m); minimum daily, 13 ft³/s (0.37 m³/s) Oct. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	38	323	1190	270	716	81	59	202	237	81	1310
2	17	36	84	467	186	1860	559	59	194	168	354	1270
3	19	38	206	398	130	1140	206	194	112	155	100	738
4	67	38	462	593	70	1820	507	122	103	198	61	198
5	20	38	106	738	50	1430	386	100	98	183	61	87
6	27	40	260	749	40	186	320	81	175	146	130	67
7	18	46	210	771	35	109	260	75	246	134	583	64
8	16	44	110	749	30	100	255	72	354	67	183	54
9	16	40	60	578	30	716	856	69	158	51	56	44
10	13	40	40	366	30	1460	489	72	122	350	61	40
11	18	40	90	81	30	1470	760	78	119	72	406	38
12	24	40	250	30	25	1430	804	90	90	49	206	34
13	109	42	720	87	25	1490	1060	90	75	49	81	202
14	31	42	498	202	25	1490	1470	64	44	46	51	6840
15	26	36	471	119	25	700	633	61	27	38	42	484
16	20	27	190	38	25	526	122	56	26	38	40	134
17	25	126	183	42	25	81	87	51	25	29	36	78
18	476	81	158	34	25	38	72	49	29	19	84	92
19	255	24	46	46	25	36	1410	26	23	18	51	578
20	381	21	51	72	25	33	1450	20	21	18	223	1600
21	223	20	75	87	25	30	1470	19	415	20	563	1670
22	294	20	54	54	206	29	1440	17	190	721	151	1340
23	158	40	31	78	1150	29	1230	36	67	402	1060	1640
24	31	42	31	294	1010	67	115	54	42	168	1240	1420
25	30	24	42	100	1050	46	78	64	33	255	358	98
26	49	21	31	72	927	33	81	87	27	81	175	34
27	56	49	27	59	291	29	103	130	26	331	223	33
28	38	335	25	56	228	194	78	81	25	378	689	362
29	38	331	26	51	---	535	67	92	42	617	1270	175
30	38	327	38	122	---	112	61	95	275	146	653	75
31	38	---	275	223	---	72	---	134	---	78	1270	---
TOTAL	2535	2086	5173	8546	6013	18007	16510	2297	3385	5262	10542	20799
MEAN	81.8	69.5	167	276	215	581	550	74.1	113	170	340	693
MAX	476	335	720	1190	1150	1860	1470	194	415	721	1270	6840
MIN	13	20	25	30	25	29	61	17	21	18	36	33
CAL YR 1978	TOTAL	59289	MEAN 162	MAX 2020	MIN 12							
WTR YR 1979	TOTAL	101155	MEAN 277	MAX 6840	MIN 13							

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 (0.8 km) southwest of Rees, 4.2 mi (6.8 km) downstream from Alum Creek, and 10.5 mi (16.9 km) upstream from mouth.

DRAINAGE AREA.--544 mi² (1,409 km²).

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 (212.811 m) National Geodetic Vertical Datum of 1929. Aug. 18, 1921, to Oct. 23, 1927, nonrecording gage at site 0.3 mi (0.5 km) upstream at datum 2.00 ft (0.610 m) higher prior to Oct. 1, 1924, at present datum thereafter.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Hoover Reservoir 26 mi (42 km) upstream (see station 03228400) and Alum Creek Lake 30 mi (48 km) upstream (see station 03228804) since August 1973. Beginning June 15, 1956, diversion at Morse Road Treatment Plant, 21 mi (34 km) upstream from station, for municipal water supply for the city of Columbus. Water-quality data collected at this site 1964 to 1977.

AVERAGE DISCHARGE.--55 years, 514 ft³/s (14.56 m³/s) (adjusted for diversion).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 59,800 ft³/s (1,690 m³/s) Jan. 22, 1959, gage height, 22.03 ft (6.715 m) (from high-water mark in well), from rating curve extended above 13,000 ft³/s (368 m³/s) on basis of contracted-opening measurement of peak flow; minimum, 5 ft³/s (0.14 m³/s) Sept. 4, 5, 10-12, 1925; minimum daily since 1956, 9.4 ft³/s (0.266 m³/s) Sept. 13, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 25, 1913 reached a stage of 20.5 ft (6.25 m), present datum, at site 0.3 mi (0.5 km) upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,700 ft³/s (615 m³/s) Sept. 15, gage height, 17.75 ft (5.410 m); minimum daily, 55 ft³/s (1.56 m³/s) Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	221	94	401	3440	349	1600	264	165	432	1130	349	1870
2	87	91	231	2720	342	2600	1450	154	465	465	1400	1810
3	64	91	374	587	333	4100	2080	415	261	318	591	1380
4	178	85	2690	711	327	4300	1450	544	208	290	306	743
5	104	81	729	762	290	3950	2940	439	187	381	258	599
6	93	97	398	884	192	1780	1120	284	261	250	513	536
7	84	96	349	873	150	983	748	226	667	196	587	336
8	62	111	1430	858	135	555	571	199	1080	160	476	223
9	67	99	3770	680	130	809	2690	182	544	138	226	178
10	58	94	762	358	125	1590	2930	158	480	548	194	144
11	55	87	401	206	120	1610	1430	154	309	795	2000	125
12	109	85	309	160	120	1540	1740	182	213	284	1050	176
13	387	106	591	148	115	1540	1620	245	176	208	443	226
14	287	113	702	495	110	1550	5920	171	136	144	258	10200
15	169	102	676	447	110	930	3310	154	107	114	192	14000
16	118	81	384	258	115	667	2360	133	88	102	178	3220
17	173	194	342	234	120	300	1710	125	88	93	156	1980
18	398	381	330	245	120	199	829	125	127	74	242	1900
19	461	185	201	187	125	203	1330	111	93	64	216	1810
20	264	116	169	223	130	187	1520	82	79	60	211	1830
21	394	91	281	391	150	176	1500	78	587	71	1980	1840
22	226	76	242	321	716	148	1450	79	894	863	702	1590
23	364	79	173	231	2650	150	1350	81	318	780	1100	1750
24	113	150	156	641	4620	231	391	146	176	684	6080	1700
25	91	120	176	809	3430	273	208	178	133	1240	1950	498
26	144	99	146	387	5890	192	206	290	114	458	1220	261
27	211	165	123	306	2020	165	297	381	96	720	1600	189
28	127	408	102	270	1030	192	223	352	85	2140	1150	1430
29	114	447	102	256	---	624	194	226	87	3530	4520	1250
30	111	418	123	223	---	339	171	203	425	894	2760	624
31	118	---	528	327	---	180	---	239	---	422	2020	---
TOTAL	5452	4442	17391	18638	24064	33663	44012	6501	8916	17616	34928	54418
MEAN	176	148	561	601	859	1086	1457	210	297	568	1127	1814
MAX	461	447	3770	3440	5890	4300	5920	544	1080	3530	6080	14000
MIN	55	76	102	148	110	148	171	78	79	60	156	125
+	114	108	96.5	114	117	112	122	128	126	126	122	122
CAL YR 1978 TOTAL	171463				5440							
WTR YR 1979 TOTAL	270041				14000							
MEAN 470												
MEAN 740												
MAX 39												
MAX 14000												
MIN 55												

+ Diversion, equivalent in cubic feet per second, for city of Columbus.

03229600 SCIOTO RIVER BELOW SHADEVILLE, OH

LOCATION.--Lat 39°47'37", long 83°00'40", Pickaway County, Hydrologic Unit 05060001, on left bank at Picway Plant of Columbus and Southern Ohio Electric Company, 0.4 mi (0.6 km) downstream from Big Walnut Creek, and 3.2 mi (5.1 km) downstream from Shadepville.

DRAINAGE AREA.--2,266 mi² (5,869 km²).

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1965 to current year.

pH: March 1965 to current year.

WATER TEMPERATURES: March 1965 to current year.

DISSOLVED OXYGEN: March 1965 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. No discharge records available.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,520 micromhos Feb. 22, 1979; minimum, 161 micromhos Nov. 28, 1973.

pH: Maximum, 9.5 units June 30, 1972; minimum, 5.1 units Mar. 16, 1972.

WATER TEMPERATURES: Maximum, 33.0°C Aug. 16, 1965; minimum, 0.0°C on many days during winter periods.

DISSOLVED OXYGEN: Maximum, 15.0 mg/L Feb. 7-11, 1969; minimum, 0.0 mg/L on many days during 1965-68, 1971, 1973-75.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,520 micromhos Feb. 22; minimum, 162 micromhos Sept. 14, 15.

pH: Maximum, 8.5 units Feb. 5; minimum, 6.7 units Jan. 7, 8, Apr. 16.

WATER TEMPERATURES: Maximum, 27.0° July 16, Aug. 9, 10; minimum, 0.5°C Jan. 5-9, Feb. 23-26.

DISSOLVED OXYGEN: Maximum, 14.3 mg/L Feb. 25; minimum, 0.9 mg/L Oct. 4.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	912	786	822	768	678	645	681	330	864	819	564	507
2	819	768	846	828	711	648	501	306	840	795	495	393
3	768	759	849	837	795	561	621	501	810	780	411	393
4	834	708	867	852	576	303	627	573	819	780	411	393
5	732	711	870	849	564	333	585	528	843	786	402	378
6	780	720	861	822	588	570	528	507	858	813	384	327
7	780	762	822	801	645	585	513	504	861	837	378	333
8	834	783	819	798	678	366	519	507	930	858	384	333
9	837	801	822	810	342	267	564	522	942	909	510	384
10	837	810	843	825	528	348	603	564	957	918	525	411
11	834	807	873	843	651	531	645	606	939	909	432	408
12	858	783	873	855	726	654	684	645	909	888	420	396
13	780	648	873	858	726	660	741	684	927	894	411	402
14	645	537	858	807	663	582	1120	744	927	900	504	408
15	660	600	849	804	591	579	1170	945	921	909	501	477
16	717	663	858	822	672	582	939	915	951	909	525	501
17	720	681	843	780	705	669	918	843	984	954	570	525
18	726	648	762	606	714	699	951	873	990	972	618	573
19	666	633	684	612	741	717	891	867	975	954	633	621
20	684	648	753	687	783	738	885	858	960	924	660	636
21	678	624	783	753	816	762	918	867	1140	963	684	654
22	705	672	843	786	789	762	867	795	1520	1120	696	672
23	708	624	876	837	810	783	897	819	1390	780	720	690
24	729	675	876	780	813	795	897	735	711	327	726	714
25	768	723	774	759	807	783	807	672	513	393	741	714
26	801	768	801	768	798	774	750	675	399	282	744	729
27	804	762	807	723	816	792	786	726	435	375	753	738
28	780	753	723	642	834	816	792	759	525	435	768	753
29	789	771	660	630	858	834	861	786	---	---	783	642
30	789	774	669	630	876	852	876	858	---	---	693	627
31	780	765	---	---	861	636	888	852	---	---	741	696
MONTH	912	537	876	606	876	267	1170	306	1520	282	783	327

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

[illegible]

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	8.2	7.4	7.5	7.3	7.7	7.5	7.8	7.7	7.7	7.6	7.9	7.5
2	7.9	7.4	7.5	7.3	7.7	7.5	7.9	7.7	7.7	7.6	7.9	7.4
3	7.7	7.4	7.5	7.3	7.7	7.4	8.1	8.0	7.7	7.6	7.7	7.5
4	7.5	7.1	7.4	7.2	7.7	7.5	8.1	7.9	7.7	7.5	7.8	7.6
5	7.5	7.3	7.4	7.2	7.7	7.6	8.2	7.5	8.5	7.7	7.9	7.7
6	7.4	7.2	7.5	7.3	7.7	7.6	7.4	7.0	8.1	7.9	7.8	7.7
7	7.5	7.4	7.5	7.4	7.6	7.5	7.4	6.7	7.9	7.7	7.9	7.8
8	7.5	7.5	7.6	7.4	7.7	7.5	7.7	6.7	7.8	7.7	7.8	7.7
9	7.6	7.4	7.6	7.4	7.7	7.6	7.8	7.5	7.8	7.7	8.0	7.8
10	7.6	7.3	7.5	7.3	7.8	7.7	7.8	7.7	7.7	7.6	7.9	7.8
11	7.5	7.4	7.5	7.3	7.9	7.8	7.8	7.6	7.8	7.7	7.9	7.9
12	7.5	7.3	7.3	7.2	7.9	7.8	7.8	7.6	7.7	7.6	7.9	7.8
13	7.5	7.3	7.3	7.1	7.8	7.7	7.8	7.6	7.7	7.6	7.9	7.7
14	7.5	7.3	7.3	7.1	7.9	7.7	7.7	7.6	7.7	7.6	7.8	7.7
15	7.5	7.3	7.4	7.3	8.0	7.7	7.9	7.7	7.6	7.5	8.0	7.8
16	7.4	7.4	7.5	7.3	7.9	7.8	7.9	7.7	7.7	7.5	7.9	7.8
17	7.5	7.3	7.4	7.1	7.9	7.8	7.7	7.6	7.9	7.7	7.9	7.7
18	7.6	7.4	7.5	7.3	7.9	7.6	7.7	7.6	7.9	7.7	7.9	7.8
19	7.5	7.4	7.5	7.3	7.9	7.5	7.8	7.7	7.8	7.6	7.9	7.8
20	7.6	7.4	7.5	7.2	7.7	7.4	7.7	7.6	7.8	7.6	7.9	7.8
21	7.6	7.5	7.4	7.3	7.7	7.6	7.7	7.6	7.7	7.6	8.0	7.8
22	7.6	7.5	7.5	7.3	7.7	7.6	7.9	7.5	7.6	7.5	8.0	7.8
23	7.7	7.5	7.4	7.3	7.9	7.5	7.6	7.5	7.5	7.3	8.0	7.8
24	7.6	7.5	7.5	7.3	7.8	7.6	7.5	7.3	7.4	7.3	8.0	7.9
25	7.6	7.4	7.5	7.3	7.9	7.7	7.6	7.3	7.4	7.3	8.2	8.0
26	7.4	7.3	7.4	7.3	7.9	7.7	7.6	7.5	7.4	7.2	8.2	8.1
27	7.5	7.3	7.4	7.3	7.9	7.8	7.6	7.5	7.6	7.4	8.0	7.8
28	7.5	7.4	7.5	7.4	7.8	7.8	7.6	7.5	7.7	7.4	7.9	7.7
29	7.5	7.3	7.5	7.3	7.8	7.8	7.6	7.2	---	---	8.1	7.8
30	7.4	7.2	7.6	7.4	7.8	7.7	7.7	7.6	---	---	8.0	7.9
31	7.4	7.1	---	---	7.8	7.7	7.7	7.5	---	---	8.0	7.9
MONTH	8.2	7.1	7.6	7.1	8.0	7.4	8.2	6.7	8.5	7.2	8.2	7.4
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	8.2	7.9	8.2	8.1	7.7	7.5	7.8	7.8	7.8	7.6	7.7	7.5
2	8.0	7.8	8.2	8.1	7.7	7.5	7.9	7.8	7.9	7.6	7.8	7.5
3	7.9	7.8	8.3	8.0	7.7	7.5	7.9	7.9	8.0	7.8	7.8	7.5
4	7.9	7.8	8.1	7.8	7.7	7.6	8.0	7.9	8.1	8.0	8.0	7.7
5	7.8	7.8	7.8	7.7	7.7	7.6	8.1	8.0	8.0	7.9	7.9	7.7
6	8.0	6.7	7.9	7.8	7.7	7.5	8.0	8.0	8.0	7.9	7.9	7.7
7	7.9	7.5	7.9	7.8	7.7	7.6	8.0	7.9	7.9	7.8	7.9	7.7
8	7.9	7.8	7.8	7.7	7.6	7.5	8.0	7.9	7.9	7.7	7.8	7.7
9	7.8	7.6	7.8	7.7	7.6	7.5	7.9	7.8	7.9	7.8	8.0	7.6
10	7.8	7.7	7.8	7.8	7.6	7.5	7.9	7.5	7.9	7.7	8.1	7.6
11	7.8	7.7	7.8	7.8	7.8	7.5	7.9	7.6	8.0	7.7	7.9	7.6
12	7.8	7.7	7.7	7.5	7.9	7.8	7.7	7.6	8.0	7.9	8.1	7.7
13	7.9	7.7	8.0	7.7	7.9	7.8	7.8	7.7	8.1	8.0	8.0	7.4
14	8.0	7.8	8.0	7.8	7.9	7.8	7.8	7.7	8.1	8.0	7.6	7.0
15	8.0	7.9	7.9	7.8	7.8	7.8	7.8	7.7	8.2	8.1	7.3	6.9
16	7.9	7.8	7.9	7.8	7.9	7.8	7.9	7.7	8.2	8.1	7.6	7.1
17	7.9	7.8	7.8	7.7	7.9	7.7	8.0	7.8	8.2	8.1	7.7	7.5
18	8.0	7.8	7.8	7.6	8.1	7.8	8.1	7.9	8.2	8.1	7.8	7.6
19	8.1	7.9	7.7	7.6	8.1	7.9	8.1	7.9	8.1	8.0	7.8	7.7
20	8.0	7.9	7.7	7.5	7.9	7.9	8.1	7.9	8.0	7.9	7.8	7.6
21	8.0	7.9	7.7	7.5	7.9	7.7	8.0	7.8	8.1	7.5	7.7	7.6
22	8.1	8.0	7.7	7.6	7.9	7.6	8.3	7.6	7.8	7.5	7.7	7.6
23	8.0	7.9	7.6	7.5	7.9	7.7	7.8	7.6	7.6	7.4	7.8	7.7
24	7.9	7.8	7.7	7.5	8.1	7.9	7.8	7.7	7.4	7.2	7.8	7.6
25	8.0	7.9	7.8	7.6	8.1	8.0	7.8	7.5	7.4	7.2	8.0	7.6
26	8.0	7.9	7.9	7.7	8.0	7.9	7.6	7.5	7.5	7.4	7.9	7.5
27	8.1	7.9	7.9	7.8	7.9	7.8	7.6	7.4	7.5	7.4	7.8	7.5
28	8.1	8.0	8.0	7.9	7.8	7.5	7.7	7.6	7.9	7.5	7.7	7.4
29	8.2	8.1	8.0	7.9	7.7	7.5	7.7	7.6	7.8	6.9	7.6	7.4
30	8.2	8.1	7.9	7.7	7.8	7.6	7.8	7.7	7.5	7.2	7.6	7.5
31	---	---	7.7	7.5	---	---	7.8	7.8	7.6	7.3	---	---
MONTH	8.2	6.7	8.3	7.5	8.1	7.5	8.3	7.4	8.2	6.9	8.1	6.9
YEAR	8.5	6.7										

03229600 · SCIOTO RIVER BELOW SHADEVILLE, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	20.0	18.5	14.5	13.0	7.0	6.0	6.0	5.0	2.5	2.0	3.0	2.5
2	19.5	17.5	14.0	12.5	7.5	6.0	6.0	2.0	2.5	2.0	3.0	2.0
3	19.0	17.5	14.5	13.0	9.5	7.5	2.0	1.0	3.0	2.5	3.5	2.0
4	18.5	17.0	15.0	13.5	8.0	7.5	1.0	1.0	3.0	2.0	5.0	3.5
5	17.5	16.0	15.0	13.5	7.0	6.0	1.0	.5	2.0	1.5	5.0	3.0
6	17.0	16.0	15.0	14.0	7.0	6.0	1.0	.5	3.0	1.5	4.0	2.5
7	16.0	15.5	14.5	13.0	8.0	7.0	.5	.5	3.5	3.0	4.0	3.0
8	15.5	14.0	12.5	11.5	9.0	6.5	1.0	.5	3.0	2.0	5.0	3.5
9	16.0	13.5	12.0	10.5	7.0	3.5	1.0	.5	3.0	2.0	5.0	4.0
10	17.0	14.5	12.0	10.5	3.5	2.5	2.0	1.0	3.0	2.0	5.5	3.5
11	16.0	15.5	13.5	11.0	4.0	2.5	2.0	1.0	3.0	2.0	3.5	2.0
12	17.5	16.0	13.5	13.0	5.0	4.0	3.0	2.0	3.0	2.5	3.5	2.0
13	17.0	14.5	14.0	13.0	5.0	3.5	4.0	3.0	3.0	2.0	4.0	3.0
14	14.5	14.0	13.5	13.0	3.5	3.0	4.0	1.5	3.5	2.5	4.5	3.5
15	14.5	13.5	13.0	11.5	3.5	2.5	2.0	1.0	4.0	3.0	4.0	2.5
16	14.0	13.0	12.0	11.5	4.5	3.0	2.5	1.5	3.5	3.0	4.5	2.5
17	14.0	12.5	13.5	12.0	4.5	4.0	3.0	2.0	3.0	2.0	6.5	3.5
18	13.5	12.0	12.5	10.5	4.5	4.0	2.5	2.0	3.0	2.0	8.5	5.5
19	14.0	12.5	11.0	10.0	5.0	4.5	2.5	2.0	3.5	2.0	9.0	7.0
20	15.0	13.0	11.0	10.0	6.5	5.0	3.5	2.5	3.5	2.0	10.0	8.5
21	15.0	12.5	10.5	10.0	7.0	4.5	3.5	2.0	5.0	3.5	11.5	9.0
22	15.5	13.5	11.0	10.0	5.5	4.0	3.0	2.0	4.5	2.0	11.5	9.5
23	15.5	13.5	12.0	11.0	5.5	4.0	3.5	2.5	2.0	.5	11.5	11.0
24	14.5	13.0	12.0	9.0	5.0	4.5	3.5	1.0	.5	.5	11.5	9.5
25	14.5	12.5	8.5	8.0	5.0	4.5	1.5	1.0	1.0	.5	9.5	8.0
26	15.0	14.0	8.5	8.0	4.0	3.5	2.0	1.5	1.0	.5	8.0	7.0
27	14.0	12.0	9.0	8.0	3.5	3.0	2.5	2.0	2.0	1.0	8.5	6.5
28	14.0	12.0	8.0	6.0	4.0	2.5	3.0	2.0	2.5	2.0	9.5	7.0
29	13.5	12.0	6.0	5.5	5.0	3.0	2.5	2.0	---	---	10.0	9.0
30	13.5	11.5	6.5	6.0	6.0	4.5	3.0	2.0	---	---	11.5	9.5
31	14.0	11.5	---	---	5.5	5.0	3.0	2.0	---	---	11.5	11.0
MONTH	20.0	11.5	15.0	5.5	9.5	2.5	6.0	.5	5.0	.5	11.5	2.0
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	11.0	10.0	15.5	12.5	20.5	18.0	20.5	19.0	26.0	24.0	22.5	22.0
2	11.0	10.0	16.5	13.0	21.0	19.0	21.0	18.5	24.5	23.0	22.0	21.5
3	10.0	8.0	16.0	15.0	21.5	20.0	22.0	19.0	24.5	22.5	22.5	21.0
4	8.0	7.0	15.5	13.0	22.0	19.5	21.5	21.0	26.0	23.5	23.5	21.5
5	7.0	6.5	15.5	12.5	23.0	20.0	22.5	20.0	25.5	24.0	23.5	22.5
6	7.5	6.5	16.5	13.0	23.0	21.0	22.5	19.5	25.5	23.5	24.0	22.5
7	7.5	6.0	18.5	15.0	22.5	21.5	23.0	20.0	26.0	23.5	24.0	22.5
8	8.0	7.0	20.5	17.0	21.5	21.0	23.5	21.0	25.5	24.5	23.0	20.5
9	7.5	5.5	21.5	18.5	23.0	21.0	23.0	22.0	27.0	24.0	21.0	19.0
10	7.0	6.5	22.5	20.5	24.5	22.0	23.5	21.5	27.0	25.0	21.5	19.0
11	8.5	7.0	23.5	21.0	23.0	20.5	23.5	21.5	25.0	21.0	22.0	20.0
12	10.0	8.5	23.0	20.5	22.5	20.0	24.0	22.5	22.0	20.5	23.0	20.5
13	10.0	9.0	21.0	19.0	21.5	20.0	24.0	23.0	22.5	20.5	22.0	21.0
14	10.0	9.0	20.5	17.5	23.0	20.0	25.0	23.0	22.0	21.0	21.0	18.5
15	9.0	7.5	20.5	18.5	24.0	21.5	26.0	24.0	21.5	19.5	18.5	18.0
16	8.0	7.5	20.0	17.5	24.5	22.0	27.0	24.5	22.0	19.0	19.0	18.0
17	9.0	8.0	20.0	17.5	24.5	22.5	26.0	24.5	21.5	19.0	19.0	18.5
18	10.5	9.0	21.0	18.0	24.0	22.5	26.0	23.5	21.5	20.5	19.5	19.0
19	11.5	9.5	21.5	18.5	24.5	21.5	25.0	22.5	23.0	20.5	19.0	18.5
20	11.5	10.5	22.0	20.0	25.5	22.0	26.0	22.5	23.0	22.0	18.5	17.5
21	11.5	10.5	22.5	20.5	24.0	22.5	26.0	23.5	22.0	21.0	18.5	18.0
22	11.0	10.5	21.0	19.0	23.0	21.0	24.5	23.0	22.0	21.0	18.0	17.0
23	12.0	11.0	20.0	19.0	24.0	22.0	24.5	22.5	22.0	21.0	17.5	16.5
24	14.0	11.5	19.0	16.5	23.0	21.0	24.0	23.0	21.5	20.5	18.0	16.5
25	16.5	13.5	16.5	14.5	22.5	19.5	23.0	22.0	21.0	20.5	19.0	17.0
26	16.0	14.5	15.5	13.5	23.0	20.0	24.5	22.5	21.0	20.5	19.0	17.0
27	16.0	14.0	15.5	14.0	23.5	21.0	24.5	23.5	21.5	20.5	18.5	17.5
28	14.0	12.5	16.5	15.0	24.5	21.5	24.0	22.5	22.0	21.0	18.5	17.0
29	14.5	12.5	17.5	15.5	23.5	22.0	22.0	21.5	21.5	21.0	18.0	17.0
30	15.0	13.0	19.0	16.5	22.0	20.5	24.0	22.0	22.0	21.0	19.0	17.5
31	---	---	18.5	17.5	---	---	25.5	23.5	22.0	21.0	---	---
MONTH	16.5	5.5	23.5	12.5	25.5	18.0	27.0	18.5	27.0	19.0	24.0	16.5
YEAR	27.0	.5										

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH					
1	8.1	1.6	8.0	7.1	10.1	9.3	11.3	10.7	13.4	12.8	13.5	13.2				
2	6.5	2.8	8.0	6.8	10.1	9.1	12.5	11.0	13.4	12.9	14.0	13.6				
3	6.0	2.4	8.2	7.0	9.3	7.6	13.0	12.5	13.4	12.9	14.1	13.9				
4	5.5	.9	7.9	6.8	9.6	8.4	13.2	13.0	13.6	12.9	13.9	13.3				
5	5.8	2.9	7.8	6.5	9.6	9.2	13.4	13.2	14.0	13.1	13.9	13.2				
6	4.9	2.2	7.5	6.3	9.5	9.2	13.2	13.0	14.0	13.5	13.9	13.5				
7	6.1	4.7	6.7	6.2	9.4	9.2	13.0	12.9	13.6	13.0	13.8	13.4				
8	6.5	5.5	8.4	5.9	10.0	8.6	13.0	12.9	13.9	12.9	13.8	13.4				
9	6.9	4.2	8.8	7.5	10.9	9.8	12.9	12.7	13.7	12.9	13.4	12.7				
10	6.8	3.7	8.8	7.4	11.3	10.9	12.7	12.4	13.9	12.8	13.6	12.9				
11	6.4	5.6	8.7	7.1	11.4	11.1	12.4	12.3	13.8	12.9	13.8	13.4				
12	6.4	4.3	7.2	6.2	11.1	10.6	12.2	11.8	13.2	12.8	13.9	13.6				
13	6.2	4.7	7.2	5.9	11.6	10.6	11.8	11.3	13.6	12.6	13.6	13.4				
14	6.0	5.2	6.7	6.3	11.8	11.6	11.6	11.1	13.5	12.5	13.4	13.2				
15	6.4	5.3	7.1	6.3	12.0	11.8	11.9	11.3	13.0	12.2	13.6	13.3				
16	6.3	5.9	7.5	6.3	11.9	11.4	12.0	11.6	13.7	12.2	13.7	13.5				
17	7.0	5.2	7.0	5.7	11.4	11.1	12.0	11.8	14.2	12.6	13.4	12.9				
18	7.3	6.4	7.5	6.5	11.1	10.8	12.0	11.8	13.8	12.8	12.9	12.3				
19	7.1	6.7	7.1	6.5	10.9	10.5	12.0	11.8	13.4	12.5	12.5	12.1				
20	6.7	6.4	7.4	6.9	11.0	10.5	11.8	11.0	14.1	12.6	12.1	11.6				
21	7.0	6.4	8.3	6.9	11.0	10.1	11.2	10.9	13.3	11.6	12.3	11.4				
22	6.7	6.2	8.6	7.6	11.0	10.6	11.5	10.9	13.2	11.7	12.3	11.4				
23	6.6	6.1	7.8	7.2	11.0	10.6	11.5	11.1	13.3	12.5	11.4	10.6				
24	6.3	5.9	8.2	7.1	10.9	10.7	11.4	11.0	14.1	13.2	11.0	10.5				
25	8.0	5.8	9.4	8.2	11.0	10.8	11.8	11.3	14.3	13.7	11.8	10.5				
26	7.5	6.8	8.8	8.1	11.4	11.1	11.9	11.7	14.0	13.5	12.6	11.2				
27	7.8	6.8	8.7	8.1	11.5	11.3	11.9	11.5	14.2	13.9	13.6	11.9				
28	8.0	7.2	9.3	8.7	11.5	11.3	11.9	11.7	13.9	13.4	13.9	12.3				
29	7.9	7.1	9.4	8.7	11.5	11.2	13.0	11.8	---	---	13.2	11.7				
30	8.1	7.1	9.9	8.8	11.2	10.9	13.1	12.7	---	---	12.0	11.3				
31	8.0	5.6	---	---	11.3	10.9	13.1	12.4	---	---	11.4	10.5				
MONTH	8.1	.9	9.9	5.7	12.0	7.6	13.4	10.7	14.3	11.6	14.1	10.5				
DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER						
1	11.8	10.6	10.1	9.0	8.1	6.6	7.5	4.6	6.5	3.0	8.2	8.0				
2	10.8	10.3	10.2	8.5	8.1	6.8	8.3	7.0	6.4	3.0	8.1	7.9				
3	12.3	10.8	9.6	8.8	8.4	7.9	8.8	8.3	7.3	6.3	8.1	7.9				
4	12.2	11.7	---	---	8.2	7.8	8.8	8.4	7.5	6.8	7.9	7.5				
5	12.7	11.9	---	---	8.1	7.5	9.4	9.0	7.2	6.5	7.6	7.3				
6	12.5	11.3	---	---	7.9	7.4	9.4	7.4	7.0	5.7	7.3	6.7				
7	11.7	11.3	---	---	7.6	6.7	9.0	8.6	6.2	5.7	7.1	6.6				
8	11.6	10.4	---	---	7.3	6.3	9.5	8.3	6.5	4.5	7.5	6.7				
9	11.5	10.2	---	---	7.2	6.9	8.7	7.8	6.2	5.0	7.8	6.8				
10	11.5	11.1	---	---	7.4	6.7	8.3	4.5	6.4	3.5	7.7	5.9				
11	11.2	10.9	---	---	8.2	7.0	8.1	5.6	6.8	3.4	7.6	6.2				
12	10.9	10.3	---	---	8.4	7.9	6.3	5.8	7.1	6.6	8.3	6.1				
13	10.3	9.6	---	---	8.5	7.9	6.7	6.2	7.2	5.9	7.6	4.8				
14	10.8	9.7	---	---	8.9	8.0	6.5	5.8	7.0	5.8	7.2	5.0				
15	11.3	10.8	---	---	9.0	7.7	6.4	5.6	7.4	6.8	---	---				
16	11.3	11.0	---	---	9.5	7.5	7.4	5.5	7.6	7.0	---	---				
17	11.3	11.0	---	---	9.8	6.6	8.1	6.3	7.7	6.9	---	---				
18	11.1	10.6	8.5	7.7	10.8	7.0	8.1	6.2	---	---	---	---				
19	10.7	10.4	8.6	7.1	10.7	7.4	8.3	6.2	---	---	---	---				
20	10.9	10.6	8.4	6.8	9.9	6.9	9.2	6.0	---	---	8.7	8.2				
21	11.0	10.6	8.4	6.4	8.1	5.7	8.9	5.5	---	---	8.6	8.0				
22	11.1	10.5	8.8	6.7	7.0	5.0	8.6	2.9	---	---	8.7	8.0				
23	10.6	10.1	7.0	5.4	8.4	7.0	6.6	4.8	---	---	8.9	8.3				
24	10.0	9.2	6.8	5.1	9.0	8.1	6.7	6.2	---	---	8.8	8.4				
25	9.3	8.8	6.9	6.1	9.2	8.7	6.9	4.9	---	---	8.6	7.2				
26	9.1	7.7	7.5	5.6	9.1	8.0	6.1	5.1	---	---	7.6	7.0				
27	9.1	7.8	9.0	7.3	8.6	7.3	6.2	3.1	---	---	7.4	6.8				
28	8.8	8.3	9.8	8.9	8.1	6.9	6.4	5.7	7.9	7.0	7.9	6.4				
29	9.9	8.9	10.0	9.5	6.9	5.6	7.4	5.9	7.8	6.6	7.4	7.0				
30	10.1	9.1	9.5	9.0	6.8	4.2	7.4	6.4	8.4	7.8	7.4	7.0				
31	---	---	8.9	7.6	---	---	6.6	5.8	8.3	7.9	---	---				
MONTH	12.7	7.7	10.2	5.1	10.8	4.2	9.5	2.9	8.4	3.0	8.9	4.8				
YEAR	14.3	.9														

SCIOTO RIVER BASIN

03230500 BIG DARBY CREEK AT DARBYVILLE, OH

LOCATION.--Lat 39°42'02", long 83°06'37", Pickaway County, Hydrologic Unit 05060001, on right bank on downstream side of bridge on State Highway 316, 0.4 mi (0.6 km) northeast of Darbyville, 0.4 mi (0.6 km) upstream from Lizzard Run, and 3.0 mi (4.8 km) downstream from Greenbrier Creek.

DRAINAGE AREA.--534 mi² (1,383 km²).

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 (217.533 m) National Geodetic Vertical Datum of 1929. Prior to Mar. 17, 1940, nonrecording gage at same site and datum.

REMARKS.--Records good except those for periods of no gage height record, Jan. 6 to Feb. 28, which are fair. Water-quality data collected at this site 1964 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--55 years, 448 ft³/s (12.69 m³/s), 11.39 in/yr 289 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 49,000 ft³/s (1,390 m³/s) Jan. 22, 1959, gage height, 17.94 ft (5.468 m) from rating curve extended above 22,000 ft³/s (623 m³/s) on basis of contracted-opening measurement of peak flow; minimum observed, 1.4 ft³/s (0.040 m³/s) Sept. 17, 1932.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,500 ft³/s (127 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
Jan. 2	2200	5000	142	9.46	2.883	Apr. 15	0200	9240	262	12.17	3.709
Feb. 26	---	8000	227	unknown		Sept. 15	1900	*14000	396	*14.00	4.267
Mar. 6	---	9000	255	unknown							

Minimum discharge, 26 ft³/s (0.74 m³/s) Oct. 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	38	53	1950	170	3180	253	269	634	185	420	894
2	27	38	53	4560	150	4050	707	252	817	213	680	918
3	26	38	71	3800	140	4400	1680	277	561	231	1180	1760
4	29	40	535	1410	130	5220	1420	325	425	192	772	1060
5	32	40	817	984	120	6000	2510	344	347	171	478	698
6	34	38	614	685	110	5200	2030	328	399	158	566	514
7	32	38	273	560	100	3500	1290	297	407	145	731	394
8	32	40	622	430	95	2350	939	273	851	137	542	313
9	31	40	2230	330	90	1920	1090	251	758	133	354	264
10	31	38	2220	260	90	1490	1740	236	645	132	262	238
11	36	40	1010	230	85	1350	1230	226	1330	133	523	216
12	36	40	607	210	85	1250	1300	239	790	161	453	198
13	45	40	466	210	80	815	1520	247	508	183	455	201
14	48	38	375	240	80	745	6180	217	373	164	355	6080
15	44	40	309	300	75	700	7770	209	308	145	254	11500
16	42	41	269	260	75	609	3280	196	270	136	206	10200
17	44	45	244	230	75	531	1840	185	244	130	180	3730
18	49	54	217	250	75	491	1320	177	237	125	171	1720
19	45	58	202	220	75	460	1020	172	220	115	218	1190
20	45	51	195	210	80	439	833	170	203	110	204	909
21	43	50	223	310	100	409	708	167	204	105	854	749
22	42	51	222	280	250	367	617	162	222	102	1220	678
23	40	52	244	250	600	351	538	157	282	102	1240	593
24	36	52	222	400	1500	361	481	178	259	107	1820	491
25	36	50	216	600	4000	354	444	227	205	414	951	408
26	36	49	197	460	6600	318	417	426	181	320	688	351
27	37	52	177	370	5200	279	399	1310	168	220	718	305
28	37	58	160	300	3970	251	354	1090	158	380	553	761
29	37	58	159	260	---	244	310	855	154	880	2080	1230
30	37	53	157	230	---	245	287	577	159	960	3260	1010
31	38	---	251	220	---	249	---	448	---	620	1450	---
TOTAL	1157	1360	13610	21009	24200	48128	44517	10487	12319	7309	23838	49573
MEAN	37.3	45.3	439	678	864	1553	1484	338	411	236	769	1652
MAX	49	58	2230	4660	6600	6000	7770	1310	1330	960	3260	11500
MIN	26	38	53	210	75	244	263	157	154	102	171	198
CFSM	.07	.09	.82	1.27	1.62	2.91	2.78	.63	.77	.44	1.44	3.09
IN.	.08	.09	.95	1.46	1.69	3.35	3.10	.73	.86	.51	1.66	3.45

CAL YR 1978 TOTAL 185659 MEAN 509 MAX 7910 MIN 25 CFSM .95 IN 12.93
WTR YR 1979 TOTAL 257507 MEAN 705 MAX 11500 MIN 26 CFSM 1.32 IN 17.94

SCIOTO RIVER BASIN

199

03230700 SCIOTO RIVER AT CIRCLEVILLE, OH

LOCATION.--Lat 39°36'05", long 82°57'19", in SW 1/4 sec. 19, T.11 N., R.21 W., Pickaway County, Hydrologic Unit 05060002, on right bank 100 ft (30.5 m) upstream from U.S. Highway 22 bridge, 1,400 ft (427 m) downstream from Hargus Creek, and 1.0 mi (1.5 km) downstream from Big Darby Creek.

DRAINAGE AREA.--3,217 mi² (8,332 km²).

PERIOD OF RECORD.--October 1973 to September 1979 (discontinued). Gage height records collected in this vicinity since September 1915, are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 643.03 ft (195.996 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except for winter periods, which are fair. Flow regulated by 5 reservoirs 38 mi (61 km) to 62 mi (100 km) upstream from station (see Station No. 03220500, 03221500, 03225500, 03228400, and 03228805). Water-quality data collected at this site 1973 to 1977.

AVERAGE DISCHARGE.--6 years, 3,170 ft³/s (89.77 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,800 ft³/s (1,130 m³/s) Feb. 25, 1975, gage height, 21.95 ft (6.690 m); minimum daily, 290 ft³/s (8.21 m³/s) Feb. 6-9, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913 reached a stage of 28.2 ft (8.60 m), from information supplied by National Weather Service.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 38,600 ft³/s (1093 m³/s) Sept. 16, gage height, 21.71 ft (6.617 m); minimum daily, 350 ft³/s (9.91 m³/s) Oct. 9.

REVISIONS.--The maximum discharges for water years 1974-1978 have been revised, as shown in the following table. They supersede figures published in WRD OH-74-1 through WRD OH-78-1.

Water year	Date	(ft ³ /s)	(m ³ /s)	(ft)	(m)	Water year	Date	(ft ³ /s)	(m ³ /s)	(ft)	(m)
1974	Apr. 5, 1974	23,800	674	17.57	5.355	1977	Apr. 4, 1977	19,800	561	15.80	4.816
1975	Feb. 25, 1975	39,800	1130	21.95	6.690	1978	Mar. 16, 1978	28,100	796	19.03	5.800
1976	Feb. 19, 1976	28,400	804	19.15	5.837						

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	580	505	1090	8860	1500	12100	2010	1650	3370	2440	2430	7550
2	580	530	1020	17000	1400	15500	4130	1550	3470	2070	2920	5430
3	391	574	1010	16400	1300	18700	7950	1650	3170	2300	3790	5480
4	568	530	6090	7020	1200	20100	6220	2560	2360	2250	3250	3890
5	684	463	5120	5740	1200	22700	11400	2320	1970	2220	2640	2890
6	487	445	2820	5020	1100	24500	11200	2000	2000	1760	3070	2530
7	475	593	1960	4510	1100	20100	8450	1740	2250	1460	2730	2290
8	483	606	3460	3810	1000	15200	5990	1590	4320	1080	2310	1930
9	350	606	13300	2620	950	14500	6110	1470	3930	910	1820	1650
10	356	580	11500	2060	900	13500	10800	1350	2760	1020	1420	1460
11	361	524	4320	1850	900	12600	8450	1290	2880	2460	4420	1320
12	499	433	2830	1650	900	11300	8020	1300	2400	1750	7200	1240
13	1040	415	2730	1590	900	9830	7210	1840	1950	1560	3580	1230
14	1630	439	3880	2090	850	9050	15900	1540	1680	1460	2260	14300
15	1290	475	3520	2380	850	7710	24300	1370	1490	1140	1720	31900
16	925	568	2750	2060	800	5220	19500	1290	1300	993	1420	37300
17	815	658	1950	2180	800	3710	14600	1160	1160	1040	1220	24700
18	793	1580	1660	2220	800	2840	12000	1040	1100	970	1240	10300
19	1120	1210	1530	1980	800	2600	9050	970	1160	815	1970	6480
20	925	829	1330	1930	850	2520	8850	888	1020	718	1630	6770
21	880	678	1840	2650	1010	2450	7870	808	1290	651	7380	7730
22	751	600	1870	2680	2610	2290	7190	829	2930	970	7610	7500
23	758	561	1570	2050	8340	2140	5920	910	2560	1380	6010	4850
24	691	665	1470	2740	19100	2140	3470	1160	2380	1280	10000	3880
25	524	671	1510	4660	24500	2150	2380	1410	1800	3330	9110	3120
26	505	593	1410	2980	27400	1950	2180	1820	1350	2490	5030	2150
27	711	738	1260	2460	24300	1760	2210	3500	1110	1480	8360	1890
28	751	1310	1110	2320	15400	1600	2070	5890	955	4160	6400	5060
29	612	1320	1000	2110	---	1710	1890	5550	844	7480	10400	9440
30	530	1150	977	1790	---	1870	1740	4510	1300	7640	15900	5230
31	505	---	1530	1680	---	1590	---	3190	---	3660	11600	---
TOTAL	21490	20849	89417	121090	142760	265930	239050	60145	62259	64937	150840	221490
MEAN	693	695	2884	3906	5099	8578	7968	1940	2075	2095	4866	7383
MAX	1630	1580	13300	17000	27400	24500	24300	5890	4320	7640	15900	37300
MIN	350	415	977	1590	800	1590	1740	808	844	651	1220	1230
CAL YR 1978	TOTAL	1148267	MEAN	3146	MAX	36100	MIN	350				
WTR YR 1979	TOTAL	1460257	MEAN	4001	MAX	37300	MIN	350				

03230800 DEER CREEK AT MOUNT STERLING, OH

LOCATION.--39°42'54", long 83°15'26", Madison County, Hydrologic Unit 05060002, on left bank at downstream side of bridge on State Highway 56, 0.2 mi (0.3 km) downstream from unnamed right bank tributary, 0.6 mi (1.0 km) southeast of Mount Sterling, and 4.9 mi (7.9 km) upstream from Duffs Fork.

DRAINAGE AREA.--228 mi² (591 km²).

PERIOD OF RECORD.--October 1966 to current year.

REVISED RECORDS.--WDR OH-75-1: 1968(M).

GAGE.--Water-stage recorder. Datum of gage is 836.25 ft (254.889 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods which are fair and Aug. 25 to Sept. 27, which are poor. Water-quality data collected at this site 1967 to 1977. Sediment data collected 1970 to 1974.

AVERAGE DISCHARGE.--13 years, 235 ft³/s (6.66 m³/s), 14.01 in/yr (356 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,600 ft³/s (329 m³/s) May 24, 1968, gage height, 11.87 ft (3.618 m); minimum, 5.1 ft³/s (0.14 m³/s) Nov. 24, 1970, July 28, 29, and Aug. 6, 7, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1900 ft³/s (53.8 m³) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 9	0800	2390 67.7	7.80 2.377	Mar. 4	1430	3200 90.6	8.39 2.557
Jan. 2	0200	3060 86.7	8.29 2.527	Apr. 14	1000	9080 257	11.03 3.362
Feb. 24	0630	6080 172	9.87 3.008	Aug. 21	1730	3100 87.8	8.32 2.536
Feb. 25	2400	6030 171	9.85 3.002	Aug. 24	0400	3480 98.6	8.93 2.722
Mar. 2	0400	3010 85.2	8.26 2.518	Sept. 15	---	*10000 283	unknown

Minimum discharge 11.0 ft³/s (0.31 m³/s) Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	20	40	1700	82	1970	100	105	329	100	156	440
2	11	20	37	2410	78	2720	492	98	387	88	521	370
3	12	37	52	740	76	2140	734	125	243	70	422	860
4	14	44	536	400	74	3060	710	178	183	62	236	520
5	20	41	450	300	72	2410	1350	192	151	82	161	350
6	19	38	263	250	70	1230	698	172	353	64	139	260
7	20	38	192	220	68	823	422	146	383	49	139	200
8	17	38	497	200	66	641	333	132	636	45	112	140
9	16	32	2040	190	66	506	409	118	473	45	88	120
10	14	31	1000	180	64	450	458	112	418	48	74	98
11	15	30	680	170	64	378	356	105	288	46	310	80
12	17	28	450	160	62	299	478	103	201	42	497	76
13	32	28	330	160	62	267	608	103	154	41	257	80
14	40	27	250	150	62	267	6180	88	129	44	161	1200
15	33	27	200	150	62	230	2100	84	116	41	121	7000
16	26	27	180	140	62	201	905	76	105	36	91	4500
17	23	36	170	140	60	186	608	70	98	32	74	1900
18	22	59	160	140	60	159	450	66	91	28	66	900
19	21	54	150	140	60	149	353	66	82	25	82	600
20	21	42	160	130	60	141	292	64	74	23	189	400
21	21	36	200	160	84	134	250	61	78	23	2140	300
22	19	33	186	150	455	123	217	55	84	22	1290	260
23	19	31	154	140	1730	123	195	54	70	28	1540	220
24	20	32	141	250	5030	136	181	139	64	31	2110	180
25	22	31	144	190	4030	123	169	181	57	362	850	150
26	21	27	121	160	4130	110	164	250	51	257	450	130
27	23	33	98	130	1630	98	159	362	49	134	320	140
28	25	46	88	120	1350	88	139	441	48	108	250	512
29	23	49	91	110	---	88	123	277	48	459	1000	852
30	23	44	91	100	---	91	114	192	64	404	1600	531
31	21	---	192	90	---	88	---	169	---	230	1000	---
TOTAL	642	1059	9343	9670	19769	19429	19767	4384	5507	3069	16446	23379
MEAN	20.7	35.3	301	312	706	627	659	141	184	99.0	531	779
MAX	40	59	2040	2410	5030	3060	6180	441	636	459	2140	7000
MIN	11	20	37	90	60	88	100	54	48	22	66	76
CFSM	.09	.16	1.32	1.37	3.10	2.75	2.89	.62	.81	.43	2.33	3.42
IN.	.10	.17	1.52	1.58	3.23	3.17	3.23	.72	.90	.50	2.68	3.81

CAL YR 1978 TOTAL 82435.3 MEAN 226 MAX 6640 MIN 7.9 CFSM .99 IN 13.45
WTR YR 1979 TOTAL 132464.0 MEAN 363 MAX 7000 MIN 11 CFSM 1.59 IN 21.61

Note: No gage-height record Aug. 25 to Sept. 27.

SCIOTO RIVER BASIN

201

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 (61 m) downstream from bridge on Crownover Mill Road, 1,200 ft (366 m) downstream from Deer Creek Dam, and 2.8 mi (4.5 km) east of Pancoastburg.

DRAINAGE AREA.--277 mi² (717 km²).

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 700.00 ft (213.360 m) Corps of Engineers bench mark. Oct. 23, 1963, to June 30, 1966, crest-stage gage at site 200 ft (61 m) upstream at datum 59.84 ft (18.239 m) higher.

REMARKS.--Records good. Flow regulated by Deer Creek Lake (see station 03230890). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--13 years 266 ft³/s (7.533 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,500 ft³/s (552 m³/s) (estimated) Mar. 10, 1964, gage height, 80.93 ft (24.667 m), present datum; no flow May 25-27, 1968, result of dam closure.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,000 ft³/s (85.0 m³/s) Mar. 11, gage height, 75.06 ft (22.878 m); minimum daily, 11 ft³/s (0.31 m³/s) Oct. 1, Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	16	306	603	171	1210	12	128	159	51	272	1380
2	12	16	306	941	150	2280	12	109	213	51	282	1360
3	13	16	298	968	134	1650	12	110	242	51	368	1340
4	13	16	509	960	134	1660	12	111	237	52	414	972
5	13	16	771	961	111	1680	13	111	233	52	413	451
6	12	16	643	917	94	1120	12	111	266	52	411	269
7	12	48	504	886	94	672	14	94	368	52	409	223
8	13	62	434	700	92	1420	14	119	652	52	184	160
9	13	62	19	351	92	2360	15	157	765	52	90	105
10	13	62	19	210	92	2400	16	157	634	52	87	102
11	13	62	19	188	92	2580	16	158	574	52	85	99
12	13	62	1000	163	92	2930	16	160	361	53	167	97
13	14	216	2330	163	92	2860	324	162	192	83	283	96
14	13	313	2240	160	88	2820	1280	163	152	96	280	41
15	13	294	1570	188	90	2830	1270	163	150	96	277	11
16	13	290	570	210	90	2750	19	165	119	96	273	14
17	13	286	368	210	90	2350	237	165	42	98	258	15
18	13	286	219	206	74	1410	625	155	49	98	181	13
19	13	283	219	206	64	450	1290	141	56	98	147	522
20	13	283	179	206	65	210	1500	129	55	79	111	1490
21	13	294	207	206	65	207	1270	99	54	43	757	1640
22	13	298	213	347	301	206	1250	72	53	16	1190	1620
23	15	298	211	351	564	204	1230	64	52	16	1190	1630
24	15	309	210	294	15	203	1210	61	52	16	1210	1780
25	15	317	208	491	19	182	497	116	52	16	1220	1900
26	15	317	157	396	20	155	168	193	52	15	1210	1860
27	15	298	134	306	22	129	168	324	52	80	1200	1880
28	15	64	94	302	22	129	168	461	52	109	1180	1350
29	15	92	97	188	---	53	168	499	52	137	1290	1420
30	15	306	107	125	---	12	168	429	52	234	1420	1830
31	15	---	108	157	---	12	---	212	---	256	1410	---
TOTAL	417	5298	14269	12560	3029	39134	13006	5298	6042	2304	18269	25670
MEAN	13.5	177	460	405	108	1262	434	171	201	74.3	589	856
MAX	15	317	2330	968	564	2930	1500	499	765	256	1420	1900
MIN	11	16	19	125	15	12	12	61	42	15	85	11

CAL YR 1978 TOTAL 92125.8 MEAN 252 MAX 2500 MIN 6.5
WTR YR 1979 TOTAL 145296.0 MEAN 398 MAX 2930 MIN 11

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 (3.2 km) downstream from Dry Run, and 7.6 mi (12.2 km) upstream from Hay Run.

DRAINAGE AREA.--333 mi² (862 km²).

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 (219.048 m) 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 (0.914 m) 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 (37 m) downstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Deer Creek Lake 9.0 mi (14.5 km) upstream beginning in 1968. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--44 years (1926-35, 1938-56, 1962-79), 297 ft³/s (8.411 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,600 ft³/s (1,120 m³/s) Jan. 22, 1959, gage height, 17.6 ft (5.36 m) (from floodmarks), from rating curve extended above 25,000 ft³/s (708 m³/s) on basis of contracted-opening measurement of peak flow; minimum daily, 1.8 ft³/s (0.051 m³/s) July 25, 1934, Oct. 1-4, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,720 ft³/s (162 m³/s) Sept. 14, gage height, 11.79 ft (3.594 m); minimum daily, 16 ft³/s (0.45 m³/s) Oct. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	24	341	1200	220	1270	46	173	292	86	369	1590
2	17	24	339	1350	190	2710	175	136	270	74	411	1560
3	18	24	419	1010	170	2060	128	152	294	72	462	1530
4	19	24	796	1030	160	2150	173	161	281	74	547	1250
5	17	24	957	1030	160	1920	182	178	274	72	541	630
6	16	24	820	1010	160	1410	115	163	324	69	560	377
7	17	33	596	936	150	776	86	146	419	71	541	334
8	17	68	1150	757	150	1180	81	134	1110	71	359	264
9	17	68	949	456	150	2360	150	187	923	71	142	182
10	18	69	274	287	150	2360	138	187	780	77	138	173
11	18	69	173	253	150	2440	104	187	651	80	382	166
12	22	69	570	229	150	2770	101	190	468	73	354	159
13	111	215	2450	206	150	2730	339	195	270	117	447	173
14	92	366	2420	161	150	2690	1320	190	206	146	417	3180
15	59	329	2080	120	150	2660	1680	187	200	140	392	531
16	42	327	694	148	150	2630	142	185	192	138	377	264
17	35	354	506	173	140	2430	215	178	72	130	359	192
18	30	369	285	281	120	1540	644	170	66	132	296	157
19	30	339	276	287	100	589	1110	157	77	130	237	411
20	29	332	261	285	100	266	1630	144	73	117	199	1540
21	27	334	317	354	110	255	1300	118	74	84	1200	1760
22	26	344	299	406	708	251	1270	87	74	33	1500	1780
23	26	339	281	436	1940	251	1240	71	70	30	1550	1780
24	25	346	276	462	784	251	1220	122	69	33	1560	1860
25	25	354	279	580	1470	231	701	170	68	70	1580	2020
26	26	351	239	400	661	208	221	241	67	39	1570	1980
27	30	359	192	280	301	170	215	400	67	71	1890	1970
28	29	249	161	230	332	168	210	522	67	168	1450	2210
29	27	84	148	200	---	128	202	541	67	299	1480	1740
30	25	346	148	180	---	47	202	470	78	335	1630	2100
31	24	---	247	200	---	44	---	320	---	371	1600	---
TOTAL	935	6257	18943	14937	9326	40945	15340	6462	7943	3473	24540	33863
MEAN	30.2	209	611	482	333	1321	511	208	265	112	792	1129
MAX	111	369	2450	1350	1940	2770	1680	541	1110	371	1890	3180
MIN	16	24	148	120	100	44	46	71	66	30	138	157
CAL YR 1978	TOTAL	125783	MEAN	345	MAX	3050	MIN	16				
WTR YR 1979	TOTAL	182964	MEAN	501	MAX	3180	MIN	16				

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 (427 m) downstream from Bridge Street bridge, 7.4 mi (11.9 km) upstream from Paint Creek, and 15.4 mi (24.8 km) downstream from Deer Creek.

DRAINAGE AREA.--3,849 mi² (9,969 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1913 to September 1914 (gauge heights and discharge measurements only). October 1920 to current year. Monthly discharge only for some periods, published in WSP 1305. Gauge-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 (181.066 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1914, nonrecording gage at site 1,300 ft (396 m) upstream of different datum. Apr. 1, 1921, to Aug. 6, 1930, nonrecording gage, at site 1,400 ft (427 m) upstream at present datum. Aug. 7, 1930, to Sept. 30, 1969, water-stage recorder 900 ft (274 m) upstream at same datum.

REMARKS.--Records good. Flow regulated by 6 reservoirs 36 mi (58 km) to 91 mi (146 km) upstream from station (see stations 03220500, 03221500, 03225000, 03228400, 03228850, 03230890).

AVERAGE DISCHARGE.--59 years, 3,406 ft³/s (96.46 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 144,000 ft³/s (4,080 m³/s) Jan. 23, 1959, gage height, 32.5 ft (9.906 m), (from high-water mark in well); minimum daily, 166 ft³/s (4.70 m³/s) Sept. 27, 1944.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913 reached a stage of 39.8 ft (12.13 m), discharge, 260,000 ft³/s (7,360 m³/s) (estimated by Franklin County Conservancy District).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 40,700 ft³/s (1,150 m³/s) Sept. 17, gage height, 15.94 ft (4.859 m); minimum daily, 471 ft³/s (13.3 m³/s) Oct. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	519	660	1370	8460	2100	16900	2210	2270	5000	2120	3530	12300
2	717	660	1330	17600	1940	18100	4950	2090	4630	2640	2840	9270
3	587	678	1450	19400	1930	21300	9140	2100	4560	2250	4650	8300
4	527	688	4980	14900	1850	24200	9020	3390	3430	2490	4490	7300
5	736	632	9000	8890	1660	26400	10900	4030	2690	2420	3720	4740
6	632	696	4560	7990	1530	29700	13400	3160	2410	2120	3280	3550
7	570	632	2970	7120	1530	29900	10400	2570	2820	1660	4120	3070
8	544	697	4580	6930	1460	22000	8650	2240	7570	1310	3070	2550
9	494	736	15700	5190	1350	18400	7020	2070	7250	1090	2140	2100
10	471	736	15600	3570	1530	17800	11300	1970	4860	1050	1740	1770
11	494	727	9270	2920	1990	16800	11400	1820	4230	1930	3050	1600
12	536	669	4540	2350	1400	15900	9850	1790	3950	2370	9000	1470
13	1570	623	5130	2020	1300	14700	9580	2120	2750	1700	6590	1430
14	2300	605	7140	2290	1200	13600	12800	2280	2200	1660	3390	11200
15	1740	632	7210	3120	1100	12900	22600	1910	1910	1420	2410	25000
16	1310	632	5320	2920	1100	10800	28500	1770	1700	1170	1900	31200
17	1000	660	3370	2790	1000	8510	20600	1660	1490	1140	1640	39400
18	958	1740	2510	3120	960	6300	15700	1530	1340	1140	1490	28000
19	1020	1770	2150	2880	900	4840	12600	1430	1330	1040	2730	10800
20	1120	1400	1940	2730	958	3660	12600	1340	1260	936	2300	9410
21	914	1100	2180	3990	1200	3470	11400	1240	1400	870	7570	11300
22	936	1030	2770	4310	2840	3260	10700	1160	2350	797	12000	11900
23	776	992	2200	3450	3470	3030	9890	1130	3220	1350	9520	10000
24	870	981	1990	3530	3470	2940	7300	1270	2820	1380	10400	7270
25	707	1050	1940	6590	12200	2940	4810	1580	2220	2420	13600	6780
26	881	1020	1930	5520	36600	2710	3240	1920	1640	3900	9770	5220
27	992	1070	1670	3780	34400	2410	3050	3180	1330	1990	13700	4560
28	970	1420	1490	3300	27600	2070	2950	7270	1160	2840	11600	8380
29	828	1460	1330	3010	---	2040	2650	7120	1040	8190	10400	14200
30	727	1440	1260	2460	---	2320	2420	6640	1110	10500	16300	11200
31	678	---	1580	2150	---	2070	---	5040	---	6050	16600	---
TOTAL	27124	27736	130460	169280	150568	361970	301650	81090	85670	73943	199540	305270
MEAN	875	925	4208	5461	5377	11680	10050	2616	2856	2385	6437	10180
MAX	2300	1770	15700	19400	36600	29900	28500	7270	7570	10500	16600	39400
MIN	471	696	1260	2020	900	2040	2210	1130	1040	797	1490	1430

CAL YR 1978 TOTAL 1463990 MEAN 4011 MAX 33800 MIN 447
WTR YR 1979 TOTAL 1914311 MEAN 5245 MAX 39400 MIN 471

SCIOTO RIVER BASIN

03231500 SCIOTO RIVER AT CHILLICOTHE, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1950-51, 1965 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1965 to current year.

pH: May 1965 to current year.

WATER TEMPERATURES: October 1950 to September 1951, October 1953 to current year.

DISSOLVED OXYGEN: May 1965 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, 1,210 micromhos Jan. 13, 1976; minimum, 150 micromhos June 29, 1972.

pH: Maximum, 9.2 units Dec. 24, 26, 1973; 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 winter periods.

DISSOLVED OXYGEN: Maximum, 20.0 mg/L July 28, 29, Aug. 4, 1978; minimum, 0.0 mg/L Apr. 27, Aug. 12, Sept. 22, 1966.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,120 micromhos Feb. 21; minimum, 208 micromhos Sept. 14.

pH: Maximum, 8.6 units June 20, 21; minimum, 6.3 units Mar. 6.

WATER TEMPERATURES: Maximum, 28.0°C July 23, Aug. 9; minimum, 0.0° Jan. 4, 8, 9, 16, Feb. 6, 9, 10, 11, 13.

DISSOLVED OXYGEN: Maximum, 14.0 mg/L Jan. 5, 6, June 20; minimum, 3.2 mg/L Oct. 3.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	790	716	774	770	686	648	672	414	772	770	430	404
2	824	788	778	774	652	648	424	392	782	772	432	418
3	848	800	786	780	656	556	502	424	784	772	420	380
4	840	804	780	752	570	496	586	504	798	760	398	392
5	836	792	750	740	502	420	592	582	758	756	398	372
6	796	772	772	750	576	452	582	560	776	760	370	320
7	786	768	804	770	598	522	550	538	786	776	320	308
8	796	768	820	804	568	372	544	538	794	772	340	322
9	764	750	812	754	372	336	568	544	800	786	356	338
10	764	752	754	740	396	338	610	570	812	800	376	356
11	786	740	740	734	544	402	648	612	840	814	384	376
12	778	640	738	734	606	546	656	650	842	816	386	394
13	732	666	744	736	622	586	884	668	834	826	392	384
14	674	496	786	742	634	596	900	688	832	816	402	390
15	672	632	736	680	626	598	722	678	1030	806	428	402
16	660	568	740	726	650	604	856	732	922	824	464	430
17	626	608	738	684	642	634	908	774	828	818	500	464
18	668	628	724	646	680	642	772	754	834	820	550	502
19	704	658	750	730	692	682	758	738	840	828	594	550
20	714	706	730	672	736	666	938	686	994	842	636	598
21	718	696	672	652	702	674	694	608	1120	856	650	636
22	700	696	664	650	680	670	712	614	850	588	662	650
23	714	664	686	664	678	664	688	664	624	426	674	642
24	720	702	706	686	698	666	712	608	518	404	678	662
25	728	702	722	706	716	700	620	586	484	366	692	678
26	730	614	738	694	724	716	630	588	360	326	692	674
27	680	530	736	700	730	720	682	634	326	316	690	672
28	730	684	720	706	728	724	804	684	402	326	694	684
29	764	732	744	716	744	728	716	704	---	---	708	694
30	776	766	738	688	756	712	734	712	---	---	732	708
31	776	770	---	---	766	666	758	734	---	---	732	668
MONTH	848	496	820	646	766	336	938	392	1120	316	732	308

205

03231500 SCIOTO RIVER AT CHILLOCOTHE, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

[illegible]

SCICTO RIVER BASIN

03231500 SCIOTO RIVER AT CHILLICOTHE, OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.1	8.0	7.9	7.8	7.6	7.5	7.7	7.5	8.0	8.0	7.8	7.8
2	8.0	7.8	7.8	7.8	7.5	7.5	7.6	7.5	8.0	8.0	7.8	7.8
3	7.9	7.7	7.9	7.8	7.7	7.5	7.7	7.6	8.0	8.0	7.9	7.8
4	8.1	7.8	7.8	7.8	7.5	7.2	7.8	7.7	8.0	8.0	7.8	7.8
5	7.9	7.8	7.9	7.8	7.4	7.2	7.8	7.8	8.0	8.0	7.8	7.8
6	7.9	7.8	7.9	7.8	7.6	7.4	7.8	7.8	8.1	8.0	7.8	6.3
7	7.8	7.7	7.8	7.8	7.6	7.5	7.8	7.8	8.1	8.0	7.9	7.8
8	7.8	7.6	7.9	7.8	7.6	7.4	7.8	7.8	8.1	8.0	7.8	7.8
9	7.9	7.8	7.9	7.8	7.4	7.3	7.8	7.7	8.0	8.0	7.8	7.8
10	7.8	7.7	8.0	7.9	7.4	7.3	7.7	7.7	8.0	8.0	7.9	7.8
11	7.7	7.7	8.0	7.9	7.5	7.4	7.7	7.7	8.0	8.0	7.9	7.9
12	7.7	7.7	7.9	7.8	7.5	7.5	7.7	7.7	8.0	8.0	8.0	7.9
13	7.8	7.7	7.9	7.8	7.6	7.5	7.7	7.6	8.0	8.0	7.9	7.9
14	7.8	7.6	7.8	7.8	7.7	7.6	7.7	7.6	8.0	8.0	7.9	7.9
15	7.8	7.7	7.9	7.8	7.7	7.7	8.1	7.7	8.0	8.0	8.0	7.9
16	7.9	7.8	7.8	7.8	7.7	7.6	8.0	8.0	8.0	8.0	8.0	8.0
17	7.9	7.8	7.9	7.8	7.6	7.6	8.0	7.9	8.0	8.0	8.0	8.0
18	7.8	7.8	7.9	7.8	7.6	7.5	8.0	8.0	8.1	8.0	8.0	7.9
19	7.8	7.8	7.8	7.8	7.6	7.6	8.0	8.0	8.0	8.0	7.9	7.9
20	7.8	7.8	8.0	7.8	7.6	7.6	8.0	8.0	8.0	8.0	7.9	7.8
21	7.8	7.8	8.0	7.9	7.6	7.6	8.0	8.0	8.0	7.9	7.8	7.8
22	7.8	7.8	8.0	7.9	7.6	7.6	8.0	8.0	8.0	7.9	7.8	7.8
23	7.8	7.8	8.0	7.9	7.6	7.6	8.0	8.0	7.9	7.9	7.8	7.8
24	7.9	7.8	7.9	7.5	7.8	7.6	8.0	8.0	7.9	7.8	7.8	7.8
25	7.9	7.8	7.5	7.5	7.7	7.7	8.0	8.0	7.9	7.9	7.9	7.9
26	7.9	7.8	7.5	7.5	7.8	7.7	8.0	8.0	7.9	7.9	7.9	7.9
27	7.8	7.8	7.5	7.5	7.8	7.8	8.0	8.0	7.9	7.9	8.0	7.9
28	7.8	7.8	7.5	7.5	7.8	7.8	8.0	8.0	7.9	7.8	8.0	7.9
29	7.8	7.8	7.5	7.5	7.8	7.8	8.0	8.0	---	---	7.9	7.9
30	7.8	7.8	7.5	7.5	7.8	7.7	8.0	8.0	---	---	7.9	7.8
31	7.9	7.8	---	---	7.7	7.7	8.0	8.0	---	---	7.9	7.8
MONTH	8.1	7.6	8.0	7.5	7.8	7.2	8.1	7.5	8.1	7.8	8.0	6.3

[illegible]

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

SCICTO RIVER BASIN

03231500 SCIOTO RIVER AT CHILLICOTHE, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN									
	OCTOBER				NOVEMBER				DECEMBER				JANUARY				FEBRUARY				MARCH			
1	8.1	6.0	8.7	7.5	9.8	9.3	11.9	11.2	12.7	12.4	12.5	12.1	12.7	12.4	12.5	12.1								
2	7.0	5.0	8.3	7.1	9.7	9.4	12.0	11.6	12.7	12.3	12.6	12.2	12.7	12.3	12.6	12.2								
3	5.6	3.2	8.6	7.2	9.9	9.7	13.7	12.1	12.5	12.4	12.8	11.9	12.5	12.4	12.8	11.9								
4	7.0	4.9	8.5	7.2	9.7	9.1	13.9	13.7	12.5	12.3	12.1	11.6	12.5	12.3	12.1	11.6								
5	7.4	4.7	9.2	7.5	---	---	14.0	13.8	12.4	12.2	12.1	11.6	12.4	12.2	12.1	11.6								
6	7.2	5.5	8.9	7.3	---	---	14.0	13.8	12.6	12.3	12.5	12.1	12.6	12.3	12.5	12.1								
7	5.8	4.4	7.4	7.0	---	---	13.8	13.7	12.6	12.4	12.4	12.1	12.6	12.4	12.4	12.1								
8	6.7	4.4	8.2	6.8	---	---	13.9	13.7	12.7	12.4	12.1	12.0	12.7	12.4	12.1	12.0								
9	7.5	5.7	8.8	7.5	---	---	13.8	13.6	12.5	12.2	12.2	12.0	12.5	12.2	12.2	12.0								
10	7.3	5.7	9.7	8.1	---	---	13.6	13.3	12.5	12.2	12.2	12.0	12.5	12.2	12.2	12.0								
11	6.0	5.3	11.8	8.3	---	---	13.3	13.2	12.5	12.2	12.5	12.2	12.5	12.2	12.5	12.2								
12	6.4	5.1	9.3	8.4	---	---	13.2	12.7	12.3	12.2	12.7	12.5	12.3	12.2	12.7	12.5								
13	7.3	5.7	9.5	8.2	---	---	12.7	12.3	12.4	12.2	12.6	12.0	12.4	12.2	12.6	12.0								
14	6.4	5.2	8.4	7.5	---	---	12.4	12.2	12.4	12.1	12.2	11.9	12.4	12.1	12.2	11.9								
15	6.2	5.1	8.2	7.7	---	---	12.8	12.3	12.1	11.7	12.3	11.9	12.8	12.3	12.3	11.9								
16	7.3	3.4	8.0	7.5	---	---	12.9	12.3	12.3	11.7	12.5	12.3	12.9	12.3	12.3	12.3								
17	7.0	5.4	8.8	7.5	---	---	13.0	12.6	12.5	11.8	12.3	12.0	12.6	12.5	12.3	12.0								
18	7.1	6.6	8.2	7.4	---	---	12.9	12.7	12.6	12.1	11.9	11.2	12.7	12.6	11.9	11.2								
19	8.3	6.8	7.6	7.0	---	---	13.0	12.9	12.6	11.9	11.1	10.5	12.9	12.6	11.9	10.5								
20	7.8	7.2	8.8	7.1	---	---	12.9	12.5	12.6	11.9	10.5	9.9	12.9	12.6	11.9	9.9								
21	7.9	7.4	8.9	8.4	---	---	12.6	12.4	12.7	11.8	10.0	9.5	12.7	12.4	11.8	9.5								
22	8.2	7.4	9.2	8.3	---	---	12.5	12.2	12.7	11.8	9.5	9.3	12.7	12.4	11.8	9.3								
23	7.6	6.9	8.9	8.5	---	---	12.5	12.0	12.8	12.4	9.3	9.1	12.7	12.4	11.8	9.3								
24	8.1	6.9	8.8	8.5	---	---	12.4	12.0	12.8	12.5	9.2	9.1	12.7	12.4	11.8	9.3								
25	8.2	7.4	8.9	8.3	---	---	12.6	12.2	13.1	12.6	9.4	9.1	12.7	12.4	11.8	9.3								
26	8.0	7.2	9.1	8.7	12.4	12.1	12.8	12.5	13.2	13.0	9.9	9.4	12.7	12.4	11.8	9.3								
27	7.9	7.7	9.1	8.8	12.4	12.2	12.6	12.4	13.2	12.9	10.8	10.0	12.7	12.4	11.8	9.3								
28	8.1	7.7	9.3	8.6	12.8	12.3	12.4	12.0	12.9	12.4	11.2	10.1	12.7	12.4	11.8	9.3								
29	8.0	7.0	9.0	8.9	12.8	12.3	12.4	12.1	---	---	10.7	9.5	12.7	12.4	11.8	9.3								
30	8.2	6.8	9.8	9.7	12.4	11.8	12.4	12.2	---	---	9.5	8.9	12.7	12.4	11.8	9.3								
31	8.7	7.6	---	---	12.0	11.6	12.5	12.1	---	---	9.0	8.7	12.7	12.4	11.8	9.3								
MONTH	8.7	3.2	11.8	6.8	12.8	9.1	14.0	11.2	13.2	11.7	12.8	8.7	12.7	12.4	11.8	9.3								

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.4	8.6	8.9	8.1	7.3	6.8	7.7	6.7	7.0	6.6	7.4	7.0
2	9.3	8.4	9.3	8.2	6.7	5.9	6.9	5.2	7.2	6.6	7.2	6.9
3	9.1	8.4	8.6	8.2	6.6	6.0	8.0	6.9	6.8	4.5	7.7	7.1
4	9.8	9.2	8.2	7.2	7.2	6.5	8.9	7.4	7.2	5.7	7.7	7.0
5	10.6	9.4	8.2	7.0	7.1	6.8	9.0	7.7	7.1	6.8	7.4	7.3
6	11.0	10.7	8.7	7.4	7.3	6.2	9.2	7.6	7.3	6.6	7.3	7.2
7	11.4	11.0	8.7	7.7	7.0	6.0	10.3	8.3	6.6	6.1	7.4	7.2
8	11.3	11.0	8.6	7.3	6.9	6.1	11.1	8.5	7.1	6.5	7.5	7.3
9	11.6	10.7	8.4	6.7	6.8	5.8	9.0	7.9	6.9	6.1	8.0	7.4
10	11.3	10.6	9.0	6.5	6.9	5.9	10.4	7.6	7.1	6.1	8.4	7.8
11	11.4	11.0	10.0	6.0	6.8	6.5	8.6	6.4	6.8	6.0	8.7	7.9
12	11.1	10.4	8.7	6.1	7.2	6.8	6.9	5.0	6.4	5.6	8.6	7.3
13	10.6	10.0	7.5	5.4	7.1	6.9	6.5	5.9	7.0	6.4	8.7	7.7
14	10.2	9.5	7.5	5.5	7.4	7.1	7.5	5.9	7.1	6.6	8.7	6.9
15	10.4	9.9	9.8	6.1	7.5	6.9	7.5	6.2	7.3	7.1	6.9	6.2
16	10.7	10.3	9.6	7.1	8.1	6.7	8.8	6.2	7.9	7.1	6.2	6.0
17	11.3	9.2	9.4	6.2	9.2	6.7	10.5	6.5	8.0	7.5	6.4	6.1
18	10.9	9.8	8.7	6.5	10.2	7.1	11.6	7.1	7.9	7.3	6.4	6.1
19	10.7	10.3	9.2	6.5	10.6	6.9	12.5	7.5	8.0	6.3	7.4	6.4
20	10.5	10.1	10.2	6.2	14.0	7.6	13.1	8.3	7.6	5.6	8.1	7.2
21	10.1	9.8	9.8	6.3	12.5	8.0	13.6	8.8	7.5	4.7	8.6	7.9
22	10.0	9.7	10.3	6.4	8.9	5.8	13.6	9.0	6.4	4.3	8.6	8.3
23	10.0	9.8	7.1	6.0	10.1	5.9	11.0	7.1	7.0	6.2	8.9	8.5
24	9.8	9.3	6.2	5.5	7.6	6.4	10.4	6.9	6.7	5.5	9.0	8.8
25	9.3	8.5	6.4	5.7	9.3	7.4	7.8	5.9	6.6	5.9	9.0	8.7
26	8.4	7.7	6.9	6.1	9.9	8.2	6.0	4.6	7.3	6.5	9.0	8.5
27	7.8	7.6	7.2	6.8	10.8	8.6	6.1	5.8	7.3	7.1	8.8	8.5
28	7.7	7.2	7.3	6.7	12.2	8.0	6.4	5.7	7.0	6.7	9.0	8.2
29	8.6	7.4	8.4	7.5	10.6	8.5	6.3	4.8	7.1	5.2	8.2	7.3
30	8.5	8.1	8.0	7.6	9.1	7.1	6.6	5.4	6.8	5.9	8.0	7.6
31	---	---	7.5	7.0	---	---	6.8	6.6	7.1	6.8	---	---
MONTH	11.6	7.2	10.3	5.4	14.0	5.8	13.6	4.6	8.0	4.3	9.0	6.0
YEAR	14.0	3.2										

03232000 PAINT CREEK NEAR GREENFIELD, OH

LOCATION.--Lat 39°22'45", long 83°22'32", Fayette County, Hydrologic Unit 05060003, on right bank at upstream side of bridge on State Highway 753, 0.6 mi (1.0 km) upstream from Stone Run, 2.0 mi (3.2 km) north of Greenfield, and 3.0 mi (4.8 km) downstream from Indian Creek.

DRAINAGE AREA.--249 mi² (645 km²).

PERIOD OF RECORD.--August 1926 to November 1935, October 1939 to September 1956; water years 1962-66 (occasional low-flow measurements), (annual maximums), water years 1963-66. October 1966 to current year.

REVISED RECORDS.--WSP 743: 1926(M). WSP 758: 1926-33. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 844.27 ft (257.333 m) National Geodetic Vertical Datum of 1929. Prior to Feb. 14, 1940 nonrecording gage, Feb. 14, 1940 to June 3, 1955 water-stage recorder, June 4, 1955 to Sept. 30, 1956 nonrecording gage, at same site at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Sediment data collected at this site 1970 to 1974.

AVERAGE DISCHARGE.--39 years (1926-35, 1939-56, 1966-79), 232 ft³/s (6.570 m³/s), 12.65 in/yr (321 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,700 ft³/s (615 m³/s) May 24, 1969, gage height, 14.28 ft (4.353 m); no flow Sept. 10, 18, 27, 29, 30, Oct. 1, 4, 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s (56.64 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s)	(m ³ /s)	Gage height (ft)	(m)	Date	Time	Discharge (ft ³ /s)	(m ³ /s)	Gage height (ft)	(m)
Dec. 9	0100	3450	97.7	7.97	2.429	Aug. 20	1830	2020	57.2	6.41	1.954
Jan. 1	1600	3120	88.4	7.63	2.326	Aug. 26	1530	2610	73.9	7.11	2.167
Feb. 25	1630	*6700	190	*10.21	3.112	Sept. 14	0630	5880	166	9.80	2.987
Mar. 2	1930	2850	80.7	7.36	2.243	Sept. 16	0530	5990	170	9.86	3.005
Apr. 15	0800	4250	120	8.73	2.661						

Minimum 9.5 ft³/s (0.27 m³/s) Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	57	96	2010	130	2280	118	111	382	118	68	395
2	14	49	84	2560	120	2650	376	102	286	104	74	297
3	11	43	376	1780	110	2370	466	158	224	81	57	277
4	14	42	1180	930	110	2320	551	332	185	70	134	242
5	15	39	965	582	100	2170	849	401	158	64	94	185
6	12	38	671	425	100	1520	735	297	154	53	67	150
7	11	39	470	341	98	975	484	234	216	46	51	134
8	12	37	1760	283	96	726	372	187	1120	43	67	109
9	11	33	3070	210	96	582	421	161	784	43	77	97
10	11	30	2380	190	94	498	480	146	547	49	63	84
11	11	30	1230	170	94	435	405	136	392	140	300	70
12	27	28	766	160	92	354	401	128	288	62	206	67
13	789	27	650	150	92	303	513	124	219	89	255	66
14	554	27	554	220	92	286	1850	113	176	66	158	3640
15	379	29	456	180	92	244	3450	102	150	58	102	4520
16	269	44	388	280	90	209	1390	92	132	45	74	5240
17	185	122	341	270	90	190	780	83	120	36	58	1830
18	136	306	294	452	90	181	558	80	113	31	58	740
19	120	226	269	408	90	172	438	77	108	26	312	484
20	108	154	263	350	88	167	357	77	108	24	872	369
21	87	118	456	566	210	156	300	72	138	20	1340	366
22	74	97	401	432	1100	144	258	68	99	21	1470	601
23	64	89	332	314	3570	144	226	74	89	16	1120	551
24	66	83	291	495	4720	161	202	81	78	19	1100	382
25	59	68	297	621	5580	146	187	106	71	29	960	297
26	70	61	261	459	4630	124	178	209	66	44	1150	242
27	102	126	214	350	2640	111	174	312	58	36	853	209
28	89	158	170	286	2020	101	150	418	55	66	726	1130
29	77	128	160	210	---	99	132	309	53	138	901	1230
30	62	111	170	160	---	99	118	224	84	63	960	911
31	57	---	379	140	---	99	---	231	---	63	654	---
TOTAL	3510	2439	19394	15984	26434	20016	16929	5245	6653	1763	14381	24915
MEAN	113	81.3	626	516	944	646	564	169	222	56.9	464	831
MAX	789	306	3070	2560	5580	2650	3450	418	1120	140	1470	5240
MIN	11	27	84	140	88	99	118	68	53	16	51	66
CFSM	.45	.33	2.51	2.07	3.79	2.59	2.27	.68	.89	.23	1.86	3.34
IN.	.52	.36	2.90	2.39	3.95	2.99	2.53	.78	.99	.26	2.15	3.72

CAL YR 1978 TOTAL 113941.2 MEAN 312 MAX 5690 MIN 6.0 CFSM 1.25 IN 17.02
WTR YR 1979 TOTAL 157663.0 MEAN 432 MAX 5580 MIN 11 CFSM 1.74 IN 23.55

SCIOTO RIVER BASIN

03232300 RATTLESNAKE CREEK NEAR CENTERFIELD, OH

LOCATION.--Lat 39°19'44", long 83°28'32", Highland County, Hydrologic Unit 05060003, on right bank 600 ft (183 m) upstream from county road bridge at Centerfield, 0.6 mi (1.0 km) upstream from Walnut Creek, 1.5 mi (2.4 km) downstream from Lees Creek, and 2.4 mi (3.9 km) southeast of East Monroe.

DRAINAGE AREA.--209 mi² (541 km²).

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water stage recorder. Datum of gage is 822.32 ft (250.643 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Water-quality data collected at this site December 1973 to September 1978.

AVERAGE DISCHARGE.--8 years, 252 ft³/s (7.14 m³/s), 16.37 in/yr (416 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,550 ft³/s (214 m³/s) Sept. 14, 1979, gage height, 13.57 ft (4.136 m); maximum gage-height 15.02 ft (4.578 m) Feb. 28, 1979; backwater from Paint Creek Lake; minimum, 1.8 ft³/s (0.051 m³/s) Aug. 22-24, 1972, Sept. 24-26, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft³/s (56.6 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 13	0915	2610	73.9	Apr. 14	2315	2760	78.2
Dec. 4	0545	2680	75.9	Aug. 26	2100	3730	106
Dec. 8	2400	4850	137	Aug. 28	0900	2100	59.5
Jan. 1	1515	4590	130	Sept. 14	0815	*7550	214
Feb. 25	1800	7200	204	Sept. 28	1130	2610	73.9
Feb. 28	1600	a	*15.02				7.61
			4.578				2.320

Minimum discharge, 5.4 ft³/s (0.15 m³/s) Oct. 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	74	132	2740	90	2100	78	70	412	178	31	246
2	7.6	67	117	2560	86	2500	237	66	284	137	77	183
3	5.9	62	758	1340	82	2200	380	109	189	84	54	134
4	6.4	57	2010	565	78	1900	431	337	146	66	53	105
5	7.6	54	1230	369	76	1400	759	531	119	60	41	83
6	7.0	53	675	274	74	950	543	318	103	48	31	68
7	7.0	48	435	190	72	680	310	215	100	41	22	58
8	7.0	48	2910	160	70	450	249	161	621	35	19	50
9	7.0	47	3550	140	70	306	287	130	578	33	15	44
10	6.4	43	2240	130	68	266	354	115	346	35	13	40
11	7.0	42	1010	120	68	236	270	105	270	36	141	36
12	13	41	553	110	68	195	295	96	172	33	295	33
13	1450	38	474	110	68	164	531	91	128	31	195	34
14	1070	37	408	180	68	161	2040	83	105	34	100	4150
15	797	39	342	150	66	141	2000	74	89	72	64	2860
16	553	58	291	240	66	119	794	66	81	67	48	2760
17	355	173	250	230	66	111	446	61	75	42	40	1880
18	253	502	219	450	66	107	314	58	74	28	40	1570
19	196	335	203	387	66	107	246	56	96	21	42	1570
20	169	213	225	339	70	103	203	56	130	18	164	498
21	138	163	474	553	410	100	169	56	178	14	839	277
22	109	135	387	412	1160	92	149	50	130	14	967	1020
23	91	122	291	284	4500	94	128	53	89	13	824	819
24	82	120	244	486	4230	101	119	58	72	12	554	456
25	76	96	250	532	5320	98	113	68	62	19	694	295
26	94	84	225	376	4200	81	107	156	55	24	967	221
27	186	192	179	260	2000	71	105	263	49	25	1200	172
28	169	267	140	219	1600	64	94	389	39	41	1080	1330
29	127	196	120	140	---	64	83	243	37	105	726	1240
30	98	163	132	110	---	64	75	161	56	53	703	928
31	82	---	498	100	---	66	---	154	---	42	398	---
TOTAL	6185.2	3569	20972	14356	24858	15091	11959	4449	4885	1461	10437	23160
MEAN	200	119	677	463	888	487	399	144	163	47.1	337	772
MAX	1450	502	3550	2740	5320	2500	2040	531	621	178	1200	4150
MIN	5.9	37	117	100	66	64	75	50	37	12	13	33
CFSM	.96	.57	3.24	2.22	4.25	2.33	1.91	.69	.78	.23	1.61	3.69
IN.	1.10	.64	3.73	2.56	4.42	2.69	2.13	.79	.87	.26	1.86	4.12

CAL YR 1978 TOTAL 110295.8 MEAN 302 MAX 5600 MIN 4.6 CFSM 1.45 IN 19.63
WTR YR 1979 TOTAL 141382.2 MEAN 387 MAX 5320 MIN 5.9 CFSM 1.85 IN 25.16

a Backwater from Paint Creek Lake.

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 (122 m) downstream from Paint Creek dam, 700 ft (213 m) upstream from Cliff Creek, and 4.5 mi (7.2 km) northwest of Bainbridge.

DRAINAGE AREA.--570 mi² (1,476 km²).

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.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft (213.360 m) National Geodetic Vertical Datum of 1929. (levels by Corps of Engineers). Prior to May 3, 1968, water-stage recorder and crest-stage gage at partial-record site 1,000 ft (305 m) downstream at datum 42.96 ft (13.094 m) higher.

REMARKS.--Records good. Flow regulated by Paint Creek Lake (see station 03232460). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--12 years, 582 ft³/s (16.48 m³/s)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 45,000 ft³/s (1,270 m³/s) Mar. 10, 1964, gage height, 27.3 ft (8.32 m), site and datum then in use; minimum daily, 4.7 ft³/s (0.13 m³/s) Sept. 1, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,860 ft³/s (223 m³/s) Feb. 28, gage height, 55.09 ft (16.791 m); minimum daily, 8 ft³/s (0.23 m³/s) Feb. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	321	250	1540	282	7740	446	10	838	140	271	867
2	56	342	309	2290	253	7570	1650	18	986	246	250	616
3	56	309	359	2200	217	7430	1330	26	715	164	157	553
4	56	301	1680	2840	227	7340	1180	17	420	147	115	386
5	46	289	2550	3600	289	7200	1840	13	325	329	95	282
6	39	289	2500	3460	253	5790	1610	55	309	337	97	282
7	39	364	2390	2710	208	4130	1100	406	313	180	95	282
8	39	396	1090	937	185	6050	816	430	884	119	95	236
9	39	364	10	483	172	6660	913	441	1070	100	95	154
10	39	337	10	441	169	6910	1110	446	1110	100	97	143
11	40	325	10	467	169	7310	833	446	1050	100	313	94
12	39	321	2330	506	193	7220	907	382	816	140	799	84
13	1700	329	6690	364	240	5900	949	342	751	246	553	84
14	1900	321	6510	368	199	2310	2130	267	751	214	467	60
15	1360	355	6490	636	642	907	2150	240	656	100	373	17
16	1060	420	3370	720	603	636	10	240	547	100	193	17
17	584	456	1820	955	233	406	1360	191	391	100	111	17
18	451	1160	1270	1190	214	324	4910	123	359	102	97	18
19	406	1120	833	1040	202	373	3440	104	364	86	136	2370
20	355	827	685	767	167	377	955	106	305	52	368	5040
21	325	584	931	1040	119	386	705	129	415	21	961	4930
22	256	420	1110	1600	861	420	799	154	451	12	1660	3920
23	177	420	827	1060	878	325	710	199	364	18	2200	4370
24	159	420	670	715	8.0	355	435	233	305	25	2200	4980
25	159	415	725	1210	12	386	446	243	253	54	2190	4990
26	329	415	720	1460	9.2	364	467	285	140	129	1630	5010
27	511	489	483	901	9.2	285	285	675	104	164	1830	4310
28	547	746	401	778	2850	172	199	1030	106	121	2230	1910
29	523	992	451	675	---	129	132	730	106	250	2210	1890
30	401	535	430	401	---	191	51	725	106	368	2140	4040
31	293	---	462	282	---	220	---	456	---	305	1280	---
TOTAL	12040	14382	48366	37636	9863.4	95816	33868	9162	15310	4569	25308	51962
MEAN	388	479	1560	1214	352	3091	1129	296	510	147	816	1732
MAX	1900	1160	6690	3600	2850	7740	4910	1030	1110	368	2230	5040
MIN	39	289	10	282	8.0	129	10	10	104	12	95	17
CAL YR 1978	TOTAL	248531.0	MEAN	681	MAX	6810	MIN	10				
WTR YR 1979	TOTAL	358282.4	MEAN	982	MAX	7740	MIN	8.0				

SCIOTO RIVER BASIN

03232500 ROCKY FORK NEAR BARRETTS MILLS, OH

LOCATION.--Lat 39°13'06", long 83°23'08", Highland County, Hydrologic Unit 05060003, on left bank at downstream side of highway bridge, 1.1 mi (1.8 km) north of Barretts Mills, 2 mi (3 km) east of Rainsboro, 2.8 mi (4.5 km) upstream from mouth, and 6 mi (10 km) downstream from Rocky Fork Lake.

DRAINAGE AREA.--140 mi² (363 km²).

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 (234.94 m) National Geodetic Vertical Datum of 1929, (levels by Corps of Engineers). Prior to Feb. 15, 1940, nonrecording gage at same site and datum.

REMARKS.--Records fair. Some diurnal fluctuation caused by mill 6 mi (10 km) upstream from station. Flow regulated by Rocky Fork Lake 6 mi (10 km) upstream, since 1952, capacity, 34,100 acre-ft (42.0 hm³). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--40 years, 154 ft³/s (4.36 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,400 ft³/s (379 m³/s) Mar. 10, 1964 from rating curve extended above 8,800 ft³/s (249 m³/s) on basis of velocity-area studies; maximum gage height, 15.56 ft (4.743 m) Mar. 6, 1945; minimum daily discharge, 0.90 ft³/s (0.025 m³/s) Sept. 10, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,600 ft³/s (159 m³/s) Feb. 25, gage height, 9.67 ft (2.947 m); minimum daily, 20 ft³/s (0.57 m³/s) Oct. 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	113	169	1000	60	306	249	117	217	51	217	240
2	24	96	148	800	58	364	1170	77	183	49	138	210
3	22	83	380	531	56	361	850	121	150	41	113	180
4	25	74	1240	380	54	351	579	226	126	39	89	140
5	23	66	776	292	52	345	550	306	105	40	71	110
6	22	61	507	220	50	312	431	262	86	34	57	90
7	21	56	390	150	48	281	312	224	80	31	46	78
8	21	54	2160	110	47	254	255	180	333	27	39	68
9	20	50	2950	80	46	234	259	140	400	27	32	56
10	20	46	1310	64	45	224	252	130	298	28	29	46
11	22	43	757	52	44	214	226	110	254	28	138	37
12	30	41	511	40	44	210	219	100	190	28	188	31
13	413	40	455	34	44	210	219	90	142	46	144	28
14	511	38	370	50	44	207	219	80	115	90	105	3070
15	420	48	310	77	43	207	219	70	96	74	77	1660
16	321	115	260	217	42	205	219	64	80	70	55	757
17	236	231	240	523	42	142	219	58	69	56	43	431
18	183	380	220	515	42	31	217	54	60	42	37	289
19	148	281	200	492	42	31	198	50	67	32	51	207
20	119	220	190	538	42	29	176	46	64	25	130	148
21	96	180	300	587	250	29	156	42	81	22	246	567
22	81	150	410	515	1100	28	144	34	74	23	207	1310
23	70	140	290	455	3080	28	134	36	66	60	172	1100
24	66	138	220	309	2630	31	130	45	54	54	222	617
25	60	121	270	100	3640	32	124	60	45	152	286	400
26	241	117	200	83	3070	34	117	73	38	121	330	284
27	403	281	170	77	1540	37	117	112	34	124	1040	214
28	298	275	140	75	918	43	117	132	32	181	634	1340
29	222	231	110	70	---	51	117	108	29	515	450	1070
30	169	198	130	66	---	59	117	87	34	318	350	638
31	136	---	270	62	---	74	---	124	---	278	280	---
TOTAL	4473	3967	16053	8564	17173	4964	8321	3358	3602	2706	6016	15416
MEAN	144	132	518	276	613	160	277	108	120	87.3	194	514
MAX	511	380	2950	1000	3640	364	1170	306	400	515	1040	3070
MIN	20	38	110	34	42	28	117	34	29	22	29	28
CAL YR 1978	TOTAL	74565	MEAN 204	MAX 4750	MIN 20							
WTR YR 1979	TOTAL	94613	MEAN 259	MAX 3640	MIN 20							

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 (0.3 km) downstream from Sulfur Lick, 1.2 mi (1.9 km) southwest of Bourneville, and 1.2 mi (1.9 km) upstream from Upper Twin Creek.

DRAINAGE AREA.--807 mi² (2,090 km²).

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 (202.863 m) National Geodetic Vertical Datum of 1929. See WSP 1725 for history of changes prior to May 3, 1939.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by Paint Creek Lake 17 mi (27.4 km) upstream since 1971, capacity 145,000 acre-ft (179 hm³) and Rocky Fork Lake 23 mi (37 km) upstream since 1952, capacity, 34,100 acre-ft (42.0 hm³). Water-quality data collected at this site 1965 to 1977. Sediment data 1956 to 1962.

AVERAGE DISCHARGE.--56 years (1921-36, 1939-79), 800 ft³/s (22.7 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 56,900 ft³/s (1,610 m³/s) Mar. 10, 1964, gage height, 20.50 ft (6.248 m), from rating curve extended above 30,000 ft³/s (850 m³/s) on basis of contracted-opening measurement at gage height 20.08 ft (6.120 m); minimum daily, 5 ft³/s (0.1 m³/s) Oct. 29, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,950 ft³/s (282 m³/s) Feb. 25, gage height, 11.39 ft (3.472 m); minimum daily, 64 ft³/s (1.81 m³/s) Oct. 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	427	470	3130	380	7020	701	212	1170	220	448	1090
2	90	453	502	3750	330	7250	3700	191	1250	275	406	887
3	84	406	907	2970	280	7210	2680	242	953	314	327	673
4	89	375	3620	3060	260	7130	1950	475	651	199	272	594
5	84	352	4360	3970	240	6930	2620	646	488	297	215	427
6	70	338	3820	3850	220	6340	2280	453	444	419	201	394
7	68	352	3490	3390	210	4450	1630	609	427	272	186	375
8	65	444	4890	1460	200	5760	1200	625	1250	217	176	341
9	64	402	4560	740	180	6360	1210	599	1660	174	165	272
10	64	367	1880	600	180	6400	1420	589	1450	172	160	217
11	66	352	1110	500	190	6680	1230	564	1450	167	398	194
12	84	327	1270	520	220	6600	1130	525	1100	176	973	145
13	2300	348	6620	420	360	6140	1280	470	913	314	706	147
14	3670	338	6500	400	330	3370	2670	410	868	334	554	5160
15	2320	363	6400	580	457	1270	3440	355	770	272	475	2570
16	1800	535	4510	752	788	1060	657	348	630	217	355	1290
17	1100	837	2350	1300	415	752	782	327	530	194	231	793
18	695	1740	1870	1660	350	549	4820	272	440	181	186	551
19	599	1810	1220	1610	300	516	4060	228	448	165	294	1610
20	511	1270	1220	1350	270	506	1300	223	415	134	341	5880
21	440	966	1370	1820	300	502	953	223	488	92	1130	6670
22	371	625	1700	2050	1920	502	926	242	525	70	1610	7320
23	281	604	1290	1840	6180	484	946	266	466	76	2470	6890
24	220	599	1150	1340	3570	466	657	310	394	105	2500	6890
25	207	564	1120	1240	5360	475	594	338	352	191	2710	6540
26	493	549	1150	1710	4360	470	620	386	288	240	2360	6280
27	1210	881	920	1100	2030	419	549	604	207	288	3630	5980
28	973	1120	461	820	2420	355	406	1240	196	297	3170	5980
29	837	1430	457	700	---	288	344	894	191	953	2940	3070
30	690	1110	479	620	---	307	275	782	199	695	2670	5900
31	470	---	684	430	---	363	---	776	---	559	1860	---
TOTAL	20130	20284	72350	49682	32300	96924	47040	14424	20613	8279	34119	85130
MEAN	649	676	2334	1603	1154	3127	1558	465	687	267	1101	2838
MAX	3670	1810	6620	3970	6180	7250	4820	1240	1660	953	3630	7320
MIN	64	327	457	400	180	288	275	191	191	70	160	145
CAL YR 1978	TOTAL	391139	MEAN	1072	MAX	8570	MIN	47				
WTR YR 1979	TOTAL	501275	MEAN	1373	MAX	7320	MIN	64				

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 (1.3 km) downstream from Walnut Creek, 1.2 mi (1.9 km) north of Higby, 3 mi (5 km) northwest of Richmondale and 5.0 mi (8.0 km) upstream from Salt Creek.

DRAINAGE AREA.--5,131 mi² (13,289 km²).

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 (172.907 m) National Geodetic Vertical Datum of 1929. prior to Nov. 7, 1930, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow slightly regulated by 7 reservoirs 45 mi (72 km) to 105 mi (169 km) upstream from station. See stations 03220500, 03221500, 03225000, 03228400, 03228805, 03230890, 03232460, and since 1952 by Rocky Fork Lake 51 mi (82 km) upstream, capacity, 34,100 acre-ft (42.0 hm³).

AVERAGE DISCHARGE.--49 years, 4,547 ft³/s (129 m³/s)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 177,000 ft³/s (5,010 m³/s Jan. 23, 1937, from rating curve extended above 112,000 ft³/s (3,170 m³/s); maximum gage height, 26.4 ft (8.05 m) Jan. 23, 1937, from floodmarks, and Jan. 23, 1959; minimum daily discharge, 244 ft³/s (6.91 m³/s) Oct. 23, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--A stage of 31.6 ft (9.63 m) occurred Mar. 26, 1913, and has not been exceeded since.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 53,300 ft³/s (1,510 m³/s) Feb. 26, gage height, 19.50 ft (5.944 m); minimum daily, 782 ft³/s (22.1 m³/s) Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1060	1450	2620	11900	2990	27000	3890	2890	7410	2100	4040	13000
2	1060	1420	2430	26600	2790	27400	12300	2650	6230	2920	3160	9840
3	1030	1400	3160	23800	2740	29500	13000	2790	5730	2510	4470	8280
4	931	1390	10800	19000	2600	32100	11800	4860	3980	2720	4420	7610
5	986	1330	14100	12600	2390	33600	13300	6230	3540	2600	3790	5270
6	1060	1280	9700	11800	2150	35500	15900	4430	3160	2600	3230	4090
7	931	1260	7290	10800	2260	35400	13200	3660	3400	2150	4020	3540
8	904	1280	14200	8610	2100	30300	10200	3370	8790	1790	3110	3070
9	849	1300	30100	6060	1980	25800	8410	3140	9610	1540	2540	2570
10	809	1300	22500	4490	1840	25200	12000	2990	6790	1420	2060	2170
11	782	1300	12400	3840	1750	24200	12800	2790	6040	1690	3380	1950
12	863	1300	6620	3540	1810	23100	10600	2700	5420	2700	8840	1780
13	3440	1260	9970	3140	1730	21600	10800	2890	4000	2030	6420	1720
14	6630	1280	12800	3720	1820	18300	16600	2800	3400	2060	6000	17500
15	4800	1390	13100	4290	1850	14300	25300	2600	3020	1920	4580	33800
16	3660	1660	11400	4160	2260	12200	30200	2440	2670	1630	2470	31300
17	2690	2140	6490	4230	1920	9810	23500	2310	2380	1510	2050	38500
18	2040	3960	5140	5660	1720	7710	19500	2120	2120	1490	1820	34200
19	1870	4140	3960	5270	1750	6160	17100	1960	2030	1420	3910	12200
20	1960	3130	3650	4970	1640	4990	13800	1870	1990	1310	3280	13000
21	1750	2490	4250	8000	1870	4640	12100	1780	2200	1230	9750	16600
22	1640	2100	4990	7370	6270	4180	11000	1690	2700	1110	13100	19400
23	1480	1990	4130	6510	22300	4140	10500	1670	3790	1400	11400	16600
24	1400	1960	3680	6410	33400	4040	7930	1750	3180	1570	12000	13100
25	1310	1950	3450	8610	34900	4000	5800	2040	2770	2010	15800	12200
26	1510	1930	3650	7870	50500	3770	4380	2460	2180	4000	13300	10600
27	3130	2260	3230	5830	40000	3380	4110	3950	1810	2540	20000	9930
28	2340	3210	2570	4760	34600	3060	3840	8070	1630	2360	14900	16700
29	2070	3400	2260	4310	---	2790	3450	8180	1510	8190	12500	20200
30	1820	3230	2180	3770	---	2940	3160	7040	1490	10200	17900	16300
31	1580	---	3110	3210	---	2870	---	6280	---	5400	18600	---
TOTAL	58385	59790	239930	245130	265930	483980	350520	106400	114970	80120	236850	397020
MEAN	1883	1993	7740	7907	9498	15610	12020	3432	3832	2585	7640	13230
MAX	6630	4140	30100	26600	50500	35500	30200	8180	9610	10200	20000	38500
MIN	782	1260	2180	3140	1640	2790	3160	1670	1490	1110	1820	1720

CAL YR 1978 TOTAL 2038587 MEAN 5585 MAX 44200 MIN 782
WTR YR 1979 TOTAL 2649025 MEAN 7258 MAX 50500 MIN 782

WATER-QUALITY RECORDS

SUSPENDED SEDIMENT DISCHARGE: Water years 1954-74, January-September 1979.

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.

SEDIMENT LOADS: Maximum daily, 550,000 tons (499,000 tonnes) Jan. 23, 1959; minimum daily, 0.82 ton

DISSOLVED OXYGEN: Maximum, 13.9 mg/L May 16: minimum, 5.2 mg/L Oct. 4, Aug. 22.

[illegible]

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

[illegible][illegible]

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

ANALYSES OF MINOR ELEMENTS

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)
OCT 13...	1030	3	2	100	100	0	0	<10	4
FEB 07...	1300	1	1	200	200	9	6	10	4
APR 11...	1300	1	1	0	0	8	1	<10	<10
JUL 10...	1200	3	3	100	90	1	1	40	10

DATE	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
OCT 13...	3	1	8	4	4600	410	10	10	240
FEB 07...	0	0	3	2	730	30	71	70	60
APR 11...	3	1	11	5	4100	90	91	5	90
JUL 10...	1	0	8	3	1000	60	7	3	70

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 13...	240	<.5	<.5	1	0	0	0	40	20
FEB 07...	50	<.5	<.5	0	0	0	0	90	30
APR 11...	9	<.5	<.5	0	0	0	0	50	20
JUL 10...	20	<.5	<.5	0	0	0	0	50	30

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
AUG 21...	1500	10900	1410	41500	42	57	70
SEP 14...	1600	25500	2320	160000	38	53	66

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
AUG 21...	84	92	97	99	99	100
SEP 14...	83	96	97	99	100	--

SUSPENDED SEDIMENT DISCHARGE

PERIOD OF RECORD.--Water years 1954-74, January-September, 1979.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 13...	1030	2850	15.5	164	1260
NOV 08...	1200	1300	11.0	26	91
DEC 07...	1230	7110	6.0	112	2150
JAN 10...	1500	4380	.0	106	1250
FEB 07...	1300	2280	.5	12	74
MAR 06...	1500	37500	4.5	174	17600
APR 11...	1300	12800	8.0	91	3150
MAY 01...	1500	2840	15.0	39	299
JUN 04...	1600	4200	21.0	76	862
JUL 10...	1200	1400	23.0	34	129
AUG 07...	1300	4200	25.0	136	1540
21...	1500	10900	--	1410	41500
SEP 04...	1300	7530	23.0	140	2850
14...	1600	25600	--	2320	160000

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1							---	---	18	146	224	16300
2							---	---	12	90	217	16100
3							---	---	8	59	159	12700
4							---	---	8	56	126	10900
5							---	---	8	52	144	13300
6							---	---	12	70	168	16800
7							---	---	12	73	191	19000
8							---	---	6	34	181	14800
9							---	---	7	37	179	12500
10							---	---	9	45	140	9530
11							---	---	6	28	122	7970
12							---	---	7	34	112	6990
13							---	---	8	37	100	5830
14							---	---	9	44	96	4740
15							---	---	7	35	82	3170
16							45	505	6	37	66	2170
17							34	389	5	26	65	1720
18							44	672	7	32	66	1370
19							39	555	6	28	64	1070
20							95	1390	5	22	54	728
21							157	3390	11	56	51	639
22							64	1280	222	3870	52	588
23							48	844	1270	73500	47	525
24							144	2800	430	39400	45	490
25							190	4420	900	87700	35	378
26							88	1870	790	117000	25	254
27							41	646	388	46100	22	201
28							24	308	208	20000	20	165
29							18	209	---	---	26	196
30							14	142	---	---	33	261
31							18	156	---	---	28	217
TOTAL							---	19576	---	388611	---	191601
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	155	2620	41	320	464	9270	82	503	138	1500	158	5550
2	955	30400	42	302	160	2690	123	1020	114	970	146	3880
3	285	10000	44	330	111	1720	102	738	118	1420	141	3160
4	184	5860	94	1230	86	933	105	816	114	1360	141	2900
5	200	7180	117	1970	70	688	103	770	103	1050	131	1870
6	183	7860	54	647	54	478	95	711	108	942	152	1680
7	114	4060	28	277	69	652	74	464	133	1440	105	1000
8	79	2180	31	282	1070	30100	50	316	121	1020	76	630
9	64	1450	32	271	610	15800	59	268	92	628	60	415
10	115	3730	32	258	212	3890	36	152	77	426	48	280
11	150	5180	33	249	216	3530	68	336	153	1660	42	221
12	66	1890	38	278	170	2490	158	1220	400	9550	45	216
13	85	2480	48	373	125	1370	92	542	218	3770	45	209
14	408	18100	56	423	102	964	82	492	182	2950	640	30200
15	670	45800	33	233	78	665	72	402	105	1290	250	23400
16	480	39100	35	231	73	558	58	277	69	460	225	19000
17	380	24100	28	174	67	458	54	242	60	334	190	21400
18	319	16800	26	148	65	400	88	392	52	256	135	12800
19	278	12800	25	132	59	347	72	305	838	10600	97	3200
20	259	9650	21	106	57	331	48	191	438	3870	168	5900
21	170	5550	21	101	82	520	49	181	1130	29700	178	7980
22	180	5350	28	128	157	1200	57	192	385	13600	168	8800
23	183	5190	32	145	288	3000	98	410	218	6650	137	6140
24	137	2950	34	160	148	1320	90	418	243	7870	138	4880
25	94	1470	36	198	132	1040	120	1010	410	17500	140	4610
26	76	899	41	272	97	615	384	4200	342	12300	128	3660
27	64	710	85	904	65	344	204	1490	706	38100	78	2090
28	58	603	210	4580	52	249	147	988	265	10700	863	53100
29	50	467	123	2710	52	232	540	12000	196	6610	845	50500
30	40	341	94	1790	55	244	417	11500	256	12400	219	8990
31	---	---	150	2810	---	---	242	3530	197	9890	---	---
TOTAL	---	274770	---	22032	---	86098	---	46076	---	210816	---	288651

TOTAL LOAD FOR YEAR: 1518241 TONS.

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

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	848	720	708	693	656	642	454	300	693	666	366	347
2	795	720	719	707	642	624	386	321	705	683	356	345
3	824	753	729	716	624	341	---	---	708	693	357	332
4	---	---	741	731	414	291	---	---	713	704	342	335
5	---	---	737	725	477	417	---	---	725	699	345	335
6	---	---	729	720	477	417	---	---	720	698	338	309
7	---	---	741	728	516	480	---	---	735	699	308	288
8	---	---	758	741	515	444	513	506	747	728	309	296
9	---	---	765	749	---	---	536	516	755	726	324	311
10	---	---	758	717	---	---	555	536	770	747	341	318
11	---	---	723	714	---	---	581	555	774	749	354	341
12	809	776	725	719	---	---	600	581	780	758	365	356
13	780	303	728	719	---	---	620	597	783	770	377	362
14	507	372	729	716	485	465	624	539	783	767	398	377
15	543	509	755	699	483	467	620	567	768	747	422	396
16	555	531	695	659	524	464	705	608	749	704	453	420
17	554	528	671	476	557	530	735	663	764	710	488	456
18	579	543	543	431	584	558	645	600	765	755	533	488
19	614	581	626	537	618	585	630	615	768	749	578	534
20	660	617	621	614	612	603	633	473	786	750	623	579
21	671	660	614	596	599	539	443	363	776	708	635	624
22	671	666	624	597	590	552	431	672	359	645	633	633
23	686	671	638	624	599	588	554	525	324	246	669	642
24	714	686	654	639	605	593	550	342	410	270	651	639
25	716	698	671	654	606	593	512	411	429	194	665	642
26	710	446	681	672	---	---	537	506	311	194	665	663
27	479	432	672	572	638	618	579	537	296	279	---	---
28	587	464	596	563	671	641	612	581	347	290	---	---
29	633	588	629	599	689	665	632	615	---	---	---	---
30	663	636	647	633	696	686	641	629	---	---	---	---
31	696	662	---	---	689	333	660	639	---	---	---	---
MONTH	848	303	765	431	696	291	735	300	786	194	669	288
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	674	657	554	435	716	675	545	480	467	443
2	---	---	677	665	618	557	731	654	566	542	483	465
3	530	516	684	617	632	620	653	575	611	566	501	479
4	512	470	612	461	632	618	647	575	590	549	500	464
5	515	474	492	461	659	635	651	639	602	579	540	491
6	512	488	563	495	659	650	669	656	618	603	566	543
7	576	518	585	561	663	654	662	654	608	563	587	569
8	585	575	614	575	656	408	675	659	579	552	600	588
9	588	555	629	611	548	428	698	677	603	575	612	602
10	560	486	633	623	563	524	714	698	629	605	645	608
11	477	465	647	624	590	552	707	698	626	503	671	647
12	521	482	650	641	620	588	696	672	525	347	696	672
13	525	500	669	647	615	606	666	566	432	339	699	678
14	464	383	680	671	642	612	629	576	543	440	674	195
15	441	381	674	651	665	641	663	629	590	545	234	183
16	386	354	662	651	686	666	696	666	623	593	258	237
17	386	359	668	657	692	684	699	692	654	624	291	258
18	405	387	686	669	699	692	717	692	677	654	381	296
19	407	396	698	684	708	699	723	711	674	414	462	387
20	438	413	708	698	717	699	731	723	566	426	471	381
21	431	423	714	705	701	657	740	729	537	279	381	291
22	434	425	722	713	677	621	777	737	438	383	342	314
23	429	423	723	708	735	626	768	747	510	426	378	342
24	485	435	717	707	615	540	807	773	483	429	413	378
25	528	486	719	699	650	579	785	554	453	312	426	414
26	591	531	696	678	666	653	533	407	384	278	434	425
27	611	590	696	578	683	663	491	477	341	264	456	435
28	639	611	617	585	705	684	503	483	398	336	471	257
29	657	639	621	606	714	702	515	332	489	390	378	287
30	668	648	630	615	705	698	378	327	497	380	413	350
31	---	---	639	447	---	---	474	354	440	392	---	---
MONTH	668	354	723	447	735	408	807	327	677	264	699	183
YEAR	848	183										

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	---	---	16.5	14.0	20.0	18.0	21.5	20.0	26.5	25.0	23.5	22.5
2	---	---	17.5	14.5	21.0	19.5	22.5	20.0	26.0	25.0	23.0	22.5
3	12.0	11.5	17.5	16.5	21.5	20.0	23.5	21.0	25.5	24.0	24.0	22.5
4	11.5	10.0	17.0	14.0	22.0	19.5	23.0	22.0	26.0	24.0	24.0	22.5
5	10.0	9.5	15.5	12.5	23.0	20.5	23.0	20.5	26.0	24.5	23.5	23.0
6	9.5	8.0	17.0	14.0	24.0	21.5	23.5	20.5	26.5	24.5	24.5	22.5
7	8.5	8.0	19.0	15.5	24.0	22.5	23.0	21.0	26.5	25.0	24.5	23.0
8	9.5	8.0	20.5	17.5	23.5	21.5	23.5	21.5	27.0	25.5	23.5	21.5
9	9.5	8.0	21.5	19.5	22.0	21.0	23.5	22.5	27.5	25.5	21.5	19.5
10	9.0	7.5	22.5	21.0	23.5	22.0	23.5	22.0	27.5	26.0	21.5	19.5
11	8.5	8.0	23.0	21.0	23.0	21.5	25.0	23.0	26.5	23.5	22.0	20.5
12	10.5	8.5	23.0	22.0	23.0	21.0	24.5	23.0	23.5	22.0	23.0	21.0
13	11.5	10.5	22.5	20.0	22.0	20.5	24.0	23.5	22.5	21.0	23.0	22.0
14	12.0	10.5	21.0	19.0	22.5	20.0	25.5	23.0	22.5	21.5	22.0	19.0
15	11.5	11.0	21.0	19.5	24.0	21.5	25.5	24.5	22.5	20.5	19.0	18.5
16	11.0	10.0	20.5	18.0	24.0	22.5	27.0	25.0	22.5	20.5	19.0	18.5
17	11.0	9.5	20.5	18.0	24.0	22.5	27.0	25.5	22.0	20.0	19.0	18.5
18	12.0	10.5	21.0	18.0	24.0	23.0	27.0	25.0	22.5	21.0	19.5	19.0
19	12.5	11.0	21.5	19.0	24.5	22.5	26.5	24.0	23.0	21.5	20.0	19.0
20	13.0	11.5	22.5	20.5	25.0	23.0	25.5	24.5	23.5	22.5	19.0	18.0
21	14.0	12.5	22.5	21.5	24.5	23.0	26.5	24.5	23.0	21.0	19.0	18.0
22	14.0	13.5	22.0	20.5	24.5	22.5	27.5	26.0	22.5	21.5	18.0	17.0
23	13.5	13.0	21.5	20.0	24.5	23.5	26.5	25.5	23.0	22.5	18.0	16.5
24	15.0	13.0	20.0	18.0	24.0	21.5	26.5	25.5	23.0	22.5	18.5	17.0
25	16.0	14.5	18.0	15.0	23.0	20.5	26.5	24.5	22.5	21.5	18.5	17.5
26	16.5	15.5	16.0	14.0	23.0	20.5	24.5	24.0	22.0	20.5	19.0	18.0
27	17.0	15.5	16.0	14.5	23.5	21.5	25.0	24.0	21.5	20.5	18.5	17.5
28	16.5	15.0	17.0	15.0	24.5	22.5	25.0	24.0	22.5	21.5	18.0	17.5
29	15.5	13.5	18.5	16.0	24.0	22.5	24.0	23.0	22.5	22.0	18.5	17.5
30	16.0	14.0	20.0	17.0	22.5	21.0	24.0	22.5	22.5	22.0	18.5	18.0
31	---	---	19.5	18.5	---	---	25.5	23.5	23.0	22.0	---	---
MONTH	17.0	7.5	23.0	12.5	25.0	18.0	27.5	20.0	27.5	20.0	24.5	16.5
YEAR	27.5	.0										

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	9.1	6.1	8.3	7.9	9.5	8.9	9.5	9.0	11.1	10.9	11.8	11.4
2	8.7	6.1	8.1	7.9	9.5	8.9	9.5	8.9	11.3	10.9	12.0	11.7
3	7.9	6.7	8.1	7.8	9.5	8.7	---	---	11.1	10.7	12.1	11.8
4	7.0	5.2	8.1	7.7	9.4	9.0	---	---	10.9	10.5	12.0	11.4
5	8.6	6.2	8.1	7.4	9.2	8.7	---	---	11.0	10.5	11.5	11.3
6	7.6	6.0	8.3	7.9	9.7	9.2	---	---	10.9	10.4	11.6	11.3
7	7.3	6.2	8.3	7.4	10.6	9.4	---	---	11.3	10.7	11.5	11.1
8	7.3	6.1	8.6	7.3	9.5	9.4	10.4	10.2	11.3	10.9	11.2	11.0
9	7.8	6.3	8.6	8.2	---	---	10.4	9.9	11.3	10.9	11.4	11.0
10	8.7	7.0	9.0	8.5	---	---	10.4	9.7	11.1	10.8	11.5	11.3
11	8.0	6.9	9.1	8.7	---	---	10.4	9.8	11.2	10.6	11.9	11.2
12	6.9	6.2	8.9	8.0	---	---	10.0	9.6	11.1	10.7	12.1	11.6
13	7.6	6.5	9.1	8.5	---	---	9.7	9.2	10.9	10.6	11.7	11.4
14	7.9	7.4	9.2	8.5	10.9	10.4	9.7	9.1	11.1	10.6	11.3	11.1
15	7.9	7.5	8.6	7.9	10.9	10.5	10.0	9.5	11.0	10.5	11.2	11.0
16	8.0	7.1	9.2	8.6	10.6	10.2	9.9	9.7	11.2	10.5	11.3	11.1
17	8.4	7.6	9.1	8.5	10.2	9.7	10.1	9.6	11.2	10.7	11.2	10.7
18	8.2	7.5	9.1	8.8	9.9	9.6	10.3	9.9	11.0	10.7	10.7	9.8
19	8.1	7.8	9.1	8.5	9.6	9.2	10.4	10.1	11.0	10.6	9.9	9.1
20	7.9	7.6	9.6	8.4	9.3	8.9	10.4	9.9	11.0	10.6	9.2	8.6
21	8.0	7.6	9.7	8.7	9.2	8.8	10.2	10.0	11.2	10.4	8.9	8.7
22	7.9	7.6	9.5	8.4	9.6	9.1	10.1	9.9	12.1	11.2	8.8	8.5
23	7.9	7.5	8.7	7.9	9.5	9.3	10.2	9.8	12.4	12.0	8.7	8.3
24	7.8	7.3	8.5	7.8	9.4	9.1	10.1	9.4	11.9	11.6	8.8	8.3
25	8.1	7.7	8.9	8.0	9.3	9.1	12.5	9.9	12.0	11.6	9.0	8.7
26	8.0	7.4	8.8	8.3	---	---	11.9	11.6	12.1	11.9	9.0	8.9
27	8.3	8.0	9.2	8.6	9.7	9.3	11.7	10.9	12.0	11.8	---	---
28	8.3	8.0	9.3	8.7	9.7	9.4	11.1	10.7	11.9	11.4	---	---
29	8.5	8.0	9.4	8.7	9.7	9.3	11.1	10.8	---	---	---	---
30	8.5	8.2	9.4	9.0	9.6	9.2	11.3	10.9	---	---	---	---
31	8.3	8.0	---	---	9.5	9.0	11.1	10.8	---	---	---	---
MONTH	9.1	5.2	9.7	7.3	10.9	8.7	12.5	8.9	12.4	10.4	12.1	8.3

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	---	---	---	---	7.6	7.0	---	---	7.3	6.8	7.2	6.6
2	---	---	10.2	8.4	7.0	6.4	---	---	7.5	6.8	7.1	6.6
3	9.0	8.6	9.9	9.0	7.0	6.6	7.7	7.1	7.2	5.8	7.4	6.6
4	9.3	8.6	9.7	9.0	7.3	6.6	7.8	6.8	7.4	5.9	7.3	6.6
5	9.2	8.2	9.8	8.6	7.2	6.6	9.0	7.4	7.5	6.8	7.0	6.3
6	9.4	8.5	8.8	8.1	7.3	6.6	9.6	7.7	8.2	6.4	7.0	6.6
7	9.5	9.0	9.5	8.1	7.0	6.5	11.0	7.6	7.2	6.3	7.2	6.3
8	9.3	8.7	9.8	7.4	6.9	6.3	12.3	8.7	7.3	6.0	7.4	6.6
9	9.0	8.3	9.7	8.1	6.7	6.4	10.5	7.9	7.2	6.4	7.9	7.0
10	9.0	8.5	11.1	7.4	6.7	6.4	10.1	7.2	7.2	5.9	8.1	7.2
11	10.2	8.8	11.3	8.0	6.9	6.6	11.2	7.8	7.3	6.4	8.1	7.1
12	9.9	8.9	9.9	7.3	7.3	6.6	8.8	6.0	6.8	6.1	7.6	6.8
13	8.8	8.5	8.9	6.5	7.4	7.1	7.1	6.0	7.2	6.4	7.5	6.3
14	9.4	7.6	10.2	6.6	7.7	7.2	7.6	6.4	7.2	6.9	7.9	6.7
15	9.1	7.9	11.0	6.5	7.6	7.1	7.8	6.2	7.9	6.9	6.9	6.2
16	8.9	8.3	13.9	8.6	7.5	6.5	8.4	5.9	8.0	7.4	6.2	5.8
17	8.7	8.3	11.2	8.2	8.1	6.5	10.4	6.5	8.0	7.1	5.9	5.7
18	8.6	8.2	11.5	8.3	8.6	6.7	12.7	6.5	7.8	6.9	6.1	5.6
19	8.6	7.7	11.2	7.9	9.0	7.0	12.6	8.0	7.6	6.9	7.0	5.9
20	---	---	10.7	7.7	11.2	7.1	11.8	7.7	6.8	5.9	8.0	7.1
21	---	---	11.5	7.7	9.7	7.5	11.1	7.9	7.7	6.4	8.6	7.7
22	---	---	10.8	7.6	9.2	6.8	---	---	6.8	5.2	8.7	8.1
23	---	---	10.2	7.5	7.0	5.8	13.4	7.9	7.1	6.3	8.7	8.3
24	---	---	7.5	6.5	6.4	5.5	11.1	6.7	7.0	6.5	8.7	8.4
25	---	---	7.6	6.7	7.5	6.2	9.5	6.3	6.8	6.0	8.6	8.4
26	---	---	8.3	7.4	8.5	6.8	6.4	5.5	7.8	6.7	8.6	8.4
27	---	---	8.4	7.5	9.4	7.0	6.6	5.9	7.8	7.3	8.6	8.2
28	---	---	8.1	7.3	9.1	7.3	7.0	6.0	7.5	7.0	8.8	8.0
29	---	---	8.1	7.5	8.3	7.2	7.0	6.2	7.4	6.8	8.1	7.1
30	---	---	7.8	7.5	7.8	6.7	6.7	5.9	6.8	5.9	7.8	7.2
31	---	---	7.7	7.2	---	---	7.1	6.7	7.1	6.6	---	---
MONTH	10.2	7.6	13.9	6.5	11.2	5.5	13.4	5.5	8.2	5.2	8.8	5.6
YEAR	13.9	5.2										

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 (6.4 km) north of Dublin. DRAINAGE AREA, 979 mi² (2,536 km²). 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.
- Reservoir is formed by concrete dam; dam completed and storage began in 1924. Usable capacity, 14,500 acre-ft (17.9 hm³), between elevations, 789.5 ft (240.64 m) (sill of outlet gate), and 845 ft (258 m) (crest of spillway), based on survey made in 1942. Flashboards installed May 8, 1945, additional capacity, 2,480 acre-ft (3.06 hm³), between elevations 845 ft (258 m) (crest of spillway), and 847.9 ft (258.44 m) (crest of flashboards). Dead storage below elevation 789.5 ft (240.64 m), 55 acre-ft (67,800 m³). 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 (29.9 hm³) Jan. 22, 1959, elevation, 854.40 ft (260.421 m); minimum, 43 acre-ft (53,000 m³) Feb. 11, 1945, elevation, 791.97 ft (241.392 m).
- EXTREMES FOR CURRENT YEAR: Maximum contents, 20,420 acre-ft (25.2 hm³) Apr. 14, elevation, 851.20 ft (259,446 m); minimum, 12,860 acre-ft (15.9 hm³) Nov. 17, elevation, 842.78 ft (256.880 m).
- 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 (10.0 km) northwest of State Capitol building in Columbus, and 6.5 mi (10.5 km) upstream from Olentangy River. DRAINAGE AREA, 1,044 mi² (2,704 km²). 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 (207.380 m) National Geodetic Vertical Datum, adjustment of 1929 (levels by city of Columbus). Prior to Oct. 4, 1940 nonrecording gage at same site and datum.
- Reservoir formed by concrete dam; dam completed and storage began in 1905. Usable capacity, 3,700 acre-ft (4.56 hm³) between elevations, 735.4 ft (224.15 m) (lowest outlets), and 753.4 ft (229.64 m) (crest of spillway), based on survey made in 1935. Flashboards installed July 28, 1945, additional capacity, 750 acre-ft (925,000 m³), between elevations, 753.4 ft (229.64 m) (crest of spillway) and 755.6 ft (230.31 m) (crest of flashboards). Dead storage below elevation, 735.4 ft (224.15 m), 239 acre-ft (295,000 m³). 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 (9.24 hm³) Jan. 22, 1959, elevation, 763.91 ft (232.840 m); minimum, 38 acre-ft (46,900 m³) Jan. 24, 1945, elevation, 735.78 ft (224.266 m).
- EXTREMES FOR CURRENT YEAR: Maximum contents, 5,900 acre-ft (7.27 hm³) Mar. 5, elevation, 759.61 ft (231.530 m); minimum, 3,520 acre-ft (4.34 hm³) Nov. 6, elevation, 752.89 ft (229.481 m).
- 03225000 DELAWARE LAKE NEAR DELAWARE.--Lat 40°21'31", long 83°04'10", in T.5 N., R.19 W., Delaware County, Hydrologic Unit 05060001, in gate house of dam on Olentangy River, 4.0 mi (6.4 km) north of Delaware. DRAINAGE AREA, 386 mi² (1,000 km²). PERIOD OF RECORD, March 1951 to current year. Prior to October 1971 published as Delaware Reservoir. GAGE, water-stage recorder. Datum of gage is Sandy Hook datum (levels by Corps of Engineers).
- Lake is formed by earthfill dam with concrete spillway; storage began Mar. 20, 1951. Usable capacity 24,500 acre-ft (30.2 hm³) between elevation, 884.0 ft (269.44 m) (lowest outlet) and 922.0 ft (281.03 m) (crest of spillway). Additional flood-control storage above elevation 922.0 ft (281.03 m) by taintor gates on spillway, 107,500 acre-ft (133 hm³). Normal conservation pool storage 8,400 acre-ft (10.4 hm³), elevation, 910.0 ft (277.37 m) winter, and 14,000 acre-ft (17.3 hm³), elevation, 915.0 ft (278.89 m) summer. No dead storage. Figures given herein represent usable contents. Lake is used primarily for flood control although the conservation pool is operated to augment low flow for water supply, pollution abatement, and for recreation and wildlife conservation purposes. Outflow is controlled mostly by operation of gates in sluiceways through dam, but above spillway level, taintor gates on spillway can be used. Capacity curve furnished by Corps of Engineers.
- EXTREMES FOR PERIOD OF RECORD: Maximum contents, 113,000 acre-ft (139 hm³) Jan. 25, 1959, elevation, 944.75 ft (287.960 m); minimum, 2,070 acre-ft (2.55 hm³) Feb. 13, 1970, elevation, 899.43 ft (274.146 m).
- EXTREMES FOR CURRENT YEAR: Maximum contents, 69,730 acre-ft (86.0 hm³) Mar. 7, elevation, 937.56 ft (285.768 m); minimum, 8,360 acre-ft (10.3 hm³) Jan. 19, Feb. 7, Mar. 22, elevation, 909.96 ft (277.356 m).
- 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 (0.8 km) northeast of Central College, and 12 mi (19 km) northeast of Columbus. DRAINAGE AREA, 190 mi² (492 km²). PERIOD OF RECORD, March 1955 to current year. 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.
- Reservoir formed by earthfill dam with concrete spillway; dam completed in 1954 and storage began in March 1955. Usable capacity, 60,130 acre-ft (74.1 hm³) between elevations 830.0 ft (252.98 m) (lowest outlet), and 890.0 ft (271.27 m) (crest of spillway). Additional flood-control storage above elevation 890.0 ft (271.27 m) by bascule gates installed in May 1970, 25,750 acre-ft (31.7 hm³). Dead storage below elevation 830.0 ft (252.98 m), 214 acre-ft (264,000 m³). 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, 83,258 acre-ft (103 hm³), revised, Feb. 24, 1975, elevation, 897.26 ft (273.485 m); minimum, 19,010 acre-ft (23.4 hm³) Mar. 1, 1964, elevation, 868.58 ft (264.743 m).
- EXTREMES FOR CURRENT YEAR: Maximum contents, 80,710 acre-ft (99.5 hm³) Sept. 14, elevation, 896.54 ft (273.265 m); minimum, 30,870 acre-ft (38.1 hm³) Dec. 3, elevation, 877.10 ft (267.341 m).
- REVISIONS.--The maximum contents for the water year 1975 has been revised to 83,258 acre-ft (103 hm³) Feb. 24, 1975, elevation 897.26 ft (273.485 m) superseding figure published in the report for 1975.

RESERVOIRS IN SCIOTO RIVER BASIN--Continued

03228804 ALUM CREEK LAKE NEAR WORTHINGTON.--Lat 40°11'03", long 82°57'50", Delaware County, Hydrologic Unit 05060001, in outlet structure of dam on Alum Creek, 180 ft (54.9 m) upstream from Lewis Center Road, 0.3 mi (0.48 km) west of Africa, 4.2 mi (6.84 km) northwest of Westerville, and 7.0 mi (11.3 km) north of Worthington. DRAINAGE AREA, 122 mi² (316 km²). PERIOD OF RECORD, January 1975 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Lake formed by earthfill dam with concrete gravity channel section; dam completed and storage began in 1974, station established Jan. 16, 1975. Usable capacity, 48,940 acre-ft (60.3 hm³) between elevation 835.0 ft (254.51 m) (lowest outlet) and 878.0 ft (267.61 m) (crest of spillway). Additional flood-control storage above 878.0 ft (267.61 m) by taintor gates on spillway 85,000 acre-ft (104.8 hm³). Normal conservation pool storage 71,120 acre-ft (87.7 hm³) elevation 885.0 ft (269.75 m) winter, and 80,860 acre-ft (99.7 hm³) elevation 888.0 ft (270.66 m) summer. Dead storage 879 acre-ft (1.08 hm³) below 835.0 ft (254.51 m). Figures given herewith represent usable contents. Lake is used for flood control, recreation, water supply, and wildlife conservation purposes. Outflow is controlled mostly by operation of gates in sluiceway through dam, but above spillway level, taintor gates can be used. Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 96,750 acre-ft (119 hm³) Sept. 17, 1979, elevation, 892.40 ft (272.004 m); minimum, 5,860 acre-ft (7.23 hm³) Jan. 25, 1975, elevation, 849.59 ft (258.955 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 96,750 acre-ft (119 hm³) Sept. 17, elevation, 892.40 ft (272.004 m); minimum, 70,880 acre-ft (87.4 hm³) Dec. 1, elevation, 884.92 ft (269.724 m).

03230890 DEER CREEK LAKE NEAR PANCOASTBURG.--Lat 39°37'20", long 83°12'58", Pickaway County, Hydrologic Unit 05060002, in outlet tower of dam on Deer Creek, 1,000 ft (305 m) upstream from Crownover Mill Road, and 2.8 mi (4.5 km) east of Pancoastburg. DRAINAGE AREA, 277 mi² (717 km²). PERIOD OF RECORD, April 1968 to current year. Prior to October 1971 published as Deer Creek Reservoir. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Lake formed by earthfill dam with concrete spillway; dam completed in 1968 and storage began April 1, 1968. Usable capacity 26,440 acre-ft (32.6 hm³) between elevation 772.0 ft (235.31 m) (lowest outlet) and 814.0 ft (248.11 m) crest of spillway. Additional flood control storage above 814.0 ft (248.11 m) by taintor gates on spillway 76,100 acre-ft (93.8 hm³). Normal conservation pool storage 6,420 acre-ft (7.92 hm³), elevation, 796.0 ft (242.62 m) winter, and 21,030 acre-ft (25.9 hm³), elevation, 810.0 ft (246.89 m) summer. Dead storage 2 acre-ft (2.470 m³) below 772.0 ft (235.31 m). Figures given herein represent usable contents. Lake is used primarily for flood control although the conservation pool is operated to augment low flow for water supply, pollution abatement and for recreation and wildlife conservation purposes. Outflow is controlled mostly by operation of gates in sluiceways through dam, but above spillway level, taintor gates on spillway can be used. Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 71,830 acre-ft (88.6 hm³) May 31, 1968, elevation, 835.25 ft (254.584 m); minimum, 1,140 acre-ft (1.41 hm³) Jan. 8, 1970, elevation, 784.75 ft (239.192 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 59,170 acre-ft (73.0 hm³) Sept. 19, elevation, 830.73 ft (253.207 m); minimum, 6,400 acre-ft (7.89 hm³) Mar. 29, elevation, 795.98 ft (242.615 m).

03232460 PAINT CREEK LAKE NEAR BAINBRIDGE.--Lat 39°15'09", long 83°20'59", Highland County, Hydrologic Unit 05060003, in outlet structure of dam on Paint Creek, 1.9 mi (3.1 km) upstream from Rocky Fork, and 4.5 mi (7.2 km) northwest of Bainbridge. DRAINAGE AREA, 570 mi² (1,476 km²). PERIOD OF RECORD, April 1974 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

Lake is formed by earth and rock embankment dam with concrete spillway. Dam completed in 1974 and storage began April 8, 1974. Usable capacity 37,420 acre-ft (46.1 hm³) between elevation 750.0 ft (228.60 m) (lowest outlet), and 810.0 ft (246.89 m) (crest of spillway). Additional flood control storage above elevation 810.0 ft (246.89 m) by three taintor gates on spillway, 107,600 acre-ft (132.67 hm³). Seasonal pool storage 20,310 acre-ft (25.0 hm³) elevation, 798.0 ft (243.23 m). Dead storage 5 acre-ft (6,170 m³) below elevation 750.0 ft (228.60 m). Figures given herein represent usable contents. Lake is used primarily for flood control although seasonal pool is used for water quality control, water supply, recreation and wildlife conservation purposes. Outflow is controlled mostly by operation of gates in sluiceway through dam but above spillway level taintor gates on spillway can be used. Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 111,900 acre-ft (138 hm³) Feb. 28, 1979, elevation, 837.37 ft (255.230 m); minimum since initial filling was completed on May 6, 1974, 8,930 acre-ft (11.0 hm³) Mar. 28, 1975, elevation, 786.03 ft (239.582 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 111,900 acre-ft (138 hm³) Feb. 28 elevation, 837.37 ft (255.230 m); minimum, 10,050 acre-ft (12.4 hm³) Dec. 20 elevation, 787.54 ft (240.042 m).

SCIOTO RIVER BASIN

RESERVOIRS IN SCIOTO RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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									
Sept. 30.....	844.41	14060	--	755.36	4360	--	911.55	9950	--
Oct. 31.....	844.49	14120	+60	753.96	3890	-470	911.57	9970	+20
Nov. 30.....	843.30	13240	-880	754.92	4210	+320	910.70	9100	-870
Dec. 31.....	848.34	17400	+4160	756.21	4650	+440	910.39	8790	-310
CAL YR 1978	--	--	+3340	--	--	+290	--	--	-320
03221500 GRIGGS RESERVOIR									
Jan. 31.....	848.15	17210	-190	755.73	4490	-160	910.06	8460	-330
Feb. 28.....	849.30	18370	+1160	757.02	4940	+450	931.35	46050	+37590
Mar. 31.....	848.54	17600	-770	756.02	4590	-350	912.48	10980	-35070
Apr. 30.....	848.36	17420	-180	755.73	4490	-100	915.14	14180	+3200
May 31.....	848.59	17650	+230	756.11	4620	+130	915.71	14920	+740
June 30.....	848.25	17310	-340	755.66	4470	-150	915.83	15080	+160
July 31.....	848.31	17370	+60	755.77	4500	+30	914.99	13990	-1090
Aug. 31.....	849.21	18270	+900	756.56	4780	+280	915.31	14400	+410
Sept. 30.....	848.27	17330	-940	755.77	4500	-280	915.20	14260	-140
WTR YR 1979	--	--	+3270	--	--	+140	--	--	+4310
03228400 HOOVER RESERVOIR									
Sept. 30.....	883.96	44580	--	887.20	78180	--	809.85	20840	--
Oct. 31.....	880.48	37100	-7480	886.01	74300	-3880	810.33	21450	+610
Nov. 30.....	877.32	31260	-5840	885.04	71250	-3050	803.22	13090	-8360
Dec. 31.....	882.00	40180	+8920	885.25	71910	+660	796.75	6990	-6100
CAL YR 1978	--	--	-4400	--	--	-6270	--	--	+410
Jan. 31.....	887.05	52310	+12130	884.98	71060	-850	796.29	6640	-350
Feb. 28.....	893.45	70110	+17800	890.67	90260	+19200	822.94	41430	+34790
Mar. 31.....	892.75	67910	-2200	886.64	76350	-13910	796.76	6990	-34440
Apr. 30.....	892.78	68000	+90	888.12	81270	+4920	810.06	21100	+14110
May 31.....	891.22	63480	-4520	888.33	81990	+720	810.26	21360	+260
June 30.....	890.87	62510	-970	888.34	82020	+30	810.68	21910	+550
July 31.....	889.65	59190	-3320	888.28	81820	-200	811.81	23400	+1490
Aug. 31.....	891.97	65580	+6390	889.54	86200	+4380	814.46	27110	+3710
Sept. 30.....	893.22	69370	+3790	888.59	82880	-3320	818.54	33460	+6350
WTR YR 1979	--	--	+24790	--	--	+4700	--	--	+12620
03232460 PAINT CREEK LAKE									
Sept. 30.....	797.81	20090	--						
Oct. 31.....	797.59	19830	-260						
Nov. 30.....	787.85	10290	-9540						
Dec. 31.....	789.52	11660	+1370						
CAL YR 1978	--	--	+1300						
Jan. 31.....	789.82	11910	+250						
Feb. 28.....	836.93	110150	+98240						
Mar. 31.....	788.23	10590	-99560						
Apr. 30.....	791.49	13410	+2820						
May 31.....	798.80	21270	+7860						
June 30.....	798.72	21180	-90						
July 31.....	798.68	21130	-50						
Aug. 31.....	798.69	21140	+10						
Sept. 30.....	803.12	26870	+5730						
WTR YR 1979	--	--	+6780						

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 (0.5 km) downstream from Brown Run, 0.3 mi (0.5 km) upstream from Tucker Run, 0.7 mi (1.1 km) upstream from bridge on U.S. Highway 52 at McGaw, 2.7 mi (4.3 km) northeast of Buena Vista, and 3.2 mi (5.1 km) upstream from mouth.

DRAINAGE AREA.--12.2 mi² (31.6 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 543.41 ft (165.631 m) National Geodetic Vertical Datum of 1929. Ohio Department of Highways bench mark. Prior to July 21, 1972 at site 0.7 mi (1.1 km) downstream at datum 23.41 ft (7.135 m) lower.

REMARKS.--Records fair except those for winter periods which are poor.

AVERAGE DISCHARGE.--16 years, 14.4 ft³/s (0.408 m³/s), 16.03 in/yr (407 mm/yr)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,500 ft³/s (99.1 m³/s) Mar. 4, 1964, gage height, 9.7 ft (2.96 m), in gage well, 10.2 ft (3.11 m), 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.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 3, 1960 reached a stage of 11.62 ft (3.542 m), discharge, 7,230 ft³/s (205 m³/s), on basis of contracted-opening and flow over road measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft³/s (12.7 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 3	1430	635 18.0	3.55 1.082	June 21	2200	610 17.3	3.50 1.067
Dec. 4	0315	*2210 62.6	*5.60 1.707	July 27	1045	1100 31.2	4.32 1.317
Dec. 20	2145	1060 30.0	4.27 1.301	Aug. 20	2345	1290 36.5	4.58 1.396
Jan. 1	1515	524 14.8	3.33 1.015	Sept. 14	0615	469 13.3	3.20 0.975
Feb. 25	1045	1160 32.9	4.41 1.344	Sept. 21	1400	2000 56.6	5.40 1.646
June 8	0915	491 13.9	3.25 0.991	Sept. 22	1015	708 20.1	3.69 1.125
June 21	0700	1280 36.2	4.57 1.393				

Minimum discharge, 0.58 ft³/s (0.016 m³/s) Oct. 9, 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.69	2.4	8.4	189	8.0	29	135	4.2	8.9	16	14	11
2	.69	2.0	6.4	105	6.2	22	249	3.8	5.6	6.9	8.4	8.4
3	.69	1.9	189	42	5.6	21	75	4.9	4.2	3.5	4.9	6.4
4	.81	1.8	371	27	4.8	20	40	14	3.2	7.4	2.9	4.9
5	.75	1.6	55	20	4.3	17	23	40	2.7	9.4	2.2	4.2
6	.75	1.5	26	17	4.0	16	17	27	2.0	4.9	1.8	3.5
7	.69	1.5	18	21	3.7	14	13	21	2.0	3.2	1.5	2.9
8	.63	1.5	630	21	3.4	13	13	16	192	2.4	1.3	2.2
9	.63	1.3	344	15	3.2	11	19	12	58	2.4	1.3	1.8
10	.58	1.3	74	15	3.0	10	19	10	29	2.4	1.3	1.6
11	.58	1.2	36	12	2.9	9.4	19	8.4	28	2.0	106	1.5
12	.88	1.2	26	12	2.8	7.8	19	6.9	16	26	59	1.3
13	2.0	1.2	21	13	2.8	7.4	28	5.6	6.4	87	21	1.5
14	10	1.1	17	81	2.7	8.4	65	4.9	6.0	73	8.9	100
15	21	13	15	39	5.2	6.9	41	4.2	4.2	26	4.9	26
16	7.3	38	13	28	100	5.6	27	3.2	3.5	16	2.9	12
17	3.4	72	12	47	35	5.6	20	2.7	3.2	8.4	2.0	6.0
18	2.2	55	10	55	24	5.6	17	2.2	2.7	5.6	1.6	3.8
19	1.8	20	10	36	20	5.6	15	2.0	2.9	3.5	2.7	2.9
20	1.5	10	201	98	15	5.6	13	1.8	11	2.7	83	2.2
21	1.2	6.8	178	149	67	5.2	11	1.8	394	2.2	211	327
22	1.0	5.2	50	59	128	4.9	9.4	1.5	115	2.0	46	226
23	.95	6.0	29	39	167	6.0	8.9	1.6	77	2.4	43	63
24	.95	8.9	25	65	122	11	7.8	3.2	31	3.8	128	26
25	.95	7.3	25	46	414	12	7.4	2.7	19	6.0	105	14
26	17	18	20	31	142	11	7.4	4.5	10	101	110	8.9
27	32	149	16	25	56	9.4	6.9	4.9	5.6	375	94	6.4
28	10	43	13	20	38	8.9	5.6	4.9	3.5	67	45	41
29	5.6	23	12	15	---	9.4	5.2	3.2	2.9	31	26	37
30	3.7	13	13	13	---	8.4	4.9	2.4	8.9	17	21	23
31	2.7	---	65	10	---	63	---	6.4	---	13	16	---
TOTAL	133.62	509.7	2528.8	1365	1390.6	390.1	941.5	231.9	1058.4	929.1	1176.6	976.4
MEAN	4.31	17.0	81.6	44.0	49.7	12.6	31.4	7.48	35.3	30.0	38.0	32.5
MAX	32	149	630	189	414	63	249	40	394	375	211	327
MIN	.58	1.1	6.4	10	2.7	4.9	4.9	1.5	2.0	2.0	1.3	1.3
CFSM	.35	1.39	6.69	3.61	4.07	1.03	2.57	.61	2.89	2.46	3.12	2.66
IN.	.41	1.55	7.71	4.16	4.24	1.19	2.87	.71	3.23	2.83	3.59	2.98

CAL YR 1978 TOTAL 8544.88 MEAN 23.4 MAX 630 MIN .28 CFSM 1.92 IN 26.05
WTR YR 1979 TOTAL 11631.72 MEAN 31.9 MAX 630 MIN .58 CFSM 2.62 IN 35.46

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.--

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

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

INSTRUMENTATION.--Water temperature recorder since July 1972.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 36.0°C July 20, 21, 1977; minimum, 0.0°C on several days during winter period in 1973, 1978, and 1979.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum, 28.5°C Aug. 9; minimum recorded, 0.0°C Dec. 11.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT									
12...	1200	.88	125	6.5	14.0	9.7	93	900	24
NOV									
02...	1240	4.4	95	6.7	11.5	10.4	94	800	36
DEC									
13...	1300	18	64	6.3	.5	12.7	88	70	14
JAN									
10...	1230	15	80	6.1	1.5	14.5	100	70	11
FEB									
21...	1300	37	72	6.5	1.0	13.6	96	430	120
MAR									
13...	1155	6.9	88	6.5	5.5	13.5	110	K18	K1
APR									
17...	1200	21	80	6.8	12.0	10.6	98	39	K9
MAY									
17...	1200	2.7	105	6.8	16.0	10.5	100	170	E1
JUN									
13...	1300	8.0	105	7.0	17.5	9.8	100	580	280
JUL									
11...	1400	2.0	120	6.6	23.0	9.8	110	270	K13
AUG									
14...	1300	9.0	110	6.9	19.0	8.8	94	1300	80
SEP									
05...	1130	3.7	75	6.6	22.5	8.2	93	390	32

DATE	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L 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)	ALKA- LITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)
OCT									
12...	520	44	23	7.8	5.9	3.5	2.1	21	--
NOV									
02...	80	33	18	5.8	4.5	2.9	1.8	15	--
DEC									
13...	28	25	15	4.0	3.7	2.1	1.7	10	--
JAN									
10...	10	30	21	4.8	4.4	2.4	1.4	9	--
FEB									
21...	350	27	18	4.3	4.0	2.9	1.4	9	--
MAR									
13...	K9	31	21	4.9	4.6	2.7	1.5	10	--
APR									
17...	K15	28	16	4.4	4.1	2.7	1.7	12	--
MAY									
17...	130	36	20	5.8	5.2	3.6	2.0	16	--
JUN									
13...	390	35	19	5.8	4.9	3.2	1.9	16	--
JUL									
11...	58	36	18	6.3	5.0	3.3	2.1	18	--
AUG									
14...	310	31	15	5.4	4.3	2.8	2.0	16	3.9
SEP									
05...	290	35	20	6.0	4.8	2.9	2.1	15	7.4

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	CYANIDE TOTAL (MG/L AS CN)
OCT									
12...	30	2.4	.1	9.0	69	73	.23	.00	.00
NOV									
02...	23	1.3	.1	9.4	62	58	.14	.00	--
DEC									
13...	21	1.7	.0	9.9	59	50	.07	.00	--
JAN									
10...	24	1.2	.0	9.8	55	53	.27	.00	--
FEB									
21...	26	1.3	.0	9.0	56	54	.32	.00	--
MAR									
13...	29	1.6	.0	9.4	62	62	.24	.00	--
APR									
17...	27	1.3	.0	10	63	58	.20	.01	.00
MAY									
17...	33	1.5	.0	10	73	71	.11	.00	--
JUN									
13...	30	1.8	.0	11	80	68	.31	.00	--
JUL									
11...	32	1.9	.0	10	68	71	.17	.00	--
AUG									
14...	24	1.4	.0	11	70	61	.25	.01	--
SEP									
05...	24	1.5	.0	11	88	61	.19	.00	--

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)
OCT									
12...	1200	.88	<.7	<.4	2.6	<.4	2.4	<.4	.01
NOV									
02...	1240	4.4	--	--	--	--	--	--	--
DEC									
13...	1300	18	--	--	--	--	--	--	--
JAN									
10...	1230	15	--	--	--	--	--	--	--
FEB									
21...	1300	37	--	--	--	--	--	--	--
MAR									
13...	1155	6.9	--	--	--	--	--	--	--
APR									
17...	1200	21	--	--	--	--	--	--	--
MAY									
17...	1200	2.7	--	--	--	--	--	--	--
JUN									
13...	1300	8.0	--	--	--	--	--	--	--
JUL									
11...	1400	2.0	--	--	--	--	--	--	--
AUG									
14...	1300	9.0	--	--	--	--	--	--	--
SEP									
05...	1130	3.7	--	--	--	--	--	--	--

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.0	14.5	---	---	3.0	1.5						
2	19.0	14.0	11.5	9.0	4.0	2.0						
3	19.0	13.0	12.0	8.0	6.0	3.0						
4	17.5	13.5	12.0	8.5	6.0	4.0						
5	17.0	12.0	12.0	8.5	4.0	3.0						
6	14.5	12.0	11.5	8.5	3.5	2.5						
7	15.0	11.0	10.0	9.0	4.0	3.0						
8	13.5	9.0	10.0	7.5	6.5	4.0						
9	13.5	8.0	8.0	6.5	5.0	2.5						
10	14.5	8.0	9.0	6.0	2.5	.5						
11	12.5	9.5	9.0	6.0	1.0	.0						
12	14.0	10.5	10.0	7.5	1.0	.5						
13	---	---	10.5	7.5	---	---						
14	---	---	8.5	7.5	---	---						
15	---	---	7.5	6.0	---	---						
16	---	---	6.5	6.0	---	---						
17	---	---	8.5	6.5	---	---						
18	---	---	7.5	6.5	---	---						
19	---	---	7.0	5.0	---	---						
20	---	---	5.5	4.0	---	---						
21	---	---	5.0	4.0	---	---						
22	---	---	6.0	4.0	---	---						
23	---	---	6.5	5.0	---	---						
24	---	---	6.0	4.0	---	---						
25	---	---	4.5	3.0	---	---						
26	---	---	4.0	3.0	---	---						
27	---	---	6.0	4.5	---	---						
28	---	---	6.0	3.5	---	---						
29	---	---	3.5	3.0	---	---						
30	---	---	4.0	3.0	---	---						
31	---	---	---	---	---	---						
MONTH	19.0	8.0	12.0	3.0	6.5	.0						
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	10.5	10.5	20.5	16.5	20.5	16.0	24.0	20.0	22.5	19.0
2	---	---	18.0	10.5	20.5	16.5	22.0	17.0	22.5	20.5	22.0	19.5
3	---	---	15.5	14.0	18.5	16.0	23.0	17.0	23.5	19.0	23.5	19.5
4	---	---	15.0	15.0	21.5	15.0	21.0	18.5	24.5	19.5	24.0	20.0
5	---	---	15.0	15.0	23.0	16.5	20.5	16.0	25.0	20.5	22.5	20.5
6	---	---	15.0	15.0	24.0	17.5	21.5	15.5	25.5	20.5	24.0	20.5
7	---	---	18.5	12.5	21.5	18.5	21.0	16.0	27.5	21.5	24.5	20.5
8	---	---	18.5	14.0	16.5	15.5	22.5	17.0	28.0	22.0	21.5	18.5
9	---	---	18.0	15.0	17.5	15.5	19.5	18.5	28.5	22.0	22.0	16.5
10	---	---	18.5	16.0	20.0	16.0	23.0	18.5	27.5	22.5	23.0	16.0
11	10.5	7.0	20.5	18.0	18.5	15.0	23.0	19.0	21.5	18.5	23.5	17.5
12	13.0	10.0	20.5	17.5	19.5	14.0	23.5	19.0	19.5	18.0	25.0	18.5
13	12.5	10.5	18.5	18.5	17.5	15.0	18.5	17.5	20.5	17.0	21.5	19.0
14	13.0	9.0	18.5	18.5	21.0	15.0	20.0	17.0	21.0	17.5	20.0	17.5
15	---	---	18.5	18.5	23.0	16.5	20.0	17.5	21.5	17.0	18.5	16.0
16	---	---	18.5	16.0	21.5	17.0	23.0	18.5	22.0	16.0	19.0	15.0
17	13.0	10.5	16.0	16.0	23.0	18.0	23.0	18.5	22.5	16.0	19.5	15.0
18	10.5	10.5	16.5	15.5	24.5	18.5	24.0	19.0	21.5	18.0	20.0	16.0
19	10.5	10.5	18.0	13.5	21.0	19.0	23.5	18.0	24.0	19.5	20.5	16.5
20	10.5	10.5	22.5	16.0	24.5	18.0	23.0	19.0	22.5	19.0	20.0	15.5
21	15.5	10.5	21.0	18.0	18.0	16.0	23.5	19.5	19.0	18.0	18.0	16.5
22	13.5	12.5	19.5	15.5	18.5	15.5	26.0	20.0	20.5	18.0	16.5	15.5
23	15.5	12.0	18.5	17.0	18.5	16.0	26.5	21.0	20.5	18.5	16.5	14.5
24	17.0	12.5	16.5	15.0	17.0	15.0	26.0	21.0	19.5	18.0	17.5	14.5
25	19.0	14.5	15.0	15.0	19.0	14.0	22.5	21.5	18.5	17.5	18.5	15.5
26	15.5	15.0	15.0	14.5	20.0	14.5	21.5	18.5	18.5	17.5	19.0	15.5
27	15.5	15.5	16.0	13.0	20.5	15.5	19.0	18.0	19.5	17.5	17.5	15.5
28	15.5	15.5	19.0	14.0	21.5	16.5	19.0	17.5	21.0	18.0	16.5	16.0
29	15.5	11.5	20.5	13.5	19.5	18.0	21.5	18.5	21.0	18.5	18.0	16.0
30	10.5	10.5	22.0	14.0	18.5	17.5	21.5	18.5	21.5	19.0	18.0	16.0
31	---	---	20.0	16.5	---	---	23.0	19.0	22.5	19.0	---	---
MONTH	19.0	7.0	22.5	10.5	24.5	14.0	26.5	15.5	28.5	16.0	25.0	14.5
YEAR	28.5	.0										

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

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

ANALYSES OF MINOR ELEMENTS

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)
OCT 12...	1200	.88	0	0	1	<10	2
NOV 02...	1240	4.4	--	--	--	--	--
DEC 13...	1300	18	--	--	--	--	--
JAN 10...	1230	15	--	--	--	--	--
FEB 21...	1300	37	--	--	--	--	--
MAR 13...	1155	6.9	--	--	--	--	--
APR 17...	1200	21	0	0	16	10	0
MAY 17...	1200	2.7	--	--	--	--	--
JUN 13...	1300	8.0	--	--	--	--	--
JUL 11...	1400	2.0	--	--	--	--	--
AUG 14...	1300	9.0	--	--	--	--	--
SEP 05...	1130	3.7	--	--	--	--	--

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
OCT 12...	5	0	<.5	0	0	0
NOV 02...	--	--	--	--	--	--
DEC 13...	--	--	--	--	--	--
JAN 10...	--	--	--	--	--	--
FEB 21...	--	--	--	--	--	--
MAR 13...	--	--	--	--	--	--
APR 17...	400	10	<.5	0	0	20
MAY 17...	--	--	--	--	--	--
JUN 13...	--	--	--	--	--	--
JUL 11...	--	--	--	--	--	--
AUG 14...	--	--	--	--	--	--
SEP 05...	--	--	--	--	--	--

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

PESTICIDES ANALYSES

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
OCT 12...	1200	.88	.0	.00	.0	.00	.00	.00
NOV 02...	1240	4.4	--	--	--	--	--	--
DEC 13...	1300	18	--	--	--	--	--	--
JAN 10...	1230	15	--	--	--	--	--	--
FEB 21...	1300	37	--	--	--	--	--	--
MAR 13...	1155	6.9	--	--	--	--	--	--
APR 17...	1200	21	--	--	--	--	--	--
MAY 17...	1200	2.7	--	--	--	--	--	--
JUN 13...	1300	8.0	--	--	--	--	--	--
JUL 11...	1400	2.0	--	--	--	--	--	--
AUG 14...	1300	9.0	--	--	--	--	--	--
SEP 05...	1130	3.7	--	--	--	--	--	--

DATE	DI- ELDRIN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
OCT 12...	.00	.00	.00	.00	.00	.00	.00	.00
NOV 02...	--	--	--	--	--	--	--	--
DEC 13...	--	--	--	--	--	--	--	--
JAN 10...	--	--	--	--	--	--	--	--
FEB 21...	--	--	--	--	--	--	--	--
MAR 13...	--	--	--	--	--	--	--	--
APR 17...	--	--	--	--	--	--	--	--
MAY 17...	--	--	--	--	--	--	--	--
JUN 13...	--	--	--	--	--	--	--	--
JUL 11...	--	--	--	--	--	--	--	--
AUG 14...	--	--	--	--	--	--	--	--
SEP 05...	--	--	--	--	--	--	--	--

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

PESTICIDES ANALYSES

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
OCT 12...	1200	.88	57	.0	3	.0	.0
NOV 02...	1240	4.4	--	--	--	--	--
DEC 13...	1300	18	--	--	--	--	--
JAN 10...	1230	15	--	--	--	--	--
FEB 21...	1300	37	--	--	--	--	--
MAR 13...	1155	6.9	--	--	--	--	--
APR 17...	1200	21	--	--	--	--	--
MAY 17...	1200	2.7	--	--	--	--	--
JUN 13...	1300	8.0	--	--	--	--	--
JUL 11...	1400	2.0	--	--	--	--	--
AUG 14...	1300	9.0	--	--	--	--	--
SEP 05...	1130	3.7	--	--	--	--	--

DATE	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
OCT 12...	2.2	.0	.0	.0	.0	.0
NOV 02...	--	--	--	--	--	--
DEC 13...	--	--	--	--	--	--
JAN 10...	--	--	--	--	--	--
FEB 21...	--	--	--	--	--	--
MAR 13...	--	--	--	--	--	--
APR 17...	--	--	--	--	--	--
MAY 17...	--	--	--	--	--	--
JUN 13...	--	--	--	--	--	--
JUL 11...	--	--	--	--	--	--
AUG 14...	--	--	--	--	--	--
SEP 05...	--	--	--	--	--	--

UPPER TWIN CREEK BASIN

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

SUSPENDED SEDIMENT DISCHARGE

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
OCT					
12...	1200	.88	14.0	2	.00
NOV					
02...	1240	4.4	11.5	1	.01
DEC					
13...	1300	18	.5	4	.19
JAN					
10...	1230	15	1.5	8	.32
FEB					
21...	1300	37	1.0	13	1.3
MAR					
13...	1155	6.9	5.5	0	.00
APR					
17...	1200	21	12.0	0	.03
MAY					
17...	1200	2.7	16.0	2	.01
JUN					
13...	1300	8.0	17.5	2	.04
JUL					
11...	1400	2.0	23.0	1	.01
AUG					
14...	1300	9.0	19.0	1	.02
SEP					
05...	1130	3.7	22.5	5	.05

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 (0.5 km) downstream from Cedar Run, 7.0 mi (11.3 km) east of West Union, and 7.1 mi (11.4 km) upstream from Beasley Fork.

DRAINAGE AREA.--387 mi² (1,002 km²).

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 (155.63 m) National Geodetic Vertical Datum of 1912. Prior to Nov. 22, 1940, nonrecording gage at same site and datum.

REMARKS.--Records good except those for Jan. 31 to Feb. 15, and those for periods of no gage-height record, Apr. 7 to May 30, which are poor. Water-quality data collected at this site 1965 to 1977; Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--48 years, 456 ft³/s (12.91 m³/s), 16.00 in/yr (406 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 59,200 ft³/s (1,680 m³/s) Mar. 10, 1964, gage height, 27.91 ft (8.507 m), from rating curve extended above 22,000 ft³/s (623 m³/s) on basis of slope-area measurement at gage heights 22.70 ft (6.919 m), 26.5 ft (8.077 m), and 27.91 ft (8.507 m); no flow Sept. 13-23, 27, 28, 1955 and for part of each day Sept. 17, 18, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 11,000 ft³/s (312 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
Dec. 3	2315	12200	346	14.40	4.389	Apr. 2	1530	15600	442	16.18	4.932
Dec. 8	2345	21000	595	18.43	5.617	Sept. 14	1730	*23500	666	*19.30	5.883
Jan. 1	2215	16000	453	16.36	4.987	Sept. 21	2345	18400	521	17.40	5.304
Feb. 23	2200	14500	411	15.64	4.767	Sept. 22	2145	20300	575	18.19	5.544
Feb. 25	2300	20700	586	18.34	5.590	Sept. 28	1800	22000	623	18.79	5.727

Minimum discharge, 16 ft³/s (0.45 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	175	367	8400	180	1610	3150	130	946	107	246	270
2	46	148	297	4190	150	1300	10400	120	572	100	166	709
3	53	128	3980	1190	120	980	2120	190	297	71	123	430
4	50	113	7810	723	110	1130	1210	500	204	100	98	215
5	39	102	1570	528	100	938	1270	1100	151	208	80	154
6	34	94	737	424	92	602	737	800	116	133	67	123
7	28	90	587	557	86	467	500	600	197	78	59	102
8	25	92	16000	564	82	400	460	450	2340	58	53	85
9	21	90	11200	297	78	336	1300	350	1610	50	48	71
10	19	81	1980	351	74	302	980	280	737	48	43	62
11	20	73	1110	284	72	279	720	220	341	45	587	58
12	78	71	856	211	70	234	580	180	215	51	1170	54
13	2840	78	702	250	68	211	1400	140	151	187	336	53
14	2370	83	535	1880	68	226	2200	110	120	695	157	13100
15	2350	766	412	1000	140	226	1500	90	102	316	102	1870
16	803	3010	367	702	1890	178	1000	78	85	140	78	856
17	418	3290	412	913	730	163	700	72	76	89	62	418
18	266	3040	326	1920	436	163	520	68	68	65	53	279
19	191	896	284	758	284	160	420	64	67	51	849	211
20	154	514	929	1980	219	154	360	60	76	42	1910	169
21	125	367	3500	3530	1930	148	290	58	1240	37	1760	6930
22	105	297	1000	1490	5620	138	250	56	507	34	572	12400
23	89	326	616	888	9960	133	230	58	191	378	572	3560
24	80	535	474	2480	4260	187	220	62	157	219	1530	1130
25	74	346	616	1420	9760	246	220	74	109	803	1400	681
26	1920	326	455	681	7220	175	210	160	80	1050	1830	455
27	2800	3850	321	535	1580	138	200	480	67	1450	3740	331
28	780	1530	219	430	1690	125	180	540	55	1050	1190	12600
29	418	681	219	326	---	118	160	280	51	4130	1470	2920
30	284	480	351	262	---	116	140	140	94	1040	849	1290
31	215	---	2270	230	---	1340	---	113	---	442	455	---
TOTAL	16746	21672	60502	39394	47069	12923	33627	7623	11022	13267	21655	61586
MEAN	540	722	1952	1271	1681	417	1121	246	367	428	699	2053
MAX	2840	3850	16000	8400	9960	1610	10400	1100	2340	4130	3740	13100
MIN	19	71	219	211	68	116	140	56	51	34	43	53
CFSM	1.40	1.87	5.04	3.28	4.34	1.08	2.90	.64	.95	1.11	1.81	5.31
IN.	1.61	2.08	5.82	3.79	4.52	1.24	3.23	.73	1.06	1.28	2.08	5.92

CAL YR 1978 TOTAL 297400 MEAN 815 MAX 18400 MIN 12 CFSM 2.11 IN 28.59
WTR YR 1979 TOTAL 347086 MEAN 951 MAX 16000 MIN 19 CFSM 2.46 IN 33.36

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 (46 m) upstream from diversion dam for Georgetown water treatment plant, 0.7 mi (1.1 km) upstream from Town Run, 1.4 mi (2.3 km) southwest of Georgetown, and 7.2 mi (11.6 km) upstream from mouth.

DRAINAGE AREA.--218 mi² (565 km²).

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 (184.160 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 12, 1972 nonrecording gage at a site 1.0 mi (1.6 km) downstream at datum 35.24 ft (10.741 m) lower. See WSP 2108 for history of changes prior to Dec. 8, 1940.

REMARKS.--Records fair except those for Dec. 8 to Feb. 26, which are poor. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1970 to 1974.

AVERAGE DISCHARGE.--52 years, 260 ft³/s (7.363 m³/s), 16.20 in/yr (411 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,400 ft³/s (634 m³/s) Mar. 10, 1964; maximum gage height, 20.87 ft (6.361 m), 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, 1977, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,500 ft³/s (156 m³/s), and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 4	0330	7570 214	6.99 2.131	Apr. 14	0900	5700 161	6.39 1.948
Dec. 8	---	*15000 425	unknown	Aug. 27	1230	6770 192	6.75 2.057
Jan. 2	0030	9220 261	7.41 2.259	Sept. 14	0530	12500 354	8.10 2.469
Feb. 23	1230	11500 326	7.91 2.411	Sept. 22	1100	10700 303	7.73 2.356
Feb. 26	0200	10000 283	7.59 2.313	Sept. 28	2330	6120 173	6.54 1.993
Apr. 2	0630	9560 271	7.49 2.283				

Minimum discharge, 2.2 ft³/s (0.062 m³/s) Oct. 2, 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	60	130	6680	78	974	1120	53	941	29	85	468
2	3.1	53	104	5410	70	758	7460	50	270	32	140	234
3	4.7	44	2200	1800	64	421	1690	53	108	29	159	92
4	16	41	5970	840	60	701	1010	201	67	88	70	57
5	9.6	35	646	280	58	437	1310	637	50	276	47	47
6	6.5	35	258	210	56	206	349	217	38	77	35	41
7	5.2	32	399	260	54	135	223	96	85	41	26	32
8	5.2	35	11000	180	52	121	190	67	3310	26	13	26
9	5.2	35	2500	150	50	104	868	53	646	23	11	20
10	5.2	35	1000	140	50	104	710	41	234	23	11	18
11	6.5	35	500	120	49	77	342	38	144	20	264	23
12	9.6	35	420	110	48	67	1950	32	104	164	619	18
13	1630	35	330	120	47	63	1320	26	63	931	140	20
14	1420	38	260	1100	46	70	3450	23	50	868	63	9220
15	1330	185	210	440	100	77	637	26	41	201	41	5650
16	370	1520	190	290	1100	67	289	26	29	77	26	295
17	149	1540	180	340	520	63	174	23	26	47	23	130
18	92	1940	170	1100	290	70	149	23	23	29	16	92
19	63	263	150	500	170	67	104	23	41	20	817	77
20	50	185	430	1000	130	88	92	29	57	18	508	57
21	41	126	1600	1900	500	60	77	38	476	16	2030	2450
22	35	100	450	850	2100	57	74	38	154	11	384	7260
23	29	113	280	520	8850	50	74	41	77	11	144	3260
24	26	246	250	1300	6240	96	74	41	50	11	179	377
25	23	179	290	680	5510	100	74	38	44	492	377	190
26	797	201	210	400	4700	77	74	44	32	2100	1180	126
27	2080	2260	150	240	468	57	67	77	23	1180	5000	88
28	342	974	92	160	646	50	63	246	18	827	646	3240
29	154	315	70	110	---	47	57	92	16	2920	995	2610
30	100	174	77	95	---	47	50	53	53	421	252	384
31	74	---	1140	86	---	229	---	121	---	140	113	---
TOTAL	8887.3	10969	31656	27411	32106	5540	24121	2566	7270	11148	14414	36602
MEAN	287	366	1021	884	1147	179	804	82.8	242	360	465	1220
MAX	2080	2260	11000	6680	8850	974	7460	637	3310	2920	5000	9220
MIN	3.1	32	70	86	46	47	50	23	16	11	11	18
CFSM	1.32	1.68	4.68	4.06	5.26	.82	3.69	.38	1.11	1.65	2.13	5.60
IN.	1.52	1.87	5.40	4.68	5.48	.95	4.12	.44	1.24	1.90	2.46	6.25

CAL YR 1978 TOTAL 159289.07 MEAN 436 MAX 11000 MIN .00 CFSM 2.00 IN 27.18
WTR YR 1979 TOTAL 212690.30 MEAN 583 MAX 11000 MIN 3.1 CFSM 2.67 IN 36.29

LITTLE MIAMI RIVER BASIN

237

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 (1.3 km) downstream from Conner Branch, 0.9 mi (1.4 km) upstream from Massies Creek, 1.3 mi (2.1 km) northeast of Oldtown, and at mile 82.25 (132.3 km).

DRAINAGE AREA.--129 mi² (334 km²).

PERIOD OF RECORD.--July 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 816.56 ft (248.887 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good, except those for the winter period, and periods of no gage-height record which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1952 to 1958.

AVERAGE DISCHARGE.--27 years, 111 ft³/s (3.144 m³/s), 11.68 in/yr (297 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,800 ft³/s (419 m³/s) Jan. 21, 1959, gage height, 12.20 ft (3.719 m), from rating curve extended above 4,400 ft³/s (125 m³/s) on basis of slope-area measurements of peak flow; minimum, 5.4 ft³/s (0.15 m³/s) July 29, 1954, result of temporary storage at rock dam upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 800 ft³/s (22.7 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
Dec. 9	1145	954	27.0	4.94	1.506	Apr. 14	1000	3320	94.0	9.27	2.825
Jan. 2	0830	1310	37.1	5.87	1.789	Aug. 19	1400	1000	28.3	5.07	1.545
Feb. 24	0530	2540	71.9	8.40	2.560	Aug. 21	2000	1620	45.9	6.61	2.015
Feb. 25	2000	1800	51.0	6.99	2.131	Aug. 23	2215	925	26.2	4.86	1.481
Mar. 2	0530	1070	30.3	5.26	1.603	Aug. 29	1700	1660	47.0	6.69	2.039
Mar. 4	1400	1150	32.6	5.47	1.667	Sept. 15	0345	*4990	141	*10.28	3.133

Minimum discharge, 10 ft³/s (0.28 m³/s) Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	19	29	845	60	764	107	108	150	105	89	264
2	13	19	29	1050	58	950	254	97	140	92	244	290
3	15	18	48	401	56	791	299	130	120	76	165	242
4	17	18	311	299	56	1040	304	160	110	71	108	197
5	21	18	233	235	58	788	475	150	150	73	100	169
6	16	19	143	183	62	503	299	140	200	66	152	150
7	16	22	107	150	58	388	224	130	260	60	173	133
8	16	21	340	130	56	335	197	120	350	56	112	120
9	16	19	869	120	56	290	233	120	270	63	87	112
10	16	18	406	100	56	267	231	110	200	63	78	105
11	17	17	242	86	56	233	220	100	150	56	160	100
12	16	17	183	76	60	203	306	100	120	54	237	95
13	30	17	158	76	62	191	469	96	110	58	150	97
14	32	18	135	85	64	189	2260	94	110	58	110	2400
15	31	21	119	92	64	169	791	90	100	54	92	3090
16	31	28	105	90	62	154	456	86	96	51	78	662
17	30	40	95	86	62	148	345	82	90	45	71	396
18	24	50	86	82	62	146	283	78	86	43	66	311
19	26	40	83	79	64	141	242	76	90	40	553	267
20	23	34	81	76	80	137	214	74	86	37	368	231
21	22	30	112	80	133	129	193	72	110	37	1250	218
22	21	25	108	74	358	124	181	70	100	37	674	209
23	20	23	94	66	1530	124	165	68	92	36	801	185
24	19	23	84	90	2020	129	156	76	84	44	621	167
25	20	22	78	120	1220	119	150	98	76	83	363	158
26	23	21	66	110	1290	108	143	120	70	74	278	146
27	26	34	56	95	665	100	141	160	66	59	337	139
28	21	40	54	80	538	97	131	200	62	70	486	193
29	20	36	56	70	---	98	120	170	62	146	1210	276
30	20	32	60	64	---	97	113	130	94	107	659	216
31	20	77	126	62	---	102	---	130	---	78	352	---
TOTAL	657	759	4696	5252	8966	9054	9722	3435	3804	1992	10224	11338
MEAN	21.2	25.3	151	169	320	292	324	111	127	64.3	330	378
MAX	32	50	869	1050	2020	1040	2260	200	350	146	1250	3090
MIN	13	17	29	62	56	97	107	68	62	36	66	95
CFSM	.16	.20	1.17	1.31	2.48	2.26	2.51	.86	.98	.50	2.56	2.93
IN.	.19	.22	1.35	1.51	2.59	2.61	2.80	.99	1.10	.57	2.95	3.27

CAL YR 1978 TOTAL 40758 MEAN 112 MAX 2140 MIN 10 CFSM .87 IN 11.75
WTR YR 1979 TOTAL 69899 MEAN 192 MAX 3090 MIN 13 CFSM 1.49 IN 20.16

LITTLE MIAMI RIVER BASIN

03241500 MASSIE CREEK AT WILBERFORCE, OH

LOCATION.--Lat 39°43'22", long 83°52'58", Greene County, Hydrologic Unit 05090202, on right bank 200 ft (61 m) downstream from bridge on Wilberforce-Clifton Road, 0.5 mi (0.8 km) northwest of Wilberforce, 0.6 mi (1.0 km) downstream from unnamed right bank tributary and 1.7 mi (2.7 km) upstream from Clark Run.

DRAINAGE AREA.--63.2 mi² (164 km²).

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 (263.698 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 4, 1972 at site 150 ft (46 m) upstream at same datum.

REMARKS.--Records good except those for the winter period, which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1952 to 1958.

AVERAGE DISCHARGE.--27 years, 60.6 ft³/s (1.716 m³/s), 13.02 in/yr (331 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,300 ft³/s (207 m³/s) Jan. 21, 1959, Mar. 4, 1963, gage height, 11.25 ft (3.429 m), from rating curve extended above 3,100 ft³/s (87.8 m³/s); minimum, 0.3 ft³/s (0.008 m³/s) Sept. 3-7, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft³/s (17.0 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	1730	782 22.1	5.40 1.646	Apr. 14	0730	*1700 48.1	*7.47 2.277
Feb. 24	---	1500 42.5	unknown	Aug. 20	2400	1390 39.4	6.89 2.100
Feb. 25	1800	1270 36.0	6.65 2.027	Aug. 22	0030	657 18.6	5.05 1.539
Mar. 2	0100	660 18.7	5.06 1.542	Sept. 14	0700	1620 45.9	7.31 2.228
Mar. 4	1300	621 17.6	4.94 1.506				

Minimum, 3.5 ft³/s (0.099 m³/s) Oct. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	7.1	14	531	33	502	37	46	66	53	45	104
2	4.1	6.9	13	647	32	591	157	44	59	42	177	132
3	4.3	6.9	31	282	31	475	154	59	51	34	119	114
4	6.2	6.7	223	161	30	592	214	74	46	31	72	88
5	5.7	6.8	177	106	32	454	322	74	42	28	55	71
6	6.0	6.9	107	82	34	268	178	67	106	24	45	61
7	5.6	7.7	80	60	31	198	121	60	127	22	39	52
8	5.1	7.6	239	50	30	167	101	54	212	22	32	45
9	4.5	6.6	540	43	29	136	115	50	156	26	28	40
10	4.6	6.5	314	39	29	123	111	48	109	24	25	37
11	5.0	6.4	165	37	30	104	109	46	84	22	40	34
12	6.2	6.3	121	37	32	86	148	45	67	20	51	32
13	16	6.3	106	41	33	79	518	42	57	27	40	35
14	11	6.7	88	66	34	77	1450	40	50	24	31	1270
15	12	7.3	75	50	34	66	542	38	45	21	26	1390
16	11	7.8	65	48	33	59	274	35	42	19	23	572
17	9.5	16	56	48	33	55	189	32	41	16	21	230
18	8.9	21	49	46	33	54	149	32	38	15	20	159
19	9.9	17	46	44	34	52	123	31	36	14	196	124
20	8.6	14	46	50	44	49	105	31	34	13	409	101
21	8.2	12	74	45	70	47	92	30	38	12	627	92
22	7.6	11	68	42	220	44	83	28	33	12	507	87
23	7.1	10	55	40	580	47	74	28	29	15	256	76
24	7.0	10	50	54	1200	48	70	29	27	30	214	68
25	7.4	9.5	45	80	837	43	67	39	26	36	156	63
26	9.6	9.3	36	64	775	38	65	58	24	25	125	58
27	9.5	15	29	56	423	35	62	77	23	21	191	55
28	8.1	17	32	49	355	34	56	92	22	49	188	99
29	7.8	16	26	43	---	35	51	67	25	72	288	174
30	7.5	15	22	35	---	34	48	54	61	42	202	125
31	7.4	---	76	34	---	34	---	54	---	31	137	---
TOTAL	235.5	303.3	3068	3010	5111	4626	5785	1504	1776	842	4385	5588
MEAN	7.60	10.1	99.0	97.1	183	149	193	48.5	59.2	27.2	141	186
MAX	16	21	540	647	1200	592	1450	92	212	72	627	1390
MIN	4.1	6.3	13	34	29	34	37	28	22	12	20	32
CFSM	.12	.16	1.57	1.54	2.90	2.36	3.05	.77	.94	.43	2.23	2.94
IN.	.14	.18	1.81	1.77	3.01	2.72	3.41	.89	1.05	.50	2.58	3.29

CAL YR 1978	TOTAL	22394.9	MEAN 61.4	MAX 1340	MIN 2.9	CFSM .97	IN 13.18
WTR YR 1979	TOTAL	36233.8	MEAN 99.3	MAX 1450	MIN 4.1	CFSM 1.57	IN 21.33

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OH

LOCATION.--Lat 39°35'00, long 84°01'49", Greene County, Hydrologic Unit 05090202, on right bank at downstream side of bridge on New Burlington Road, 0.3 mi (0.5 km) upstream from unnamed right bank tributary, 2.2 mi (3.5 km) southwest of Spring Valley, 2.8 mi (4.5 km) downstream from Gladly Run, and at mile 61.95 (99.68 km).

DRAINAGE AREA.--366 mi² (948 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1925 to December 1935 and October 1939 to December 1951 (published as "at Spring Valley"), July 1968 to current year.

REVISED RECORDS.--WSP 893: 1932(M). WSP 1053: 1929. WSP 2108: 1969.

GAGE.--Water-stage recorder. Datum of gage is 729.29 ft (222.288 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 12, 1939, nonrecording gage and Dec. 13, 1939 to Dec. 31, 1951, water-stage recorder at site 2.5 mi (4.0 km) upstream at datum 8.6 ft (2.62 m) higher.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--33 years (1925-35, 1939-51, 1969-79), 384 ft³/s (10.87 m³/s), 14.25 in/yr (362 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,400 ft³/s (521 m³/s) Feb. 26, 1929, gage height, 16.8 ft (5.12 m) site and datum then in use; minimum, 23 ft³/s (0.65 m³/s) July 27, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959 reached a stage of 18.1 ft (5.52 m) at present site and datum, discharge, 36,400 ft³/s (1,030 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,600 ft³/s (102 m³/s) and maximums (*):

Date	Time	DISCHARGE		GAGE HEIGHT		Date	Time	DISCHARGE		GAGE HEIGHT	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)			(ft ³ /s)	(m ³ /s)	(ft)	(m)
Jan. 1	2300	3880	110	10.60	3.231	Aug. 21	0900	4540	129	11.20	3.414
Feb. 24	1130	5300	150	11.84	3.609	Sept. 14	1700	*5800	164	*12.23	3.728
Apr. 15	0330	4640	131	11.29	3.441						

Minimum 91 ft³/s (2.58m³/s) Nov. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	100	128	2610	200	2030	323	326	378	292	538	668
2	98	96	124	3060	190	2400	895	310	384	251	1200	607
3	98	96	318	1280	190	1980	888	526	314	218	672	611
4	107	95	1270	806	180	2350	1050	554	284	229	417	496
5	104	95	723	624	190	2020	1270	519	265	206	362	428
6	112	94	475	522	210	1320	895	438	431	190	338	381
7	106	96	367	474	200	1030	693	388	714	175	368	338
8	100	100	1540	411	190	903	607	353	759	161	296	306
9	97	99	2520	380	190	802	731	323	752	229	249	286
10	98	94	1260	340	190	742	697	312	582	211	225	275
11	98	94	697	300	190	428	735	310	515	181	1990	265
12	110	94	544	270	190	511	977	298	388	167	824	256
13	323	93	465	250	200	542	1540	298	320	229	503	254
14	167	97	405	280	200	550	4110	281	292	227	359	4310
15	239	102	359	300	200	463	3360	271	271	474	298	5340
16	151	111	325	300	200	414	1310	262	254	229	267	4250
17	131	200	292	290	210	428	969	251	240	186	243	1150
18	121	205	265	280	210	424	813	243	234	166	227	828
19	130	153	256	260	220	411	714	238	269	152	1470	693
20	119	136	263	260	230	401	641	231	236	143	1700	582
21	113	128	379	280	310	384	574	224	372	136	4240	546
22	108	121	337	250	938	365	550	218	249	130	2870	534
23	105	117	285	220	3430	375	500	213	218	185	1520	456
24	107	113	240	290	5140	424	474	220	203	271	1700	411
25	106	107	230	420	4180	372	449	279	195	414	1000	375
26	116	104	210	360	3940	335	428	356	186	281	781	350
27	125	162	190	320	2180	318	428	485	178	249	899	326
28	110	149	170	280	1530	306	397	492	172	394	973	511
29	104	140	180	230	---	306	365	384	170	892	1690	685
30	101	134	206	210	---	304	344	312	335	431	1550	582
31	104	---	593	210	---	314	---	318	---	323	873	---
TOTAL	3809	3525	15616	16367	25628	23952	27727	10233	10160	8022	30642	27100
MEAN	123	118	504	528	915	773	924	330	339	259	988	903
MAX	323	205	2520	3060	5140	2400	4110	554	759	892	4240	5340
MIN	97	93	124	210	180	304	323	213	170	130	225	254
CFSM	.34	.32	1.38	1.44	2.50	2.11	2.53	.90	.93	.71	2.70	2.47
IN.	.39	.36	1.59	1.66	2.60	2.43	2.82	1.04	1.03	.82	3.11	2.75

CAL YR 1978	TOTAL	129237	MEAN 354	MAX 6900	MIN 92	CFSM .97	IN 13.14
WTR YR 1979	TOTAL	202781	MEAN 556	MAX 5340	MIN 93	CFSM 1.52	IN 20.61

LITTLE MIAMI RIVER BASIN

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1968 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: September 1968 to current year.

pH: September 1968 to current year.

WATER TEMPERATURES: September 1968 to current year.

DISSOLVED OXYGEN: September 1968 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, 1,570 micromhos Feb. 1, 1971; minimum, 161 micromhos July 4, 1975.

pH: Maximum, 9.2 units Dec. 30, 1971; minimum, 6.6 units Nov. 29, 1972, July 11, 12, 1974.

WATER TEMPERATURES: Maximum, 34.5°C June 26, 1971; minimum, 0.0°C on many days during winter periods.

DISSOLVED OXYGEN: Maximum, 16.7 mg/L Mar. 2-5, 1978; minimum, 1.0 mg/L July 29, 1974.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,350 micromhos Feb. 21, 22; minimum, 204 micromhos Sept. 14.

pH: Maximum, 8.5 units Apr. 29, 30, May 1, July 20, 21, 22; minimum, 6.7 units June 8.

WATER TEMPERATURES: Maximum, 25.5°C Aug. 8, 9-10; minimum, 0.0°C Jan. 3, 4, 7-10.

DISSOLVED OXYGEN: Maximum, 14.1 mg/L Nov. 10; minimum, 4.3 mg/L June 6.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1130	1020	1090	1020	915	873	465	330	840	822	585	447
2	1150	990	1070	1030	924	882	441	351	867	846	447	411
3	1070	1000	1080	1020	945	525	633	450	861	825	507	450
4	1100	1020	1070	1020	591	336	723	636	858	822	516	435
5	1120	993	1090	1010	675	597	747	720	903	855	525	444
6	1060	984	1080	1020	750	681	771	741	903	861	603	525
7	1100	969	1070	1010	777	753	783	753	861	825	651	549
8	1070	990	1060	1020	777	309	807	774	939	837	672	651
9	1070	1020	1080	1020	450	339	831	813	954	876	690	672
10	1080	1020	1060	1010	609	450	843	819	909	861	705	687
11	1100	1040	1080	1040	708	618	846	828	939	882	708	690
12	1080	786	1080	1030	747	711	831	801	885	858	729	705
13	1010	567	1090	1030	762	750	813	804	897	873	738	720
14	828	573	1070	1010	768	759	1310	807	888	843	741	726
15	849	693	1090	1020	780	768	858	837	870	846	744	726
16	918	729	1060	996	795	783	861	792	---	---	759	735
17	972	912	1060	780	807	786	813	795	---	---	765	738
18	1010	963	858	687	810	795	864	759	972	918	765	735
19	1020	966	972	831	834	801	795	762	912	882	756	732
20	1050	909	987	927	834	798	885	789	---	---	765	714
21	1010	969	1010	960	804	714	1020	687	1350	930	759	735
22	1040	984	1040	981	777	750	783	690	1350	603	762	732
23	1060	1020	1040	990	798	777	837	786	582	261	753	729
24	1050	1010	1040	987	804	780	837	684	279	249	798	717
25	1090	1030	1030	966	819	756	705	660	393	285	771	747
26	1080	1020	1020	984	801	765	777	708	363	321	771	747
27	1040	1010	1010	936	816	792	774	765	546	369	795	756
28	1020	963	966	864	846	807	783	768	609	561	789	756
29	1060	996	993	942	852	828	897	783	---	---	792	756
30	1060	1000	1010	873	843	822	915	825	---	---	795	753
31	1050	1010	---	---	825	378	843	822	---	---	---	---
MONTH	1150	567	1090	687	945	309	1310	330	1350	249	798	411

241

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

[illegible]

LITTLE MIAMI RIVER BASIN

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.1	8.1	8.2	8.1	8.1	7.8	8.2	7.9	8.2	8.1	---	---
2	8.1	8.0	8.1	8.0	8.0	7.9	8.1	7.9	8.2	7.7	---	---
3	8.1	8.1	8.1	8.0	8.0	7.8	8.1	7.6	8.3	7.6	---	---
4	8.2	8.1	8.1	8.0	8.0	7.8	7.8	7.6	8.3	8.2	---	---
5	8.2	8.1	8.1	8.0	8.0	7.9	7.8	7.3	8.3	7.8	---	---
6	8.2	8.2	8.1	8.0	8.0	7.9	7.8	7.3	8.3	7.8	---	---
7	8.2	8.2	8.1	8.0	8.1	8.0	7.6	7.3	8.3	7.7	8.3	7.8
8	8.2	8.1	8.2	8.0	8.1	7.7	8.0	7.4	8.2	8.0	8.3	8.1
9	8.2	8.0	8.2	8.1	7.8	7.6	8.0	7.5	8.2	7.9	8.3	8.2
10	8.2	8.0	8.2	8.1	7.8	7.6	8.0	7.2	8.2	8.0	8.3	8.2
11	8.2	8.1	8.2	8.1	7.9	7.6	8.0	7.0	8.2	7.9	8.4	8.3
12	8.1	8.0	8.1	8.0	8.0	7.8	7.5	7.0	8.3	8.0	8.3	8.1
13	8.1	7.9	8.1	8.0	8.0	7.9	---	---	8.3	7.9	8.3	8.1
14	8.2	8.0	8.0	7.9	8.0	7.9	8.1	7.0	8.3	8.0	8.3	8.2
15	8.3	8.1	8.0	7.9	8.0	7.8	8.1	7.3	8.4	8.3	8.4	8.2
16	8.3	8.2	8.1	7.9	8.0	7.8	7.8	7.1	8.4	8.2	8.4	8.1
17	8.3	8.1	8.0	7.9	8.0	7.9	7.3	6.8	8.3	7.8	8.4	8.0
18	8.3	8.2	7.9	7.8	8.0	7.8	7.8	7.3	8.4	8.0	8.2	8.0
19	8.2	8.1	8.0	7.9	8.0	7.7	7.7	7.0	8.3	8.1	8.2	8.1
20	8.2	8.0	8.0	7.9	8.1	7.9	---	---	8.4	8.0	8.2	8.1
21	8.2	7.9	8.1	8.0	8.1	7.9	7.4	7.0	---	---	---	---
22	8.2	8.0	8.1	8.0	8.0	7.9	7.8	7.1	---	---	---	---
23	8.1	8.1	8.1	7.9	8.0	7.8	7.6	7.1	---	---	---	---
24	8.2	8.0	8.0	7.9	8.0	7.9	8.0	7.2	---	---	---	---
25	8.2	8.1	8.1	7.9	8.0	7.8	8.2	7.7	---	---	---	---
26	8.1	8.1	8.0	7.9	8.0	7.8	8.1	7.9	---	---	---	---
27	8.2	8.0	8.0	7.9	8.0	7.7	8.2	8.0	---	---	---	---
28	8.2	8.1	8.1	7.9	8.1	7.8	8.3	8.2	---	---	---	---
29	8.2	8.2	8.1	7.8	8.1	7.5	8.3	8.1	---	---	---	---
30	8.2	8.0	8.1	7.9	8.2	8.1	8.3	7.8	---	---	---	---
31	8.2	8.1	---	---	8.2	8.0	8.3	7.7	---	---	---	---
MONTH	8.3	7.9	8.2	7.8	8.2	7.5	8.3	6.8	8.4	7.6	8.4	7.8
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	---	---	8.5	8.0	---	---	8.0	7.2	8.2	7.9	8.3	8.2
2	---	---	8.2	8.1	7.8	7.3	8.0	7.8	8.1	7.8	8.3	8.2
3	---	---	8.2	7.6	7.8	7.4	8.0	7.7	8.1	8.0	8.3	8.2
4	---	---	7.8	7.3	7.9	7.6	8.0	7.5	8.1	8.1	8.3	8.2
5	---	---	8.2	7.2	7.9	7.5	8.1	7.8	8.1	8.1	8.3	8.2
6	---	---	8.1	7.6	7.8	7.2	8.2	7.9	8.1	8.0	8.3	8.2
7	---	---	8.0	7.4	7.6	7.3	8.1	7.9	8.1	8.1	8.3	8.2
8	---	---	7.8	7.3	7.5	6.7	8.2	7.8	8.1	8.0	8.3	8.2
9	---	---	7.8	7.4	7.5	7.0	8.0	7.6	8.1	8.0	8.4	8.3
10	8.4	7.9	7.6	7.1	7.9	7.0	7.8	7.2	8.1	8.0	8.3	8.2
11	8.5	8.3	7.6	7.0	8.0	7.7	---	---	8.1	7.7	8.3	8.2
12	8.3	8.0	7.6	7.3	8.0	7.6	---	---	8.2	7.9	8.3	8.2
13	8.1	7.9	7.8	7.5	8.0	7.8	---	---	8.2	8.0	8.3	8.2
14	7.9	7.9	7.8	7.5	8.0	7.5	---	---	8.2	8.1	8.2	7.7
15	8.2	7.9	7.9	7.6	7.9	7.3	---	---	8.2	8.1	7.6	7.5
16	8.2	8.1	7.9	7.8	7.9	7.4	8.2	7.8	8.3	8.2	7.9	7.6
17	8.2	8.0	7.9	7.8	7.9	7.5	8.4	8.2	8.3	8.2	8.1	7.9
18	8.2	8.1	7.9	7.7	7.9	7.7	8.4	8.3	8.3	8.2	8.1	8.0
19	8.2	8.1	7.9	7.7	7.9	7.6	8.4	8.3	8.2	7.8	8.1	8.0
20	8.3	8.0	7.9	7.7	7.7	7.3	8.5	8.3	8.1	7.9	8.1	7.9
21	8.2	8.0	7.9	7.8	7.6	7.1	8.5	8.3	7.9	7.7	8.0	8.0
22	8.1	7.4	7.9	7.8	7.7	7.1	8.5	8.3	8.1	7.8	8.0	8.0
23	8.0	6.9	7.9	7.8	7.9	7.6	8.4	8.3	8.2	8.1	8.1	8.0
24	8.1	7.4	7.9	7.8	8.0	7.8	8.3	8.0	8.1	8.0	8.1	8.0
25	8.1	7.6	8.0	7.9	8.1	7.6	8.2	8.0	8.2	8.1	8.1	8.0
26	8.2	7.8	8.1	7.5	8.0	7.5	8.3	7.9	8.2	8.2	8.1	8.0
27	8.4	8.2	8.1	7.8	8.0	7.7	8.3	8.2	8.4	8.2	8.0	7.8
28	8.4	8.3	8.0	7.8	8.0	7.7	8.2	8.1	8.3	8.2	7.9	7.8
29	8.5	8.2	8.0	7.7	7.9	7.8	8.2	7.9	8.2	8.0	8.0	7.8
30	8.5	8.4	7.9	7.4	7.9	7.3	8.3	8.2	8.2	8.0	8.0	7.9
31	---	---	---	---	---	---	8.2	8.1	8.3	8.2	---	---
MONTH	8.5	6.9	8.5	7.0	8.1	6.7	8.5	7.2	8.4	7.7	8.4	7.5
YEAR	8.5	6.7										

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

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

YEAR	25.5	.0
------	------	----

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.2	6.3	10.9	7.2	12.4	10.3	10.8	10.3	12.8	12.2	12.2	11.9
2	8.5	6.0	11.9	8.1	12.1	10.2	12.3	10.7	12.7	12.3	12.6	12.2
3	8.1	6.5	12.6	8.1	10.8	9.1	12.2	12.0	12.5	12.2	12.2	11.7
4	7.5	6.4	12.7	8.2	10.2	8.4	12.1	11.9	12.6	11.8	11.7	10.8
5	8.0	6.4	12.9	8.1	11.0	10.3	12.0	11.8	12.8	12.3	11.5	10.6
6	7.8	6.9	12.5	7.5	11.2	11.0	11.9	11.8	12.8	12.4	11.6	11.4
7	8.4	6.8	9.2	7.6	11.0	10.4	11.9	11.7	12.6	12.0	11.4	11.1
8	9.0	7.2	12.5	7.6	10.9	10.2	12.1	11.8	12.8	12.0	11.3	11.0
9	9.2	7.5	13.2	8.7	11.7	10.9	12.1	11.7	13.0	12.4	11.2	10.9
10	9.1	7.5	14.1	9.1	12.1	11.7	11.9	11.7	12.9	12.3	11.4	11.1
11	7.8	7.0	13.9	9.0	12.0	11.6	11.8	11.7	12.9	12.2	12.0	11.4
12	8.3	7.0	9.9	7.9	11.6	11.0	11.7	11.5	12.8	12.1	12.1	11.8
13	7.3	6.5	11.5	7.2	11.2	10.9	11.5	11.2	13.1	12.3	11.7	11.1
14	8.2	7.3	8.7	7.3	11.6	11.2	11.9	11.1	13.0	12.3	11.1	10.7
15	8.7	8.1	8.8	7.2	11.5	11.4	12.2	12.0	12.6	11.7	11.9	11.1
16	8.8	8.3	11.2	8.1	11.4	11.2	12.0	11.7	13.4	11.7	12.0	11.8
17	9.2	8.4	9.0	7.6	11.3	11.1	11.8	11.6	13.7	12.6	11.8	11.3
18	9.1	8.4	8.6	7.0	11.3	11.2	12.2	11.6	13.6	12.7	11.3	10.4
19	8.5	7.9	10.7	8.6	11.2	11.0	12.1	11.8	13.5	12.3	10.3	9.8
20	8.6	7.2	11.0	9.4	10.9	10.4	11.8	11.2	13.6	12.4	10.1	9.6
21	8.7	7.6	11.2	9.3	10.9	9.5	11.5	10.9	13.3	11.8	10.4	9.5
22	8.6	7.3	11.1	9.0	11.6	10.9	11.9	11.5	13.0	11.5	10.7	9.7
23	7.4	6.8	9.8	8.4	11.6	11.4	11.7	11.4	12.9	12.3	9.8	9.2
24	8.4	6.8	9.6	8.0	11.6	11.2	11.5	11.1	12.6	12.3	10.0	8.8
25	8.9	7.3	11.9	8.9	11.5	11.1	13.0	11.5	12.7	12.5	11.8	9.9
26	7.6	6.5	10.8	9.6	11.7	11.3	12.8	12.6	12.7	12.6	12.7	11.3
27	8.1	6.4	9.8	8.9	12.1	11.7	12.5	12.1	12.6	12.1	13.1	11.6
28	9.3	7.1	11.1	8.6	12.0	11.8	12.3	12.0	12.1	12.0	13.0	11.4
29	9.8	7.5	11.9	9.9	12.0	11.6	12.5	12.1	---	---	12.2	10.6
30	10.2	7.7	12.3	10.2	11.8	11.3	12.7	12.2	---	---	12.3	9.7
31	10.5	7.7	---	---	11.3	10.6	12.6	12.0	---	---	10.4	9.3
MONTH	10.5	6.0	14.1	7.0	12.4	8.4	13.0	10.3	13.7	11.5	13.1	8.8
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.1	9.3	13.0	9.6	7.0	6.3	7.2	6.0	7.2	6.6	8.0	6.9
2	10.3	9.5	13.4	9.6	7.1	6.7	7.9	6.9	7.3	5.7	8.0	6.7
3	10.2	9.7	10.5	8.1	6.9	6.5	8.0	6.6	7.7	6.9	7.9	7.3
4	11.1	10.6	9.8	8.3	7.0	6.7	7.0	6.3	7.5	6.9	7.8	6.6
5	11.2	10.8	12.7	9.3	6.9	6.5	8.5	6.2	7.4	6.8	7.8	6.6
6	11.2	10.6	12.8	9.4	6.5	4.3	8.7	6.8	7.2	6.9	7.6	6.9
7	11.7	11.0	12.8	8.8	6.6	5.8	9.2	6.7	7.2	6.7	7.8	7.0
8	11.3	10.4	12.5	8.0	6.9	5.2	9.7	6.7	7.1	6.5	8.5	7.3
9	10.6	9.7	11.1	7.5	6.9	6.3	7.5	6.0	6.9	6.4	8.8	7.8
10	11.6	10.6	10.7	7.2	6.9	6.3	7.7	6.3	6.9	6.2	8.9	7.4
11	11.1	9.9	10.6	7.1	7.1	6.6	9.3	8.0	7.2	6.1	8.8	7.8
12	10.1	9.6	8.5	6.8	7.2	6.8	9.2	6.7	7.9	7.0	8.6	7.2
13	9.6	9.1	10.9	7.5	7.4	7.1	7.6	6.6	8.0	7.5	8.5	7.5
14	9.6	8.9	11.2	8.1	7.4	7.0	8.6	6.5	7.9	7.5	7.8	6.3
15	10.1	9.0	11.0	7.8	7.1	6.9	7.6	5.9	8.2	7.6	7.1	5.8
16	10.4	9.7	11.4	7.9	7.0	6.7	7.9	6.7	8.4	7.9	7.9	6.5
17	10.4	9.5	12.0	8.1	7.0	6.5	8.2	6.7	8.3	7.7	8.2	7.7
18	10.1	9.7	11.2	7.8	7.1	6.4	8.6	6.8	8.0	7.5	8.0	7.8
19	10.1	9.2	10.3	7.3	6.9	5.8	9.2	6.9	8.0	6.8	8.1	7.8
20	9.8	9.4	9.2	6.2	6.7	5.5	10.0	7.0	7.7	7.0	8.3	7.2
21	9.6	9.0	9.0	5.9	6.5	4.5	10.5	6.9	7.7	6.4	8.1	7.5
22	9.4	8.7	8.8	6.2	6.5	5.8	10.2	6.7	7.6	6.7	8.4	7.6
23	9.9	9.2	7.7	6.2	6.8	6.0	8.8	6.7	7.9	7.2	8.6	7.3
24	9.8	8.7	6.6	6.0	7.1	6.2	7.0	5.9	7.7	7.0	8.6	7.3
25	9.7	8.8	8.0	6.1	7.8	6.9	6.9	5.8	8.0	7.4	8.4	8.2
26	9.0	8.4	8.5	7.2	7.9	6.9	7.3	6.7	8.2	7.5	8.3	7.1
27	10.5	8.9	8.1	7.3	7.9	6.4	7.1	6.4	8.2	7.6	8.3	7.5
28	10.2	9.2	8.0	7.4	8.2	6.2	7.3	6.2	8.1	7.1	8.1	7.2
29	12.0	9.9	7.5	6.8	7.3	5.9	7.5	6.5	8.1	7.0	8.2	7.7
30	12.0	9.8	6.9	6.4	6.6	5.3	7.6	6.7	8.1	7.3	8.2	7.3
31	---	---	6.6	6.2	---	---	7.2	6.7	7.9	7.3	---	---
MONTH	12.0	8.4	13.4	5.9	8.2	4.3	10.5	5.8	8.4	5.7	8.9	5.8
YEAR	14.1	6.3										

LITTLE MIAMI RIVER BASIN

245

03242150 CAESAR CREEK NEAR XENIA, OH

LOCATION.--Lat 39°37'25", long 83°54'09", Greene County, Hydrologic Unit 05090202, on left bank at downstream side of bridge on Winchester Road, 0.2 mi (0.3 km) downstream from unnamed left bank tributary, 4.5 mi (7.2 km) south of Xenia, 7.4 mi (11.9 km) upstream from Anderson Fork, and at mile 22.1 (35.6 km).

DRAINAGE AREA.--71.4 mi² (185 km²).

PERIOD OF RECORD.--August 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 894.18 ft (272.546 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for October 8 to Feb. 21, which are poor. Since 1964, some regulation by seasonal changes in storage in Lake Shawnee, 7.2 mi (11.6 km) upstream, drainage area 10.9 mi² (28.2 km²). Summer storage is about 1,100 acre-ft (1.36 hm³) more than winter. Water-quality data collected at this site 1968 to 1977.

AVERAGE DISCHARGE.--11 years, 80.9 ft³/s (2.291 m³/s) 15.39 in/yr (391 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,170 ft³/s (146 m³/s) July 4, 1975, gage height, 13.47 ft (4.106 m) from rating curve extended above 1,240 ft³/s (35.1 m³/s) on the basis of rating extension study; minimum daily, 0.42 ft³/s (0.012 m³/s) July 20, 21, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 24, 1968, reached a stage of 15.9 ft (4.846 m) outside, from flood mark; discharge, 12,500 ft³/s (354 m³/s) result of contracted opening estimate.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1000 ft³/s (28.3 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 4	0200	1290 36.5	8.29 2.527	Apr. 13	2130	3670 104	12.33 3.758
Dec. 8	2100	1900 53.8	9.49 2.893	Aug. 1	1930	2030 57.5	9.73 2.966
Jan. 1	1430	2080 58.9	9.81 2.990	Aug. 11	0300	1660 47.0	9.02 2.749
Feb. 23	1700	3400 96.3	11.93 3.636	Aug. 21	0100	*3780 107	*12.49 3.807
Feb. 25	1730	2390 67.7	10.36 3.158	Aug. 23	1930	1640 46.4	8.98 2.737
Apr. 4	1330	1160 32.9	8.01 2.441	Sept. 14	0530	3680 104	12.34 3.761

Minimum daily discharge, 1.9 ft³/s (0.054 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	12	27	1380	42	736	54	32	62	53	439	96
2	3.6	11	24	631	40	613	353	31	51	31	448	78
3	2.5	10	148	249	36	554	170	92	43	23	174	77
4	2.1	9.0	687	167	35	672	548	133	36	26	104	60
5	2.1	8.6	240	110	34	406	445	144	32	22	73	49
6	2.1	8.0	163	85	33	281	244	118	38	16	65	41
7	2.1	7.4	130	68	32	237	120	89	74	14	49	23
8	2.1	7.6	1020	64	32	215	107	73	199	13	37	18
9	2.0	7.6	929	60	31	174	137	63	117	15	29	18
10	2.0	7.0	326	58	30	161	121	55	59	16	24	18
11	2.0	6.8	212	56	29	139	212	40	45	14	683	16
12	2.5	6.4	172	54	28	121	273	35	33	14	266	14
13	32	6.2	159	54	28	92	1280	35	28	20	132	18
14	31	8.3	132	130	28	65	1580	31	26	40	83	2660
15	29	14	113	112	27	50	457	29	21	18	56	628
16	27	34	96	90	27	47	307	28	20	15	43	284
17	25	120	83	101	27	48	219	25	21	12	33	148
18	21	174	74	144	27	52	140	24	50	9.9	29	104
19	19	128	69	95	29	48	115	24	25	8.9	331	64
20	17	102	73	93	33	46	96	23	21	8.3	571	61
21	14	81	132	157	120	47	86	22	41	7.4	1590	81
22	12	67	98	93	639	45	78	20	22	6.9	353	47
23	11	59	78	70	2050	51	86	20	18	6.4	514	43
24	10	48	73	185	1090	53	121	20	16	6.9	617	34
25	10	37	68	142	1240	44	56	27	14	13	264	29
26	11	31	58	109	797	38	52	43	13	13	221	24
27	29	37	46	82	436	34	49	92	12	11	339	22
28	26	44	42	66	436	32	43	112	11	33	235	165
29	21	39	40	54	---	33	37	69	11	78	259	219
30	16	34	45	48	---	29	36	51	79	107	167	120
31	14	---	261	45	---	33	---	48	---	55	120	---
TOTAL	402.0	1164.9	5818	4852	7436	5196	7622	1648	1238	726.7	8348	5259
MEAN	13.0	38.8	188	157	266	168	254	53.2	41.3	23.4	269	175
MAX	32	174	1020	1380	2050	736	1580	144	199	107	1590	2660
MIN	1.9	6.2	24	45	27	29	36	20	11	6.4	24	14
CFSM	.18	.54	2.63	2.20	3.73	2.35	3.56	.75	.58	.33	3.77	2.45
IN.	.21	.61	3.03	2.53	3.87	2.71	3.97	.86	.64	.38	4.35	2.74

CAL YR 1978 TOTAL 29531.8 MEAN 80.9 MAX 1880 MIN 1.2 CFSM 1.13 IN 15.39
WTR YR 1979 TOTAL 49710.6 MEAN 136 MAX 2660 MIN 1.9 CFSM 1.91 IN 25.90

LITTLE MIAMI RIVER BASIN

03242200 ANDERSON FORK NEAR NEW BURLINGTON, OH

LOCATION.--Lat 39°33'59", long 83°54'10", Greene County, Hydrologic Unit 05090202, on right bank at downstream side of bridge on Old Winchester Trail, 1.0 mi (1.6 km) downstream from Painters Run, 3.4 mi (5.5 km) east of New Burlington, 5.0 mi (8.0 km) upstream from mouth, and at mile 19.7 (31.7 km).

DRAINAGE AREA.--77.8 mi² (202 km²).

PERIOD OF RECORD.--July 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 883.67 ft (269.343 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Water-quality data collected at this site 1968 to 1977.

AVERAGE DISCHARGE.--11 years, 87.6 ft³/s (2.481 m³/s), 15.29 in/yr (388 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,510 ft³/s (156 m³/s) Feb. 24, 1975, gage height, 12.76 ft (3.889 m); minimum, 0.08 ft³/s (0.002 m³/s) Sept. 24, 25, 1970.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 24, 1968 reached a stage of 15.7 ft (4.785 m), present datum, from floodmarks, discharge about 9,400 ft³/s (266 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28.3 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
Dec. 4	---	1200	34.0	unknown		Apr. 4	1230	1020	28.9	7.60	2.316
Dec. 8	---	1800	51.0	unknown		Apr. 13	2330	3040	86.1	10.61	3.234
Jan. 1	0930	1950	55.2	9.23	2.813	Aug. 11	0330	1070	30.3	7.71	2.350
Feb. 21	2330	1910	54.1	9.17	2.795	Aug. 21	0030	2280	64.6	9.69	2.954
Feb. 23	1830	4550	129	12.10	3.688	Aug. 23	2030	2540	71.9	10.03	3.057
Feb. 25	1830	2590	73.3	10.09	3.075	Sept. 14	0800	*4880	138	*12.38	3.773

Minimum, 6.1 ft³/s (0.17 m³/s) Oct. 9, 10, 11, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	30	42	1300	43	752	49	36	96	73	65	74
2	7.4	30	40	540	40	583	224	34	66	41	115	61
3	6.6	28	200	280	39	451	166	58	51	29	54	50
4	6.6	22	840	180	37	590	501	83	43	28	32	42
5	6.7	22	400	120	35	343	350	137	37	23	26	37
6	6.7	21	240	90	34	233	197	106	37	18	28	34
7	6.7	19	140	76	33	186	137	80	45	16	21	29
8	6.7	20	1200	68	32	157	118	67	211	17	16	26
9	6.5	20	1000	64	31	129	159	60	144	28	14	23
10	6.2	18	520	62	30	118	156	52	87	29	13	21
11	6.1	17	300	62	30	104	161	45	62	23	474	19
12	7.5	15	200	60	30	87	231	37	47	20	247	17
13	245	15	160	60	29	76	688	35	37	30	112	21
14	241	15	130	140	29	76	1980	32	33	79	65	3450
15	207	15	110	120	29	64	806	28	29	137	45	1170
16	165	18	90	100	29	56	456	24	27	115	35	474
17	97	120	76	120	29	55	338	24	26	60	30	192
18	70	226	69	150	29	55	116	23	27	37	26	126
19	59	120	66	110	29	55	95	23	30	27	373	91
20	54	83	74	100	34	54	80	23	30	22	532	68
21	44	65	185	170	288	55	72	21	59	21	1330	61
22	38	55	134	100	1070	51	53	21	41	19	334	106
23	34	51	100	80	2870	54	57	21	29	15	645	180
24	32	49	87	190	1850	58	55	21	24	14	583	116
25	32	47	76	151	1350	52	55	29	21	14	211	82
26	35	47	64	122	1110	43	51	44	18	14	204	65
27	75	57	52	84	407	40	52	91	17	14	393	56
28	66	70	42	66	368	37	46	98	16	15	213	434
29	48	56	40	54	---	37	42	60	23	26	245	474
30	40	46	44	48	---	37	40	45	108	26	147	235
31	34	---	348	45	---	37	---	49	---	20	98	---
TOTAL	1700.7	1417	7069	4912	9964	4725	7541	1507	1521	1050	6726	7834
MEAN	54.9	47.2	228	158	356	152	251	48.6	50.7	33.9	217	261
MAX	245	226	1200	1300	2870	752	1980	137	211	137	1330	3450
MIN	6.1	15	40	45	29	37	40	21	16	14	13	17
CFSM	.71	.61	2.93	2.03	4.58	1.95	3.23	.63	.65	.44	2.79	3.36
IN.	.81	.68	3.38	2.35	4.76	2.26	3.61	.72	.73	.50	3.22	3.75
CAL YR 1978	TOTAL	35689.7	MEAN	97.8	MAX	3080	MIN	4.1	CFSM	1.26	IN	17.06
WTR YR 1979	TOTAL	35966.7	MEAN	153	MAX	3450	MIN	6.1	CFSM	1.97	IN	26.76

LITTLE MIAMI RIVER BASIN

247

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 (152 m) downstream from Wooster Pike Bridge on U.S. Highway 50 in Milford, 1.2 mi (1.9 km) upstream from East Fork, 6.4 mi (10.3 km) downstream from North Branch Creek, and at mile 12.9 (20.8 km).

DRAINAGE AREA.--1,203 mi² (3,116 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 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 (150.678 m) National Geodetic Vertical Datum, adjustment of 1912. June 22, 1915, to May 14, 1920, nonrecording gage at site 4 mi (6 km) upstream at different datum. Mar. 11, 1925, to Aug. 16, 1928, nonrecording gage at bridge 500 ft (152 m) upstream at datum 5.72 ft (1.743 m) higher. Aug. 17, 1928 to Sept. 30, 1977 water-stage recorder at same site at datum 5.00 ft (1.524 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Some regulation since 1948 by Cowan Lake, capacity 12,000 acre-ft (14.8 hm³), 45 mi (72 km) upstream on Cowan Creek, tributary to Todd Fork, and Caesar Creek Lake capacity 242,200 acre-ft (298.6 hm³) 41.3 mi (66.4 km) upstream on Caesar Creek.

AVERAGE DISCHARGE.--54 years, (1915-17, 1925-36, 1938-79), 1,238 ft³/s (35.06 m³/s), 13.98 in/yr (355 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 84,100 ft³/s (2,380 m³/s) Jan. 22, 1959, gage height, 27.30 ft (8.321 m) present datum, from rating curve extended above 60,000 ft³/s (1,700 m³/s) on basis of slope-area measurement of peak flow; minimum observed, 27 ft³/s (0.76 m³/s) Sept. 18, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 30.5 ft (9.30 m), present datum, from information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 15,000 ft³/s and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Dec. 8	2200	25800	731	16.67	5.081	Feb. 25	2100	29400	833	17.63	5.374
Jan. 1	1900	21300	603	15.37	4.685	Apr. 14	0100	21600	612	15.48	4.718
Feb. 23	1900	25300	716	16.52	5.035	Sept. 14	1000	*44800	1269	*21.20	6.462

Minimum daily discharge, 178 ft³/s (5.04 m³/s) Oct. 10.

LITTLE MIAMI RIVER BASIN

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	182	326	776	14600	600	5280	1110	638	1070	1200	1200	1450
2	185	318	703	9600	540	5600	5710	593	1000	900	5910	1280
3	208	305	4920	4610	500	6040	2940	969	870	715	3140	1220
4	220	301	11000	2440	460	6670	6040	2750	644	739	2270	1050
5	195	289	4010	1830	430	6240	4730	3110	554	632	1040	1120
6	198	281	2330	2790	500	5230	4170	1600	507	436	847	1040
7	192	285	2940	3840	560	4560	4170	1120	733	339	877	977
8	192	293	15800	3730	480	4420	3810	900	1610	293	632	922
9	185	305	15100	3490	450	4190	3320	770	2020	517	528	870
10	178	305	5210	3410	430	4040	2110	679	1470	795	417	834
11	192	297	2580	3400	430	3900	1740	632	1120	638	2790	827
12	246	293	1900	3370	420	3760	4760	604	1180	496	4220	655
13	5250	293	1580	3250	420	3670	7130	582	985	1450	2020	644
14	3380	305	1360	4190	410	3460	13000	549	673	1280	2080	30500
15	2700	380	3020	2670	410	2610	7340	491	517	1420	1840	11500
16	1780	538	3520	1200	430	1430	5960	461	446	1600	1110	7190
17	1260	1920	3460	1360	470	1350	3350	412	412	1010	745	5640
18	930	2670	3340	2250	450	946	3640	375	384	821	627	4220
19	745	1120	3410	1330	430	892	3350	361	621	598	953	3790
20	549	821	2360	1320	450	862	3020	357	554	417	6200	3490
21	446	727	2870	3790	1540	834	1780	344	808	326	5210	3790
22	389	661	1660	2330	7130	783	1670	331	783	281	5170	4190
23	352	879	1350	1410	18700	795	1830	326	632	522	4470	2930
24	378	733	1200	3810	12200	1370	1700	326	544	650	5140	2270
25	309	691	1460	3080	16600	1060	1790	361	456	802	4290	3110
26	366	655	1270	1700	13600	840	1070	496	366	679	3520	3070
27	685	1680	1070	1300	6670	758	985	739	318	522	5320	2380
28	587	1580	862	1100	4730	715	1180	1400	293	502	4830	3840
29	451	1050	758	880	---	655	1020	1190	285	1330	5390	4110
30	384	862	709	740	---	644	789	745	610	1160	4520	2410
31	353	---	3350	660	---	650	---	733	---	814	2420	---
TOTAL	23667	20963	105878	95480	90440	84254	105214	24944	22465	23884	89726	111319
MEAN	763	699	3415	3080	3230	2718	3507	805	749	770	2894	3711
MAX	5250	2670	15800	14600	18700	6670	13000	3110	2020	1600	6200	30500
MIN	178	281	703	660	410	644	789	326	285	281	417	644
CFSM	.63	.58	2.84	2.56	2.69	2.26	2.92	.67	.62	.64	2.41	3.09
IN.	.73	.65	3.27	2.95	2.80	2.61	3.25	.77	.69	.74	2.77	3.44
CAL YR 1978	TOTAL	509018	MEAN	1395	MAX	22300	MIN	153	CFSM	1.16	IN	15.74
WTR YR 1979	TOTAL	798234	MEAN	2187	MAX	30500	MIN	178	CFSM	1.02	IN	24.68

LITTLE MIAMI RIVER BASIN

249

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 current year.

pH: May 1975 to current year.

WATER TEMPERATURES: May 1975 to current year.

DISSOLVED OXYGEN: May 1975 to current year.

INSTRUMENTATION.--Water-quality monitor since May 1975. Prior to May 1975, sampling site was 4.2 mi (6.76 km) upstream.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,200 micromhos Feb. 12, 1977; minimum, 197 micromhos July 4, 1975.

pH: Maximum, 9.3 units June 10, 1977; minimum, 7.1 units June 27, 1978.

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; minimum 3.8 mg/L July 21, 1977.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,130 micromhos Feb. 16; minimum, 228 micromhos Feb. 23.

pH: Maximum, 8.9 units Oct. 1, Nov. 9, 10; minimum, 7.1 units Feb. 9.

WATER TEMPERATURES: Maximum, 29.0°C Aug. 8, 9; minimum, 0.0°C on many days during winter period.

DISSOLVED OXYGEN: Maximum, 14.9 mg/L Feb. 17; minimum, 5.3 mg/L Aug. 2.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
02...	1530	184	861	8.4	18.5	8.0	10.0	106	9	570	240
NOV											
01...	1330	346	768	8.5	11.5	10	11.5	100	13	420	88
DEC											
11...	1330	2470	533	7.7	2.5	7.0	13.5	98	52	8800	6200
JAN											
01...	1630	20	--	--	--	--	--	--	--	--	--
09...	1200	3360	510	7.7	.5	1.0	14.4	100	3	1400	1000
FEB											
07...	1315	675	820	8.0	.0	5.0	14.3	98	87	570	270
23...	2000	24600	--	--	.0	--	--	--	--	--	--
MAR											
12...	1230	3760	552	7.9	3.0	1.0	13.9	103	21	240	210
APR											
03...	1245	2750	515	8.0	10.5	70	10.4	93	46	100	12000
MAY											
08...	1230	992	639	8.4	18.5	3.0	11.8	120	32	460	60
JUN											
12...	1200	1220	656	8.2	21.5	65	8.4	94	30	2100	400
JUL											
09...	1130	408	666	8.5	22.0	20	9.4	110	18	6900	1000
AUG											
13...	1200	1940	500	8.0	20.5	55	8.8	97	23	3900	1600
SEP											
04...	1445	901	648	8.1	24.5	25	8.9	110	3	760	9000

LITTLE MIAMI RIVER BASIN

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	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)	ALKA- LINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT 02...	370	91	94	33	46	3.8	280	--	67	74	.3
NOV 01...	320	83	83	28	28	3.9	240	--	56	55	.2
DEC 11...	240	76	60	21	12	3.6	160	--	46	30	.2
JAN 01...	--	--	--	--	--	--	--	--	--	--	--
09...	260	83	64	25	11	3.0	180	--	35	37	.2
FEB 07...	350	68	90	30	32	2.5	280	--	59	61	.2
23...	--	--	--	--	--	--	--	--	--	--	--
MAR 12...	250	75	64	23	10	2.6	180	--	38	33	.2
APR 03...	210	52	55	18	19	3.1	160	--	41	35	.1
MAY 08...	290	68	74	25	17	2.4	220	--	53	38	.3
JUN 12...	300	78	73	28	17	3.1	220	--	46	34	.2
JUL 09...	280	64	71	26	31	3.2	220	--	49	50	.2
AUG 13...	220	43	58	19	14	3.5	180	3.5	35	24	.2
SEP 04...	310	78	77	28	17	2.6	230	3.6	42	33	.2

DATE	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N03)	PHOS- PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M
OCT 02...	6.5	504	493	.48	.56	3.3	14	.56	--	--	6.53
NOV 01...	4.8	441	403	.50	.62	3.3	15	.50	7.7	230	65.8
DEC 11...	7.0	303	276	.99	1.0	6.1	27	.30	7.2	--	--
JAN 01...	--	--	--	--	--	--	--	--	--	--	--
09...	4.3	317	288	.65	.82	16	70	.13	--	--	--
FEB 07...	6.9	499	450	.48	1.0	4.8	21	.29	2.6	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
MAR 12...	5.7	339	285	.60	.80	4.9	22	--	3.6	7500	--
APR 03...	6.9	332	275	1.0	1.2	3.8	17	.38	--	--	--
MAY 08...	2.4	404	344	.45	.53	3.6	16	.15	4.1	26000	--
JUN 12...	7.9	412	341	1.2	1.2	8.2	36	.40	5.2	390	11.0
JUL 09...	2.5	430	365	.85	.98	3.5	15	.42	--	54000	7.40
AUG 13...	8.9	312	271	.98	1.0	3.4	15	.35	9.0	--	--
SEP 04...	7.8	395	359	.49	.50	3.4	15	.24	6.2	--	--

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

ANALYSES OF MINOR ELEMENTS

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)
OCT 02...	1530	1	1	100	100	1	0	<10	0
JAN 09...	1200	1	1	100	100	8	2	20	4
APR 03...	1245	1	0	100	100	2	2	30	30
JUL 09...	1130	4	3	100	70	1	0	20	20

DATE	TIME	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
OCT 02...	2	1	1	5	2	570	0	18	15	60
JAN 09...	1	1	1	8	4	540	100	100	20	70
APR 03...	3	1	1	10	5	5900	290	24	8	580
JUL 09...	0	0	0	7	3	1500	10	7	3	130

DATE	TIME	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 02...	10	<.5	<.5	<.5	0	0	2	2	20	10
JAN 09...	10	.6	<.5	<.5	0	0	0	0	50	20
APR 03...	20	<.5	<.5	<.5	0	0	0	0	80	30
JUL 09...	7	<.5	<.5	<.5	0	0	0	0	40	40

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
OCT 02...	1530	184	18.5	28	14
NOV 01...	1330	346	11.5	12	11
DEC 11...	1330	2470	2.5	95	634
JAN 01...	1630	20	--	893	48
JAN 09...	1200	3360	.5	140	1270
FEB 07...	1315	675	.0	4	7.3
FEB 23...	2000	24600	.0	1560	104000
MAR 12...	1230	3760	3.0	--	23
APR 03...	1245	2750	10.5	--	165
MAY 08...	1230	992	18.5	16	43
JUN 12...	1200	1220	21.5	118	389
JUL 09...	1130	408	22.0	58	64
AUG 13...	1200	1940	20.5	123	644
SEP 04...	1445	901	24.5	50	122

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	873	860	779	753	647	617	---	---	830	773	563	486
2	894	861	791	746	660	638	---	---	836	816	486	476
3	899	852	812	767	665	335	489	459	830	804	543	471
4	912	809	818	774	375	288	581	500	810	789	548	539
5	884	848	819	770	513	378	633	585	836	798	539	524
6	900	869	818	785	594	516	668	566	836	821	569	533
7	923	894	819	788	609	552	567	516	827	749	585	570
8	929	888	827	798	552	254	545	522	759	740	584	576
9	936	872	834	806	366	254	551	510	863	738	581	575
10	914	858	848	818	467	372	551	545	864	846	573	567
11	932	881	846	810	555	533	558	536	852	828	573	564
12	938	756	840	815	638	557	554	531	890	831	567	552
13	750	287	848	821	680	635	567	539	878	852	554	534
14	437	309	845	813	693	665	654	542	1020	846	543	533
15	464	393	851	812	692	549	672	543	930	849	575	540
16	561	468	813	765	549	540	692	623	1130	912	648	561
17	581	546	786	513	551	537	822	639	942	900	650	642
18	590	561	569	462	546	539	674	554	888	837	662	648
19	618	581	615	513	549	539	636	555	851	827	731	659
20	648	617	657	609	593	536	830	642	932	852	737	720
21	666	644	672	647	585	488	672	464	1090	513	729	719
22	743	660	689	663	600	510	578	465	501	359	726	717
23	761	737	701	681	633	596	651	578	374	228	741	716
24	770	747	699	671	650	624	708	438	345	233	737	660
25	782	752	675	660	645	612	557	440	360	249	692	660
26	792	771	678	660	630	600	633	563	378	252	714	690
27	792	725	669	549	650	621	669	627	449	381	720	698
28	750	695	561	527	644	627	701	663	537	450	728	710
29	728	693	611	549	698	639	720	693	---	---	725	716
30	744	713	642	606	704	686	737	704	---	---	753	716
31	767	734	---	---	701	510	774	725	---	---	764	714
MONTH	938	287	851	462	704	254	830	438	1130	228	764	471
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	764	615	704	650	692	651	746	638	636	392	---	---
2	626	408	726	687	666	636	630	540	407	284	---	---
3	546	435	732	623	662	641	596	540	488	392	---	---
4	585	341	656	441	665	645	606	528	513	489	669	64

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.9	8.8	8.5	8.4	8.4	8.2	---	---	7.9	7.6	7.7	7.7
2	8.8	8.4	8.6	8.4	8.4	8.3	---	---	8.0	7.7	7.7	7.7
3	8.5	8.4	8.6	8.4	8.4	7.9	---	---	8.0	7.8	7.7	7.7
4	8.4	8.3	8.6	8.4	8.0	7.9	---	---	8.0	7.8	7.7	7.7
5	8.4	8.4	8.7	8.4	8.1	7.9	---	---	8.1	7.5	7.7	7.7
6	8.5	8.4	8.7	8.6	8.2	8.0	---	---	8.1	7.8	7.8	7.8
7	8.5	8.4	8.8	8.6	8.2	8.1	---	---	8.2	7.8	7.8	7.8
8	8.5	8.4	8.8	8.6	8.2	7.9	---	---	8.3	7.6	7.8	7.8
9	8.5	8.5	8.9	8.7	8.0	7.9	8.3	7.7	8.3	7.1	7.8	7.8
10	8.5	8.4	8.9	8.6	8.0	7.6	8.4	8.3	8.4	7.7	7.8	7.8
11	8.5	8.4	8.8	8.7	---	---	8.4	7.9	8.2	7.6	7.9	7.8
12	8.5	8.3	8.8	8.7	---	---	8.1	7.6	8.0	7.5	7.9	7.8
13	8.4	7.9	8.8	8.6	7.9	7.7	8.3	7.9	8.3	7.5	8.0	7.9
14	8.1	7.9	8.7	8.6	7.9	7.5	8.4	8.1	8.1	7.8	8.0	8.0
15	8.2	8.2	8.6	8.5	8.0	7.8	8.4	7.7	8.1	8.0	8.0	8.0
16	8.3	8.2	8.5	8.4	8.1	7.9	8.2	7.7	8.1	7.3	8.0	8.0
17	8.3	8.3	8.4	8.2	8.1	7.9	8.3	8.2	8.3	7.9	8.1	8.0
18	8.4	8.3	8.2	8.2	8.1	8.0	8.2	7.8	8.3	7.2	8.0	8.0
19	8.4	8.3	8.3	8.2	8.1	8.0	8.1	7.6	8.2	7.7	8.2	8.0
20	8.4	8.2	8.4	8.3	8.1	8.1	8.2	8.1	8.3	7.3	8.1	8.0
21	8.4	8.0	8.5	8.4	8.2	7.6	8.2	8.1	---	---	8.1	8.0
22	8.4	8.0	8.5	8.5	---	---	8.1	7.9	---	---	8.1	8.1
23	8.4	8.3	8.5	8.4	---	---	8.1	7.8	---	---	8.2	8.1
24	8.5	8.4	8.5	8.4	---	---	8.1	7.8	8.0	7.5	8.1	8.1
25	8.5	8.3	8.4	8.3	---	---	8.0	7.6	8.1	8.0	8.2	8.1
26	8.4	8.3	8.4	8.4	---	---	8.0	7.5	8.1	7.6	8.2	8.1
27	8.4	8.3	8.4	8.3	---	---	8.1	7.8	8.0	7.6	8.3	8.1
28	8.4	8.3	8.3	8.2	---	---	8.1	7.9	7.7	7.6	8.3	8.1
29	8.5	8.4	8.4	8.2	---	---	8.0	7.9	---	---	8.4	8.2
30	8.5	8.2	8.4	8.2	---	---	8.1	7.6	---	---	8.4	8.2
31	8.5	8.2	---	---	---	---	8.0	7.8	---	---	8.4	8.2
MONTH	8.9	7.9	8.9	8.2	8.4	7.5	8.4	7.5	8.4	7.1	8.4	7.7
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.3	8.1	8.6	8.3	8.2	8.1	8.4	8.2	8.1	7.8	---	---
2	8.1	7.8	8.6	8.4	8.3	8.1	8.2	7.8	7.8	7.5	---	---
3	8.0	7.9	8.5	8.3	8.3	8.1	7.9	7.9	7.9	7.8	---	---
4	8.0	7.8	8.3	8.0	8.4	8.2	7.9	7.9	8.0	7.9	8.3	8.1
5	8.0	7.8	8.1	8.0	8.5	8.3	8.1	7.9	8.1	7.9	8.3	8.1
6	8.1	8.0	8.3	8.1	8.5	8.4	8.2	8.0	8.1	8.1	8.4	8.2
7	8.1	8.0	8.5	8.2	8.5	8.4	8.4	8.2	8.2	8.1	8.4	8.3
8	8.1	8.1	8.6	8.3	8.4	8.0	8.5	8.3	8.2	8.0	8.5	8.4
9	8.1	8.0	8.6	8.4	8.1	8.0	8.5	8.3	8.2	8.1	8.5	8.4
10	8.1	8.0	8.6	8.4	8.1	8.0	8.3	8.0	8.3	8.2	8.4	8.4
11	8.2	8.1	8.6	8.4	8.2	8.1	8.0	7.9	8.4	7.9	8.4	8.3
12	8.1	8.0	8.5	8.4	8.3	8.2	8.1	8.0	7.9	7.7	8.4	8.2
13	8.0	7.8	8.5	8.3	8.3	8.2	8.0	7.8	8.1	8.0	8.4	8.4
14	7.9	7.8	8.5	8.4	8.3	8.2	7.9	7.8	8.2	8.0	---	---
15	7.9	7.9	8.5	8.4	8.4	8.3	8.0	7.9	8.1	8.1	---	---
16	8.0	7.9	8.5	8.4	8.5	8.3	8.0	7.6	8.2	8.1	---	---
17	8.1	8.0	8.6	8.4	8.5	8.4	8.0	7.8	8.3	8.2	---	---
18	8.1	8.0	8.6	8.4	8.7	8.4	8.1	7.9	8.3	8.2	---	---
19	8.1	8.0	8.6	8.4	8.5	8.1	8.3	8.1	8.2	8.0	---	---
20	8.1	8.0	8.5	8.4	8.6	8.3	8.3	8.1	8.2	7.6	---	---
21	8.1	8.1	8.5	8.4	8.5	8.4	8.5	8.2	7.9	7.8	---	---
22	8.1	8.1	8.5	8.3	8.5	8.3	8.5	8.3	7.9	7.8	---	---
23	8.2	8.1	8.5	8.3	8.3	8.2	8.4	8.1	8.1	7.9	---	---
24	8.2	8.1	8.4	8.3	8.4	8.2	8.4	7.9	8.1	7.9	---	---
25	8.2	8.1	8.3	8.2	8.6	8.4	8.0	7.9	8.0	7.9	---	---
26	8.3	8.1	8.3	8.2	8.7	8.4	8.0	8.0	8.1	8.0	8.2	8.0
27	8.4	8.1	8.3	8.3	8.8	8.5	8.0	7.9	8.0	7.8	8.1	8.0
28	8.4	8.2	8.3	8.2	8.8	8.5	8.0	7.9	8.1	7.8	8.2	8.0
29	8.4	8.2	8.3	8.2	8.7	8.5	8.1	7.9	8.1	8.0	8.2	8.0
30	8.5	8.2	8.3	8.2	8.6	8.4	8.1	7.9	---	---	8.3	8.1
31	---	---	8.3	8.1	---	---	8.0	7.9	---	---	---	---
MONTH	8.5	7.8	8.6	8.0	8.8	8.0	8.5	7.6	8.4	7.5	8.5	8.0
YEAR	8.9	7.1										

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX MIN		MAX MIN		MAX MIN		MAX MIN		MAX MIN		MAX MIN	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.0	18.0	12.5	10.5	5.5	4.5	---	---	1.0	.0	3.5	3.0
2	19.0	17.0	12.0	10.0	5.0	4.5	---	---	.5	.0	4.5	3.5
3	18.0	17.0	12.5	10.5	8.0	5.0	.5	.0	.5	.0	5.0	3.5
4	17.5	16.0	12.5	10.5	9.0	7.5	.5	.0	1.5	.0	7.5	5.0
5	16.5	15.5	13.0	11.0	7.5	5.5	.5	.5	.5	.0	7.5	6.0
6	15.5	14.5	13.0	11.5	6.0	5.0	1.5	.5	.5	.0	6.0	5.0
7	14.5	13.5	12.0	10.5	7.5	6.0	2.0	1.0	.5	.0	5.0	4.0
8	14.0	12.5	11.0	9.5	8.5	6.5	2.5	1.0	.5	.0	5.0	4.0
9	14.5	12.0	10.0	8.5	6.5	4.0	1.0	.0	.5	.0	5.0	4.0
10	15.0	12.5	10.0	8.5	7.0	3.0	1.0	.5	.5	.0	4.5	4.
11	14.5	13.5	10.5	8.5	2.5	2.5	1.5	.5	.5	.0	4.0	3.0
12	16.0	13.5	10.5	10.0	3.5	2.5	2.0	1.0	.5	.0	4.0	2.5
13	15.5	14.0	12.0	10.5	4.5	3.5	2.5	2.0	.5	.0	4.5	3.5
14	14.0	12.0	12.0	11.5	4.0	3.0	2.5	1.0	.5	.0	5.0	4.5
15	12.0	11.5	11.5	10.0	5.0	3.0	.5	.0	.5	.5	4.5	3.5
16	11.5	11.0	10.0	9.5	5.0	5.0	.5	.0	.5	.0	5.5	3.0
17	12.0	11.0	11.5	9.5	5.5	5.0	1.5	.5	.5	.0	7.0	4.0
18	12.5	11.0	11.0	10.0	5.0	4.5	1.0	.0	.5	.0	9.0	6.0
19	13.5	12.0	10.0	9.0	5.0	5.0	.5	.0	.5	.0	10.5	8.5
20	14.0	12.0	9.0	8.0	6.5	5.0	1.5	.5	.5	.0	12.0	10.5
21	14.5	12.5	8.0	7.5	6.5	5.0	1.5	1.0	.5	.5	13.0	11.5
22	14.5	12.5	8.5	7.5	5.0	3.5	1.0	.5	.5	.0	13.5	11.5
23	14.0	12.5	9.0	8.0	3.5	3.0	2.0	1.0	1.5	.5	13.0	12.5
24	13.0	11.5	9.0	8.5	3.0	2.5	1.5	.5	1.5	1.5	12.5	9.5
25	12.5	10.5	8.0	7.5	3.0	3.0	1.0	.0	1.5	1.0	9.5	7.5
26	12.5	12.0	7.5	7.0	3.0	2.0	.5	.0	1.0	.5	7.5	6.0
27	12.0	11.0	7.5	7.0	2.0	1.5	1.0	.5	2.0	.5	7.0	5.5
28	12.0	10.0	7.5	6.5	1.5	.5	1.5	1.0	3.0	2.0	8.0	5.5
29	11.5	10.0	6.5	5.5	2.0	.0	1.0	1.0	---	---	10.0	8.0
30	11.5	9.5	6.0	5.0	3.0	1.5	1.5	.5	---	---	12.0	10.0
31	12.0	10.0	---	---	5.0	3.0	1.5	.5	---	---	12.5	12.0
MONTH	19.0	9.5	13.0	5.0	9.0	.0	2.5	.0	3.0	.0	13.5	2.5
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	12.0	10.5	15.5	12.5	20.5	19.0	22.0	20.5	27.0	24.0	---	---
2	11.5	10.0	16.5	13.5	21.5	19.5	23.0	20.0	24.0	22.5	---	---
3	11.0	10.0	16.5	15.5	22.5	20.0	23.5	21.0	22.5	20.5	---	---
4	9.5	7.0	16.0	12.5	23.5	20.0	23.0	22.0	21.0	20.0	25.0	24.0
5	8.0	6.5	13.5	11.5	24.0	21.0	23.0	20.5	23.5	20.0	25.0	23.0
6	8.0	7.0	16.0	12.5	25.0	22.5	23.5	20.5	26.0	23.0	25.5	23.5
7	7.0	6.0	19.0	14.5	24.5	23.5	23.5	21.0	27.5	24.5	25.0	23.5
8	7.5	6.0	21.5	17.0	23.0	22.0	23.5	21.5	29.0	25.5	23.5	20.5
9	7.5	6.5	22.5	20.0	23.5	22.0	23.0	21.5	29.0	26.5	21.5	19.0
10	8.0	6.0	24.0	21.0	25.0	22.5	23.0	21.0	28.5	27.0	22.0	19.5
11	9.0	7.0	24.5	22.0	23.5	21.5	24.0	22.0	27.0	22.0	23.0	20.0
12	11.5	9.0	23.5	20.5	23.5	20.5	24.5	23.5	21.5	20.5	24.0	21.0
13	12.0	11.0	21.5	19.0	22.0	20.5	23.5	22.0	22.5	20.0	23.0	22.0
14	11.5	10.5	21.0	18.5	24.0	20.5	24.0	22.0	22.0	18.0	---	---
15	11.0	10.0	21.5	19.0	25.5	23.0	26.0	23.5	18.5	17.0	---	---
16	10.0	9.0	21.5	18.5	25.5	23.0	25.5	23.0	19.5	16.5	---	---
17	11.0	9.0	21.5	18.0	25.5	23.5	26.0	24.0	21.5	18.0	---	---
18	10.5	9.0	21.5	18.5	26.5	24.0	26.0	24.0	22.0	20.5	---	---
19	10.5	9.5	22.0	19.0	25.0	21.0	25.5	23.0	23.0	21.5	---	---
20	11.0	10.0	23.0	20.0	25.5	22.5	26.0	23.0	22.5	20.5	---	---
21	14.0	11.0	22.5	20.5	25.5	22.5	27.0	24.0	22.0	21.5	---	---
22	13.0	12.5	21.0	19.0	26.0	23.5	28.0	25.0	21.5	20.5	---	---
23	13.0	11.5	20.5	19.5	25.5	23.5	27.0	24.0	22.0	21.0	---	---
24	14.0	12.0	19.5	17.0	24.5	22.0	26.0	24.0	21.5	18.5	---	---
25	14.0	12.5	17.0	14.0	23.5	20.5	24.5	23.5	19.5	18.0	---	---
26	14.5	13.5	16.0	13.0	24.5	20.5	24.5	23.5	17.5	16.5	18.0	17.5
27	16.0	12.5	16.5	14.5	25.0	21.5	25.5	23.5	19.0	16.5	18.0	17.5
28	15.0	12.0	17.5	15.0	26.0	22.5	24.5	23.5	18.0	17.0	17.5	17.0
29	13.0	10.5	19.0	15.5	25.0	23.0	24.5	23.0	17.5	17.0	18.5	17.0
30	14.5	11.5	20.5	17.0	23.0	21.0	25.5	23.0	---	---	19.0	18.0
31	---	---	20.0	19.5	---	---	27.0	24.0	---	---	---	---
MONTH	16.0	6.0	24.5	11.5	26.5	19.0	28.0	20.0	29.0	16.5	25.5	17.0
YEAR	29.0	.0										

03246200 EAST FORK LITTLE MIAMI RIVER NEAR MARATHON, OH

LOCATION.--Lat 39°06'52", long 84°01'29", Clermont County, Hydrologic Unit 05090202, on right bank at downstream side of bridge on Blue Sky Park Road, 500 ft (152 m) upstream from Fivemile Creek, 1.0 mi (1.6 km) downstream from Sixmile Creek, 2.3 mi (3.7 km) southwest of Marathon, and at mile 44.2 (77.1 km).

DRAINAGE AREA.--195 mi² (505 km²).

PERIOD OF RECORD.--August 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 842.32 ft (256.739 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Water-quality data collected at this site 1969 to 1977. Sediment data collected 1970 to 1974.

AVERAGE DISCHARGE.--11 years, 256 ft³/s (7.25 m³/s), 17.83 in/yr (453 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,400 ft³/s (323 m³/s) Apr. 2, 1970, Feb. 24, 1975; maximum gage height, 18.57 ft (5.660 m) Apr. 2, 1970, in gage well, about 19.8 ft (6.04 m) outside; minimum discharge, 0.50 ft³/s (1.42 m³/s) Oct. 15, 16, 17, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85.0 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s)	(m ³ /s)	Gage height (ft)	(m)	Date	Time	Discharge (ft ³ /s)	(m ³ /s)	Gage height (ft)	(m)
Oct. 13	2030	4460	126	12.79	3.898	Apr. 14	0330	4010	114	12.30	3.749
Dec. 4	0530	5580	158	13.96	4.255	Aug. 27	1230	3780	107	12.03	3.667
Dec. 9	0430	7270	206	15.52	4.730	Sept. 14	0900	*11200	317	*18.46	5.627
Jan. 1	2030	5470	155	13.85	4.221	Sept. 22	2200	3780	107	12.04	3.670
Feb. 23	2030	7810	221	15.97	4.868	Sept. 28	2230	4130	117	12.43	3.789
Feb. 25	2200	6330	179	14.68	4.474						

Minimum 4.1 ft³/s (0.12 m³/s) Oct. 1, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	85	128	4450	120	1310	421	34	889	72	83	75
2	4.7	76	101	3230	100	1010	2080	31	326	73	678	53
3	4.5	69	1590	382	82	652	656	163	157	41	232	40
4	4.5	63	4460	198	72	898	1140	800	99	203	81	32
5	4.7	58	689	161	62	481	934	1070	72	99	39	26
6	5.4	55	316	133	56	243	324	367	53	34	23	21
7	5.9	52	232	110	52	170	166	198	126	21	16	17
8	5.7	55	4350	96	50	137	128	129	1650	14	13	15
9	5.7	52	5840	82	49	115	433	96	488	12	12	13
10	5.9	52	630	68	48	99	411	79	246	13	9.3	11
11	6.1	49	282	60	47	93	201	64	252	13	370	10
12	7.2	45	211	54	46	75	796	56	139	82	900	9.3
13	2630	41	206	60	45	65	975	50	73	618	226	15
14	1540	22	186	329	44	68	2670	45	50	362	90	8830
15	984	69	149	526	50	68	488	40	39	131	47	6140
16	387	282	131	305	62	52	261	34	31	58	30	359
17	208	842	124	356	50	46	181	43	25	37	21	188
18	135	1230	117	863	47	45	135	40	22	22	16	122
19	96	301	107	393	45	44	107	28	24	14	295	96
20	75	168	157	362	80	43	90	22	25	10	1240	89
21	62	120	1160	1450	630	41	79	21	110	8.1	701	784
22	46	99	329	889	3410	40	72	19	128	6.9	276	3100
23	37	109	186	495	6090	40	55	19	99	25	170	1550
24	32	196	159	1000	4800	79	64	22	44	62	201	390
25	29	145	334	1170	3610	78	68	34	29	23	117	232
26	584	112	229	562	3660	53	64	129	20	24	611	155
27	1020	872	145	382	529	40	55	424	17	27	2780	99
28	292	682	102	260	728	34	55	515	13	153	961	2280
29	168	276	104	200	---	31	45	184	12	592	503	1640
30	126	163	96	160	---	30	39	99	63	232	224	414
31	99	---	1100	140	---	69	---	243	---	81	119	---
TOTAL	8615.3	6440	23950	18926	24664	6249	13203	5098	5321	3163.0	11084.3	26805.3
MEAN	278	215	773	611	881	202	440	164	177	102	358	894
MAX	2630	1230	5840	4450	6090	1310	2670	1070	1650	618	2780	8830
MIN	4.5	22	96	54	44	30	39	19	12	6.9	9.3	9.3
CFSM	1.43	1.10	3.96	3.13	4.52	1.04	2.26	.84	.91	.52	1.84	4.59
IN.	1.64	1.23	4.57	3.61	4.71	1.19	2.52	.97	1.02	.60	2.11	5.11

CAL YR 1978 TOTAL 114098.5 MEAN 313 MAX 8060 MIN 3.4 CFSM 1.61 IN 21.77
WTR YR 1979 TOTAL 153518.9 MEAN 421 MAX 8830 MIN 4.5 CFSM 2.16 IN 29.29

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 (70 m) upstream from unnamed right bank tributary, 1,400 ft (427 m) upstream from Lucy Run, 1.3 mi (2.1 km) south of Batavia, and at mile 15.7 (25.3 km).

DRAINAGE AREA.--352 mi² (912 km²), includes that of unnamed tributary.

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

GAGE.--Water-stage recorder. Datum of gage is 571.68 ft (174.248 m) National Geodetic Vertical Datum of 1929. Prior to July 17, 1968, nonrecording gage 1,100 ft (335 m) downstream at same datum.

REMARKS.--Records fair. Flow regulated by East Fork Lake, since 1977. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--14 years, 444 ft³/s (12.57 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,700 ft³/s (813 m³/s) Apr. 2, 1970, gage height, 20.31 ft (6.190 m); minimum daily, 0.14 ft³/s (0.004 m³/s) Sept. 23, 27, 1967. Maximum discharge since start of construction of East Fork Dam 31,000 ft³/s (878 m³/s) Aug. 30, 1974, gage height, 20.80 ft (6.400 m) in gage well, 21.8 ft (6.645 m) from floodmarks, result of failure of cofferdam.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1964 reached a stage of 21.46 ft (6.541 m) at site 1,100 ft (335 m) downstream from information by local resident, discharge, about 32,000 ft³/s (906 m³/s), from flood study.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,900 ft³/s (337 m³/s) Sept. 14, gage height, 15.40 ft (4.694 m); minimum daily, 6.4 ft³/s (0.18 m³/s) Oct. 8, 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	204	285	22	326	120	157	157	41	672	222	809	983
2	190	249	21	148	128	1050	812	42	828	146	781	260
3	134	240	139	917	118	2580	1790	84	602	98	729	393
4	9.6	236	110	2410	118	2840	1900	157	170	291	707	212
5	7.0	224	35	2950	128	2740	2290	582	77	481	690	38
6	7.0	216	28	2900	128	3550	2710	1140	97	408	676	424
7	6.7	201	32	2860	118	3940	2060	870	166	184	653	704
8	6.4	163	334	2810	123	4230	1090	245	828	58	652	279
9	6.4	148	173	2470	136	4130	879	69	1420	45	636	37
10	7.0	142	110	1790	125	4060	1280	69	1230	95	635	35
11	14	136	106	1230	115	3980	976	77	870	262	697	35
12	14	170	106	123	115	3920	717	101	650	353	631	35
13	281	186	103	123	128	3550	1150	118	391	438	622	248
14	1840	166	1430	151	115	1570	1790	125	142	474	616	1520
15	2880	183	3630	186	120	967	2470	108	62	413	812	504
16	2380	173	3560	372	142	1620	2880	69	62	360	1060	1340
17	1460	79	3490	537	142	1610	1450	48	53	330	1040	2170
18	1200	35	3420	500	123	1600	438	41	31	320	1150	3190
19	518	24	2870	622	118	1330	506	41	316	426	1440	3140
20	290	22	1640	913	125	665	326	41	261	613	1480	3080
21	262	21	926	905	216	438	101	39	347	590	1440	2150
22	228	21	1400	1300	253	438	61	23	496	563	1420	788
23	183	23	1810	1790	334	449	57	23	459	544	1460	1460
24	125	23	1230	1840	636	465	53	26	270	529	1440	2390
25	95	21	59	1780	1510	396	66	62	63	508	1410	3140
26	151	25	52	1770	1080	245	67	88	27	544	1710	3100
27	208	61	50	1290	905	128	64	190	32	563	1700	3050
28	220	33	49	471	145	170	43	391	30	605	1970	3260
29	212	24	71	123	---	154	42	427	23	595	1940	3060
30	285	23	110	123	---	103	42	228	147	653	1910	3030
31	330	---	207	120	---	73	---	326	---	733	1710	---
TOTAL	13754.1	3553	27323	35850	7564	53148	28267	5891	10822	12444	34626	44055
MEAN	444	118	881	1156	270	1714	942	190	361	401	1117	1469
MAX	2880	285	3630	2950	1510	4230	2880	1140	1420	733	1970	3260
MIN	6.4	21	21	120	115	73	42	23	23	45	616	35

CAL YR 1978 TOTAL 166022.1 MEAN 455 MAX 4530 MIN 6.4
WTR YR 1979 TOTAL 277297.1 MEAN 760 MAX 4230 MIN 6.4

LITTLE MIAMI RIVER BASIN

03247500 EAST FORK LITTLE MIAMI RIVER AT PERINTOWN, OH

LOCATION.--Lat 39°08'13", long 84°14'17", Clermont County, Hydrologic Unit 05090202, on left bank at downstream side of highway bridge at Perintown, 0.2 mi (0.3 km) downstream from Sugarcamp Run, 5 mi (8 km) upstream from mouth, and at mile 6.4 (10.3 km).

DRAINAGE AREA.--476 mi² (1,233 km²).

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 (154.543 m) National Geodetic Vertical Datum of 1929. Prior to Feb. 6, 1940, nonrecording gage, at same site and datum.

REMARKS.--Records good. Occasional regulation by Stonelick Creek 14 mi (23 km) upstream. Surface area at spillway level, 171 acres (69 hm²). Flow regulated by East Fork Lake, since 1977. Water-quality data collected at this site 1964 to 1977.

AVERAGE DISCHARGE.--56 years (1915-17, 1925-79), 550 ft³/s (15.58 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,400 ft³/s (1,200 m³/s) Mar. 10, 1964, gage height, 23.84 ft (7.266 m); minimum daily, 0.4 ft³/s (0.011 m³/s) July 24, 1930, Sept. 11, 12, 23, 1939; minimum gage height, -0.18 ft (-0.055 m) Oct. 3-7, 1917. Maximum discharge since start of construction of East Fork Dam 23,200 ft³/s (657 m³/s) Aug. 30, 1974, gage height, 19.52 ft (5.950 m), result of failure of cofferdam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 29,000 ft³/s (821 m³/s) Sept. 14, gage height, 21.00 ft (6.401 m); minimum daily, 24 ft³/s (0.68 m³/s) Oct. 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	236	333	76	3420	175	714	1050	74	977	399	738	1110
2	218	282	65	1150	166	1060	2440	72	943	210	1020	314
3	201	271	1810	778	168	2490	2070	446	773	160	768	406
4	61	265	2320	2130	166	2890	3180	1170	273	399	724	346
5	30	251	359	2670	151	2550	2530	1160	101	599	695	69
6	27	243	164	2650	147	3050	2650	1270	111	504	681	282
7	26	236	241	2630	153	3270	2190	1090	149	260	667	748
8	25	201	5410	2590	151	3510	1320	424	1380	95	658	396
9	24	166	1760	2400	151	3440	1340	131	1410	92	644	78
10	24	158	424	1740	147	3400	1530	117	1280	175	644	58
11	28	151	282	1420	139	3360	1280	110	899	285	1210	55
12	42	158	249	179	143	3320	1690	137	753	396	960	53
13	2200	225	238	179	151	3150	2140	155	488	1120	662	184
14	2120	191	949	532	141	1640	2950	164	230	921	644	10800
15	3170	299	3060	352	166	1010	2460	155	86	536	743	899
16	2430	472	3030	457	365	1580	2850	95	81	428	1010	1410
17	1500	932	3000	866	276	1600	1710	87	78	375	995	1940
18	1330	532	2960	977	218	1590	540	59	58	349	1130	2800
19	630	160	2650	681	184	1430	599	61	453	396	1490	2780
20	311	93	1940	1320	175	773	484	60	431	621	2650	2730
21	276	72	1530	1710	1260	492	184	59	910	608	1720	3360
22	241	61	1380	1420	2280	484	133	51	657	582	1390	2750
23	201	69	1800	1850	4140	552	117	58	565	621	1380	1770
24	141	120	1510	2620	1650	899	115	55	385	595	1540	2200
25	97	83	305	2030	3290	599	103	78	139	582	1360	2760
26	676	72	191	1800	2040	379	113	189	61	639	2050	2720
27	548	798	131	1450	1320	208	126	496	55	695	2280	2680
28	317	410	105	681	528	233	98	548	55	960	2020	4610
29	265	155	103	208	---	225	84	557	51	1110	1900	3040
30	296	98	168	193	---	166	78	299	424	733	1800	2730
31	372	---	1660	191	---	238	---	417	---	763	1660	---
TOTAL	18063	7557	39870	43274	20041	50302	38164	9844	14256	16208	37833	56078
MEAN	583	252	1286	1396	716	1623	1272	318	475	523	1220	1869
MAX	3170	932	5410	3420	4140	3510	3180	1270	1410	1120	2650	10800
MIN	24	61	65	179	139	166	78	51	51	92	644	53
CAL YR 1978	TOTAL	233749	MEAN 640	MAX 5800	MIN 24							
WTR YR 1979	TOTAL	351490	MEAN 963	MAX 10800	MIN 24							

RESERVOIRS IN LITTLE MIAMI RIVER BASIN

03242340 CAESAR CREEK LAKE NEAR WELLMAN.--Lat 39°29'10", long 84°03'38", Warren County, Hydrologic Unit 05090202, in outlet structure of dam on Caesar Creek, 1.3 mi (2.1 km) west of Wellman, 3 mi (4.8 km) southwest of Harveysburg, and 3.1 (5.0 km) upstream from confluence with Little Miami River. DRAINAGE AREA, 237 mi² (613.8 km²). PERIOD OF RECORD, October 1978 to September 1979. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers.)

Lake is formed by an earth and rockfill dam with open cut spillway. Dam completed and storage began in January 1978. Usable capacity 242,200 acre-ft (298.63 hm³) between elevation 739.0 ft (225.25 m) (lowest outlet) and 883.0 ft (269.14 m) (crest of spillway) of which 102,000 acre-ft (125.77 km³) is in conservation pool. Dead storage below elevation 739.0 ft (225.25 m) is 8 acre-ft (9864 m³). Figures given herein represent usable contents. There are no gates on the spillway and all regulation is done by gates in conduit through dam. Reservoir is used for flood control, wild life conservation, water supply, pollution abatement, and recreation. Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents 132,300 acre-ft (163 hm³) Mar. 3, 1979, elevation 859.90 ft (261.793 m); minimum 68,040 acre-ft (83.9 hm³) Jan. 15, 1979, elevation 835.88 ft (254.776).

EXTREMES FOR CURRENT YEAR.--Maximum contents 132,300 acre-ft (163 hm³) Mar. 3, elevation 859.90 ft (261.793 m); minimum 68,040 acre-ft (83.9 hm³) Jan. 15, elevation 835.88 ft (254.776).

03247040 EAST FORK LAKE NEAR BANTAM.--Lat 39°01'20", long 84°09'08", Clermont County, Hydrologic Unit 05090202, in outlet structure of dam on East Fork Little Miami River, 1.7 mi (2.74 km) north of Bantam, 4.2 mi (6.76 km) south of Batavia, and 20.3 mi (32.66 km) upstream from confluence with Little Miami River. DRAINAGE AREA, 342 mi² (886 km²). PERIOD OF RECORD, October 1978 to September 1979. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers.)

Lake is formed by earthfill dam with open cut spillway. Dam was completed and storage began Feb. 6, 1978. Usable capacity 284,500 acre-ft (350 hm³) between elevation 623.0 ft (189.89 m) (lowest outlet) and 795.0 ft (242.32 m) (crest of spillway). Seasonal pool storage 90,390 acre-ft (111 hm³) elevation 733.0 ft (223.42 m). Dead storage 4 acre-ft (4,930 m³) below 623.0 ft (189.89 m). Figures given herein represent usable contents. Lake is used primarily for flood control although seasonal pool is used for water supply, water quality control, recreation, and wildlife conservation purposes. Outflow is controlled by operation of gates in conduit through dam. Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 163,100 acre-ft (201 hm³) Mar. 2, 1979, elevation 761.64 ft (232.148 m); minimum, 24,820 acre-ft (30.6 hm³) Oct. 26, 1978, elevation 690.09 ft (210.339 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 163,100 acre-ft (201 hm³) Mar. 2, elevation 761.64 ft (232.148 m); minimum, 24,820 acre-ft (30.6 hm³) Oct. 26, elevation 690.09 (210.339 m).

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre- feet)	Change in contents (acre-feet)
	03242340	CAESAR CREEK LAKE		03247040	EAST FORK LAKE	
Sept. 30.....	846.59	95310	--	693.53	28190	--
Oct. 31.....	846.80	95880	+570	696.54	31390	+3200
Nov. 30.....	846.65	95470	-410	710.43	49270	+17880
Dec. 31.....	843.61	92640	-2830	732.36	89050	+39780
CAL YR 1978						
Jan. 31.....	840.50	79260	-13380	728.89	81940	-7110
Feb. 28.....	857.09	126200	+46940	759.77	157600	+75660
Mar. 31.....	846.23	94320	-31880	729.46	83080	-74520
Apr. 30.....	847.57	98020	+3700	731.84	87960	+4880
May 31.....	849.15	102500	+4480	733.24	90910	+2950
June 30.....	849.40	103200	+700	733.20	90820	-90
July 31.....	849.35	103000	-200	733.97	92460	+1640
Aug. 31.....	850.16	105300	+2300	722.51	69750	+22710
Sept. 30.....	846.90	96160	-9140	734.07	92680	+22930
WTR YR 1979	---	---	+850	---	---	+64490

MILL CREEK BASIN

03255500 MILL CREEK AT READING, OH

LOCATION.--Lat 39°13'14", long 84°26'49", in sec. 32, R.1, T.4, Hamilton County, Hydrologic Unit 05090203, on right bank at upstream side of Koehler Street Bridge at Reading, 1.0 mi (1.6 km) upstream from West Fork Mill Creek, and 13.0 mi (20.9 km) upstream from mouth.

DRAINAGE AREA.--73.0 mi² (189 km²).

PERIOD OF RECORD.--October 1938 to April 1939, June 1939 to current year.

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 527.00 ft (160.630 m) Ohio River datum. Prior to Oct. 1, 1951, water-stage recorder or nonrecording gage at same site at datum 4.00 ft (1.219 m) higher. Oct. 1, 1951, to Apr. 25, 1954, nonrecording gage at present site and datum.

REMARKS.--Records good except those for periods of no gage height 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 (164 m³/s) Mar. 6, 1945, gage height, 20.00 ft (6.096 m) present datum; no flow for many days in 1940-41, 1944, 1951.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,700 ft³/s (48.1 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)				
Dec. 8	1930	2490	70.5	11.39	3.472	Apr. 4	1300	1900	53.8	9.95	3.033
Jan. 1	1400	2720	77.0	11.37	3.466	Apr. 13	1900	3230	91.5	12.44	3.792
Feb. 23	---	2500	70.8	unknown		Aug. 1	1730	3700	105	13.46	4.103
Feb. 25	1530	3350	94.9	12.69	3.868	Aug. 20	1300	3530	100	13.08	3.987
Apr. 2	0700	1770	50.1	9.71	2.960	Sept. 14	0330	*5390	153	*18.58	5.663

Minimum daily 6.2 ft³/s (0.18 m³/s) June 17.

Note: No gage height record Jan. 2 to Feb. 24, May 29 to July 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	29	28	1470	50	188	221	33	30	190	878	32
2	10	17	25	676	46	143	829	33	15	70	1270	37
3	11	15	561	360	42	129	177	218	6.5	22	348	26
4	25	13	610	270	38	252	701	311	8.0	250	133	29
5	16	11	179	220	36	147	255	182	9.0	130	75	28
6	13	10	97	180	34	102	123	78	22	60	62	30
7	10	16	97	160	33	89	85	61	60	30	51	23
8	8.2	20	1830	140	31	78	104	52	220	50	64	18
9	7.5	17	899	120	29	67	230	45	40	90	96	14
10	8.5	14	286	100	27	62	114	40	24	46	43	18
11	16	11	137	88	26	50	152	37	19	22	224	21
12	95	13	88	76	25	50	380	59	9.0	100	94	19
13	441	13	75	60	24	52	878	37	8.4	500	45	147
14	83	12	60	170	23	52	883	30	8.2	220	38	3320
15	110	25	54	140	22	45	207	30	7.6	100	35	766
16	37	53	52	110	23	42	125	28	6.8	42	31	221
17	26	130	53	200	25	38	96	26	6.2	38	28	104
18	21	171	43	330	26	35	78	24	45	34	30	73
19	18	64	43	260	27	40	69	21	500	28	204	75
20	16	34	103	230	28	43	61	19	350	24	883	51
21	15	26	176	400	28	41	54	20	430	22	308	140
22	12	22	71	270	33	40	55	21	330	250	106	252
23	12	23	57	210	1300	116	48	24	40	340	80	106
24	17	25	56	420	780	182	50	22	35	380	72	67
25	16	19	46	250	1580	65	48	67	26	150	58	55
26	41	16	42	150	597	50	51	41	21	116	169	47
27	47	80	38	110	221	45	55	93	18	85	133	42
28	23	79	35	95	190	42	45	31	54	136	98	340
29	16	52	34	80	---	43	34	21	130	157	80	112
30	16	37	45	64	---	40	34	9.0	440	70	54	65
31	39	---	521	56	---	46	---	58	---	51	43	---
TOTAL	1241.2	1067	6441	7465	5344	2414	6242	1771.0	2918.7	3803	5833	6278
MEAN	40.0	35.6	208	241	191	77.9	208	57.1	97.3	123	188	209
MAX	441	171	1830	1470	1580	252	883	311	500	500	1270	3320
MIN	7.5	10	25	56	22	35	34	9.0	6.2	22	28	14

CAL YR 1978 TOTAL 31548.7 MEAN 86.4 MAX 1830 MIN 7.5
WTR YR 1979 TOTAL 50817.9 MEAN 139 MAX 3320 MIN 6.2

03256500 WEST FORK MILL CREEK LAKE NEAR GREENHILLS, OH

LOCATION.--Lat 39°15'34", long 84°29'41", in SE 1/4 sec.17, T.3, R.1, Hamilton County, Hydrologic Unit 05090203, in gate house of dam on West Fork Mill Creek, 1.2 mi (1.9 km) east of Greenhills.

DRAINAGE AREA.--29.9 mi² (77.4 km²).

PERIOD OF RECORD.--April 1953 to current year. Prior to October 1971, published as West Fork Mill Creek Reservoir near Greenhills, Ohio.

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 600.00 ft (182.880 m) National Geodetic Vertical Datum of 1912 (levels by Corps of Engineers); gage readings have been reduced to elevations above National Geodetic Vertical Datum.

REMARKS.--Reservoir is formed by earthfill dam with concrete spillway; operation for flood control began Dec. 20, 1952; storage to maintain conservation pool began Apr. 19, 1953. Usable capacity 11,310 acre-ft (13.9 hm³) between elevations 655.0 ft (199.64 m), lowest outlet, and 702.0 ft (213.97 m), crest of spillway, of which 1,470 acre-ft (1.81 hm³) is in conservation pool. Dead storage below elevation 655.0 ft (199.64 m), 65 acre-ft (80,100 m³). Figures given herein represent usable contents. Reservoir is used for flood control and recreation. There are no gates on spillway and all regulation is done by gates in conduit through dam.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 9,680 acre-ft (11.9 hm³) Jan. 22, 1959, elevation, 698.95 ft (213.040 m); minimum, 714 acre-ft (0.88 hm³) Jan. 18, 1979, elevation, 669.86 ft (204.173 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 6,320 acre-ft (7.79 hm³) Sept. 15, elevation, 691.50 ft (210.769 m); minimum, 714 acre-ft (0.88 hm³) Jan. 18, elevation, 669.86 ft (204.173 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	675.23	1510	---
Oct. 31.....	675.18	1500	-10
Nov. 30.....	675.23	1510	+10
Dec. 31.....	675.69	1600	+90
CAL YR 1978.....	---	---	+100
Jan. 31.....	670.12	740	-860
Feb. 28.....	676.11	1680	+940
Mar. 31.....	675.15	1490	-190
Apr. 30.....	675.09	1480	-10
May 31.....	675.56	1570	+90
June 30.....	676.57	1780	+210
July 31.....	675.24	1510	-270
Aug. 31.....	675.18	1500	-10
Sept. 30.....	675.30	1520	+20
WTR YR 1979.....	---	---	+10

MILL CREEK BASIN

03257500 WEST FORK MILL CREEK AT WOODLAWN, OH

LOCATION.--Lat 39°15'14", long 84°28'13", in NE 1/4 sec.10, R.1, T.3, Hamilton County, Hydrologic Unit 05090203, on left bank at upstream side of Riddle Road Bridge in Woodlawn, 0.5 mi (0.8 km) upstream from small left bank tributary, 1.9 mi (3.1 km) downstream from West Fork Mill Creek Dam, and 4.0 mi (6.4 km) upstream from mouth.

DRAINAGE AREA.--32.2 mi² (83.4 km²).

PERIOD OF RECORD.--December 1952 to current year.

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 570.00 ft (173.736 m) Corps of Engineers bench mark.

REMARKS.--Records good except those for winter period, and below 3.8 ft³/s (0.11 m³/s), which are fair. Flow regulated by West Fork Mill Creek Reservoir 1.9 mi (3.1 km) upstream beginning 1953 (see station 03256500). Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--26 years (1953-79), 32.4 ft³/s (0.918 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,000 ft³/s (56.6 m³/s) Apr. 4, 1956, gage height, 6.82 ft (2.079 m); no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 962 ft³/s (27.2 m³/s) Sept. 15, gage height, 6.72 ft (2.048 m); minimum daily, 0.19 ft³/s (0.005 m³/s) Oct. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.28	.56	3.3	47	6.6	18	37	4.2	34	159	51	3.6
2	.27	1.8	6.0	425	5.8	53	94	4.2	8.3	6.0	407	6.6
3	.33	4.2	45	648	4.8	71	188	20	2.4	4.8	616	9.8
4	8.0	2.8	198	276	5.8	73	54	347	2.4	15	172	6.9
5	13	2.4	218	36	6.8	116	321	168	2.4	39	11	4.8
6	6.7	2.6	203	26	5.2	63	377	27	2.4	26	5.4	26
7	.21	8.6	44	11	4.0	16	205	9.0	4.2	5.1	3.3	4.8
8	.19	7.9	93	5.4	3.6	15	32	9.0	121	5.4	3.3	4.5
9	.20	4.2	367	12	3.4	11	134	8.6	21	23	3.3	4.5
10	.22	4.5	595	9.4	3.3	9.4	65	8.6	11	12	3.1	4.2
11	.35	2.4	407	7.0	3.2	7.2	27	7.6	8.3	5.1	14	1.5
12	22	3.1	260	5.8	3.1	4.2	176	23	3.6	7.6	81	.88
13	229	5.1	87	5.8	3.0	7.2	176	34	2.6	205	15	1.5
14	43	5.4	26	68	2.9	11	382	13	2.4	183	5.4	87
15	90	8.3	26	123	2.8	5.7	462	4.5	2.4	126	3.1	485
16	12	52	24	81	2.8	4.2	188	2.6	2.4	12	2.6	751
17	.66	71	24	24	2.7	4.2	22	2.6	2.4	9.4	1.1	620
18	.47	94	22	106	2.7	4.2	14	2.6	2.4	4.8	1.5	275
19	.77	13	20	11	2.6	4.8	12	2.6	112	3.3	149	7.6
20	.88	5.4	54	32	2.6	5.4	11	2.6	99	3.3	134	11
21	2.4	3.1	89	128	49	5.4	12	2.4	178	3.3	164	20
22	5.1	2.8	52	119	220	5.4	18	2.4	162	3.3	9.0	193
23	6.0	6.9	9.0	28	54	6.6	11	1.3	6.6	4.5	9.0	134
24	7.6	9.4	8.0	160	464	66	11	1.5	9.0	10	8.6	11
25	5.4	5.7	7.5	112	266	34	11	12	7.6	43	8.3	7.6
26	8.3	1.6	6.0	16	467	27	10	34	3.6	29	35	3.6
27	22	90	5.0	13	729	9.0	9.0	37	3.6	9.0	215	3.6
28	9.0	29	3.5	11	423	8.6	9.0	28	3.6	11	16	60
29	5.1	5.7	3.6	14	---	8.6	6.3	7.9	7.2	159	17	128
30	2.4	3.1	7.9	8.6	---	8.6	4.5	1.0	291	15	7.2	12
31	.66	---	52	7.6	---	21	---	11	---	40	4.8	---
TOTAL	502.49	456.56	2965.8	2576.6	2749.7	703.7	3078.8	839.2	1118.8	1181.9	2176.0	2888.98
MEAN	16.2	15.2	95.7	83.1	98.2	22.7	103	27.1	37.3	38.1	70.2	96.3
MAX	229	94	595	648	729	116	462	347	291	205	616	751
MIN	.19	.56	3.3	5.4	2.6	4.2	4.5	1.0	2.4	3.3	1.1	.88
CAL YR 1978	TOTAL	12956.87	MEAN	35.5	MAX	595	MIN	.19				
WTR YR 1979	TOTAL	21238.53	MEAN	58.2	MAX	751	MIN	.19				

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 100 ft (30 m) downstream from Anthony Wayne Avenue Bridge in Carthage, 1.0 mi (1.6 km) downstream from West Fork Mill Creek, and 11.0 mi (17.7 km) upstream from mouth.

DRAINAGE AREA.--115 mi² (298 km²).

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 (157.582 m) revised Ohio River datum. Prior to Oct. 1, 1954 at site 100 ft (30 m) upstream at datum 5.00 ft (1.524 m) higher. Oct. 1, 1954 to Sept. 30, 1977 at same site at datum 5.00 ft (1.524 m) higher.

REMARKS.--Records good except those for Dec. 15 to Feb. 16, Apr. 2 to May 29, which are fair. Some inter-basin transfers of water between Mill Creek and Great Miami River basins by industrial and municipal operations. Flow regulated by West Fork Mill Creek Reservoir, 6.9 mi (11.1 km) upstream, beginning 1953 (see station 03256500). Water-quality data collected at this site 1965 to 1977.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,030 ft³/s (256 m³/s) Sept. 14, 1979, gage height, 21.82 ft (6.651 m) present datum, from rating curve extended above 4,000 ft³/s (79.3 m³/s) on basis of slope-area measurement of peak flow; no flow many days in 1947-48.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,030 ft³/s (256 m³/s) Sept. 14, gage height 21.82 ft (6.651 m); minimum daily, 10 ft³/s (0.283 m³/s) Oct. 8, 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	26	27	1660	58	285	240	56	82	269	1020	28
2	12	22	26	965	50	258	1000	52	37	36	1600	36
3	53	22	573	790	46	261	400	350	17	24	955	31
4	29	20	757	472	42	419	950	700	18	319	404	33
5	22	17	370	338	40	395	840	400	19	160	94	27
6	22	19	269	282	38	322	440	160	19	104	79	69
7	11	37	139	235	36	199	250	110	98	34	53	20
8	10	34	1830	192	35	144	140	95	303	47	53	15
9	10	25	1260	155	34	118	330	85	75	122	118	13
10	11	22	796	128	33	100	180	80	48	77	34	15
11	55	19	580	96	32	80	180	120	40	27	301	15
12	122	25	352	80	31	64	540	95	21	124	215	13
13	631	22	192	75	31	60	1100	80	18	644	63	135
14	170	23	84	225	31	71	1300	65	18	416	39	3490
15	165	83	74	208	34	66	750	54	18	233	26	1250
16	61	107	74	130	70	54	350	46	15	61	23	938
17	29	307	71	208	77	47	150	39	13	52	20	725
18	26	199	60	419	59	43	100	32	17	34	23	483
19	25	51	66	314	49	42	88	29	664	29	459	177
20	23	31	235	290	44	48	80	27	352	25	1050	57
21	22	27	290	577	543	49	75	30	516	22	535	223
22	19	26	148	404	847	47	72	35	327	269	155	494
23	23	38	67	274	1730	79	68	40	50	410	108	319
24	31	35	70	626	1100	375	66	35	49	472	100	98
25	26	26	58	422	1960	223	70	88	37	288	69	79
26	77	31	46	253	1090	139	80	60	26	211	258	52
27	63	215	38	165	951	94	94	140	23	130	433	44
28	34	105	34	122	734	71	76	70	21	187	126	516
29	25	46	35	102	---	64	70	39	110	404	130	314
30	31	32	52	84	---	61	62	20	594	122	60	100
31	54	---	591	65	---	63	---	100	---	126	39	---
TOTAL	1909	1692	9264	10356	9825	4341	10131	3332	3645	5478	8642	9809
MEAN	61.6	56.4	299	334	351	140	338	107	122	177	279	327
MAX	631	307	1830	1660	1960	419	1300	700	664	644	1600	3490
MIN	10	17	26	65	31	42	52	20	13	22	20	13

CAL YR 1978 TOTAL 47131 MEAN 129 MAX 1830 MIN 10
WTR YR 1979 TOTAL 78424 MEAN 215 MAX 3490 MIN 10

GREAT MIAMI RIVER BASIN

03260700 BOKONGEHALAS 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 (3 km) downstream from Bluejacket Creek, 2.8 mi (4.5 km) northeast of De Graff, and 4 mi (6 km) upstream from mouth.

DRAINAGE AREA.--36.3 mi² (94.0 km²).

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 (307.470 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Diurnal fluctuation caused by municipal plant operation in Bellefontaine, 9.8 mi (15.8 km) upstream; since storage capacity is small, daily flows are not affected appreciably. Water-quality data collected at this site 1965 to 1973.

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

AVERAGE DISCHARGE.--22 years, 32.3 ft³/s (0.915 m³/s), 12.08 in/yr (307 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,780 ft³/s (50.4 m³/s) Jan. 21, 1959, gage height, 6.83 ft (2.082 m); minimum daily, 2.2 ft³/s (0.062 m³/s) Sept. 29, 30, Oct. 7, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.50 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 23	1930	*1080 30.6	*5.97 1.820	Apr. 14	0400	523 14.8	5.10 1.554
Mar. 5	2345	697 19.7	5.40 1.646				

Minimum daily discharge, 5.9 ft³/s (0.17 m³/s) Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	7.0	7.5	212	9.7	121	28	30	34	21	25	23
2	5.9	7.0	7.3	138	9.4	204	61	29	29	16	48	21
3	6.5	7.0	23	57	9.0	337	48	42	26	14	26	19
4	10	7.0	77	37	8.7	580	99	41	25	16	20	20
5	6.8	7.0	29	27	8.4	294	120	34	23	14	20	18
6	8.0	7.3	19	24	8.1	171	72	30	23	13	21	16
7	6.8	7.8	16	22	7.8	130	52	29	22	12	16	15
8	6.3	7.8	45	19	7.6	103	48	28	23	11	15	14
9	6.1	7.5	69	18	7.4	86	59	26	23	22	16	12
10	6.3	7.5	26	17	7.4	83	49	27	25	21	14	12
11	6.3	7.5	19	16	7.2	60	52	26	20	16	14	12
12	7.0	7.5	17	15	7.2	50	72	28	19	14	13	12
13	31	7.5	15	15	7.2	48	97	26	17	16	12	12
14	10	8.9	14	16	7.0	50	394	24	17	14	11	58
15	7.5	8.0	13	15	7.0	41	174	22	16	12	11	32
16	7.3	7.8	12	15	7.0	37	116	19	15	12	10	20
17	7.0	15	10	14	7.0	35	87	17	14	12	10	18
18	7.0	12	10	14	7.0	33	69	16	14	11	15	16
19	7.3	8.6	10	13	7.0	33	58	15	14	11	11	15
20	6.8	8.3	11	12	12	32	50	13	14	10	13	14
21	6.8	8.0	16	13	31	30	45	13	19	10	50	14
22	6.3	7.8	12	12	72	29	44	13	15	9.5	22	14
23	6.3	8.6	10	10	602	29	40	13	14	9.5	21	12
24	6.8	7.8	9.7	14	541	31	38	28	13	10	53	12
25	6.8	7.3	9.7	21	158	28	37	139	12	13	40	12
26	9.1	7.3	8.8	17	83	26	36	216	12	16	27	11
27	7.8	8.0	8.2	13	87	24	37	109	12	22	28	11
28	7.0	8.3	7.6	12	69	24	39	75	12	24	28	16
29	6.5	7.8	8.6	11	---	28	33	52	13	101	89	15
30	6.5	7.5	9.5	11	---	27	31	40	23	37	47	13
31	7.0	---	40	10	---	27	---	35	---	25	30	---
TOTAL	242.9	242.4	589.9	860	1802.1	2831	2185	1255	558	565.0	776	509
MEAN	7.84	8.08	19.0	27.7	64.4	91.3	72.8	40.5	18.6	18.2	25.0	17.0
MAX	31	15	77	212	602	580	394	216	34	101	89	58
MIN	5.9	7.0	7.3	10	7.0	24	28	13	12	9.5	10	11
CFSM	.22	.22	.52	.76	1.77	2.52	2.01	1.12	.51	.50	.69	.47
IN.	.25	.25	.60	.88	1.85	2.90	2.24	1.29	.57	.58	.80	.52

CAL YR 1978 TOTAL 10963.9 MEAN 30.0 MAX 638 MIN 5.4 CFSM .83 IN 11.24
WTR YR 1979 TOTAL 12416.3 MEAN 34.0 MAX 602 MIN 5.9 CFSM .94 IN 12.72

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 (15 m) upstream from North Street Bridge in Sidney, and 0.5 mi (0.8 km) downstream from Tawawa Creek.

DRAINAGE AREA.--541 mi² (1,401 km²).

PERIOD OF RECORD.--February 1914 to current year. Prior to October 1962, published as Miami River at Sidney.

REVISED RECORDS.--WSP 1305: 1914(M), 1922(M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 924.70 ft (281.848 m) National Geodetic Vertical Datum of 1912. Prior to Sept. 18, 1919, nonrecording gage at site 50 ft (15 m) downstream at datum 1.76 ft (0.536 m) higher. Sept. 18, 1919, to August, 1925, nonrecording gage at site 50 ft (15 m) downstream at present datum.

REMARKS.--Records good except those for winter periods, which are fair. Water supply for city of Sidney is pumped from the Great Miami River 1,200 ft (366 m) upstream and from wells adjacent to Great Miami River upstream from station. The pumpage averaged 4.6 ft³/s (0.13 m³/s) in 1979 and is returned as sewage 1.2 mi (1.9 km) downstream from the station. Some regulation by Indian Lake, 28 mi (45 km) upstream, capacity, 45,900 acre-ft (56.6 hm³) prior to 1926; water diverted into Miami and Erie Canal at Port Jefferson, 2.8 mi (4.5 km) 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.--54 years (1925-79) 475 ft³/s (13.45 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,700 ft³/s (586 m³/s) Mar. 20, 1927, gage height 14.4 ft (4.39 m), from rating curve extended above 8,700 ft³/s (195 m³/s) on basis of velocity-area studies; maximum gage height, 15.91 ft (4.849 m) Jan. 21, 1959; minimum discharge, 1.5 ft³/s (0.041 m³/s) Aug. 13, 1963, result of temporary storage behind dam upstream; minimum daily discharge, 8.0 ft³/s (0.23 m³/s) Sept. 23, 1935.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 25, 1913 reached a stage of 19.6 ft (5.97 m), present datum, discharge, 44,000 ft³/s (1,250 m³/s), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft³/s (113 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 23	2030	5910 167	8.93 2.722	Apr. 14	0230	5450 154	8.54 2.603
Mar. 4	2100	*6130 174	*9.11 2.777	Aug. 28	2100	4120 117	7.34 2.237

Minimum daily discharge 34 ft³/s (0.96 m³/s) Oct. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	68	91	2720	140	1370	354	283	422	185	367	763
2	34	64	87	2750	130	2540	756	237	367	160	586	483
3	37	64	229	1510	120	3250	844	252	311	134	407	359
4	51	64	1150	773	120	5620	1010	334	267	117	293	441
5	60	65	737	483	110	5640	1870	343	223	116	432	654
6	54	63	451	390	110	4780	1440	262	217	109	575	474
7	53	60	386	350	100	3820	1030	228	206	83	363	293
8	49	63	762	320	100	2870	732	210	195	85	224	226
9	46	68	1370	290	100	2110	807	196	276	109	195	197
10	42	65	789	280	98	1750	914	193	895	171	184	154
11	41	64	476	270	96	1400	764	201	540	150	170	137
12	52	64	321	260	94	971	1260	217	350	119	174	128
13	145	63	227	250	92	717	1890	288	247	114	157	122
14	197	75	192	260	90	699	4900	220	193	120	128	800
15	145	75	170	300	90	741	4120	186	166	107	113	620
16	106	73	158	270	88	552	3310	197	150	99	112	400
17	89	119	144	250	86	474	2410	174	143	89	105	300
18	80	203	131	240	84	452	1690	151	139	83	104	230
19	76	162	126	230	82	447	1160	144	148	79	118	200
20	75	125	130	230	82	427	759	141	134	72	129	180
21	69	132	175	260	140	396	585	143	164	68	586	170
22	67	203	187	240	566	360	503	150	164	68	527	160
23	63	216	164	230	3380	343	449	135	137	67	662	150
24	58	218	151	250	5430	352	394	198	128	76	1250	140
25	59	212	140	310	3560	340	374	1040	128	103	1090	130
26	77	207	120	270	2140	314	347	2390	113	162	553	120
27	96	214	100	240	1810	282	385	2110	99	542	452	120
28	89	175	90	220	1520	248	360	1650	95	1270	1390	140
29	84	113	100	200	---	243	319	1110	99	2860	2970	170
30	75	96	115	180	---	260	282	682	136	1420	2190	140
31	72	---	453	160	---	280	---	503	---	624	1380	---
TOTAL	2275	3453	9922	14986	20558	44048	36018	14568	6852	9561	17986	8601
MEAN	73.4	115	320	483	734	1421	1201	470	228	308	580	287
MAX	197	218	1370	2750	5430	5640	4900	2390	895	2860	2970	800
MIN	34	60	87	160	82	243	282	135	95	67	104	120

CAL YR 1978 TOTAL 164732 MEAN 451 MAX 6170 MIN 28
WTR YR 1979 TOTAL 188828 MEAN 517 MAX 5640 MIN 34

GREAT MIAMI RIVER BASIN

03261950 LORAMIE CREEK NEAR NEWPORT, OH

LOCATION.--Lat 40°18'25", long 84°23'02", in SE 1/4 sec, 24, T.11 N., R.4 E., Shelby County, Hydrologic Unit 05080001, right bank at downstream side of bridge on Cardo Roman Road, 1.1 mi (1.8 km) northwest of Newport, 3 mi (5 km) south of Fort Loramie, 3 mi (5 km) downstream from Mile Creek, and at mile 16.5 (26.6 km).

DRAINAGE AREA.--152 mi² (394 km²).

PERIOD OF RECORD.--October 1964 to current year.

REVISED RECORDS.--WRD Ohio 1971: 1966(M).

GAGE.--Water-stage recorder. Datum of gage is 927.00 ft (282.550 m) National Geodetic Vertical Datum of 1912.

REMARKS.--Records good, except those for winter periods, which are fair. Some regulation by Lake Loramie 5 mi (8 km) upstream, capacity, 13,000 acre-ft (16.0 km³). Sediment data collected at this site 1967 to 1975.

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

AVERAGE DISCHARGE.--15 years, 130 ft³/s (3.682 m³/s)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,370 ft³/s (95.4 m³/s) Feb. 24, 1975, gage height, 14.08 ft (4.292 m); minimum daily, 0.10 ft³/s (0.003 m³/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 (5.18 m) and flood of Jan. 21, 1959 a stage of 14.2 ft (4.33 m), from flood profile furnished by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1500 ft³/s (42.5 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 25	0100	2300 65.1	12.49 3.807	Apr. 14	2200	1730 49.0	11.44 3.487
Mar. 5	0600	*2420 68.5	*12.69 3.868				

Minimum daily discharge 0.58 ft³/s (0.016 m³/s) Oct. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.72	10	3.6	989	7.2	359	56	62	63	24	190	175
2	.79	11	5.0	1420	6.6	674	109	48	50	16	781	234
3	.72	14	106	1200	6.2	1110	133	55	38	7.5	603	211
4	.96	13	427	720	5.9	2070	165	69	31	6.7	232	167
5	.96	12	240	330	5.7	2350	358	55	25	6.3	310	163
6	1.4	12	110	180	5.5	1710	258	44	61	4.6	771	94
7	1.4	11	72	90	5.3	948	163	36	95	3.4	912	60
8	1.1	12	200	64	5.2	522	120	31	51	3.0	359	39
9	.77	12	451	48	5.0	347	185	26	37	3.9	146	23
10	.58	12	204	38	4.8	353	217	24	28	8.9	122	16
11	.65	12	99	28	4.7	242	232	22	23	9.0	88	14
12	1.1	13	65	22	4.6	147	716	25	17	5.9	58	12
13	15	12	51	18	4.6	106	690	39	13	5.4	33	10
14	12	18	40	20	4.6	124	1450	28	11	8.5	22	345
15	14	19	35	22	4.6	128	1520	24	9.7	9.8	17	511
16	9.0	15	32	17	4.5	97	858	19	8.5	8.7	13	229
17	4.6	29	29	15	4.5	88	367	14	7.1	5.3	10	113
18	2.5	42	27	19	4.5	87	204	11	9.0	3.6	10	122
19	13	21	26	17	4.5	91	131	11	9.0	2.6	11	74
20	15	9.4	30	16	4.5	83	94	12	7.8	2.5	12	17
21	13	6.2	35	26	5.4	74	76	11	12	2.2	30	13
22	11	4.8	25	42	77	65	67	9.4	21	2.7	70	12
23	7.5	5.9	19	25	870	62	55	7.9	10	3.5	234	10
24	4.8	8.2	16	24	2140	64	52	49	6.8	8.8	344	7.7
25	6.8	7.2	14	29	2080	51	55	403	5.2	13	187	6.9
26	11	6.2	11	19	1600	38	65	904	4.4	227	102	6.1
27	13	5.0	8.5	14	1000	33	62	755	3.8	571	153	6.0
28	11	4.3	7.0	12	574	26	87	413	4.1	802	714	7.7
29	10	4.8	6.6	10	---	33	100	217	3.8	730	1120	11
30	9.8	4.0	9.0	8.5	---	40	73	124	14	410	906	11
31	10	---	199	7.8	---	47	---	85	---	200	366	---
TOTAL	204.15	366.0	2602.7	5490.3	8449.4	12169	8718	3633.3	679.2	3115.8	8926	2720.4
MEAN	6.59	12.2	84.0	177	302	393	291	117	22.6	101	288	90.7
MAX	15	42	451	1420	2140	2350	1520	904	95	802	1120	511
MIN	.58	4.0	3.6	7.8	4.5	26	52	7.9	3.8	2.2	10	6.0

CAL YR 1978 TOTAL 48789.05 MEAN 134 MAX 2750 MIN .58
WTR YR 1979 TOTAL 57074.25 MEAN 156 MAX 2350 MIN .58

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 (396 m) downstream from Lockington Dam, 0.5 mi (0.8 km) northwest of Lockington, and at mile 1.9 (3.1 km).

DRAINAGE AREA.--257 mi² (666 km²).

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 (243.849 m) National Geodetic Vertical Datum of 1912. Prior to July 3, 1924, nonrecording gage at same site at datum 75.96 ft (23.153 m) 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 (22.848 m) higher.

REMARKS.--Records good, except those for winter periods, which are fair. Slight regulation by Lake Loramie 18 mi (29 km) upstream, capacity, 13,000 acre-ft (16.0 km³). Flood flow regulated by Lockington retarding basin beginning in 1921.

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

AVERAGE DISCHARGE.--64 years, 207 ft³/s (5.862 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft³/s (295 m³/s) May 7, 1916, gage height, 86.4 ft (26.33 m), present datum, from rating curve extended above 5,400 ft³/s (153 m³/s); minimum daily, 1.7 ft³/s (0.048 m³/s) Sept. 4, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 25, 1913 reached a stage of 91.6 ft (27.92 m), present datum, discharge, 25,600 ft³/s (725 m³/s), at site upstream from Turtle Creek, drainage area, 211 mi² (546 km²), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,300 ft³/s (122 m³/s) Mar. 5, gage height, 83.24 ft (25.372 m); minimum daily, 7.6 ft³/s (0.215 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	11	18	2420	28	571	127	111	117	36	200	435
2	8.0	8.6	18	2040	25	1260	337	98	91	38	711	636
3	8.5	11	312	1270	23	1950	275	98	76	32	826	366
4	9.7	9.7	996	680	22	3970	445	126	65	25	359	329
5	10	9.8	460	470	21	3980	714	112	56	23	818	253
6	9.4	9.6	220	350	20	2890	448	92	70	22	2120	179
7	8.8	9.4	143	270	20	1490	286	81	137	19	1270	122
8	8.5	9.9	610	160	19	904	223	71	96	17	688	92
9	8.2	9.7	875	120	19	614	383	64	79	19	369	73
10	8.3	9.4	357	95	18	595	378	60	80	18	272	58
11	8.3	9.5	183	80	17	414	448	59	58	19	176	49
12	7.9	9.8	122	64	17	263	1280	55	48	20	128	46
13	29	9.1	96	54	17	201	1370	80	41	19	94	43
14	66	11	77	56	17	235	3010	71	36	22	69	666
15	85	12	89	65	16	232	2010	58	32	23	55	843
16	53	18	104	48	16	188	1330	53	29	20	47	383
17	34	50	99	42	16	170	664	46	27	19	41	200
18	25	178	90	46	16	165	358	41	26	16	38	133
19	20	83	88	43	16	169	249	38	27	14	43	171
20	16	47	90	40	17	158	193	36	27	12	86	77
21	13	31	127	56	21	142	157	35	30	12	552	51
22	13	24	91	81	131	126	136	33	29	11	670	47
23	11	22	52	62	1720	117	118	30	34	11	822	42
24	9.4	25	43	64	3420	127	105	37	26	11	1010	38
25	9.6	28	42	99	2650	106	104	451	22	17	420	35
26	12	22	35	67	1480	85	119	1170	19	53	227	33
27	16	21	27	47	1030	72	121	1070	18	549	319	31
28	17	22	22	43	615	66	141	685	17	1140	1050	32
29	15	23	21	39	---	72	177	339	17	1970	1940	34
30	13	21	24	33	---	82	143	207	21	776	1190	35
31	12	---	588	30	---	95	---	149	---	334	648	---
TOTAL	572.2	764.5	6119	9034	11447	21509	15849	5656	1451	5317	17258	5532
MEAN	18.5	25.5	197	291	409	694	528	182	48.4	172	557	184
MAX	85	178	996	2420	3420	3980	3010	1170	137	1970	2120	843
MIN	7.6	8.6	18	30	16	66	104	30	17	11	38	31
CAL YR 1978 TOTAL	79567.0		MEAN 218	MAX 3750	MIN 7.0							
WTR YR 1979 TOTAL	100508.7		MEAN 275	MAX 3980	MIN 7.6							

GREAT MIAMI RIVER BASIN

03262700 GREAT MIAMI RIVER AT TROY, OH

LOCATION.--Lat 40°02'25", long 84°11'52", Miami County, Hydrologic Unit 05080001, 400 ft (122 m) downstream from B. and O. Railroad bridge, 1,300 ft (396 m) downstream from bridge on State Highway 55 at Troy, 1.2 mi (1.9 km) upstream from small left bank tributary, 2.3 mi (3.7 km) downstream from Spring Creek, and at mile 105 (169 km).

DRAINAGE AREA.--926 mi² (2,398 km²).

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 (247.092 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Flood flow regulated by retarding basin on Loramie Creek, 18 mi (29 km) upstream. Low and medium flow slightly regulated by Indian Lake; capacity, 45,900 acre-ft (56.6 hm³), 54 mi (87 km) upstream. Water supply for city of Troy is pumped from wells adjacent to the Great Miami River upstream from the station. The pumpage averaged 4.5 ft³/s (0.13 m³/s) in 1979 and is returned as sewage 1 mi (2 km) downstream from the station. Water-quality data collected at this site 1965 to 1974. Sediment data collected 1970 to 1974.

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

AVERAGE DISCHARGE.--17 years, 787 ft³/s (22.29 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,300 ft³/s (490 m³/s) Mar. 6, 1963, gage height, 14.66 ft (4.468 m); minimum, 0.50 ft³/s (0.014 m³/s) July 12, 13, 1963, result of temporary storage during repair of dam upstream; minimum daily discharge, 4.3 ft³/s (0.122 m³/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 (5.00 m), discharge, 21,000 ft³/s (595 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,200 ft³/s (374 m³/s) Feb. 24, gage height, 12.27 ft (3.740 m); minimum daily, 67 ft³/s (1.90 m³/s) Oct. 11, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	119	131	5740	220	2240	456	432	630	246	834	1630
2	74	114	137	5810	200	4460	1010	414	528	275	1370	1610
3	76	109	344	3550	180	5750	1340	426	469	228	1670	1080
4	96	106	2820	1770	160	10600	1300	475	408	216	930	950
5	91	109	1880	790	150	10900	2820	515	362	184	1870	1130
6	101	106	960	640	140	8640	2200	438	374	170	4200	920
7	85	94	694	560	140	5860	1630	380	403	153	2840	607
8	85	89	1370	480	140	4360	1180	356	386	134	1570	450
9	83	87	3180	430	140	3060	1250	327	356	170	806	391
10	80	94	1740	400	130	2540	1500	305	980	196	744	305
11	67	101	930	390	130	2080	1310	311	806	228	556	265
12	67	109	630	380	130	1520	2860	322	528	192	456	246
13	295	106	456	370	130	1110	3260	368	391	188	380	233
14	408	111	386	360	130	1020	9840	380	333	188	305	1010
15	403	128	327	350	120	1090	7070	311	270	177	246	2170
16	280	122	338	350	120	881	5310	285	242	163	224	1350
17	199	188	311	380	120	702	3600	295	220	134	212	710
18	170	420	290	350	120	670	2360	256	224	125	203	495
19	159	344	270	320	120	654	1720	237	224	125	327	450
20	143	237	280	350	130	630	1220	228	224	119	327	368
21	117	196	327	370	150	585	881	224	251	111	2110	300
22	103	212	374	390	322	535	736	216	251	109	1850	280
23	101	260	290	370	4130	501	654	216	233	111	2410	270
24	99	265	265	410	11100	515	578	256	199	143	3310	285
25	99	265	251	470	7580	488	542	881	184	159	2360	237
26	122	256	228	450	4480	432	528	3880	188	199	1330	216
27	143	265	184	400	3040	408	508	3630	170	615	1190	207
28	146	260	149	350	2440	368	563	2740	143	2410	1790	224
29	137	188	184	310	---	362	528	1810	140	5660	6640	233
30	131	143	196	280	---	374	488	1100	237	3280	4460	228
31	122	---	630	250	---	397	---	788	---	1530	2850	---
TOTAL	4365	5203	20552	27820	36092	73732	59242	22802	10354	17938	50370	18850
MEAN	141	173	663	897	1289	2378	1975	736	345	579	1625	628
MAX	408	420	3180	5810	11100	10900	9840	3880	980	5660	6640	2170
MIN	67	87	131	250	120	362	456	216	140	109	203	207

CAL YR 1978 TOTAL 282267 MEAN 773 MAX 11100 MIN 54
WTR YR 1979 TOTAL 347320 MEAN 952 MAX 11100 MIN 67

03262745 GREAT MIAMI RIVER AT TIPP CITY, OH

LOCATION.--39°58'02", long 84°10'03", Miami County, Hydrologic Unit 05090001, on right bank at bridge on Tipp-Elizabeth Road, 0.04 mi (0.06 km) upstream from Millers Ditch at Tipp City and at mile 99.00 (159.29 km).

DRAINAGE AREA.--970 mi² (2,512 km²).

PERIOD OF RECORD.--July 1978 to current year (Discontinued).

PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: July 1978 to current year (Discontinued).

pH: July 1978 to current year (Discontinued).

WATER TEMPERATURES: July 1978 to current year (Discontinued).

DISSOLVED OXYGEN: July 1978 to current year (Discontinued).

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. No discharge records available.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 990 micromhos Feb. 22, 1979; minimum, 228 micromhos Feb. 24, 1979.

pH: Maximum recorded 9.0 units July 13, 15, 1978; minimum recorded, 7.2 units Aug. 4, 1978.

WATER TEMPERATURES: Maximum recorded, 30.0°C July 22, 1978; minimum, 0.0°C Feb. 17, 1979.

DISSOLVED OXYGEN: Maximum, 20.0 mg/L June 17, 18, 27, July 6, 7, 8, 1979; minimum recorded, 1.4 mg/L July 24, 1978.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 990 micromhos Feb. 22; minimum, 228 micromhos Feb. 24.

pH: Maximum, 8.9 units Dec. 26, Feb. 20, June 24, 25, July 7, 8; minimum, 7.3 units July 29, 30, Aug. 6, 29.

WATER TEMPERATURES: Maximum, 28.5°C July 16, minimum, 0.0°C Feb. 17.

DISSOLVED OXYGEN: Maximum, 20.0 mg/L June 17, 18, 27, July 6-8; minimum, 3.1 mg/L July 23-25.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	804	768	800	786	736	722	664	422	770	740	522	480
2	818	806	808	798	740	726	450	408	776	750	476	406
3	822	744	828	804	742	658	544	464	778	752	404	348
4	800	780	816	806	642	530	596	542	772	746	340	270
5	794	772	824	812	---	---	648	598	796	766	292	272
6	794	772	824	808	---	---	684	650	814	756	328	290
7	788	776	832	816	---	---	710	686	798	772	412	332
8	790	774	824	812	---	---	732	710	814	786	458	416
9	800	764	824	814	---	---	744	728	840	794	488	458
10	796	772	834	818	---	---	748	740	842	794	510	490
11	790	772	830	816	---	---	746	732	856	796	528	512
12	792	772	---	---	---	---	738	724	868	842	558	528
13	762	634	---	---	---	---	736	724	888	826	598	560
14	668	614	---	---	742	738	806	728	864	818	626	598
15	660	570	836	802	758	742	796	774	838	816	642	622
16	694	662	818	798	770	756	786	760	858	826	644	616
17	750	696	808	718	782	770	772	760	862	824	636	604
18	770	754	766	740	776	762	804	766	870	806	670	638
19	782	764	762	732	776	772	792	776	844	800	680	670
20	776	770	776	756	790	774	784	752	854	810	682	676
21	776	768	790	774	776	764	784	758	952	828	682	670
22	780	776	794	786	772	762	814	768	990	850	688	676
23	786	776	816	792	776	762	790	766	934	300	690	678
24	818	782	808	780	778	772	816	754	282	228	690	678
25	796	790	790	748	808	778	786	738	364	272	690	676
26	806	790	742	688	846	786	758	724	398	364	702	690
27	800	782	690	674	812	792	736	718	444	398	712	702
28	800	782	694	678	814	804	728	716	502	442	722	706
29	806	792	710	690	818	806	748	728	---	---	708	690
30	802	762	724	710	842	822	762	734	---	---	706	686
31	810	770	---	---	832	672	760	740	---	---	704	684
MONTH	822	570	836	674	846	530	816	408	990	228	722	270

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

[illegible]

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

YEAR	8.9	7.3
------	-----	-----

03262745 GREAT MIAMI RIVER AT TIPP CITY, OH--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER					
1	12.0	10.5	15.5	11.5	21.0	19.0	22.0	20.5	25.0	24.0	23.0	22.0				
2	12.0	10.5	17.0	13.0	22.0	19.5	23.0	19.5	24.0	23.0	22.5	22.0				
3	11.0	9.5	17.0	15.5	23.0	20.0	24.5	20.5	24.0	22.0	23.5	21.5				
4	9.0	7.5	16.5	13.5	23.5	20.5	23.5	22.0	25.0	23.0	24.0	22.0				
5	8.0	7.0	15.5	12.0	24.5	21.5	24.0	20.0	24.5	23.0	24.0	22.5				
6	8.0	6.0	17.5	13.0	25.0	22.5	24.5	19.5	23.0	22.5	24.0	23.0				
7	7.0	6.0	20.0	15.5	23.5	23.0	24.0	20.5	25.0	22.5	23.5	22.0				
8	7.5	5.5	22.5	18.5	23.5	22.5	24.5	20.5	26.0	24.5	22.0	19.5				
9	8.0	6.5	23.5	20.5	26.0	22.5	23.5	22.0	26.5	25.0	20.5	18.0				
10	8.0	6.0	23.5	21.5	26.0	23.5	25.5	22.0	26.0	24.5	21.0	18.5				
11	8.0	7.0	25.0	22.5	23.0	21.0	26.5	23.0	24.5	21.5	22.0	19.5				
12	11.0	8.0	24.0	19.5	23.0	20.0	26.5	24.0	22.5	20.0	23.5	20.5				
13	11.5	11.0	20.5	18.0	21.5	20.0	25.5	24.0	23.0	20.0	23.0	21.5				
14	10.5	9.5	21.0	18.0	23.0	19.5	27.0	23.5	22.5	21.0	21.5	20.0				
15	10.0	9.5	21.0	19.0	25.0	21.0	26.5	24.5	21.5	19.0	20.0	18.0				
16	9.5	9.0	21.0	18.0	25.5	22.0	28.5	24.0	22.0	18.0	19.0	17.5				
17	10.5	8.5	21.0	18.0	26.5	22.5	27.5	24.5	21.5	18.5	19.5	17.5				
18	11.5	9.5	22.0	18.5	25.5	22.5	27.0	23.0	22.0	19.5	20.0	18.0				
19	13.0	10.5	23.0	19.5	25.5	22.0	26.0	22.5	23.0	20.5	19.5	18.0				
20	14.5	11.5	22.5	20.0	27.0	22.5	26.5	22.5	22.5	21.5	19.0	17.0				
21	15.0	13.5	22.5	20.0	26.5	23.5	26.5	23.5	21.5	21.0	18.0	18.0				
22	15.0	14.0	21.5	19.0	26.5	24.0	26.5	24.0	21.5	20.5	18.0	17.0				
23	15.5	14.0	21.0	19.0	26.0	23.5	27.5	23.5	21.5	21.0	18.0	15.5				
24	16.0	14.5	20.0	16.5	25.0	21.5	26.0	23.5	21.5	20.5	18.0	16.0				
25	17.5	15.5	16.0	12.5	25.0	20.5	25.0	23.5	21.0	20.0	19.0	16.0				
26	17.0	15.5	12.5	11.5	25.5	20.5	27.0	24.0	20.5	19.5	20.0	16.5				
27	16.5	14.0	14.5	12.5	25.5	21.5	27.5	25.0	20.5	19.5	19.5	17.5				
28	15.5	13.0	16.0	14.0	25.0	22.5	26.5	23.0	21.0	20.5	19.0	18.0				
29	14.0	11.5	17.5	14.5	24.5	22.5	23.0	21.5	21.0	20.5	20.0	17.5				
30	15.0	12.0	19.5	17.0	22.5	21.5	23.5	22.0	22.0	20.5	20.5	18.0				
31	---	---	19.5	19.0	---	---	25.5	23.5	23.0	21.0	---	---				
MONTH	17.5	5.5	25.0	11.5	27.0	19.0	28.5	19.5	26.5	18.0	24.0	15.5				
YEAR	28.5	.0														

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	10.7	7.0	12.0	8.1	15.0	10.0	14.7	14.0	---	---	11.7	11.6
2	10.8	7.4	12.3	7.8	13.2	10.3	15.1	14.1	---	---	11.8	11.5
3	9.7	7.4	13.2	8.3	11.4	9.8	15.9	15.1	---	---	11.5	10.9
4	10.9	7.3	13.6	8.6	10.9	10.0	16.2	15.8	---	---	10.9	10.4
5	11.1	8.0	13.3	8.1	---	---	16.1	15.9	---	---	10.7	10.3
6	10.5	7.7	13.7	7.7	---	---	16.2	15.9	---	---	10.8	10.6
7	11.4	8.3	11.5	7.9	---	---	---	---	---	---	10.7	10.3
8	12.7	9.0	14.3	8.6	---	---	---	---	---	---	10.4	10.2
9	12.8	9.5	14.6	9.0	---	---	---	---	---	---	10.6	10.2
10	12.8	9.3	14.5	8.8	---	---	---	---	---	---	10.9	10.5
11	11.7	8.9	15.4	8.8	---	---	---	---	---	---	11.4	10.9
12	11.9	8.1	---	---	---	---	---	---	14.8	13.3	11.5	11.0
13	10.1	8.3	---	---	---	---	---	---	16.2	11.5	11.0	10.4
14	9.6	8.1	---	---	13.7	12.9	---	---	16.3	11.9	10.5	10.2
15	10.6	9.0	10.9	9.2	13.6	12.7	---	---	15.3	11.6	11.0	10.3
16	10.5	9.4	13.6	8.1	13.2	12.6	---	---	17.5	11.2	11.3	10.8
17	11.5	9.6	10.8	8.4	13.7	12.6	---	---	17.7	12.3	11.0	10.2
18	11.9	9.5	9.8	8.5	13.3	12.5	---	---	16.6	12.3	10.2	9.6
19	11.2	8.7	11.4	9.8	13.2	12.4	---	---	17.5	11.8	9.8	9.1
20	11.1	8.7	12.4	10.0	12.9	11.7	---	---	18.1	11.7	9.8	8.8
21	11.3	8.3	12.0	9.8	13.0	11.7	---	---	17.4	11.6	10.7	8.8
22	11.8	8.0	13.1	9.5	13.7	12.3	---	---	16.5	11.5	10.8	9.2
23	9.5	7.8	11.0	9.7	14.1	12.7	---	---	13.2	12.2	9.8	8.7
24	11.5	8.5	11.4	9.6	13.4	12.4	---	---	12.6	12.2	10.2	8.5
25	11.8	8.5	13.6	10.4	14.1	12.4	---	---	12.2	12.0	12.0	9.5
26	9.3	7.7	12.5	10.8	14.0	12.5	---	---	12.0	11.6	12.5	10.6
27	11.2	8.2	12.3	10.6	16.3	12.8	---	---	11.9	11.6	12.9	11.1
28	11.3	8.0	13.2	10.6	17.4	15.4	---	---	12.0	11.6	12.6	10.8
29	11.4	8.0	14.0	10.8	17.9	15.3	---	---	---	---	12.5	10.0
30	12.0	8.2	14.6	10.2	16.1	14.4	---	---	---	---	12.1	9.6
31	12.6	8.7	---	---	14.9	14.0	---	---	---	---	12.1	9.1
MONTH	12.8	7.0	15.4	7.7	17.9	9.8	16.2	14.0	18.1	11.2	12.9	8.5
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.5	9.4	12.7	9.3	10.4	7.9	13.5	6.9	6.3	6.1	8.1	7.8
2	11.4	9.5	12.8	9.1	11.2	8.0	16.6	8.2	7.0	6.1	7.8	7.6
3	11.3	10.1	10.7	8.1	11.9	8.0	17.5	8.3	6.9	6.7	8.2	7.7
4	11.0	10.6	10.5	7.6	12.7	7.6	15.2	7.5	6.8	6.5	8.6	7.7
5	11.5	11.0	12.9	8.7	14.6	7.4	19.6	6.9	6.9	6.5	8.8	7.7
6	11.7	11.0	12.8	8.9	13.7	6.9	20.0	6.8	7.0	6.8	8.0	7.3
7	12.1	11.6	13.1	8.4	11.6	6.7	20.0	8.4	7.1	6.8	8.1	7.2
8	12.3	11.3	13.6	7.6	11.8	6.7	20.0	8.7	6.8	6.5	9.0	7.3
9	11.8	10.8	13.5	6.9	11.8	6.5	15.0	7.2	7.1	6.4	9.4	7.7
10	12.2	11.4	11.8	6.1	9.0	6.5	16.7	6.8	7.0	6.4	9.3	7.7
11	11.8	11.0	12.4	5.9	8.2	6.9	16.5	6.9	7.2	6.3	10.2	7.7
12	11.1	10.0	8.2	5.6	---	---	16.5	5.7	8.4	7.1	10.7	7.4
13	9.9	9.5	10.6	6.4	8.7	8.1	13.4	5.4	9.1	7.3	11.3	6.8
14	9.9	9.6	11.2	7.1	10.0	7.7	14.7	5.3	9.8	7.2	9.2	7.0
15	9.9	9.6	11.0	7.4	13.0	7.0	13.2	4.7	10.5	7.4	8.6	8.1
16	10.2	9.9	11.5	7.6	17.1	7.2	15.7	5.1	11.2	7.7	8.9	8.4
17	10.5	10.0	12.2	8.0	20.0	7.4	15.5	4.6	12.2	7.4	8.8	8.3
18	10.4	9.9	11.9	7.7	20.0	7.2	15.2	4.7	12.1	7.1	8.6	8.0
19	10.1	9.6	11.7	6.9	15.3	8.7	16.4	4.8	10.0	7.2	8.6	7.6
20	9.8	9.2	11.4	6.4	14.5	8.7	16.5	4.8	9.6	7.5	8.8	7.4
21	9.5	8.8	11.9	6.4	10.8	9.0	15.2	4.7	8.4	8.0	8.5	7.5
22	10.0	8.9	11.6	6.9	11.2	9.0	13.9	4.2	8.3	7.9	9.2	7.7
23	10.4	9.0	11.0	6.2	11.3	9.1	13.1	3.1	8.1	7.7	9.8	8.0
24	10.4	8.9	7.4	6.0	11.4	8.9	5.8	3.1	8.2	8.0	9.8	8.4
25	11.4	8.5	9.6	7.0	12.0	9.0	6.3	3.1	8.6	8.1	10.2	8.0
26	10.5	8.2	10.2	9.6	11.7	9.1	8.8	3.5	8.5	8.3	10.1	7.6
27	11.7	8.5	9.8	9.3	20.0	8.4	7.6	3.8	8.7	8.4	9.9	7.0
28	11.0	8.7	9.5	9.3	18.0	7.2	6.1	5.2	8.4	8.2	8.6	7.0
29	12.3	9.4	9.6	9.0	14.6	6.6	6.8	6.1	8.1	7.6	10.3	6.5
30	12.3	9.5	9.4	8.3	12.2	6.3	7.0	6.7	7.9	7.7	10.6	6.6
31	---	---	8.8	7.9	---	---	6.7	6.3	8.0	7.7	---	---
MONTH	12.3	8.2	13.6	5.6	20.0	6.3	20.0	3.1	12.2	6.1	11.3	6.5
YEAR	20.0	3.1										

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 (1.3 km) north of Taylorsville, 2.1 mi (3.4 km) east of Vandalia, 9.5 mi (15.3 km) upstream from Stillwater River, and at mile 90.9 (146.3 km).

DRAINAGE AREA.--1,149 mi² (2,976 km²).

PERIOD OF RECORD.--January 1914 to September 1917 (published as Miami River at Tadmor), October 1921 to current year (published as Miami River at Taylorsville 1921-62). Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at site at Tadmor, January 1914 to July 1920, are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 743: 1924(M). WSP 853: 1930, 1937. WSP 923: 1922-24. WSP 1385: 1916. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 760.00 ft (231.648 m) National Geodetic Vertical Datum of 1912. Prior to October 1921, nonrecording gage at site 1.7 mi (2.7 km) upstream at different datum. Jan. 1, 1922, to Nov. 11, 1925, nonrecording gage at site 50 ft (15.2 m) downstream at outlet works of Taylorsville Dam at datum 59.92 ft (18.263 m) lower, October 1921 to September 1978 at site 650 ft (198 m) downstream at datum 59.92 ft (18.263 m) lower.

REMARKS.--Records fair, except those for winter periods, and those for Feb. 24 to May 24 which are poor. Flood flow regulated by retarding basins on Great Miami River, just downstream from station and on Loramie Creek 28 mi (45 km) upstream from station beginning in 1921. Low and medium flow slightly regulated by Indian Lake 64 mi (103 km) upstream from station, and by Lake Loramie 47 mi (76 km) upstream from station on Loramie Creek; combined capacity, 58,900 acre-ft (72.6 hm³).

COOPERATION.--Gage-height tapes and 6 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--61 years, 992 ft³/s (28.09 m³/s), 11.73 in/yr (298 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,400 ft³/s (889 m³/s) Jan. 22, 1959, gage height, 75.44 ft (22.994 m) at site and datum then in use; minimum daily, 25 ft³/s (0.71 m³/s) July 18, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 25.4 ft (7.74 m) at site at Tadmor, discharge, 127,000 ft³/s (3,600 m³/s) computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,200 ft³/s (402 m³/s) Feb. 24 gage height, 18.60 ft (5.669 m); minimum daily, 116 ft³/s (3.29 m³/s) Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	189	227	5900	360	2940	707	707	883	396	1300	2180
2	116	184	209	7580	330	5470	1420	683	732	389	1690	2020
3	118	166	345	4210	300	6500	1920	712	627	335	2040	1590
4	151	161	3260	2390	280	10700	1810	798	548	289	1430	1440
5	149	161	2510	1400	260	13300	3320	834	495	269	1840	1330
6	158	163	1480	1100	240	11400	2770	742	637	249	4470	1170
7	142	173	1050	850	230	8280	2050	646	540	227	3660	867
8	130	166	1630	740	220	5490	1630	596	565	206	2130	669
9	126	163	3870	680	210	3870	1710	548	523	221	1330	557
10	135	149	2200	620	210	3070	2000	523	1110	275	1150	495
11	137	153	1350	580	200	2500	1840	515	1260	325	1110	436
12	130	161	961	560	200	1960	3320	527	722	296	1090	403
13	328	166	742	540	190	1560	3720	544	587	275	834	368
14	495	178	609	520	190	1440	10700	605	483	296	641	1540
15	641	198	531	500	190	1450	10300	523	407	252	511	2540
16	452	198	503	500	180	1320	6980	467	355	236	463	1760
17	325	265	467	540	180	1090	4450	459	328	200	425	1110
18	265	592	433	500	170	1020	2910	440	325	184	403	787
19	262	536	422	480	170	996	2200	411	322	176	400	660
20	239	393	411	460	190	979	1740	400	316	176	1000	578
21	206	328	557	560	230	911	1430	396	361	163	3870	507
22	173	306	583	620	683	834	1210	389	351	166	2730	475
23	163	365	483	580	4070	819	1090	396	328	275	3610	425
24	173	375	422	580	12900	856	1040	368	286	272	4860	440
25	173	358	414	740	10900	798	927	683	265	358	3450	407
26	187	338	368	680	6240	717	894	3350	259	358	2140	358
27	224	348	335	620	3720	660	850	3650	246	540	1930	328
28	212	358	286	550	2960	609	911	3040	218	2090	2170	365
29	203	322	293	480	---	609	840	2120	206	5060	6740	372
30	189	259	322	430	---	614	803	1530	365	3480	5010	365
31	198	---	698	380	---	655	---	1070	---	1850	3380	---
TOTAL	6726	7872	27971	36870	46203	93417	77492	28672	14650	19884	67807	26542
MEAN	217	262	902	1189	1650	3013	2583	925	488	641	2187	885
MAX	641	592	3870	7580	12900	13300	10700	3650	1260	5060	6740	2540
MIN	116	149	209	380	170	609	707	368	206	163	400	328
CFSM	.19	.23	.79	1.04	1.44	2.62	2.25	.81	.43	.56	1.90	.77
IN.	.22	.25	.91	1.19	1.50	3.02	2.51	.93	.47	.64	2.20	.86
CAL YR 1978	TOTAL	377360	MEAN	1034	MAX	14300	MIN	79	CFSM	.90	IN	12.22
WTR YR 1979	TOTAL	454106	MEAN	1244	MAX	13300	MIN	116	CFSM	1.08	IN	14.70

GREAT MIAMI RIVER BASIN

275

03264000 GREENVILLE CREEK NEAR BRADFORD, OH

LOCATION (revised).--Lat 40°06'08", long 84°25'48", in SW 1/4 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 (1.3 km) downstream from small left bank tributary, 1.8 mi (2.9 km) south of Bradford, and 6 mi (10 km) upstream from mouth.

DRAINAGE AREA.--193 mi² (500 km²).

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.

GAGE.--Water-stage recorder. Datum of gage is 948.9 ft (289.22 m) National Geodetic Vertical Datum of 1912. 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 (61 m) downstream at same datum.

REMARKS.--Records good except those for the winter period, which are fair. Some diurnal fluctuation caused by mill 8 mi (13 km) upstream from station; daily flows are not affected appreciably. Sediment data collected at this site 1970 to 1974.

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

AVERAGE DISCHARGE.--49 years, 171 ft³/s (4.843 m³/s), 12.03 in/yr (306 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,320 ft³/s (264 m³/s) May 14, 1933, gage height, 9.2 ft (2.80 m); maximum gage height, 10.31 ft (3.142 m) Mar. 5, 1963, from high-water mark in well (ice jam); minimum discharge, 4.8 ft³/s (0.14 m³/s) Sept. 17, 1963.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 12.1 ft (3.69 m), discharge, 18,200 ft³/s (515 m³/s), at site with drainage area of 213 mi² (552 km²), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42.5 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 2	0030	1910 54.1	5.79 1.765	July 30	0600	2110 59.8	6.06 1.847
Feb. 24	2130	*4170 118	*8.40 2.560	Aug. 3	0230	1660 47.0	5.42 1.652
Mar. 4	2300	4010 114	8.24 2.512	Aug. 22	1900	3650 103	7.78 2.371
Apr. 14	1900	1760 49.8	5.56 1.695				

Minimum daily, 29 ft³/s (0.82 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	60	79	1510	56	581	150	123	108	75	437	266
2	30	60	74	1650	54	902	217	112	98	58	1230	238
3	30	60	352	718	52	1330	220	129	87	54	1140	205
4	34	58	1120	473	50	3190	244	159	80	50	477	178
5	33	58	639	322	50	3560	337	141	78	48	333	158
6	37	58	352	220	49	1920	322	129	392	48	263	142
7	35	58	254	170	48	897	254	128	561	44	202	128
8	33	56	522	150	47	691	208	126	315	42	158	113
9	31	57	867	130	46	565	250	118	311	53	132	101
10	31	56	444	120	45	495	260	113	326	189	113	94
11	31	56	260	110	45	384	356	106	214	160	202	92
12	37	51	205	100	45	283	1230	104	160	89	311	85
13	455	53	186	90	44	250	1040	116	134	89	178	84
14	448	63	155	100	44	270	1650	96	119	380	123	411
15	247	70	136	90	43	254	1080	95	107	283	101	451
16	186	67	125	82	43	208	589	89	93	155	87	234
17	132	160	113	78	42	189	418	75	86	101	79	166
18	105	553	103	76	42	181	308	73	80	82	75	139
19	99	311	103	74	41	178	250	72	79	64	441	121
20	89	200	103	74	41	181	212	69	66	56	388	106
21	79	150	165	78	50	173	186	66	91	50	1940	102
22	70	123	170	80	577	153	170	65	91	107	3210	104
23	66	115	136	78	1450	153	154	60	72	66	2950	92
24	63	109	121	74	3460	197	150	65	63	56	2740	85
25	63	95	117	70	3240	178	145	110	58	165	1620	82
26	67	84	103	68	1810	141	145	267	57	514	695	80
27	75	87	91	66	1510	128	139	221	53	405	777	74
28	74	97	86	64	937	117	145	266	51	477	618	82
29	69	86	83	62	---	125	141	177	49	1760	614	87
30	64	82	80	60	---	125	130	129	95	1730	448	84
31	64	---	333	58	---	128	---	114	---	673	337	---
TOTAL	2906	3193	7677	7095	13961	18127	11100	3713	4174	8123	22419	4384
MEAN	93.7	106	248	229	499	585	370	120	139	262	723	146
MAX	455	553	1120	1650	3460	3560	1650	267	561	1760	3210	451
MIN	29	51	74	58	41	117	130	60	49	42	75	74
CFSM	.49	.55	1.29	1.19	2.59	3.03	1.92	.62	.72	1.36	3.75	.76
IN.	.56	.62	1.48	1.37	2.69	3.49	2.14	.72	.80	1.57	4.32	.84
CAL YR 1978	TOTAL	68872	MEAN 189	MAX 2300	MIN 27	CFSM .98	IN 13.27					
WTR YR 1979	TOTAL	106872	MEAN 293	MAX 3560	MIN 29	CFSM 1.52	IN 20.60					

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 (1.3 km) northwest of Pleasant Hill, 2 mi (3 km) downstream from Painter Creek, 2 mi (3 km) upstream from Canyon Run, and at mile 28.35 (45.62 km).

DRAINAGE AREA.--503 mi² (1,303 km²).

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 (N). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 846.73 ft (258.083 m) National Geodetic Vertical Datum of 1912. Prior to Dec. 23, 1934, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Sediment data collected at this site 1963 to 1975.

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

AVERAGE DISCHARGE.--57 years, 440 ft³/s (12.46 m³/s), 11.88 in/yr (302 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,400 ft³/s (748 m³/s) Jan. 14, 1937, from rating curve extended above 14,500 ft³/s (396 m³/s) on basis of velocity-area study; maximum gage height, 17.98 ft (5.480 m) Jan. 21, 1959; minimum discharge observed, 4 ft³/s (0.11 m³/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 (5.33 m). Discharge, at site about 3 mi (5 km) upstream, 51,400 ft³/s (1,460 m³/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 discharge above base of 5,000 ft³/s (142 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	2230	6340 180	10.09 3.075	Apr. 14	0900	6050 171	9.79 2.984
Feb. 24	1000	7970 226	11.59 3.533	July 29	1800	6140 174	9.89 3.014
Mar. 4	2200	*11900 337	*14.18 4.322	Aug. 22	2030	7650 217	11.30 3.444

Minimum discharge 45 ft³/s (1.27 m) Oct. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	102	138	5410	110	1370	360	254	237	168	796	527
2	49	96	133	5200	110	2910	601	232	210	140	3540	472
3	49	96	569	1820	110	4650	601	265	187	120	3010	397
4	53	96	3370	819	100	10200	660	308	172	111	977	350
5	55	92	1700	640	98	9960	1130	276	162	102	601	316
6	58	90	781	450	96	5130	882	250	604	98	2370	275
7	55	90	557	380	94	2510	627	237	1330	90	1350	244
8	53	92	1460	320	92	1890	521	223	607	82	478	217
9	48	90	2780	280	90	1550	647	208	496	106	340	198
10	46	88	1110	240	90	1460	723	199	533	171	340	187
11	49	88	594	220	90	1020	907	191	397	272	386	178
12	55	84	442	210	88	681	3970	194	298	174	527	167
13	509	82	386	210	88	594	3030	220	244	154	340	165
14	737	92	326	220	86	723	5690	211	219	490	251	993
15	551	106	285	200	86	674	3130	195	196	614	202	1410
16	371	111	259	190	84	527	1530	177	177	316	177	537
17	244	212	229	180	84	490	972	158	162	205	159	348
18	193	955	209	180	82	478	719	150	159	157	151	273
19	171	551	202	180	82	478	575	146	168	128	1290	233
20	154	331	209	170	82	448	489	144	168	109	1330	205
21	138	248	303	180	110	414	429	140	294	98	6220	195
22	120	209	355	170	737	366	384	135	303	125	7030	194
23	111	196	272	170	4600	355	342	129	189	120	6820	175
24	106	183	244	180	7680	430	327	143	148	130	6420	160
25	106	165	237	170	4790	392	319	263	130	219	3250	151
26	116	151	205	160	1820	307	323	1090	120	962	1430	146
27	130	154	168	150	1400	263	308	729	111	1500	1760	136
28	130	159	148	140	1050	248	315	712	106	1540	1440	147
29	118	151	168	130	---	263	318	437	104	5370	1840	152
30	111	146	165	120	---	276	281	307	159	4250	1020	144
31	106	---	835	120	---	280	---	258	---	1470	667	---
TOTAL	4840	5306	18839	19209	24029	51337	31110	8581	8390	19591	56512	9292
MEAN	156	177	608	620	858	1656	1037	277	280	632	1823	310
MAX	737	955	3370	5410	7680	10200	5690	1090	1330	5370	7030	1410
MIN	46	82	133	120	82	248	281	129	104	82	151	136
CFSM	.31	.35	1.21	1.23	1.71	3.29	2.06	.55	.56	1.26	3.62	.62
IN.	.36	.39	1.39	1.42	1.78	3.80	2.30	.63	.62	1.45	4.18	.69

CAL YR 1978 TOTAL 175440 MEAN 481 MAX 9910 MIN 41 CFSM .96 IN 12.97
WTR YR 1979 TOTAL 257036 MEAN 704 MAX 10200 MIN 46 CFSM 1.40 IN 19.01

GREAT MIAMI RIVER BASIN

277

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 (305 m) downstream from Englewood Dam, 1 mi (2 km) southeast of Englewood, and at mile 8.9 (14.3 km).

DRAINAGE AREA.--650 mi² (1,684 km²).

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 (213.351 m) National Geodetic Vertical Datum of 1912.

REMARKS.--Records good except those for winter periods, which are fair. Flood flow regulated by Englewood retarding basin.

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

AVERAGE DISCHARGE.--54 years, 573 ft³/s (16.23 m³/s), 11.97 in/yr (304 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,980 ft³/s (283 m³/s) June 15, 1958, gage height, 80.88 ft (24.652 m); minimum, 3.7 ft³/s (0.10 m³/s) Sept. 30, Oct. 1, 1944, gage height, 71.36 ft (21.751 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a discharge of 85,400 ft³/s (2,420 m³/s) at site 1 mi (2 km) downstream, computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,710 ft³/s (218 m³/s) Mar. 6, gage height, 79.51 ft (24.235 m); minimum, 66 ft³/s (1.87 m³/s) Oct. 2, 3, 8, gage height, 72.10 ft (21.976 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	129	173	3840	180	1970	420	340	315	212	1690	1040
2	69	123	170	5180	170	3200	697	311	281	195	2470	866
3	71	118	237	4860	160	4050	943	349	252	169	3890	708
4	80	116	3170	2200	160	5330	828	413	231	154	2170	573
5	78	116	3190	923	160	7140	1680	399	217	145	947	497
6	84	116	1350	640	150	7610	1320	352	498	135	1870	412
7	80	111	838	540	150	7130	963	324	1810	128	2260	349
8	77	108	1250	440	140	6170	757	306	1000	120	779	304
9	75	111	3420	380	140	4990	847	283	676	160	461	270
10	71	108	2310	340	140	3120	1080	271	700	230	400	253
11	69	106	1010	310	130	1670	1000	260	561	380	1340	250
12	73	106	680	290	130	1130	3450	255	400	290	1270	240
13	194	102	561	280	130	875	4220	276	317	230	717	240
14	953	108	477	310	130	894	4830	275	278	700	443	480
15	749	116	408	280	120	1050	5210	261	251	850	322	1500
16	532	126	362	260	120	749	4180	239	230	520	265	730
17	357	163	325	250	120	647	1910	221	216	330	232	470
18	258	697	286	250	120	631	1200	206	207	240	217	370
19	217	913	272	240	120	631	913	202	207	200	2040	320
20	198	464	276	240	120	607	757	202	206	180	2870	290
21	180	325	362	260	170	561	647	194	223	170	4560	270
22	163	263	464	250	464	504	569	184	364	160	6130	260
23	154	237	408	240	2270	477	496	180	272	180	6610	250
24	142	225	341	230	5210	540	459	184	207	195	6860	240
25	131	209	330	290	6290	554	443	229	177	291	6690	230
26	140	191	290	260	5680	439	439	899	163	864	5600	230
27	142	187	245	240	4300	368	421	1050	153	1890	3850	230
28	151	187	202	220	2160	330	410	972	145	2080	2570	240
29	148	187	221	210	---	335	406	660	143	3810	2670	240
30	140	180	229	200	---	357	375	436	182	5110	2010	240
31	131	---	420	190	---	368	---	351	---	4220	1390	---
TOTAL	5978	6248	24277	24643	29334	64427	41870	11084	10882	24538	75593	12592
MEAN	193	208	783	795	1048	2078	1396	358	363	792	2438	420
MAX	953	913	3420	5180	6290	7610	5210	1050	1810	5110	6860	1500
MIN	69	102	170	190	120	330	375	180	143	120	217	230
CFSM	.30	.32	1.21	1.22	1.61	3.20	2.15	.55	.56	1.22	3.75	.65
IN.	.34	.36	1.39	1.41	1.68	3.69	2.40	.63	.62	1.40	4.33	.72

CAL YR 1978 TOTAL 232118 MEAN 636 MAX 7560 MIN 61 CFSM .98 IN 13.28
WTR YR 1979 TOTAL 331466 MEAN 908 MAX 7610 MIN 69 CFSM 1.40 IN 18.97

GREAT MIAMI RIVER BASIN

03266500 MAD RIVER AT ZANESFIELD, OH

LOCATION.--Lat 40°21'01", long 83°40'28", Logan County, Hydrologic Unit 05080001, on left bank at upstream side of bridge on County Road No. 5 (adjacent to former U.S. Highway 33), 0.8 mi (1.3 km) upstream from Sugar Creek, 1 mi (2 km) north of Zanesfield, and at mile 61.45 (98.87 km).

DRAINAGE AREA.--7.31 mi² (18.9 km²).

PERIOD OF RECORD.--August 1946 to September 1979 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1,208.28 ft (368.284 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--33 years, 7.72 ft³/s (0.219 m³/s), 14.34 in/yr (364 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,100 ft³/s (59.5 m³/s) Apr. 13, 1972, gage height, 9.54 ft (2.908 m) in gage house, from rating curve extended above 220 ft³/s (6.23 m³/s) on basis of critical-depth measurement of peak flow; minimum, 0.30 ft³/s (0.008 m³/s) Jan. 16, 1966, gage height, 0.58 ft (0.177 m), result of freezeup.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 238 ft³/s (6.74 m³/s) Feb. 23, gage height, 2.42 ft (0.738), above base of 200 ft³/s (5.66 m³/s); minimum 1.1 ft³/s (0.031 m³/s) Oct. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.3	1.5	63	2.2	26	8.5	6.1	8.5	3.6	3.2	2.8
2	1.2	1.3	1.5	29	2.2	37	21	6.1	7.7	3.0	3.4	2.8
3	1.4	1.3	7.3	13	2.2	87	14	10	6.5	2.6	2.6	2.6
4	1.5	1.3	17	6.1	2.2	160	39	10	6.1	3.2	2.4	2.6
5	1.4	1.3	5.1	4.4	2.1	65	29	9.5	4.9	2.8	3.0	2.4
6	1.5	1.3	3.1	3.9	2.1	36	16	9.0	4.4	2.6	2.8	2.2
7	1.5	1.4	2.7	3.8	2.1	28	12	8.1	4.2	2.4	2.2	2.1
8	1.4	1.4	10	3.6	2.1	24	13	7.7	4.0	2.4	2.2	1.9
9	1.3	1.4	12	4.3	2.1	21	15	7.3	6.0	5.4	2.4	1.9
10	1.3	1.3	4.9	3.9	2.1	22	13	7.3	4.2	5.1	2.2	1.9
11	1.3	1.3	3.4	3.3	2.0	15	15	6.9	3.8	3.0	2.2	1.9
12	1.5	1.4	3.0	2.8	2.0	13	19	6.9	3.4	2.6	2.1	1.9
13	4.4	1.4	2.8	2.9	2.0	13	53	6.9	3.2	2.8	2.1	1.9
14	1.9	1.6	2.4	3.2	2.0	14	78	5.7	3.0	2.4	1.9	12
15	1.6	1.4	2.3	3.1	2.0	10	33	6.1	2.8	2.2	1.9	5.1
16	1.6	1.4	2.2	3.0	2.0	9.5	22	5.1	2.8	2.1	1.9	3.2
17	1.5	2.7	2.1	2.9	2.1	9.0	17	4.8	2.8	2.1	1.9	2.6
18	1.5	2.1	2.0	2.7	2.1	9.5	14	4.5	2.8	2.1	2.4	2.4
19	1.6	1.7	1.9	2.6	2.2	8.5	13	4.5	2.6	1.9	2.1	2.2
20	1.5	1.6	2.4	2.5	2.3	8.5	11	4.2	2.6	1.9	5.1	2.2
21	1.4	1.5	3.0	2.5	2.4	8.1	11	3.9	3.0	1.9	6.1	2.4
22	1.4	1.5	2.5	2.5	4.8	7.3	11	4.2	2.6	1.9	3.4	2.2
23	1.4	1.8	2.2	2.5	114	8.1	9.9	4.5	2.6	1.9	3.2	2.1
24	1.4	1.6	2.2	2.4	84	8.5	9.5	7.7	2.4	2.2	3.2	2.1
25	1.4	1.5	2.2	2.5	33	7.3	9.0	33	2.4	2.4	2.8	1.9
26	2.0	1.5	2.0	2.4	21	6.5	9.0	45	2.4	2.4	2.6	2.1
27	1.7	1.7	1.8	2.4	16	6.1	9.0	24	2.2	2.6	2.6	1.9
28	1.6	1.7	1.7	2.4	15	5.7	9.9	16	2.4	5.1	3.6	3.0
29	1.5	1.5	1.7	2.3	---	6.9	8.5	12	3.0	7.3	5.1	2.6
30	1.5	1.5	2.5	2.3	---	7.3	7.3	9.5	5.1	3.4	4.2	2.2
31	1.4	---	26	2.2	---	7.7	---	9.0	---	2.8	3.4	---
TOTAL	48.8	45.7	137.4	190.4	332.3	695.5	549.6	305.5	114.4	90.1	90.2	81.1
MEAN	1.57	1.52	4.43	6.14	11.9	22.4	18.3	9.85	3.81	2.91	2.91	2.70
MAX	4.4	2.7	26	63	114	160	78	45	8.5	7.3	6.1	12
MIN	1.2	1.3	1.5	2.2	2.0	5.7	7.3	3.9	2.2	1.9	1.9	1.9
CFSM	.22	.21	.61	.84	1.63	3.06	2.50	1.35	.52	.40	.40	.37
IN.	.25	.23	.70	.97	1.69	3.54	2.80	1.55	.58	.46	.46	.41
CAL YR 1978	TOTAL	2869.1	MEAN	7.86	MAX	139	MIN	1.1	CFSM	1.08	IN	14.60
WTR YR 1979	TOTAL	2681.0	MEAN	7.35	MAX	160	MIN	1.2	CFSM	1.01	IN	13.64

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 (2.9 km) upstream from Dugan Run, 1.8 mi (2.9 km) downstream from Muddy Creek, 2.5 mi (4.0 km) west of Urbana, and at mile 39.7 (63.9 km).

DRAINAGE AREA.--162 mi² (420 km²).

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 (300.295 m) National Geodetic Vertical Datum of 1929. Prior to May 18, 1930, nonrecording gage at same site and datum. May 18, 1930, to Sept. 30, 1931, nonrecording gage at site 600 ft (183 m) downstream at datum 0.36 ft (0.110 m) lower. Aug. 1 to Sept. 25, 1939, nonrecording gage at present site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Sediment data collected at this site 1970 to 1974.

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

AVERAGE DISCHARGE.--46 years, 142 ft³/s (4.021 m³/s), 11.91 in/yr (303 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,000 ft³/s (227 m³/s) Jan. 22, 1959, gage height, 12.05 ft (3.673 m), from rating curve extended above 4,000 ft³/s (113 m³/s) on basis of estimate of peak flow based on contracted-opening measurement at site 3 mi (5 km) downstream with drainage area of 235 mi² (609 km²) adjusted to gage site by 0.8 power of the drainage-area ratio; minimum, 2.1 ft³/s (0.059 m³/s) Jan. 21, 1963, gage height, 2.33 ft (0.710 m), result of freezeup; minimum daily, 24 ft³/s (0.68 m³/s) Feb. 2, 3, 1945, Jan. 13, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,400 ft³/s (39.6 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 23	2230	*2520 71.4	*6.88 2.097	Apr. 14	0400	1770 50.1	5.91 1.801
Mar. 04	0230	2260 64.0	6.53 1.990				

Minimum daily discharge 70 ft³/s (1.98 m³/s) Feb. 17-19, result of ice effect.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	76	71	641	92	338	175	182	182	155	204	185
2	74	76	71	467	90	556	267	178	171	138	266	210
3	76	76	89	249	88	765	240	192	165	132	203	150
4	81	76	334	198	86	1960	328	195	159	130	178	140
5	76	76	183	175	82	982	375	183	154	126	190	150
6	79	74	133	161	84	603	302	175	156	123	258	151
7	76	74	118	157	82	495	249	171	151	119	203	144
8	74	71	179	143	80	444	240	167	155	116	176	139
9	74	71	310	143	78	407	270	161	283	153	170	139
10	74	71	183	130	76	399	248	163	451	188	167	136
11	76	71	150	124	76	347	237	160	249	148	244	133
12	79	71	137	124	74	314	301	156	209	133	210	130
13	124	74	127	124	74	302	350	155	188	133	180	130
14	106	74	121	130	74	302	1070	150	178	128	167	499
15	92	74	118	121	72	271	494	149	169	122	157	291
16	86	71	112	121	72	253	380	143	161	117	151	214
17	84	81	106	121	70	249	333	140	156	114	146	191
18	84	92	103	115	70	244	304	140	151	112	149	179
19	84	81	100	112	70	236	282	138	150	111	141	168
20	81	79	103	112	72	227	255	136	147	108	141	161
21	81	76	112	118	86	219	252	132	157	108	241	160
22	81	74	103	115	130	206	242	128	176	108	181	156
23	79	79	97	109	937	210	232	128	153	106	179	148
24	76	76	94	124	1210	206	226	164	142	114	236	147
25	79	74	94	130	491	198	221	225	138	119	203	143
26	84	74	89	115	351	187	214	416	135	113	177	140
27	84	76	86	112	314	179	208	301	132	200	174	138
28	81	76	84	112	290	175	205	257	130	450	236	146
29	81	74	84	106	---	179	196	214	133	553	358	147
30	79	74	86	100	---	175	190	194	149	300	235	141
31	79	---	137	95	---	175	---	187	---	224	194	---
TOTAL	2538	2262	3914	4904	5371	11803	8896	5580	5230	5001	6115	5106
MEAN	81.9	75.4	126	158	192	381	297	180	174	161	197	170
MAX	124	92	334	641	1210	1960	1070	416	451	553	358	499
MIN	74	71	71	95	70	175	175	128	130	106	141	130
CFSM	.51	.47	.78	.98	1.19	2.35	1.83	1.11	1.07	.99	1.22	1.05
IN.	.58	.52	.90	1.13	1.23	2.71	2.04	1.28	1.20	1.15	1.40	1.17

CAL YR 1978	TOTAL	58701	MEAN 161	MAX 1210	MIN 71	CFSM .99	IN 13.48
WTR YR 1979	TOTAL	66720	MEAN 183	MAX 1960	MIN 70	CFSM 1.13	IN 15.32

GREAT MIAMI RIVER BASIN

03267900 MAD RIVER AT ST. PARIS PIKE AT EAGLE CITY, OH

LOCATION.--Lat 39°57'51"N, long 83°49'54"W, 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 (1.3 km) southeast of Eagle City, 1.1 mi (1.8 km) downstream from Moore Run, 3.1 mi (5.0 km) upstream from Buck Creek, 3.3 mi (5.3 km) south of Tremont City, and at mile 29.5 (47.5 km).

DRAINAGE AREA.--310 mi² (803 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 904.66 ft (275.740 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. 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 24.4 ft³/s (0.69 m³/s) in 1979, is returned as sewage 1.4 mi (2.3 km) upstream from gaging station near Springfield (station 03269500). Water-quality data collected at this site 1966 to 1977.

AVERAGE DISCHARGE.--14 years, 301 ft³/s (8.524 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,700 ft³/s (275 m³/s) June 26, 1971, gage height, 16.00 ft (4.877 m), from rating curve extended above 3,060 ft³/s (86.7 m³/s); minimum daily, 60 ft³/s (1.70 m³/s) Jan. 27, 28, 1977 (result of freezeup).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 19.8 ft (6.04 m), from data furnished by Miami Conservancy District. Flood of Jan. 21, 1959 reached a stage of 15.7 ft (4.79 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2500 ft³/s (90.8 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 23	2000	*5190 147	*12.71 3.874	Apr. 14	0300	3810 108	11.21 3.417
Mar. 4	0030	3630 103	11.00 3.353	Sept. 14	1000	2540 71.9	9.59 2.923

Minimum daily discharge, 125 ft³/s (3.54 m³/s) Nov. 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	137	137	141	1840	190	849	327	318	301	290	423	364
2	136	136	139	1100	180	1290	596	301	284	252	532	410
3	137	136	234	540	180	1780	495	342	273	234	374	342
4	143	134	955	406	170	3310	642	345	265	231	318	318
5	139	130	432	349	170	1770	743	321	257	222	355	304
6	143	132	314	318	170	1070	572	307	273	214	854	290
7	134	132	270	304	170	884	462	295	257	210	469	273
8	130	132	638	281	160	767	434	287	260	207	358	262
9	128	132	757	260	160	672	544	281	423	252	318	257
10	128	130	401	249	160	659	476	301	832	301	307	252
11	128	128	314	239	160	568	465	284	448	252	600	244
12	130	125	281	236	150	510	625	276	355	229	455	239
13	199	125	265	236	150	487	845	270	315	229	358	247
14	213	130	242	262	150	487	2200	262	293	219	321	1770
15	186	128	230	231	150	448	951	260	276	212	295	790
16	165	128	220	231	150	423	716	252	265	207	281	525
17	155	163	208	231	140	413	600	244	260	200	270	434
18	151	192	201	234	140	400	529	242	254	196	273	387
19	151	163	197	222	140	390	484	239	249	193	276	352
20	147	151	206	224	150	377	455	234	244	189	284	327
21	143	145	270	257	180	361	434	231	290	187	712	324
22	139	143	225	236	342	349	420	224	330	193	498	315
23	141	147	208	219	2450	349	403	224	270	203	734	295
24	139	145	204	281	2460	358	390	270	249	239	871	281
25	141	139	201	284	1210	339	380	321	239	279	532	273
26	151	137	188	240	854	321	371	596	234	242	420	265
27	153	147	177	220	672	310	358	480	229	257	420	260
28	145	151	171	210	572	301	352	423	224	629	417	293
29	137	147	175	200	---	310	339	355	224	875	707	287
30	137	145	182	200	---	304	327	321	295	484	510	270
31	137	---	589	190	---	318	---	310	---	361	406	---
TOTAL	4543	4210	9235	10530	11930	21174	16935	9416	8968	8488	13948	11250
MEAN	147	140	298	340	426	683	565	304	299	274	450	375
MAX	213	192	955	1840	2460	3310	2200	596	832	875	871	1770
MIN	128	125	139	190	140	301	327	224	224	187	270	239
CAL YR 1978	TOTAL	110464	MEAN	303	MAX	2310	MIN	125				
WTR YR 1979	TOTAL	130627	MEAN	358	MAX	3310	MIN	125				

GREAT MIAMI RIVER BASIN

281

03268090 CLARENCE J. BROWN RESERVOIR NEAR SPRINGFIELD, OH

LOCATION.--Lat 39°57'01", long 83°44'51", in SE 1/4 sec. 13, R.10, T.5, Clark County, Hydrologic Unit 05080001, in gatehouse of dam on Buck Creek, 1.3 mi (2.1 km) upstream from Beaver Creek, and 4.0 mi (6.4 km) northeast of city hall in Springfield.

DRAINAGE AREA.--82.0 mi² (212 km²).

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929, (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by rolled rock-fill dam having an impervious core with sand and gravel shell, and an open-cut spillway. Storage began in January 1974, recorder was installed and records began April 16, 1974. Usable capacity 63,690 acre-ft (78.5 hm³) between elevations 968.0 ft (295.05 m), lowest outlet, and 1,023.0 ft (311.81 m), crest of spillway. Dead storage below elevation 968.0 ft (295.05 m) 6 acre-ft (7,400 m³). Figures given herein represent usable contents. Reservoir is used for flood control, low-flow augmentation and recreation. There are no gates on spillway and all regulation is done by gates in conduit through dam.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 42,630 acre-ft (52.6 hm³) Feb. 28, 1975, elevation, 1,014.60 ft (309.250 m); minimum, 7,680 acre-ft (9.45 hm³) Sept. 30, 1979, elevation, 992.54 ft (302.526 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 38,750 acre-ft (47.8 hm³) April 15, elevation, 1,012.85 ft (308.717 m); minimum, 7,680 acre-ft (9.47 hm³) Sept. 30, elevation, 992.54 ft (302.526 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	1011.53	35940	---
Oct. 31.....	1010.06	32930	-3010
Nov. 30.....	1009.03	30900	-2030
Dec. 31.....	1009.15	31140	+240
CAL YR 1978.....	---	---	-80
Jan. 31.....	1009.53	31880	+740
Feb. 28.....	1012.12	37180	+5300
Mar. 31.....	1011.45	35780	-1400
Apr. 30.....	1012.09	37120	+1340
May 31.....	1012.57	38150	+1030
June 30.....	1012.26	37480	-670
July 31.....	1012.54	38080	+600
Aug. 31.....	1009.75	32320	-5760
Sept. 30.....	992.54	7680	-24640
WTR YR 1979.....			-28260

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 (46 m) downstream from Rock Run, 300 ft (91 m) downstream from bridge on Lower Valley Pike, 2 mi (3 km) downstream from Buck Creek, 3 mi (5 km) west of Springfield, and at mile 24.1 (38.8 km).

DRAINAGE AREA.--490 mi² (1,269 km²).

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 (268.657 m) National Geodetic Vertical Datum of 1912. Jan. 1, 1904 to Mar. 31, 1906, nonrecording gage at site 0.3 mi (0.5 km) downstream at different datum. Feb. 1, 1914, to Feb. 29, 1924, nonrecording gage at site 1.8 mi (2.9 km) upstream at datum 6.39 ft (1.948 m) higher. Mar. 1, 1924, to July 31, 1925, nonrecording gage at site 300 ft (91 m) upstream at same datum.

REMARKS.--Records good. Some regulation by C.J. Brown Reservoir, 8.3 mi (13.4 km) upstream on Buck Creek, since 1972. Occasional low-flow regulation by powerplant 2.3 mi (3.7 km) upstream; daily flows are not affected appreciably. Water-quality data collected at this site 1965 to 1973.

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

AVERAGE DISCHARGE.--66 years, (1904-05, 1914-79), 485 ft³/s (13.74 m³/s), 13.44 in/yr (341 mm/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,500 ft³/s (864 m³/s) Jan. 21, 1959, gage height, 15.76 ft (4,804 m), from rating curve extended above 14,000 ft³/s (396 m³/s) on basis of slope-area and contracted opening measurements of peak flow; minimum daily discharge, 30 ft³/s (0.85 m³/s) Sept. 15, 1904.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 25, 1913 reached a stage of 16.9 ft (5.15 m), present datum, discharge, 55,400 ft³/s (1,570 m³/s) computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,340 ft³/s (265 m³/s) Sept. 14, gage height, 10.69 ft (3.258 m); minimum daily, 206 ft³/s (5.83 m³/s) Nov. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	261	279	233	2900	320	1790	534	556	599	526	977	916
2	256	206	231	1790	310	2320	1010	529	543	428	1110	970
3	270	276	462	853	300	2670	826	613	509	399	943	859
4	283	273	1410	728	290	4650	1070	602	493	426	846	844
5	282	271	699	642	280	2760	1210	553	477	379	936	917
6	274	268	580	593	270	1790	967	525	696	338	1630	890
7	263	269	517	565	270	1550	803	509	552	327	1060	860
8	262	262	1310	534	260	1400	757	494	568	323	880	832
9	259	270	1530	484	260	1300	1030	480	715	404	744	816
10	253	260	808	487	250	1270	871	539	1230	422	559	809
11	258	262	626	471	250	1100	895	485	752	373	994	799
12	258	271	560	468	240	844	1140	484	625	343	797	785
13	424	268	531	472	240	807	1690	463	576	348	635	876
14	419	212	493	548	230	805	3760	452	545	338	571	6120
15	355	276	471	418	230	739	1730	444	521	323	533	1640
16	320	271	451	403	220	685	1590	431	502	317	507	1270
17	302	395	430	411	220	669	1260	407	491	308	494	1320
18	302	367	406	406	220	645	922	386	484	299	492	1430
19	311	319	334	373	220	619	845	378	447	291	836	1360
20	298	305	364	386	230	600	796	372	404	287	634	1310
21	290	299	443	453	320	547	755	371	441	283	1290	1320
22	283	293	381	403	670	526	739	362	490	281	1150	1280
23	288	309	349	373	3980	537	671	351	405	301	1870	1230
24	286	297	347	536	4230	545	589	452	393	421	1560	1220
25	288	285	339	501	2290	515	586	554	404	526	997	1320
26	320	280	315	419	1660	490	602	869	396	487	799	1290
27	304	319	298	396	1240	473	597	791	377	472	830	1260
28	294	296	287	388	1160	462	610	670	347	1000	894	1390
29	285	247	289	362	---	470	585	554	350	1290	1640	1310
30	290	240	307	351	---	465	574	520	567	804	1170	1120
31	287	---	860	330	---	543	---	558	---	625	984	---
TOTAL	9125	8445	16661	18444	20660	34586	30024	15754	15899	13689	29362	38363
MEAN	294	282	537	595	738	1116	1001	508	530	442	947	1279
MAX	424	395	1530	2900	4230	4650	3760	869	1230	1290	1870	6120
MIN	253	206	231	330	220	462	534	351	347	281	492	785
CFSM	.60	.58	1.10	1.21	1.51	2.28	2.04	1.04	1.08	.90	1.93	2.61
IN.	.69	.64	1.26	1.40	1.57	2.63	2.28	1.20	1.21	1.04	2.23	2.91

CAL YR 1978 TOTAL 190816 MEAN 523 MAX 3550 MIN 206 CFSM 1.07 IN 14.49
WTR YR 1979 TOTAL 251012 MEAN 688 MAX 6120 MIN 206 CFSM 1.40 IN 19.06

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 (91 m) upstream from Huffman Dam, 2.3 mi (3.7 km) downstream from Mud Run, 6.2 mi (10.0 km) northeast of Dayton and at mile 6.1 (9.8 km). Water-quality sampling site on left bank 900 ft (274 m) downstream.

DRAINAGE AREA.--635 mi² (1,645 km²).

WATER-DISCHARGE RECORDS

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.

GAGE.--Water-stage recorder. Datum of gage is 777.06 ft (236.848 m) National Geodetic Vertical Datum of 1929. Jan. 21, 1959 to Dec. 14, 1967, at site 900 ft (274 m) downstream, at datum 77.01 ft (23.473 m) lower. See WSP 1725 for history of changes prior to Jan. 21, 1959.

REMARKS.--Records good except those for the winter period, which are fair. Flood flows affected by backwater from Huffman retarding dam beginning in 1921, some regulation by C.J. Brown Reservoir 26 mi (48.8 km) 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.--65 years, 622 ft³/s (17.62 m³/s), 13.30 in/yr (338 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,200 ft³/s (600 m³/s) Jan. 22, 1959 (based on Huffman retarding basin outflow records); maximum gage height, 87.9 ft (26.79 m) Feb. 26, 1929 at site and datum then in use; minimum daily discharge, 94 ft³/s (2.66 m³/s) Aug. 6, 1934, but may have been less during period 1921-24.

EXTREMES FOR PERIOD OF RECORD.--Flood of March 25, 1913 reached a stage of 14.0 ft (4.27 m), original site and datum, discharge 75,700 ft³/s (2,140 m³/s), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,620 ft³/s (216 m³/s) Sept. 15, gage height, 14.75 ft (4.496 m); minimum daily, 275 ft³/s (7.79 m³/s) Nov. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	313	325	297	3620	420	2340	714	756	859	688	913	1080
2	313	290	290	3260	400	3260	1230	737	804	501	1830	1150
3	317	286	434	1270	380	3170	1200	843	739	412	1180	1020
4	345	309	1770	976	370	5180	1170	878	708	432	966	944
5	321	305	996	839	360	4670	1720	816	684	395	1110	1000
6	337	305	744	762	350	2590	1250	754	1300	322	1700	967
7	321	305	649	722	340	2110	1020	723	919	299	1310	942
8	313	301	1370	688	330	1890	938	699	928	288	1010	904
9	309	293	2580	624	320	1700	1230	683	1460	404	896	886
10	305	293	1190	624	320	1610	1150	730	1820	428	699	870
11	305	293	844	587	310	1460	1120	707	1140	396	1180	860
12	305	293	731	570	310	1110	1610	684	836	339	1080	847
13	487	297	683	576	300	1040	1660	680	723	356	811	884
14	448	275	637	675	300	1040	5330	651	656	351	713	5560
15	458	278	598	581	300	967	2850	638	612	396	661	4710
16	397	305	570	528	300	895	2360	621	568	322	626	1920
17	371	393	538	500	300	867	1990	609	543	300	594	1680
18	349	438	512	480	300	853	1380	547	515	285	584	1780
19	362	384	458	460	300	816	1230	552	503	355	1130	1650
20	349	354	448	440	300	807	1140	551	417	452	977	1550
21	341	341	570	500	340	753	1080	546	494	451	2140	1540
22	333	333	512	470	839	722	1050	530	542	470	1320	1510
23	329	333	467	450	3120	731	981	517	426	398	2240	1420
24	333	337	448	600	6790	762	862	610	377	519	2900	1370
25	329	321	458	735	3710	718	839	758	379	740	1630	1470
26	337	313	420	592	3300	679	839	1180	372	706	1170	1440
27	349	337	388	554	1970	658	857	1260	361	589	1140	1400
28	337	345	371	533	1660	637	842	1110	314	975	1260	1570
29	329	321	375	487	---	628	811	876	315	1690	1840	1530
30	325	309	379	467	---	628	784	776	588	1100	1470	1380
31	325	---	735	440	---	714	---	821	---	802	1200	---
TOTAL	10692	9612	21462	24610	28339	46005	41247	22843	20902	16161	38280	45844
MEAN	345	320	692	794	1012	1484	1375	737	697	521	1235	1528
MAX	487	438	2580	3620	6790	5180	5330	1260	1820	1690	2900	5560
MIN	305	275	290	440	300	628	714	517	314	285	584	847
CFSM	.54	.50	1.09	1.25	1.59	2.34	2.17	1.16	1.10	.82	1.95	2.41
IN.	.63	.56	1.26	1.44	1.66	2.70	2.42	1.34	1.22	.95	2.24	2.69

CAL YR 1978	TOTAL	236694	MEAN 648	MAX 5590	MIN 275	CFSM 1.02	IN 13.87
WTR YR 1979	TOTAL	325997	MEAN 893	MAX 6790	MIN 275	CFSM 1.41	IN 19.10

GREAT MIAMI RIVER BASIN

03270000 MAD RIVER NEAR DAYTON, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1947-48, 1962-63, 1966 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1968 to current year.

pH: June 1968 to current year.

WATER TEMPERATURES: June 1968 to current year.

DISSOLVED OXYGEN: June 1968 to current year.

INSTRUMENTATION.--Water-quality monitor since June 1968.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 3,000 micromhos Sept. 13, 14, 1974; minimum, 165 micromhos June 26, 1971.

pH: Maximum, 10.1 units July 21, 1973; minimum, 4.4 units Apr. 8, 1971.

WATER TEMPERATURES: Maximum, 32.5°C July 15, 1977; minimum, 0.0°C on several days during winter periods.

DISSOLVED OXYGEN: Maximum, 15.9 mg/L May 3, 1978, Feb. 10, 1979; minimum, 3.2 mg/L July 9, 1977.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,500 micromhos Feb. 21; minimum, 279 micromhos Feb. 23, 24.

pH: Maximum recorded, 8.8 units Nov. 4-6, 8; minimum recorded, 6.4 units Dec. 5, 6.

WATER TEMPERATURES: Maximum, 27.0°C July 16; minimum, 1.0°C Dec. 9, Jan. 3, Feb. 4, 5, 10, 13.

DISSOLVED OXYGEN: Maximum, 15.9 mg/L Feb. 10; minimum, 4.6 mg/L May 11.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	747	729	738	726	774	753	570	402	783	753	1060	675
2	738	723	738	708	792	756	570	402	771	762	---	---
3	756	726	783	738	798	579	702	579	780	756	---	---
4	738	711	777	714	570	480	735	702	792	753	---	---
5	771	699	738	714	711	579	744	732	759	750	---	---
6	738	708	732	720	732	708	759	735	765	747	---	---
7	729	699	732	717	747	726	762	738	783	753	900	552
8	735	717	735	717	750	462	750	726	798	753	768	627
9	732	720	741	723	594	453	---	---	786	753	927	642
10	738	720	747	723	684	600	---	---	762	744	819	648
11	753	729	750	720	735	687	756	750	789	735	900	654
12	747	726	747	732	759	735	759	744	756	732	873	687
13	717	513	744	729	756	729	837	750	747	732	774	654
14	690	558	771	729	732	723	1020	843	741	735	798	657
15	678	606	780	744	744	726	825	792	822	744	732	618
16	723	681	765	717	741	726	---	---	813	777	762	675
17	738	720	786	579	741	726	---	---	786	768	816	675
18	756	726	702	618	741	723	879	792	789	756	741	663
19	774	720	732	687	762	726	786	747	768	753	744	666
20	732	705	741	729	822	753	939	759	804	759	756	612
21	738	726	750	732	765	729	852	798	1500	798	735	639
22	735	726	747	735	747	720	804	747	1130	810	768	663
23	747	732	768	738	756	747	822	786	789	279	786	738
24	---	---	735	711	771	744	1110	750	426	279	747	735
25	---	---	741	717	750	738	759	714	---	---	747	729
26	---	---	741	726	759	738	750	714	---	---	753	726
27	711	705	765	705	774	744	759	747	---	---	744	732
28	732	705	732	696	780	756	771	747	771	711	762	735
29	732	723	753	723	801	765	801	759	---	---	750	744
30	726	714	774	753	786	771	786	759	---	---	762	738
31	741	714	---	---	783	537	774	756	---	---	786	687
MONTH	774	513	786	579	822	453	1110	402	1500	279	1060	552

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

[illegible]

GREAT MIAMI RIVER BASIN

03270000 MAD RIVER NEAR DAYTON, OH--Continued
PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	8.5	8.2	8.7	8.2	8.5	8.1	8.4	8.1			---	---
2	8.6	8.2	8.7	8.3	8.2	7.2	8.4	8.0			---	---
3	8.4	8.2	8.7	8.2	7.2	6.6	8.0	7.5			---	---
4	8.5	8.1	8.8	8.2	7.3	6.5	7.9	7.0			---	---
5	8.4	8.1	8.8	8.2	7.3	6.4	---	---			---	---
6	8.4	8.2	8.8	8.2	7.6	6.4	---	---			---	---
7	8.5	8.1	8.5	8.2	8.2	7.8	---	---			8.3	7.9
8	8.6	8.2	8.8	8.3	8.2	7.8	---	---			8.5	7.8
9	8.6	8.3	8.7	8.2	8.0	7.1	---	---			8.1	7.8
10	8.5	8.2	8.5	8.1	7.9	7.1	---	---			8.2	7.9
11	8.4	8.2	8.6	7.9	7.6	6.8	---	---			8.3	8.1
12	8.4	8.1	8.2	8.0	8.0	6.8	---	---			8.4	8.1
13	8.3	8.0	8.4	6.5	---	---	---	---			8.3	7.9
14	8.4	7.9	8.3	6.9	---	---	---	---			8.2	8.0
15	8.4	8.1	8.2	8.0	---	---	---	---			8.2	8.1
16	8.4	8.2	8.5	8.1	---	---	---	---			8.2	8.0
17	8.5	8.2	8.3	8.0	---	---	---	---			8.2	7.9
18	8.5	8.2	8.2	7.9	---	---	---	---			8.1	7.8
19	8.5	8.1	8.6	8.1	---	---	---	---			8.0	7.8
20	8.5	8.2	8.4	8.1	---	---	---	---			8.1	7.8
21	8.6	8.2	8.5	8.1	---	---	---	---			8.2	7.9
22	8.6	8.2	8.6	8.1	---	---	---	---			8.3	7.9
23	8.3	8.1	8.3	8.1	---	---	---	---			8.1	7.8
24	---	---	8.4	8.1	---	---	---	---			8.1	7.9
25	---	---	8.7	8.1	---	---	---	---			8.2	8.0
26	---	---	8.3	8.1	---	---	---	---			8.2	8.0
27	8.5	8.1	8.3	8.0	8.0	7.9	---	---			8.3	8.0
28	8.6	8.2	8.5	8.0	8.5	8.0	---	---			8.3	8.0
29	8.6	8.2	8.5	8.1	8.6	7.2	---	---			8.3	7.9
30	8.6	8.2	8.5	7.3	8.5	8.1	---	---			8.3	7.9
31	8.6	8.2	---	---	8.4	8.3	---	---			8.0	7.8
MONTH	8.6	7.9	8.8	6.5	8.6	6.4	8.4	7.0			8.5	7.8
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	8.1	7.8	8.6	8.2	8.1	7.8	8.1	7.7	7.9	7.6	7.8	7.6
2	7.9	7.7	8.6	8.2	8.2	7.9	8.2	7.6	7.7	7.5	7.8	7.7
3	8.1	7.9	8.4	8.1	8.2	7.9	8.3	7.6	7.8	7.6	7.8	7.6
4	8.0	7.8	8.4	8.1	8.3	7.9	8.1	7.6	7.8	7.6	7.9	7.6
5	7.9	7.8	8.7	8.2	8.3	7.9	8.4	7.7	7.9	7.7	7.9	7.6
6	8.1	7.9	8.7	8.2	7.9	7.7	8.4	7.7	7.8	7.6	7.9	7.7
7	8.1	8.0	8.7	8.1	8.0	7.7	8.4	7.7	7.8	7.6	8.1	7.7
8	8.0	7.9	8.7	8.1	8.0	7.9	8.4	7.8	7.9	7.6	8.2	7.9
9	8.0	7.9	8.6	8.1	7.9	7.7	8.0	7.7	7.9	7.6	8.2	7.8
10	8.1	7.9	8.5	8.1	7.9	7.7	8.2	7.6	7.9	7.6	8.1	7.6
11	8.0	7.9	8.6	8.0	8.0	7.8	8.2	7.6	8.0	7.9	7.9	7.6
12	7.9	7.8	8.5	8.2	8.1	7.9	8.2	7.7	8.1	7.7	7.9	7.6
13	7.9	7.8	8.7	8.3	8.1	7.6	7.9	7.7	8.0	7.7	7.9	7.6
14	7.8	7.7	8.7	8.3	8.0	7.5	7.9	7.6	8.0	7.7	7.8	7.4
15	7.9	7.8	8.7	8.2	8.0	7.5	7.9	7.6	8.2	7.8	---	---
16	8.0	7.9	8.4	8.0	8.0	7.5	8.1	7.6	8.2	7.7	---	---
17	8.0	7.9	8.5	8.0	8.1	7.5	8.3	7.6	8.2	7.7	---	---
18	8.0	7.9	8.5	7.9	8.1	7.5	8.4	7.8	8.0	7.7	---	---
19	8.1	7.9	8.4	7.9	8.2	7.7	8.4	7.7	7.9	7.5	---	---
20	8.0	7.9	8.4	7.8	8.2	7.6	8.4	7.7	7.8	7.5	7.9	7.8
21	8.1	7.9	8.2	7.9	8.1	7.7	8.2	7.8	7.6	7.4	7.8	7.7
22	8.1	8.0	---	---	8.1	7.5	8.2	7.8	7.6	7.5	7.9	7.7
23	8.2	8.1	---	---	8.2	7.5	8.3	7.8	7.6	7.4	7.9	7.7
24	8.2	8.1	---	---	8.4	7.7	8.0	7.7	7.4	7.3	7.9	7.7
25	8.3	8.0	8.0	7.9	7.8	7.8	7.6	7.3	7.6	7.5	7.8	7.7
26	8.3	8.1	8.0	7.9	8.3	7.6	7.6	7.3	7.6	7.5	7.8	7.7
27	8.5	8.2	7.9	7.8	8.3	7.6	7.7	7.5	7.5	7.3	7.9	7.7
28	8.5	8.3	8.1	7.8	8.3	7.6	7.7	7.4	7.6	7.5	7.9	7.7
29	8.5	8.3	8.1	7.9	8.1	7.6	7.4	7.0	7.6	7.4	7.9	7.8
30	8.5	8.2	8.1	7.9	8.0	7.7	7.6	7.4	7.6	7.4	7.9	7.8
31	---	---	8.0	7.9	---	---	7.8	7.5	7.8	7.5	---	---
MONTH	8.5	7.7	8.7	7.8	8.4	7.5	8.4	7.0	8.2	7.3	8.2	7.4
YEAR	8.8	6.4										

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

287

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN						
	OCTOBER				NOVEMBER				DECEMBER				JANUARY				FEBRUARY				MARCH				
1	18.0	15.5	13.5	11.0	8.0	4.5	8.0	6.0	4.0	2.5	7.0	6.0	2	17.5	14.5	13.0	9.5	8.0	6.0	4.0	1.5	---	---		
3	16.5	14.5	13.5	10.0	10.5	7.5	2.5	1.0	5.0	3.0	---	---	4	16.5	14.5	14.0	10.5	10.5	7.0	3.0	1.5	---	---		
5	15.5	13.5	14.0	11.0	6.5	5.5	3.5	2.5	3.0	1.0	---	---	6	14.5	13.0	14.5	12.5	8.0	6.5	3.5	3.0	3.5	1.0	---	---
7	14.0	12.0	13.0	11.0	9.0	7.5	3.5	2.5	4.0	2.5	9.0	7.5	8	14.0	11.0	11.5	9.0	10.0	6.5	3.0	1.5	3.5	2.0	9.5	7.0
9	13.5	10.0	11.0	8.0	6.5	5.0	---	---	4.0	1.5	8.5	7.0	10	15.0	11.0	11.5	8.5	4.5	3.0	---	---	3.5	1.0	7.5	6.5
11	14.0	13.0	12.5	9.0	5.5	3.0	3.0	2.0	3.0	1.5	6.5	4.5	12	16.0	14.0	12.5	12.0	7.5	5.5	4.5	2.0	2.5	1.5	8.0	4.5
13	15.5	13.5	13.0	11.0	7.0	5.5	5.5	3.5	1.5	1.0	9.0	7.0	14	14.0	12.0	13.0	11.5	5.5	4.5	5.0	2.5	3.5	3.0	9.0	7.5
15	13.0	11.0	11.5	10.0	6.0	4.0	2.5	1.5	5.0	4.0	7.5	6.0	16	11.5	10.0	10.0	9.0	6.0	5.0	---	---	5.5	4.0	8.5	5.5
17	12.5	9.5	12.5	9.5	6.5	5.0	---	---	4.0	1.5	10.0	7.0	18	13.0	10.5	10.0	9.0	5.0	4.0	5.0	3.0	3.0	1.5	12.5	9.0
19	14.0	11.5	9.5	7.5	6.0	5.0	4.0	3.0	4.5	2.0	13.0	11.0	20	14.5	11.0	9.0	8.0	9.5	5.5	5.5	3.5	5.5	2.0	14.0	12.5
21	15.0	11.0	9.5	8.0	8.0	5.5	5.0	4.5	5.5	5.0	14.5	12.0	22	15.5	12.0	10.0	8.0	6.0	4.5	5.0	3.5	6.0	4.5	14.5	11.5
23	14.5	12.5	11.0	9.0	6.5	4.0	6.5	4.0	5.0	3.0	14.0	12.5	24	---	---	10.5	7.5	5.5	4.5	5.0	3.5	3.0	1.5	12.5	9.5
25	---	---	9.0	6.5	5.5	4.5	4.0	2.5	---	---	9.5	7.0	26	---	---	7.5	6.5	4.5	3.5	4.0	2.5	---	---	7.0	6.0
27	13.0	10.5	8.5	6.5	4.5	3.0	5.0	3.5	---	---	10.0	6.0	28	13.0	10.0	8.0	6.5	4.5	2.5	5.0	4.0	6.0	5.5	10.5	7.5
29	12.0	9.0	6.5	5.0	5.5	3.0	4.5	3.5	---	---	13.0	10.0	30	12.0	8.5	7.5	5.0	7.5	5.0	5.5	3.5	---	---	14.0	12.0
31	13.5	9.5	---	---	8.0	7.0	5.0	3.5	---	---	13.5	12.5	MONTH	18.0	8.5	14.5	5.0	10.5	2.5	8.0	1.0	6.0	1.0	14.5	4.5
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL				MAY				JUNE				JULY				AUGUST				SEPTEMBER					
1	12.5	10.5	15.5	11.0	20.0	17.5	19.5	17.5	23.5	22.0	22.0	20.5	2	11.5	10.5	17.0	12.0	21.5	18.0	21.5	16.5	22.5	20.5	21.5	20.5
3	11.0	9.0	16.0	15.0	22.5	18.0	23.5	18.0	22.5	20.0	22.5	20.5	4	8.5	7.5	15.0	12.0	22.5	18.0	22.5	18.0	22.5	20.0	22.5	20.5
5	8.5	6.5	15.5	11.0	23.5	18.5	21.5	17.5	23.5	21.5	23.5	21.5	6	8.5	6.5	17.5	12.0	22.5	19.5	21.5	17.0	23.0	20.5	21.5	21.5
7	7.0	6.0	20.5	14.0	21.5	20.0	22.5	17.5	23.0	21.5	23.5	21.5	8	8.5	6.5	23.5	17.5	21.5	20.0	22.5	17.5	24.5	21.5	22.5	20.5
9	9.0	7.0	23.5	19.0	23.0	20.0	22.5	18.0	25.0	23.0	20.5	18.5	10	9.0	6.0	23.5	20.0	23.5	19.5	25.0	23.0	20.5	19.0	17.0	18.0
11	9.5	8.0	24.0	20.0	20.5	18.5	24.0	20.0	24.5	22.5	21.0	19.5	12	13.0	9.5	21.0	17.0	21.0	18.0	22.5	20.0	20.5	19.0	17.5	19.5
13	13.5	11.0	19.5	16.0	19.0	17.5	22.5	21.0	21.5	18.5	22.0	21.0	14	11.0	9.5	19.5	14.5	21.0	18.5	22.5	20.0	20.5	19.0	17.5	20.5
15	10.5	9.0	21.0	16.5	23.5	19.0	25.0	20.5	21.5	19.0	20.5	18.5	16	9.0	8.0	21.0	15.5	21.0	16.5	20.0	17.0	20.5	19.0	17.5	16.5
17	11.0	8.5	21.0	15.0	23.5	19.5	26.0	21.5	20.0	17.0	18.5	16.0	18	13.0	10.0	21.5	15.5	20.5	17.0	20.5	18.0	20.5	19.0	17.5	16.0
19	14.0	11.0	22.0	16.5	23.5	19.0	25.0	19.5	20.5	18.0	19.0	17.0	20	15.0	12.0	22.0	17.5	23.0	19.0	20.5	18.5	20.5	19.0	17.0	16.5
21	15.0	14.0	19.5	17.0	24.5	21.0	23.5	21.0	21.0	20.0	18.0	17.5	22	14.0	13.0	---	---	20.5	20.0	20.5	19.5	20.0	19.0	17.5	16.0
23	14.0	12.5	---	---	24.0	19.5	25.0	20.5	21.5	20.0	17.0	15.0	24	16.0	13.5	---	---	21.0	18.5	22.5	20.0	20.5	19.0	17.5	15.0
25	17.0	15.5	13.5	11.0	19.5	17.0	22.5	21.5	20.0	19.0	18.0	16.5	26	17.0	14.5	12.5	11.0	21.0	18.0	22.5	20.0	20.5	19.0	17.5	16.0
27	16.0	13.0	15.5	12.0	23.0	18.0	25.5	22.5	19.5	18.0	18.0	16.5	28	13.5	10.5	18.0	14.0	20.5	17.0	20.5	19.5	20.0	19.0	17.0	16.5
29	13.0	9.5	19.5	14.5	22.0	20.0	22.0	20.0	21.0	19.5	19.0	17.0	30	14.5	11.0	21.5	16.0	22.5	18.0	22.5	20.0	20.5	19.0	17.5	16.0
31	---	---	19.5	18.0	---	---	25.0	22.0	22.5	20.0	19.0	17.5	MONTH	17.0	6.0	24.0	11.0	24.5	17.0	27.0	16.5	25.0	16.5	23.5	15.0
YEAR	27.0	1.0																							

GREAT MIAMI RIVER BASIN

289

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 (305 m) downstream from Main Street Bridge in Dayton, 0.7 mi (1.1 km) upstream from Wolf Creek, 0.8 mi (1.3 km) downstream from Mad River, and at mile 80.0 (128.7 km).

DRAINAGE AREA.--2,511 mi² (6,503 km²).

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 (213.360 m) National Geodetic Vertical Datum of 1912. Prior to Oct. 1, 1921, nonrecording gage at Main Street Bridge at datum 23.73 ft (7.233 m) higher. Oct. 1, 1921, to July 24, 1931, nonrecording gage at Main Street Bridge at datum 21.00 ft (6.401 m) higher.

REMARKS.--Records good prior to July 12, fair thereafter. Flood flow regulated by four retarding basins upstream from station beginning in 1920 on Mad River 6.5 mi (10.5 km) upstream, on Stillwater River 10.5 mi (16.9 km) upstream, on Great Miami River 11.5 mi (18.5 km) upstream, and on Loramie Creek 40 mi (64 km) upstream. Also see REMARKS for stations 03261500, 03261950 and 03269500. Water is diverted 6 mi (10 km) 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 11 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--50 years (1929-79). 2,119 ft³/s (60.02 m³/s)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 60,900 ft³/s (1,720 m³/s) Jan. 22, 1959, gage height, 35.45 ft (10.805 m) in gage well, from graph based on gage readings; 36.0 ft (10.97 m), from outside floodmarks; minimum daily, 109 ft³/s (3.09 m³/s) Aug. 8, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913 reached a stage of 29.0 ft (8.84 m), site and datum then in use, discharge, 250,000 ft³/s (7,080 m³/s), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25,700 ft³/s (728 m³/s) Feb. 24, gage height, 31.10 ft (9.479 m) in gage well; minimum daily, 413 ft³/s (11.7 m³/s) Oct. 2, 8, 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	428	608	716	12800	1140	7370	1920	1950	1960	1330	3900	4380
2	413	556	679	16600	1060	11800	3200	1870	1750	1190	6060	4130
3	428	523	1160	11400	1120	13600	4140	2140	1570	1070	7180	3390
4	507	540	7410	6150	1040	19600	3910	2280	1460	994	4590	2990
5	474	540	7370	3380	852	23600	6590	2200	1350	937	3980	2690
6	474	540	3850	2690	840	21300	5720	2000	2490	836	8030	2570
7	443	556	2710	2390	840	17800	4370	1860	2990	759	7280	2190
8	413	540	4140	2100	820	14100	3540	1760	2490	739	3990	1860
9	413	540	10200	1750	820	11300	3850	1680	2660	890	2690	1680
10	428	507	6430	1800	800	8450	4250	1640	3240	998	2260	1580
11	443	507	3540	1720	780	6150	4090	1600	3010	1050	2730	1500
12	443	507	2630	1650	760	4580	8020	1550	2200	860	3140	1400
13	1060	523	2230	1650	760	3720	10300	1560	1790	800	2370	1400
14	1610	507	1920	1900	740	3450	18300	1570	1530	1280	1760	7700
15	1680	540	1700	1510	740	3480	18200	1460	1380	1440	1440	9800
16	1490	573	1580	1510	740	3120	13900	1310	1250	1020	1290	4500
17	1160	954	1470	1580	740	2740	8930	1240	1190	800	1190	3300
18	954	1490	1360	1560	740	2600	5890	1160	1170	660	1140	3000
19	912	1900	1270	1450	740	2550	4540	1090	1200	680	3670	2600
20	812	1330	1290	1470	740	2490	3720	1040	1160	760	4850	2400
21	754	1080	1580	1800	920	2330	3200	1020	1270	740	7090	2300
22	661	954	1700	1870	1940	2170	2900	983	1390	750	10300	2200
23	626	996	1510	1700	8540	2170	2650	987	1230	780	12500	2100
24	608	996	1360	2020	23000	2250	2410	1090	1000	920	14600	2000
25	608	954	1330	2200	21900	2170	2300	1490	952	1320	11800	2100
26	643	892	1200	1800	16700	1970	2260	4400	909	1860	8980	2000
27	698	974	1080	1610	11200	1800	2210	5630	871	2960	6980	1900
28	679	954	912	1510	7630	1680	2260	4960	787	5200	6080	2100
29	661	892	933	1380	---	1650	2160	3670	794	10500	11200	2100
30	626	773	1040	1250	---	1680	2100	2740	1270	10300	8440	2000
31	626	---	1970	1230	---	1850	---	2210	---	6930	6040	---
TOTAL	22175	23746	78270	95430	108642	205520	161830	62140	48313	61353	177550	85860
MEAN	715	792	2525	3078	3880	6630	5394	2005	1610	1979	5727	2862
MAX	1680	1900	10200	16600	23000	23600	18300	5630	3240	10500	14600	9800
MIN	413	507	679	1230	740	1650	1920	983	787	660	1140	1400

CAL YR 1978 TOTAL 865854 MEAN 2372 MAX 26000 MIN 413
WTR YR 1979 TOTAL 1130829 MEAN 3098 MAX 23600 MIN 413

03270800 WOLF CREEK AT TROTWOOD, OH

LOCATION.--Lat 39°47'39", long 84°18'36", Montgomery County, Hydrologic Unit 05080002, on right bank 350 ft (107 m) downstream from Union Road Bridge, 700 ft (213 m) downstream from unnamed right bank tributary, 0.2 mi (0.3 km) south of Trotwood, and 0.3 mi (0.5 km) upstream from North Branch.

DRAINAGE AREA.--22.7 mi² (58.8 km²).

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 826.28 ft (251.850 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair.

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

AVERAGE DISCHARGE.--17 years, 21.4 ft³/s (0.606 m³/s), 12.80 in/yr (325 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,970 ft³/s (84.1 m³/s) May 24, 1968, gage height, 6.47 ft (1.972 m), from rating curve extended above 1,000 ft³/s (28.3 m³/s); no flow all or part of each day Sept. 8-17, Oct. 3, 1964, Sept. 16-19, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge during flood in January 1959, about 3,900 ft³/s (110 m³/s), gage height, 8.0 ft (2.44 m), computed by Miami Conservancy District on basis of estimate of peak flow based on contracted-opening measurement at site 1.1 mi (1.8 km) downstream with drainage area of 48.2 mi² (125 km²), adjusted to gage site by 0.8 power of the drainage-area ratio. Flood in March 1913 reached a stage of 9.4 ft (2.87 m), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s (19.8 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 31	1815	932 26.4	3.50 1.067	July 28	2015	1130 32.0	3.83 1.167
Jan. 1	1445	710 20.1	3.09 0.942	Aug. 19	0315	*2470 70.0	*5.58 1.701
Feb. 23	1545	1480 41.9	4.35 1.326	Aug. 21	0030	1230 34.8	3.98 1.213
Apr. 13	2200	1260 35.7	4.03 1.228				

Minimum discharge, 0.79 ft³/s (0.022 m³/s) Oct. 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	3.5	5.4	469	8.5	207	20	8.4	7.1	3.8	81	16
2	1.2	3.5	5.4	153	8.0	230	83	8.1	5.6	2.5	53	14
3	1.5	3.9	89	56	7.5	319	41	24	5.1	1.8	26	11
4	3.5	3.9	221	33	7.2	373	99	22	4.8	3.2	17	9.6
5	2.0	3.9	54	27	6.9	146	68	18	4.1	2.4	14	8.6
6	2.4	4.4	31	22	6.7	79	38	14	51	1.6	12	7.8
7	1.5	4.9	25	18	6.5	49	27	12	20	1.4	9.6	6.7
8	1.2	4.9	252	16	6.3	37	25	10	14	2.5	7.9	5.7
9	1.2	4.9	143	15	6.1	29	45	9.1	30	4.5	6.6	5.3
10	.99	4.9	45	14	5.9	27	30	8.7	26	5.8	7.2	5.0
11	1.2	4.9	28	13	5.8	21	75	8.1	13	3.6	45	4.7
12	2.7	4.9	22	12	5.7	17	174	9.5	9.4	2.7	19	4.2
13	17	4.4	20	13	5.6	17	315	8.2	7.5	20	11	6.0
14	7.6	4.9	17	14	5.5	17	275	6.9	6.9	34	8.3	149
15	9.5	6.4	15	12	5.4	13	87	6.5	6.1	172	6.6	30
16	5.9	5.9	13	13	6.6	12	46	5.7	5.8	49	5.5	16
17	3.9	33	11	16	6.0	12	31	5.3	5.5	17	4.9	11
18	2.7	22	10	20	5.4	12	25	5.2	5.0	9.0	4.7	9.3
19	4.4	10	11	18	5.2	12	20	5.2	8.8	6.0	534	7.9
20	3.5	7.6	16	20	7.0	12	17	4.7	5.9	4.5	436	6.9
21	2.7	5.9	37	36	60	11	16	4.3	16	3.6	365	8.6
22	2.4	5.4	21	23	210	10	14	3.8	7.2	6.1	98	12
23	2.7	6.4	16	18	788	14	13	4.0	4.7	4.9	141	11
24	3.5	5.9	15	21	340	17	13	4.6	3.7	20	115	7.9
25	3.9	4.4	13	24	262	13	13	9.5	2.9	80	51	6.8
26	4.9	4.4	10	18	131	11	12	8.0	2.5	66	49	6.2
27	5.4	7.6	9.0	16	68	9.5	11	19	2.2	42	118	5.6
28	3.9	8.2	8.5	13	53	9.5	12	14	2.0	249	127	17
29	3.5	6.4	9.0	12	---	10	9.7	8.5	3.3	281	49	14
30	3.1	6.4	9.8	10	---	11	9.1	6.8	8.9	85	29	10
31	3.1	---	301	9.2	---	17	---	7.9	---	38	19	---
TOTAL	115.39	207.7	1483.1	1174.2	2039.8	1774.0	1663.8	290.0	295.0	1222.9	2470.3	433.8
MEAN	3.72	6.92	47.8	37.9	72.9	57.2	55.5	9.35	9.83	39.4	79.7	14.5
MAX	17	33	301	469	788	373	315	24	51	281	534	149
MIN	.99	3.5	5.4	9.2	5.2	9.5	9.1	3.8	2.0	1.4	4.7	4.2
CFSM	.16	.31	2.11	1.67	3.21	2.52	2.45	.41	.43	1.74	3.51	.64
IN.	.19	.34	2.43	1.92	3.34	2.91	2.73	.48	.48	2.00	4.05	.71

CAL YR 1978 TOTAL 9133.11 MEAN 25.0 MAX 1190 MIN .65 CFSM 1.10 IN 14.97
WTR YR 1979 TOTAL 13169.99 MEAN 36.1 MAX 788 MIN .99 CFSM 1.59 IN 21.58

03271075 GREAT MIAMI RIVER NEAR STEWART STREET AT DAYTON, OH

LOCATION.--Lat 39°44'31", long 84°11'41", Montgomery County, Hydrologic Unit 05080002, on right bank 0.13 mi (0.21 km) upstream from Stewart Street bridge, 1.2 mi (1.9 km) downstream from Wolf Creek in Dayton, and at mile 78.10 (125.66 km).

DRAINAGE AREA.--2,587 mi² (6,700 km²).

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. See records of daily discharge for station at Dayton (station 03270500).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1660 micromhos Jan. 14, 1979; minimum recorded, 220 micromhos Aug. 3, 1978.

pH: Maximum, 8.9 units June 28-30, July 14, 15, 17, 24, Sept. 8-10, 20, 25-28, Dec. 2, 1978; minimum recorded, 7.3 units Aug. 3, 1978.

WATER TEMPERATURES: Maximum recorded, 30.5°C June 29, 1978; minimum, 0.5°C Dec. 27, 28, 29, 1978, Jan. 3, 18, 19, 22, 25, 26, 30, 31, Feb. 1, 1979.

DISSOLVED OXYGEN: Maximum recorded, 19.0 mg/L Sept. 30, 1978; minimum, 1.7 mg/L July 7, 1979.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,660 micromhos Jan. 14; minimum, 226 micromhos Aug. 19.

pH: Maximum, 8.9 units Dec. 2; minimum, 7.5 units Aug. 4, Sept. 14.

WATER TEMPERATURES: Maximum, 30.0°C July 28; minimum, 0.5°C Dec. 27, 28, 29, Jan. 3, 18, 19, 22, 25, 26, 30, 31, Feb. 1.

DISSOLVED OXYGEN: Maximum, 18.5 mg/L Dec. 28; minimum, 1.7 mg/L July 7.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	768	726	822	788	796	764	504	342	862	814	684	460
2	784	752	818	782	802	768	492	438	---	---	528	462
3	794	728	826	784	782	430	522	464	---	---	492	428
4	790	692	822	792	626	328	642	528	---	---	420	370
5	790	716	810	782	634	588	736	644	---	---	370	290
6	778	724	808	784	700	636	810	740	---	---	302	286
7	776	760	812	794	724	700	808	760	---	---	358	304
8	---	---	798	784	714	364	822	766	---	---	434	360
9	---	---	814	788	610	458	804	792	---	---	542	440
10	---	---	802	784	652	610	816	792	---	---	592	546
11	794	774	806	784	712	654	816	798	---	---	612	592
12	794	746	816	802	734	714	874	822	---	---	654	614
13	658	338	844	794	758	736	1380	806	---	---	672	648
14	718	570	804	788	768	756	1660	968	---	---	668	666
15	632	574	828	770	784	768	---	---	---	---	670	666
16	676	622	810	782	794	780	---	---	---	---	674	670
17	---	---	786	410	794	788	1050	832	---	---	682	674
18	---	---	680	660	808	788	932	830	---	---	718	682
19	---	---	---	---	824	796	944	834	---	---	738	720
20	770	762	---	---	812	704	1140	860	---	---	740	732
21	780	772	---	---	780	726	938	796	---	---	740	732
22	792	768	---	---	788	774	878	838	1080	860	736	728
23	792	780	---	---	788	782	862	812	838	276	746	610
24	800	770	---	---	796	744	994	836	372	318	736	676
25	800	770	---	---	792	772	962	802	400	330	758	736
26	790	768	---	---	796	788	810	792	416	364	754	736
27	816	776	---	---	798	786	814	770	598	416	752	740
28	808	784	---	---	804	784	1100	828	682	584	756	744
29	804	792	---	---	824	792	1020	822	---	---	770	754
30	808	788	---	---	810	768	830	802	---	---	764	744
31	810	786	---	---	762	322	976	794	---	---	752	628
MONTH	816	338	844	410	824	322	1660	342	1080	276	770	286

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

[illegible]

295

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	13.0	7.4	15.0	7.9	16.1	14.5	11.2	10.2	14.3	11.8	12.3	12.1
2	14.4	7.7	15.6	8.2	17.5	15.4	11.9	11.3	---	---	12.3	12.0
3	14.7	8.0	15.7	7.9	16.6	10.4	12.1	11.6	---	---	12.2	11.2
4	14.7	10.9	15.6	7.5	11.3	9.7	12.0	11.7	---	---	11.2	10.8
5	11.4	8.3	15.4	7.4	11.6	11.3	11.9	10.2	---	---	11.8	10.8
6	10.7	7.6	15.5	7.3	11.8	10.9	10.4	9.8	---	---	11.8	11.5
7	8.2	5.4	11.3	7.7	11.2	10.7	11.6	10.2	---	---	11.7	11.3
8	---	---	15.6	8.3	11.7	10.8	11.9	9.8	---	---	11.9	11.5
9	---	---	15.2	8.5	11.7	11.1	11.6	9.9	---	---	11.7	11.5
10	---	---	15.9	8.4	11.6	11.1	11.8	11.6	---	---	11.5	11.3
11	15.4	13.7	15.8	8.1	11.7	11.3	11.8	11.6	---	---	11.3	10.9
12	15.4	13.4	10.7	7.7	12.2	11.4	11.5	10.6	---	---	11.8	11.0
13	14.1	7.5	13.9	8.0	12.5	12.1	11.2	10.8	---	---	11.8	10.1
14	13.5	11.7	11.5	7.7	12.9	12.2	11.1	10.3	---	---	10.1	9.8
15	11.4	6.4	10.7	8.1	12.9	12.3	---	---	---	---	9.9	9.7
16	8.7	6.1	13.3	8.7	12.5	12.1	---	---	---	---	9.8	9.6
17	---	---	13.7	8.4	12.9	12.2	11.8	11.5	---	---	9.6	9.4
18	---	---	---	---	12.6	12.1	13.9	12.3	---	---	10.1	9.4
19	---	---	---	---	12.6	11.9	13.6	12.6	---	---	10.2	9.6
20	12.8	9.9	---	---	12.1	10.5	12.2	10.7	---	---	9.9	9.3
21	13.1	8.4	---	---	11.9	10.7	13.9	9.8	---	---	11.2	9.2
22	13.0	8.1	---	---	12.8	11.8	14.9	13.9	13.3	12.3	12.3	9.4
23	10.0	7.7	---	---	16.5	12.1	14.8	13.3	12.9	12.2	10.7	8.9
24	14.1	8.3	---	---	17.0	15.6	14.1	13.1	12.5	12.2	10.2	9.1
25	13.7	8.6	---	---	17.4	16.4	12.8	11.9	12.9	12.1	12.2	9.8
26	10.2	7.8	---	---	17.7	17.1	12.2	11.8	12.7	12.2	13.5	10.6
27	13.5	8.3	---	---	18.0	15.4	12.1	11.5	12.2	12.0	14.7	11.1
28	13.9	8.4	---	---	18.5	17.1	12.2	11.4	12.5	12.1	14.3	10.7
29	14.5	8.5	---	---	18.2	16.9	12.6	11.7	---	---	14.0	10.1
30	15.0	8.7	---	---	17.0	16.3	12.8	11.7	---	---	13.6	9.8
31	14.7	8.4	---	---	16.5	10.4	12.8	11.6	---	---	11.9	8.7
MONTH	15.4	5.4	15.9	7.3	18.5	9.7	14.9	9.8	14.3	11.8	14.7	8.7
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.4	9.3	14.1	8.0	---	---	12.4	5.3	7.7	6.8	---	---
2	10.6	9.7	13.7	8.8	---	---	13.5	5.5	7.4	6.7	---	---
3	11.9	10.1	9.2	7.6	---	---	14.6	4.2	7.6	7.1	---	---
4	11.1	10.6	9.2	7.5	---	---	10.3	2.9	7.4	6.9	7.8	7.4
5	11.1	10.4	11.2	7.9	---	---	13.8	3.6	7.6	6.5	8.1	6.8
6	10.5	10.3	11.0	7.1	8.1	6.5	14.2	2.4	7.4	6.7	8.6	7.6
7	10.4	10.2	11.3	6.4	7.9	7.0	14.6	1.7	7.1	6.5	9.7	7.6
8	10.2	9.3	11.0	5.8	8.2	7.3	14.4	2.3	6.8	6.5	10.6	7.6
9	9.8	9.2	9.8	5.2	7.9	7.1	8.4	2.8	7.2	6.4	11.5	8.0
10	10.4	9.6	9.4	4.4	7.7	7.3	12.2	3.5	7.6	5.8	11.4	8.0
11	9.6	8.8	9.6	3.7	7.8	7.4	13.8	3.7	7.0	6.5	12.0	7.7
12	8.9	8.5	8.7	4.0	9.5	7.1	13.3	4.4	7.4	6.9	11.8	7.4
13	8.5	8.3	7.7	4.0	9.4	7.0	9.7	4.2	9.5	7.0	11.2	7.2
14	9.1	8.4	7.1	5.5	10.4	7.1	11.9	4.8	10.2	7.6	7.6	7.4
15	9.2	8.9	6.9	5.0	11.3	6.7	12.5	5.6	11.2	8.0	7.6	7.5
16	9.2	8.9	12.4	6.7	12.3	6.2	13.1	11.8	12.0	7.8	8.0	7.6
17	9.2	9.0	12.6	7.4	15.3	6.5	13.4	11.5	12.2	7.7	8.0	7.9
18	9.4	9.0	13.1	6.4	15.2	6.3	15.1	12.0	12.2	7.5	8.7	7.9
19	9.6	9.4	13.9	6.0	13.9	6.4	15.4	7.7	8.2	7.6	9.1	8.7
20	9.5	9.1	13.8	5.8	14.4	5.5	14.3	5.1	---	---	10.0	9.0
21	9.4	9.1	16.9	5.8	11.7	5.4	13.4	4.5	---	---	9.5	8.9
22	9.7	9.1	16.0	12.5	11.7	5.1	14.2	4.3	---	---	10.7	9.1
23	10.2	9.4	15.3	11.8	12.8	5.3	14.2	4.6	---	---	11.9	9.2
24	10.3	8.9	---	---	13.5	5.3	9.0	4.5	---	---	11.9	9.0
25	10.7	8.6	---	---	14.4	5.3	8.1	5.9	---	---	12.0	8.9
26	10.3	8.3	15.4	8.8	14.7	4.9	8.1	6.7	---	---	11.3	8.4
27	11.6	8.3	8.8	8.6	14.7	4.5	7.9	6.7	---	---	11.5	7.9
28	10.2	8.1	8.9	8.6	14.6	4.1	7.9	7.1	---	---	8.6	7.8
29	12.1	8.7	8.7	8.2	12.3	3.7	8.2	7.8	---	---	10.5	8.1
30	11.5	8.4	13.0	8.1	9.5	4.5	8.0	7.6	---	---	11.3	7.8
31	---	---	---	---	---	---	7.6	6.8	---	---	---	---
MONTH	12.1	8.1	16.9	3.7	15.3	3.7	15.4	1.7	12.2	5.8	12.0	6.8
YEAR	18.5	1.7										

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 (183 m) downstream from bridge on State Highway 725 at Miamisburg, 0.3 mi (0.5 km) downstream from Bear Creek, 3.2 mi (5.1 km) upstream from Crains Run, and at mile 66.4 (106.8 km).

DRAINAGE AREA.--2,711 mi² (7,021 km²).

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 (206.837 m) National Geodetic Vertical Datum of 1912. Mar. 16, 1916 to Sept. 30, 1920, nonrecording gage at site 6.7 mi (10.8 km) 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 (3.5 km) downstream at datum 677.06 ft (206.368 m) National Geodetic Vertical Datum.

REMARKS.--Records good. Diurnal fluctuation caused by powerplant 0.4 mi (0.6 km) upstream from station. Flood flow regulated by retarding dams beginning in 1920 on Mad River 19 mi (31 km) upstream, on Stillwater River 23 mi (37 km) upstream, on Great Miami River 23 mi (37 km) upstream and on Loramie Creek 52 mi (84 km) upstream. Also see REMARKS for stations 03261500 and 03269500.

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

AVERAGE DISCHARGE.--42 years, 2,386 ft³/s (67.57 m³/s), 11.96 in/yr (304 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61,800 ft³/s (1,750 m³/s) Jan. 21, 22, 1959, gage height, 20.65 ft (6.294 m), in gage well, from graph based on gage readings; 21.3 ft (6.49 m), from outside floodmarks; minimum daily, 148 ft³/s (4.19 m³/s) Sept. 7, 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 26, 1913 reached a discharge of 257,000 ft³/s (7,280 m³/s), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 28,800 ft³/s (816 m³/s) Feb. 24, gage height, 14.37 ft (4.380 m); minimum daily, 523 ft³/s (14.8 m³/s) Oct. 8, 9..

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	539	872	875	15200	1330	8850	2140	2080	2250	1470	6450	4810
2	541	849	831	19000	1210	12900	3710	1980	1980	1250	6510	4350
3	546	802	1590	12900	1280	15100	4660	2410	1790	1130	7210	3610
4	627	808	7870	7480	1200	21600	4710	2500	1630	1110	5790	3100
5	608	786	8570	3910	1030	26300	6870	2400	1500	1010	3680	3000
6	608	792	4600	3000	994	24200	6400	2130	2810	908	6150	2970
7	573	796	3080	2710	1090	20300	4960	1960	3170	830	8730	2610
8	523	790	5820	2370	1050	15400	3960	1850	2940	780	5000	2290
9	523	778	11500	2160	1010	12100	4340	1720	2840	1060	3190	2050
10	530	748	7700	1960	952	9250	4500	1620	3250	1040	2540	1930
11	547	722	4170	1920	962	6770	4860	1630	3390	1070	4550	1840
12	564	712	2980	1880	962	5180	8510	1580	2510	1150	4340	1740
13	1600	726	2520	1880	911	4190	11800	1570	2050	1290	3020	1800
14	1800	743	2200	2240	973	3760	20400	1610	1740	1210	2260	14400
15	2310	721	1980	1870	1000	3780	20900	1520	1540	3100	1860	11400
16	1840	778	1810	1720	983	3450	15300	1380	1360	1780	1560	5870
17	1460	1300	1660	1840	890	3020	10000	1280	1290	1190	1370	4060
18	1210	1600	1530	1860	830	2890	6610	1240	1250	996	1280	3490
19	1190	2170	1450	1690	900	2790	5140	1170	1450	864	7350	3010
20	1100	1550	1470	1780	880	2730	4210	1100	1310	794	7650	2790
21	1030	1230	1840	2240	1290	2590	3580	1070	1690	761	12400	2710
22	948	1090	1930	2210	2710	2410	3260	1050	1470	716	11100	2630
23	901	1090	1750	2030	12400	2450	2920	1050	1410	934	13500	2420
24	883	1090	1530	2740	24900	2560	2690	1110	1110	1400	15800	2310
25	871	1040	1530	2750	26800	2410	2540	1580	1030	2180	12900	2310
26	915	1000	1330	2200	20100	2210	2470	4030	1000	2370	10200	2250
27	940	1150	1220	1930	12600	2010	2430	6600	961	2880	7910	2150
28	937	1110	1070	1820	8790	1890	2420	5600	878	5100	6930	2660
29	906	1050	1050	1650	---	1860	2320	4170	851	10600	9950	2540
30	884	925	1150	1500	---	1880	2240	3080	1450	11400	9730	2300
31	884	---	2880	1410	---	2090	---	2520	---	8110	6690	---
TOTAL	29338	29818	91486	111850	130027	228920	180850	66590	53900	70483	207600	105390
MEAN	946	994	2951	3608	4644	7385	6028	2148	1797	2274	6697	3513
MAX	2310	2170	11500	19000	26800	26300	20900	6600	3390	11400	15800	14400
MIN	523	712	831	1410	830	1860	2140	1050	851	716	1280	1740
CFSM	.35	.37	1.09	1.33	1.71	2.72	2.22	.79	.66	.84	2.47	1.30
IN.	.40	.41	1.26	1.53	1.78	3.14	2.48	.91	.74	.97	2.85	1.45

CAL YR 1978 TOTAL 986418 MEAN 2703 MAX 26300 MIN 510 CFSM 1.00 IN 13.54
WTR YR 1979 TOTAL 1306252 MEAN 3579 MAX 26800 MIN 523 CFSM 1.32 IN 17.92

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 (1.6 km) downstream from Bear Creek, 0.6 mi (1.0 km) downstream from discharge station at Miamisburg, 0.65 mi (1.05 km) downstream from discharge station at Miamisburg, and at mile 65.75 (105.79 km).

DRAINAGE AREA.--2,713 mi² (7.027 km²).

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, 1,270 micromhos Feb. 22, 1979; minimum 270 micromhos Feb. 24, 1979.

pH: Maximum, 9.1 units July 7, 1979; minimum, 7.0 units July 30, Aug. 30, 1979.

WATER TEMPERATURES: Maximum, 33.0°C July 20, 22, 1978; minimum, 0.0°C Jan. 3, 4, 7-9, 15, Feb. 25, 26, 1979.

DISSOLVED OXYGEN: Maximum, 20.0 mg/L July 12, 1978; minimum, 1.1 mg/L July 23, 1978.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum 1,270 micromhos Feb. 22; minimum, 270 micromhos Feb. 24.

pH: Maximum, 9.1 units July 7; minimum, 7.0 units July 30, Aug. 30.

WATER TEMPERATURES: Maximum, 31.0°C July 22; minimum, 0.0°C Jan. 3, 4, 7-9, 15, Feb. 25, 26.

DISSOLVED OXYGEN: Maximum 16.1 mg/L July 21; minimum, 2.9 mg/L Oct. 2.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	909	861	924	873	897	798	555	399	852	810	594	540
2	933	843	957	879	828	807	402	393	843	801	534	459
3	933	876	957	885	816	471	459	396	849	807	456	420
4	984	861	957	888	585	483	561	465	897	822	420	312
5	891	843	969	885	564	513	651	564	858	810	309	300
6	936	867	924	870	645	570	693	651	864	825	312	297
7	891	843	963	888	699	648	708	672	909	840	357	300
8	918	855	936	885	690	483	738	684	948	843	426	360
9	894	849	957	876	543	489	747	699	885	816	498	432
10	951	873	915	870	585	531	768	723	891	840	543	498
11	951	879	945	897	678	588	789	735	864	828	573	543
12	951	813	981	876	687	666	783	753	852	831	612	570
13	780	573	951	873	711	708	891	774	891	837	654	612
14	735	594	915	882	735	711	1060	882	882	846	651	630
15	702	654	903	870	756	726	867	816	948	852	---	---
16	699	648	873	864	780	744	834	804	987	900	---	---
17	759	699	924	672	813	744	870	795	930	858	---	---
18	840	759	741	642	807	753	858	807	885	855	---	---
19	810	780	762	714	834	777	837	801	906	846	---	---
20	915	789	789	747	795	750	912	825	---	---	---	---
21	891	828	807	780	783	723	909	789	1230	1010	723	705
22	918	840	816	795	762	738	825	795	1270	891	726	696
23	840	816	897	810	777	735	825	789	894	444	747	675
24	858	834	861	792	759	741	837	717	423	270	696	672
25	867	849	828	813	771	723	825	768	318	273	723	681
26	873	843	885	768	792	747	798	765	384	321	747	678
27	846	831	867	792	801	762	792	768	528	384	783	735
28	867	843	816	795	795	786	909	768	579	522	747	738
29	855	834	849	801	858	789	945	822	---	---	771	747
30	918	828	834	792	813	798	828	798	---	---	792	747
31	915	858	---	---	819	561	855	801	---	---	765	699
MONTH	984	573	981	642	897	471	1060	393	1270	270	792	297

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

[illegible]

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.3	8.1	8.3	7.5	8.3	7.9	8.1	8.0	8.0	7.9	7.7	7.6
2	8.2	8.0	8.2	7.9	8.2	8.0	8.0	7.9	8.0	7.9	7.7	7.5
3	8.2	8.1	8.1	7.9	8.2	7.9	8.1	8.0	7.9	7.7	7.6	7.4
4	8.2	8.1	8.2	7.8	8.1	8.0	8.1	8.1	8.0	7.8	7.5	7.4
5	7.9	7.8	8.2	7.9	8.1	7.9	8.2	8.1	8.3	7.7	7.6	7.5
6	7.9	7.7	8.2	8.0	8.0	7.9	8.2	8.1	7.9	7.7	7.6	7.5
7	7.8	7.7	8.2	7.9	---	---	8.2	7.9	7.9	7.6	7.7	7.6
8	7.9	7.7	8.2	8.0	8.0	7.9	8.2	8.1	7.9	7.8	7.7	7.7
9	7.8	7.7	8.2	7.9	8.0	7.9	8.1	8.1	7.9	7.8	7.8	7.7
10	7.8	7.6	8.3	8.0	8.1	7.9	8.1	8.1	8.0	7.8	7.8	7.7
11	7.8	7.6	8.2	8.0	8.1	7.9	8.1	8.0	7.9	7.8	7.8	7.8
12	7.7	7.6	8.2	8.0	8.2	7.9	8.1	8.1	7.8	7.8	7.8	7.8
13	7.8	7.6	8.2	8.0	8.2	8.2	8.1	8.0	7.9	7.7	7.8	7.7
14	7.8	7.6	8.1	7.9	8.3	8.2	8.2	8.0	7.8	7.7	7.9	7.8
15	7.9	7.8	7.9	7.8	8.2	8.1	8.2	8.1	7.7	7.6	---	---
16	7.8	7.7	7.9	7.8	8.2	7.9	8.1	7.9	7.9	7.6	---	---
17	7.8	7.7	8.0	7.8	8.2	8.2	8.1	8.0	8.0	7.8	---	---
18	7.9	7.6	8.0	7.9	8.2	8.1	8.1	8.0	7.9	7.7	---	---
19	7.8	7.6	8.1	7.9	8.1	8.1	8.1	8.1	7.9	7.8	---	---
20	7.8	7.6	8.1	8.0	8.1	8.0	8.1	7.8	---	---	---	---
21	7.8	7.4	8.1	8.0	8.2	8.1	8.1	8.0	7.8	7.6	7.9	7.8
22	7.9	7.6	---	---	8.2	8.2	8.1	8.1	7.7	7.5	7.9	7.9
23	7.8	7.6	---	---	8.3	8.2	8.1	7.9	7.6	7.2	8.0	7.9
24	7.7	7.2	---	---	8.3	8.2	8.1	8.0	7.6	7.2	7.9	7.8
25	7.7	7.2	---	---	8.3	8.2	8.1	8.0	7.6	7.5	8.0	7.6
26	7.7	7.3	---	---	8.3	8.2	8.0	7.9	7.6	7.6	8.1	7.9
27	7.7	7.5	---	---	8.3	8.2	7.9	7.9	7.7	7.4	8.1	7.9
28	7.9	7.5	---	---	8.2	8.2	8.0	7.9	7.6	7.5	8.1	8.0
29	8.0	7.7	---	---	8.2	8.0	8.0	7.9	---	---	8.0	7.9
30	7.9	7.7	8.1	8.0	8.1	8.0	8.0	7.9	---	---	8.1	7.9
31	7.9	7.5	---	---	8.1	8.0	8.0	7.9	---	---	8.0	7.9
MONTH	8.3	7.2	8.3	7.5	8.3	7.9	8.2	7.8	8.3	7.2	8.1	7.4
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.0	7.9	8.2	7.7	7.8	7.7	8.1	7.9	7.7	7.5	7.8	7.5
2	7.9	7.9	8.3	8.1	8.0	7.5	8.6	8.0	7.6	7.4	7.8	7.6
3	---	---	8.1	7.9	8.1	7.8	8.8	8.3	7.7	7.4	8.0	7.5
4	8.1	7.9	8.0	7.9	---	---	8.6	8.3	7.7	7.4	7.9	7.7
5	8.0	7.9	8.2	7.9	---	---	8.8	8.3	7.7	7.5	7.9	7.8
6	8.0	8.0	8.3	8.1	8.2	7.8	9.0	8.3	7.7	7.5	8.1	7.9
7	8.0	8.0	8.3	8.0	8.1	7.7	9.1	8.1	7.6	7.3	8.1	8.0
8	8.0	8.0	8.2	8.0	8.0	7.8	9.0	8.2	7.9	7.4	8.2	8.0
9	8.0	8.0	8.2	7.9	7.9	7.7	8.6	8.0	7.8	7.5	8.2	8.1
10	8.1	8.0	8.3	8.0	7.9	7.8	8.5	7.9	7.8	7.7	8.2	8.1
11	8.1	8.0	8.2	8.0	8.0	7.9	8.5	8.1	7.9	7.6	8.1	8.0
12	8.0	7.9	8.1	7.8	8.0	7.9	8.6	8.2	8.0	7.7	8.1	8.0
13	7.9	7.8	8.2	7.9	8.0	7.9	8.2	7.9	8.0	8.0	8.2	7.8
14	7.8	7.7	8.0	7.9	8.1	7.9	8.3	7.8	8.0	7.9	7.9	7.6
15	7.8	7.7	8.1	7.6	8.1	7.9	8.2	7.5	8.1	8.0	8.0	7.8
16	7.9	7.8	7.9	7.6	8.2	7.9	8.1	7.7	8.2	8.0	7.9	7.9
17	7.9	7.8	---	---	8.5	7.9	8.5	8.0	8.2	7.9	8.0	7.9
18	7.9	7.8	7.8	7.6	8.5	8.3	8.8	7.9	8.2	8.0	8.0	7.8
19	8.0	7.9	8.2	7.8	8.4	8.1	8.8	8.0	8.0	7.3	8.0	7.9
20	8.0	7.9	8.2	7.9	8.6	8.1	8.8	8.0	7.7	7.6	8.0	7.9
21	8.0	7.7	8.1	7.9	8.2	7.8	8.8	8.0	7.7	7.5	---	---
22	8.0	7.9	8.1	7.7	8.0	7.9	8.6	7.9	7.7	7.4	8.1	7.7
23	8.0	7.9	8.0	7.8	8.5	8.0	8.3	7.8	7.6	7.3	8.1	8.0
24	8.0	7.9	8.0	7.8	8.6	8.3	7.9	7.7	7.7	7.2	8.0	8.0
25	8.0	7.9	8.0	7.8	8.6	8.3	---	---	7.8	7.6	8.0	7.9
26	8.1	8.0	8.0	7.8	8.6	8.2	7.8	7.5	7.8	7.7	8.1	7.9
27	8.1	8.0	8.1	8.0	8.6	8.2	7.8	7.7	7.7	7.4	8.2	8.0
28	8.1	7.7	8.0	8.0	8.7	8.1	7.8	7.7	7.7	7.4	8.1	7.9
29	8.1	7.8	8.0	7.9	8.4	7.9	7.6	7.3	7.7	7.1	8.0	7.7
30	---	---	7.9	7.8	8.0	7.6	7.6	7.0	7.7	7.0	8.1	7.9
31	---	---	7.9	7.8	---	---	7.6	7.3	7.8	7.5	---	---
MONTH	8.1	7.7	8.3	7.6	8.7	7.5	9.1	7.0	8.2	7.0	8.2	7.5
YEAR	9.1	7.0										

GREAT MIAMI RIVER BASIN

03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX MIN		MAX MIN		MAX MIN		MAX MIN		MAX MIN		MAX MIN	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	21.0	19.0	16.0	13.0	9.0	7.5	9.0	6.0	4.0	3.0	4.5	4.0
2	20.5	18.0	14.5	11.0	9.0	8.0	6.0	1.5	5.5	2.5	4.5	3.5
3	20.5	19.5	15.0	11.5	10.5	8.5	1.5	.0	5.0	4.5	5.0	3.0
4	20.5	19.0	16.5	13.5	11.5	8.0	3.0	.0	5.0	2.5	6.5	5.0
5	19.5	18.0	16.5	13.5	8.0	6.5	3.0	1.5	4.0	1.5	5.5	4.5
6	18.0	16.5	17.0	15.0	8.5	7.0	2.0	1.0	5.0	2.0	5.0	3.5
7	17.0	15.5	15.0	12.0	8.5	7.0	2.0	.0	5.0	3.0	4.0	3.5
8	16.5	13.5	13.5	11.0	9.0	7.5	.5	.0	3.5	1.5	5.0	3.5
9	16.5	13.0	13.0	11.0	7.5	5.0	2.0	.0	3.5	2.0	4.5	4.5
10	18.0	14.5	13.5	11.0	6.5	4.0	2.0	.5	3.0	1.5	5.0	4.0
11	17.0	16.5	14.0	11.5	6.0	4.5	2.0	.5	3.0	1.5	4.0	3.5
12	18.5	17.0	14.5	13.5	6.0	4.5	3.0	1.5	3.5	2.0	5.0	3.5
13	18.0	14.5	16.0	14.0	6.0	5.0	3.5	2.5	3.5	.5	7.0	4.0
14	14.5	12.5	16.0	15.5	5.5	4.5	3.5	.5	5.5	3.0	7.0	5.0
15	13.0	11.5	15.5	13.0	6.5	4.5	1.5	.0	6.0	5.0	---	---
16	12.0	11.0	13.0	12.5	6.5	6.0	3.5	1.0	5.0	3.0	---	---
17	13.0	10.0	12.5	12.5	6.5	5.5	4.0	2.5	3.0	1.0	---	---
18	14.0	11.5	12.5	10.5	6.5	5.5	4.0	2.0	4.5	2.0	---	---
19	15.0	13.5	10.5	9.0	7.0	6.5	3.5	2.5	5.0	2.5	---	---
20	16.0	12.5	10.5	9.0	9.0	7.0	4.0	3.5	---	---	---	---
21	17.0	13.0	11.0	9.5	8.0	5.0	3.5	2.0	6.0	5.0	---	---
22	17.5	14.0	11.5	10.5	6.0	4.0	2.5	2.0	5.5	4.5	---	---
23	16.0	12.5	12.0	11.0	5.5	4.0	4.0	2.0	5.0	2.5	---	---
24	13.5	11.0	11.5	9.0	5.0	4.5	4.0	1.5	2.5	1.0	---	---
25	13.5	10.5	9.5	8.5	5.0	4.0	3.5	1.0	1.0	.0	---	---
26	14.0	13.0	9.5	8.5	4.5	3.0	4.0	2.5	1.0	.0	---	---
27	14.5	12.0	10.0	9.0	4.0	2.5	4.0	3.5	3.5	.5	---	---
28	15.0	11.5	10.0	8.5	3.5	2.0	4.0	3.5	4.0	2.0	---	---
29	14.0	11.5	8.5	7.5	5.5	3.0	4.0	3.0	---	---	12.5	12.0
30	15.0	11.5	8.5	7.0	6.5	5.0	4.5	3.0	---	---	13.5	12.5
31	15.5	12.0	---	---	9.0	6.5	5.0	4.0	---	---	13.5	13.0
MONTH	21.0	10.0	17.0	7.0	11.5	2.0	9.0	.0	6.0	.0	13.5	3.0
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	13.0	12.0	17.5	15.0	22.5	19.5	23.5	20.5	27.0	25.0	26.0	24.0
2	12.0	11.5	19.5	15.0	23.5	20.5	25.5	20.5	25.0	24.0	25.0	24.0
3	---	---	18.5	17.5	22.0	19.0	27.0	23.0	26.0	23.0	26.5	23.0
4	10.5	9.0	17.5	14.5	---	---	25.0	23.0	27.0	24.0	27.0	24.0
5	9.5	8.0	17.5	13.5	---	---	25.5	21.0	27.5	25.0	27.5	25.0
6	8.5	7.5	19.5	15.0	25.5	23.0	27.5	22.0	27.0	25.5	28.0	25.0
7	8.0	7.5	23.0	17.5	24.5	23.0	26.5	22.5	27.5	24.0	27.0	24.5
8	8.5	6.5	26.0	21.0	25.0	22.5	26.5	22.5	30.5	25.5	24.5	22.0
9	9.0	8.5	27.0	23.5	25.5	23.0	25.0	24.0	30.0	27.0	24.0	22.5
10	10.0	7.5	28.0	24.0	25.5	23.5	28.0	23.5	29.5	28.0	24.0	21.0
11	10.0	7.5	29.0	25.0	24.5	21.0	28.0	24.5	27.0	23.5	26.0	22.0
12	12.0	10.0	27.0	21.5	24.5	21.0	28.0	26.0	23.5	21.5	27.0	24.0
13	12.5	11.5	24.0	20.0	23.5	21.0	26.0	25.0	24.0	21.0	26.0	23.0
14	11.5	10.5	23.5	20.5	25.5	21.5	29.0	25.0	24.0	22.5	23.0	21.0
15	10.5	10.0	22.5	20.0	27.0	23.0	28.0	25.0	23.5	20.5	21.0	19.0
16	10.5	9.0	22.5	18.0	27.5	24.0	30.0	25.5	24.5	20.5	21.5	18.5
17	11.5	9.0	---	---	27.5	23.5	29.5	27.0	24.0	21.0	22.0	18.5
18	14.5	10.5	24.5	22.5	27.0	24.5	29.5	25.5	23.5	21.5	23.0	19.5
19	15.5	13.0	24.5	20.5	26.5	23.5	29.5	24.5	25.0	21.5	22.0	19.5
20	17.0	14.0	24.5	21.5	28.5	24.5	30.0	25.0	24.5	23.0	21.0	19.0
21	17.5	16.0	23.5	20.5	27.5	25.0	30.5	26.5	23.5	22.0	---	---
22	17.0	16.0	22.5	19.0	28.5	25.0	31.0	26.5	24.0	22.0	20.0	18.0
23	17.5	16.0	22.0	20.0	27.0	24.5	30.5	26.5	23.5	22.5	20.0	16.5
24	19.0	16.5	21.5	16.5	25.0	22.5	27.5	26.5	23.5	22.5	21.5	17.0
25	20.0	18.5	16.5	12.5	26.5	21.0	---	---	23.5	21.5	22.0	18.5
26	19.5	18.5	17.5	12.5	27.5	22.5	26.5	24.5	22.5	21.5	23.0	19.5
27	19.0	17.0	18.5	16.0	27.5	26.0	27.5	25.5	23.0	21.0	21.5	20.0
28	17.5	15.0	21.0	17.5	28.0	24.0	27.0	24.0	23.5	22.0	21.0	20.0
29	17.5	14.5	20.5	16.5	27.0	24.0	25.0	23.0	23.5	22.5	23.0	20.0
30	---	---	22.0	17.5	24.0	22.0	25.5	22.5	25.5	22.5	23.0	20.5
31	---	---	20.5	20.0	---	---	27.5	24.0	26.5	23.5	---	---
MONTH	20.0	6.5	29.0	12.5	28.5	19.0	31.0	20.5	30.5	20.5	28.0	16.5
YEAR	31.0	.0										

301

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH					
1	4.9	3.5	7.9	7.1	10.4	8.8	---	---	---	---	12.9	12.7				
2	5.7	3.8	8.0	6.0	9.8	8.5	---	---	---	---	13.2	12.9				
3	4.9	3.5	7.8	5.7	9.0	8.2	---	---	---	---	13.2	12.8				
4	5.5	2.9	7.2	5.0	9.9	8.9	---	---	---	---	12.8	12.5				
5	5.2	3.6	7.3	4.8	10.7	10.0	---	---	---	---	12.7	12.5				
6	5.0	4.0	7.1	4.7	10.8	10.5	---	---	---	---	13.0	12.2				
7	5.1	4.0	6.1	4.8	10.7	10.2	---	---	11.5	10.3	12.2	12.1				
8	5.8	4.6	7.3	5.2	10.5	9.9	---	---	12.1	10.0	12.2	11.8				
9	6.5	5.1	8.2	5.1	11.1	10.5	13.2	12.3	12.6	10.8	11.8	11.7				
10	5.9	4.7	8.0	5.8	11.5	11.2	13.2	12.5	13.2	11.2	11.7	11.6				
11	5.1	3.9	8.0	5.3	11.8	11.3	13.2	12.6	13.1	11.4	12.0	11.7				
12	5.0	3.6	6.7	5.0	11.6	11.3	12.9	12.4	12.9	11.0	12.0	11.5				
13	6.4	4.9	7.1	4.8	10.9	10.6	12.6	12.0	13.1	11.0	11.5	10.6				
14	7.7	6.1	6.0	4.3	10.9	10.6	12.3	11.6	12.3	10.2	11.1	10.8				
15	8.2	7.6	5.6	4.3	10.9	10.4	12.9	12.1	11.7	9.1	---	---				
16	8.1	7.7	6.9	5.2	10.6	10.2	12.6	11.8	12.9	9.2	---	---				
17	8.6	7.6	7.5	5.7	10.8	10.1	12.0	11.5	13.3	10.0	---	---				
18	8.8	7.4	8.2	7.0	10.4	9.9	12.2	11.4	11.9	10.0	---	---				
19	8.3	7.4	9.5	8.2	10.2	9.7	12.1	11.5	12.1	9.1	---	---				
20	8.3	7.1	9.5	8.7	9.9	9.2	11.9	11.3	---	---	---	---				
21	8.1	6.8	9.3	8.3	9.7	9.0	11.6	11.3	11.3	9.2	10.1	9.4				
22	7.9	6.5	8.9	7.4	10.5	9.7	12.4	11.7	12.2	9.9	10.1	8.7				
23	---	---	8.0	6.1	10.8	10.2	12.4	11.5	13.1	12.2	9.5	7.9				
24	---	---	9.0	7.4	10.4	10.1	11.9	11.0	13.6	13.1	9.5	7.4				
25	---	---	9.6	8.0	10.6	10.0	14.3	11.2	13.4	13.2	10.5	9.0				
26	---	---	9.0	8.3	10.6	10.4	---	---	13.7	13.3	12.9	9.6				
27	---	---	9.7	7.8	11.0	10.4	---	---	13.6	13.1	12.8	10.9				
28	---	---	9.1	7.7	12.5	10.5	---	---	13.2	12.7	11.9	10.0				
29	---	---	9.5	7.4	14.5	11.9	---	---	---	---	10.6	9.0				
30	---	---	10.8	8.6	14.3	13.9	---	---	---	---	10.2	7.8				
31	---	---	---	---	---	---	---	---	---	---	8.6	7.6				
MONTH	8.8	2.9	10.8	4.3	14.5	8.2	14.3	11.0	13.7	9.1	13.2	7.4				
DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	

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 (0.8 km) downstream from Bantas Fork, 1.4 mi (2.3 km) west of Ingomar, and 4.8 mi (7.7 km) upstream from Aukerman Creek.

DRAINAGE AREA.--197 mi² (510 km²).

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 (248.540 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, 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.--17 years, 188 ft³/s (5.324 m³/s), 12.96 in/yr (329 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,300 ft³/s (547 m³/s) Mar. 4, 1963, gage height, 14.40 ft (4.389 m), from rating curve extended above 7,000 ft³/s (198 m³/s) on basis of contracted-opening measurement at gage height 18.8 ft (5.73 m); minimum daily, 2.5 ft³/s (0.071 m³/s) Sept. 12-14, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959 reached a stage of 18.8 ft (5.73 m), discharge, 30,300 ft³/s (858 m³/s), computed by Miami Conservancy District. Flood of Mar. 25, 1913 reached a stage of 28.0 ft (8.53 m).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,700 ft³/s (133 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 23	1815	*8240 233	*9.77 2.978	Apr. 13	2315	5740 163	8.09 2.466
Mar. 4	0215	5500 156	7.91 2.411	July 29	0430	5530 157	7.93 2.417

Minimum, 13.0 ft³/s (0.37 m³/s) Oct. 1, 2, 3, 9, 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	23	40	3620	66	976	147	80	78	42	424	163
2	14	22	38	1710	62	1790	474	130	67	36	760	138
3	14	22	303	546	60	2540	340	130	60	32	399	120
4	16	22	2070	303	58	5020	556	200	56	29	243	104
5	15	21	634	205	56	2110	645	164	54	27	174	91
6	15	21	306	175	54	1050	340	138	354	25	141	80
7	16	21	223	147	52	672	232	120	232	22	118	71
8	15	21	1320	130	50	502	208	106	168	21	99	62
9	13	21	1460	110	48	375	400	96	181	28	83	56
10	13	21	456	100	54	324	317	89	136	291	73	54
11	14	21	248	90	50	258	613	85	89	188	676	51
12	15	20	191	95	48	199	1840	84	78	92	691	47
13	98	20	169	100	47	177	1740	89	74	78	286	46
14	104	21	140	110	46	188	2860	77	62	226	174	329
15	100	22	125	82	45	162	949	73	50	2120	123	271
16	71	22	113	90	54	137	507	67	46	471	97	141
17	51	108	98	110	50	129	328	62	43	208	81	102
18	41	188	88	150	47	127	245	60	40	123	71	84
19	37	108	86	140	44	125	172	59	86	86	798	74
20	35	74	95	180	42	123	154	59	70	67	1790	65
21	31	59	295	360	50	117	142	58	190	55	2680	67
22	26	51	191	180	753	111	131	56	110	57	1170	121
23	23	50	140	127	4660	140	127	54	75	59	1100	144
24	22	50	123	162	3750	285	127	53	55	66	1210	97
25	22	45	117	149	1650	194	121	54	44	1130	509	79
26	25	41	86	125	949	142	111	72	38	1590	314	69
27	26	46	72	100	571	119	108	119	35	773	408	62
28	26	50	65	90	408	109	97	175	33	1500	781	87
29	25	46	69	80	---	113	90	113	37	4130	461	145
30	25	44	74	74	---	109	83	88	54	1280	323	112
31	24	---	1090	70	---	131	---	81	---	632	213	---
TOTAL	986	1301	10525	9710	13824	18554	14204	2891	2695	15484	16470	3132
MEAN	31.8	43.4	340	313	494	599	473	93.3	89.8	499	531	104
MAX	104	188	2070	3620	4660	5020	2860	200	354	4130	2680	329
MIN	13	20	38	70	42	109	83	53	33	21	71	46
CFSM	.16	.22	1.73	1.59	2.51	3.04	2.40	.47	.46	2.53	2.70	.53
IN.	.19	.25	1.99	1.83	2.61	3.50	2.58	.55	.51	2.92	3.11	.59

CAL YR 1978 TOTAL 71538 MEAN 196 MAX 5680 MIN 10 CFSM 1.00 IN 13.51
WTR YR 1979 TOTAL 109776 MEAN 301 MAX 5020 MIN 13 CFSM 1.53 IN 20.73

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 (0.5 km) downstream from Germantown Dam, 1.5 mi (2.4 km) northwest of Germantown, and 3 mi (5 km) upstream from Little Twin Creek.

DRAINAGE AREA.--275 mi² (712 km²).

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 (213.433 m) National Geodetic Vertical Datum of 1912. Prior to Dec. 18, 1926, nonrecording gage at site 1 mi (2 km) downstream at datum 12.49 ft (3.807 m) higher.

REMARKS.--Records good except those for winter periods, and periods of no gage-height record, which are fair. Flood flow regulated by Germantown retarding basin, 0.3 mi (0.5 km) upstream beginning in 1920.

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

AVERAGE DISCHARGE.--61 years (1914-23, 1927-79), 261 ft³/s (7.392 m³/s), 12.89 in/yr 327 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,390 ft³/s (266 m³/s) July 8, 1915, gage height 11.7 ft (3.57 m), from graph based on gage readings, site and datum then in use; maximum gage height, 29.19 ft (8.897 m) Jan. 22, 1959; minimum discharge, 1.5 ft³/s (0.042 m³/s) Sept. 25, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 25, 1913 reached a stage of 18.3 ft (5.58 m), original site and datum, discharge, 66,000 ft³/s (1,870 m³/s), computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR. --Maximum discharge, about 7,500 ft³/s (212 m³/s) Feb. 24; minimum, 19.0 ft³/s (0.53 m³/s) Oct. 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	40	78	4540	100	1400	217	124	105	63	717	229
2	21	39	72	3000	95	2500	751	116	96	54	986	215
3	21	38	182	863	90	3500	580	154	86	45	606	173
4	22	38	2380	502	86	6200	831	266	79	45	365	146
5	24	37	936	347	83	2500	985	240	75	45	259	127
6	23	36	447	260	80	1500	535	199	98	38	204	113
7	22	36	321	220	78	950	369	171	376	34	173	100
8	23	36	1590	190	76	720	321	150	218	32	145	89
9	21	35	2150	170	74	560	483	134	190	49	124	81
10	19	35	727	160	84	450	474	124	189	134	110	74
11	20	35	401	150	78	380	569	118	152	272	441	69
12	23	34	300	160	74	300	2310	115	121	132	834	64
13	118	34	258	190	70	271	1870	121	100	106	373	67
14	187	32	222	170	70	274	4310	109	90	206	227	899
15	165	35	192	160	84	246	1430	101	80	2210	164	464
16	138	37	177	190	80	208	775	95	70	763	129	226
17	101	103	156	230	74	195	516	89	63	324	110	157
18	82	311	138	280	70	190	385	84	59	195	97	126
19	72	192	134	240	67	185	314	83	113	136	735	108
20	65	134	142	220	64	187	267	83	98	105	1600	95
21	59	107	362	461	100	175	240	82	246	88	2950	94
22	53	93	290	397	800	163	222	77	172	75	1450	126
23	47	88	214	234	5000	198	200	74	99	84	1380	204
24	43	88	185	318	7000	413	190	73	78	93	1620	140
25	42	80	160	300	3200	307	180	83	64	659	747	112
26	46	74	130	243	1700	222	170	95	55	1840	465	97
27	47	88	110	170	1000	185	160	134	50	1120	513	87
28	46	100	100	150	700	167	150	188	46	1090	861	142
29	44	91	100	130	---	165	140	148	48	4650	591	196
30	42	86	112	120	---	163	135	116	71	2280	446	166
31	42	---	936	110	---	182	---	106	---	856	299	---
TOTAL	1699	2212	13702	14875	21077	25056	20079	3852	3387	17823	19721	4986
MEAN	54.8	73.7	442	480	753	808	669	124	113	575	636	166
MAX	187	311	2380	4540	7000	6200	4310	266	376	4650	2950	899
MIN	19	32	72	110	64	163	135	73	46	32	97	64
CFSM	.20	.27	1.61	1.75	2.74	2.94	2.43	.45	.41	2.09	2.31	.60
IN.	.23	.30	1.85	2.01	2.85	3.39	2.72	.52	.46	2.41	2.67	.67

CAL YR 1978 TOTAL 99796 MEAN 273 MAX 6380 MIN 16 CFSM .99 IN 13.50
WTR YR 1979 TOTAL 148469 MEAN 407 MAX 7000 MIN 19 CFSM 1.48 IN 20.08

Note: No gage height record Jan. 31 to Mar. 12.

03272410 GREAT MIAMI RIVER AT ROCKDALE, OH

LOCATION.--39°26'12", long 84°27'08", Butler County, Hydrologic Unit 05080002, on left bank 1.1 mi (1.8 km) downstream from Gregory Creek at Rockdale and at mile 43.73 (70.36 km).

DRAINAGE AREA.--3.275 mi² (8,482 km²).

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. No discharge records available.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,030 micromhos Feb. 18, 1979; minimum, 198 micromhos Aug. 1, 1979.

pH: Maximum, 9.1 units July 14, 1978; minimum, 7.3 units May 28, 29, July 16, 1979.

WATER TEMPERATURES: Maximum, 31.5°C July 22, 1978; minimum, 0.5°C Jan. 4, 9, 15, Feb. 25, 26, 1979.

DISSOLVED OXYGEN: Maximum, 20.0 mg/L July 14, 16, Sept. 9, 1978, July 6, 1979; minimum 1.6 mg/L July 22, 1978.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,030 micromhos Feb. 18; minimum, 198 micromhos Aug. 1.

pH: Maximum, 8.7 units Oct. 1, July 20, 21; minimum, 7.3 units May 28, 29, July 16.

WATER TEMPERATURES: Maximum, 28.0°C July 22; minimum, 0.5°C Jan. 4, 9, 15, Feb. 25, 26.

DISSOLVED OXYGEN: Maximum, 20.0 mg/L July 6; minimum, 3.1 mg/L May 23.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	956	912	890	882	862	834	540	370	870	858	592	560
2	952	926	904	892	870	846	448	404	900	864	556	492
3	954	930	918	906	870	476	504	448	888	868	490	458
4	954	902	918	912	556	398	628	506	882	870	454	354
5	930	902	922	916	596	548	796	636	922	866	350	328
6	944	922	928	910	790	600	836	798	920	884	358	340
7	922	908	936	912	920	806	862	836	898	890	390	358
8	944	922	914	898	930	370	858	756	912	892	456	394
9	944	916	930	908	546	386	794	768	974	894	532	460
10	926	918	930	920	596	546	810	784	976	914	592	536
11	932	904	932	918	738	600	822	798	932	904	638	594
12	928	770	926	908	896	744	834	812	932	902	662	640
13	832	624	930	926	940	898	846	816	912	888	732	662
14	802	606	934	916	936	750	876	836	910	890	752	734
15	716	574	930	886	788	766	1020	884	946	908	756	750
16	716	694	916	892	804	784	920	880	980	942	758	754
17	722	698	922	676	802	794	878	758	996	934	758	754
18	768	728	812	750	812	798	858	770	1030	990	756	754
19	812	768	752	680	830	806	862	840	986	938	754	750
20	834	810	778	740	836	744	892	816	948	918	758	748
21	852	816	792	778	786	740	808	774	940	604	766	758
22	866	844	822	786	786	764	800	788	678	432	770	760
23	876	848	836	806	796	780	820	804	578	384	770	758
24	882	860	840	822	802	786	810	676	416	300	756	742
25	886	868	844	832	802	788	758	684	338	300	752	736
26	906	864	848	832	804	788	814	762	406	322	764	748
27	900	878	844	786	812	798	812	800	498	408	800	754
28	904	900	828	812	828	808	832	804	584	500	790	774
29	904	876	846	814	846	824	894	826	---	---	796	784
30	894	880	850	836	846	834	946	882	---	---	802	788
31	894	874	---	---	844	450	878	852	---	---	798	786
MONTH	956	574	936	676	940	370	1020	370	1030	300	802	328

305

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

[illegible]

GREAT MIAMI RIVER BASIN

03272410 GREAT MIAMI RIVER AT ROCKDALE, OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
		OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH				
1	8.7	8.1	8.3	8.1	8.1	8.0	8.0	7.8	8.1	8.0	7.9	7.9	7.9	7.9	7.9	
2	8.6	8.2	8.2	8.1	8.1	7.9	8.0	7.8	8.1	8.0	7.9	7.9	7.9	7.9	7.9	
3	8.2	8.0	8.2	8.1	8.0	7.9	8.0	7.9	8.2	8.1	8.2	7.9	7.9	7.9	7.9	
4	8.1	7.9	8.2	8.1	7.9	7.8	8.1	8.0	8.2	8.1	7.9	7.8	7.8	7.8	7.8	
5	8.1	7.9	8.2	8.1	8.0	8.0	8.1	7.9	8.2	8.0	7.8	7.8	7.8	7.8	7.8	
6	8.1	8.0	8.2	8.0	8.0	7.9	8.1	8.1	8.2	8.1	7.8	7.8	7.8	7.8	7.8	
7	8.2	8.0	8.1	8.0	8.2	7.9	8.1	8.1	8.1	8.0	7.8	7.8	7.8	7.8	7.8	
8	8.2	8.0	8.2	8.1	8.2	8.0	8.2	8.1	8.1	8.0	7.8	7.8	7.8	7.8	7.8	
9	8.3	8.0	8.2	8.1	8.3	8.0	8.2	8.1	8.2	8.1	7.9	7.8	7.8	7.8	7.8	
10	8.2	8.0	8.2	8.1	8.3	8.2	8.2	8.1	8.2	8.1	8.0	7.9	7.9	7.9	7.9	
11	8.0	7.9	8.2	8.0	8.3	8.2	8.2	8.1	8.2	8.1	8.0	7.9	7.9	7.9	7.9	
12	8.1	7.9	8.1	8.0	8.2	8.1	8.2	8.1	8.2	8.1	7.9	7.8	7.8	7.8	7.8	
13	8.0	7.9	8.2	8.0	8.2	8.1	8.1	8.1	8.2	8.0	7.8	7.8	7.8	7.8	7.8	
14	8.1	8.1	8.1	8.0	8.2	8.1	8.1	8.0	8.2	8.1	7.9	7.8	7.8	7.8	7.8	
15	8.2	8.0	8.2	8.0	8.2	8.2	8.1	8.0	8.1	7.9	8.0	7.9	7.9	7.9	7.9	
16	8.2	8.1	8.3	8.2	8.2	8.1	8.1	8.1	8.1	7.9	8.0	8.0	8.0	8.0	8.0	
17	8.2	8.1	8.2	8.0	8.2	8.1	8.1	8.0	8.1	8.0	8.0	7.9	7.9	7.9	7.9	
18	8.2	8.1	8.2	8.1	8.3	8.2	8.1	8.1	8.2	8.1	8.0	7.9	7.9	7.9	7.9	
19	8.1	8.1	8.2	8.1	8.2	8.1	8.1	8.1	8.2	8.1	8.0	7.9	7.9	7.9	7.9	
20	8.2	8.1	8.3	8.2	8.1	7.9	8.1	8.0	8.2	8.0	8.0	7.9	7.9	7.9	7.9	
21	8.2	8.1	8.3	8.2	8.1	8.0	8.1	8.0	8.0	7.9	8.0	7.9	7.9	7.9	7.9	
22	8.2	8.1	8.2	8.2	8.1	8.1	8.2	8.1	8.0	8.0	7.9	7.8	7.8	7.8	7.8	
23	8.1	8.0	8.2	8.1	8.2	8.1	8.1	8.0	8.0	7.9	7.9	7.8	7.8	7.8	7.8	
24	8.2	8.1	8.2	8.1	8.1	8.1	8.1	8.0	8.0	7.9	7.9	7.8	7.8	7.8	7.8	
25	8.2	8.1	8.3	8.2	8.2	8.1	8.2	8.1	7.9	7.9	8.0	7.9	7.9	7.9	7.9	
26	8.1	8.0	8.3	8.2	8.3	8.2	8.2	8.1	8.0	7.9	8.1	7.9	7.9	7.9	7.9	
27	8.2	8.0	8.3	8.2	8.3	8.3	8.1	8.1	7.9	7.9	8.1	7.6	7.6	7.6	7.6	
28	8.2	8.0	8.3	8.2	8.3	8.2	8.1	8.0	7.9	7.9	8.1	7.9	7.9	7.9	7.9	
29	8.2	8.1	8.3	8.1	8.3	8.1	8.2	8.1	---	---	8.0	7.8	7.8	7.8	7.8	
30	8.2	8.1	8.0	8.0	8.1	8.0	8.2	8.1	---	---	8.0	7.8	7.8	7.8	7.8	
31	8.2	8.1	---	---	8.1	8.0	8.1	8.1	---	---	7.9	7.8	7.8	7.8	7.8	
MONTH	8.7	7.9	8.3	8.0	8.3	7.8	8.2	7.8	8.2	7.9	8.2	7.6	7.6	7.6	7.6	

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

307

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH					
1	21.0	19.5	15.5	14.0	8.5	7.5	7.5	6.0	3.5	2.5	4.0	3.5				
2	21.0	19.0	15.5	13.5	8.5	8.0	6.0	3.0	4.0	2.5	4.0	3.5				
3	19.5	19.0	16.0	14.0	10.5	8.0	3.0	1.0	4.5	3.5	4.5	3.0				
4	19.5	18.0	15.5	14.0	10.5	7.0	2.0	.5	5.0	3.5	6.0	4.5				
5	18.5	17.5	16.0	14.0	7.0	6.0	6.5	2.0	3.5	1.5	5.5	5.0				
6	18.0	17.0	16.0	14.5	8.5	5.5	8.5	7.0	3.5	1.5	5.0	4.5				
7	17.0	16.0	15.0	13.0	12.5	8.5	9.5	8.5	5.0	3.5	5.0	4.5				
8	17.5	15.0	13.5	12.0	13.0	5.5	9.0	1.0	4.0	3.0	5.5	4.5				
9	17.5	15.0	13.5	11.5	5.5	4.5	1.5	.5	3.5	2.0	5.5	5.5				
10	18.0	15.5	13.0	11.5	4.5	3.5	1.5	1.0	3.5	2.0	6.0	5.5				
11	17.5	16.5	13.5	12.0	7.0	3.5	2.5	1.5	3.5	2.5	5.0	5.0				
12	18.0	16.5	14.0	13.5	11.0	7.5	3.5	2.0	3.5	2.0	6.0	5.0				
13	17.5	16.0	15.0	13.5	12.0	11.0	4.0	3.0	3.0	1.0	9.0	6.0				
14	17.0	14.0	14.5	14.0	12.0	4.5	4.0	2.0	4.0	2.5	10.0	9.0				
15	14.5	13.5	14.0	12.5	5.5	4.0	1.5	.5	5.5	4.0	10.5	10.0				
16	13.5	13.0	12.5	11.5	5.5	5.0	2.5	1.0	5.5	4.0	11.0	10.5				
17	14.0	12.5	13.5	12.5	5.5	5.0	3.5	2.5	4.5	2.5	11.0	10.5				
18	14.0	12.5	12.5	11.5	5.5	5.0	3.0	2.5	3.0	2.0	12.0	11.0				
19	15.5	13.5	11.5	10.5	6.5	5.5	3.5	2.5	4.5	2.5	13.0	12.0				
20	16.0	14.0	10.0	9.5	9.0	6.0	4.5	3.0	5.5	2.5	14.0	13.0				
21	16.5	14.5	11.0	9.5	8.5	6.0	7.0	3.5	5.5	2.5	14.5	14.0				
22	16.5	15.0	11.5	10.0	6.0	5.0	7.0	2.5	6.5	1.5	15.0	13.5				
23	16.0	14.5	12.5	11.0	5.0	4.5	4.0	2.5	2.5	1.5	15.0	14.5				
24	15.5	13.5	12.0	9.5	4.5	4.5	5.0	3.5	2.0	1.0	15.0	14.0				
25	15.5	14.0	10.0	9.0	4.5	4.0	7.0	5.0	1.5	.5	13.5	11.5				
26	16.0	15.0	10.5	9.5	4.0	3.5	7.0	1.5	1.0	.5	11.0	8.0				
27	15.0	14.0	9.5	8.5	4.0	3.0	3.5	2.5	2.5	1.0	9.5	7.5				
28	15.5	14.0	9.5	8.5	3.5	2.5	4.0	3.0	3.5	2.0	10.0	8.0				
29	15.0	14.0	9.0	7.5	5.0	2.5	3.0	2.5	---	---	11.5	10.0				
30	14.5	12.5	9.5	8.5	6.0	5.0	3.5	2.5	---	---	13.0	11.5				
31	15.0	13.0	---	---	7.0	6.0	4.5	3.5	---	---	13.5	13.0				
MONTH	21.0	12.5	16.0	7.5	13.0	2.5	9.5	.5	6.5	.5	15.0	3.0				
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN				
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER						
1	13.5	12.0	16.5	14.0	21.5	20.5	23.0	21.5	24.5	22.5	24.0	22.5				
2	12.5	11.5	17.0	15.0	22.5	20.5	24.0	21.0	23.0	22.5	24.5	24.0				
3	12.0	11.5	17.0	16.5	24.0	21.5	24.5	22.0	23.0	22.0	25.5	24.5				
4	12.0	8.5	17.0	16.0	24.0	21.5	24.0	22.5	24.0	22.5	26.0	25.5				
5	9.0	8.5	16.5	15.5	25.5	23.0	24.5	22.0	25.0	24.0	26.5	26.0				
6	8.5	8.0	17.0	14.0	25.0	23.5	24.5	21.5	25.0	24.5	26.5	26.5				
7	8.5	8.0	19.0	16.0	24.5	23.5	24.0	21.5	25.0	23.0	26.5	24.0				
8	11.0	8.5	22.0	19.0	23.5	23.0	24.5	22.0	25.5	24.5	24.0	21.5				
9	11.0	8.5	23.0	20.5	24.5	23.5	23.5	22.5	26.5	25.5	21.5	20.0				
10	9.5	8.0	24.0	22.0	25.0	24.0	25.5	22.5	27.5	26.5	21.5	19.5				
11	10.0	9.0	25.0	23.0	24.5	23.5	25.5	23.5	26.5	22.5	23.0	21.0				
12	11.5	9.5	24.0	21.5	23.5	22.0	25.0	24.5	23.0	21.0	24.5	22.0				
13	12.0	11.0	22.5	20.5	22.5	21.5	25.0	24.5	23.5	22.5	24.0	23.0				
14	11.0	10.0	22.0	19.5	23.5	21.5	26.0	24.0	23.5	21.0	22.5	19.5				
15	10.0	9.5	22.5	20.5	25.0	22.0	25.0	23.5	21.5	20.0	20.0	18.5				
16	10.0	9.0	22.5	20.0	25.5	23.5	25.5	23.5	22.0	20.0	18.5	18.0				
17	10.5	9.0	22.5	19.5	26.0	24.0	26.5	25.0	22.5	20.5	21.5	18.0				
18	12.0	10.0	23.0	20.0	25.0	23.5	27.0	24.5	22.5	21.5	23.0	21.5				
19	13.5	11.5	23.0	20.5	25.0	23.5	26.5	24.0	22.0	21.0	23.5	23.0				
20	14.5	13.0	23.0	21.5	26.0	23.5	26.5	24.0	22.0	21.0	24.0	23.0				
21	15.5	14.5	22.5	21.0	26.5	24.0	27.5	24.5	21.5	20.5	24.0	23.5				
22	16.5	15.5	22.0	20.5	26.5	24.0	28.0	25.0	21.5	20.5	24.0	23.5				
23	17.0	16.5	22.0	21.0	26.5	25.0	27.5	25.0	21.5	21.0	23.5	18.0				
24	17.5	17.0	21.5	19.0	25.5	23.0	26.0	24.5	21.0	20.5	18.5	16.5				
25	18.5	17.5	19.0	16.5	24.5	21.5	25.0	24.5	21.0	20.5	20.0	18.0				
26	18.5	17.5	17.0	15.5	24.5	21.5	24.5	24.5	21.0	20.0	20.5	19.0				
27	17.5	17.0	16.0	14.5	25.5	22.5	25.0	24.5	21.0	20.0	20.0	19.5				
28	17.0	14.5	16.5	14.5	26.0	23.5	25.5	23.5	21.0	20.5	21.0	19.5				
29	14.5	13.0	18.5	16.5	25.0	24.0	23.0	21.5	21.0	21.0	22.0	21.0				
30	15.0	13.0	20.0	18.5	24.0	22.0	22.5	21.5	22.0	21.0	21.5	19.0				
31	---	---	20.5	20.0	---	---	24.5	22.5	22.5	21.5	---	---				
MONTH	18.5	8.0	25.0	14.0	26.5	20.5	28.0	21.0	27.5	20.0	26.5	16.5				
YEAR	28.0	.5														

GREAT MIAMI RIVER BASIN

03272410 GREAT MIAMI RIVER AT ROCKDALE, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	14.4	6.1	11.0	8.4	12.3	10.5	11.5	7.4	13.6	13.4	12.6	12.5
2	14.9	7.2	11.6	8.5	11.6	10.5	12.8	11.6	13.6	12.7	12.8	12.7
3	9.4	6.5	11.0	8.4	11.6	10.4	13.6	12.9	13.4	12.9	12.9	12.6
4	9.5	5.9	11.2	8.3	11.5	10.4	13.6	13.1	13.7	12.2	12.5	12.1
5	8.6	6.6	11.3	8.3	12.5	11.6	13.1	11.7	14.2	13.1	12.4	12.2
6	8.6	6.7	10.9	8.1	12.5	12.1	11.7	11.2	14.1	13.1	12.6	11.7
7	9.7	7.2	8.8	7.9	12.0	11.1	11.2	10.9	13.2	12.1	12.1	11.8
8	10.3	7.3	11.6	8.3	12.7	11.0	13.2	11.1	13.7	12.6	12.1	11.7
9	10.7	7.1	11.7	8.8	13.2	12.7	13.5	12.8	14.2	12.9	11.8	11.5
10	10.7	7.1	11.5	9.0	13.7	13.1	13.6	13.3	14.4	13.4	11.8	11.5
11	8.6	6.7	11.4	8.7	13.6	12.6	13.4	13.0	14.4	12.8	11.6	11.3
12	9.2	6.6	9.3	8.1	12.5	11.4	13.1	12.4	13.7	13.1	11.4	10.9
13	7.8	6.8	11.0	8.0	11.4	11.2	12.5	12.3	15.0	13.7	10.9	9.3
14	8.8	7.8	9.1	7.7	13.0	11.3	13.1	12.2	14.4	13.2	9.3	9.1
15	9.5	8.8	9.5	7.8	12.8	12.6	13.3	13.0	13.2	11.7	9.4	9.2
16	9.6	9.1	10.2	8.0	12.6	12.3	13.2	12.8	14.1	11.7	9.5	9.3
17	10.0	9.3	9.2	8.6	12.7	12.3	12.8	12.2	15.2	12.6	9.4	9.1
18	9.7	8.9	10.0	9.2	12.5	12.3	12.7	12.5	14.8	12.8	9.3	8.8
19	9.3	8.3	11.0	10.0	12.2	11.7	12.6	12.4	15.4	12.5	9.9	8.8
20	9.2	8.0	11.8	10.8	11.8	10.5	12.3	11.6	15.1	11.9	9.4	8.9
21	9.4	7.9	11.2	10.5	11.5	10.5	12.1	11.2	12.7	10.7	9.0	8.6
22	9.4	8.0	10.9	9.9	11.9	11.5	11.6	10.9	12.9	11.8	8.7	7.5
23	8.1	7.7	9.9	9.1	12.1	11.7	---	---	13.0	12.5	7.5	6.9
24	9.8	7.8	10.7	9.2	11.7	11.2	13.1	11.8	13.5	13.0	7.5	7.3
25	9.4	7.9	11.7	10.2	11.4	11.2	13.1	12.2	13.4	13.2	7.8	7.4
26	7.9	7.1	10.8	10.1	11.1	10.8	14.0	12.6	13.4	13.2	9.0	7.8
27	9.9	7.5	10.8	10.0	10.8	10.1	13.7	12.7	13.3	12.9	11.7	7.6
28	9.8	7.8	11.5	10.4	10.0	8.6	13.6	12.4	13.0	12.6	11.1	9.4
29	10.3	7.8	11.5	10.3	8.5	6.9	13.9	12.6	---	---	9.9	8.5
30	10.6	8.3	11.9	10.2	6.9	5.8	13.8	12.9	---	---	10.0	7.9
31	11.1	8.3	---	---	7.2	5.7	13.5	13.1	---	---	8.6	7.2
MONTH	14.9	5.9	11.9	7.7	13.7	5.7	14.0	7.4	15.4	10.7	12.9	6.9
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	8.2	7.0	10.4	8.0	8.2	6.9	11.4	6.7	6.9	6.6	---	---
2	10.4	7.8	10.9	7.4	8.5	6.6	16.1	6.9	7.1	6.7	---	---
3	10.5	10.2	8.4	6.7	10.4	6.2	18.4	7.9	7.4	7.1	---	---
4	11.1	10.3	8.9	8.4	12.8	6.4	13.6	7.2	7.2	6.9	7.8	7.6
5	11.3	11.0	9.1	8.7	14.9	6.2	19.8	7.8	7.5	7.3	7.7	7.3
6	11.4	11.1	10.4	8.3	11.0	5.3	20.0	8.7	7.4	6.6	7.6	7.5
7	11.4	11.3	11.0	7.2	7.0	4.9	19.2	9.0	6.9	6.6	8.6	7.1
8	11.3	10.4	9.5	6.2	7.2	7.0	17.6	8.0	7.2	6.5	10.0	7.1
9	11.2	10.4	11.1	5.4	7.2	5.5	11.6	6.4	7.1	7.0	10.9	8.1
10	11.4	11.1	10.0	4.8	7.1	5.9	---	---	6.9	5.6	11.5	8.1
11	11.1	10.8	8.8	3.8	7.5	7.2	---	---	7.0	6.5	11.6	7.6
12	10.8	10.2	---	---	7.5	6.6	---	---	7.8	7.1	12.5	7.6
13	10.3	10.0	---	---	9.3	6.2	---	---	7.9	7.7	10.6	6.9
14	10.8	10.3	8.5	6.1	10.2	7.7	---	---	8.1	7.6	8.2	7.7
15	11.0	10.8	6.9	4.0	11.3	7.6	---	---	9.5	7.3	8.9	8.2
16	11.1	10.9	8.4	4.2	12.5	7.2	---	---	10.7	7.5	8.9	8.7
17	11.1	10.6	7.6	4.4	15.1	7.3	---	---	11.8	7.3	9.1	8.6
18	10.5	10.1	7.3	4.1	15.6	7.6	---	---	10.8	6.8	8.6	8.1
19	10.1	9.7	6.7	3.6	13.2	7.3	---	---	7.6	5.8	8.4	8.2
20	9.9	9.5	5.8	3.4	14.0	6.6	---	---	7.1	6.8	8.4	8.2
21	9.5	9.3	8.1	3.4	9.3	6.2	---	---	7.5	7.1	8.3	8.1
22	9.4	9.2	7.2	3.5	10.7	5.9	---	---	7.5	7.4	8.3	8.2
23	9.3	9.1	5.6	3.1	12.6	6.4	---	---	7.5	7.2	9.5	8.3
24	9.1	8.9	---	---	13.6	6.6	---	---	7.4	7.1	9.8	8.6
25	8.9	8.7	---	---	16.4	7.6	6.6	5.6	7.6	7.3	9.3	7.6
26	8.7	8.5	---	---	19.0	7.8	7.1	6.7	7.6	7.5	8.7	7.2
27	9.6	8.5	---	---	15.3	8.1	7.1	6.8	7.5	7.1	8.1	6.8
28	9.7	7.9	---	---	19.3	7.9	7.1	6.6	7.3	7.2	6.9	6.5
29	10.6	8.6	---	---	15.4	7.0	7.7	6.5	7.3	6.8	6.6	6.0
30	10.4	8.6	---	---	10.2	6.2	7.8	7.4	7.3	6.9	6.5	5.5
31	---	---	8.6	7.4	---	---	7.3	6.9	7.0	6.6	---	---
MONTH	11.4	7.0	11.1	3.1	19.3	4.9	20.0	5.6	11.8	5.6	12.5	5.5
YEAR	20.0	3.1										

GREAT MIAMI RIVER BASIN

309

03272700 SEVENMILE CREEK AT CAMDEN, OH

LOCATION.--Lat 39°37'45", long 84°38'40", Preble County, Hydrologic Unit 05080002, 0.3 mi (0.5 km) downstream from Beasley Run on right bank at downstream side of bridge on State Highway 725 in Camden, and at mile 16.2 (26.1 km).

DRAINAGE AREA.--69.0 mi² (179 km²).

PERIOD OF RECORD.--December 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 818.57 ft (249.501 m) National Geodetic Vertical Datum of 1929. (Levels by Miami Conservancy District). Prior to Oct. 1, 1975, at same site at datum 3.02 ft (0.920 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Water-quality data collected at this site 1972 to 1974.

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

AVERAGE DISCHARGE.--8 years (1972-79), 73.5 ft³/s (2.082 m³/s), 14.47 in/yr (368 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,210 ft³/s (176 m³/s) June 22, 1974, gage height 13.25 ft (4.039 m), present datum from rating curve extended above 2,200 ft³/s (62.3 m³/s); minimum daily, 1.6 ft³/s (0.045 m³/s) July 21, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,500 ft³/s (42.5 m³/s) and maximums (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 1	1415	1580 44.7	7.83 2.387	Apr. 13	2100	2020 57.2	8.51 2.594
Feb. 23	1630	*3280 92.9	*10.12 3.085	July 28	2000	2280 64.6	8.87 2.704
Mar. 4	0145	1960 55.5	8.42 2.566				

Minimum daily, 6.6 ft³/s (0.19 m³/s) Oct. 3, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	12	23	1230	22	359	82	35	24	19	129	47
2	7.0	12	22	472	20	550	242	33	20	15	192	41
3	6.6	12	138	177	18	826	148	67	18	13	115	36
4	8.8	12	549	100	17	1610	225	76	17	15	78	31
5	6.6	12	200	77	15	570	197	66	16	15	59	27
6	7.4	11	120	60	16	285	123	56	30	12	49	25
7	9.4	11	93	49	17	205	93	49	25	11	41	22
8	7.9	11	573	44	16	165	85	43	25	10	34	19
9	7.0	11	431	39	16	132	122	39	23	15	29	17
10	7.0	11	173	34	15	114	101	37	24	85	27	16
11	6.8	11	110	35	15	92	176	35	21	55	132	15
12	8.8	11	88	36	15	76	457	35	18	34	94	14
13	85	10	80	38	15	71	621	34	16	42	56	14
14	65	10	66	34	15	70	718	30	15	57	47	135
15	51	11	62	28	16	58	246	29	14	208	47	76
16	40	12	54	36	14	51	159	26	13	120	47	45
17	28	68	47	45	13	49	119	24	13	64	36	33
18	22	97	43	62	12	49	97	23	12	38	20	29
19	21	53	42	47	13	46	84	23	95	26	48	25
20	18	38	54	53	14	49	76	23	120	20	161	21
21	16	32	122	149	67	44	69	22	196	17	281	24
22	15	28	84	81	373	41	63	20	80	15	140	92
23	13	29	65	61	1960	95	59	19	43	14	170	88
24	13	28	60	72	926	156	57	20	31	22	175	55
25	13	23	54	45	557	96	55	25	24	135	112	42
26	15	22	43	39	290	70	53	26	20	175	68	34
27	16	29	33	36	184	59	48	35	17	337	77	30
28	14	31	27	33	145	53	47	37	16	645	139	54
29	13	26	31	30	---	52	41	27	18	988	101	69
30	12	25	35	27	---	50	39	23	32	286	78	51
31	12	---	477	25	---	69	---	24	---	157	59	---
TOTAL	576.3	709	3999	3294	4816	6212	4702	1061	1036	3665	2841	1227
MEAN	18.6	23.6	129	106	172	200	157	34.2	34.5	118	91.6	40.9
MAX	85	97	573	1230	1960	1610	718	76	196	988	281	135
MIN	6.6	10	22	25	12	41	39	19	12	10	20	14
CFSM	.27	.34	1.87	1.54	2.49	2.90	2.28	.50	.50	1.71	1.33	.59
IN.	.31	.38	2.16	1.78	2.60	3.35	2.53	.57	.56	1.98	1.53	.66

CAL YR 1978	TOTAL	27886.0	MEAN 76.4	MAX 2110	MIN 4.7	CFSM 1.11	IN 15.03
WTR YR 1979	TOTAL	34138.3	MEAN 93.5	MAX 1960	MIN 6.6	CFSM 1.36	IN 18.40

GREAT MIAMI RIVER BASIN

03274000 GREAT MIAMI RIVER AT HAMILTON, OH

LOCATION.--Lat 39°23'28", long 84°34'20", in NE 1/4 sec. 6, T.1 N., R.3 E., Butler County, Hydrologic Unit 05080002, on right bank 1,000 ft (305 m) downstream from Columbia Bridge at Hamilton, 3 mi (5 km) downstream from Four Mile Creek, 4.3 mi (6.9 km) upstream from Pleasant Run, and at mile 34.8 (60.0 km).

DRAINAGE AREA.--3,630 mi² (9,402 km²).

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 (1.1 km) 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 (152.394 m) National Geodetic Vertical Datum of 1912. Prior to Apr. 12, 1927, nonrecording gage at site 0.7 mi (1.1 km) upstream at datum 64.65 ft (19.705 m) higher.

REMARKS.--Records good. 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 (10 km) upstream from gage for municipal supply of Hamilton. Diversion averaged 1.03 ft³/s (0.029 m³/s) in 1979 and is returned as sewage 1.4 mi (2.3 km) downstream from the station. The Miami and Erie Canal diverted water from the basin 1.7 mi (2.7 km) 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 13 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--48 years (1931-79), 3,233 ft³/s (91.56 m³/s), 12.10 in/yr (307 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 352,000 ft³/s (9,970 m³/s) Mar. 26, 1913, gage height, 38.5 ft (11.73 m), 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 (3,059 m³/s) Jan. 21, 1959, gage height 79.47 ft (24.222 m); minimum daily discharge, 155 ft³/s (4.39 m³/s) Sept 27, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 43,800 ft³/s (1,240 m³/s) Feb. 25, gage height, 71.13 ft (21.680 m); minimum daily, 595 ft³/s (16.9 m³/s) Oct. 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	681	864	1160	25000	1860	11300	3120	2750	2800	1950	9820	5540
2	644	839	1090	25300	1650	15900	6490	2590	2470	1760	11300	4900
3	644	798	2800	16900	1710	18400	6340	3440	2160	1520	8230	4580
4	696	765	13000	13900	1640	27800	7430	3980	1990	1660	7190	3800
5	726	781	11200	8160	1460	31200	8510	3740	1890	1490	4600	3500
6	719	773	6610	4220	1370	26600	7770	3240	2500	1220	5200	3470
7	696	798	4510	3850	1430	21700	6160	2880	3580	1120	8730	3210
8	644	806	11400	3390	1410	17200	5160	2780	4220	1050	5840	2770
9	595	773	17700	2980	1380	13600	5720	2590	3350	1230	3970	2420
10	595	773	10400	2690	1280	10600	5720	2420	3420	1340	2900	2220
11	615	734	6020	2590	1260	7910	6200	2350	4000	1590	5010	2090
12	703	711	4420	2560	1310	6320	11800	2290	3240	1650	5820	2050
13	2170	726	3720	2530	1230	5220	15400	2270	2560	2260	4130	2130
14	2120	742	3300	3050	1280	4740	28000	2200	2190	2150	3170	23300
15	2930	773	3000	2730	1340	4600	24000	2150	1950	4370	2480	12200
16	2410	822	2730	2420	1390	4350	17000	2040	1770	4220	2100	7100
17	1950	1590	2510	2580	1250	3950	12100	1890	1620	2360	1840	4850
18	1560	2640	2260	2980	1120	3720	8260	1810	1550	1730	1710	4070
19	1390	2700	2150	2530	1180	3610	6340	1750	1970	1440	5740	3610
20	1310	2260	2160	2470	1190	3560	5270	1670	2130	1250	8970	3260
21	1170	1730	3240	4080	1990	3440	4220	1580	3270	1140	14200	3120
22	1080	1480	3050	3660	6020	3240	4170	1560	2530	1030	13100	3520
23	988	1340	2720	3080	24300	3330	3850	1520	2130	1160	13000	3260
24	925	1380	2390	4280	33500	4150	3600	1520	1770	1700	17500	2900
25	899	1290	2380	4100	37000	3670	3410	1720	1480	3210	13800	2730
26	899	1230	2120	3140	27200	3290	3270	3090	1400	4790	11100	2610
27	979	1520	1860	2820	15200	2970	3210	6400	1250	4830	8780	2480
28	934	1580	1660	2560	11200	2770	3110	5960	1210	5760	8560	3490
29	916	1410	1550	2300	---	2650	2730	4890	1190	17600	11500	3390
30	881	1280	1610	2090	---	2650	2850	3800	1670	15900	8920	2900
31	864	---	4670	1890	---	2820	---	3120	---	10600	6780	---
TOTAL	34333	35908	139390	166830	184150	277260	231210	85990	69260	105080	235990	131470
MEAN	1108	1197	4496	5382	6577	8944	7707	2774	2309	3390	7613	4382
MAX	2930	2700	17700	25300	37000	31200	28000	6400	4220	17600	17500	23300
MIN	595	711	1090	1890	1120	2650	2730	1520	1190	1030	1710	2050
CFSM	.31	.33	1.24	1.48	1.81	2.46	2.12	.76	.64	.93	2.10	1.21
IN.	.35	.37	1.43	1.71	1.89	2.84	2.37	.88	.71	1.08	2.42	1.35

CAL YR 1978 TOTAL 1317858 MEAN 3611 MAX 37500 MIN 595 CFSM 1.00 IN 13.51
WTR YR 1979 TOTAL 1696871 MEAN 4649 MAX 37000 MIN 595 CFSM 1.28 IN 17.39

GREAT MIAMI RIVER BASIN

311

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 (10.3 km) downstream from Indian Creek, and 14.3 mi (23.0 km) downstream from discharge station at Hamilton.

DRAINAGE AREA.--3,814 mi² (9,878 km²).

PERIOD OF RECORD.--July 1966 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1966 to current year.

pH: March 1975 to current year.

WATER TEMPERATURES: July 1966 to current year.

DISSOLVED OXYGEN: July 1966 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. Samples were collected each month as part of the National Stream Quality Accounting Network. See records of daily discharge for station at Hamilton (station 0327400).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,160 micromhos Mar. 18, 1970; minimum, 230 micromhos May 24, 1968.

pH: Maximum recorded, 9.2 units Aug. 4, 1977; minimum recorded, 7.0 units June 19, 1975.

WATER TEMPERATURES: Maximum, 36.5°C July 15, 16, 21, 1977; minimum, 0.0°C on several days during winter months in 1970, 1971, 1976-1979.

DISSOLVED OXYGEN: Maximum, 20.0 mg/L Aug. 15, Sept. 24, 1978; minimum, 0.0 mg/L June 27, 1971.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,030 micromhos Jan. 16; minimum, 261 micromhos Mar. 4, 5.

pH: Maximum, 9.1 units June 26, 27; minimum, 7.3 units Aug. 29, 31.

WATER TEMPERATURES: Maximum, 30.0°C July 22, 23; minimum, 0.0°C Jan. 4, 5, 8-11, 15.

DISSOLVED OXYGEN: Maximum, 18.9 mg/L July 7; minimum, 3.6 mg/L Aug. 1.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
02...	1210	673	927	8.6	20.0	7.0	10.7	116	20	1100	1800
NOV											
07...	1200	847	950	8.0	14.0	20	7.5	72	15	3500	520
DEC											
06...	1300	6670	600	8.1	5.5	55	12.0	95	41	16000	18000
JAN											
03...	1130	12900	483	8.1	1.0	85	13.4	94	54	22000	16000
FEB											
13...	1200	1610	930	7.9	1.5	3.0	12.8	91	69	480	100
MAR											
14...	1300	5000	700	8.1	8.0	20	12.0	100	21	4800	4800
APR											
11...	0930	5600	705	8.0	8.5	15	11.0	94	23	6200	9400
MAY											
08...	1200	2640	756	8.3	20.0	10	9.2	100	31	710	K80
JUN											
05...	1130	1930	798	8.6	24.0	10	10.7	120	32	1400	K100
JUL											
02...	1200	1830	792	8.5	23.5	22	9.5	110	37	1600	7200
AUG											
08...	1130	5020	525	7.7	25.5	100	--	--	77	2700	1700
SEP											
04...	1145	3820	696	7.8	24.0	25	8.2	96	12	2300	430

GREAT MIAMI RIVER BASIN

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OH--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L 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)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT 02...	380	140	88	38	56	5.4	240	--	120	90	.6
NOV 07...	420	180	110	36	47	5.0	240	--	110	79	.8
DEC 06...	280	97	68	26	15	3.8	180	--	60	35	.2
JAN 03...	210	71	53	19	10	5.0	140	--	46	28	.2
FEB 13...	370	110	91	34	40	4.1	260	--	93	74	.4
MAR 14...	310	88	77	28	20	2.8	220	--	68	37	.2
APR 11...	310	94	78	29	19	2.7	220	--	67	39	.3
MAY 08...	320	120	78	30	23	3.0	200	--	75	68	.4
JUN 05...	350	120	85	34	28	3.4	230	--	80	52	.4
JUL 02...	310	85	71	31	38	3.9	220	--	80	58	.4
AUG 08...	220	62	56	20	12	4.3	160	--	36	22	.3
SEP 04...	320	79	80	29	19	3.2	240	7.4	57	33	.3

DATE	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS NO3)	PHOS- PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M
OCT 02...	1.7	566	544	1.6	1.9	4.7	21	.66	--	--	--
NOV 07...	4.3	599	536	.81	.95	4.8	21	.70	7.7	4900	107
DEC 06...	7.4	368	324	1.4	1.7	9.1	40	.45	6.7	--	--
JAN 03...	6.3	297	252	1.8	2.0	8.7	39	.46	--	--	--
FEB 13...	5.8	560	499	.70	2.4	5.5	24	.53	5.3	--	--
MAR 14...	7.3	405	373	.73	1.3	5.9	26	.26	5.2	580	--
APR 11...	5.2	407	373	.95	1.3	6.0	27	.22	--	--	--
MAY 08...	1.3	503	399	1.1	1.2	4.6	20	.18	5.8	34000	6.78
JUN 05...	4.0	457	425	1.5	1.8	7.6	34	.42	4.5	100000	14.9
JUL 02...	3.5	510	419	1.6	1.7	5.3	23	.54	--	150000	14.7
AUG 08...	8.7	324	256	1.8	1.9	5.3	23	.56	17	6200	--
SEP 04...	8.9	428	387	.69	.75	3.6	16	.30	3.0	--	--

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OH--Continued

ANALYSES OF MINOR ELEMENTS

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)
OCT 02...	1210	2	2	100	100	0	0	10	5
JAN 03...	1130	2	2	100	100	2	2	20	2
APR 11...	0930	1	1	100	0	4	1	10	<10
JUL 02...	1200	3	3	100	100	1	0	30	30

DATE	TIME	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
OCT 02...	1	1	1	11	3	1000	0	55	6	100
JAN 03...	3	0	0	29	20	9000	50	41	39	160
APR 11...	1	1	1	8	2	1100	40	35	3	60
JUL 02...	2	0	0	13	8	1400	520	66	7	130

DATE	TIME	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 02...	10	<.5	<.5	<.5	1	1	2	1	60	10
JAN 03...	0	<.5	<.5	<.5	1	0	0	0	80	40
APR 11...	20	<.5	<.5	<.5	0	0	0	0	60	30
JUL 02...	70	<.5	<.5	<.5	1	0	0	0	60	50

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
OCT 02...	1210	673	20.0	42	76
NOV 07...	1200	847	14.0	35	80
DEC 06...	1300	6670	5.5	808	14600
JAN 03...	1130	12900	1.0	243	8460
FEB 13...	1200	1610	1.5	8	35
MAR 14...	1300	5000	8.0	149	2010
APR 11...	0930	5600	8.5	44	665
MAY 08...	1200	2640	20.0	24	171
JUN 05...	1130	1930	24.0	36	188
JUL 02...	1200	1830	23.5	75	371
AUG 08...	1130	5820	25.5	276	4340
SEP 04...	1145	3820	24.0	73	753

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OH--Continued

PESTICIDE ANALYSES

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- DANE, TOTAL (UG/L)	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL (UG/L)
NOV 07...	1150	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB 13...	1130	ND	--	ND	--	ND	--	ND	--	ND
MAY 08...	1200	ND	--	ND	--	ND	--	ND	--	ND

DATE	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- AZINON, TOTAL (UG/L)	DI- AZINON, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN TOTAL (UG/L)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ETHION, TOTAL (UG/L)	ETHION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
NOV 07...	ND	ND	ND	ND	.6	ND	ND	ND	ND
FEB 13...	--	ND	--	ND	--	ND	--	ND	--
MAY 08...	--	ND	--	ND	--	ND	--	ND	--

DATE	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	MALA- THION, TOTAL (UG/L)	MALA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	METHYL PARA- THION, TOTAL (UG/L)
NOV 07...	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB 13...	ND	--	ND	--	ND	--	ND	--	ND
MAY 08...	ND	--	ND	--	ND	--	ND	--	ND

DATE	METHYL PARA- THION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI- THION, TOTAL (UG/L)	METHYL TRI- THION, TOT. IN BOTTOM MATL. (UG/KG)	PARA- THION, TOTAL (UG/L)	PARA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOX- APHENE, TOTAL (UG/L)	TOXA- PHENE, TOTAL (UG/KG)	TOTAL TRI- THION (UG/L)	TRI- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
NOV 07...	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB 13...	--	ND	--	ND	--	ND	--	ND	--
MAY 08...	--	ND	--	ND	--	ND	--	ND	--

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	929	890	---	---	890	858	521	351	---	---	606	567
2	945	905	987	909	870	864	464	368	878	875	560	513
3	924	920	914	903	875	602	507	465	905	878	507	465
4	939	926	942	927	677	452	570	509	902	884	461	261
5	944	927	945	935	599	512	651	575	897	885	353	261
6	935	921	950	941	719	581	705	654	927	891	---	---
7	944	935	954	938	699	644	735	708	927	891	---	---
8	950	930	953	936	699	431	761	737	917	905	---	---
9	950	930	945	935	554	414	786	761	923	906	---	---
10	963	938	947	929	596	558	810	788	971	915	---	---
11	951	933	959	942	659	599	827	810	980	932	---	---
12	941	902	956	948	711	662	834	819	939	917	---	---
13	905	725	956	944	750	711	840	831	945	932	---	---
14	800	723	962	951	770	750	914	839	939	908	711	704
15	792	632	969	947	812	771	1000	861	935	917	728	708
16	738	666	956	926	816	798	1030	902	998	938	737	728
17	731	713	947	666	819	803	899	878	986	965	750	738
18	737	714	800	758	822	815	863	798	983	959	759	749
19	776	716	840	723	825	816	866	818	1020	984	753	746
20	816	776	729	710	845	819	893	849	1020	971	764	752
21	831	809	---	---	812	765	875	677	990	738	777	768
22	839	818	---	---	813	780	773	687	---	---	782	777
23	857	840	---	---	803	788	821	770	---	---	786	761
24	873	858	851	830	813	798	818	726	---	---	768	743
25	878	869	858	836	819	803	792	722	---	---	749	734
26	882	872	870	848	819	809	830	798	---	---	768	747
27	903	860	855	828	831	809	833	821	---	---	780	764
28	909	896	854	834	836	825	836	813	590	567	794	774
29	918	903	852	833	852	834	849	831	---	---	803	795
30	921	908	879	837	869	851	933	842	---	---	807	800
31	---	---	---	---	864	516	---	---	---	---	812	801
MONTH	963	632	987	666	890	414	1030	351	1020	567	812	261
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	804	761	777	776	771	749	812	795	552	318	641	606
2	753	608	---	---	788	774	804	747	501	359	672	639
3	698	627	---	---	801	785	755	731	642	509	686	666
4	704	581	710	669	813	791	762	618	639	554	701	687
5	656	596	722	678	809	777	737	684	611	560	731	70

GREAT MIAMI RIVER

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OH--Continued

PH (UNITS), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.3	8.2	8.2	8.1	8.1	7.9	8.9	8.4	8.1	7.8	7.8	7.4
2	8.3	8.2	---	---	8.2	8.0	8.6	8.0	8.4	7.8	7.9	7.7
3	8.4	8.3	---	---	8.5	8.0	8.8	8.3	8.5	7.8	8.0	7.4
4	8.4	8.3	8.1	7.9	8.8	8.2	8.6	8.5	8.2	7.8	7.8	7.6
5	8.5	8.4	8.2	8.0	9.0	8.4	8.9	8.4	8.0	7.7	7.8	7.5
6	---	8.4	8.3	8.0	9.0	8.7	9.0	8.7	8.0	7.9	8.0	7.7
7	8.5	8.5	8.5	8.1	8.8	8.1	8.9	8.5	---	---	8.1	7.8
8	8.5	8.4	8.5	8.2	8.1	7.9	8.8	8.4	7.8	7.4	8.2	8.0
9	---	---	8.5	8.1	8.3	8.0	8.8	8.4	7.8	7.6	8.3	8.1
10	---	---	8.7	8.2	8.3	8.0	8.7	8.3	7.9	7.8	8.3	8.0
11	8.3	7.9	8.5	8.2	8.4	7.9	8.7	8.3	8.0	7.9	8.3	8.0
12	8.3	7.8	8.4	7.9	8.2	8.1	8.5	8.2	8.1	7.9	8.3	8.0
13	8.2	8.1	8.1	7.9	8.4	8.1	8.2	7.8	8.1	7.9	8.3	8.1
14	8.2	8.0	8.3	7.9	8.4	8.2	8.3	7.8	8.2	8.0	8.1	7.4
15	8.1	8.0	8.4	8.0	8.6	8.2	8.3	7.8	8.3	8.1	7.7	7.5
16	8.3	8.0	8.2	8.0	8.7	8.3	7.7	7.4	8.6	8.2	7.8	7.6
17	8.2	8.0	8.4	8.0	8.9	8.4	7.9	7.6	8.7	8.4	7.8	7.6
18	---	---	8.4	8.0	8.9	8.4	---	---	8.6	8.5	7.8	7.6
19	8.0	7.9	8.4	7.9	---	---	---	---	8.6	8.0	7.9	7.8
20	8.0	7.9	8.5	7.9	---	---	8.7	8.5	8.0	7.4	7.9	7.8
21	8.0	7.9	8.8	8.1	---	---	8.6	8.3	7.7	7.4	7.9	7.8
22	8.0	7.9	8.6	8.2	---	---	8.7	8.3	7.9	7.5	7.9	7.8
23	8.1	7.9	8.3	8.0	---	---	8.7	8.3	7.7	7.5	7.9	7.8
24	8.1	8.0	8.0	8.0	---	---	8.8	8.4	7.6	7.4	7.9	7.7
25	8.1	8.0	8.1	7.9	9.0	8.8	8.3	8.0	7.9	7.6	7.9	7.7
26	8.1	8.0	8.2	8.0	9.1	8.7	7.9	7.9	7.8	7.7	7.9	7.7
27	8.2	8.0	8.1	8.0	9.1	8.6	7.9	7.9	7.9	7.5	7.9	7.8
28	8.3	8.1	8.1	8.0	9.0	8.5	8.0	7.9	7.9	7.7	7.9	7.7
29	8.3	8.1	8.0	8.0	9.0	8.7	8.0	7.6	7.9	7.3	7.8	7.7
30	8.3	8.1	8.1	8.0	8.8	8.5	8.0	7.6	7.9	7.7	7.9	7.7
31	---	---	8.0	8.0	---	---	8.0	7.5	7.9	7.3	---	---
MONTH	8.5	7.8	8.8	7.9	9.1	7.9	9.0	7.4	8.7	7.3	8.3	7.4
YEAR	9.1	7.3										

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	20.5	19.5	15.5	14.0	8.0	7.0	7.0	5.5	---	---	4.0	3.0
2	21.0	19.0	15.0	13.5	8.0	7.5	5.5	2.5	3.0	2.0	4.0	3.5
3	20.0	19.5	15.5	14.0	9.5	8.0	2.5	.5	4.0	3.0	4.0	3.5
4	19.5	18.5	16.0	14.5	9.5	7.5	.5	.0	4.5	3.5	6.0	4.5
5	18.0	17.5	16.0	15.0	7.5	6.0	1.0	.0	3.0	1.5	6.0	5.0
6	17.5	16.0	16.0	15.0	6.0	5.0	1.5	1.0	2.5	.5	---	---
7	16.0	15.5	15.5	13.0	7.5	6.0	1.5	1.0	3.0	2.5	---	---
8	16.5	15.0	13.5	12.0	8.0	6.0	1.0	.0	3.0	2.0	---	---
9	17.0	15.0	13.0	11.5	6.0	4.5	.5	.0	3.0	1.5	---	---
10	18.0	15.5	12.5	12.0	4.5	3.0	1.0	.0	2.5	1.5	---	---
11	17.0	16.5	13.5	12.0	3.5	2.5	1.5	.0	3.5	2.0	---	---
12	18.5	17.0	14.0	13.5	5.0	3.5	3.0	1.5	3.5	2.5	---	---
13	18.5	16.5	15.0	13.5	5.0	4.0	4.0	3.0	2.5	.5	---	---
14	16.0	15.0	15.0	14.0	4.5	4.0	4.0	2.0	3.0	1.5	---	---
15	15.0	14.0	14.0	12.0	5.0	4.0	1.5	.0	4.0	3.5	---	---
16	13.5	13.0	12.0	11.5	5.5	4.5	2.0	.5	4.5	4.0	---	---
17	13.5	12.0	13.5	11.5	5.5	4.5	3.5	2.0	4.0	2.0	9.0	6.5
18	14.0	12.5	12.5	11.0	5.0	4.5	3.0	2.0	2.5	1.5	11.0	10.0
19	15.0	13.5	11.5	10.5	6.0	5.0	3.0	2.0	3.0	1.5	12.0	10.0
20	15.5	13.5	10.0	9.5	8.0	6.0	4.5	3.0	4.5	1.5	13.0	12.0
21	16.5	14.0	---	---	8.5	6.0	4.5	2.5	5.0	3.5	15.0	13.0
22	17.0	15.0	---	---	6.0	5.0	2.5	2.0	---	---	15.5	14.5
23	16.5	15.0	---	---	5.5	4.5	3.5	2.0	---	---	15.5	15.0
24	15.0	13.5	10.5	10.0	5.0	4.5	4.0	2.0	---	---	15.0	11.5
25	14.5	13.0	10.0	9.0	4.5	4.0	2.0	1.5	---	---	11.5	9.0
26	15.0	14.5	9.5	8.5	4.0	3.5	2.0	1.0	---	---	9.0	8.0
27	15.0	13.5	9.5	9.0	3.5	2.5	3.0	2.0	---	---	9.5	7.5
28	15.0	13.0	9.0	7.5	3.5	2.5	3.5	2.5	3.0	2.5	10.5	8.0
29	14.5	13.0	8.0	7.0	4.5	3.0	3.5	2.5	---	---	12.5	10.5
30	14.5	12.5	8.0	7.0	6.0	4.5	3.0	2.0	---	---	13.5	12.5
31	15.0	13.5	---	---	6.5	6.0	---	---	---	---	14.0	13.5
MONTH	21.0	12.0	16.0	7.0	9.5	2.5	7.0	.0	5.0	.5	15.5	3.0
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	13.5	12.5	15.0	14.0	23.5	21.0	25.5	22.5	26.0	24.0	25.5	23.0
2	12.5	11.5	---	---	24.0	22.0	26.0	23.0	24.5	23.0	24.5	23.5
3	12.0	11.5	---	---	25.0	22.5	26.5	23.5	25.0	23.0	25.5	23.5
4	11.0	8.5	17.0	15.0	26.0	23.0	26.0	24.0	25.5	23.5	25.5	23.5
5	9.5	8.0	16.5	13.5	26.5	23.5	25.5	22.0	27.5	24.5	27.0	24.5
6	9.0	8.0	18.0	15.0	28.0	24.5	26.0	22.5	27.0	25.5	27.0	25.0
7	8.0	7.5	20.5	16.5	27.0	25.5	25.5	23.0	26.5	25.0	26.5	25.0
8	9.0	7.5	23.0	19.0	26.0	24.5	25.0	23.0	28.5	25.0	25.5	23.0
9	9.0	8.0	24.5	22.0	28.0	25.0	24.5	23.5	29.5	27.0	23.0	21.0
10	9.5	7.5	26.0	23.0	28.5	26.0	27.0	24.0	29.5	28.0	23.0	20.5
11	10.0	8.5	27.0	24.5	25.5	24.0	28.0	25.0	28.0	24.5	24.0	21.5
12	12.0	10.0	26.0	22.0	25.5	22.5	27.0	25.5	24.5	22.0	25.5	23.0
13	12.0	11.5	23.5	21.0	24.5	23.0	25.0	23.5	23.0	21.5	25.0	24.5
14	11.5	10.5	23.0	20.5	26.0	22.5	27.0	23.5	23.0	21.5	23.5	20.5
15	10.5	10.0	23.5	21.0	27.0	24.0	28.0	25.5	23.0	20.5	20.5	19.0
16	11.0	9.5	23.5	20.5	27.0	24.5	27.0	24.5	23.0	20.5	20.0	18.5
17	11.0	9.5	23.5	20.5	28.0	25.0	28.0	25.5	23.5	21.0	20.5	18.0
18	13.0	10.5	24.0	20.5	28.0	25.5	27.0	25.5	23.5	22.5	21.5	19.0
19	14.0	11.5	24.5	21.5	---	---	---	---	25.0	22.5	21.5	19.5
20	15.0	12.5	24.0	22.0	---	---	28.0	25.0	23.0	22.0	20.5	19.0
21	16.0	14.5	22.5	20.5	---	---	29.0	26.0	23.0	22.0	20.5	20.0
22	16.0	15.5	23.0	21.5	---	---	30.0	27.0	22.5	21.5	20.0	18.0
23	16.5	15.0	22.5	21.0	---	---	30.0	27.5	22.5	22.0	19.0	17.0
24	18.0	15.5	20.5	19.5	---	---	29.5	27.0	22.0	21.5	19.0	16.5
25	18.5	17.0	19.0	16.5	25.5	23.5	27.0	26.0	22.0	21.5	20.5	17.5
26	18.5	17.5	18.5	15.5	26.5	22.5	26.0	25.0	21.5	21.0	21.5	19.0
27	18.5	16.0	17.0	15.5	27.0	23.5	25.0	24.5	22.0	20.5	20.5	19.5
28	17.0	14.5	17.5	14.5	28.0	24.0	25.5	25.0	22.5	21.5	20.5	19.5
29	15.5	13.5	19.5	16.0	27.5	25.0	24.5	22.5	23.0	21.5	21.0	19.0
30	16.0	14.0	22.0	18.5	25.0	23.0	24.0	23.0	23.0	22.5	21.5	19.5
31	---	---	21.5	21.0	---	---	26.0	24.0	24.5	22.5	---	---
MONTH	18.5	7.5	27.0	13.5	28.5	21.0	30.0	22.0	29.5	20.5	27.0	16.5
YEAR	30.0	.0										

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OH--Continued

DISSOLVED OXYGEN (DO), MG/L, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX MIN		MAX MIN		MAX MIN		MAX MIN		MAX MIN		MAX MIN	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.7	7.0	9.9	7.3	11.2	9.8	12.1	10.3	---	---	12.2	11.4
2	14.2	8.0	9.9	7.5	10.5	9.6	---	---	12.9	12.7	12.4	11.8
3	11.6	9.2	10.2	7.8	10.3	9.6	---	---	12.8	12.5	13.6	12.5
4	11.9	8.1	10.3	7.7	10.3	9.4	13.4	13.3	12.6	12.2	---	---
5	10.0	7.5	10.0	7.4	10.9	10.3	13.3	12.9	13.0	12.4	---	---
6	8.9	7.3	9.7	7.5	12.0	10.9	12.8	12.5	13.3	12.8	---	---
7	9.7	7.6	8.1	7.3	11.8	11.4	12.7	12.5	13.1	12.7	---	---
8	10.7	7.8	9.7	7.3	11.5	11.2	12.7	12.5	12.7	12.3	---	---
9	10.4	7.9	10.1	7.9	11.6	11.3	13.2	12.7	13.2	12.4	---	---
10	10.6	7.6	9.7	8.0	12.0	11.6	13.0	12.7	13.3	12.6	---	---
11	8.6	7.2	9.9	8.0	12.0	11.8	12.9	12.6	13.3	12.7	---	---
12	8.9	6.5	8.9	7.6	11.8	11.4	12.6	12.3	13.2	12.4	---	---
13	7.5	6.4	9.1	7.1	11.5	11.3	12.2	11.7	13.5	12.5	---	---
14	8.2	7.3	7.7	6.8	11.4	11.3	12.2	11.7	13.9	12.3	---	---
15	8.7	8.2	7.8	6.8	11.3	11.2	12.8	12.3	13.2	12.3	---	---
16	9.1	8.5	8.6	7.1	11.2	10.9	12.7	12.5	13.2	11.8	---	---
17	9.6	8.8	8.3	7.6	11.2	10.9	12.4	11.8	13.9	12.2	---	---
18	6.5	8.6	8.7	7.7	11.1	10.9	12.3	11.8	13.8	12.7	12.2	11.3
19	8.9	8.2	9.4	8.6	10.9	10.5	12.2	11.9	14.2	12.6	11.3	10.7
20	9.0	8.1	9.3	9.3	10.6	10.0	11.9	11.4	14.2	12.3	---	---
21	9.0	7.7	---	---	10.5	9.9	12.0	11.4	13.4	12.0	10.3	9.4
22	8.9	7.4	---	---	11.1	10.5	12.3	12.0	13.4	12.6	10.3	9.5
23	7.6	7.1	---	---	11.2	10.9	12.3	11.9	---	---	9.8	9.1
24	8.8	6.9	9.0	8.5	11.1	10.9	13.0	11.6	---	---	10.0	9.2
25	9.1	7.6	10.4	8.4	11.2	10.9	13.6	13.1	---	---	11.0	9.9
26	8.2	7.2	9.6	8.7	11.3	11.1	13.6	13.2	---	---	12.0	10.6
27	8.8	7.1	9.1	8.5	11.5	11.2	13.5	12.9	---	---	11.9	11.2
28	9.2	7.5	10.1	8.7	11.5	11.4	12.9	12.7	12.4	12.1	12.0	10.7
29	9.4	7.7	10.2	9.3	11.5	11.3	13.1	12.6	---	---	11.3	10.4
30	9.7	7.8	11.2	9.3	11.3	10.8	13.2	13.0	---	---	11.3	9.8
31	9.9	7.7	---	---	11.1	10.5	---	---	---	---	10.6	9.7
MONTH	14.2	6.4	11.2	6.8	12.0	9.4	13.6	10.3	14.2	11.8	13.6	9.1
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	10.6	9.7	9.8	8.7	7.8	6.4	11.3	6.0	6.2	3.6	---	---
2	10.5	9.8	---	---	8.4	6.5	15.5	6.1	---	---	---	---
3	10.9	10.2	---	---	11.0	6.3	17.2	8.7	---	---	---	---
4	11.2	10.4	8.3	7.5	13.6	6.9	12.4	7.8	---	---	8.3	7.1
5	11.3	10.4	10.1	8.3	15.2	7.5	15.7	8.2	---	---	7.4	6.7
6	11.5	10.4	10.7	8.1	16.6	7.2	18.6	9.8	9.3	7.4	8.3	6.3
7	12.1	11.5	12.4	8.0	9.9	5.9	18.9	10.1	8.9	8.3	8.9	6.4
8	12.0	11.2	13.3	7.9	8.2	5.2	16.6	9.5	---	---	9.3	6.3
9	11.4	10.9	12.4	7.1	8.5	5.5	12.2	6.9	9.8	7.8	9.7	6.7
10	12.1	11.3	14.7	7.2	8.1	5.4	16.1	6.4	8.6	7.1	10.2	6.8
11	11.6	11.1	11.9	6.4	7.8	5.9	15.9	7.4	7.4	6.7	10.9	6.7
12	11.1	9.9	9.3	5.7	7.3	6.2	12.6	7.1	8.5	7.3	11.2	6.4
13	10.3	9.5	7.9	5.6	8.3	6.5	8.2	6.7	8.6	8.2	9.2	6.1
14	---	---	9.7	6.1	9.0	6.6	10.8	6.8	10.8	8.1	---	---
15	---	---	10.0	6.3	10.4	6.6	11.7	6.1	11.9	8.6	---	---
16	---	---	8.1	6.3	11.1	6.7	6.9	6.0	12.5	8.5	---	---
17	12.4	11.0	10.2	6.0	13.3	6.6	7.3	6.3	15.8	8.7	---	---
18	12.7	12.1	9.4	6.0	13.7	6.6	---	---	12.5	8.8	---	---
19	12.2	11.4	10.7	5.0	---	---	---	---	9.8	7.4	---	---
20	11.3	10.6	11.7	5.4	---	---	16.1	8.1	11.7	7.6	---	---
21	10.6	9.6	14.2	6.8	---	---	16.7	7.4	8.2	7.8	---	---
22	9.9	9.3	11.6	6.8	---	---	16.8	7.0	12.9	6.7	---	---
23	9.9	9.2	8.6	6.0	---	---	15.1	7.1	11.5	6.5	---	---
24	10.1	8.9	6.9	5.9	---	---	11.6	5.8	9.8	6.3	---	---
25	9.4	8.2	8.0	5.9	16.1	11.5	7.3	5.4	---	---	9.6	8.7
26	8.7	7.8	8.9	6.8	17.2	8.3	7.2	5.9	---	---	9.9	7.9
27	9.9	7.6	8.0	7.0	18.5	8.6	7.0	6.2	---	---	9.5	7.7
28	10.1	8.2	8.1	7.7	18.1	9.0	6.2	6.0	---	---	8.2	7.5
29	11.3	8.7	7.8	7.2	14.0	7.2	8.3	5.4	---	---	8.7	7.5
30	11.0	8.8	7.7	7.0	9.2	5.7	7.0	6.4	---	---	9.0	7.3
31	---	---	7.2	6.7	---	---	6.9	6.3	---	---	---	---
MONTH	12.7	7.6	14.7	5.0	18.5	5.2	18.9	5.4	15.8	3.6	11.2	6.1
YEAR	18.9	3.6										

As the number of streams on which discharge information is likely to be desired far exceeds the number of stations feasible to operate at one time, the Geological Survey collects limited data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. 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.

Records collected at partial-record stations are presented in two tables. Given first is a table of discharge measurements at low flow partial-record stations and second is a table followed by a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

LOW-FLOW PARTIAL-RECORD STATIONS

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. These measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of a stream. The "PERIOD OF RECORD" column shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1979

Station no	Station name	Location	Drainage Area (mi ²)	Period of Record	Measurements Date	Discharge (cfs)
LITTLE BEAVER CREEK BASIN						
03108980	Middle Fork Little Beaver Creek near Salem, OH	Lat 40°54'20", long 80°48'17", Mahoning County, Hydrologic Unit 05030101, at bridge on State Highway Alt. 14, 1.1 mi (1.8 km) east of Salem, 4 mi (6.4 km) upstream from East Branch Middle Fork Little Beaver Creek.	35.7	1979	10-25-78	14.4
03108985	Cherry Valley Run at Leetonia, OH	Lat 40°52'33", long 80°45'24", Columbiana County, Hydrologic Unit 05030101, at bridge on Madison Street in Leetonia.	11.9	1979	10-25-78 4-24-79 6- 6-79 9-11-79	3.79 10.5 9.47 1.73
03108990	East Branch Middle Fork Little Beaver Creek at Leetonia, OH	Lat 40°52'16", long 80°45'54", Columbiana County, Hydrologic Unit 05030101, at bridge on State Route 344, 0.6 mi (1.0 km) southwest of Leetonia, 1.5 mi (2.4 km) upstream from mouth.	28.0	1979	10-25-78	4.46
03109150	West Fork Little Beaver Creek at Guilford, OH	Lat 40°47'30", long 80°52'12", Columbiana County, Hydrologic Unit 05030101, at culvert on State Route 172, downstream from Guilford Lake at Guilford.	11.5	1979	6- 6-79	13.0
03109395	Bull Creek at Negley, OH	Lat 40°47'15", long 80°32'42", Columbiana County, Hydrologic Unit 05030101, at bridge on State Route 170, 0.6 mi (1.0 km) upstream from mouth, at Negley.	55.4	1979	10-24-78	21.4
MUSKINGUM RIVER BASIN						
03116410	Nimisila Creek near Canal Fulton, OH	Lat 40°54'57", long 81°33'43", Summit County, Hydrologic Unit 05040001, at bridge on State Highway 93, 2.5 mi (4.0 km) northeast of Canal Fulton. Water-quality data collected at this site 1974 to 1977.	23.1	1960-61 1974-79	4-26-79 9-13-79	17.2 6.14
03116950	Newman Creek near Massillon, OH	Lat 40°49'22", long 81°33'06", Stark County, Hydrologic Unit 05040001, at bridge on Beaumont Avenue, 1.9 mi (3.1 km) upstream from mouth, 2 mi (3 km) northwest of Massillon. Water-quality data collected at this site 1976 to 1977.	38.2	1976-79	4-27-79 9-24-79	38.2 16.7
03117280	Hugle Run near Malvern, OH	Lat 40°42'49", long 81°09'03", Carroll County, Hydrologic Unit 05040001, at bridge on private road, 1,000 ft (300 m) upstream from mouth, 2.2 mi (3.5 km) northeast of Malvern. Water-quality data collected at this site 1976 to 1977.	21.3	1976-79	4-24-79 9-11-79	e23.2 e3.60

e Estimated.

PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

LOW-FLOW PARTIAL-RECORD STATIONS.--Continued

Discharge measurements made at low-flow partial-record stations during water year 1979.--Continued

Station No	Station name	Location	Drainage area (mi ²)	Period of record	Measurements Date Discharge (cfs)
HOCKING RIVER BASIN					
03155895	Hocking River at Union Street, Lancaster, OH	Lat 39°43'04", long 82°36'35", Fairfield County, Hydrologic Unit 05030204, at footbridge at east end of Union Street, 0.2 mi (0.3 km) downstream from 6th Avenue bridge in Lancaster, and 0.8 (1.3 km) upstream from Hunters Run.	36.2	1978-79	9-26-78 5.32 7-23-79 6.73
03156549	Center Branch Rush Creek near Junction City, OH	Lat 39°43'24", long 82°20'36", Perry County, Hydrologic Unit 05030204, at bridge on State Route 37, 2.3 mi (3.7 km) west of Junction City.	24.9	1979	6- 5-79 12.6 7-23-79 2.33
03156550	Rush Creek near Junction City, OH	Lat 39°43'13", long 82°21'01", Perry County, Hydrologic Unit 05030204, at bridge on Flag Dale Road (Perry County Road 23), 0.4 mi (0.6 km) downstream from Center Branch, 2.7 mi (4.3 km) west of Junction City.	71.0	1978-79	9-26-78 4.28 7-23-79 38.7
CAMPAIGN CREEK BASIN					
03160105	Campaign Creek near Gallipolis, OH	Lat 39°53'51", long 82°11'31", Gallia County, Hydrologic Unit 05030202, at bridge on Anlerville-Porter Road, 5.6 mi (9.0 km) upstream from mouth, 5.8 mi (9.3 km) north of Gallipolis. Water-quality data collected at this site 1976 to 1977.	35.5	1976-79	4-25-79 e9.14 9-10-79 e1.96
SCIOTO RIVER BASIN					
03219520	Fulton Creek near Radnor, OH	Lat 40°22'17", long 83°11'20", Delaware County, Hydrologic Unit 05060001, at bridge on State Route 257, 0.2 mi (0.3 km) upstream from mouth, 2.2 mi (3.7 km) southwest of Radnor.	46.9	1956, 1979	6- 7-79 7.40
03219590	Bokes Creek near Warrensburg, OH	Lat 40°19'20", long 83°10'30", Delaware County, Hydrologic Unit 05060001, at bridge on State Route 257, 0.2 mi (0.3 km) upstream from mouth, 1.2 mi (1.9 km) north of Warrensburg.	83.2	1956, 1960, 1979	6- 7-79 11.4
03235090	Salt Creek at Adelphi, OH	Lat 39°28'23", long 82°45'01", Pickaway County, Hydrologic Unit 05060002, at bridge on State Routes 56 and 180, 0.6 mi (1.0 km) downstream from Beech Fork, 0.5 mi (0.8 km) north of Adelphi.	47.8	1978-79	9- 7-78 2.70 7-23-79 6.60
03236055	Middle Fork Salt Creek near Richmond Dale, OH	Lat 39°13'00", long 82°45'46", Ross County, Hydrologic Unit 05060002, at bridge on West Junction Road, 0.2 mi (0.3 km) upstream from Little Salt Creek, 1.7 mi (2.7 km) north of Brocks Corner, 3.0 mi (4.8 km) northwest of Richmond Dale.	109	1979	7-23-79 4.48
03236200	Little Salt Creek at Jackson, OH	Lat 39°03'13", long 82°38'05", Jackson County, Hydrologic Unit 05060002, at bridge on U.S. Highway 35 in Jackson, 0.6 mi (1.0 km) upstream from Horse Creek.	33.6	1978-79	9- 6-78 4.32 7-24-79 10.1
03236600	Little Salt Creek near Richmond Dale, OH	Lat 39°11'27", long 82°46'10", Ross County, Hydrologic Unit 05060002, at bridge on State Route 35, 0.4 mi (0.6 km) west of Brocks Corner, 2.3 mi (3.7 km) upstream from mouth, 2.5 mi (4.0 km) east of Richmond Dale.	133	1979	7-24-79 47.5
03236800	Salt Creek at Richmond Dale, OH	Lat 39°11'53", long 82°48'49", Ross County, Hydrologic Unit 05060002, at bridge on State Route 35, 0.3 mi (0.5 km) south of Richmond Dale, 1.2 mi (1.9 km) upstream from mouth.	552	1979	7-24-79 108

e Estimated.

LOW-FLOW PARTIAL-RECORD STATIONS.--Continued

Discharge measurements made at low-flow partial-record stations during water year 1979.--Continued

Station No	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (cfs)
LITTLE MIAMI RIVER BASIN						
03238950	Little Miami River near South Charleston, OH	Lat 39°49'23", long 83°39'40", Clark County, Hydrologic Unit 05090202, at bridge on Clifton Road, 1.4 mi (2.3 km) west of South Charleston.	9.76	1979	5-24-79	3.67
03239800	Little Miami River at John Bryant State Park near Clifton, OH	Lat 39°47'09", long 83°51'39", Greene County, Hydrologic Unit 05090202, at Old Stage Coach Trail Walkbridge (near Park Road No. 2) in John Bryant State Park, 1.2 mi (1.9 km) upstream from Yellow Springs Creek, 2.0 mi (3.2 km) southwest of Clifton.	103	1979	10- 5-78 3-21-79	18.8 102
03241700	Little Miami River near Xenia, OH	Lat 39°42'27", long 83°59'15", Greene County, Hydrologic Unit 05090202, at bridge on Dayton-Xenia Road, 0.9 mi (1.4 km) downstream from Shawnee Creek, 3.5 mi (5.6 km) northwest of Xenia.	238	1948, 1979	3-21-79	225
03241890	Little Beaver Creek at Alpha, OH	Lat 39°42'36", long 84°01'44", Greene County, Hydrologic Unit 05090202, at bridge on Factory Road in Alpha, 300 ft (90 m) upstream from mouth, 1.9 mi (3.1 km) southeast of Zimmerman.	26.4	1979	3-21-79	32.9
03241960	Little Sugar Creek at Bellbrook, OH	Lat 39°37'51", long 84°04'17", Greene County, Hydrologic Unit 05090202, at bridge on Upper Bellbrook Road, 400 ft (120 m) upstream from mouth, 0.4 mi (0.6 km) southeast of Bellbrook.	12.4	1978-79	9- 1-78 3-21-79	5.88 7.76
03241990	Sugar Creek near Bellbrook, OH	Lat 39°37'15", long 84°03'26", Greene County, Hydrologic Unit 05090202, at bridge on Pennewit Road, 0.4 mi (0.6 km) upstream from mouth, 1.3 mi (2.1 km) southeast of Bellbrook.	33.5	1979	3-21-79	21.5
GREAT MIAMI RIVER BASIN						
03261700	Loramie Creek near McCartyville, OH	Lat 40°25'26", long 84°13'28", Shelby County, Hydrologic Unit 05080001, at bridge on Amsterdam Road, 0.6 mi (1.0 km) upstream from Clay Creek, 2.7 mi (4.3 km) northeast of McCartyville.	20.6	1979	5-23-79	1.77

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 1979

		Annual maximum					
Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Gage height (feet)	Dis- charge (ft ³ /s)
Beaver River basin							
03092099	Hinkley Creek at Charlestown, OH	Lat 41°09'16", long 81°08'51", Portage County, Hydrologic Unit 05030103, at bridge on Rock Spring Road, 0.6 mi (1.0 km) south of Charlestown, 2.2 mi (3.5 km) upstream from mouth.	7.85	1970-79	9-14-79	13.50	2,120
03098700	Crab Creek at Youngstown, OH	Lat 41°07'20", long 80°38'08", Mahoning County, Hydrologic Unit 05030103, at bridge on Hubbard Road at Youngstown, 2.0 mi (3.2 km) upstream from mouth.	14.0	1959-79	9-14-79	7.55	940
Little Beaver Creek basin							
03109000	Lisbon Creek at Lisbon, OH	Lat 40°46'55", long 80°45'53", Columbiana County, Hydrologic Unit 05030101, at city water works of Lisbon, 800 feet (244 m) upstream from bridge on State Highway 164.	6.19	1947-62, 1963-79	2-25-79	4.12	445
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 (1.3 km) southeast of Bloomingdale.	0.044	1978-79	2-25-79	100.60	8.20
Short Creek basin							
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 (91 m) southwest from intersection with U.S. Highway 250 in Georgetown.	1.31	1978-79	2-25-79	94.82	33
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	1978-79	2-25-79	86.61	205
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 (1.4 km) east of Parlett.	1.57	1978-79	2-25-79	94.33	44.0
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 (0.13 km) east of Penn Central Railroad crossing on Smithfield-Adona Road, 1.6 mi (2.6 km) northwest of Piney Fork and 3.0 mi (4.8 km) west of Smithfield.	0.44	1978-79	4- 8-79	97.29	13
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 (2.7 km) south of Harrisville, and 2.1 mi (3.4 km) west of Pleasant Grove	0.34	1978-79	2-25-79	102.82	60
Sunfish Creek basin							
03114240	Wood Run near Woodfield, OH	Lat 39°46'56", long 81°03'21", Monroe County, Hydrologic Unit 05030201, at culvert on State Highway 26, 0.5 mi (0.8 km) upstream from Standing Stone Run, and 3.5 mi (5.6 km) northeast of Woodfield.	0.53	1978-79	2-25-79	97.67	92

CREST-STAGE PARTIAL-RECORD STATIONS--Continued

		Annual maximum					
Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Gage height (feet)	Dis- charge (ft ³ /s)
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 (4.3 km) southeast of Antioch.	5.45	1978-79	2-25-79	94.91	854
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 (0.40 km) upstream from mouth, and 1.2 mi (1.9 km) southwest of Bloomfield.	0.13	1978-79	8-18-79	100.37	79
03115510	Moss Run near Wingett, OH	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 (13 km) southwest of Wingett.	1.30	1978-79	2-25-79	90.08	195
Duck Creek basin							
03115600	Barnes Run near Summerfield, OH	Lat 39°46'20", long 81°22'26", Noble County, Hydrologic Unit 05030201, at bridge on county road adjacent to State Highway 78, 2.5 mi (4.0 km) southwest of Summerfield.	3.46	1947-79	8-26-79	13.64	1,470
03115710	Buffalo Run tributary near Dexter City, OH	Lat 39°31'41", long 81°26'58", Noble County, Hydrologic Unit 05030201, at culvert on County Road 2, 1.3 mi (2.1 km) east of Dexter City.	0.19	1978-79	8-20-79	96.71	45
Muskingum River basin							
03119700	Conotton Creek at Jewett, OH	Lat 40°21'59", long 81°00'13", Harrison County, Hydrologic Unit 05040001, at bridge on State Highway 9 in Jewett.	14.3	1947-79	2-25-79	13.82	890
03123400	Dundee Creek at Dundee, OH	Lat 40°35'35", long 81°36'13", Tuscarawas County, Hydrologic Unit 05040001, at culvert on State Highway 93, 0.4 mi (0.6 km) upstream from mouth, 0.5 mi (0.8 km) northeast of Dundee.	0.71	1966-79	9-14-79	29.29	327
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 (2.7 km) north of Hendrysburg.	1.97	1978-79	2-25-79	100.59	132
03127950	Clear Fork near Jewett, OH	Lat 40°19'28", long 81°01'20", Harrison County, Hydrologic Unit 05040001, at bridge 150 ft (46 m) north of County Road 13, 0.5 mi (0.8 km) east of State Route 9, and 3.1 mi (5.0 km) south of Jewett.	5.45	1978-79	2-25-79	97.29	255
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 (0.8 km) west of State Route 416, and 0.7 mi (1.1 km) east of Wainwright.	0.55	1978-79	2-25-79	100.59	22
03138900	Jennings Ditch tributary near Wooster, OH	Lat 40°44'45", long 81°55'48", Wayne County, Hydrologic Unit 05040003, at culvert on State Highway 83, 0.8 mi (1.3 km) upstream from mouth, 4.0 mi (6.4 km) south of Wooster.	0.90	1946, 1966-79	9-14-79	20.59	200
03144800	Etna Creek at Etna, OH	Lat 39°58'08", long 82°40'55", Licking County, Hydrologic Unit 05040006, at culvert on State Highway 310, 0.7 mi (1.1 km) north of Etna.	1.10	1966-79	9-14-79	18.56	365
03148300	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 (762 m) downstream from First Street bridge in Roseville.	80.6	1964-79	2-25-79	15.39	4,300
03150600	Tupper Creek at DeVola, OH	Lat 39°28'24", long 81°27'58", Washington County, Hydrologic Unit 05040004, at culvert on State Highway 60 at DeVola.	0.99	1966-79	2-25-79	9.79	125

CREST-STAGE PARTIAL-RECORD STATIONS--Continued

					Annual maximum		
Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Gage height (feet)	Dis-charge (ft ³ /s)
Hocking River basin							
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 (1.3 km) west of U.S. Highway 33, and 2.3 mi (3.7 km) south of Doanville.	1.09	1978-79	2-25-79	96.75	140
03159450	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 (61 m) above mouth, 4.5 mi (7.2 km) north of Athens, and 3.0 mi (4.8 km) southeast of Chauncey.	1.48	1978-79	8-26-79	97.21	210
Raccoon River 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 (1.3 km) east of State Route 328, and 3.0 mi (4.8 km) east of New Plymouth.	0.30	1978-79	2-25-79	96.88	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 (0.55 km) west of Charley Creek Road, and 1.25 mi (2.00 km) northeast of Burlington.	0.73	1978-79	8-18-79	100.27	220
Scioto River basin							
03221900	Dry Run at Columbus, OH	Lat 39°57'22", long 83°06'19", Franklin County, Hydrologic Unit 05060001, at culvert in Westinghouse employees parking lot at entrance to plant, 1,000 ft (305 m) north of U.S. Highway 40, near west edge of Columbus.	1.91	1965-79	7-23-79	22.28	570
03226890	Turkey Run at Upper Arlington, OH	Lat 40°02'10", long 83°04'06", Franklin County, Hydrologic Unit 05060001, at culvert on Lytham Road at Upper Arlington.	0.90	1972-79	9-14-79	17.90	310
03226900	Fishinger and Kenny Road Creek at Upper Arlington, OH	Lat 40°01'27", long 83°02'38", Franklin County, Hydrologic Unit 05060001, at culvert on Kenny Road at Upper Arlington.	0.45	1964-79	9-14-79	20.31	330
03228000	Scioto Big Run at Briggsdale, OH	Lat 39°54'56", long 83°03'55", Franklin County, Hydrologic Unit 05060001, at bridge on U.S. Highway 62 at Briggsdale 2.8 mi (4.5 km) northeast of Grove City 4 mi (6 km) upstream from mouth.	11.0	1947-58, 1959-79	9-14-79	13.60	3,650
03231600	East Fork Paint Creek near Sedalia, OH	Lat 39°42'36", long 83°27'48", Madison County, Hydrologic Unit 05060003, at culvert on State Highway 38, 1.8 mi (2.9 km) southeast of Sedalia.	3.82	1947-79	9-14-79	14.87	710
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 (3.1 km) southwest of Adelphi.	3.13	1978-79	9-14-79	14.87	710
03235200	Little Blackjack Branch near South Bloomingville, OH	Lat 39°27'23", long 82°30'25", Hocking County, Hydrologic Unit 05060002, at culvert on State Highway 664, 5.5 mi (8.8 km) northeast of South Bloomingville.	0.89	1966-79	10-13-78	20.27	140
03235995	Salt Creek above damsite near Londonderry, OH	Lat 39°17'26", long 82°44'45", Vinton County, Hydrologic Unit 05060002, at bridge on State Highway 671, 0.5 mi (0.8 km) east of Ross County line, 2.8 mi (4.5 km) northeast of Londonderry.	268	1963-79	12- 9-78	18.45	15,700

CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis- charge (ft ³ /s)
03237210	Rose Run near Portsmouth, OH	Lat 38°48'20", long 82°59'03", Scioto County, Hydrologic Unit 05060002, at culvert on U.S. Highway 23, 2.9 mi (4.7 km) north of Portsmouth city limits.	1.04	1966-79	12- 8-78	16.76	165
		Ray Run basin					
03238700	Ray Run near Moscow, Oh	Lat 38°51'15", long 84°12'00", Clermont County Hydrologic Unit 05090201, at culvert on State Highway 743, 1.5 mi (2.4 km) east of Moscow.	0.86	1966-79	8- 1-79	29.20	1,430
		Little Miami River basin					
03242100	Wayne Creek at Waynesville, OH	Lat 39°31'08", long 84°04'47", Warren County, Hydrologic Unit 05090202, at culvert on State Highway 73, 0.8 mi (1.3 km) southeast of intersection of State Highway 73 and U.S. Highway 42 at Waynesville.	1.01	1966-79	8- 1-79	25.40	456
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 (90 m) east of State Highway 139, and 2.7 mi (4.3 km) south of Jackson.	1.28	1978-79	12- 9-78	94.80	190
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 (91 m) north of State Highway 348, and 1.2 mi (1.9 km) northwest of Lucasville.	1.22	1978-79	9-22-79	94.38	219
		Great Miami River basin					
03262750	Millers Ditch at Tipp City, OH	Lat 39°57'59", long 84°10'22", Miami County, Hydrologic Unit 05080001, at culvert on 4th Street in Tipp City.	0.83	1966-79	4-13-79	11.51	56
03272695	Trippets 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 (0.5 km) north of State Highway 725 at Camden.	0.33	1978-79	7-28-79	98.769	76
03272900	Collins Creek at Collinsville, OH	Lat 39°31'05", long 84°36'53", Butler County, Hydrologic Unit 05090002, at culvert on U.S. Highway 127, 0.3 mi (0.5 km) upstream from mouth, 0.4 mi (0.6 km) northwest of Collinsville.	0.94	1966-79	4-14-79	19.84	157

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following table. Those that are measurements of base flow are designated by an asterisk (*); measurement of peak flow by a square (+).

Discharge measurements made at miscellaneous sites during water year 1979

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
Chickamauga Creek Basin						
Chickamauga Creek tributary	Ohio River	Lat 38°51'45", long 82°14'55", Gallia County, Hydrologic Unit 05090101, at culvert on State Route 160, 1.0 mi (1.6 km) southeast of Kerr, and 4.0 mi (6.4 km) northwest of Gallipolis.	3.03	---	8-12-79	+1,350
Scioto River Basin						
Blacklick Creek	Big Walnut Creek	Lat 39°54'23", long 82°49'02", Franklin County, Hydrologic Unit 05060002, at bridge on Refugee-Long Road, 1.1 mi (1.8 km) southeast of Brice.	50.6	1956, 1959	9-14-79	+7,250
Great Miami River Basin						
Painter Creek	Stillwater River	Lat 40°04'50", long 84°21'18", Miami County, Hydrologic Unit 05080001, at bridge on Sugar Grove Road, 2.7 mi (4.3 km) south of Covington.	47.5		9-12-79	*11
Ludlow Creek	Stillwater River	Lat 39°59'52", long 84°20'15", Miami County, Hydrologic Unit 05080001, at bridge on State Highway 48 at Ludlow Falls.	62.9		9-13-79	*12
Pleasant Run	Great Miami River	Lat 39°20'33", long 84°34'06", Butler County, Hydrologic Unit 05080002, at bridge on River Road at Fairfield.	18.9	---	8- 1-79	+5,430

* Base flow.

+ Peak flow.

GROUND-WATER RECORDS

327

ATHENS COUNTY

391934082065000. Local number, AT-10.

LOCATION.--Lat 39°19'34", long 82°06'50", Hydrologic Unit 05030204, 0.3 mi (0.5 km) south of fairgrounds in Athens.

Owner: City of Athens.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled public supply water-table well, diameter 26 in (0.66 m), depth 52 ft (15.8 m), screened below 35 ft (10.7 m).

PERIOD OF RECORD.--June 1967 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINIT (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 07...	1140	7.1	0	130	30	60	380	0	310	48	100

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
NOV 07...	110	726	.00	.00	.00	.23	.00	<10	5000	1	600

GROUND-WATER RECORDS

ATHENS COUNTY--Continued

391940082070000. Local number, AT-4.

LOCATION.--Lat 39°19'40", long 82°07'00", Hydrologic Unit 05030204, in Athens well field along Hocking River

Owner: Athens Water Department.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 12 in (0.3 m), depth drilled 50 ft (15.2 m), cased. DATUM.--Altitude of land-surface datum is 638.51 ft (194.618 m). Measuring point: Floor of instrument shelter 2.20 ft (0.671 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--June 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 22.44 ft (6.840 m) Nov. 17, 1977; minimum daily low, 12.66 ft (3.859 m) Feb. 10, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 20.90 ft (6.370 m) Oct. 17; minimum daily low, 16.41 ft (5.002 m) Mar. 10.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.74	20.70	20.74	18.61	18.26	17.33	18.07	---	18.64	18.92	19.48	17.87
2	20.75	20.76	20.71	18.52	18.28	17.13	18.12	---	18.63	18.95	19.43	17.82
3	20.76	20.76	20.68	18.39	18.31	16.94	18.09	18.44	---	19.00	19.39	17.77
4	20.76	20.75	20.66	18.30	18.33	16.79	---	18.46	---	19.02	19.34	---
5	20.76	20.76	20.53	18.26	18.37	16.65	---	18.46	18.58	19.01	19.33	---
6	20.78	20.77	20.30	18.22	18.41	16.56	---	18.44	18.57	19.04	19.34	---
7	20.80	20.80	20.23	18.23	18.44	16.50	---	18.42	18.60	19.07	19.34	17.76
8	---	20.82	20.10	18.24	18.49	16.44	---	18.41	18.60	19.10	19.33	17.74
9	---	20.83	19.94	18.21	18.54	16.43	---	18.42	18.60	19.13	19.33	17.79
10	---	20.84	19.60	18.32	18.60	16.41	---	18.44	18.58	19.16	19.33	17.88
11	---	20.85	19.25	18.36	18.66	16.46	---	18.45	18.56	19.19	19.34	17.90
12	---	20.86	19.00	18.44	18.69	16.51	---	18.47	18.55	19.21	19.33	17.94
13	---	20.87	18.78	18.55	18.73	16.57	---	18.49	18.53	19.25	19.26	18.00
14	---	20.87	18.64	18.64	18.75	16.66	---	18.50	18.52	19.27	19.17	18.03
15	---	20.88	18.53	18.65	18.78	16.75	---	18.52	18.54	19.30	19.11	18.03
16	---	20.88	18.45	18.67	18.82	16.83	---	18.54	18.57	19.32	19.07	18.03
17	20.90	20.88	18.41	18.68	18.83	16.92	---	18.57	18.60	19.34	19.07	17.95
18	20.89	20.88	18.40	18.68	18.84	17.00	---	18.62	18.63	19.37	19.08	17.90
19	20.85	20.87	18.40	18.69	18.86	17.08	---	18.67	18.67	19.40	19.07	17.87
20	20.84	20.86	18.41	18.70	18.87	17.15	---	18.69	18.71	19.43	19.07	17.85
21	20.83	20.84	18.41	18.70	18.90	17.22	---	18.73	18.74	19.47	19.06	17.85
22	20.82	20.81	18.41	18.67	18.91	17.29	---	18.77	18.75	19.50	19.02	17.85
23	20.82	20.80	18.42	18.60	18.91	17.37	---	18.80	18.74	19.55	18.94	17.84
24	20.82	20.79	18.44	18.55	18.95	17.44	---	18.83	18.73	19.58	18.87	17.80
25	20.83	20.79	18.46	18.51	18.70	17.51	---	18.84	18.74	19.62	18.78	17.77
26	20.84	20.80	18.48	18.43	18.43	17.58	---	18.84	18.75	19.63	18.58	17.75
27	20.85	20.80	18.49	18.35	18.07	17.65	---	18.83	18.77	19.63	18.58	17.75
28	20.85	20.80	18.53	18.28	17.70	17.73	---	18.80	18.81	19.64	18.42	17.75
29	20.80	20.79	18.57	18.26	---	17.82	---	18.73	18.85	19.64	18.25	17.75
30	20.77	20.76	18.61	18.25	---	17.90	---	18.68	18.90	19.61	18.09	17.71
31	20.76	---	18.62	18.25	---	18.00	---	18.65	---	19.53	17.96	---
MAX	20.90	20.88	20.74	18.70	18.95	18.00	18.12	18.84	18.90	19.64	19.48	18.03
WTR YR 1979	MEAN	18.89		HIGH	16.41		LOW	20.90				

GROUND-WATER RECORDS

329

ATHENS COUNTY--Continued

392004082071600. Local number, AT-2A.

LOCATION.--Lat 39°20'04", long 82°07'16", Hydrologic Unit 05030204, 1.1 mi (1.8 km) west of city hall in Athens.

Owner: City of Athens.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Unused drilled water-table well, diameter 12 in (0.3 m), depth 35.5 ft (10.8 m), cased.

DATUM.--Altitude of land-surface datum is 641.81 ft (195.624 m). Measuring point: Floor of instrument shelter, 5.80 ft (1.768 m) above land-surface datum.

REMARKS.--Prior to water year 1978, well depth reported as 43 ft (13.1 m).

PERIOD OF RECORD.--March 1954 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 20.00 ft (6.096 m) Oct. 4, 1955; minimum daily low, 1.05 ft (0.320 m) May 25, 28, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum daily low 19.16 ft (5.840 m) Oct. 13; minimum daily low, 8.78 ft (2.676 m) Feb. 28.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.13	18.32	18.08	15.68	14.86	9.27	15.29	15.84	15.63	16.44	16.69	13.91
2	19.13	18.33	18.06	15.14	14.89	9.47	15.20	15.86	15.51	16.50	16.59	14.13
3	19.10	18.34	18.04	14.77	14.96	9.77	14.83	15.95	15.52	16.52	16.61	14.33
4	19.10	18.36	17.94	14.51	15.10	10.16	14.43	15.93	15.59	16.59	16.67	14.51
5	19.10	18.39	17.65	14.46	15.17	10.49	14.34	15.72	15.69	16.65	16.74	14.67
6	19.10	18.40	17.44	14.42	15.24	10.78	14.34	15.45	15.78	16.69	16.77	14.88
7	19.12	18.44	17.29	14.52	15.33	11.17	14.38	15.39	15.85	15.74	16.76	15.07
8	19.13	18.45	17.16	14.68	15.37	11.70	14.43	15.47	15.87	16.79	16.86	15.23
9	19.14	18.48	16.54	14.74	15.48	12.02	14.51	15.57	15.71	16.83	16.91	15.37
10	19.14	18.51	15.91	14.87	15.54	12.35	14.54	15.66	15.57	16.87	16.96	15.54
11	19.14	18.53	15.40	14.91	15.56	12.68	14.36	15.74	15.60	16.87	16.96	15.71
12	19.15	18.56	15.07	14.95	15.63	12.93	14.39	15.81	15.65	16.86	16.78	15.85
13	19.16	18.57	14.87	14.98	15.64	13.11	14.57	15.83	15.75	16.88	16.46	15.93
14	19.06	18.60	14.86	15.16	15.59	13.48	14.57	15.83	15.83	16.94	16.29	16.05
15	18.92	18.62	14.88	15.15	15.65	13.67	14.37	15.92	15.92	16.99	16.28	15.85
16	18.80	18.62	15.00	15.10	15.76	13.84	14.39	15.99	15.99	17.03	16.33	15.50
17	18.73	18.58	15.09	15.09	15.77	13.97	14.52	16.05	16.09	17.09	16.38	15.20
18	18.67	18.55	15.14	15.17	15.78	14.14	14.56	16.11	16.21	17.14	16.48	15.20
19	18.62	18.44	15.22	15.09	15.87	14.30	14.75	16.19	16.29	17.19	16.52	15.36
20	18.60	18.36	15.29	15.03	15.88	14.42	14.57	16.27	16.36	17.24	16.53	15.48
21	18.59	18.30	15.38	14.77	15.93	14.56	14.97	16.33	16.36	17.30	16.50	15.52
22	18.58	18.28	15.35	14.68	15.92	14.66	15.10	16.35	16.28	17.37	16.24	15.35
23	18.61	18.25	15.34	14.55	15.65	14.73	15.17	16.39	16.05	17.41	16.08	14.96
24	18.61	18.28	15.37	14.50	15.14	14.86	15.27	16.40	16.02	17.43	15.95	14.82
25	18.62	18.28	15.49	14.45	14.55	14.86	15.34	16.36	16.05	17.43	15.82	14.95
26	18.63	18.28	15.55	14.32	12.85	14.90	15.47	16.28	16.11	17.41	15.65	15.07
27	18.61	18.27	15.62	14.28	9.02	14.98	15.52	16.13	16.20	17.37	14.77	15.18
28	18.49	18.24	15.68	14.47	8.78	15.04	15.51	15.90	16.28	17.33	14.31	15.19
29	18.41	18.19	15.72	14.55	---	15.11	15.57	15.65	16.34	17.25	13.91	14.84
30	18.35	18.12	15.77	14.59	---	15.23	15.76	15.57	16.42	17.06	13.71	14.45
31	18.32	---	15.80	14.72	---	15.31	---	15.63	---	16.81	13.73	---
MAX	19.16	18.62	18.08	15.68	15.93	15.31	15.76	16.40	16.42	17.43	16.96	16.05
WTR YR 1979	MEAN	15.93		HIGH	8.78		LOW	19.16				

GROUND-WATER RECORDS

ASHLAND COUNTY

405303082170700. Local number, AS-2.

LOCATION.--Lat 40°53'03", long 82°17'07", Hydrologic Unit 05040002, Jerome Fork well field 2 mi (3.2 km) northeast of Ashland.

Owner: Ashland Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in (0.15 m), depth 64 ft (19.5 m), cased.

DATUM.--Altitude of land-surface datum is 980 ft (300 m), from topographic map. Measuring point: Floor of instrument shelter 2.00 ft (0.610 m) 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 (10.430 m) March 17, 1972; minimum daily low, 13.20 ft (4.023 m) May 15, 18, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 26.44 ft (9.059 m); Feb. 22; minimum daily low, 19.98 ft (6.090 m) Sept. 28.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.22	---	25.86	25.47	25.66	25.69	22.95	22.52	22.82	23.26	23.12	21.79
2	24.21	---	25.94	25.51	25.75	25.65	22.95	22.51	22.78	23.22	23.18	21.73
3	24.25	---	25.93	25.52	25.83	25.51	22.98	22.42	22.75	23.20	23.17	21.67
4	24.30	---	25.90	25.46	25.92	25.23	22.93	22.41	22.66	23.09	23.16	21.53
5	24.42	---	25.90	25.44	25.95	24.75	22.84	22.39	22.65	22.97	23.13	21.61
6	24.45	---	25.93	25.39	25.96	24.33	22.86	22.39	22.79	22.95	23.06	21.76
7	24.50	---	25.93	25.34	26.00	23.98	22.86	22.34	22.93	22.90	23.03	21.89
8	24.52	---	25.90	25.31	26.03	23.61	22.78	22.41	23.05	22.80	22.94	21.94
9	24.50	---	25.89	25.29	26.06	23.37	22.59	22.39	23.15	22.69	22.92	21.96
10	24.50	---	25.92	25.33	26.10	23.07	22.59	22.37	23.16	22.64	22.85	21.96
11	24.53	---	25.90	25.35	26.10	22.82	22.55	22.32	23.17	22.63	22.88	21.94
12	24.56	---	25.85	25.37	26.16	22.68	22.55	22.30	23.17	22.63	22.88	22.00
13	24.60	---	25.80	25.37	26.16	22.61	22.48	22.28	23.25	22.61	22.85	22.09
14	24.66	---	25.78	25.45	26.18	22.60	22.45	22.23	23.29	22.60	22.77	22.09
15	24.67	---	25.72	25.46	26.23	22.66	22.42	22.25	23.28	22.57	22.74	22.00
16	24.67	---	25.73	25.42	26.28	22.65	22.40	22.35	23.29	22.51	22.71	21.78
17	24.70	---	25.73	25.42	26.28	22.67	22.43	22.36	---	22.54	22.65	---
18	24.73	---	25.70	25.36	26.30	22.65	22.41	22.31	---	22.48	22.57	---
19	24.80	---	25.68	25.38	26.33	22.55	22.42	22.35	23.32	22.48	22.51	20.65
20	24.91	---	25.65	---	26.34	22.68	22.41	22.43	23.40	22.47	22.47	20.59
21	24.95	---	25.69	---	26.41	22.77	22.41	22.52	23.43	22.47	22.35	20.40
22	---	---	25.69	---	26.44	22.79	22.38	22.58	23.51	22.47	22.32	20.28
23	---	---	25.79	25.24	26.43	22.80	22.33	22.65	23.54	22.46	22.24	20.25
24	---	25.74	25.66	25.17	26.34	22.84	22.32	22.74	23.54	22.53	22.18	20.17
25	---	25.73	25.64	25.22	26.34	22.85	22.30	22.82	23.56	22.59	22.13	20.11
26	---	25.70	25.63	25.20	26.11	22.88	22.31	22.88	23.53	22.73	22.10	20.05
27	---	25.66	25.63	25.15	25.95	22.92	22.38	22.87	23.52	22.81	22.01	20.00
28	---	25.75	25.62	25.28	25.90	22.90	22.43	22.86	23.49	22.90	21.98	19.98
29	---	25.80	25.59	25.35	---	22.82	22.46	22.83	23.44	22.93	21.90	20.04
30	---	25.84	25.56	25.42	---	22.85	22.48	22.87	23.35	22.99	21.87	20.05
31	---	---	25.53	25.54	---	22.94	---	22.85	---	23.08	21.84	---
MAX	24.95	25.84	25.94	25.54	26.44	25.69	22.98	22.88	23.56	23.26	23.18	22.09
WTR YR 1979	MEAN	23.64		HIGH	19.98		LOW	26.44				

GROUND-WATER RECORDS

331

ASHLAND COUNTY--Continued

405425082173000. Local number. AS-3.

LOCATION.--Lat 40°54'25", long 82°17'30", Hydrologic Unit 05040002, Ashland Bates well field along Jerome Fork near Ashland.

Owner: Ashland Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (0.2 m), depth 78 ft (23.8 m), cased.

DATUM.--Altitude of land-surface datum is 990 ft (302 m), from topographic map. Measuring point: Floor of instrument shelter 5.00 ft (1.524 m) 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, 30.81 ft (9.391 m) Oct. 10, 1978; minimum daily low, 3.10 ft (0.945 m) above land surface Feb. 23, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 30.81 ft (9.391 m) Oct. 10; minimum daily low, 9.94 ft (3.030 m) June 9.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.29	29.32	29.73	28.22	22.13	27.11	16.59	22.36	22.20	24.31	14.43	23.19
2	30.19	29.43	29.47	27.98	21.89	27.09	16.22	22.57	22.43	18.80	14.59	16.53
3	30.19	29.50	29.72	23.65	21.62	26.85	16.21	22.53	15.16	21.53	14.71	14.35
4	30.32	29.59	25.66	22.89	21.39	26.55	15.97	22.90	12.78	22.13	14.81	14.50
5	30.32	29.65	24.82	22.44	26.14	25.97	15.45	23.05	11.52	22.28	14.40	14.57
6	30.38	29.68	24.37	22.00	26.42	21.45	15.19	17.60	10.80	19.71	19.34	12.70
7	30.68	29.80	24.06	21.66	26.77	24.25	15.19	16.43	10.43	16.08	21.32	20.25
8	30.74	29.81	23.77	21.41	26.90	24.35	14.99	16.04	10.15	16.46	17.70	21.57
9	30.79	25.18	23.51	24.98	27.06	24.27	12.54	15.82	9.94	15.66	17.37	21.75
10	30.81	29.06	23.25	24.51	27.26	24.21	13.05	23.76	11.97	16.11	16.45	22.24
11	30.67	29.31	23.04	20.99	27.38	24.22	13.21	24.77	12.07	17.15	16.10	22.57
12	30.68	29.32	22.80	20.78	27.59	18.35	13.26	25.20	10.23	17.96	15.12	16.37
13	30.62	29.43	22.57	20.62	27.69	17.76	13.35	20.65	12.38	24.03	21.21	21.20
14	30.65	29.56	22.46	20.66	27.73	17.16	13.30	23.46	19.97	24.93	22.22	21.52
15	30.65	29.67	22.26	25.21	27.83	17.05	10.87	23.72	20.51	25.19	22.70	22.40
16	30.03	29.71	22.18	25.80	27.99	16.90	11.93	18.27	19.91	19.69	22.99	22.87
17	30.18	29.78	22.09	26.19	28.07	16.68	12.55	17.61	20.90	21.88	23.10	23.40
18	30.20	29.83	21.96	26.46	28.21	16.49	12.87	17.20	15.55	18.63	23.02	24.31
19	30.23	25.66	21.86	26.59	28.27	16.40	13.08	22.02	20.89	18.15	18.30	24.71
20	30.28	28.86	21.70	26.61	28.25	16.28	13.24	22.59	21.54	18.23	21.29	24.58
21	30.36	29.15	21.68	25.66	28.39	16.27	13.38	16.94	14.49	18.41	22.43	21.11
22	30.02	29.34	21.62	26.38	28.40	16.12	13.68	17.18	14.37	18.27	22.48	18.72
23	30.05	29.09	26.55	26.58	28.36	15.87	13.78	17.61	15.67	21.20	22.59	18.11
24	25.26	29.23	27.02	26.83	28.18	15.84	13.76	17.12	21.67	23.41	23.10	24.29
25	29.01	29.47	27.38	26.88	27.86	15.97	13.73	16.73	22.42	18.73	23.28	24.38
26	25.12	29.59	23.51	22.62	27.61	20.94	13.70	16.44	22.58	16.58	17.55	23.29
27	24.34	29.32	26.81	26.74	27.51	22.76	13.94	15.89	22.25	16.51	21.91	24.83
28	28.17	29.47	27.41	27.33	27.31	23.05	14.10	14.87	23.33	14.57	22.57	24.95
29	28.67	29.57	27.85	27.45	---	23.32	21.06	19.85	24.53	13.22	22.61	24.93
30	28.95	29.67	28.05	23.03	---	17.74	21.81	19.73	24.68	13.61	22.95	22.02
31	29.19	---	28.15	22.46	---	16.78	---	21.62	---	14.25	23.14	---
MAX	30.81	29.83	29.73	28.22	28.40	27.11	21.81	25.20	24.68	25.19	23.28	24.95
WTR YR 1979	MEAN	22.21		HIGH	9.94		LOW	30.81				

GROUND-WATER RECORDS

AUGLAIZE COUNTY

403233083574500. Local number, AU-3.

LOCATION.--Lat 40°32'33", long 83°57'45", Hydrologic Unit 05080001, 1.0 mi (1.6 km) southwest of New Hampshire.

Owner: State of Ohio.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in (0.3 m), depth 380 ft (115.8 m), cased to 52 ft (15.8 m).

DATUM.--Altitude of land-surface datum is 1,020 ft (311 m), from topographic map. Measuring point: Floor of instrument shelter, 3.00 ft (0.914 m) above land-surface datum.

PERIOD OF RECORD.--December 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 11.87 ft (3.618 m) Feb. 7-8, 1977; minimum daily low, 5.51 ft (1.679 m) June 15, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 9.43 ft (2.874 m) Nov. 30; minimum daily low, 5.95 ft (1.814 m) Apr. 26.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.55	9.07	9.41	8.92	8.13	7.83	6.97	6.13	6.17	6.54	7.18	7.17
2	8.55	9.11	9.41	8.94	8.13	7.86	6.94	6.09	6.18	6.64	7.16	7.10
3	8.53	9.10	9.39	8.98	8.07	7.78	6.98	6.06	6.13	6.65	7.23	7.12
4	8.56	9.12	9.20	8.98	8.11	7.71	6.87	6.07	6.12	6.67	7.30	7.13
5	8.57	9.09	9.27	8.96	8.18	7.76	6.82	6.07	6.11	6.78	7.29	7.09
6	8.55	9.12	9.40	8.86	8.13	7.69	6.91	6.06	6.10	6.83	7.27	7.02
7	8.61	9.13	9.38	8.75	8.08	7.56	6.87	6.09	6.14	6.85	7.26	7.09
8	8.67	9.15	9.32	8.72	8.15	7.56	6.70	6.11	6.20	6.83	7.31	7.11
9	8.70	9.15	9.33	8.69	8.16	7.54	6.55	6.17	6.17	6.77	7.31	7.09
10	8.71	9.22	9.41	8.68	8.20	7.50	6.70	6.19	6.09	6.78	7.25	7.00
11	8.67	9.26	9.38	8.65	8.19	7.46	6.57	6.20	6.18	6.83	7.26	7.05
12	8.65	9.27	9.36	8.55	8.18	7.50	6.54	6.23	6.23	6.84	7.27	7.03
13	8.65	9.25	9.35	8.44	8.17	7.35	6.48	6.26	6.26	6.78	7.29	6.96
14	8.69	9.31	9.35	8.49	8.12	7.41	6.34	6.28	6.27	6.81	7.32	6.87
15	8.68	9.32	9.26	8.51	8.07	7.46	6.33	6.32	6.27	6.87	7.37	6.91
16	8.80	9.33	9.27	8.45	8.23	7.43	6.27	6.38	6.27	6.99	7.42	6.95
17	8.81	9.29	9.29	8.38	8.27	7.38	6.24	6.38	6.26	7.04	7.39	6.93
18	8.80	9.30	9.27	8.43	8.23	7.30	6.21	6.36	6.34	7.11	7.31	6.86
19	8.75	9.34	9.20	8.40	8.26	7.25	6.16	6.32	6.40	7.13	7.35	6.89
20	8.75	9.37	9.09	8.20	8.21	7.20	6.11	6.33	6.40	7.17	7.35	6.83
21	8.78	9.36	9.08	8.08	8.22	7.19	6.11	6.40	6.41	7.19	7.34	6.77
22	8.82	9.35	9.09	8.23	8.23	7.13	6.11	6.44	6.44	7.22	7.33	6.89
23	8.89	9.26	9.12	8.16	8.18	6.98	6.13	6.40	6.49	7.24	7.26	6.90
24	8.89	9.32	9.03	8.02	8.23	6.92	6.08	6.35	6.54	7.26	7.25	6.87
25	8.81	9.33	9.04	8.15	8.17	6.98	6.04	6.23	6.59	7.20	7.32	6.87
26	8.89	9.31	9.13	8.11	7.99	7.05	5.95	6.17	6.66	7.13	7.31	6.89
27	8.91	9.28	9.20	8.07	7.97	7.09	5.99	6.18	6.64	7.16	7.26	6.87
28	9.01	9.39	9.18	8.04	7.93	7.03	6.03	6.16	6.67	7.12	7.21	6.81
29	9.06	9.36	9.15	8.11	---	7.00	6.05	6.17	6.64	7.12	7.15	6.80
30	9.08	9.43	9.11	8.11	---	6.98	6.07	6.17	6.54	7.14	7.21	6.80
31	9.06	---	9.09	8.04	---	7.00	---	6.15	---	7.16	7.23	---
MAX	9.08	9.43	9.41	8.98	8.27	7.86	6.98	6.44	6.67	7.26	7.42	7.17
WTR YR 1979	MEAN	7.61		HIGH	5.95		LOW	9.43				

GROUND-WATER RECORDS

333

BELMONT COUNTY

400619080423200. Local number, B-1.

LOCATION.--Lat 40°06'19", long 80°42'32", Hydrologic Unit 05030106, in the northeast part of Martins Ferry.

Owner: City of Martins Ferry.

AQUIFER.--Gravel of Quaternary Age.

WELL CHARACTERISTICS.--Unused drilled water-table well, diameter 40 in (1.02 m), depth drilled 79 ft (24.1 m), present depth 61 ft (18.6 m), cased.

DATUM.--Altitude of land-surface datum is 1,160 ft (354 m), from topographic map. Measuring point: Surface of instrument platform, 13.40 ft (4.084 m) above land-surface datum.

REMARKS.--Water level affected by Ohio River stage and by pumping from nearby municipal wells.

PERIOD OF RECORD.--June 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 38.95 ft (11.872 m) Sept. 27, 1968; minimum daily low, 0.05 ft (0.015 m) Mar. 11, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 35.52 ft (10.826 m) Feb. 15; minimum recorded daily low, 15.49 ft (4.721 m) Mar. 6.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32.00	33.74		---	30.59	23.96	27.72	32.96	31.49	32.63	33.59	
2	33.42	33.84		---	31.66	23.52	29.12	32.86	31.04	33.80	33.91	
3	33.47	33.78		---	31.07	21.85	26.79	32.87	30.07	33.60	33.77	
4	33.47	33.88		---	30.36	21.64	26.74	33.41	32.04	32.49	32.80	
5	33.81	32.43		---	32.22	19.68	27.07	31.75	32.82	33.23	32.77	
6	33.74	33.17		---	33.12	15.49	28.42	30.84	32.93	33.56	33.85	
7	32.73	---		---	33.64	17.50	27.57	32.68	33.72	32.72	34.04	
8	32.37	---		---	33.69	20.60	27.57	33.17	33.72	31.93	33.94	
9	33.37	---		---	34.85	21.50	28.82	33.79	33.66	33.40	34.13	
10	33.65	---		---	34.09	21.35	24.51	33.39	32.19	33.90	34.45	
11	33.82	---		---	32.71	21.59	23.53	33.69	33.53	34.23	32.64	
12	34.10	---		---	33.97	23.13	24.67	33.75	33.51	34.33	31.47	
13	33.65	---		---	34.95	24.27	24.49	31.63	34.29	34.52	33.32	
14	32.63	---		---	35.47	25.72	24.44	32.10	34.87	33.42	34.07	
15	31.49	---		---	35.52	26.42	25.27	32.57	34.87	31.61	31.11	
16	32.45	---		---	35.32	27.15	28.18	33.15	34.80	33.53	---	
17	33.03	---		---	34.14	27.73	28.15	33.37	33.66	34.37	---	
18	32.93	---		---	31.91	26.23	28.39	33.94	34.21	34.38	---	
19	33.38	---		---	32.68	29.98	29.19	32.93	34.33	34.63	---	
20	34.45	---		---	34.11	30.68	30.06	32.78	34.60	34.56	---	
21	32.61	---		---	34.72	31.29	29.43	33.63	34.94	34.32	---	
22	33.17	---		---	34.76	32.18	28.92	33.84	34.90	33.45	---	
23	33.73	---		---	32.67	32.78	31.71	34.47	34.11	34.10	---	
24	33.88	---		---	28.47	32.38	32.38	34.21	33.39	34.32	---	
25	33.96	---		---	23.03	31.47	33.02	32.84	34.56	34.46	---	
26	34.09	---		---	17.46	30.78	32.54	27.65	34.50	34.47	---	
27	33.70	---		---	17.79	31.14	32.34	27.75	34.95	34.65	---	
28	32.48	---		---	22.79	31.34	31.59	27.10	35.23	33.27	---	
29	32.90	---		---	---	31.63	30.22	27.95	34.95	32.07	---	
30	33.19	---		---	---	31.43	32.27	29.52	34.19	32.02	---	
31	33.47	---		30.36	---	29.56	---	30.96	---	33.34	---	
MAX	34.45	33.88		30.36	35.52	32.78	33.02	34.47	35.23	34.65	34.45	
WTR YR 1979	MEAN	31.46		HIGH	15.49	LOW	35.52					

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

GROUND-WATER RECORDS

BUTLER COUNTY

391805084261800. Local number, BU-9.

LOCATION.--Lat 39°18'05", long 84°26'18", Hydrologic Unit 05090203, 2.5 mi (4.0 km) northwest of Sharonville.

Owner: Olinkraft, Inc.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (0.20 m), depth 85 ft (26 m), cased.

DATUM.--Altitude of land-surface datum is 586.89 ft (178.884 m). Measuring point: Floor of instrument shelter, 4.66 ft (1.420 m) above land-surface datum.

REMARKS.--Prior to water year 1978, well diameter reported as 26 in (0.66 m).

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 24.40 ft (7.437 m) Mar. 16, 1954; minimum daily low, 4.40 ft (1.341 m) Aug. 3, 1958.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 14.23 ft (4.337 m) Nov. 10; minimum daily low, 5.80 ft (1.768 m) Feb. 28.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.70	13.98	13.03	9.50	9.60	6.01	10.14	9.41		---	9.18	8.77
2	13.79	14.03	13.10	8.14	9.65	6.15	9.51	9.52		---	7.65	8.85
3	13.68	14.08	12.81	7.69	9.55	6.12	9.11	9.39		---	6.68	8.98
4	13.87	13.96	11.41	7.53	9.93	6.41	8.72	9.25		---	6.44	9.13
5	13.83	13.86	10.45	7.48	10.00	6.62	8.11	9.03		---	6.37	9.35
6	14.01	13.98	10.91	7.44	9.95	6.71	8.14	8.77		---	6.59	9.73
7	14.03	14.03	10.76	7.58	10.13	6.94	8.05	8.94		---	6.91	10.14
8	14.11	14.14	10.53	8.00	10.31	7.32	7.53	9.12		---	7.20	10.39
9	14.15	14.04	9.05	8.23	10.63	7.53	7.90	9.41		---	7.47	10.45
10	14.21	14.23	8.32	8.55	10.63	7.74	7.98	9.47		---	7.58	10.68
11	14.05	14.20	7.99	8.66	10.67	7.89	7.97	9.68		---	7.69	10.95
12	14.02	14.10	7.82	8.66	10.81	8.14	7.90	9.66		---	7.76	11.07
13	14.03	14.02	7.91	8.58	10.92	8.16	7.83	9.64		---	7.99	11.22
14	13.87	14.18	8.01	9.32	10.83	8.67	7.21	9.78		---	8.28	9.21
15	13.78	14.14	8.12	9.39	10.83	8.99	6.36	10.21		---	8.52	7.13
16	13.82	14.06	8.34	9.32	11.41	9.14	6.27	10.49		---	8.74	6.48
17	14.00	13.68	8.62	9.19	11.43	9.17	6.47	10.65		---	8.97	6.23
18	13.82	13.60	8.62	9.33	11.07	9.12	6.74	10.72		---	8.97	6.39
19	13.66	13.46	8.77	9.23	11.18	9.33	7.00	10.68		---	8.95	6.65
20	13.76	13.44	8.72	8.87	11.13	9.48	7.29	10.69		---	8.99	6.82
21	13.74	13.39	9.20	8.80	10.73	9.67	7.43	11.07		---	7.74	6.86
22	13.71	13.33	9.31	9.05	10.11	9.75	7.53	11.31		---	7.19	7.06
23	13.92	12.95	9.40	8.96	9.02	9.61	7.75	11.29		---	7.28	7.08
24	13.90	13.28	9.20	8.64	7.82	9.44	7.83	11.48	10.12	7.56	7.22	
25	13.61	13.26	9.52	8.84	6.94	9.71	8.00	11.41	9.50	7.81	7.45	
26	13.86	13.11	9.95	8.88	6.06	10.00	8.27	11.29	9.16	7.81	7.61	
27	13.94	12.93	10.13	8.78	5.94	10.24	8.53	11.19	9.06	7.76	7.78	
28	13.96	13.17	10.26	8.98	5.80	10.17	8.92	11.22	9.04	7.96	7.71	
29	14.01	13.03	10.28	9.14	---	10.11	8.93	11.45	8.87	8.29	7.70	
30	13.95	13.07	10.29	9.22	---	10.13	9.21	11.41	8.83	8.58	7.66	
31	13.89	---	10.20	9.36	---	10.15	---	---	9.08	8.77	---	
MAX	14.21	14.23	13.10	9.50	11.43	10.24	10.14	11.48	10.12	9.18	11.22	
WTR YR 1979	MEAN	9.86	HIGH	5.80	LOW	14.23						

GROUND-WATER RECORDS

335

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 (2.4 km) east of Ross.

Owner: City of Cincinnati.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in (0.15 m), depth 157 ft (47.9 m), cased.

DATUM.--Altitude of land-surface datum is 547.73 ft (166.948 m). Measuring point: Floor of instrument shelter 7.80 ft (2.377 m) 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, 21.74 ft (6.626 m) Feb. 9, 1977; minimum daily low, 2.00 ft (0.610 m) above land surface, May 24, 25, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 20.55 ft (6.264 m), Oct. 3; minimum daily low, 10.55 ft (3.216 m) Mar. 6.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.40	19.75	17.90	17.65	---	---	15.35	16.10	17.40	---	15.25	14.45
2	20.50	19.65	18.10	17.90	---	13.55	15.55	16.75	17.55	---	14.10	14.65
3	20.55	19.50	17.45	18.20	---	13.15	16.00	16.79	17.60	---	14.60	14.95
4	20.55	19.75	15.40	18.40	---	12.40	16.20	16.75	18.40	19.00	15.25	15.00
5	20.30	19.75	14.60	18.60	---	11.20	15.50	16.90	18.70	18.55	16.10	15.00
6	20.40	19.80	---	18.55	---	10.55	15.50	17.02	18.80	18.60	16.45	15.15
7	20.40	18.75	---	18.50	---	11.70	15.50	17.25	18.55	18.75	16.15	15.20
8	20.45	19.00	---	18.15	---	12.30	13.40	17.50	16.30	18.80	16.05	15.40
9	20.50	19.45	---	12.60	18.90	13.20	12.50	18.00	16.35	19.20	16.65	15.55
10	20.25	---	---	17.65	18.85	15.95	---	---	17.15	19.20	17.15	16.80
11	20.25	---	---	18.00	18.80	16.15	---	18.30	17.45	19.15	17.25	17.05
12	20.05	---	---	18.30	18.95	16.25	---	18.45	17.80	19.10	17.00	17.20
13	20.00	---	---	18.40	---	16.45	---	18.40	17.85	18.30	16.75	17.25
14	18.10	---	---	18.40	---	16.55	---	18.40	18.10	17.95	16.95	15.60
15	17.55	---	---	---	---	16.20	---	17.00	18.35	17.95	17.35	11.45
16	17.60	---	---	18.15	---	16.20	11.25	16.80	18.55	17.10	17.45	13.00
17	17.85	---	---	18.25	---	16.20	12.75	17.80	18.65	17.15	17.10	13.95
18	18.00	---	---	18.15	---	15.65	13.90	18.05	18.85	17.45	17.20	14.50
19	---	---	---	18.20	---	15.65	14.15	18.05	18.80	---	17.20	14.90
20	---	18.35	---	18.15	---	15.45	14.25	17.95	18.50	---	16.10	16.20
21	---	17.45	---	18.00	---	15.55	14.60	18.60	18.30	---	15.60	16.45
22	---	17.05	---	17.60	---	15.35	14.90	18.90	18.00	---	14.20	16.45
23	---	16.95	17.05	17.75	---	15.35	14.95	19.05	18.25	---	14.15	16.40
24	---	18.10	17.25	17.70	---	15.55	15.15	19.10	18.40	17.90	13.40	16.50
25	---	18.15	17.35	17.45	---	15.85	15.30	18.80	18.85	17.50	13.10	15.30
26	19.50	18.15	17.45	17.60	---	16.05	17.05	18.60	18.95	17.40	13.45	15.35
27	19.45	17.35	17.45	---	---	16.05	17.25	17.90	19.00	17.30	14.25	15.35
28	19.50	17.05	17.60	---	---	16.25	17.35	16.95	19.00	16.95	14.70	15.35
29	19.40	17.10	17.50	---	---	16.10	17.50	17.25	---	16.40	14.80	15.00
30	19.65	17.85	17.35	---	---	16.00	16.45	17.60	---	13.90	14.25	15.15
31	19.75	---	17.60	---	---	15.80	---	17.65	---	14.75	14.30	---
MAX	20.55	19.80	18.10	18.60	18.95	16.55	17.50	19.10	19.00	19.20	17.45	17.25
WTR YR 1979	MEAN	16.99		HIGH	10.55		LOW	20.55				

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

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 (0.15 m), depth 176 ft (53.6 m), cased.

DATUM.--Altitude of land-surface datum is 572.54 ft (174.510 m), measuring point: Floor of instrument shelter 1.93 ft (0.588 m) 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, 31.17 ft (9.501 m) Jan. 13, 1977; minimum daily low, 11.45 ft (3.490 m) June 6, 1947.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 29.85 ft (9.098 m) Dec. 8; minimum daily low, 22.15 ft (6.751 m) Apr. 21.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.61	29.11	29.45	---	26.34	24.29	23.74	22.96	24.38	26.07	25.77	24.42
2	28.66	29.16	29.45	26.81	26.32	24.24	23.77	23.08	24.42	26.07	25.67	24.42
3	28.70	29.21	29.45	26.51	26.23	24.13	23.77	23.13	24.46	26.08	24.87	24.42
4	28.75	29.24	29.44	26.38	26.25	24.02	23.70	23.14	24.50	26.08	24.55	24.43
5	28.75	29.26	29.35	26.32	26.28	23.93	23.53	23.14	24.56	26.09	24.70	24.45
6	28.75	29.29	29.15	26.10	26.28	23.58	23.39	23.14	24.63	26.08	24.75	24.51
7	28.73	29.33	29.05	26.00	26.26	23.21	23.35	23.14	24.70	26.13	24.77	24.60
8	28.71	29.34	29.85	25.95	26.23	22.97	23.35	23.15	24.79	26.15	24.81	24.65
9	28.66	29.37	28.60	26.01	26.20	22.84	23.39	23.18	24.90	26.16	24.83	24.70
10	28.65	29.43	29.45	26.04	26.25	22.74	23.41	23.22	25.03	26.17	24.88	24.75
11	28.64	29.48	28.25	26.06	26.31	22.77	23.41	23.26	25.15	26.18	24.91	24.82
12	28.64	29.54	28.10	26.06	26.37	22.86	23.41	23.30	25.29	26.18	24.94	24.85
13	28.63	29.56	27.90	26.04	26.47	22.89	23.33	23.37	25.40	26.18	24.99	24.91
14	28.60	29.60	27.75	26.05	26.51	22.91	23.20	23.42	25.50	26.14	25.04	24.91
15	28.55	29.65	27.72	26.07	26.52	22.95	22.86	23.48	25.60	26.08	25.11	24.14
16	28.51	29.70	27.57	26.10	26.54	23.00	22.69	23.53	25.69	26.00	25.16	23.54
17	28.51	29.72	27.51	26.17	26.55	23.03	22.47	23.59	25.79	25.97	25.23	23.34
18	28.50	29.73	27.40	26.18	26.56	23.12	22.31	23.65	25.82	25.98	25.26	23.22
19	28.50	29.73	27.45	26.25	26.57	23.22	22.21	23.70	25.92	26.03	25.26	23.20
20	28.49	29.69	27.49	26.26	26.58	23.32	22.16	23.77	25.98	26.07	25.17	23.20
21	28.49	29.68	27.49	26.28	26.58	23.38	22.15	23.83	26.01	26.12	24.98	23.22
22	28.49	29.67	27.46	26.28	26.57	23.40	22.22	23.90	26.04	26.20	24.88	23.24
23	28.55	29.67	27.39	---	26.50	23.42	22.27	23.97	26.04	26.25	24.75	23.25
24	28.63	29.55	27.39	---	26.45	23.43	22.29	24.05	26.04	26.27	24.60	23.27
25	28.67	29.49	27.40	---	26.44	23.48	22.32	24.12	26.02	26.28	24.52	23.30
26	28.74	29.46	27.40	---	26.18	23.57	22.38	24.18	26.00	26.28	24.47	23.33
27	28.78	29.45	27.40	---	24.65	23.62	22.49	24.23	26.00	26.26	24.46	23.40
28	28.84	29.45	27.43	---	24.38	23.65	22.52	24.27	26.05	26.21	24.44	23.41
29	28.89	29.45	27.44	---	---	23.68	22.72	24.29	26.07	---	24.42	23.42
30	---	29.46	27.43	---	---	23.69	22.92	24.30	26.07	---	24.42	23.43
31	29.05	---	27.37	---	---	23.71	---	24.35	---	25.77	24.42	---
MAX	29.05	29.73	29.85	26.81	26.58	24.29	23.77	24.35	26.07	26.28	25.77	24.91
WTR YR 1979	MEAN	25.73		HIGH	22.15		LOW	29.85				

GROUND-WATER RECORDS

337

BUTLER COUNTY--Continued

392021084340300. Local number, BU-56.

LOCATION.--Lat 39°20'21", long 84°34'03", Hydrologic Unit 05080002, 1.3 mi (2.1 km) east of the Great Miami River in Fairfield.

Owner: Hamilton Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 5 in (0.13 m), depth 58 ft (17.7 m), cased.

DATUM.--Altitude of land-surface datum is 583.62 ft (177.887 m). (Levels by Miami Conservancy District.)

Measuring point: Floor of instrument shelter, 3.00 ft (0.914 m) above land-surface datum.

PERIOD OF RECORD.--November 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 39.11 ft (11.921 m) Feb. 25-26, 1977; minimum daily low, 26.81 ft (8.172 m) Apr. 10, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 36.80 ft (11.216 m) Nov. 20; minimum daily low, 28.51 ft (9.600 m) Apr. 25.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34.14	35.94	36.31	34.26	32.91	31.94	30.04	28.87	30.51	31.63	31.89	30.54
2	34.28	36.00	36.34	34.24	32.86	31.82	30.07	28.91	30.53	31.66	31.44	30.61
3	34.36	36.05	36.33	34.21	32.88	31.56	29.95	28.96	30.54	31.68	30.72	30.60
4	34.41	36.10	36.31	34.11	32.89	31.42	29.55	29.01	30.61	31.72	30.71	30.60
5	34.57	36.15	36.24	34.02	32.88	31.36	29.58	29.02	30.69	31.74	30.70	30.58
6	34.67	36.21	36.19	33.89	32.84	31.24	29.56	29.02	30.79	31.75	30.68	30.59
7	34.74	36.27	36.15	33.74	32.88	31.08	29.73	29.04	30.82	31.75	30.71	30.63
8	---	36.31	36.10	33.64	32.90	30.92	29.71	29.07	30.86	31.77	30.74	30.68
9	---	36.36	36.02	33.56	32.91	30.84	29.82	29.14	30.88	31.78	30.76	30.70
10	---	36.41	35.76	33.49	32.92	30.73	29.85	29.23	30.91	31.80	30.80	30.71
11	---	36.47	35.66	33.42	32.93	30.62	29.50	29.32	30.71	31.84	30.81	30.72
12	34.78	36.51	35.55	33.34	32.99	30.56	29.55	29.40	30.85	31.85	30.81	30.76
13	34.70	36.55	35.41	33.25	33.00	30.47	29.34	29.43	30.96	31.84	30.79	30.78
14	34.79	36.61	35.32	33.28	32.96	30.41	29.26	29.46	30.98	31.80	30.80	30.71
15	34.82	36.66	35.21	33.27	33.07	30.40	29.26	29.51	31.07	31.69	30.84	30.05
16	34.88	36.69	35.12	33.21	33.09	30.29	29.23	29.59	31.15	31.66	30.85	29.83
17	34.90	36.72	34.98	33.16	33.06	30.14	28.97	29.64	31.27	31.64	30.85	29.70
18	34.92	36.75	34.92	33.16	33.11	30.15	28.87	29.70	31.39	31.63	30.86	29.57
19	34.95	36.79	34.83	33.10	33.10	30.16	28.73	29.77	31.48	31.62	30.89	29.48
20	35.04	36.80	34.77	33.04	33.07	30.18	28.74	29.87	31.49	31.64	30.89	29.43
21	35.14	36.78	34.66	33.07	33.09	30.20	28.54	29.97	31.48	31.66	30.84	29.47
22	35.25	36.72	34.66	33.08	33.05	30.11	28.57	30.05	31.46	31.71	30.80	29.48
23	35.35	36.64	34.63	32.99	32.92	30.00	28.58	30.12	31.47	31.77	30.78	29.44
24	35.41	36.45	34.57	33.00	32.71	29.97	28.58	30.21	31.50	31.82	30.81	29.38
25	35.48	36.46	34.58	32.98	32.62	30.12	28.51	30.24	31.52	31.83	30.83	29.33
26	35.57	36.46	34.41	32.94	32.50	30.20	28.52	30.25	31.54	31.86	30.82	29.30
27	35.63	36.44	34.45	32.89	32.35	30.23	28.51	30.29	31.56	31.89	30.77	29.28
28	35.70	36.44	34.44	32.91	32.15	29.92	28.70	30.24	31.59	31.90	30.72	29.25
29	35.77	36.43	34.43	32.90	---	29.84	28.74	30.25	31.60	31.91	30.68	29.24
30	35.82	36.38	34.42	32.87	---	29.88	28.81	30.39	31.63	31.90	30.68	29.23
31	35.87	---	34.39	32.91	---	29.98	---	30.48	---	31.89	30.66	---
MAX	35.87	36.80	36.34	34.26	33.11	31.94	30.07	30.48	31.63	31.91	31.89	30.78
WTR YR 1979	MEAN	32.14		HIGH	28.51		LOW	36.80				

GROUND-WATER RECORDS

BUTLER COUNTY--Continued

392048084311400. Local number, BU-8.

LOCATION.--Lat 39°20'48", long 84°31'14", Hydrologic Unit 05080002, Symmes and Gilmore Road, east of Hamilton.

Owner: Hamilton Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 6 in (0.15 m), depth 200 ft (61.0 m), cased.

DATUM.--Altitude of land-surface datum is 630 ft (192 m), from topographic map. Measuring point: Floor of instrument shelter 4.13 ft (1.259 m) 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 (21.854 m) Oct. 24, 1944; minimum daily low, 38.24 ft (11.556 m) June 8, 1947.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 54.83 ft (16.712 m) Dec. 4, 6; minimum daily low, 42.26 ft (12.881 m) Sept. 30.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51.52	53.06	54.13	---	48.94	46.26	46.00	44.32	46.63	46.38	47.37	44.15
2	51.70	53.09	54.12	50.64	48.97	46.22	45.82	44.31	46.65	46.57	47.24	44.05
3	51.69	53.10	54.11	50.52	---	46.05	45.96	44.30	46.58	46.62	46.13	44.14
4	51.88	53.10	54.83	50.28	---	45.50	45.96	44.38	46.62	46.57	45.33	44.32
5	51.88	53.05	54.77	50.12	49.04	45.47	45.40	44.38	46.72	46.63	44.87	44.34
6	52.03	53.17	54.83	49.80	49.04	45.47	45.40	44.13	46.93	46.62	44.60	44.52
7	52.10	53.30	54.82	49.39	48.95	45.21	45.42	44.09	47.05	46.55	44.58	44.77
8	52.17	53.35	53.57	49.14	49.21	45.17	45.25	44.17	47.12	46.47	44.65	44.82
9	52.17	53.35	53.40	49.31	49.44	45.28	44.52	44.25	47.11	46.36	44.72	44.84
10	52.23	53.46	53.14	49.30	49.45	45.23	44.87	44.29	46.92	46.37	44.71	44.86
11	52.19	53.50	52.79	49.37	49.40	45.18	44.89	44.39	47.04	46.48	44.69	45.07
12	52.30	53.50	52.37	49.38	49.33	45.37	44.80	44.46	47.16	46.50	44.72	45.14
13	52.40	53.48	51.97	49.16	49.51	45.33	44.51	44.50	47.78	46.30	44.75	45.18
14	52.39	53.70	51.92	48.92	49.51	45.55	44.33	44.64	47.83	46.35	44.82	45.07
15	52.37	53.71	51.67	49.65	49.82	45.76	43.93	44.95	47.85	46.73	44.95	43.90
16	52.60	53.75	51.45	49.66	49.86	45.76	43.42	45.14	47.83	45.25	44.99	42.88
17	52.63	53.71	51.66	49.49	50.08	45.63	43.35	45.17	47.70	46.28	44.97	42.45
18	52.57	53.85	51.64	49.53	50.07	45.47	43.38	45.12	47.51	46.32	44.82	42.31
19	52.45	53.91	51.28	49.58	49.83	45.44	43.39	45.08	47.60	46.35	44.84	42.41
20	52.52	53.92	51.24	---	49.86	45.55	43.39	45.17	47.50	46.45	44.85	42.42
21	52.54	53.90	51.31	---	49.81	45.67	43.37	45.50	47.07	46.51	44.72	42.38
22	52.55	53.91	51.44	---	49.81	45.65	43.44	45.61	46.68	46.66	44.40	42.35
23	52.73	53.85	51.43	---	49.74	45.40	43.52	45.61	46.48	46.81	44.25	42.35
24	52.73	53.87	51.41	---	49.03	45.39	43.58	45.77	46.37	46.82	44.29	42.30
25	52.55	53.90	51.15	---	48.46	45.70	43.55	45.87	46.47	46.99	44.34	42.38
26	52.77	53.86	51.25	---	47.47	45.96	43.50	45.87	46.50	47.12	44.32	42.47
27	52.80	53.85	51.46	---	47.11	46.10	43.62	45.96	46.51	47.13	44.14	42.44
28	52.95	54.20	51.46	---	46.87	46.05	43.80	46.08	46.54	47.16	44.01	42.38
29	53.00	54.21	51.46	---	---	45.89	43.98	46.24	46.53	47.17	44.13	42.36
30	53.00	54.12	---	---	---	45.94	44.17	46.37	46.45	---	44.24	42.26
31	53.00	---	---	---	---	45.99	---	46.47	---	47.39	44.23	---
MAX	53.00	54.21	54.83	50.64	50.08	46.26	46.00	46.47	47.85	47.39	47.37	45.18
WTR YR 1979	MEAN	47.76		HIGH	42.26		LOW	54.83				

GROUND-WATER RECORDS

339

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 (90 m) 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 (0.76 m), depth 168 ft (51.2 m) cased.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CAC03)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	BICARBONATE (MG/L AS HC03)	CARBONATE (MG/L AS C03)
NOV 30...	1330	910	7.0	16.0	410	110	34	336	0
FEB 15...	1400	920	7.4	15.0	410	110	33	400	0
MAY 14...	1300	825	7.0	17.0	410	110	34	410	0
AUG 02...	1100	885	7.2	16.5	410	110	33	394	0

DATE	ALKALINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS C02)	SULFATE DIS-SOLVED (MG/L AS S04)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
NOV 30...	280	54	96	50	.2	536	1.7	.00	--
FEB 15...	330	25	100	46	.8	550	1.5	.00	--
MAY 14...	340	66	100	49	.1	610	1.6	.00	--
AUG 02...	320	40	110	48	.3	635	1.7	.01	30

DATE	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 30...	--	--	--	60	--	--	0	--	--
FEB 15...	--	--	--	50	--	--	0	--	--
MAY 14...	--	--	--	600	--	--	20	--	--
AUG 02...	10	13	5	160	4	0	10	100	10

GROUND-WATER RECORDS

BUTLER COUNTY--Continued

392515084322000. Local number, BU-5.

LOCATION.--Lat 39°25'15", long 84°32'22", Hydrologic Unit 05080002, 2.0 mi (3.2 km) 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 (0.46 m), depth 110 ft (33.5 m) cased.

DATUM.--Altitude of land-surface datum is 590 ft (180 m), from topographic map. Measuring point: Floor of instrument shelter 5.71 ft (1.740 m) above land surface datum.

REMARKS.--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 (12,817 m) Sept. 16-17, 1954; minimum daily low, 4.10 ft (1,250 m) Jan. 23, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 25.25 ft (7,696 m) Nov. 3; minimum daily low, 14.46 ft (4,407 m) Mar. 10.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.07	20.51	21.09	23.37	22.07	20.14	17.32	15.88	20.92	17.63	17.06	17.49
2	20.08	20.61	20.92	17.51	17.74	19.86	22.56	15.86	19.92	20.67	21.36	20.98
3	20.09	20.25	20.76	17.06	17.69	15.26	23.48	15.89	17.13	20.97	17.01	17.75
4	20.14	20.82	20.50	20.89	17.71	14.76	23.71	15.77	21.30	20.63	16.98	17.45
5	22.94	20.78	20.09	17.18	---	18.95	23.98	15.70	17.34	18.09	17.03	17.24
6	20.35	20.73	20.00	17.11	---	18.80	24.23	15.77	21.36	17.97	17.02	17.09
7	20.31	24.22	19.90	17.17	---	18.77	18.40	15.89	21.50	17.90	17.01	16.97
8	20.34	20.90	22.76	17.33	---	18.94	17.48	15.93	17.49	17.85	16.93	16.92
9	20.35	20.88	19.41	17.22	---	19.11	21.98	15.98	17.25	17.87	21.61	16.86
10	20.37	20.82	18.95	17.30	---	14.46	22.91	16.08	17.16	17.93	17.54	21.35
11	20.39	20.81	18.76	21.37	---	14.51	22.83	19.76	17.14	18.21	17.30	20.66
12	23.48	20.82	18.76	17.62	---	19.44	22.56	16.28	17.17	22.61	17.23	16.88
13	20.61	20.84	18.80	17.49	---	14.89	22.15	16.22	17.20	18.09	17.27	16.67
14	20.36	20.91	22.18	17.58	---	19.63	16.10	16.30	21.07	18.19	17.24	16.56
15	20.27	20.87	18.92	17.60	---	20.03	15.23	16.35	21.14	17.96	17.25	16.51
16	20.23	20.83	18.80	21.23	---	19.75	20.54	16.31	17.58	22.01	17.19	16.51
17	20.24	20.83	18.84	17.78	---	15.68	20.47	16.34	17.55	22.34	17.16	16.50
18	20.30	20.91	18.77	17.52	---	15.57	20.70	20.77	17.48	18.40	17.09	16.57
19	23.12	20.77	18.85	17.42	---	15.80	19.04	16.41	17.51	18.32	17.12	16.52
20	20.45	20.70	22.74	17.27	19.53	20.91	20.76	16.46	17.46	22.53	17.08	16.57
21	20.38	20.64	18.99	17.28	24.05	21.31	15.38	21.31	22.08	18.57	17.13	16.53
22	20.33	20.65	18.91	17.28	23.68	21.30	15.34	17.09	17.72	18.79	17.14	---
23	20.38	24.11	18.93	17.25	22.97	20.73	20.89	16.80	17.54	18.85	17.20	---
24	20.34	20.83	18.88	17.25	17.15	16.11	21.15	20.56	17.54	18.51	17.14	---
25	20.37	20.72	21.91	17.13	16.05	15.88	21.10	16.97	17.52	18.37	17.30	---
26	20.40	20.71	19.21	18.81	19.86	20.70	15.92	16.85	17.52	18.27	17.20	---
27	20.62	20.67	19.14	17.13	20.06	21.27	15.82	16.83	17.53	18.22	20.72	---
28	20.43	20.70	19.17	17.18	15.28	22.92	15.79	20.82	21.76	18.07	17.60	---
29	20.45	20.70	19.07	17.19	---	23.57	15.80	16.83	17.74	17.82	17.45	---
30	20.48	24.87	18.47	17.23	---	23.89	15.88	16.81	17.64	17.30	17.37	---
31	20.55	---	18.89	17.37	---	18.03	---	16.86	---	17.11	17.44	---
MAX	23.48	25.25	22.76	23.37	24.05	23.89	24.23	21.31	22.08	22.61	21.61	21.35
WTR YR 1979	MEAN	18.92		HIGH	14.46		LOW	25.25				

GROUND-WATER RECORDS

341

BUTLER COUNTY--Continued

392939084231700. Local number, BU-3.

LOCATION.--Lat 39°29'39", long 84°23'17", Hydrologic Unit 05080002, Armco Steel Corp. Rt. 122 in Middletown.

Owner: Armco Steel Corp.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 24 in (0.61 m), depth 250 ft (76.2 m) cased.

DATUM.--Altitude of land-surface datum is 668 ft (204 m), from topographic map. Measuring point: Floor of instrument shelter 1.08 ft (0.329 m) 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 (44.888 m) Apr. 4, 1955; minimum daily low, 50.30 ft (15.331 m) May 15, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 60.57 ft (18.462 m) Oct. 10; minimum daily low, 50.30 ft (15.331 m) May 15.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60.56	50.15	60.08	---	57.33	56.55	---	51.12	52.05	---	54.39	55.51
2	60.51	50.15	60.03	56.31	57.33	56.55	---	51.00	52.05	---	---	55.33
3	60.47	50.15	60.02	56.28	57.18	56.31	---	50.80	51.96	---	---	55.47
4	60.54	50.13	59.64	56.27	57.12	56.21	---	50.84	51.90	52.50	---	---
5	60.53	59.96	59.44	56.23	57.12	---	---	50.75	52.01	52.56	---	---
6	60.45	59.95	59.32	55.93	57.07	55.90	---	50.52	52.15	52.69	---	---
7	60.45	50.15	59.31	55.80	57.09	55.60	---	50.44	52.19	52.80	---	---
8	60.44	50.16	58.82	55.97	57.12	55.63	---	50.43	52.33	52.79	---	---
9	60.20	50.14	58.67	56.73	57.17	56.99	---	50.40	52.33	52.77	---	---
10	60.57	50.19	58.58	56.94	57.08	57.08	---	50.65	52.33	52.68	---	---
11	60.04	50.20	58.50	56.96	57.06	57.06	---	50.64	52.36	52.74	---	---
12	60.25	50.20	58.28	56.95	56.94	55.48	---	50.50	52.43	52.84	---	---
13	60.23	50.14	58.03	56.73	56.94	54.70	---	50.48	52.46	52.87	---	---
14	60.20	50.23	58.03	57.33	56.88	55.03	---	50.35	52.48	52.82	---	---
15	60.19	50.24	57.74	57.33	56.95	55.18	---	50.30	52.47	52.86	---	---
16	60.20	50.20	57.68	57.21	57.14	55.20	---	51.36	52.42	53.16	---	---
17	60.34	50.16	57.68	57.47	57.14	---	---	51.52	52.45	54.11	---	---
18	60.25	50.25	57.50	57.51	57.05	55.02	---	51.65	52.45	53.40	---	---
19	60.19	50.26	57.25	57.45	57.09	56.00	---	51.70	52.45	54.05	54.92	---
20	60.18	50.20	57.11	57.09	56.93	56.35	---	51.75	52.42	54.59	55.02	---
21	60.19	50.20	57.21	57.42	56.93	56.50	---	51.80	52.32	54.63	55.03	---
22	60.14	50.20	57.20	57.51	56.89	56.48	---	51.97	52.36	54.72	55.02	---
23	60.24	50.04	57.09	57.44	56.49	56.55	---	51.99	52.36	54.97	55.14	---
24	60.24	50.18	56.74	57.50	56.53	56.85	---	51.96	52.38	55.25	55.19	---
25	60.09	50.18	56.75	57.56	56.44	56.98	---	51.88	52.44	55.25	55.49	---
26	60.35	50.07	56.84	57.52	56.62	57.11	---	51.88	52.43	55.30	55.15	---
27	60.35	50.02	56.83	57.36	56.63	56.99	---	51.83	52.45	53.71	55.08	54.54
28	60.30	50.18	56.80	57.46	56.55	56.19	---	51.73	52.50	53.81	55.16	54.62
29	60.33	60.18	56.62	57.50	---	56.35	---	51.83	---	54.06	55.52	---
30	---	50.08	56.48	57.49	---	---	51.12	51.93	---	54.12	55.50	54.47
31	60.13	---	56.34	57.27	---	---	---	52.00	---	54.32	55.52	---
MAX	60.57	50.26	60.08	57.56	57.33	57.11	51.12	52.00	52.50	55.30	55.52	55.51
WTR YR 1979	MEAN	56.13		HIGH	50.30		LOW	50.57				

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

GROUND-WATER RECORDS

BUTLER COUNTY--Continued

393103084240900. Local number, BU-2

LOCATION.--Lat 39°31'03", long 84°24'09", Hydrologic Unit 05080002, in basement of YMCA in Middletown.

Owner: Middletown YMCA.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in (0.3 m), depth 88 ft (25.8 m), cased.

DATUM.--Altitude of land-surface datum is 636.27 ft (193.935 m). Measuring point: Top of platform 14.77 ft (4.502 m) 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 (15.895 m) Sept. 28, Nov. 5, 1953 and Jan. 22, 1954; minimum daily low, 27.75 ft (8.458 m) Feb. 15, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 37.89 ft (11.549 m) Nov. 15; minimum daily low, 30.30 ft (9.235 m) Apr. 20.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36.65	36.71	36.65	35.55	35.05	33.50	32.65	32.30	34.35	---	34.90	34.50
2	35.75	35.20	36.75	35.80	35.20	33.40	33.15	32.20	34.90	---	34.65	34.65
3	36.05	35.31	37.70	36.35	34.90	33.70	32.05	32.00	34.90	---	34.75	35.25
4	36.45	35.11	37.70	35.40	35.60	34.00	33.15	32.95	33.65	---	35.10	34.45
5	35.85	36.95	36.80	34.40	34.80	32.70	32.45	32.55	33.40	---	34.60	34.00
6	36.42	36.65	37.40	34.25	34.40	32.60	32.30	32.40	33.80	---	34.65	35.00
7	36.03	36.39	37.85	35.05	35.05	32.80	31.70	33.40	34.10	---	35.65	34.55
8	36.75	37.68	37.35	35.80	34.65	31.70	32.80	33.70	34.25	---	35.95	34.20
9	36.10	37.00	36.70	34.20	34.35	31.65	31.60	33.15	33.65	---	35.70	34.35
10	35.95	36.82	36.95	35.00	34.50	31.50	31.75	32.75	34.10	---	35.95	35.15
11	36.95	36.63	37.25	34.25	35.45	32.00	32.90	33.45	34.35	---	35.85	36.25
12	37.40	37.48	36.35	34.25	34.45	31.65	32.00	33.20	35.50	---	35.50	36.30
13	36.90	37.48	36.40	33.95	34.25	31.45	31.95	33.45	34.70	---	35.05	35.60
14	36.40	36.68	36.80	34.85	35.45	32.30	31.60	32.90	35.10	---	37.50	34.90
15	37.18	37.89	35.75	34.10	35.50	31.85	32.05	32.65	35.80	---	36.95	35.20
16	36.50	37.30	35.35	34.20	36.30	31.45	31.10	33.00	35.75	---	35.50	35.25
17	36.10	36.75	34.95	35.00	35.60	31.50	31.55	33.60	35.10	---	35.75	34.40
18	37.56	36.70	35.95	34.30	35.85	31.25	31.85	33.15	35.75	---	35.80	34.40
19	36.67	37.20	35.30	34.55	35.60	31.35	31.03	34.00	35.30	---	35.95	34.65
20	36.93	37.60	35.70	34.05	34.80	31.40	30.30	34.35	35.35	---	36.35	34.80
21	36.43	36.95	36.30	34.50	35.40	31.10	30.75	34.15	35.50	---	35.95	34.55
22	37.08	37.47	36.30	33.85	34.85	31.35	31.95	34.60	35.55	---	35.80	34.30
23	36.28	36.74	35.35	33.90	35.05	31.75	31.10	34.90	35.25	---	36.15	34.20
24	36.63	37.22	36.05	34.65	34.75	31.90	31.80	34.80	35.10	---	35.60	34.60
25	37.00	36.60	35.25	34.25	35.75	32.90	32.65	---	35.60	---	34.40	34.10
26	36.70	37.01	32.65	35.00	34.35	31.30	30.95	---	35.50	---	34.95	34.80
27	37.30	36.50	33.25	34.15	33.95	31.95	32.10	---	35.70	---	33.90	34.80
28	37.10	36.78	35.20	34.90	34.30	32.60	32.10	---	35.52	---	34.25	34.55
29	37.28	36.00	36.50	34.50	---	31.55	32.45	---	---	---	34.65	34.60
30	---	35.95	34.90	34.95	---	32.05	32.10	---	---	---	34.45	33.65
31	35.55	---	34.95	35.30	---	31.75	---	34.80	---	35.25	34.70	---
MAX	37.56	37.89	37.85	36.35	36.30	34.00	33.15	34.90	35.80	35.25	37.50	36.30
WTR YR 1979	MEAN	34.70		HIGH	30.30		LOW	37.89				

GROUND-WATER RECORDS

343

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.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in (0.15 m), depth 23 ft (7.0 m), cased. DATUM.--Altitude of land-surface datum is 641 ft (195 m), from topographic map. Measuring point: Floor of instrument shelter 3.50 ft (1.067 m) above land-surface datum.

REMARKS.--Water level affected by pumping wells nearby in Middletown well field.

PERIOD OF RECORD.--June 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 14.05 ft (4.282 m) Feb. 8-9, 1977; minimum daily low, 0.06 ft (0.018 m) Feb. 25, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 13.26 ft (4.042 m) Nov. 11; minimum daily low, 3.01 ft (0.917 m) Mar. 6.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.83	12.61	12.65	11.09	11.33	6.31	10.44	9.73	10.47	11.13	8.12	7.90
2	12.87	12.98	12.83	7.51	11.21	6.14	10.15	9.76	10.53	10.86	7.90	8.12
3	12.72	12.86	12.82	6.47	11.63	5.97	9.90	10.09	10.64	10.75	7.92	8.35
4	12.72	13.19	12.09	7.35	11.52	5.60	9.56	9.71	10.78	10.73	8.07	8.74
5	12.78	13.02	10.90	7.66	11.71	3.65	9.35	9.55	10.97	10.93	8.58	9.09
6	12.65	13.14	10.14	8.58	11.71	3.01	9.09	9.57	11.04	11.57	8.92	9.34
7	13.04	13.00	10.43	8.67	11.61	3.33	9.38	10.05	10.57	11.66	8.82	9.52
8	12.83	12.93	10.26	9.28	11.84	3.92	9.17	10.01	9.90	11.71	8.91	9.66
9	12.85	13.04	9.25	9.30	11.81	4.93	9.28	9.97	9.65	11.80	9.11	8.77
10	12.69	13.05	8.86	9.40	12.19	5.65	9.08	10.43	9.52	11.80	9.51	10.00
11	12.57	13.26	9.02	10.08	11.98	5.83	9.07	10.73	9.56	11.79	9.52	10.09
12	12.29	13.12	9.18	10.14	12.08	6.71	8.85	10.77	9.78	11.74	9.40	10.25
13	12.12	13.08	9.19	10.12	11.87	7.13	8.31	10.34	9.97	11.74	9.50	10.39
14	12.35	13.08	9.86	10.24	11.68	7.26	7.41	10.62	10.40	11.40	9.92	10.22
15	12.34	12.89	10.02	10.78	12.07	8.08	5.25	10.49	10.81	11.45	10.26	6.73
16	11.41	13.11	10.60	10.54	11.90	8.45	5.43	10.48	10.91	10.29	10.44	7.12
17	11.68	12.95	10.47	10.51	12.26	8.81	5.79	10.87	10.77	10.51	10.28	7.56
18	11.69	13.04	10.65	10.88	12.09	8.81	6.02	10.92	10.91	10.53	10.35	7.94
19	12.05	12.68	10.75	11.07	12.37	9.27	7.03	10.70	10.96	10.75	10.38	8.44
20	11.91	12.36	10.77	11.14	12.20	9.10	7.50	10.67	11.04	11.31	9.37	8.76
21	12.41	12.23	11.05	10.86	12.20	9.59	8.16	11.14	11.04	11.68	9.16	8.89
22	12.21	12.20	11.09	10.93	11.85	9.79	7.97	11.32	11.00	11.93	8.04	9.02
23	12.42	12.36	11.35	10.70	11.27	9.80	8.53	11.45	11.05	12.06	7.81	9.14
24	12.32	12.15	11.12	10.43	8.19	10.06	8.75	11.53	11.16	12.21	7.25	9.42
25	12.32	12.50	11.11	10.61	5.44	9.87	8.75	11.53	11.25	12.06	6.66	9.57
26	12.58	12.29	10.87	10.56	4.32	10.03	9.32	11.42	11.25	11.27	6.82	9.61
27	12.57	12.19	10.97	10.99	4.97	10.17	9.19	10.83	11.51	10.76	7.11	9.63
28	12.82	12.15	11.61	11.00	5.65	10.18	9.26	10.14	11.68	10.49	7.48	8.70
29	12.55	12.48	11.65	11.02	---	10.43	9.27	8.92	11.73	9.88	7.61	9.63
30	12.66	12.61	12.03	10.97	---	10.26	9.75	10.14	11.57	8.32	7.50	9.49
31	12.54	---	11.85	11.01	---	10.59	---	10.35	---	7.93	7.61	---
MAX	13.04	13.26	12.83	11.14	12.37	10.59	10.44	11.53	11.73	12.21	10.44	10.39
WTR YR 1979	MEAN	10.24		HIGH	3.01		LOW	13.26				

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 (4.8 km) north of Carrollton.

Owner: Carrollton Water Department.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in (0.25 m), depth 70 ft (21.336 m), cased.

DATUM.--Altitude of land-surface datum is 1050 ft (320 m), from topographic map. Measuring point: Top of platform 3.00 ft (0.914 m) 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 (12.405 m) Nov. 19, 1957; minimum daily low, 7.20 ft (2.195 m) Jan. 10, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 35.71 ft (10.884 m) Oct. 14; minimum daily low, 21.50 ft (6.553 m) Mar. 19.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34.00	33.47	32.10	25.68	22.60	28.17	21.70			---	25.86	33.11
2	34.04	33.37	32.15	25.44	22.46	27.82	---			---	26.08	32.95
3	33.86	33.34	31.97	25.30	22.17	26.41	---			---	26.50	32.76
4	33.64	33.15	31.48	---	22.43	25.67	---			---	26.93	32.62
5	33.49	32.92	31.47	---	22.26	25.12	---			---	27.17	32.47
6	33.49	32.88	31.22	---	22.10	24.62	---			---	27.41	32.61
7	34.04	32.97	30.83	---	22.43	24.02	---			---	27.85	32.89
8	34.50	32.86	30.27	---	22.46	23.42	---			---	28.37	33.05
9	34.61	32.65	29.88	---	22.72	23.26	---			---	28.70	33.19
10	35.03	32.56	29.49	---	23.08	22.61	---			---	29.56	33.41
11	34.84	32.49	28.87	---	23.01	22.22	---			---	30.46	33.53
12	35.46	32.37	28.24	---	23.81	21.88	---			---	30.77	33.62
13	35.63	32.23	27.86	---	24.08	21.68	---			---	30.98	33.66
14	35.71	32.33	27.68	---	24.68	21.51	---			---	31.28	33.85
15	35.30	32.27	27.67	---	25.20	21.88	---			---	31.53	33.65
16	35.13	32.66	28.04	---	25.73	21.67	---			---	31.66	33.11
17	35.04	32.54	28.27	---	25.99	21.51	---			---	31.86	32.39
18	34.82	32.69	28.08	---	26.27	21.58	---			---	32.03	32.06
19	34.60	32.28	27.24	---	27.08	21.50	---			---	32.16	31.77
20	34.57	32.46	27.01	---	27.54	21.63	---			---	32.11	31.14
21	34.40	32.41	26.88	---	28.59	21.68	---			---	32.26	31.03
22	34.13	32.28	26.85	---	28.60	---	---			---	32.44	30.82
23	33.87	32.24	26.69	22.84	28.48	---	---			---	32.61	30.63
24	33.75	32.14	26.48	22.85	28.48	---	---			---	32.77	30.32
25	33.66	32.06	26.43	22.87	28.83	---	---			---	32.88	29.75
26	33.59	32.07	26.28	22.84	28.27	---	---			---	32.85	29.78
27	33.54	31.88	26.27	22.66	28.44	---	---			---	32.92	29.80
28	33.37	31.95	26.07	22.65	28.01	---	---			---	33.04	29.54
29	33.09	31.85	25.87	22.68	---	---	---			---	33.13	29.25
30	33.13	31.93	25.89	22.47	---	22.10	---			---	33.13	29.01
31	33.39	---	25.88	22.43	---	22.11	---			25.80	33.09	---
MAX	35.71	33.47	32.15	25.68	28.83	28.17	21.70			25.80	33.13	33.85
WTR YR 1979	MEAN	29.32		HIGH	21.50		LOW	35.71				

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

GROUND-WATER RECORDS

345

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 (0.2 m), depth 40 ft (12.2 m), cased.

DATUM.--Altitude of land-surface datum is 1030 ft (314 m), from topographic map. Measuring point: Floor of instrument shelter 4.50 ft (1.372 m) 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 (7.559 m) Feb. 26-29, Mar. 13, 1964; minimum daily low, 12.45 ft (3.795 m) Mar. 24, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 16.18 ft (4.932 m) July 20, 21; minimum daily low, 14.51 ft (4.423 m) Sept. 13.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							---	15.10	15.58	15.47	15.47	15.02
2							---	15.08	15.59	15.60	14.99	15.08
3							---	15.09	15.56	15.77	15.19	15.13
4							---	15.05	15.43	15.84	15.22	15.14
5							---	15.05	15.47	15.82	15.21	15.15
6							---	15.13	15.51	15.84	15.12	15.19
7							---	15.15	15.55	15.81	15.24	15.20
8							---	15.17	15.59	15.86	15.28	15.20
9							---	15.17	15.63	15.89	15.29	14.74
10							---	15.14	15.64	15.92	15.30	14.58
11							---	15.19	15.63	15.96	15.20	14.55
12							---	15.25	15.65	15.98	15.20	14.54
13							---	15.27	15.70	16.00	15.21	14.51
14							---	15.28	15.74	16.02	15.25	14.52
15							---	15.30	15.74	16.04	15.30	14.55
16							---	15.34	15.73	16.08	15.31	14.61
17							---	15.35	15.26	16.11	15.26	14.62
18							---	15.39	15.28	16.13	15.21	14.62
19							---	15.38	15.32	16.16	15.13	14.64
20							---	15.34	15.37	16.18	15.12	14.58
21							---	15.22	15.40	16.18	15.13	14.72
22							---	15.21	15.44	16.15	15.13	14.74
23							---	15.26	15.49	16.13	15.14	14.75
24							---	15.34	15.52	16.03	15.13	14.74
25							15.09	15.37	15.52	16.02	15.17	14.74
26							15.08	15.41	15.48	16.02	15.20	14.75
27							15.09	15.43	15.49	16.01	15.23	14.73
28							15.07	15.44	15.53	15.94	15.24	14.75
29							15.07	15.51	15.55	15.75	15.15	14.75
30							15.07	15.54	15.55	15.69	15.01	14.75
31							---	15.57	---	15.67	15.05	---
MAX							15.09	15.57	15.74	16.18	15.47	15.20
WTR YR 1979	MEAN	15.34		HIGH	14.51		LOW	16.18				

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

GROUND-WATER RECORDS

CLARK COUNTY

395639084012200. Local number, CL-9.

LOCATION.--Lat 39°56'39", long 84°01'22", Hydrologic Unit 05080001, at north edge of New Carlisle.

Owner: New Carlisle Water Department.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in (0.3 m), depth 113 ft (34.4 m), cased.

DATUM.--Altitude of land-surface datum is 900 m (274 m), from topographic map. Measuring point: Top of platform 2.50 ft (0.752 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 31.25 ft (9.525 m) July 13, 1977; minimum daily low, 20.75 ft (5.325 m) Sept. 20, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 26.60 ft (8.108 m) Mar. 11; minimum daily low, 20.75 ft (5.325 m) Sept. 20.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	25.40	25.40	24.45	25.00	22.80	23.10	22.85	24.30	24.50	24.85	23.95
2	---	25.40	25.50	24.25	24.50	22.50	23.15	22.80	24.40	24.60	24.75	22.30
3	24.95	---	25.45	24.05	24.50	22.10	23.05	22.85	24.40	24.60	24.80	22.65
4	25.00	---	25.30	24.00	24.55	21.95	22.90	22.85	24.50	24.65	24.55	22.65
5	25.00	---	25.20	23.85	24.55	21.80	22.55	22.95	---	24.65	24.30	22.55
6	25.00	---	25.15	23.80	24.45	21.65	22.50	22.70	---	24.75	24.10	22.60
7	25.10	---	25.10	23.85	24.60	22.00	24.45	22.65	---	24.80	25.00	22.50
8	25.05	---	25.00	23.90	24.65	21.80	24.55	22.75	24.45	24.75	25.15	22.65
9	25.15	---	24.90	23.90	26.10	21.95	23.55	23.70	24.25	24.70	23.85	22.60
10	25.10	---	24.85	23.95	26.55	22.05	23.25	23.55	24.25	24.80	23.85	22.65
11	25.10	---	24.70	23.80	26.60	22.10	23.15	23.60	24.25	24.80	23.65	22.55
12	25.10	---	24.70	23.75	25.00	22.15	23.05	23.60	24.20	24.80	23.55	22.65
13	25.05	---	24.65	24.15	24.85	22.10	23.00	23.65	24.15	24.75	23.65	22.55
14	25.15	---	24.55	---	24.80	22.40	22.70	23.70	24.40	24.90	23.55	22.50
15	24.95	---	24.50	---	25.05	22.40	22.55	23.70	24.40	24.95	23.55	21.40
16	25.10	---	24.60	---	24.95	22.40	22.55	23.90	24.45	25.05	23.65	21.05
17	25.00	---	24.60	---	24.90	22.40	22.45	24.00	24.35	25.00	23.60	20.80
18	24.95	---	24.50	---	24.85	22.40	22.40	24.10	24.45	25.00	23.70	20.85
19	25.15	---	24.50	---	24.95	22.50	22.40	24.10	24.45	25.10	23.60	20.85
20	25.00	---	24.55	---	24.90	22.50	22.40	24.20	24.40	25.15	23.55	20.75
21	25.10	25.20	24.55	---	24.95	22.55	22.55	24.25	24.45	25.20	23.15	20.80
22	25.08	25.15	24.65	---	24.90	22.55	22.45	24.20	24.45	25.20	23.10	22.45
23	25.40	25.10	24.60	---	24.75	22.50	22.50	24.10	24.45	25.30	23.00	21.00
24	25.15	25.20	24.60	---	24.25	22.70	22.45	24.10	24.45	25.15	22.75	22.70
25	25.15	25.20	24.55	---	23.60	22.80	22.45	24.35	24.50	25.05	22.55	21.25
26	25.20	25.10	24.35	---	23.25	22.85	22.55	24.25	24.55	25.20	22.40	21.05
27	25.20	25.10	24.75	---	23.10	22.80	22.50	24.20	24.65	25.15	22.35	21.05
28	25.30	25.10	24.65	---	22.90	22.95	22.75	24.25	24.70	25.05	22.35	21.90
29	25.25	25.50	24.65	24.45	---	22.85	22.75	24.20	24.60	24.70	22.35	22.00
30	25.25	25.70	24.75	25.25	---	23.00	22.85	24.30	24.60	24.85	23.35	22.00
31	25.35	---	24.60	25.50	---	22.95	---	24.20	---	24.85	22.45	---
MAX	25.40	25.70	25.50	25.50	26.60	23.00	24.55	24.35	24.70	25.30	25.15	23.95
WTR YR 1979	MEAN	23.90		HIGH	20.75		LOW	26.60				

GROUND-WATER RECORDS

347

CLARK COUNTY

395835083491700. Local number CL-20.

LOCATION.--Lat 39°58'35", long 83°49'17", Hydrologic Unit 05080001, on left bank of Mad River 100 ft (30 m) upstream from Eagle City Road near Springfield.
 Owner: City of Springfield.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled public supply water-table well, diameter 26 in (0.66 m), depth 96 ft (29.3 m), screened below 51 ft (15.5 m).

PERIOD OF RECORD.--June 1967 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT 17...	808	7.3	--	--	110	36	13	366	0	300	29	--
APR 03...	785	7.4	10.0	9	95	33	13	378	0	310	24	87

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT 17...	30	479	1.4	.01	1.4	--	.00	--	10	--	--
APR 03...	26	498	2.0	.02	2.0	.04	.00	<10	500	1	150

GROUND-WATER RECORDS

CLARK COUNTY--Continued

395840083495200. Local number, CL-7.

LOCATION.--Lat 39°58'40", long 83°49'52", Hydrologic Unit 05080001. Eagle City Road northwest of Springfield.

Owner: State of Ohio.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in (0.15 m), depth 50 ft (15.2 m), cased.

DATUM.--Altitude of land-surface datum is 928.02 ft (282.860 m). Measuring point: Floor of instrument shelter 2.00 ft (0.610 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--September 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 30.17 ft (9.196 m) Feb. 18, 19, 1961; minimum daily low, 11.07 ft (3.374 m) Apr. 26, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 18.50 ft (5.639 m) Dec. 2, 3; minimum daily low, 11.42 ft (3.481 m) Apr. 17, 18.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.47	17.43	18.45	17.33	16.04	14.52	12.73	12.20	13.52	14.64	14.65	13.58
2	16.49	17.48	18.50	17.13	16.06	14.19	12.74	12.25	13.53	14.65	14.64	13.50
3	16.53	17.54	18.50	16.75	16.11	13.85	12.75	12.38	13.52	14.65	14.63	13.61
4	16.56	17.60	18.48	16.44	16.16	13.49	12.82	12.43	13.54	14.66	14.62	13.62
5	16.58	---	18.38	16.26	16.19	12.94	12.92	12.45	13.55	14.67	14.62	13.62
6	16.67	---	18.31	16.12	16.23	12.38	12.80	12.48	---	14.67	14.60	13.68
7	16.65	---	18.28	16.00	16.31	12.12	12.78	12.55	---	14.67	14.48	13.77
8	16.69	---	18.25	15.93	16.38	11.94	12.73	12.62	13.64	14.67	14.37	13.85
9	16.71	---	18.15	15.88	16.44	11.93	12.72	12.70	13.64	14.67	14.33	13.87
10	16.74	---	17.96	15.87	16.51	11.88	12.73	12.77	13.63	14.65	14.32	13.93
11	16.75	---	17.75	15.87	16.53	11.85	12.73	12.83	13.58	14.67	14.31	13.99
12	16.78	---	17.65	15.86	16.60	11.88	12.59	12.87	13.62	14.67	14.29	14.05
13	16.79	---	17.50	15.87	16.63	11.89	12.54	12.88	13.65	14.70	14.27	14.10
14	16.79	---	17.47	15.88	16.68	12.03	12.48	12.93	13.67	14.73	14.23	14.03
15	16.78	---	17.43	15.88	16.75	12.08	11.80	13.01	13.77	14.74	14.25	13.26
16	16.80	---	17.41	---	16.85	12.14	11.50	13.07	13.81	14.75	14.27	12.83
17	16.83	---	17.40	---	16.91	12.17	11.42	13.10	13.88	14.78	14.27	12.56
18	16.85	---	17.39	---	16.96	12.18	11.42	13.14	13.97	14.81	14.29	12.42
19	16.90	---	17.38	---	17.00	12.20	11.46	13.22	14.04	14.83	14.30	12.39
20	16.95	---	17.37	---	17.06	12.25	11.50	13.29	14.12	14.87	14.32	12.38
21	16.96	18.12	17.39	---	17.11	12.34	11.58	13.36	14.20	14.93	14.30	12.38
22	16.97	18.15	17.41	---	17.11	12.36	11.54	13.39	14.25	14.97	14.27	12.48
23	17.02	18.16	17.41	---	17.00	12.36	11.57	13.47	14.30	14.99	14.22	12.50
24	17.04	18.18	17.38	---	16.18	12.43	11.71	13.49	14.35	15.02	14.15	12.57
25	17.10	18.18	17.37	---	15.83	12.48	11.78	13.51	14.38	15.02	13.98	12.62
26	17.15	18.17	17.36	---	15.30	12.50	11.84	13.52	14.44	14.99	13.82	12.68
27	17.20	18.20	17.37	---	14.97	12.52	11.94	13.52	14.51	14.98	13.67	12.77
28	17.25	18.27	17.38	---	14.75	12.60	12.03	13.48	14.59	14.96	13.58	12.92
29	17.28	18.33	17.41	15.90	---	12.63	12.08	13.46	14.62	14.89	13.52	12.87
30	17.28	18.40	17.42	15.92	---	12.65	12.17	13.49	14.64	14.80	13.53	12.88
31	17.30	---	17.41	15.98	---	12.68	---	13.50	---	14.69	13.55	---
MAX	17.30	18.40	18.50	17.33	17.11	14.52	12.92	13.52	14.64	15.02	14.65	14.10
WTR YR 1979	MEAN	14.72		HIGH	11.42		LOW	18.50				

GROUND-WATER RECORDS

349

CLERMONT COUNTY

385144084133900. Local number, CT-2.

LOCATION.--Lat 38°51'44"N, long 84°13'39"W, Hydrologic Unit 05090201, at the Wm. H. Zimmer Nuclear Power Station, Moscow, Ohio.

Owner: Cincinnati Gas and Electric Company.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 8 in (0.2 m), depth 90 ft (27.4 m), cased to 90 ft (27.4 m).

DATUM.--Altitude of land-surface datum is 500 ft (152 m), from topographic map. Measuring point: Floor of instrument shelter 2.50 ft (0.762 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 43.24 ft (13.180 m) May 23, 1978; minimum daily, 22.45 ft (6.843 m) March 13, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 43.15 ft (13.152 m) Nov. 18; minimum daily low, 22.45 ft (6.843 m) Mar. 13.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41.72	42.69	42.86	35.23	28.70	29.51	26.57	28.41	32.01	34.52	37.16	37.18
2	41.76	42.70	42.84	35.18	28.80	28.81	26.53	28.58	31.97	34.66	37.17	37.04
3	41.81	42.71	42.81	35.17	28.94	27.71	26.57	28.86	31.90	34.72	37.19	36.97
4	41.90	42.70	42.50	34.82	29.28	26.69	26.33	29.21	31.92	34.89	37.21	36.91
5	41.90	42.75	42.48	34.49	29.47	26.25	25.96	29.32	32.02	35.04	37.23	36.89
6	42.02	42.76	42.44	34.00	29.56	25.80	25.83	29.35	32.13	35.10	37.26	36.89
7	42.07	42.80	42.41	33.55	29.89	25.26	25.73	29.41	32.25	35.17	37.30	36.93
8	42.14	42.83	41.95	33.22	30.18	24.75	25.39	29.49	32.36	35.26	37.36	36.99
9	42.15	42.82	41.58	32.98	30.42	24.35	25.56	29.65	32.42	35.37	37.40	37.02
10	42.17	42.88	41.59	32.60	30.58	23.70	25.96	29.79	32.49	35.48	37.42	37.02
11	42.16	42.92	41.34	32.30	30.71	23.17	25.98	30.01	32.61	35.62	37.51	37.06
12	42.25	42.91	40.80	31.89	30.96	22.69	25.87	30.23	32.70	35.69	37.54	37.09
13	42.33	42.92	40.21	31.58	31.13	22.45	25.51	30.41	32.80	35.82	37.58	37.10
14	42.37	43.02	39.85	31.69	31.22	22.49	25.22	30.55	32.90	35.97	37.62	37.19
15	42.38	43.04	39.20	31.71	31.47	22.85	25.01	30.69	32.99	36.09	37.69	37.22
16	42.47	43.04	38.80	31.39	31.96	22.95	25.07	30.77	33.09	36.20	37.70	37.23
17	42.53	42.97	38.45	31.22	31.99	23.12	25.22	30.81	33.24	36.26	37.72	37.22
18	42.44	43.15	38.14	31.21	31.87	23.32	25.34	30.86	33.44	36.35	37.76	37.14
19	42.39	43.12	37.74	31.13	31.96	23.60	25.49	30.99	33.61	36.45	37.84	37.07
20	42.47	43.07	37.51	30.85	31.94	24.01	25.55	31.17	33.71	36.55	37.85	37.06
21	42.50	43.03	37.52	30.89	32.03	24.46	25.90	31.37	33.77	36.64	37.85	37.00
22	42.53	43.00	37.49	31.02	32.12	24.74	26.21	31.54	33.90	36.76	37.84	36.90
23	42.59	42.96	37.16	30.79	31.57	24.85	26.44	31.67	33.99	36.86	37.81	36.89
24	42.60	43.06	36.78	30.05	31.82	25.44	26.59	31.91	34.07	36.92	37.80	36.72
25	42.54	43.06	36.56	29.89	31.73	25.92	26.98	32.08	34.09	36.98	37.85	36.56
26	42.67	42.97	36.42	29.53	31.18	26.09	27.32	32.16	34.09	37.09	37.84	36.40
27	42.75	42.86	36.33	28.98	31.06	26.09	27.71	32.25	34.10	37.16	37.71	36.21
28	42.66	43.06	36.05	28.42	30.44	25.98	28.06	32.27	34.16	37.17	37.58	36.01
29	42.71	43.06	35.78	28.40	---	25.90	28.15	32.26	34.22	37.15	37.46	35.86
30	42.70	42.86	35.60	28.32	---	26.13	28.28	32.19	34.39	37.16	37.41	35.76
31	42.67	---	35.47	28.40	---	26.43	---	32.10	---	37.16	37.33	---
MAX	42.75	43.15	42.86	35.23	32.12	29.51	28.28	32.27	34.39	37.17	37.85	37.23
WTR YR 1979	MEAN	34.40		HIGH	22.45		LOW	43.15				

GROUND-WATER RECORDS

COSHOCTON COUNTY

401256081525100. Local number, CS-3.

LOCATION.--Lat 40°12'56", long 81°52'51", Hydrologic Unit 05040004, 1.5 mi (2.4 km) north of Conesville.

Owner: Universal Cyclops Corp.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 8 in (0.2 m), depth 110 ft (33.5 m), cased.

DATUM.--Altitude of land-surface datum is 745 ft (227 m) from topographic map. Measuring point: Floor of instrument shelter 2.80 ft (0.853 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--April 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 36.98 ft (11.272 m) Oct. 16, 1973; minimum daily low, 21.40 ft (5.523 m) July 10, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 33.00 ft (10.058 m) Oct. 13; minimum daily low, 23.10 ft (7.041 m) Mar. 12, 18.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32.43	31.90	31.20	29.05	28.35	26.85	27.10	27.85	28.05	30.00	31.55	28.30
2	32.40	31.85	31.15	28.82	28.50	26.05	27.20	28.10	27.90	29.90	31.50	28.20
3	32.40	31.85	31.10	28.45	28.85	25.40	27.10	28.35	27.85	29.80	31.35	28.45
4	32.51	31.80	31.00	27.60	29.10	25.00	26.30	28.45	28.00	29.70	31.25	28.65
5	32.61	31.60	30.50	27.02	29.35	24.55	26.45	28.45	28.15	29.65	31.15	28.95
6	32.60	31.65	29.90	26.81	29.70	24.25	26.10	28.55	28.35	29.70	31.15	29.20
7	32.52	31.70	29.40	26.69	29.90	23.95	25.30	28.85	28.55	---	31.25	29.50
8	32.42	31.65	29.10	26.93	30.10	23.80	25.55	29.05	28.70	---	31.40	29.60
9	32.49	31.65	28.90	27.12	30.25	23.65	25.50	29.20	28.80	---	31.45	29.75
10	32.60	31.70	28.25	27.41	30.30	23.40	25.40	29.45	28.80	---	31.35	30.10
11	32.87	31.65	27.90	27.69	30.30	23.20	25.00	29.55	28.95	---	31.35	30.25
12	32.97	31.60	27.80	27.99	30.20	23.10	24.80	---	29.05	---	31.20	30.40
13	33.00	31.75	27.40	28.22	30.15	23.15	24.55	---	29.20	---	31.05	30.50
14	32.65	31.80	27.00	28.42	29.95	23.20	24.50	---	29.40	---	31.05	30.45
15	32.09	31.90	26.80	28.59	29.95	23.35	24.25	---	29.60	---	31.10	29.50
16	31.69	32.00	26.75	28.68	29.95	23.40	23.85	---	29.65	---	31.20	28.60
17	31.62	32.00	26.70	28.75	29.90	23.35	23.75	30.05	29.20	---	31.30	27.95
18	31.05	31.90	26.00	28.82	30.00	23.10	23.80	30.20	---	30.90	31.30	27.45
19	31.80	31.95	27.15	28.87	30.20	23.30	24.00	30.20	---	31.00	31.10	27.10
20	31.90	31.60	27.45	28.90	30.30	23.45	24.15	30.25	30.50	31.10	30.95	26.85
21	---	31.55	27.61	---	30.35	23.75	24.40	30.40	30.60	31.15	30.90	26.55
22	---	31.60	27.70	---	30.40	24.00	24.75	30.45	30.45	31.20	30.85	26.30
23	---	31.55	27.76	28.75	30.30	24.55	25.20	30.45	30.10	31.30	30.75	26.00
24	---	31.45	27.80	28.70	30.00	25.05	25.50	30.50	30.05	31.45	30.65	25.75
25	---	31.35	27.80	28.70	29.35	25.45	26.05	30.55	30.05	31.50	30.40	25.75
26	---	31.25	28.14	28.50	28.70	25.80	26.50	30.45	29.95	31.60	29.90	25.65
27	---	31.30	28.42	28.25	27.95	26.10	26.85	29.95	29.95	31.60	29.65	25.60
28	31.90	31.30	28.68	28.05	27.35	26.50	27.00	29.35	30.00	31.65	29.50	25.55
29	31.75	31.25	28.80	28.05	---	26.75	27.15	28.80	30.05	31.65	29.30	25.45
30	31.85	31.25	28.93	28.15	---	26.95	27.55	28.50	30.05	31.75	29.10	25.15
31	31.90	---	29.05	28.20	---	27.05	---	28.20	---	31.60	28.65	---
MAX	33.00	32.00	31.20	29.05	30.40	27.05	27.55	30.55	30.60	31.75	31.55	30.50
WTR YR 1979	MEAN	28.92		HIGH	23.10		LOW	33.00				

GROUND-WATER RECORDS

351

COSHOCTON COUNTY

401735081523800. Local number, CS-2.

LOCATION.--Lat 40°17'35", long 81°52'38", Hydrologic Unit 05040003, 1.7 mi (2.7 km) northwest of courthouse in Coshocton.

Owner: City of Coshocton.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled test well, diameter 6 in (0.15 m), depth 40 ft (12.2 m) cased.

DATUM.--Altitude of land-surface datum is 740 ft (226 m), from topographic map. Measuring point: Floor of of instrument shelter 8.50 ft (2.591 m) above land-surface datum.

PERIOD OF RECORD.--May 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 18.47 ft (5.630 m) Feb. 12, 1977; minimum daily low, 0.43 ft (0.131 m) Feb. 21, 1951.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 18.28 ft (5.572 m) Nov. 16; minimum daily low, 6.38 ft (1.945 m) Sept. 15.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	17.35	17.95	15.25	15.40	10.42	12.00	12.71	12.40	14.75	15.61	11.81
2	15.78	17.81	18.01	12.67	15.51	9.16	12.00	12.98	12.59	14.71	15.79	12.17
3	17.12	17.62	17.95	11.83	15.68	9.10	12.23	13.11	12.62	14.63	15.38	12.72
4	17.54	17.71	17.67	10.80	15.53	8.51	12.48	13.11	13.07	14.57	15.31	13.18
5	17.46	17.34	15.71	11.07	15.39	8.17	10.19	13.18	13.47	14.36	15.21	13.58
6	17.39	17.67	14.70	11.32	16.09	8.15	8.98	13.27	14.12	14.37	15.03	14.02
7	17.51	17.79	14.50	11.72	16.38	7.42	9.00	13.30	14.36	13.91	15.31	14.37
8	17.25	18.04	14.65	12.53	16.57	6.65	9.11	13.49	14.27	13.85	15.53	14.47
9	17.24	18.18	14.22	13.22	16.74	6.56	8.95	13.62	14.23	14.25	15.56	14.32
10	17.55	18.05	12.53	13.75	16.76	6.48	8.24	13.72	14.27	14.44	15.77	14.65
11	17.81	18.14	13.03	13.85	16.63	6.64	7.53	13.87	14.61	14.58	15.96	14.88
12	17.82	18.06	12.69	14.34	16.85	6.88	7.80	13.94	14.67	14.87	14.80	15.21
13	17.47	18.03	11.41	14.36	16.55	6.74	8.15	13.92	14.69	15.00	14.80	15.25
14	17.01	18.08	11.71	14.69	16.46	6.76	8.20	14.01	15.08	14.92	15.44	15.26
15	16.74	18.08	12.50	14.32	16.80	6.74	6.84	14.12	15.27	14.77	15.50	6.38
16	15.85	18.28	12.74	14.49	16.92	7.17	6.49	14.23	15.19	15.05	15.85	6.55
17	16.20	18.21	12.79	14.61	16.71	7.40	6.55	14.36	15.22	15.12	15.95	7.70
18	16.55	18.07	13.77	14.76	16.29	7.29	7.04	15.01	15.20	15.36	15.83	8.01
19	16.80	18.03	13.79	14.86	16.51	7.55	8.01	15.26	15.35	15.52	15.46	8.64
20	16.92	17.68	14.22	14.97	16.91	7.74	8.32	15.33	15.74	15.58	14.96	8.64
21	16.94	17.80	14.57	15.00	17.09	7.96	8.93	14.94	15.78	15.00	15.11	8.13
22	16.83	17.92	14.70	15.53	17.08	7.83	9.28	15.01	14.96	15.05	15.11	8.30
23	17.03	17.96	14.30	15.77	16.39	9.61	10.14	15.10	14.49	15.06	14.67	8.47
24	17.39	17.16	13.98	15.87	15.94	9.99	10.74	15.16	14.57	15.32	14.71	8.52
25	17.24	17.31	14.15	15.24	14.98	10.34	11.38	15.36	14.64	15.35	13.93	8.81
26	17.40	17.37	14.17	14.50	13.63	11.11	11.84	15.24	15.02	15.06	13.51	9.02
27	17.66	17.50	14.33	14.19	12.50	11.51	11.91	14.04	15.13	15.03	13.23	9.16
28	17.41	17.78	14.88	14.01	11.66	11.64	11.97	13.11	15.06	15.37	13.29	9.16
29	16.68	17.84	14.97	14.11	---	12.04	11.98	12.39	15.34	15.54	13.36	8.71
30	17.07	17.89	15.17	14.78	---	12.30	12.39	12.39	15.26	15.55	11.84	8.55
31	17.54	---	15.19	15.03	---	12.14	---	12.34	---	15.61	10.97	---
MAX	17.82	18.28	18.01	15.87	17.09	12.30	12.48	15.36	15.78	15.61	15.96	15.26
WTR YR 1979	MEAN	13.87		HIGH	6.38		LOW	18.28				

GROUND-WATER RECORDS

DARKE COUNTY

400514084345700. Local number, D-2.

LOCATION.--Lat 40°05'14", long 84°34'57", Hydrologic Unit 05080001, State Route 571, 3 mi (4.8 km) east of Greenville.

Owner: Greenville Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in (0.15 m), depth 70 ft (21.3 m), cased.

DATUM.--Altitude of land-surface datum is 1038 ft (316 m), from topographic map. Measuring point: Floor of shelter 4.00 ft (1.219 m) 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 (6.227 m) Nov. 29, 1977; minimum daily low, 17.12 ft (5.218 m) Aug. 28, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 19.01 ft (5.794 m), Nov. 19; minimum daily low, 17.12 ft (5.218 m) Aug. 28.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.73	18.80	18.77	18.28	18.42	18.25	17.77	17.55	17.71	17.70	17.59	17.13
2	18.72	18.74	18.91	18.45	18.41	18.25	17.98	17.41	17.71	17.80	17.60	17.14
3	18.59	18.75	18.68	18.50	18.20	17.98	17.95	17.41	17.57	17.80	17.61	17.19
4	18.74	18.67	18.67	18.47	18.41	17.98	17.70	17.46	17.53	17.83	17.63	17.22
5	18.69	18.71	18.69	18.40	18.41	18.02	17.72	17.49	17.53	17.94	17.61	17.15
6	18.77	18.79	18.90	18.13	18.24	17.87	17.92	17.34	17.56	17.93	17.56	17.17
7	18.82	18.81	18.82	18.11	18.33	17.68	17.85	17.37	17.60	17.86	17.53	17.31
8	18.89	18.82	18.63	18.32	18.43	17.86	17.47	17.44	17.68	17.76	17.57	17.39
9	18.83	18.76	18.65	18.29	18.53	17.89	17.59	17.49	17.62	17.69	17.59	17.35
10	18.77	18.86	18.81	18.35	18.41	17.84	17.77	17.45	17.59	17.74	17.44	17.25
11	18.65	18.89	18.70	18.32	18.40	17.76	17.55	17.49	17.64	17.80	17.58	17.32
12	18.78	18.89	18.60	18.07	18.46	17.92	17.47	17.52	17.62	17.79	17.60	17.28
13	18.86	18.78	18.61	17.92	18.45	17.71	17.39	17.54	17.68	17.75	17.61	17.20
14	18.80	18.97	18.62	18.60	18.29	17.98	17.41	17.53	17.64	17.80	17.67	17.46
15	18.76	18.97	18.46	18.59	18.32	18.11	17.41	17.67	17.60	17.85	17.72	17.47
16	18.97	18.91	18.54	18.33	18.75	17.95	17.43	17.73	17.52	17.90	17.72	17.47
17	18.97	18.84	18.72	18.20	18.75	17.80	17.47	17.67	17.52	17.87	17.50	17.37
18	18.73	19.00	18.52	18.43	18.38	17.67	17.44	17.52	17.67	17.86	17.50	17.23
19	18.61	19.01	18.38	18.27	18.51	17.62	17.39	17.38	17.70	17.83	17.60	17.38
20	18.67	18.95	18.18	17.81	18.35	17.65	17.30	17.50	17.61	17.85	17.60	17.31
21	18.67	18.82	18.59	18.20	18.47	17.73	17.33	17.61	17.57	17.79	17.51	17.21
22	18.69	18.75	18.57	18.47	18.50	17.64	17.43	17.67	17.59	17.82	17.39	17.45
23	18.82	18.59	18.59	18.29	18.32	17.37	17.39	17.50	17.67	17.85	17.26	17.49
24	18.79	18.85	18.28	18.16	18.35	17.57	17.25	17.57	17.75	17.84	17.27	17.43
25	18.50	18.83	18.54	18.41	18.20	17.86	17.15	17.55	17.80	17.73	17.36	17.42
26	18.82	18.71	18.67	18.33	18.18	17.97	17.18	17.48	17.75	17.81	17.31	17.46
27	18.82	18.78	18.69	18.18	18.25	18.02	17.28	17.61	17.67	17.79	17.18	17.38
28	18.88	18.97	18.64	18.34	18.16	17.90	17.48	17.63	17.62	17.79	17.12	17.34
29	18.92	18.88	18.47	18.40	---	17.76	17.47	17.63	17.52	17.77	17.17	17.41
30	18.83	18.88	18.43	18.34	---	17.70	17.49	17.62	17.56	17.68	17.26	17.40
31	18.75	---	18.35	18.29	---	17.79	---	17.63	---	17.59	17.22	---
MAX	18.97	19.01	18.91	18.60	18.75	18.25	17.95	17.73	17.80	17.94	17.72	17.49
WTR YR 1979	MEAN	18.00		HIGH	17.12		LOW	19.01				

GROUND-WATER RECORDS

353

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 Engineers.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in (0.3 m), depth 135 ft (41.1 m), cased.

DATUM.--Altitude of land-surface datum is 900 ft (374 m), from topographic map. Measuring point: Floor of instrument shelter 2.60 ft (0.792 m) 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 (11.290 m) Nov. 1, 1948, Dec. 2, 3, 1948; minimum daily low, 20.43 ft (6.227 m) Jan. 27, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 32.65 ft (9.952 m) Oct. 3; minimum daily low, 24.44 ft (7.449 m) Mar. 9.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32.06	32.10	32.01	31.67	31.73	28.42	31.44	30.49	---	31.06	31.27	---
2	32.06	32.09	32.05	31.19	31.74	26.43	31.45	30.51	---	30.78	31.21	---
3	32.65	32.08	32.04	31.20	31.72	25.65	31.39	30.50	---	30.53	31.12	---
4	32.05	32.05	31.85	30.95	31.76	25.88	31.26	30.53	---	30.42	30.90	---
5	32.06	32.04	31.75	30.37	31.77	26.90	30.49	30.60	---	30.63	30.93	---
6	32.02	32.05	31.80	30.23	31.75	26.89	29.95	30.60	---	30.84	31.06	30.78
7	32.06	32.07	31.80	30.47	31.71	26.67	30.19	30.64	---	30.99	31.10	---
8	32.10	32.08	31.70	30.97	31.82	25.10	30.22	30.72	---	31.01	31.20	---
9	32.11	32.07	31.56	31.11	31.85	24.44	30.20	30.75	---	31.02	31.22	---
10	32.11	32.10	31.69	31.29	31.87	24.62	30.07	30.77	---	31.01	31.17	---
11	32.11	32.10	31.65	31.34	31.88	24.90	29.70	30.79	---	30.79	31.18	---
12	32.08	32.11	31.55	31.43	31.86	25.43	29.94	30.80	31.00	30.80	31.21	31.21
13	32.06	32.08	31.00	31.44	31.92	25.86	29.93	30.83	31.02	30.89	31.23	31.23
14	32.05	32.00	30.70	31.60	31.89	27.05	29.51	30.82	31.07	30.93	31.27	31.17
15	---	32.01	30.80	31.65	31.87	29.15	28.98	30.83	31.13	31.00	31.29	30.47
16	---	32.01	31.30	31.56	31.98	29.90	28.17	30.93	31.14	31.03	31.32	30.20
17	---	31.98	31.50	31.50	31.98	30.25	27.58	30.94	31.17	31.05	31.30	29.79
18	---	32.02	31.63	31.58	31.88	30.50	26.70	30.91	31.23	31.12	31.27	28.89
19	32.00	32.04	31.67	31.50	31.91	30.69	26.50	30.92	31.26	31.12	31.24	28.53
20	32.02	---	31.65	31.52	31.87	30.92	26.18	30.95	31.25	31.19	31.21	27.55
21	32.03	---	31.78	31.55	31.84	31.02	26.50	---	31.25	31.19	30.38	27.93
22	32.05	32.00	31.79	31.16	31.83	31.12	27.17	---	31.04	31.22	30.53	29.18
23	32.08	31.95	31.81	31.12	31.67	31.27	28.75	---	30.68	31.25	30.49	29.65
24	32.07	32.00	31.75	31.00	31.23	31.43	29.24	---	30.87	31.27	30.85	29.91
25	32.00	32.00	31.83	31.02	30.85	31.58	29.56	---	31.02	31.22	30.90	30.22
26	32.05	32.00	31.89	31.02	29.83	31.71	29.72	---	31.12	31.24	30.91	30.49
27	32.06	31.95	31.94	31.44	29.43	31.79	29.96	---	31.13	31.25	30.88	30.52
28	32.10	32.01	31.98	31.51	28.95	31.79	30.14	---	31.15	31.25	30.91	30.65
29	32.13	32.00	31.97	31.59	---	31.74	30.27	---	31.14	31.24	---	30.71
30	32.12	32.00	31.95	31.61	---	31.71	30.33	---	31.11	31.25	---	30.47
31	32.10	---	31.94	31.64	---	31.66	---	---	---	31.25	---	---
MAX	32.65	32.11	32.05	31.67	31.98	31.79	31.45	30.95	31.26	31.27	31.32	31.23
WTR YR 1979	MEAN	30.89		HIGH	24.44		LOW	32.65				

GROUND-WATER RECORDS

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 (0.3 m), depth 108 ft (32.9 m), cased.

DATUM.--Altitude of land-surface datum is 820 ft (250 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--June 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 23.85 ft (7.269 m) Nov. 24, 1978; minimum daily low, 17.55 ft (5.349 m) Sept. 16, 19, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 23.85 ft (7.269 m) Nov. 24; minimum daily low, 17.55 ft (5.349 m) Sept. 16, 19.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.80	21.85	22.35	21.45	---	---	18.45	---	---	17.60	---	18.95
2	21.45	21.25	22.60	21.45	---	---	18.85	---	---	19.85	---	18.25
3	21.25	20.70	22.50	21.60	---	---	18.45	18.25	---	19.10	20.00	---
4	21.55	21.60	22.95	22.15	---	---	---	18.75	---	19.75	20.00	---
5	21.25	21.45	21.60	21.75	---	---	---	17.75	---	19.60	19.50	---
6	21.25	21.45	21.45	21.00	---	---	---	---	---	---	19.65	18.65
7	---	21.50	21.40	---	20.90	---	---	---	20.50	---	19.65	18.80
8	---	21.50	23.20	---	21.40	---	---	---	20.85	---	19.70	18.85
9	---	22.40	22.40	---	21.75	---	---	---	20.45	---	19.70	18.55
10	---	22.45	22.20	---	21.45	---	---	---	19.50	---	19.95	18.65
11	---	21.30	22.30	---	21.20	---	---	---	20.35	---	19.45	18.85
12	---	21.30	22.30	---	21.45	---	---	---	20.30	---	18.95	18.75
13	---	21.75	22.80	---	21.80	18.90	---	---	21.25	---	19.15	18.90
14	---	23.35	22.70	---	21.55	18.75	---	---	20.50	---	19.00	18.65
15	---	23.30	23.00	---	21.75	18.75	---	---	21.25	---	19.10	18.05
16	---	23.25	22.80	---	21.65	18.75	---	---	20.75	---	19.10	17.55
17	21.60	23.35	21.60	---	21.70	19.05	---	---	20.80	---	19.30	18.15
18	22.25	23.20	22.65	---	21.65	18.30	---	---	20.85	---	19.20	17.95
19	22.00	22.65	22.95	---	---	18.90	---	---	20.85	---	18.15	17.55
20	21.90	23.45	22.65	---	---	18.80	---	---	19.90	---	18.45	19.35
21	21.75	23.80	22.15	---	---	19.00	---	---	19.75	---	18.60	18.50
22	21.20	23.60	22.35	---	---	19.00	---	---	19.40	---	18.45	19.50
23	22.40	22.90	22.30	---	---	19.10	---	---	19.35	---	18.45	18.55
24	22.40	23.85	19.90	---	---	18.65	---	---	19.30	---	18.45	18.80
25	21.70	21.00	21.35	---	---	18.80	---	---	19.45	---	18.25	18.90
26	21.75	22.80	22.30	---	---	18.65	---	---	19.50	---	18.10	18.95
27	21.55	21.40	21.25	---	---	18.85	---	---	19.65	---	18.45	19.75
28	21.00	21.40	22.30	---	---	19.00	---	---	19.70	---	18.60	19.05
29	21.20	23.00	23.00	---	---	18.40	---	---	19.75	---	18.35	19.55
30	21.50	23.20	22.00	---	---	19.10	---	---	18.45	---	18.60	18.30
31	21.40	---	21.45	---	---	18.65	---	---	---	---	18.70	---
MAX	22.40	23.85	23.20	22.15	21.80	19.10	18.85	18.75	21.25	19.85	20.00	19.75
WTR YR 1979	MEAN	20.49		HIGH	17.55		LOW	23.85				

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

FAIRFIELD COUNTY

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 (0.15 m), depth 84 ft (25.6 m), cased.

DATUM.--Altitude of land-surface datum is 980 ft (299 m), from topographic map. Measuring point: Floor of instrument shelter 8.02 ft (2.44 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 19.81 ft (6.038 m) Mar. 1-4, 1964; minimum daily low, 7.27 ft (2.216 m) May 5-6, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 18.81 ft (5.733 m) Oct. 9; minimum daily low, 11.94 ft (3.639 m) Sept. 2.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.54	18.61	18.30	15.29	13.64	13.21	14.36	13.48	14.69	14.54	16.03	11.97
2	18.67	18.53	18.30	15.10	13.68	13.18	14.46	13.57	14.62	14.70	15.90	11.94
3	18.56	18.58	18.23	14.96	13.76	13.03	14.50	13.59	14.56	14.70	15.88	11.99
4	18.66	18.50	18.17	14.69	13.85	12.81	14.53	13.65	14.48	14.82	15.87	12.13
5	18.58	18.45	18.07	14.59	13.93	12.78	14.33	13.72	14.42	14.92	15.90	12.15
6	18.65	18.52	18.11	14.43	13.90	12.69	14.31	13.79	14.38	15.03	15.84	12.33
7	18.73	18.43	17.95	14.21	13.96	12.68	14.19	13.84	14.33	15.08	15.81	12.47
8	18.73	18.51	17.87	14.20	13.99	12.66	13.97	13.99	14.25	15.15	15.76	12.61
9	18.81	18.50	17.57	14.14	14.11	12.69	13.75	14.06	14.25	15.15	15.73	12.69
10	18.77	18.52	17.28	14.18	14.23	12.70	13.57	14.05	14.15	15.17	15.74	12.83
11	18.81	18.52	17.13	14.11	14.27	12.72	13.55	14.13	14.10	15.23	15.51	12.95
12	18.67	18.52	16.82	14.16	14.33	12.83	13.43	14.14	14.01	15.36	15.36	13.11
13	18.67	18.52	16.57	14.14	14.35	12.82	13.35	14.16	13.98	15.38	15.08	13.13
14	18.67	18.52	16.39	14.30	14.43	12.94	13.14	14.28	13.97	15.40	14.74	13.01
15	18.67	18.57	16.25	14.40	14.36	13.06	13.00	14.41	13.97	15.49	14.44	13.04
16	18.67	18.49	16.18	14.34	14.58	13.23	12.89	14.49	13.96	15.63	14.24	12.95
17	18.67	18.48	16.02	14.28	14.70	13.32	12.77	14.56	13.92	15.67	14.15	12.85
18	18.67	18.48	16.05	14.22	14.77	13.37	12.59	14.56	13.98	15.75	14.03	12.74
19	18.67	18.52	15.86	14.26	14.84	13.42	12.56	14.56	14.06	15.76	13.89	12.68
20	18.67	18.62	15.86	14.14	14.80	13.42	12.56	14.60	14.15	15.99	13.83	12.67
21	18.67	18.48	15.67	13.91	14.84	13.42	12.54	14.68	14.14	15.99	13.73	12.66
22	18.63	18.51	15.75	13.98	14.89	---	12.73	14.78	14.13	16.00	13.65	12.64
23	18.66	18.41	15.73	13.90	14.92	---	12.78	14.80	14.18	16.06	13.43	12.78
24	18.62	18.44	15.63	13.75	14.87	---	12.85	14.79	14.23	16.06	13.19	12.78
25	18.64	18.46	15.50	13.71	14.55	---	12.88	14.78	14.34	16.07	12.95	12.76
26	18.45	18.40	15.42	13.74	13.97	---	12.98	14.80	14.40	16.06	12.82	12.78
27	18.52	18.34	15.46	13.65	13.57	---	13.06	14.81	14.49	16.11	12.61	12.83
28	18.62	18.31	15.40	13.53	13.43	14.21	13.17	14.86	14.52	16.13	12.50	12.82
29	18.62	18.38	15.42	13.68	---	14.25	13.31	14.85	14.56	16.08	12.32	12.72
30	18.64	18.26	15.40	13.63	---	14.31	13.37	14.83	14.52	16.12	12.14	12.62
31	18.51	---	15.30	13.63	---	14.40	---	14.81	---	16.07	11.98	---
MAX	18.81	18.62	18.30	15.29	14.92	14.40	14.53	14.86	14.69	16.13	16.03	13.13
WTR YR 1979	MEAN	15.03		HIGH	11.94		LOW	18.81				

GROUND-WATER RECORDS

FAIRFIELD COUNTY--Continued

395053082361900. Local number, F-5.

LOCATION.--Lat 39°50'53", long 82°36'19", Hydrologic Unit 05060001, Gaylord Paper Co., Baltimore.

Owner: Crown Zellerbach - Gaylord Paper Division.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in (0.3 m), depth 180 (54.9 m), cased.

DATUM.--Altitude of land-surface datum is 850 ft (259 m), from topographic map. Measuring point: Floor of instrument shelter 3.5 ft (1.067 m) 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, 25.70 ft (7.833 m) May 26, 1979; minimum daily low, 0.35 ft (0.107 m) Jan. 18, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 25.70 ft (7.833 m) May 26; minimum daily low, 5.60 ft (1.707 m) Jan. 21, Feb. 4.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	20.60	7.90	8.20	6.60	8.90	8.50	23.20	24.20	19.30	13.10	10.70
2	---	20.70	7.60	9.20	6.30	9.60	8.70	18.00	24.40	21.10	13.70	12.50
3	---	15.40	8.20	8.90	8.10	9.10	10.10	17.00	24.00	21.80	11.30	14.40
4	---	15.50	8.10	9.70	5.60	9.50	10.10	13.40	23.90	18.20	12.10	---
5	---	20.20	11.00	9.90	8.80	10.30	12.00	10.10	---	20.20	13.80	---
6	---	20.80	9.40	7.70	9.40	10.80	8.40	9.50	---	20.60	14.70	9.80
7	---	20.90	14.20	9.60	9.90	12.30	8.90	8.60	13.00	15.90	12.10	7.50
8	---	23.20	10.10	10.20	10.20	8.60	8.70	11.20	13.50	15.50	10.50	8.50
9	---	17.40	9.80	11.20	11.00	8.00	12.50	11.70	12.70	16.40	9.50	10.20
10	---	14.10	9.70	9.30	11.30	8.00	8.40	17.00	13.80	16.90	9.60	8.10
11	---	14.00	9.80	8.30	9.00	8.70	7.30	18.10	16.60	14.10	9.20	8.90
12	---	13.80	9.20	8.20	8.10	8.60	7.10	18.70	19.20	16.10	8.70	11.20
13	---	13.60	9.30	8.00	8.50	8.00	6.90	19.00	17.50	18.40	9.50	8.40
14	---	12.30	10.11	8.70	8.70	8.90	11.70	20.70	11.00	18.40	9.10	9.50
15	---	11.40	11.05	7.30	11.00	8.80	13.30	20.60	10.00	18.50	12.90	6.30
16	---	17.60	10.00	6.60	9.50	9.80	17.70	20.00	9.30	18.70	9.90	6.90
17	---	11.80	9.30	6.60	8.70	10.20	17.30	23.70	8.70	19.40	8.90	8.30
18	---	14.60	8.90	7.50	8.60	13.80	17.50	23.70	10.60	21.10	8.60	11.10
19	19.40	14.10	9.90	7.00	8.70	15.50	12.70	24.30	11.50	21.70	8.70	9.80
20	19.70	15.50	8.90	6.10	10.40	12.40	9.80	24.70	12.00	21.40	9.40	8.50
21	18.00	16.00	9.30	5.60	8.30	11.30	9.20	25.20	12.20	17.00	9.00	9.90
22	18.40	15.10	8.80	6.80	7.60	13.10	8.50	23.30	12.30	15.80	9.10	9.20
23	21.70	10.00	7.20	9.90	13.60	12.00	8.70	23.40	12.20	13.50	9.80	8.20
24	21.30	9.00	7.00	7.80	16.50	12.70	7.40	23.00	12.20	16.70	9.70	9.00
25	20.00	7.95	5.80	6.80	16.60	12.70	14.10	23.70	14.40	14.00	9.70	9.30
26	18.20	8.10	15.40	7.60	18.20	12.10	15.50	25.70	14.60	15.80	9.90	9.40
27	20.40	7.90	9.40	6.70	11.90	13.00	16.20	25.30	15.30	13.60	10.90	9.30
28	19.00	7.90	8.20	6.60	9.00	10.60	17.10	25.20	15.60	13.00	9.60	9.50
29	20.70	7.80	8.80	6.40	---	9.10	17.10	24.10	15.40	12.70	9.20	9.00
30	21.30	7.70	7.30	6.60	---	8.70	21.70	23.40	16.90	13.60	9.20	9.50
31	19.60	---	7.90	5.00	---	9.30	---	23.10	---	13.20	9.50	---
MAX	21.70	23.20	15.40	11.20	18.20	15.50	21.70	25.70	24.40	21.80	14.70	14.40
WTR YR 1979	MEAN	12.60		HIGH	5.60		LOW	25.70				

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 (9.6 km) west of Washington Court House.

Owner: Martha Slagle.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 5 in (0.13 m), depth 78 ft (23.8 m), cased.

DATUM.--Altitude of land-surface datum is 1010 ft (308 m), from topographic map. Measuring point: Floor of instrument shelter 3.30 ft (1.006 m) 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, 12.85 ft (3.917 m) Jan. 17, 19, 1954; minimum daily low, 3.26 ft (0.994 m) Apr. 28, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 8.80 ft (3.917 m) Aug. 11; minimum daily low, 6.45 ft (1.966 m) Mar. 9-11, 13.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.75	7.60	7.40	7.00	7.10	7.20	6.95	7.25	7.55	7.80	8.15	8.05
2	8.75	7.60	7.40	6.75	7.10	7.15	7.00	7.20	7.65	7.70	8.25	8.20
3	8.55	7.95	7.50	6.80	7.35	6.80	6.90	7.25	7.35	7.65	8.50	8.10
4	8.50	7.90	7.15	7.60	7.20	6.75	6.75	7.10	7.55	7.60	8.75	8.10
5	8.65	7.95	7.35	6.65	7.15	6.80	6.75	7.10	7.35	7.60	8.60	8.10
6	8.60	7.80	7.25	7.05	7.15	6.70	6.85	7.30	7.45	7.60	8.50	8.15
7	8.55	7.95	7.25	6.65	7.15	6.55	6.80	7.20	7.45	8.20	8.40	8.15
8	8.60	7.85	6.95	6.85	7.20	6.55	6.50	7.25	7.35	7.95	8.40	8.35
9	8.55	7.90	7.05	6.60	7.20	6.45	6.95	7.60	7.30	7.80	8.60	8.35
10	8.45	7.80	7.05	6.85	7.25	6.45	6.90	7.35	7.30	7.80	8.50	8.30
11	8.40	7.70	7.05	6.65	7.50	6.45	6.70	7.50	7.50	7.80	8.80	8.30
12	8.35	7.95	6.75	6.90	7.35	6.50	6.70	7.35	7.40	7.70	8.40	8.55
13	8.35	7.90	6.60	6.65	7.30	6.45	6.55	7.30	7.50	7.60	8.45	8.25
14	8.55	7.85	6.65	7.30	7.35	6.50	6.70	7.50	7.50	7.75	8.35	7.75
15	8.40	7.95	6.60	7.15	7.35	6.50	6.70	7.45	7.60	7.80	8.35	7.80
16	8.15	7.80	6.65	7.10	7.50	6.50	6.80	7.70	7.65	7.75	8.40	8.00
17	8.25	8.00	6.60	6.90	7.90	6.70	6.85	7.65	7.70	7.80	8.40	7.75
18	8.10	7.85	6.65	7.25	7.70	6.60	6.70	7.50	7.90	7.80	8.65	7.65
19	8.00	7.90	6.65	6.85	7.60	6.60	6.85	7.55	7.70	7.80	8.70	7.80
20	7.85	7.85	6.85	7.15	7.55	6.55	6.55	8.25	7.55	8.00	8.60	7.75
21	8.05	7.85	6.75	6.85	7.60	6.55	6.85	8.00	7.50	8.25	8.60	7.50
22	8.05	7.60	7.00	7.10	7.65	6.60	7.00	8.10	7.50	8.30	8.50	7.75
23	7.90	7.65	6.85	6.85	7.45	6.50	6.85	7.80	7.80	8.60	8.35	7.75
24	7.85	7.55	6.90	6.95	7.80	6.90	7.00	7.50	7.70	8.10	8.30	7.45
25	7.85	7.60	6.85	6.80	7.60	6.70	6.85	7.55	7.60	8.25	8.35	7.35
26	7.60	7.40	7.10	7.05	7.50	6.75	6.75	7.50	8.30	8.10	8.35	7.35
27	7.75	7.45	7.00	6.75	7.50	6.75	7.05	7.55	7.85	8.20	8.10	7.30
28	7.80	7.25	7.00	7.10	7.45	6.80	7.10	7.60	8.45	8.05	8.10	7.00
29	8.05	7.40	6.90	6.95	---	6.80	7.45	7.55	8.40	8.15	8.00	7.10
30	7.85	7.25	7.05	7.15	---	6.70	7.45	7.55	7.90	8.30	7.95	7.00
31	7.70	---	6.80	7.10	---	---	---	7.60	---	8.15	8.00	---
MAX	8.75	8.00	7.50	7.60	7.90	7.20	7.45	8.25	8.45	8.60	8.80	8.55
WTR YR 1979	MEAN	7.51		HIGH	6.45		LOW	8.80				

GROUND-WATER RECORDS

FRANKLIN COUNTY

395118082573300. Local number, FR-3.

LOCATION.--Lat 39°51'14", long 82°57'32", Hydrologic Unit 05060001, 0.7 mi (1.1 km) southwest of Reese.

Owner: R. Hann

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 12 in (0.3 m), depth drilled 60 ft (18.3 m), present depth 53 ft (16.2 m), cased.

DATUM.--Altitude of land-surface datum is 712.94 ft (217.304 m). Measuring point: Floor of instrument shelter 3.43 ft (1.045 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 20.75 ft (6.325 m) July 7, 1966; minimum daily low, 0.0 ft (0.0 m) Jan. 22, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 12.61 ft (3.844 m) Oct. 1; minimum recorded daily low, 6.54 ft (1.994 m) Feb. 26.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.61	12.43	11.96	11.51	11.54	8.46	11.52	11.57	11.78	11.84	11.14	9.06
2	12.49	12.45	12.08	9.76	11.53	7.86	11.51	11.63	11.67	11.65	10.98	9.18
3	12.52	12.47	12.14	10.27	11.48	7.01	10.70	11.65	11.74	11.73	10.98	9.49
4	12.53	12.49	11.75	10.36	11.56	6.78	10.41	11.35	11.82	11.81	11.28	9.92
5	12.44	12.51	11.01	10.39	11.59	6.94	9.91	11.30	11.90	11.81	11.45	10.19
6	12.47	12.52	11.26	10.39	11.66	8.03	9.96	11.46	11.92	11.89	11.42	10.44
7	12.52	12.52	11.36	10.38	11.78	8.82	10.23	11.57	11.81	11.96	11.42	10.78
8	12.57	12.52	11.40	10.45	11.86	9.46	10.41	11.66	11.46	12.05	11.38	11.05
9	12.59	12.52	10.13	10.57	11.93	9.52	10.42	11.74	11.31	12.11	11.58	11.26
10	12.60	12.54	9.93	10.87	11.95	9.43	9.27	11.81	11.40	12.13	11.69	11.43
11	12.59	12.56	10.36	11.15	---	9.22	9.47	11.86	11.55	11.64	11.65	11.58
12	12.57	12.57	10.67	11.33	---	9.25	9.47	11.89	11.71	11.76	10.85	11.63
13	12.51	12.56	10.73	11.43	---	9.23	9.50	11.85	11.84	11.90	11.12	11.65
14	12.21	12.56	10.71	11.45	---	9.34	8.90	11.91	11.96	12.05	11.38	11.03
15	12.21	12.56	10.75	11.29	---	9.73	7.33	11.97	12.07	12.17	11.58	---
16	12.34	12.58	11.01	11.44	---	9.97	8.24	12.03	12.15	12.26	11.70	---
17	12.33	12.56	11.18	11.52	---	10.44	8.55	12.05	12.22	12.34	11.80	---
18	12.29	12.37	11.26	11.61	---	10.72	9.47	12.07	12.24	12.41	11.81	---
19	11.99	12.31	11.44	11.63	---	10.90	9.55	12.11	12.30	12.47	11.84	---
20	12.01	12.39	11.56	11.63	---	11.05	9.35	12.19	12.34	12.51	11.93	---
21	11.94	12.45	11.62	11.54	---	11.19	9.42	12.25	12.34	12.52	11.59	---
22	12.03	12.50	11.69	11.60	11.69	11.28	9.48	12.28	11.76	12.44	11.11	---
23	12.00	12.51	11.77	11.61	11.46	11.33	9.58	12.29	11.77	11.98	11.01	---
24	12.13	12.51	11.83	11.57	9.31	11.35	10.28	12.23	11.95	11.75	10.52	---
25	12.24	12.48	11.91	11.11	8.39	11.39	10.57	12.14	12.07	11.49	9.05	9.82
26	12.27	12.50	12.01	11.16	6.54	11.51	10.92	12.09	12.16	11.50	9.40	10.26
27	12.25	12.47	12.08	11.23	7.65	11.61	11.03	11.98	12.24	11.64	9.39	10.54
28	12.31	12.40	12.14	11.41	8.48	11.64	11.22	11.78	12.29	11.12	9.63	10.56
29	12.36	12.18	12.17	11.50	---	11.50	11.34	11.84	12.33	10.66	9.18	9.47
30	12.38	12.02	12.19	11.56	---	11.45	11.48	11.91	12.28	10.51	8.69	9.77
31	12.39	---	12.13	11.56	---	11.62	---	11.93	---	10.93	8.91	---
MAX	12.61	12.58	12.19	11.63	11.95	11.64	11.62	12.29	12.34	12.52	11.93	11.65
WTR YR 1979	MEAN	11.29		HIGH	6.54		LOW	12.61				

GROUND-WATER RECORDS

359

FRANKLIN COUNTY--Continued

395157083003500. Local number, FR-109.

LOCATION.--Lat 39°51'57", long 83°00'35", Hydrologic Unit 05060001, 6.6 mi (10.5 km) 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 (0.15 m), depth 92 ft (28.0 m), cased to 82 ft (25.0 m).

DATUM.--Altitude of land-surface datum is 702.24 ft (214.043 m). Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.

PERIOD OF RECORD.--July 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 21.34 ft (6.504 m) Feb. 9-12, 1977; minimum daily low, 12.43 ft (3.789 m) Mar. 27, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 20.01 ft (6.099 m) Dec. 2-3; minimum daily low, 12.83 ft (3.911 m) Mar. 10.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.25	19.67	20.00	19.06	17.43	14.91	14.40	14.19	15.85	16.04	17.96	---
2	19.26	19.68	20.01	18.88	17.43	14.73	14.42	14.22	15.85	17.08	17.99	---
3	19.27	19.69	20.01	18.40	17.43	14.21	14.49	14.24	15.85	17.10	18.01	---
4	19.30	19.70	19.88	18.20	17.46	13.83	14.48	14.31	15.86	17.15	18.05	---
5	19.30	19.71	19.86	18.02	17.49	13.31	14.45	14.34	15.86	17.20	18.07	---
6	19.33	19.73	19.87	17.85	17.49	12.94	14.51	14.41	15.87	17.24	18.04	---
7	19.35	19.74	19.87	17.70	17.52	12.92	14.53	14.48	15.87	17.27	18.06	---
8	19.37	19.75	19.84	17.61	17.55	12.92	14.50	14.55	15.86	17.30	18.09	---
9	19.39	19.76	19.67	17.56	17.60	12.86	14.51	14.62	15.85	17.32	18.11	---
10	19.40	19.79	19.62	17.50	17.64	12.83	14.55	14.68	15.87	17.36	18.12	---
11	19.40	19.79	19.58	17.46	17.64	12.95	14.55	14.76	15.88	17.40	18.12	---
12	19.42	19.82	19.54	17.39	17.68	13.03	14.53	14.83	15.89	17.43	18.10	---
13	19.43	19.82	19.46	17.35	17.69	13.04	14.53	14.90	15.90	17.45	18.13	---
14	19.42	19.83	19.45	17.34	17.69	13.23	14.21	14.96	15.91	17.49	18.19	---
15	19.43	19.85	19.38	17.34	17.72	13.34	13.19	15.06	15.91	17.53	18.21	---
16	19.46	19.85	19.36	17.31	17.80	13.37	13.19	15.13	15.91	17.58	18.23	---
17	19.47	19.85	19.33	17.29	17.81	13.40	13.22	15.18	15.93	17.61	18.23	---
18	19.47	19.85	19.30	17.30	17.81	13.45	13.35	15.23	15.94	17.65	18.23	---
19	19.48	19.87	19.26	17.30	17.86	13.51	13.42	15.30	15.97	17.67	18.24	13.65
20	19.51	19.88	19.22	17.24	17.86	13.56	13.49	15.37	15.95	17.70	18.26	13.69
21	19.52	19.89	19.21	17.26	17.87	13.64	13.57	15.46	15.94	17.73	18.24	13.72
22	19.54	19.90	19.21	17.32	17.86	13.67	13.55	15.51	15.96	17.77	18.22	13.80
23	19.56	19.91	19.20	17.32	17.75	13.67	13.59	15.55	15.99	17.81	18.19	13.84
24	19.56	19.94	19.16	17.24	17.38	13.80	13.72	15.61	16.01	17.83	18.10	13.88
25	19.57	19.94	19.17	17.27	16.48	13.92	13.76	15.67	16.02	17.79	18.06	13.92
26	19.59	19.94	19.17	17.27	15.51	14.02	13.82	15.72	16.03	17.84	18.04	13.98
27	19.60	19.94	19.17	17.27	15.18	14.11	13.90	15.75	16.03	17.88	17.98	14.02
28	19.62	19.96	19.17	17.31	15.07	14.12	13.99	15.82	16.03	17.90	17.94	14.02
29	19.63	19.96	19.17	17.34	---	14.22	14.03	15.86	16.03	17.86	17.90	13.78
30	19.65	19.99	19.16	17.34	---	14.28	14.13	15.89	16.03	17.91	17.18	13.83
31	19.65	---	19.15	17.37	---	14.36	---	15.88	---	17.95	---	---
MAX	19.65	19.99	20.01	19.06	17.87	14.91	14.55	15.89	16.03	17.95	18.26	14.02
WTR YR 1979	MEAN	16.97		HIGH	12.83		LOW	20.01				

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 Rds, Columbus.

Owner: Ohio State University..

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 4 in (0.1 m), depth 75 ft (22.9 m), cased.

DATUM.--Altitude of land-surface datum is 775 ft (236 m) from topographic map. Measuring point: Floor of instrument shelter 4.00 ft (1.219 m) 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 (14.691 m) Oct. 7, 1954; minimum daily low, 37.76 ft (11.509 m) Apr. 13, 1951.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 44.04 ft (13.423 m) Oct. 8; minimum daily low, 41.20 ft (12.558 m) Apr. 26.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43.92	43.73	43.50	43.15	42.95	42.45	41.96	41.44	41.56	41.66	42.15	41.92
2	43.92	43.73	43.52	43.25	42.98	42.50	41.95	41.45	41.58	41.82	42.01	41.84
3	43.93	43.70	43.52	43.37	42.90	42.42	42.00	41.33	41.57	41.89	42.04	---
4	43.90	43.66	43.29	43.41	42.92	42.30	41.95	41.26	41.61	41.83	42.06	---
5	43.90	43.63	43.31	43.41	42.96	42.26	41.95	41.30	41.79	41.91	42.59	---
6	43.89	43.63	43.52	43.32	42.93	42.26	42.00	41.22	41.57	41.98	42.12	---
7	43.97	43.63	43.53	43.18	42.78	42.19	42.04	41.51	41.63	41.98	42.26	---
8	44.04	43.63	43.53	43.20	42.88	42.11	41.78	41.47	41.65	42.16	42.50	---
9	44.08	43.62	43.42	43.23	42.99	42.17	41.70	41.54	41.66	42.00	42.21	---
10	44.00	43.63	43.58	43.25	43.01	42.14	41.30	41.44	41.61	41.85	42.12	---
11	43.88	43.64	43.59	43.29	43.01	42.14	41.78	41.79	41.67	41.91	42.03	---
12	43.75	43.64	43.53	43.18	42.92	42.21	41.56	41.78	41.91	42.00	42.05	---
13	43.82	43.64	43.45	43.03	42.93	42.20	41.50	41.50	41.81	41.86	42.06	---
14	43.81	43.64	43.48	43.02	42.90	42.06	41.52	41.47	42.23	42.02	42.12	---
15	43.81	43.64	43.38	43.25	42.70	42.34	41.54	41.55	42.36	42.17	42.15	---
16	43.90	43.64	43.35	43.16	43.09	42.34	41.59	41.75	41.93	42.50	42.41	---
17	43.94	43.63	43.45	43.12	43.14	42.31	41.54	41.68	41.77	42.44	42.75	---
18	43.90	43.71	43.44	43.12	43.07	42.25	41.53	41.78	41.75	42.45	42.20	---
19	43.80	43.77	43.28	43.12	42.94	42.12	41.53	41.72	41.84	42.47	42.02	---
20	43.70	43.77	43.20	42.83	42.93	42.06	41.57	41.53	42.50	42.47	42.06	---
21	43.70	43.73	43.23	42.61	42.82	42.03	41.51	42.17	42.10	42.44	42.04	---
22	43.70	43.68	43.25	42.96	42.86	42.03	41.53	41.99	41.80	42.44	42.02	---
23	43.70	43.51	43.34	42.90	42.70	41.92	41.54	41.79	41.85	42.43	41.99	---
24	43.70	43.55	43.30	42.73	42.69	41.64	41.44	41.46	41.91	42.28	41.93	---
25	43.68	43.56	43.25	42.79	42.63	41.86	41.31	41.34	42.00	42.12	42.01	---
26	43.67	43.51	43.36	42.81	42.50	42.03	41.20	41.38	42.18	42.10	42.01	---
27	43.70	43.43	43.45	42.78	42.57	42.14	41.28	41.39	42.30	42.11	41.90	---
28	43.80	43.60	43.52	42.73	42.56	42.15	41.38	41.44	42.28	42.13	41.87	41.46
29	43.85	43.53	43.50	42.83	---	42.03	41.41	41.47	42.01	42.14	41.87	41.53
30	43.85	43.50	43.40	42.88	---	42.03	41.41	41.68	41.68	42.14	41.91	41.52
31	43.80	---	43.35	42.83	---	41.96	---	41.66	---	---	41.94	---
MAX	44.08	43.77	43.59	43.41	43.14	42.50	42.04	42.17	42.50	42.50	42.75	41.92
WTR YR 1979	MEAN	42.56		HIGH	41.20		LOW	44.08				

GROUND-WATER RECORDS

361

GALLIA COUNTY

383638082103300. Local number, G-2.

LOCATION.--Lat 38°36'38", long 82°10'33", Hydrologic Unit 05090101, 5.9 mi (9.5 km) 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 (0.3 m), depth 65 ft, (19.8 m), cased.

DATUM.--Altitude of land-surface datum is 552 ft (168 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.

PERIOD OF RECORD.--June 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded daily low, 33.10 ft (10.089 m) Feb. 10-11, 1977; minimum daily low 16.43 ft (5.008 m) Mar. 8, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 32.92 ft (10.034 m) Nov. 14; minimum daily low, 16.43 ft (5.008 m) Mar. 8.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32.39	32.52	31.66	27.04	25.86	17.08	24.14	26.20	25.23	29.89	29.72	29.15
2	32.39	32.45	31.86	25.68	26.33	17.77	23.11	26.83	25.63	29.93	30.00	29.49
3	32.40	32.68	31.90	23.38	27.16	18.07	22.95	27.00	26.08	30.15	30.14	29.80
4	32.41	32.61	30.78	21.52	27.54	18.45	21.77	26.71	26.59	30.08	30.23	30.01
5	32.36	32.65	28.71	21.32	27.88	18.59	21.22	25.73	26.62	29.79	30.50	29.99
6	32.46	32.62	27.93	22.79	28.25	18.05	21.40	24.81	27.14	29.89	30.55	29.98
7	32.58	32.67	28.19	23.64	28.70	18.99	21.94	25.89	27.38	30.06	30.76	29.91
8	32.62	32.79	28.20	23.61	28.59	18.43	22.39	26.22	27.93	30.25	30.76	29.33
9	32.68	32.81	26.06	22.81	28.78	16.94	23.04	26.91	27.88	30.26	30.86	29.85
10	32.66	32.80	23.23	22.97	29.22	18.10	22.42	27.38	28.09	30.39	30.98	30.17
11	32.60	32.72	21.52	23.78	29.41	19.00	20.76	27.41	27.98	30.41	30.77	30.42
12	32.66	32.80	21.45	24.35	29.53	19.48	20.30	27.91	27.91	30.36	30.44	30.57
13	32.71	32.83	23.59	24.69	29.53	19.90	21.17	27.14	28.21	30.46	29.91	30.65
14	32.51	32.92	24.68	25.41	29.69	20.89	21.36	25.87	28.57	30.51	29.99	30.77
15	32.06	32.90	25.43	25.02	29.66	21.19	21.79	25.38	28.99	30.57	30.26	30.40
16	32.07	32.70	26.12	24.76	29.57	21.39	22.36	25.85	29.13	30.50	30.53	29.91
17	32.00	32.57	26.50	25.23	28.27	21.61	22.56	26.51	29.49	30.32	30.75	29.58
18	32.12	32.50	27.01	25.54	27.21	22.59	22.92	27.16	29.52	30.53	30.87	29.66
19	32.17	32.20	27.40	25.36	27.37	23.21	23.01	27.48	29.66	30.58	30.82	29.75
20	32.31	32.34	27.53	25.53	27.83	23.82	23.79	27.93	29.53	30.73	30.44	29.83
21	32.37	32.53	26.87	24.47	27.96	24.03	24.32	28.19	29.45	30.81	30.03	29.87
22	32.40	32.55	25.94	22.81	27.61	24.00	24.37	28.33	29.26	30.89	29.35	28.80
23	32.52	32.45	24.93	21.22	26.13	24.39	25.48	28.60	28.17	30.77	29.68	27.57
24	32.52	32.60	25.56	21.49	24.44	24.69	26.05	28.34	28.20	30.91	29.77	26.71
25	32.59	32.64	26.18	21.48	22.17	24.51	26.21	27.35	28.72	30.61	29.66	27.51
26	32.63	32.54	25.87	21.29	19.51	23.21	26.46	26.00	28.98	30.45	29.39	27.94
27	32.31	32.47	25.63	22.18	18.20	22.73	26.56	24.72	29.23	30.41	28.62	28.43
28	31.91	32.27	26.39	23.14	17.05	23.08	25.48	23.88	29.51	29.59	27.76	28.54
29	32.12	31.61	26.92	23.88	---	23.68	24.75	23.30	29.78	29.32	28.10	28.27
30	32.30	31.49	27.47	24.37	---	24.24	25.34	23.92	29.78	29.27	28.08	26.80
31	32.47	---	27.37	25.11	---	24.33	---	24.59	---	29.38	28.65	---
MAX	32.71	32.92	31.90	27.04	29.69	24.69	26.56	28.60	29.78	30.91	30.98	30.77
WTR YR 1979	MEAN	27.57		HIGH	16.43		LOW	32.92				

GROUND-WATER RECORDS

GREENE COUNTY

394411083561300. Local number, GR-1.

LOCATION.--Lat 39°44'11"N, long 83°56'13"W, Hydrologic Unit 05090202, along Massies Creek near U.S. 68 north of Xenia.

Owner: Xenia Water Department.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 30 in (0.75 m), depth 77 ft (23.5 m), cased.

DATUM.--Altitude of land-surface datum is 818.88 ft (249.595 m). Measuring point: Floor of instrument shelter 4.50 ft (1.372 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--August 1944 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 21.60 ft (6.584 m) July 7, 1916; minimum daily low, 0.70 ft (0.213 m) above land surface Aug. 3, 1958.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 11.70 ft (3.566 m) June 26; minimum daily low, 3.70 ft (1.128 m) Feb. 24.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.38	9.95	9.10	6.50	8.05	4.70	8.55	---	10.85	10.00	---	8.60
2	9.00	9.85	9.00	6.10	7.40	5.00	8.45	---	10.50	10.05	10.10	8.30
3	9.75	---	9.10	6.45	8.35	4.95	8.30	---	9.85	10.00	10.25	8.00
4	9.80	---	8.40	6.70	7.70	4.25	8.50	10.15	---	10.15	10.15	8.25
5	9.85	---	8.25	6.95	7.70	4.50	7.70	8.10	---	10.40	10.10	8.05
6	9.80	---	8.45	7.10	8.90	5.00	7.50	9.60	---	10.60	---	8.15
7	9.85	---	8.30	7.40	9.00	5.30	8.10	10.10	---	10.60	9.45	8.25
8	10.55	---	8.30	7.85	8.90	5.45	5.85	10.35	9.30	10.65	9.45	8.15
9	10.40	---	6.10	7.95	8.40	5.85	---	10.40	9.20	---	9.40	9.05
10	10.45	---	6.60	7.35	8.75	6.05	---	10.05	9.20	10.70	9.70	9.55
11	10.30	---	6.55	7.15	8.85	6.20	---	10.05	9.50	10.80	9.60	9.80
12	10.40	---	6.50	7.30	8.45	6.95	---	10.10	9.70	10.85	9.80	10.00
13	10.20	---	6.70	7.35	8.10	6.55	---	10.05	9.80	10.80	10.10	10.05
14	9.95	---	6.85	7.50	7.80	6.35	---	10.00	9.95	10.60	10.25	9.40
15	10.20	---	7.95	---	7.30	6.35	---	10.60	10.00	---	10.40	4.00
16	10.00	---	8.15	---	7.55	6.35	---	10.95	10.10	---	10.50	5.20
17	9.80	---	7.25	---	---	---	---	11.15	9.95	---	10.65	6.15
18	9.85	---	8.20	6.50	---	6.80	---	11.35	10.05	---	10.80	6.65
19	9.75	---	8.20	6.70	---	6.80	---	11.25	10.15	10.55	11.00	7.40
20	9.75	---	8.15	6.75	9.60	6.00	---	10.32	10.30	---	8.60	7.70
21	9.80	9.55	7.90	6.70	9.45	6.80	---	10.45	10.90	10.95	5.90	7.90
22	10.50	9.60	8.15	6.90	8.05	6.60	---	10.45	11.20	11.00	6.35	8.05
23	10.20	9.65	8.10	8.00	7.70	6.35	---	10.25	11.40	---	6.55	8.85
24	10.20	9.80	8.10	7.75	3.70	6.20	---	9.80	11.50	11.20	6.90	9.25
25	10.30	9.60	8.10	7.95	4.10	6.35	---	9.90	11.65	10.90	7.35	9.55
26	10.30	9.45	7.50	8.35	4.53	6.60	---	9.90	11.70	---	8.00	9.75
27	10.30	9.40	7.65	8.05	5.85	6.65	---	9.35	11.10	---	8.15	9.90
28	10.30	9.05	8.10	7.95	5.25	6.95	---	9.45	10.85	10.80	8.30	9.85
29	10.30	9.00	7.80	8.00	---	8.40	---	10.45	10.60	---	7.75	9.35
30	10.35	9.10	7.85	7.20	---	8.60	---	10.65	10.30	---	7.85	9.20
31	10.05	---	7.80	6.85	---	8.60	---	10.85	---	---	8.25	---
MAX	10.55	9.95	9.10	8.35	9.60	8.60	8.80	11.35	11.70	11.20	11.00	10.05
WTR YR 1979	MEAN	8.70		HIGH	3.70		LOW	11.70				

GROUND-WATER RECORDS
GREENE COUNTY--Continued

363

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 (0.15 m), depth 100 ft (30 m), cased.

DATUM.--Altitude of land-surface datum is 835 ft (255 m), 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 (5.218 m) Nov. 5, 1977; minimum daily low, 3.88 ft (1.183 m) Sept. 15, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 19.92 ft (5.072 m) Dec. 2; minimum daily low, 3.88 ft (1.183 m) Sept. 15.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.26	19.15	19.88	13.89	---	7.73	11.13	---	6.74	7.64	9.72	8.37
2	19.24	19.30	19.92	13.20	---	7.64	11.06	---	7.33	7.75	9.77	9.42
3	19.36	19.28	19.83	12.28	13.78	6.90	11.53	---	7.03	7.82	9.69	9.12
4	19.35	---	19.35	12.03	---	6.89	10.34	9.11	7.21	7.88	9.79	9.29
5	19.55	---	18.75	---	---	8.28	10.20	9.24	---	9.26	9.81	11.52
6	19.58	---	17.50	---	13.54	8.93	10.10	9.30	---	10.11	---	11.37
7	19.51	---	17.45	---	13.60	9.90	10.07	6.88	---	9.60	10.82	11.15
8	19.36	---	16.90	---	13.74	10.10	10.16	6.65	7.15	9.84	11.04	11.40
9	19.30	---	16.19	---	---	10.16	10.34	8.83	7.85	9.73	11.19	11.43
10	18.58	---	15.15	---	---	10.46	10.35	9.07	8.45	10.65	11.29	10.60
11	18.55	---	16.70	---	---	9.10	10.35	9.18	8.68	10.65	11.06	10.55
12	18.55	---	15.00	---	---	9.52	9.55	9.25	8.84	9.84	11.45	10.57
13	18.55	---	14.75	---	---	9.25	10.03	8.54	8.95	9.87	10.61	10.57
14	18.48	---	14.60	---	16.27	11.18	9.25	8.65	9.02	9.91	10.53	10.57
15	18.75	---	14.33	---	16.78	11.63	5.73	8.68	9.15	10.29	10.67	3.88
16	19.10	---	14.33	---	14.89	11.66	6.07	7.17	7.97	8.60	10.70	4.75
17	19.14	---	14.33	---	---	10.25	4.37	6.94	7.75	8.52	10.72	5.26
18	19.15	---	14.49	13.30	---	10.33	4.56	7.34	7.72	8.50	10.76	5.60
19	19.50	---	14.35	13.13	16.09	10.93	4.57	8.87	7.75	8.55	10.97	5.82
20	19.26	---	14.42	13.41	16.98	10.65	---	9.24	9.23	9.02	10.59	6.04
21	19.28	18.33	14.51	12.71	17.22	10.95	---	9.57	7.86	10.12	7.75	6.20
22	19.21	18.10	14.61	---	17.70	10.92	---	9.82	7.55	10.19	7.50	6.33
23	19.07	18.20	14.62	---	16.50	11.95	---	10.04	7.35	10.29	7.99	6.47
24	18.25	17.95	14.70	13.04	8.10	12.08	---	10.20	8.81	10.29	8.25	5.25
25	18.13	18.30	---	12.65	6.00	10.05	---	10.30	7.13	10.14	8.61	5.15
26	18.14	18.75	---	12.76	6.22	10.58	---	9.63	7.05	10.22	9.31	5.13
27	18.44	19.45	---	12.29	5.57	10.71	---	9.61	8.70	10.40	8.35	5.15
28	18.18	19.60	---	13.00	7.05	11.37	---	9.50	9.11	10.34	8.40	5.15
29	18.75	19.71	---	14.00	---	12.48	---	10.04	7.88	10.18	8.28	5.04
30	18.16	19.75	14.07	15.23	---	12.03	---	9.84	7.76	8.69	8.20	8.10
31	19.06	---	14.05	15.22	---	11.18	---	7.48	---	8.62	8.32	---
MAX	19.58	19.76	19.92	15.23	17.70	12.48	11.53	10.30	9.23	10.65	11.45	11.52
WTR YR 1979	MEAN	11.54		HIGH	3.88		LOW	19.92				

GROUND-WATER RECORDS

HAMILTON COUNTY

390645084480500. Local number, H-21.

LOCATION.--Lat 39°06'45", long 84°48'05", Hydrologic Unit 05080002, on right bank of Ohio River, 0.7 mi (1.1 km) upstream from Great Miami River.

Owner: Dupont Corporation.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled industrial supply water-table well, diameter 16 in (0.41 m) depth 133 ft (40.54 m), screened below 117 ft (35.7 m).

PERIOD OF RECORD.--November 1964 to October 1974, November 1976 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CAC03)	CARBON DIOXIDE, DIS-SOLVED (MG/L AS CO2)	SULFATE, DIS-SOLVED (MG/L AS SO4)
OCT 30...	739	7.3	16.0	13	84	23	21	316	0	260	25	75

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT 30...	33	448	1.7	.17	1.9	.00	.00	<10	100	4	20

GROUND-WATER RECORDS

365

HAMILTON COUNTY--Continued

390653084485700. Local number, H-5.

LOCATION.--Lat 39°06'53", long 84°48'57", Hydrologic Unit 05080002, 3.1 mi (5.0 km) south of Elizabethtown.

Owner: E. I. Dupont de Nemours and Company.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 8 in (0.20 m), depth 122 ft (37.2 m), cased to 122 ft (37.2 m).

DATUM.--Altitude of land-surface datum is 500 ft (152 m), from topographic map. Measuring point: Floor of shelter, 4.00 ft (1.219 m) above land-surface datum.

REMARKS.--Water levels affected by stages in the Ohio and Great Miami Rivers.

PERIOD OF RECORD.--April 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 74.50 ft (22.708 m) Sept. 10-11, 1957; minimum daily low, 24.15 ft (7.361 m) Mar. 16, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 53.38 ft (16.270 m) July 23; minimum daily low, 32.32 ft (9.851 m) Mar. 2.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52.73	52.46	51.97	48.62	48.76	32.88	49.54	49.23	49.74	52.52	51.56	
2	52.81	52.46	52.23	45.15	49.54	32.32	48.56	49.48	50.11	52.63	51.75	
3	52.84	52.20	52.09	43.42	49.88	33.12	46.08	49.07	49.68	52.65	52.02	
4	52.79	52.31	51.20	41.59	50.30	34.30	45.51	49.17	50.06	52.62	52.32	
5	52.55	52.32	49.04	40.06	50.46	35.71	45.29	48.77	50.37	52.39	52.39	
6	52.73	52.60	46.53	39.89	50.61	36.95	45.46	48.23	50.40	52.31	52.71	
7	52.77	52.63	45.54	42.09	50.94	37.50	45.03	47.47	51.51	52.49	52.69	
8	52.57	52.56	45.56	44.43	51.26	37.31	46.03	48.38	51.56	52.67	52.75	
9	52.63	52.58	42.90	44.59	51.15	37.10	47.27	48.89	51.81	52.83	52.85	
10	52.76	52.71	39.97	43.87	51.96	37.50	47.51	49.32	51.80	52.70	52.89	
11	52.67	52.76	36.80	44.26	51.42	38.80	47.41	49.78	51.79	52.80	---	
12	52.72	52.68	34.03	45.86	51.79	40.42	46.17	49.74	51.83	52.70	---	
13	52.71	52.49	33.18	46.92	51.83	41.94	43.92	49.89	52.00	52.58	---	
14	52.83	52.53	36.07	47.55	51.92	43.63	43.07	49.62	52.24	52.69	---	
15	52.61	52.62	41.03	47.55	52.05	45.11	44.22	49.01	52.35	52.57	---	
16	52.45	52.54	44.92	47.22	51.97	46.06	45.18	48.68	52.47	52.69	---	
17	52.42	52.35	46.42	47.49	51.43	46.58	46.17	49.44	52.57	52.65	---	
18	52.46	52.03	47.53	47.79	50.69	46.99	46.91	50.10	52.60	52.94	---	
19	52.49	52.05	48.30	48.00	50.05	48.05	47.44	50.41	52.54	53.10	---	
20	52.49	52.11	48.72	48.16	50.12	49.01	47.95	50.54	52.60	53.20	---	
21	52.46	52.08	48.67	47.90	50.58	49.62	48.57	50.77	52.11	53.22	---	
22	52.48	52.39	47.45	46.21	50.30	49.86	48.91	50.82	52.07	53.31	---	
23	52.51	52.26	46.16	43.37	48.97	49.77	49.04	50.80	51.93	53.38	---	
24	52.60	52.29	45.65	41.32	44.96	49.85	49.23	50.88	51.44	53.35	---	
25	52.49	52.19	46.91	40.94	42.68	50.04	49.54	50.71	51.13	53.28	---	
26	52.45	52.05	47.95	41.53	38.75	49.74	49.55	50.29	51.72	53.04	---	
27	52.42	51.98	47.97	42.07	38.41	49.09	50.02	49.62	52.02	52.80	---	
28	52.27	51.99	47.87	44.07	34.42	48.39	49.83	48.57	52.36	52.33	---	
29	52.27	51.94	48.73	45.82	---	48.83	49.27	47.57	52.57	51.58	---	
30	52.41	51.86	49.34	47.10	---	49.42	49.08	46.83	52.60	50.76	---	
31	52.40	---	49.53	48.25	---	49.91	---	48.58	---	51.31	---	
MAX	52.84	52.76	52.23	48.62	52.05	50.04	50.02	50.88	52.60	53.38	52.89	
WTR YR 1979	MEAN	48.98		HIGH	32.32		LOW	53.38				

GROUND-WATER RECORDS

HAMILTON COUNTY--Continued

391039084291500. Local number, H-11.

LOCATION.--Lat 39°10'39", long 84°29'15", Hydrologic Unit 05090203, 5.6 mi (9.0 km) 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 (0.15 m), depth 148 ft (45.1 m), cased.

DATUM.--Altitude of land-surface datum is 539 ft (164 m), from topographic map. Measuring point: Floor of instrument shelter 2.23 ft (0.680 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 129.72 ft (39.539 m) Oct 25, 1948; minimum daily low, 79.91 ft (24.357 m) Sept. 28, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 82.56 ft (25.164 m) Oct. 17; minimum daily low, 79.91 ft (24.357 m) Sept. 28.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82.25	82.25	81.96	81.68	81.93	81.64	81.34	81.30	80.97	80.62	80.40	80.25
2	82.26	82.23	82.04	82.09	81.95	81.70	81.36	81.15	81.00	80.76	80.47	80.16
3	82.05	82.19	81.79	82.24	81.69	81.46	81.49	81.00	80.89	80.77	80.53	80.21
4	82.17	82.05	81.75	82.26	81.86	81.36	81.24	81.13	80.78	80.75	80.60	80.19
5	82.16	82.01	81.88	82.22	81.87	81.50	81.29	81.18	80.68	80.92	80.58	80.12
6	82.22	81.98	82.20	81.86	81.67	81.45	81.51	80.98	80.75	80.98	80.50	80.08
7	82.32	82.08	82.10	81.60	81.52	81.20	81.52	80.96	80.83	80.90	80.45	80.26
8	82.47	82.14	81.95	81.94	81.72	81.39	81.18	81.00	80.98	80.77	80.46	80.38
9	82.42	82.02	82.16	81.94	81.94	81.52	81.21	81.03	80.98	80.58	80.49	80.41
10	82.33	82.10	82.36	82.02	81.87	81.51	81.37	80.98	80.89	80.50	80.36	80.26
11	82.11	82.21	82.35	82.01	81.83	81.46	81.27	80.97	81.00	80.57	80.35	80.21
12	82.04	82.18	82.22	81.68	81.70	81.61	81.17	81.04	80.98	80.57	80.41	80.16
13	82.18	82.11	82.10	81.30	81.74	81.43	81.13	81.08	81.08	80.50	80.48	80.05
14	82.28	82.19	82.17	82.09	81.55	81.58	81.21	81.06	81.08	80.57	80.48	80.31
15	82.28	82.21	81.84	82.21	81.28	81.90	81.29	81.19	81.05	80.68	80.58	80.42
16	82.40	82.20	81.91	81.92	82.10	81.82	81.37	81.29	80.91	80.74	80.60	80.48
17	82.56	82.01	82.20	81.69	82.18	81.66	81.45	81.26	80.72	80.72	80.46	80.37
18	82.37	82.30	82.07	81.99	81.81	81.44	81.47	81.05	80.88	80.75	80.22	80.16
19	82.13	82.40	81.69	81.86	81.82	81.27	81.41	80.81	80.98	80.70	80.25	80.19
20	82.13	82.38	81.38	81.21	81.67	81.21	81.26	80.77	80.91	80.68	80.28	80.13
21	82.15	82.25	81.91	81.34	81.53	81.29	81.19	80.88	80.77	80.60	80.25	79.96
22	82.18	82.11	81.95	81.82	81.60	81.21	81.29	80.95	80.73	80.56	80.18	80.23
23	82.27	81.69	82.06	81.74	81.37	80.86	81.26	80.77	80.81	80.60	80.17	80.30
24	82.27	82.04	81.71	81.41	81.47	80.92	81.08	80.73	80.97	80.57	80.27	80.23
25	81.91	82.05	81.86	81.81	81.34	81.32	80.90	80.74	81.04	80.43	80.42	80.20
26	82.16	81.90	82.20	81.81	81.45	81.60	80.76	80.69	80.99	80.42	80.40	80.20
27	82.26	81.83	82.28	81.62	81.57	81.73	80.96	80.75	80.88	80.48	80.26	80.11
28	82.36	82.15	82.26	81.74	81.51	81.66	81.19	80.81	80.77	80.50	80.17	79.91
29	82.46	82.09	82.08	81.87	---	81.38	81.20	80.81	80.59	80.54	80.20	80.01
30	82.41	82.01	81.97	81.85	---	81.31	81.21	80.82	80.48	80.48	80.35	79.96
31	82.31	---	81.84	81.73	---	81.35	---	80.84	---	80.40	80.36	---
MAX	82.56	82.40	82.36	82.26	82.18	81.90	81.52	81.30	81.08	80.98	80.60	80.48
WTR YR 1979	MEAN	81.30		HIGH	79.91		LOW	82.56				

GROUND-WATER RECORDS

367

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 (0.1 m), depth 60 ft (18.3 m), cased.

DATUM.--Altitude of land-surface datum is 532.22 ft (162.221 m). Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) 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 (10.897 m) Aug. 29, 1955; minimum daily low, 15.60 ft (4.755 m) Feb. 28, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 30.31 ft (9.238 m) Oct. 11; minimum daily low, 17.90 ft (5.456 m) Sept. 15.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.90	28.16	28.70	22.45	27.45	23.20		26.40	25.15	27.60	27.50	25.55
2	29.20	28.20	27.50	21.00	28.00	23.20		26.75	25.35	25.55	24.10	25.95
3	29.38	28.50	27.90	24.10	28.25	23.30		26.90	25.40	27.30	24.30	26.35
4	29.38	28.55	25.80	24.05	28.45	23.00		24.90	25.65	27.50	23.40	26.85
5	29.40	28.65	24.75	25.35	---	23.30		---	26.40	26.95	---	27.60
6	29.68	28.74	25.45	25.55	---	23.55		25.60	26.35	26.35	---	27.40
7	29.68	28.70	25.40	22.30	---	22.85		26.85	26.35	25.45	25.05	27.40
8	29.55	28.64	22.85	24.40	---	24.55		27.85	---	26.80	25.00	28.00
9	29.88	28.81	20.40	24.90	---	24.50		27.20	---	25.95	25.15	27.05
10	30.05	28.75	21.60	25.00	---	24.10		26.95	---	27.00	25.55	28.35
11	30.31	28.90	21.95	25.30	---	24.80		26.65	---	27.20	25.20	28.60
12	29.50	28.55	22.55	23.85	---	24.90		26.70	---	26.70	24.50	28.90
13	29.10	28.70	22.90	23.90	---	25.75		25.75	28.00	26.55	23.60	28.75
14	27.75	28.75	22.90	24.70	---	26.00		26.70	27.75	25.15	23.60	24.95
15	27.20	28.74	22.85	25.90	---	25.35		27.35	28.80	26.00	23.85	17.90
16	26.90	28.70	22.80	26.50	---	25.90		26.50	28.80	25.70	24.35	20.90
17	26.91	28.45	22.30	26.55	---	26.25		27.80	28.70	25.10	24.90	22.35
18	27.10	28.00	21.90	26.15	---	26.75		28.35	29.00	25.35	25.00	22.55
19	27.10	27.65	23.95	26.60	---	26.75		28.60	27.70	27.00	24.90	23.00
20	27.71	28.00	25.60	26.50	---	26.30		28.35	28.50	27.70	23.90	23.55
21	27.90	28.30	23.00	---	---	26.30		29.00	27.20	28.75	22.20	23.85
22	28.25	28.60	23.10	---	---	26.75		28.60	27.15	28.40	22.05	21.95
23	28.50	28.55	23.85	26.05	---	26.80		28.75	27.25	27.00	21.75	24.20
24	28.45	28.40	23.65	23.10	---	---		27.15	26.85	26.80	21.90	24.40
25	26.02	28.80	23.85	23.60	---	25.05		27.00	27.20	25.75	21.55	24.50
26	26.11	28.70	24.25	26.20	---	25.10		26.05	27.85	25.25	21.70	23.85
27	25.68	27.50	24.20	26.70	---	25.25		25.70	28.70	25.35	22.15	24.70
28	25.50	27.95	26.05	26.90	---	26.75		25.50	29.50	26.10	---	22.40
29	25.30	28.20	24.40	27.10	---	27.00		25.55	29.45	25.00	23.35	---
30	25.35	28.65	24.60	27.30	---	26.80		26.00	28.40	25.20	24.85	---
31	---	---	24.65	27.85	---	25.80		25.55	---	25.00	24.84	---
MAX	30.31	28.90	28.70	27.85	28.45	27.00		29.00	29.50	28.75	27.50	28.90
WTR YR 1979	MEAN	26.10		HIGH	17.90		LOW	30.31				

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 (0.2 m), depth 170 ft (51.8 m), cased.

DATUM.--Altitude of land-surface datum is 544.7 ft (166.025 m). Measuring point: Floor of instrument shelter 8.13 ft (2.478 m) 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 (37.058 m) Nov. 3, 10, 1950; minimum daily low, 71.55 ft (21.808 m) Sept. 28, 30, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 75.91 ft (23.137 m) Nov. 20; minimum daily low, 71.55 ft (21.808 m) Sept. 28, 30.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74.40	74.42	74.30	74.00	74.00	73.70	73.35	73.10	72.70		72.15	72.00
2	74.41	74.41	74.35	74.20	74.00	73.75	73.40	72.95	72.70		72.20	71.95
3	74.28	74.40	74.30	74.30	73.85	73.60	73.50	72.90	72.60		72.25	---
4	74.35	74.30	74.20	74.35	73.95	73.55	73.30	72.90	72.05		72.25	---
5	74.32	74.29	74.25	74.30	73.95	73.65	73.35	72.95	72.00		72.25	---
6	74.38	74.27	74.45	74.15	73.85	73.60	73.50	72.80	72.00		72.20	---
7	74.37	74.32	74.45	74.00	73.80	73.45	73.50	72.80	72.05		72.15	---
8	74.33	74.38	74.30	74.00	73.85	73.50	73.20	72.80	72.15		72.15	---
9	---	74.30	74.40	74.10	74.00	73.60	73.30	72.80	72.15		72.15	---
10	---	74.35	74.55	74.15	73.95	73.55	73.35	72.80	72.10		72.05	---
11	---	74.40	74.50	74.15	73.90	---	73.30	72.80	72.15		72.10	---
12	---	74.40	74.45	74.15	73.85	---	73.20	72.80	72.15		72.10	---
13	---	74.35	74.40	73.90	73.90	---	73.15	72.80	72.20		72.15	---
14	---	74.40	74.40	73.65	73.75	---	73.20	72.80	72.20		72.20	---
15	---	74.41	74.15	74.25	73.65	---	73.20	74.00	72.15		73.60	---
16	---	74.41	74.30	75.75	74.05	---	73.25	73.00	72.05		73.50	---
17	---	74.37	74.40	74.25	---	---	74.90	74.30	72.45		72.35	---
18	---	74.50	74.30	74.05	---	---	73.55	72.85	72.60		72.10	---
19	---	74.56	74.05	74.20	---	---	73.40	72.70	73.40		72.10	---
20	---	75.91	74.00	74.15	---	---	73.25	72.70	72.60		72.15	---
21	---	74.60	74.20	73.80	---	---	73.15	72.75	72.50		72.10	---
22	---	74.49	74.25	74.65	---	---	73.20	72.75	72.45		72.00	---
23	---	74.24	74.25	74.05	---	---	73.15	72.65	72.50		72.00	---
24	---	74.40	74.00	74.05	---	---	73.05	72.60	72.60		72.05	---
25	---	74.40	74.15	73.75	---	---	72.95	72.60	72.65		72.15	---
26	---	74.30	74.35	74.00	---	---	72.90	72.55	72.65		72.10	---
27	---	74.30	74.40	74.00	---	---	72.95	72.60	72.55		72.00	---
28	---	74.45	74.40	73.95	---	---	73.05	72.65	72.45		71.95	71.55
29	---	74.39	74.25	73.75	---	---	73.05	72.65	---		72.00	71.60
30	---	74.35	74.20	73.95	---	73.35	73.05	72.65	---		72.05	71.55
31	---	---	74.10	74.00	---	73.40	---	72.65	---		72.05	---
MAX	74.41	75.91	74.55	75.75	74.05	73.75	74.90	74.30	73.40		73.60	72.00
WTR YR 1979	MEAN	73.42		HIGH	71.55		LOW	75.91				

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

GROUND-WATER RECORDS

369

HAMILTON COUNTY--Continued

391214084470100. Local number, H-1.

LOCATION.--Lat 39°12'14", long 84°47'01", Hydrologic Unit 05080003, Kilby Road 4 mi (6.4 km) southeast of Harrison.

Owner: Robert Weber.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in (0.15 m), depth 124 ft (37.8 m), cased.

DATUM.--Altitude of land-surface datum is 500 ft (152 m), from topographic map. Measuring point: Floor of instrument shelter 2.70 ft (0.823 m) 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 (7.864 m) Jan. 18-20, 1964; minimum daily low, 14.00 ft (4.267 m) Jan. 22, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 23.10 ft (7.041 m) Oct. 12; minimum daily low, 16.90 ft (5.151 m) Feb. 27.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.82	22.97	22.35	---	21.33	17.86	20.50	20.66	21.32	21.73	19.75	20.03
2	22.84	22.97	22.40	19.36	21.25	17.64	20.39	20.72	21.36	21.80	18.39	20.19
3	22.86	22.92	22.40	19.87	21.26	17.72	19.93	20.73	21.40	21.83	18.65	20.35
4	22.90	22.90	21.25	19.85	21.28	17.50	19.96	20.50	21.44	21.82	19.08	20.47
5	22.93	22.90	21.18	19.95	21.30	17.12	19.70	20.23	21.52	21.49	19.29	20.57
6	22.95	22.92	21.35	20.03	21.36	18.00	19.94	20.35	21.56	21.58	19.38	20.67
7	22.98	22.93	21.43	20.09	21.41	18.04	20.05	20.44	21.56	21.65	19.40	20.77
8	23.02	22.95	21.43	20.16	21.46	17.97	20.09	20.51	21.34	21.69	19.41	20.84
9	23.05	22.96	20.45	20.23	21.49	18.09	20.09	20.58	21.30	21.71	19.31	20.94
10	23.07	22.98	20.46	20.53	21.51	18.20	19.93	20.68	21.30	21.66	20.07	21.02
11	23.09	23.00	20.45	20.74	21.54	18.32	19.98	20.80	21.32	21.58	20.11	21.09
12	23.10	23.01	19.75	20.87	21.55	18.42	19.53	20.81	21.44	21.47	20.06	21.15
13	23.05	23.03	19.55	20.97	21.57	18.61	18.92	20.79	21.52	21.42	20.18	21.19
14	22.60	23.06	20.38	21.03	21.58	18.92	18.35	20.82	21.60	20.69	20.20	21.09
15	22.63	23.06	20.62	21.08	21.58	19.28	18.90	20.88	21.64	20.60	20.23	20.44
16	22.63	23.05	20.72	21.12	21.58	19.50	19.20	20.93	21.71	20.64	20.53	20.58
17	22.65	23.05	20.78	21.17	21.59	19.71	19.22	21.00	21.75	21.01	20.69	20.67
18	22.64	22.24	20.82	21.20	21.59	19.76	19.35	21.05	21.80	21.18	20.78	20.72
19	22.62	22.38	20.70	21.21	21.60	19.91	19.45	21.11	21.82	21.37	20.82	20.77
20	22.40	22.43	20.68	21.22	21.61	19.99	19.56	21.14	21.81	21.47	20.77	20.75
21	22.29	22.39	20.63	21.23	21.61	20.05	19.79	21.17	21.37	21.57	20.35	20.81
22	22.27	22.38	20.94	21.23	20.31	20.11	19.85	21.21	21.10	21.61	19.90	20.81
23	22.48	22.37	21.08	21.24	19.85	20.13	20.00	21.24	21.12	21.65	18.90	20.42
24	22.66	22.37	21.16	21.24	19.63	20.12	20.10	21.26	21.17	21.66	18.76	20.53
25	22.73	22.37	21.23	21.25	19.05	20.20	20.19	21.31	21.28	20.53	18.95	20.68
26	22.78	22.36	21.37	21.26	18.55	20.28	20.27	21.29	21.44	19.72	19.04	20.77
27	22.78	22.32	21.46	21.28	16.90	20.36	20.38	21.27	21.60	20.09	19.02	20.83
28	22.80	22.23	21.50	21.30	17.96	20.40	20.44	21.27	21.70	20.06	18.83	20.85
29	22.83	22.24	21.55	21.31	---	20.46	20.49	21.26	21.76	---	18.92	20.82
30	22.85	22.25	21.58	21.32	---	20.51	20.59	21.30	21.74	---	19.49	20.89
31	22.87	---	21.59	21.33	---	20.52	---	21.34	---	19.62	19.85	---
MAX	23.10	23.06	22.40	21.33	21.61	20.52	20.59	21.34	21.82	21.83	20.82	21.19
WTR YR 1979	MEAN	20.93		HIGH	16.90		LOW	23.10				

GROUND-WATER RECORDS

HAMILTON COUNTY--Continued

391324084272500. Local number, H-9.

LOCATION.--Lat 39°13'24", long 84°27'25", Hydrologic Unit 05090203, 9.1 mi (14.6 km) 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 (0.25 m), depth drilled 168 ft (51.2 m) present depth 163 ft (49.7 m), cased.

DATUM.--Altitude of land-surface datum is 555.30 ft (169.255 m). Measuring point: Floor of instrument shelter, 2.76 ft (0.841 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 136.80 ft (41.697 m) Nov. 9, 1947, Feb. 15, 1948; minimum daily low, 76.51 ft (23.320 m) Sept. 30, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 79.88 ft (24.347 m) Oct. 17; minimum daily low, 76.51 ft (23.320 m) Sept. 30.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79.58	79.69	79.38	78.62	79.66	79.26	78.50	78.76	78.31	77.46	77.40	76.98
2	79.58	79.66	79.44	79.28	79.71	79.43	78.38	78.61	78.31	77.58	77.49	76.79
3	79.38	79.62	79.15	79.47	79.45	79.11	78.99	78.47	77.88	77.60	77.57	76.84
4	79.51	79.54	79.07	79.70	79.14	78.67	78.76	78.58	77.86	77.54	77.39	76.98
5	79.43	79.33	79.25	79.68	79.15	79.07	78.88	78.59	77.90	77.70	77.30	76.90
6	79.50	79.38	79.59	79.42	79.11	79.09	79.10	78.11	78.00	77.77	77.45	76.93
7	79.50	79.52	79.51	78.85	79.20	78.86	79.09	78.29	78.11	77.66	77.45	77.07
8	79.62	79.60	79.40	79.12	79.43	79.05	78.54	78.42	78.28	77.50	77.54	77.05
9	79.72	79.42	79.36	79.14	79.63	79.23	78.56	78.42	78.23	77.31	77.41	77.04
10	79.75	79.47	79.49	79.29	79.49	79.00	78.91	78.36	77.82	77.26	77.32	77.00
11	79.48	79.54	79.54	79.23	79.21	78.75	78.45	78.36	78.08	77.30	77.09	77.04
12	79.50	79.55	79.58	78.94	79.31	79.04	78.59	78.36	78.21	77.30	77.14	76.95
13	79.64	79.52	79.49	78.50	79.46	78.75	78.53	78.17	78.36	77.20	77.44	76.80
14	79.51	79.52	79.56	79.12	79.21	79.07	78.42	78.37	79.37	77.27	77.42	77.07
15	79.44	79.39	79.24	79.30	78.84	79.48	78.42	78.58	78.37	77.37	77.57	77.01
16	79.74	79.44	79.24	79.21	79.73	79.43	78.71	78.74	78.27	77.64	77.64	77.03
17	79.88	79.26	79.34	79.01	79.80	79.14	78.37	78.73	77.67	77.68	77.43	77.06
18	79.77	79.59	79.17	79.33	79.11	78.68	78.37	78.48	77.90	77.71	77.02	76.86
19	79.57	79.73	79.04	78.98	79.38	78.68	78.92	78.17	78.11	77.68	76.97	76.98
20	79.48	79.76	78.74	78.57	79.33	78.78	78.71	77.85	78.08	77.67	77.10	76.87
21	79.53	79.67	79.25	78.41	79.22	78.89	78.58	78.31	78.04	77.44	77.14	76.71
22	79.53	79.56	79.25	79.27	79.33	78.67	78.44	78.43	77.90	77.28	77.08	76.80
23	79.67	79.14	79.17	79.23	79.12	78.35	78.50	78.20	77.73	77.52	77.08	76.84
24	79.68	79.52	78.77	79.08	79.14	78.46	78.49	78.05	77.84	77.55	77.15	76.94
25	79.38	79.55	78.92	79.37	78.66	78.64	78.43	78.01	78.14	77.38	77.13	76.95
26	79.62	79.35	79.29	79.25	79.06	79.16	78.29	77.85	78.22	77.42	77.06	76.96
27	79.70	79.25	79.46	79.11	79.29	79.42	78.51	77.81	78.10	77.46	77.08	76.74
28	79.73	79.57	79.51	78.87	79.23	79.24	78.50	77.84	77.88	77.34	76.99	76.72
29	79.62	79.48	79.27	79.37	---	79.10	78.40	78.07	77.48	77.28	77.07	76.60
30	79.64	79.49	78.99	79.45	---	79.00	78.55	78.20	77.32	77.38	77.22	76.51
31	79.67	---	78.84	79.43	---	78.86	---	78.20	---	77.41	77.20	---
MAX	79.88	79.76	79.59	79.70	79.80	79.48	79.10	78.76	78.37	77.77	77.64	77.07
WTR YR 1979	MEAN	78.53		HIGH	76.51		LOW	79.88				

GROUND-WATER RECORDS

371

HAMILTON COUNTY--Continued

391341084275300. Local number, H-8.

LOCATION.--Lat 39°13'41", long 84°27'53", Hydrologic Unit 05090203. Vine and Water Streets, Wyoming.

Owner.--Wyoming Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (0.2 m), depth 194 ft (59.1 m), cased.

DATUM.--Altitude of land-surface datum is 576.2 ft (175.626 m). Measuring point: Top of platform 3.30 ft (1.006 m) 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 (45.373 m) Dec. 1, 1948; minimum daily low, 105.50 ft (32.156 m) Sept. 21, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 113.79 ft (34.583 m) Oct. 13; minimum daily low, 105.50 ft (32.156 m) Sept. 21, 28.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---		110.60	110.25	110.65	110.05	---	111.15	106.95	106.60	105.98	106.00
2	---		110.80	---	110.70	109.60	106.00	110.90	106.95	106.85	106.05	105.95
3	---		110.40	111.15	110.60	109.80	106.05	110.65	106.70	106.80	106.10	105.95
4	---		110.40	111.25	---	109.75	107.50	106.50	106.70	107.20	106.30	105.95
5	---		110.35	111.00	110.80	109.50	106.50	106.35	106.75	107.10	106.25	105.90
6	112.12		110.70	110.80	110.80	109.55	106.50	106.30	106.90	107.10	106.25	105.80
7	112.09		110.60	110.65	110.45	109.75	106.55	109.55	106.70	107.05	106.30	105.95
8	111.78		110.60	111.05	110.40	109.90	105.95	106.45	106.90	106.85	106.45	106.20
9	111.52		110.75	110.95	---	109.90	109.90	106.50	106.75	106.65	106.45	106.15
10	111.55		111.10	110.90	---	110.10	106.40	106.35	106.70	106.55	106.15	106.10
11	111.88		111.05	110.80	---	109.65	106.20	106.40	106.80	106.50	106.20	106.10
12	113.20		110.85	110.55	---	109.80	106.10	106.40	107.00	106.50	106.15	106.10
13	113.79		110.95	109.90	---	---	106.00	106.55	107.00	106.40	106.30	105.90
14	111.39		110.85	110.75	---	---	106.05	106.50	107.20	106.65	106.40	105.90
15	111.15		110.70	110.85	---	---	106.25	106.70	107.20	106.65	106.50	106.10
16	111.00		110.55	110.75	---	---	106.40	106.85	107.10	106.65	109.80	106.15
17	111.71		111.05	110.35	111.00	---	106.50	106.80	109.90	106.70	106.25	106.15
18	111.76		110.80	110.75	---	---	106.50	106.80	107.30	106.75	106.00	105.95
19	108.36		110.50	110.20	---	---	110.55	106.80	107.15	106.70	106.00	105.85
20	111.79		110.00	109.65	---	---	110.85	106.60	106.95	106.80	106.00	105.85
21	111.42		110.55	109.60	---	---	111.05	106.90	106.80	106.80	106.00	105.50
22	111.30		110.65	110.20	---	---	111.00	106.95	106.85	106.80	105.85	105.80
23	111.71		110.65	109.70	---	---	110.90	106.70	107.00	106.70	105.80	105.85
24	111.71		110.20	109.70	---	---	110.55	106.55	107.05	106.50	105.90	105.95
25	111.52		110.65	110.15	---	---	110.50	106.35	107.10	106.30	106.05	106.00
26	111.31		110.90	110.10	110.05	---	110.30	106.40	107.10	106.35	105.90	106.70
27	112.07		111.15	109.70	109.90	---	110.50	106.30	107.05	106.30	105.95	105.70
28	111.96		111.10	110.10	109.35	---	110.75	106.45	107.05	106.10	105.75	105.50
29	111.46		111.00	110.40	---	---	110.85	106.60	107.00	106.20	105.90	105.70
30	---		110.90	110.30	---	106.05	110.95	106.70	106.50	---	105.00	105.70
31	---		110.50	110.35	---	109.50	---	106.45	---	---	105.70	---
MAX	113.79		111.15	111.25	111.00	110.10	111.05	111.15	109.90	107.20	109.80	106.70
WTR YR 1979	MEAN	108.31		HIGH	105.50		LOW	113.79				

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

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 (0.15 m), depth 180 ft (54.9 m), cased.

DATUM.--Altitude of land-surface datum is 555.40 ft (159.286 m). Measuring point: Floor of instrument shelter 7.78 ft (2.371 m) 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 (30.812 m) Jan. 29, 1964; minimum daily low, 43.17 ft (13.158 m) Apr. 13, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 67.20 ft (20.483 m) Oct. 19; minimum daily low, 59.84 ft (18.239 m) Sept. 30.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66.05	66.60	66.43	66.00	66.27	65.70	65.05	64.98	64.07	62.97	62.37	61.53
2	66.25	66.61	66.56	---	66.39	65.79	65.05	64.47	64.10	63.08	62.50	61.04
3	65.95	66.49	66.55	66.64	66.14	65.63	65.18	64.32	64.00	63.14	62.57	60.88
4	66.03	66.35	66.18	66.69	66.23	65.38	65.05	64.24	63.84	63.20	62.64	60.77
5	66.03	65.70	66.53	66.60	66.26	65.52	64.93	64.33	63.72	63.42	62.64	60.76
6	66.15	66.05	66.66	66.35	66.10	65.51	65.43	64.15	64.61	63.50	62.54	61.00
7	66.33	66.27	66.65	66.09	65.65	65.32	65.37	64.13	64.25	63.46	62.48	61.28
8	66.45	66.36	66.47	66.26	65.88	65.39	65.00	64.17	64.19	63.35	62.63	61.48
9	66.45	66.26	66.67	66.28	66.07	65.51	64.84	65.72	64.43	63.17	62.29	61.53
10	66.36	66.41	66.91	66.43	66.01	65.51	65.03	65.19	64.13	63.10	62.17	61.41
11	66.10	66.51	66.89	66.46	65.97	65.47	65.00	64.21	64.27	63.13	62.14	62.08
12	66.05	66.54	66.75	65.77	65.64	65.55	64.85	64.28	64.16	63.13	62.14	61.33
13	66.16	66.49	66.68	65.58	65.78	65.44	64.75	64.31	64.16	63.00	62.18	61.09
14	66.31	66.60	66.71	66.13	65.65	65.60	64.80	64.30	64.14	63.06	62.36	60.90
15	66.31	66.62	66.35	66.43	65.39	65.84	64.79	64.44	64.81	63.18	62.42	61.21
16	66.60	66.63	66.42	66.24	66.39	65.86	64.86	64.61	64.45	63.24	62.36	61.28
17	66.63	66.39	66.66	66.17	66.68	65.77	64.90	64.45	63.82	63.24	62.20	61.19
18	66.70	66.66	66.57	66.33	66.63	65.47	64.88	64.11	63.69	63.50	61.92	60.93
19	67.20	66.80	66.20	66.32	65.92	65.28	64.88	63.94	63.85	64.95	61.95	60.90
20	66.25	66.81	65.86	65.68	65.88	65.18	64.75	63.89	63.81	64.03	61.98	60.60
21	66.35	66.65	66.36	65.12	65.58	65.23	64.60	64.09	63.62	63.73	61.92	60.30
22	66.30	66.85	66.48	65.93	65.66	65.16	64.74	64.13	63.50	63.19	62.21	60.55
23	66.41	66.22	66.54	65.93	65.52	64.74	64.72	63.99	63.55	63.29	65.28	60.62
24	66.37	66.40	66.13	65.52	65.59	64.60	65.19	63.89	63.64	64.12	64.67	60.55
25	66.04	66.41	66.20	66.01	65.50	65.18	64.40	63.88	63.71	63.94	63.95	60.46
26	66.43	66.21	66.66	66.10	65.53	65.43	64.18	63.78	63.66	62.80	62.73	60.39
27	66.47	66.17	66.75	65.93	65.63	65.52	64.29	63.79	63.55	62.38	62.46	60.21
28	66.70	66.54	66.76	65.70	65.60	65.46	64.55	63.89	63.41	62.21	61.88	59.92
29	66.60	66.56	66.40	66.07	---	65.22	64.57	63.92	63.19	62.08	61.85	59.93
30	---	66.47	66.34	66.16	---	65.14	64.45	63.94	62.91	---	61.85	59.84
31	---	---	66.24	66.02	---	65.10	---	63.96	---	---	61.47	---
MAX	67.20	66.85	66.91	66.69	66.68	65.86	65.43	65.72	64.81	64.95	65.28	62.08
WTR YR 1979	MEAN	64.68		HIGH	59.84		LOW	67.20				

GROUND-WATER RECORDS

373

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 (0.2 m), depth 167 ft (50.9 m), cased.

DATUM.--Altitude of land-surface datum is 570.65 ft (173.934 m). Measuring point: Floor of instrument shelter 4.05 ft (1.234 m) 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 (25.634 m) Oct. 14, 1960; minimum daily low, 23.10 ft (7.041 m) Apr. 28, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 56.50 ft (17.22 m) Dec. 9; minimum daily low, 42.20 ft (12.863 m) Sept. 23.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53.85	55.30	55.30	52.60	52.90	53.10	51.10	49.80	50.60	50.70	50.80	47.50
2	54.30	55.19	55.50	---	53.20	52.50	51.50	49.70	49.50	49.90	49.60	47.00
3	54.10	54.65	54.90	53.80	52.70	52.20	51.40	49.60	49.20	49.70	49.70	46.50
4	55.95	54.50	55.30	53.90	52.70	51.70	51.50	49.30	49.90	49.80	49.20	48.10
5	54.50	54.00	55.60	53.50	52.80	52.00	51.10	48.80	49.80	50.00	48.80	47.50
6	55.40	54.82	56.20	53.40	52.90	52.00	51.20	48.60	51.20	49.60	48.80	47.80
7	54.15	55.60	56.40	53.00	52.80	53.40	51.00	49.30	51.20	49.10	49.00	48.00
8	56.05	55.30	55.70	53.50	53.30	52.00	50.40	49.10	51.20	48.80	49.90	48.90
9	55.95	54.85	56.50	54.10	53.10	51.70	50.50	49.50	51.20	49.50	48.70	47.70
10	55.00	54.30	55.20	53.70	53.00	51.60	50.70	49.70	50.20	49.70	49.10	47.50
11	54.75	53.85	55.50	53.50	53.10	51.30	50.30	50.00	50.00	50.00	48.90	47.50
12	53.80	53.50	55.40	53.40	54.00	52.20	49.90	49.90	50.50	50.00	48.60	47.70
13	53.30	54.95	55.40	52.60	54.20	51.10	49.20	51.70	51.40	49.80	49.50	47.90
14	52.90	55.35	55.30	53.70	53.20	51.50	49.00	49.80	50.50	49.70	48.90	47.70
15	54.60	55.65	55.30	53.40	52.90	51.50	49.10	49.80	50.60	49.60	48.80	47.50
16	54.70	55.10	55.80	53.60	52.80	50.90	50.70	50.00	49.70	49.50	48.60	46.40
17	54.75	54.80	54.70	53.40	53.00	50.60	50.10	50.50	49.40	50.00	48.50	45.50
18	54.35	55.75	54.60	53.50	53.00	50.90	50.00	50.40	50.30	50.00	48.50	45.40
19	54.05	54.65	54.90	53.60	52.90	51.40	50.20	49.90	50.40	50.10	47.50	44.90
20	54.40	55.30	54.80	51.90	54.00	51.20	49.70	50.80	50.40	50.40	48.10	44.50
21	54.15	55.00	55.10	51.80	52.80	51.30	49.70	49.60	50.20	51.00	48.40	43.80
22	54.60	54.90	55.20	53.10	52.70	51.30	49.90	50.90	50.30	50.00	48.40	42.70
23	54.55	53.60	54.00	52.80	52.80	52.10	50.00	50.30	50.20	49.70	49.80	42.20
24	54.63	53.50	53.20	54.10	52.90	51.00	50.50	49.30	49.80	49.80	49.00	42.40
25	54.63	54.05	---	53.00	52.20	51.00	49.70	48.90	50.10	49.60	47.70	42.70
26	54.81	54.10	53.00	53.20	52.40	51.40	49.80	48.80	50.20	49.80	47.40	42.80
27	55.60	54.70	54.20	52.80	52.50	51.60	49.40	47.80	50.40	50.20	47.80	42.80
28	54.50	55.38	54.20	52.60	52.30	52.60	49.40	47.60	50.20	49.20	48.80	42.50
29	54.90	54.98	54.20	53.70	---	51.50	49.10	47.70	50.30	49.40	48.80	42.80
30	---	55.57	53.50	52.80	---	51.40	49.50	49.10	49.80	---	48.20	42.30
31	---	---	52.60	52.50	---	51.40	---	50.30	---	---	47.90	---
MAX	56.05	55.75	56.50	54.10	54.20	53.40	51.50	51.70	51.40	51.00	50.80	48.90
WTR YR 1979	MEAN	51.34		HIGH	42.20		LOW	56.50				

GROUND-WATER RECORDS

HAMILTON COUNTY--Continued

391733084392400. Local number, H-2.

LOCATION.--Lat 39°17'33", long 84°39'24", Hydrologic Unit 05080002, East Miami River Road 1.5 mi (2.4 km) south of Ross.

Owner: Lee Wilhelm.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 6 in (0.15 m), depth 89 ft (27.1 m), cased.

DATUM.--Altitude of land-surface datum is 534.21 ft (162.827 m), Measuring point: Floor of instrument shelter 8.97 ft (2.734 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--August 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 24.37 ft (7.428 m) Sept. 24, 25, 1972; minimum daily low 1.60 ft (0.488 m) June 16, 1958. (Water level above land surface but could not be measured during January 1959 flood.)

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 20.90 ft (6.370 m) Nov. 16; minimum daily low, 8.57 ft (2.612 m) Mar. 7.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.09	20.34	20.35	16.54	16.39	10.26	15.48	14.45	15.55	17.23	16.25	14.05
2	20.03	20.37	20.39	15.90	16.49	10.33	15.47	14.65	15.57	17.22	15.80	14.01
3	19.97	20.37	20.40	14.28	16.54	10.31	15.14	---	15.56	17.22	15.33	14.04
4	20.01	20.38	20.37	13.21	16.57	10.12	14.52	---	15.63	17.17	15.12	14.18
5	20.05	20.40	20.10	13.04	16.57	9.61	14.27	---	15.78	17.15	14.96	14.43
6	20.09	20.42	19.74	13.22	16.61	8.88	14.29	---	15.93	17.08	14.89	14.71
7	20.10	20.46	19.45	13.45	16.75	8.57	14.19	---	16.05	17.03	14.89	14.97
8	20.09	20.53	19.26	13.68	16.85	8.84	13.90	---	16.12	17.01	15.00	15.14
9	20.06	20.60	19.06	13.92	16.97	9.14	13.20	---	16.15	17.03	15.18	15.19
10	20.01	20.66	18.44	14.21	17.05	9.48	12.78	---	16.14	17.15	15.38	15.25
11	20.02	20.67	17.73	14.44	17.07	9.95	12.50	---	16.05	17.23	15.42	15.41
12	20.09	20.70	17.20	14.66	17.11	10.48	11.28	---	16.03	17.32	15.39	15.55
13	20.10	20.75	16.90	14.82	17.16	10.94	10.95	---	16.16	17.35	15.25	15.73
14	20.05	20.80	16.74	15.05	17.22	11.49	10.75	---	16.28	17.36	15.28	15.67
15	19.95	20.86	16.70	15.12	17.33	11.95	10.88	---	16.40	17.35	15.40	14.42
16	19.82	20.90	16.52	15.24	17.41	12.45	11.08	---	16.46	17.30	15.50	13.02
17	19.75	20.10	16.49	15.42	17.45	12.97	11.30	---	16.47	17.22	15.62	13.13
18	19.70	20.89	16.49	15.53	17.48	13.25	11.58	---	16.49	17.31	15.70	13.41
19	19.75	20.78	16.51	15.54	17.48	13.50	11.83	---	16.55	17.40	15.72	13.73
20	19.83	20.66	16.65	15.55	17.48	13.70	12.04	---	16.65	17.48	15.63	13.98
21	19.91	20.59	16.75	15.51	16.51	13.92	12.30	---	16.64	17.54	15.41	14.07
22	19.96	20.54	16.75	15.51	16.93	14.08	12.50	---	16.68	17.55	15.08	14.15
23	20.01	20.52	16.74	15.49	16.50	14.30	12.73	---	16.79	17.57	14.77	14.27
24	20.06	20.48	16.68	15.57	15.53	14.53	12.90	---	16.84	17.64	14.51	14.38
25	20.14	20.38	16.63	15.62	13.46	14.64	13.12	---	16.85	17.67	14.17	14.46
26	20.21	20.29	16.50	15.70	10.70	14.70	13.35	---	16.91	17.72	13.84	14.51
27	20.26	20.23	16.44	15.82	9.89	14.78	13.57	---	16.96	17.75	13.57	14.59
28	20.28	20.20	16.52	15.93	9.78	14.88	13.77	---	17.06	17.76	13.67	14.78
29	20.28	20.24	16.63	16.03	---	15.07	13.99	15.82	17.17	17.73	13.87	14.96
30	20.29	20.26	16.67	16.12	---	15.27	14.24	15.52	17.23	17.43	13.95	14.86
31	20.30	---	16.67	16.28	---	15.44	---	15.47	---	16.92	14.02	---
MAX	20.30	20.90	20.40	16.54	17.48	15.44	15.48	15.82	17.23	17.76	16.25	15.73
WTR YR 1979	MEAN	16.14		HIGH	8.57		LOW	20.90				

GROUND-WATER RECORDS

375

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 (2.1 km) 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 (6.1 m), depth 144 ft (43.9 m) horizontal intakes at 95-100 ft (29.0-30.5 m).

PERIOD OF RECORD.--1964 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)
NOV 27...	1230	799	7.1	15.5	340	91	28	332	0
FEB 15...	1230	790	7.6	14.5	350	94	29	340	0
MAY 14...	1200	700	7.0	14.0	340	88	28	320	0
AUG 01...	1345	730	7.5	14.5	330	89	26	324	0

DATE	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRATE (MG/L AS N)	NITROGEN, NITRITE (MG/L AS N)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
NOV 27...	270	42	81	48	.3	472	.76	.02	--
FEB 15...	280	14	81	46	.2	478	2.0	.01	--
MAY 14...	260	51	70	44	.3	521	2.8	.02	--
AUG 01...	270	16	70	43	.2	407	1.8	.01	<10

DATE	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 27...	--	--	--	20	--	--	270	--	--
FEB 15...	--	--	--	80	--	--	370	--	--
MAY 14...	--	--	--	110	--	--	270	--	--
AUG 01...	<10	16	3	180	5	0	260	30	30

GROUND-WATER RECORDS

HAMILTON COUNTY--Continued

391817084393300. Local number, H-4.

LOCATION.--Lat 39°18'17"N, long 84°39'33"W, Hydrologic Unit 05080002, 0.7 mi (1.1 km) 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 (0.15 m), depth 100 ft (30.3 m), cased.

DATUM.--Altitude of land-surface datum is 541.57 ft (165.071 m). (Levels by Miami Conservancy District.)

Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.

PERIOD OF RECORD.--December 1954 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 32.16 ft (9.802 m) Nov. 20, 1971; minimum daily low, 11.60 ft (3.536 m) June 16, 1958.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 27.72 ft (8.449 m) Nov. 24; minimum daily low, 16.31 ft (4.971 m) Mar. 7.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.18	26.96	27.42	22.94	22.22	18.44	19.34	19.28	20.83	22.30	22.07	19.90
2	26.19	27.06	27.54	22.40	22.27	18.43	19.50	19.35	20.96	22.27	21.66	19.85
3	26.26	27.15	27.53	21.76	22.40	18.23	19.56	19.44	21.01	22.37	21.10	19.92
4	26.31	27.19	27.34	21.25	22.42	17.90	19.57	19.44	21.02	22.45	20.84	19.97
5	26.37	27.24	27.26	21.09	22.49	17.27	19.55	19.48	21.08	22.43	20.80	20.02
6	26.43	27.24	26.99	21.14	22.50	16.74	19.51	19.38	21.14	22.54	20.77	20.11
7	26.52	27.26	26.69	21.12	22.54	16.31	19.51	19.35	21.17	22.63	20.75	20.23
8	26.55	27.29	26.47	21.25	22.60	16.35	19.58	19.47	21.18	22.71	20.74	20.41
9	26.38	27.34	26.29	21.39	22.66	16.55	19.51	19.58	21.29	22.75	20.84	20.50
10	26.38	27.41	25.72	21.51	22.73	16.82	19.57	19.69	21.36	22.78	20.95	20.67
11	26.47	27.48	25.13	21.61	22.85	16.89	19.57	19.82	21.37	22.82	21.11	20.74
12	26.56	27.42	24.80	21.69	22.90	17.17	19.51	19.91	21.33	22.86	21.12	20.81
13	26.62	27.25	24.59	21.78	22.92	17.55	19.27	19.95	21.30	22.87	20.90	20.86
14	26.69	27.38	24.49	21.95	22.93	17.88	18.54	20.05	21.34	22.87	21.01	20.80
15	26.69	27.46	24.43	21.94	22.96	18.13	17.54	20.13	21.42	22.81	21.12	19.77
16	26.41	27.54	24.48	21.99	23.03	18.20	16.92	20.21	21.53	22.51	21.23	19.21
17	26.48	27.64	24.46	22.06	23.08	17.80	16.98	20.28	21.70	22.59	21.32	18.85
18	26.52	27.70	24.28	22.12	23.10	17.98	17.04	20.40	21.74	22.68	21.46	18.92
19	26.56	27.67	24.20	22.17	23.10	18.40	17.26	20.55	21.75	22.77	21.46	19.05
20	26.59	27.58	24.15	22.21	23.14	18.74	17.40	20.63	21.77	22.85	21.34	19.20
21	26.62	27.60	24.12	22.22	23.18	18.97	17.56	20.65	21.75	22.97	21.21	19.34
22	26.58	27.62	24.13	22.16	23.11	19.10	17.79	20.73	21.67	23.10	21.02	19.47
23	26.57	27.71	23.90	22.07	22.86	19.10	18.01	20.80	21.64	23.14	20.79	19.50
24	26.65	27.72	23.55	21.97	22.38	18.80	18.22	20.87	21.73	23.14	20.61	19.48
25	26.71	27.25	23.32	21.96	21.28	18.87	18.41	20.95	21.82	23.10	20.31	19.53
26	26.77	27.09	23.20	21.91	19.84	19.23	18.59	21.04	21.92	23.17	20.12	19.61
27	26.85	27.09	23.22	21.89	18.76	19.47	18.77	20.97	22.00	23.18	20.00	19.66
28	26.94	27.18	23.17	22.03	18.57	19.64	18.98	20.61	22.06	23.16	19.83	19.67
29	26.88	27.27	23.26	22.05	---	19.70	19.09	20.48	22.13	23.17	19.85	19.73
30	26.77	27.34	23.19	22.09	---	19.43	19.17	20.59	22.25	22.95	19.84	19.80
31	26.86	---	23.07	22.14	---	19.29	---	20.71	---	22.43	19.77	---
MAX	26.94	27.72	27.54	22.94	23.18	19.70	19.57	21.04	22.25	23.18	22.07	20.95
WTR YR 1979	MEAN	22.09	HIGH	16.31	LOW	27.72						

GROUND-WATER RECORDS

377

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 (0.15 m), depth 40 ft (12.2 m), cased.

DATUM.--Altitude of land-surface datum is 975 ft (297 m), from topographic map. Measuring point: Floor of instrument shelter 1.5 ft (0.457 m) 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 (6.751 m) Dec. 14, 1964; minimum daily low, 5.85 ft (1.783 m) July 1, 1946.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 19.20 ft (5.852 m) July 25; minimum daily low, 12.60 ft (3.840 m) July 2.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.22	16.78	16.80	16.95	15.10	14.55	14.10	14.00	12.95	13.05	15.80	14.95
2	16.70	16.71	17.05	16.85	15.20	14.90	14.10	13.30	13.70	12.60	15.70	14.70
3	16.43	16.90	16.80	17.50	15.50	14.75	14.30	13.10	13.95	13.00	15.90	15.55
4	16.25	17.09	16.70	17.20	15.50	14.35	14.15	13.55	14.05	13.20	15.15	15.15
5	16.10	17.11	16.70	16.85	17.05	14.65	14.10	14.05	13.40	12.90	16.15	14.75
6	16.22	17.20	16.90	16.80	15.60	14.95	14.30	13.40	12.75	14.25	16.15	14.75
7	16.05	16.08	17.10	16.55	15.45	14.55	14.20	13.45	12.85	14.35	16.35	14.95
8	16.06	17.03	17.15	16.10	15.55	14.40	13.55	13.70	13.25	14.55	15.90	15.25
9	16.20	16.91	17.55	16.45	15.50	14.75	13.85	14.10	14.00	14.20	15.90	15.20
10	16.13	16.80	17.55	16.65	15.70	14.90	13.55	14.75	13.30	14.60	16.25	15.00
11	15.81	17.10	17.35	16.80	15.80	15.00	13.50	13.90	13.55	15.30	15.90	14.90
12	15.78	16.70	16.80	16.45	15.70	15.20	14.00	14.40	13.45	15.20	16.20	14.90
13	16.00	17.00	16.70	16.30	17.10	14.75	13.90	14.10	13.95	14.85	16.10	14.70
14	16.28	16.55	16.65	16.40	15.55	13.95	13.25	14.25	14.00	15.15	15.80	14.35
15	15.90	16.95	16.65	17.10	15.20	14.60	13.00	14.50	14.35	15.65	16.05	14.65
16	16.08	17.53	16.70	16.80	15.45	14.60	13.85	14.10	14.85	15.45	16.15	14.50
17	16.20	16.81	16.95	16.20	15.95	15.00	13.25	14.30	15.40	14.55	15.05	14.70
18	15.80	17.33	16.85	15.25	16.25	14.75	13.35	14.55	14.95	15.05	15.35	14.50
19	16.05	17.09	16.65	16.00	16.00	14.60	13.40	15.45	15.05	15.60	15.20	14.70
20	15.89	17.18	16.40	15.75	15.85	14.40	13.45	15.00	14.35	15.70	15.30	14.80
21	16.09	17.00	16.65	15.50	15.70	14.40	13.75	15.60	13.80	15.40	15.05	14.55
22	16.28	16.98	16.55	15.65	16.25	13.90	13.70	15.75	14.15	15.45	15.15	14.75
23	16.15	17.41	16.95	15.30	15.45	13.75	13.50	15.20	13.80	15.25	15.60	15.00
24	16.53	16.95	16.45	15.15	15.80	13.65	13.55	14.10	12.85	17.25	15.20	14.90
25	16.50	17.20	16.20	15.65	15.70	13.95	13.30	12.90	13.20	19.20	15.55	14.60
26	16.20	16.80	16.80	15.30	15.60	14.60	13.05	13.20	14.40	16.20	15.45	14.55
27	16.54	16.65	16.95	15.15	15.30	14.40	13.15	12.90	13.80	15.80	15.40	14.50
28	17.00	16.98	17.60	14.90	14.70	14.35	13.35	13.75	14.85	15.90	16.25	14.20
29	16.98	16.85	16.90	15.25	---	14.50	13.45	12.95	14.00	15.70	15.90	14.55
30	17.00	16.83	17.05	15.10	---	14.45	13.80	13.15	13.35	---	15.75	14.35
31	16.83	---	16.95	15.00	---	14.30	---	12.85	---	---	14.95	---
MAX	17.00	17.53	17.60	17.50	17.10	15.20	14.30	15.75	15.40	19.20	16.90	15.55
WTR YR 1979	MEAN	15.30		HIGH	12.60		LOW	19.20				

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 (0.15 m), depth 88 ft (26.8 m), cased.

DATUM.--Altitude of land-surface datum is 710 ft (216 m), from topographic map. Measuring point: Top of gage platform 4.90 ft (1.494 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--August 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 21.35 ft (6.507 m) Dec. 21, 22, 1967; minimum daily low, 9.11 ft (2.777 m) Apr. 22, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 17.40 ft (5.304 m) Oct. 1, 2; minimum recorded daily low, 11.67 ft (3.557 m) Mar. 7.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.40	16.64	16.50	15.18	---	---	---	15.27	15.02	15.70	---	---
2	17.40	16.68	16.53	---	---	---	---	15.32	14.97	15.70	---	---
3	17.39	16.70	16.54	---	---	---	14.31	15.33	---	15.75	15.34	---
4	17.36	16.72	16.50	---	---	---	14.17	15.30	---	15.78	15.47	---
5	17.36	16.75	16.00	---	---	---	14.05	15.13	---	15.84	15.52	---
6	17.37	16.75	15.50	---	---	---	13.99	14.93	---	15.89	15.63	---
7	17.37	16.78	15.45	---	15.01	11.67	14.11	14.90	15.13	15.94	15.46	14.86
8	16.65	16.80	15.46	---	15.07	---	14.17	14.99	15.15	15.98	15.47	15.00
9	---	16.83	15.25	---	15.15	---	14.25	15.03	14.80	16.03	15.50	15.11
10	---	16.84	13.50	---	---	---	14.18	15.15	14.53	16.03	15.59	15.22
11	---	16.85	12.60	14.57	---	---	13.98	15.17	14.60	15.97	15.62	15.32
12	---	16.96	12.92	14.67	---	---	14.03	15.21	14.68	15.89	15.47	15.40
13	---	16.89	13.27	14.73	---	---	14.15	15.24	14.82	15.89	14.71	15.44
14	---	16.80	13.60	14.80	---	---	14.15	15.11	14.93	15.97	14.38	15.41
15	---	16.90	13.83	14.78	---	---	13.89	15.12	15.08	16.03	14.53	14.34
16	---	16.90	14.07	14.68	---	---	13.82	15.23	15.17	16.08	14.75	13.43
17	16.65	16.89	14.30	---	---	---	13.97	15.31	15.27	16.13	14.94	13.35
18	16.65	16.85	14.46	---	---	---	14.11	15.38	15.41	16.17	15.10	13.66
19	16.68	16.74	14.58	---	---	---	14.25	15.43	14.48	16.23	---	13.97
20	16.74	16.65	14.71	---	---	---	14.40	15.48	15.57	16.26	---	14.22
21	16.78	16.65	14.75	---	---	---	14.50	15.57	15.58	16.30	---	14.34
22	16.80	16.66	14.69	---	---	---	14.54	15.62	15.51	16.32	---	14.27
23	16.85	16.67	14.63	---	---	---	14.75	15.68	15.30	16.37	---	14.07
24	16.87	16.70	14.66	---	---	---	14.32	15.68	15.18	16.38	---	14.14
25	16.90	16.70	14.75	---	---	---	14.90	15.69	15.31	---	---	14.28
26	16.90	16.71	14.85	---	---	---	14.96	15.55	15.42	---	---	14.40
27	16.90	16.71	14.94	---	---	---	15.03	15.46	15.52	---	---	14.50
28	16.60	16.70	15.05	---	---	---	15.09	15.27	15.62	---	---	14.51
29	16.53	16.55	15.12	---	---	---	15.14	14.92	15.69	---	---	13.95
30	16.59	16.51	15.19	---	---	---	15.21	14.86	15.70	---	---	13.41
31	16.61	---	15.19	---	---	---	---	14.97	---	---	---	---
MAX	17.40	16.96	16.54	15.18	15.15	11.67	15.21	15.69	15.70	16.38	15.63	15.44
WTR YR 1979	MEAN	15.40		HIGH	11.67		LOW	17.40				

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

GROUND-WATER RECORDS

379

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 (0.2 m), depth 90 ft (27.4 m), cased.

DATUM.--Altitude of land-surface datum is 1000 ft (305 m), from topographic map. Measuring point: Floor of instrument shelter 3.50 ft (1.067 m) 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, 15.10 ft (4.602 m) Sept. 20, 21, 1963; minimum daily low, 1.43 ft (0.436 m) Apr. 9, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 13.80 ft (4.250 m) Aug. 6; minimum daily low, 4.75 ft (1.448 m) Apr. 22.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	---	9.50	6.95	8.10	13.40	8.45	13.50	12.60
2				---	---	9.45	7.50	8.75	---	9.05	12.00	12.55
3				---	---	8.90	7.75	8.10	---	10.80	12.35	10.55
4				---	---	8.15	7.75	8.70	---	10.80	11.30	10.00
5				---	---	12.10	8.45	7.30	---	10.25	11.30	12.40
6				---	---	12.45	9.35	5.80	12.55	11.25	13.60	12.65
7				---	---	12.85	7.00	9.55	11.05	9.50	13.15	12.80
8				---	---	12.80	6.45	9.40	12.75	9.10	13.45	12.95
9				---	---	9.55	8.45	9.65	10.35	10.50	13.05	10.85
10				---	---	7.75	9.00	9.30	10.33	11.00	12.85	10.50
11				---	---	8.00	7.50	10.25	8.70	11.20	11.25	---
12				---	---	8.50	8.00	9.40	10.40	13.35	10.85	---
13				---	---	8.80	8.00	6.75	10.05	12.90	12.95	---
14				---	---	7.90	6.55	9.50	11.40	12.10	12.75	---
15				---	---	8.80	4.35	9.45	12.55	10.75	12.65	10.00
16				---	---	7.90	5.50	10.55	10.95	11.10	13.50	8.90
17				---	---	9.10	6.55	10.10	---	11.45	13.20	---
18				---	---	9.35	6.70	11.05	---	11.56	12.35	---
19				---	---	8.70	6.40	10.25	13.00	12.20	11.15	10.10
20				---	---	8.00	6.50	9.35	11.95	13.05	11.15	10.50
21				---	---	8.05	5.35	10.50	11.80	11.65	12.65	---
22				---	10.55	9.10	4.75	9.75	11.85	10.20	13.20	10.30
23				10.15	11.30	8.10	6.50	10.55	11.20	13.00	13.10	9.80
24				---	12.85	7.30	8.35	10.55	9.30	12.65	12.15	11.20
25				---	10.50	7.35	7.90	9.85	11.35	12.95	11.90	10.55
26				---	11.20	8.40	7.30	10.25	11.35	12.50	11.30	10.70
27				---	9.40	8.45	7.50	7.15	11.80	13.25	11.30	11.00
28				---	9.40	10.10	6.15	9.25	11.40	10.30	12.10	---
29				---	---	9.35	5.85	9.35	13.75	10.05	12.05	---
30				---	---	9.65	7.20	8.95	13.80	12.80	12.25	9.75
31				---	---	7.20	---	12.95	---	13.50	12.25	---
MAX				10.15	12.85	12.85	9.35	12.95	13.80	13.50	13.50	12.95
WTR YR 1979	MEAN	10.21		HIGH	4.75		LOW	13.80				

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

GROUND-WATER RECORDS

LICKING COUNTY

400159082282100. Local number, LI-2.

LOCATION.--Lat 40°01'59", long 82°28'21", Hydrologic Unit 05040006, Heath Refinery at Heath.

Owner: Heath Refinery.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water-table well.

DATUM.--Altitude of land-surface datum is 890 ft (271 m), from topographic map. Measuring point: Floor of instrument shelter 3.80 ft (1.158 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--November 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 18.55 ft (5.654 m); Dec. 17, 18, 1953; minimum daily low, 0.48 ft (0.146 m) above land surface June 23, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 1.94 ft (0.591 m) June 20; minimum daily low, 0.34 ft (0.104 m) above land surface, Feb. 24.

DEPTH BELOW LAND SURFACE (WATER-LEVEL (FEET)), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1.05	1.15	1.02	.60	---	.73	.86	1.04	.19	---	.34
2	---	1.10	1.17	-0.10	.64	---	.25	.92	1.23	.41	---	.41
3	---	1.14	1.16	.10	.67	---	.17	.90	1.28	.61	---	.51
4	---	1.18	-0.12	.30	.73	---	.18	.35	1.38	.62	---	.56
5	---	1.24	-0.04	.40	.81	---	---	.49	1.48	.61	---	.57
6	---	1.27	.05	.45	.85	---	.13	.63	1.48	.80	---	---
7	---	1.27	.10	.46	.87	---	.18	.79	1.38	.95	.49	.91
8	---	1.32	.05	.47	.89	---	.21	.92	1.38	1.05	.56	.95
9	---	1.40	-0.23	.63	.93	---	.03	.99	1.14	1.03	.69	.98
10	---	1.42	-0.10	.70	.98	---	.12	1.03	1.30	.89	.73	1.02
11	---	1.46	-0.05	.74	1.01	---	.16	1.08	1.44	1.05	.09	1.04
12	---	1.46	-0.03	.75	1.03	---	.20	1.10	1.53	1.14	-0.20	1.08
13	.09	1.50	.05	.74	1.03	---	.24	1.03	1.59	1.17	-0.18	1.09
14	.19	1.55	.15	.33	1.03	---	-0.07	1.15	1.67	1.29	.09	-0.33
15	.24	1.56	.20	.47	1.02	---	---	1.22	1.72	1.37	.23	-0.20
16	.27	1.60	.26	.62	1.10	---	.10	1.30	1.75	1.48	.41	---
17	.28	1.60	.35	.63	1.12	---	.24	1.34	1.79	1.53	.52	---
18	.36	.80	.40	.53	1.11	---	.37	1.37	1.85	1.60	.32	---
19	.52	.99	.50	.64	1.15	---	.44	1.40	---	1.66	.27	---
20	.65	1.10	.50	.64	1.15	---	.52	1.43	1.94	1.72	.15	---
21	---	1.12	.37	---	1.13	.70	.58	1.47	1.58	1.76	.13	---
22	---	1.24	.31	---	.20	.73	.53	1.50	.76	1.82	.21	---
23	---	1.25	.62	.43	-0.02	.73	.57	1.49	1.00	1.86	.18	---
24	---	1.05	.65	.42	-0.34	.60	.72	1.23	1.16	1.70	-0.14	---
25	---	1.15	.70	.05	-0.33	.67	.78	1.21	1.29	1.25	-0.05	---
26	---	1.21	.75	.22	---	.74	.77	.94	1.35	1.25	-0.03	---
27	---	1.20	.92	.27	---	.83	.45	.95	1.45	1.29	-0.14	.63
28	.75	.90	.99	.36	---	.85	.56	.93	1.52	.05	-0.09	.43
29	.85	.90	1.03	.43	---	.80	.55	1.09	1.51	-0.32	-0.03	-0.11
30	.93	1.05	1.00	.47	---	.82	.78	1.23	.49	---	.07	-0.04
31	.97	---	.70	.51	---	.82	---	1.23	---	---	.22	---
MAX	.97	1.60	1.17	1.02	1.15	.85	.78	1.50	1.94	1.86	.73	1.09
WTR YR 1979	MEAN	-0.77		High	-0.34		Low	1.94				

GROUND-WATER RECORDS

381

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 (0.3 m), depth 350 ft (106.7 m), cased.

DATUM.--Altitude of land-surface datum is 1035 ft (315 m), from topographic map. Measuring point: Floor of instrument shelter 1.00 ft (0.305 m) 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, 35.18 ft (10.723 m) July 16, 1977; minimum daily low, 0.15 ft (0.046 m) Jan. 4-6, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 23.70 ft (7.224 m) May 17; minimum daily low, 3.95 ft (1.204 m) Mar. 4.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.65	---	14.00	---	8.50	8.30	---	8.40	14.90	18.80	10.15	8.70
2	18.22	---	11.40	---	11.20	6.90	---	8.40	15.75	21.95	11.60	6.25
3	19.55	---	12.50	---	8.65	5.80	---	9.25	---	23.30	11.55	8.05
4	---	---	12.90	---	7.70	3.95	15.75	7.80	---	21.75	11.10	10.30
5	---	---	14.50	---	10.10	7.20	17.50	8.15	---	19.90	8.90	8.00
6	---	---	14.40	---	12.20	6.75	16.55	5.60	---	19.45	10.60	10.00
7	---	---	13.35	---	12.60	9.50	16.25	9.35	---	18.90	13.20	9.75
8	---	---	10.30	---	14.20	8.45	13.20	10.60	16.80	17.35	14.70	8.60
9	---	---	---	---	15.75	9.55	12.55	13.20	16.10	17.35	16.75	7.20
10	---	---	---	---	12.70	7.40	12.10	14.00	13.95	17.20	16.70	10.25
11	---	---	---	---	10.05	5.80	11.10	15.55	15.45	18.60	15.75	11.30
12	---	---	---	---	11.30	9.20	12.50	14.55	16.70	21.40	14.75	10.55
13	---	---	---	---	10.40	9.85	11.50	13.25	15.90	20.05	17.30	11.95
14	---	---	8.90	---	11.75	10.20	11.55	15.00	20.45	17.55	17.85	10.75
15	---	---	10.25	---	12.50	12.35	9.45	20.10	21.00	16.55	18.00	9.60
16	---	---	10.75	---	13.60	12.25	11.30	20.70	20.80	17.90	17.20	10.25
17	---	---	9.25	---	11.80	---	12.30	23.70	17.35	18.25	16.85	11.35
18	---	---	9.70	17.95	9.60	---	14.00	21.40	19.40	18.85	15.35	12.65
19	---	---	12.50	19.10	11.35	---	14.00	20.00	19.45	18.95	11.25	13.10
20	---	---	12.60	15.20	10.45	---	14.35	20.35	21.45	16.90	12.70	12.60
21	---	16.10	12.55	13.80	8.75	---	14.25	20.20	19.20	17.10	11.90	12.20
22	---	16.70	11.30	13.90	7.50	---	11.05	21.45	20.60	14.25	12.00	9.90
23	---	15.80	9.00	12.80	6.45	---	13.00	21.30	17.45	14.60	12.25	10.45
24	---	13.55	7.65	11.45	5.90	---	13.05	21.65	15.70	12.45	11.45	11.30
25	---	13.80	6.65	11.95	5.25	---	12.20	23.55	18.30	12.80	11.45	11.05
26	---	12.70	10.30	13.40	10.10	---	12.25	18.65	18.30	12.00	10.55	10.75
27	---	17.00	17.25	10.40	10.90	---	12.35	16.05	21.95	12.05	11.75	12.00
28	---	18.35	19.45	8.30	7.80	---	11.45	17.95	21.90	10.55	10.45	11.55
29	---	17.95	15.80	10.55	---	---	8.50	20.65	21.60	10.80	7.60	10.95
30	---	15.60	14.00	11.75	---	---	6.55	20.75	19.55	11.00	7.85	11.00
31	---	---	10.90	9.30	---	---	---	19.90	---	7.60	7.55	---
MAX	19.55	18.35	19.45	19.10	15.75	12.35	17.50	23.70	21.95	23.30	18.00	13.10
WTR YR 1979	MEAN	13.45		HIGH	3.95		LOW	23.70				

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

GROUND-WATER RECORDS

MADISON COUNTY

395740083255700. Local number, M-3.

LOCATION.--Lat 39°57'40", long 83°25'57", Hydrologic Unit 05060002, 5.2 mi (8.4 km) north of London.

Owner: State of Ohio.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in (0.3 m), depth 290 ft (88.4 m) cased to 145 ft (44.2 m).

DATUM.--Altitude of land-surface datum is 1,020 ft (311 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.

PERIOD OF RECORD.--November 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 9.54 ft (1.405 m) Dec. 3, 1978; minimum daily low, 3.93 ft (1.198 m) Feb. 25, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 9.54 ft (2.908 m) Dec. 3; minimum daily low, 4.61 ft (1.405 m) Sept. 4.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	9.21	9.53	7.19	6.24	5.12	6.06	5.65	5.65	5.98	6.30	4.93
2	---	9.20	9.53	6.83	6.31	5.16	5.95	5.65	5.49	6.07	6.24	4.73
3	---	9.19	9.54	6.62	6.26	5.00	5.39	5.60	5.37	6.13	6.28	4.64
4	---	9.18	9.30	6.47	6.32	4.79	5.70	5.79	5.51	6.10	6.22	4.61
5	---	9.20	9.29	6.46	6.39	4.83	5.44	5.75	5.57	6.45	6.20	4.64
6	---	9.24	9.27	6.30	6.36	4.76	5.43	5.73	5.46	6.38	6.06	4.72
7	---	9.23	9.27	6.19	6.33	4.68	5.41	5.88	5.53	6.38	5.92	4.91
8	---	9.27	9.12	6.24	6.41	4.80	5.27	6.09	5.58	6.32	5.88	5.14
9	---	9.25	8.92	6.28	6.48	4.86	5.26	6.09	5.57	6.26	5.91	5.21
10	---	9.31	8.67	6.35	6.54	4.98	5.31	6.14	5.49	6.26	5.94	5.22
11	8.82	9.34	8.49	6.32	6.53	5.06	5.30	6.24	5.59	6.32	5.82	5.31
12	8.77	9.37	8.26	6.26	6.49	5.18	5.21	6.11	5.63	6.34	5.83	5.37
13	8.81	9.33	8.03	6.16	6.50	5.16	5.11	6.05	5.70	6.28	5.87	5.42
14	8.84	9.39	7.99	6.33	6.49	5.31	4.37	6.03	5.74	6.33	5.90	5.05
15	8.84	9.40	7.81	6.38	6.39	5.46	4.69	6.08	5.75	6.39	5.98	4.92
16	8.93	9.41	7.77	6.34	6.65	5.51	4.73	6.17	5.75	6.47	6.04	4.79
17	8.98	9.36	7.73	6.27	6.73	5.52	4.76	6.21	5.72	6.54	6.13	4.72
18	8.97	9.38	7.68	6.34	6.67	5.51	4.86	6.31	5.84	6.57	6.01	4.69
19	8.91	9.45	7.57	6.33	6.68	5.51	4.93	6.18	5.92	6.62	6.02	4.82
20	8.89	9.50	7.43	6.10	6.67	5.53	4.94	6.11	5.95	6.67	6.10	4.88
21	8.92	9.48	7.38	5.98	6.62	5.63	5.02	6.22	5.91	6.68	5.97	4.90
22	8.96	9.46	7.43	6.19	6.61	5.62	5.11	6.24	5.91	6.66	5.79	5.05
23	9.00	9.33	7.44	6.14	6.36	5.53	5.17	6.19	5.96	6.70	5.65	5.15
24	9.04	9.37	7.34	6.00	6.12	5.53	5.19	6.10	6.03	6.71	5.57	5.20
25	8.93	9.42	7.32	6.13	5.79	5.72	5.19	5.97	6.31	6.59	5.61	5.26
26	9.01	9.40	7.41	6.10	5.34	5.89	5.15	5.87	6.17	6.55	5.60	5.32
27	9.05	9.34	7.49	6.06	5.29	6.01	5.25	5.73	6.13	6.53	5.57	5.34
28	9.14	9.48	7.48	6.06	5.25	5.99	5.39	5.68	6.11	6.55	5.56	5.29
29	9.20	9.46	7.48	6.14	---	6.00	5.49	5.68	6.09	6.44	5.34	5.17
30	9.21	9.51	7.39	6.16	---	6.01	5.53	5.77	5.97	6.32	5.10	5.09
31	9.18	---	7.38	6.13	---	6.03	---	5.77	---	6.24	4.97	---
MAX	9.21	9.51	9.54	7.19	6.73	6.03	6.06	6.31	6.31	6.71	6.30	5.42
WTR YR 1979	MEAN	6.50		HIGH	4.61		LOW	9.54				

GROUND-WATER RECORDS

383

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 (0.2 m), depth 170 ft (51.8 m) cased to 99.5 ft (30.3 m).

DATUM.--Altitude of land-surface datum is 1,160 ft (354 m), from topographic map. Measuring point: Floor of instrument shelter at land-surface datum.

REMARKS.--Influenced by seasonal water demand at county fairgrounds.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 110.75 ft (33.757 m) Sept. 18, 1946; minimum daily low, 30.35 ft (9.251 m) Apr. 23, 1951.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 47.31 ft (14.420 m) Aug. 30; minimum daily low, 33.75 ft (10.287 m) Feb. 24.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36.09	---	36.08	34.74	34.18	34.12	34.17	34.33	35.20	36.19	36.33	40.52
2	36.09	---	36.08	34.81	34.18	34.01	33.92	34.38	35.24	36.11	36.52	38.84
3	---	---	36.06	34.89	34.16	34.12	33.97	34.50	35.19	36.11	37.16	38.09
4	---	---	35.75	34.92	34.14	33.86	33.97	34.43	35.17	36.10	36.60	37.56
5	---	---	35.87	34.92	34.16	33.96	33.98	34.40	35.25	36.05	41.70	37.44
6	---	---	36.01	34.86	34.17	34.17	34.12	34.37	35.26	36.10	38.61	37.25
7	---	36.38	36.16	34.80	34.15	34.25	34.17	34.37	35.31	40.60	37.99	37.15
8	---	36.39	36.14	34.72	34.19	34.33	34.16	34.41	35.32	38.57	37.25	37.09
9	---	36.39	35.91	34.72	34.22	34.35	34.05	34.58	35.30	37.27	37.03	37.06
10	---	36.42	35.91	34.74	34.28	34.33	34.18	35.05	35.27	36.48	36.83	37.01
11	---	36.44	35.88	34.72	34.26	34.31	34.27	36.19	35.19	36.23	36.64	37.02
12	---	36.43	35.81	34.71	34.22	34.34	34.28	38.22	35.33	36.09	36.58	37.08
13	---	36.40	35.75	34.69	34.24	34.32	34.29	36.19	35.40	36.03	36.61	37.09
14	---	36.39	35.73	34.52	34.22	34.32	34.28	35.38	35.40	35.99	36.49	36.96
15	---	36.39	35.67	34.54	34.24	34.39	34.23	35.25	35.39	35.98	36.48	36.96
16	---	36.33	35.66	34.54	34.36	34.40	34.24	35.31	35.39	36.00	36.75	36.97
17	---	36.30	35.69	34.50	34.36	34.39	34.26	35.39	35.35	36.24	36.54	36.93
18	---	36.24	35.70	34.51	34.32	34.33	34.30	35.35	35.41	36.56	36.48	36.91
19	---	36.24	35.71	34.50	34.30	34.32	34.33	35.34	35.47	36.45	36.42	37.00
20	---	36.23	35.69	34.43	34.30	34.34	34.31	35.54	35.49	40.62	36.44	36.98
21	---	36.20	35.63	34.36	34.27	34.38	34.29	35.50	35.49	41.69	36.46	36.95
22	---	36.18	35.63	34.48	34.13	34.36	34.27	35.50	35.48	41.77	36.47	36.93
23	---	36.14	35.62	34.46	34.10	34.32	34.26	35.56	35.53	41.15	36.54	36.93
24	---	36.10	35.54	34.35	33.75	34.23	34.27	35.55	35.55	38.45	36.52	36.91
25	---	36.10	35.35	34.31	33.91	34.18	34.26	35.34	35.70	37.51	37.97	36.91
26	---	36.08	35.34	34.34	33.93	34.23	34.24	35.40	35.82	37.07	39.73	37.34
27	---	36.02	35.35	34.30	34.13	34.26	34.09	35.39	35.91	36.89	41.34	37.20
28	---	36.04	35.36	34.24	34.18	34.26	34.14	35.19	37.19	36.70	41.51	37.41
29	---	36.03	35.34	34.24	---	34.21	34.16	35.19	36.56	36.52	41.40	37.73
30	---	36.08	35.29	34.22	---	34.18	34.14	35.19	36.27	36.45	47.31	37.75
31	---	---	35.15	34.17	---	34.19	---	35.19	---	36.44	46.63	---
MAX	36.09	36.44	36.16	34.92	34.36	34.40	34.33	38.22	37.19	41.77	47.31	40.52
WTR YR 1979	MEAN	35.70		HIGH	33.75		LOW	47.31				

GROUND-WATER RECORDS

MARION COUNTY

403413083170500. Local number, MN-4.

LOCATION.--Lat 40°34'13", long 83°17'05", Hydrologic Unit 05060001, 1.9 mi (3.1 km) southeast of New Bloomington.

Owner: State of Ohio.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in (0.3 m), depth drilled 290 ft (88.4 m), present depth 286 ft (87.2 m), cased to 33 ft (10.1 m).

DATUM.--Altitude of land-surface datum is 915.96 ft (279.185 m). Measuring point: Floor of shelter 3.00 ft (0.914 m) 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, 21.60 ft (6.584 m) July 31, 1979. minimum daily low, 0.61 ft (0.186 m) Mar. 18, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 21.60 ft (6.584 m) July 31; minimum daily low, 4.92 ft (1.500 m) Apr. 16.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.89	---	10.73	9.62	8.38	6.72	6.36	5.90	5.83	6.74	18.40	18.75
2	10.86	---	10.73	9.46	8.40	6.74	6.29	5.89	5.86	6.85	20.13	19.73
3	15.82	---	10.69	9.36	8.35	6.60	6.33	5.91	5.83	6.87	12.04	20.32
4	21.01	---	10.44	9.15	8.39	6.30	6.25	5.98	5.83	6.86	9.97	20.58
5	21.44	---	10.42	9.10	8.40	5.74	6.05	6.01	5.90	6.97	9.03	11.85
6	---	---	10.56	8.88	8.37	5.26	5.97	6.01	5.97	7.03	14.95	9.32
7	---	---	10.54	8.74	8.30	5.22	5.96	6.06	6.04	7.05	10.25	8.28
8	---	21.28	10.40	8.69	8.39	5.36	5.94	6.14	6.09	7.03	8.43	7.76
9	---	15.33	10.31	8.67	8.43	5.38	5.77	6.20	6.10	6.98	7.99	7.45
10	---	13.09	10.37	8.72	8.47	5.41	5.93	6.21	6.04	6.92	16.33	7.18
11	---	13.15	10.34	8.71	8.47	5.44	5.83	6.22	6.17	6.93	18.29	7.97
12	---	12.73	10.23	8.61	8.39	5.85	5.70	6.27	6.20	6.92	10.71	13.58
13	---	12.42	10.14	8.51	8.41	5.61	5.59	6.31	6.51	6.85	8.94	15.89
14	---	12.08	10.14	8.65	8.38	5.70	5.41	6.33	6.28	6.87	8.23	8.26
15	---	12.06	10.01	8.69	8.23	5.83	5.02	6.39	6.29	6.94	7.93	7.42
16	---	11.86	10.02	8.61	8.54	5.88	4.92	6.50	6.32	7.01	16.50	6.99
17	---	11.63	10.07	8.55	8.58	5.89	4.97	6.51	6.36	7.07	16.87	6.75
18	---	11.41	10.07	8.60	8.50	5.85	5.00	6.49	6.49	19.09	10.38	6.52
19	---	11.35	9.96	8.59	8.43	5.85	5.02	6.50	6.56	15.54	15.13	6.44
20	---	11.25	9.82	8.30	8.39	5.88	5.05	6.57	6.58	16.82	17.06	6.39
21	---	11.10	9.87	8.21	8.34	5.98	5.14	6.67	6.56	17.16	9.47	6.30
22	---	10.99	9.90	8.45	8.37	5.96	5.25	6.72	6.58	16.35	8.37	6.38
23	---	10.83	9.94	8.39	8.23	5.87	5.31	6.67	6.65	17.36	7.83	6.40
24	---	10.82	9.83	8.19	8.10	5.89	5.33	6.66	6.73	16.76	7.52	6.41
25	---	10.82	9.86	8.38	7.63	6.09	5.33	6.59	6.80	17.65	7.38	6.41
26	---	10.78	9.95	8.37	7.05	6.27	5.33	6.42	6.83	17.03	16.19	6.46
27	---	10.66	10.01	8.36	6.88	6.38	5.45	6.19	6.83	19.57	18.63	6.48
28	---	10.80	10.06	8.29	6.77	6.38	5.51	5.91	6.84	20.07	12.12	6.40
29	---	10.79	9.96	8.36	---	6.32	5.71	5.85	6.79	20.77	8.93	6.42
30	---	10.73	9.88	8.36	---	6.32	5.79	5.85	6.72	21.36	7.79	6.41
31	---	---	9.81	8.29	---	6.35	---	5.83	---	21.60	16.61	---
MAX	21.44	21.28	10.73	9.62	8.58	6.74	6.36	6.72	6.84	21.60	20.13	20.58
WTR YR 1979	MEAN	8.86	HIGH	4.92	LOW	21.60						

GROUND-WATER RECORDS

385

MARION COUNTY

403443083230400. Local number, MN-1.

LOCATION.--Lat 40°34'43, long 83°23'04", Hydrologic Unit 05060001, SR 37 at Baptist Church in LaRue.

Owner: Village of LaRue.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 4 in (0.1 m), depth 100 ft (30.5 m), cased.

DATUM.--Altitude of land-surface datum is 930 ft (283 m), from topographic map. Measuring point: Floor of instrument shelter 3.30 ft (1.006 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 14.55 ft (4.435 m) Aug. 10, 1950; minimum daily low, 5.67 ft (1.728 m) Jan. 23, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 14.39 ft (4.386 m) Nov. 12; minimum daily low, 6.96 ft (2.121 m) Mar. 4.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.45	13.83	13.27	12.07	11.45	8.72	9.99	10.15	9.75	10.90	12.13	10.38
2	13.31	13.82	13.90	11.25	11.38	8.82	9.90	10.07	9.92	11.13	11.81	10.32
3	13.21	13.78	13.30	10.74	11.36	8.60	9.76	10.25	10.13	11.10	11.92	10.48
4	13.25	13.70	13.08	10.83	11.44	6.96	9.52	10.35	10.36	10.96	12.00	10.57
5	13.37	14.00	12.99	10.79	11.45	7.03	9.15	10.28	10.36	11.08	11.92	10.73
6	13.30	14.01	13.08	10.91	11.45	7.50	8.73	10.28	10.35	11.16	11.75	10.75
7	13.37	13.91	12.92	10.88	11.50	7.58	8.97	10.31	10.34	11.86	11.98	10.55
8	13.56	13.89	12.74	11.19	11.61	7.82	8.85	10.36	10.36	11.82	11.81	11.05
9	13.56	13.81	12.75	11.06	12.36	7.93	8.92	10.27	10.45	11.19	11.77	10.93
10	13.50	13.94	12.65	11.11	11.85	7.96	8.95	10.55	10.41	11.15	11.59	---
11	13.45	13.95	12.65	11.50	11.75	8.35	8.97	10.53	---	11.10	11.70	---
12	13.61	14.39	12.60	11.19	11.73	8.46	8.80	10.61	10.52	11.20	11.62	11.05
13	13.48	13.89	12.72	11.10	11.80	8.61	8.72	10.64	10.54	11.35	11.69	11.00
14	13.52	13.78	12.72	11.23	11.55	8.67	8.18	10.80	10.63	11.84	11.65	10.92
15	---	13.66	12.80	11.32	11.55	8.95	7.57	10.81	10.83	11.68	11.69	10.44
16	---	13.60	12.85	11.25	11.74	8.93	7.81	10.76	10.88	11.68	11.67	10.39
17	---	---	12.94	11.20	11.82	9.07	7.99	10.94	11.00	11.69	11.65	10.39
18	---	13.56	12.83	11.34	11.64	9.16	8.17	10.83	11.03	11.94	11.57	10.43
19	13.45	13.56	12.83	11.21	11.81	9.21	8.39	11.32	11.13	12.00	11.78	10.49
20	13.50	13.50	12.61	11.29	11.57	9.24	8.57	11.02	11.10	11.74	11.85	10.72
21	13.59	13.50	12.95	11.18	11.53	9.37	8.93	11.33	11.05	11.97	11.68	10.74
22	14.24	13.43	12.89	11.31	11.46	10.16	9.17	11.49	10.97	12.46	12.01	10.78
23	13.85	13.30	12.95	11.24	11.05	9.57	9.33	11.45	11.60	12.42	11.88	10.87
24	13.71	13.35	12.86	11.14	9.45	9.63	9.39	11.12	11.32	12.23	11.81	10.85
25	13.64	13.38	12.92	11.24	8.37	9.74	9.36	10.84	11.08	12.00	11.85	10.86
26	13.68	13.30	12.66	11.22	8.68	9.87	9.58	9.80	11.30	12.07	11.70	10.87
27	13.75	13.33	13.28	11.20	8.74	9.98	9.51	8.90	11.40	11.99	11.47	10.83
28	14.03	13.38	12.85	11.24	8.71	10.00	9.90	9.08	11.35	11.93	11.43	10.74
29	13.98	13.28	12.68	11.35	---	10.00	9.34	9.27	11.22	11.96	10.55	10.75
30	13.90	13.41	12.64	11.27	---	9.95	9.97	9.52	11.07	12.00	9.97	10.73
31	13.85	---	12.64	11.34	---	10.16	---	9.57	---	12.04	10.35	---
MAX	14.24	14.39	13.90	12.07	12.36	10.16	9.99	11.49	11.60	12.46	12.13	11.05
WTR YR 1979	MEAN	11.28		HIGH	6.96		LOW	14.39				

GROUND-WATER RECORDS
MARION COUNTY--Continued

403601083110400. Local number, MN-2.

LOCATION.--Lat 40°36'01", long 83°11'04", Hydrologic Unit 05060001 water treatment plant 2 mi (3.2 km) west of Marion.

Owner: Marion Water Department.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in (0.3 m), depth 67 ft (20.4 m), cased.

DATUM.--Altitude of land-surface datum is 910 ft (277 m), from topographic map. Measuring point: Floor of instrument shelter 2.00 ft (0.610 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--May, 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 49.50 ft (15.088 m) Feb. 11, 1956; minimum daily low, 7.35 ft (2.240 m) Apr. 2, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 25.68 ft (7.827 m) Nov. 22, 28; minimum daily low, 9.79 ft (2.984 m) Sept. 30.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.59	22.37	---	21.33	---	---	14.56	11.74	10.84	10.69	---	---
2	22.06	22.62	---	21.33	---	---	14.52	11.71	10.82	10.76	---	---
3	22.01	22.85	---	---	---	---	14.51	11.60	10.76	10.76	---	---
4	22.00	23.06	---	---	---	---	14.38	11.58	10.72	10.68	---	---
5	22.00	23.25	---	---	---	---	14.24	11.54	10.68	10.76	---	---
6	22.04	23.44	---	---	---	---	14.32	11.45	10.70	10.80	---	---
7	22.11	23.60	---	---	---	---	14.19	11.42	10.70	10.79	---	---
8	22.12	23.75	---	---	19.14	---	14.00	11.40	10.71	10.75	10.67	---
9	21.90	23.90	---	---	19.01	---	13.77	11.37	10.69	10.69	---	---
10	21.79	24.08	---	---	18.85	---	13.82	11.44	---	10.56	---	---
11	21.75	24.24	---	---	18.82	---	13.81	11.74	---	10.63	---	---
12	21.56	24.45	---	---	18.67	---	13.59	11.80	11.02	10.69	---	9.98
13	21.76	24.60	---	---	18.65	---	13.47	11.69	10.94	---	---	9.93
14	21.77	24.74	---	---	18.36	---	13.18	11.59	10.87	---	---	9.85
15	---	25.00	---	---	---	16.15	12.99	11.52	10.77	---	---	10.07
16	---	25.20	---	---	---	16.13	12.76	11.53	10.71	---	---	10.24
17	---	25.35	---	---	---	16.06	12.73	11.50	10.61	---	---	10.39
18	---	25.34	21.86	---	---	15.88	12.80	11.41	10.68	---	---	10.09
19	21.25	25.46	21.84	19.88	---	15.74	12.84	11.30	10.72	---	---	10.05
20	21.25	---	21.77	19.83	---	15.62	12.87	11.24	10.69	---	---	10.00
21	21.25	---	21.87	19.70	---	15.52	12.81	11.24	10.63	---	---	9.84
22	21.24	25.68	21.87	19.74	---	15.46	12.69	11.26	10.77	---	---	9.98
23	21.30	24.73	21.85	19.66	---	15.29	12.55	11.18	11.17	---	---	10.02
24	21.30	24.56	21.73	19.52	---	15.11	12.40	11.13	11.28	---	---	9.99
25	21.27	24.25	21.66	19.52	---	15.06	12.22	11.05	11.29	---	---	9.98
26	21.34	---	21.64	19.48	---	15.04	12.08	10.99	11.17	---	---	10.01
27	21.38	---	21.62	19.41	---	15.03	11.97	10.93	11.06	---	---	9.89
28	21.44	25.68	21.59	19.31	---	15.00	11.91	10.93	10.98	---	---	9.83
29	21.48	24.93	21.55	19.30	---	14.85	11.90	10.92	10.86	---	---	9.85
30	21.48	24.56	21.47	---	---	14.79	11.82	10.88	10.73	---	---	9.79
31	22.00	---	21.43	---	---	14.71	---	10.88	---	---	---	---
MAX	22.59	25.68	21.87	21.33	19.14	16.15	14.56	11.80	11.29	10.80	10.67	10.39
WTR YR 1979	MEAN	15.79	HIGH	9.79	LOW	25.68						

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

GROUND-WATER RECORDS

387

MEDINA COUNTY

410120081431800. Local number, MD-3.

LOCATION.--Lat 41°01'20", long 81°43'18", Hydrologic Unit 05040001, Auble Street at water treatment plant in Wadsworth.

Owner: Wadsworth Water Department.

AQUIFER.--Sandstone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in (0.3 m), depth 275 ft (83.8 m), cased.

DATUM.--Altitude of land-surface datum is 1180 ft (360 m), from topographic map. Measuring point: Floor of instrument shelter 1.00 ft (0.305 m) 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 (56.918 m) Jan. 21, 1975; minimum daily low, 144.00 ft (43.891 m) May 13, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 175.60 ft (53.523 m) Dec. 24; minimum recorded daily low, 152.80 ft (46.573 m) May 6.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	167.30	173.60	172.10	172.60	---	168.30	---	158.10	170.70	---	171.00	157.20
2	169.90	174.00	172.40	175.00	---	168.80	---	157.50	171.00	---	171.50	157.50
3	169.80	173.60	171.00	175.20	---	168.90	---	166.70	169.40	---	162.60	159.00
4	170.80	173.90	172.60	174.80	---	170.00	---	167.40	170.50	---	159.40	159.50
5	171.40	174.30	173.70	174.50	---	170.60	---	167.50	170.90	---	151.00	159.50
6	171.90	174.30	173.90	174.30	---	170.60	---	152.80	170.40	---	151.30	159.90
7	172.30	173.90	173.90	174.00	---	169.80	---	---	170.60	---	151.50	159.70
8	172.40	173.60	174.00	174.90	---	169.80	---	---	170.70	---	158.70	158.70
9	172.50	172.50	174.00	174.90	---	170.00	---	---	170.80	---	157.70	159.00
10	172.60	171.00	174.60	175.30	---	165.30	---	170.30	170.90	---	150.50	158.00
11	172.60	172.80	174.60	---	---	169.30	---	168.50	171.40	---	159.90	170.70
12	172.80	---	174.20	---	---	167.00	---	168.60	171.40	---	157.00	159.50
13	173.00	172.40	174.60	---	---	167.60	---	168.50	171.30	---	159.90	---
14	173.00	172.60	174.80	---	---	168.70	---	169.90	171.40	---	150.10	158.00
15	172.50	172.40	174.80	---	---	168.90	---	169.90	171.10	---	157.00	159.30
16	172.90	171.90	174.50	---	---	168.70	---	168.90	171.10	---	156.80	170.10
17	172.80	172.00	174.50	---	---	158.80	169.50	170.60	---	---	159.80	158.40
18	172.90	171.30	174.90	---	---	168.60	170.20	170.80	---	169.20	159.20	158.50
19	172.90	171.90	175.02	---	---	159.50	170.20	170.70	---	170.90	158.20	158.70
20	173.50	171.40	174.40	---	---	159.20	157.50	170.90	---	171.00	159.50	158.70
21	---	172.50	175.40	---	---	157.90	172.50	171.20	171.40	171.20	156.80	158.60
22	---	172.30	175.40	---	160.00	---	158.40	170.40	---	165.50	158.20	170.30
23	---	171.80	175.60	---	166.30	---	---	170.40	---	171.10	159.20	170.10
24	---	171.70	174.20	---	168.20	---	173.10	170.70	---	171.20	159.40	159.00
25	---	171.40	172.90	---	168.30	---	170.40	170.00	---	171.10	156.20	170.50
26	---	171.00	172.90	---	---	---	154.30	168.80	---	171.30	158.20	159.30
27	---	171.00	175.20	---	---	---	---	168.40	---	171.60	155.80	159.10
28	---	171.60	175.20	---	---	---	---	169.90	---	170.20	158.80	170.10
29	---	171.70	175.10	---	---	---	157.40	168.70	---	169.60	157.50	170.40
30	---	172.10	174.90	---	---	---	167.40	168.90	---	171.20	158.70	159.90
31	173.80	---	174.20	---	---	---	---	168.90	---	171.60	158.40	---
MAX	173.80	174.30	175.60	175.30	168.30	170.60	173.10	171.20	171.40	171.60	171.50	170.70
WTR YR 1979	MEAN	169.36		HIGH	152.80		LOW	175.60				

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

GROUND-WATER RECORDS

MERCER COUNTY

402833084375200. Local number, MR-2.

LOCATION.--Lat 40°28'33", long 84°37'52", Hydrologic Unit 05120101, at AVCO Mfg. Co. building in Coldwater.

Owner: AVCO Mfg. Company.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in. (0.15 m), depth 253 ft (77.1 m), cased.

DATUM.--Altitude of land-surface datum is 915 ft (279 m), from topographic map. Measuring point: Top of platform 1.2 ft (0.366 m) 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, 74.14 ft (22.598 m) April 6, 1979; minimum daily low, 60.13 ft (18.328 m) Feb. 14, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 74.14 ft (22.598 m) April 6; minimum daily low, 69.80 ft (21.275 m) July 15.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET). WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71.49	72.10	72.13	71.99	72.33	73.78	73.91	74.00	72.19	73.52	72.19	72.70
2	71.73	72.09	72.37	72.32	72.75	73.82	74.05	73.98	71.30	73.20	72.35	72.29
3	71.75	72.07	72.30	72.48	72.60	73.66	74.10	74.03	70.98	73.28	72.18	71.01
4	71.82	72.03	71.02	72.67	72.71	73.63	73.93	74.05	71.66	73.23	72.74	72.49
5	71.89	71.33	71.38	72.67	72.72	73.66	73.91	74.09	71.68	72.98	71.16	72.56
6	72.07	71.71	71.44	72.49	72.57	73.69	74.14	73.99	---	73.04	72.03	72.79
7	72.14	71.79	71.69	72.40	72.59	73.62	74.13	74.02	72.83	72.57	72.51	72.99
8	72.14	71.45	71.54	72.44	72.70	73.68	73.93	74.05	73.01	71.98	72.67	73.07
9	71.56	71.34	71.56	72.54	73.29	73.82	73.93	74.09	72.83	72.80	72.50	72.69
10	71.67	72.08	70.85	72.67	73.45	73.67	74.06	74.06	72.84	72.72	72.49	72.61
11	71.65	72.27	71.44	72.67	73.45	73.20	74.03	73.88	72.69	72.41	72.10	72.61
12	71.78	71.66	71.69	71.11	73.49	73.22	73.98	73.93	73.03	72.64	71.89	72.59
13	71.88	71.49	70.94	70.72	73.49	73.43	73.89	73.86	73.07	72.82	72.00	72.48
14	71.88	72.17	71.71	70.62	73.38	73.89	73.91	73.88	73.06	72.06	72.21	72.79
15	70.92	72.24	72.34	71.58	73.70	74.07	74.03	73.94	73.09	69.80	72.51	72.85
16	71.63	72.29	72.44	71.81	73.84	74.00	74.06	73.87	73.08	72.13	72.61	72.78
17	71.68	72.18	72.63	71.91	73.87	73.90	74.12	73.71	73.13	72.13	72.36	72.46
18	71.64	72.26	72.25	72.23	73.65	73.78	74.11	73.77	73.03	72.29	72.48	72.65
19	71.62	72.02	72.33	72.13	73.65	73.72	74.06	73.47	73.27	72.65	71.51	72.77
20	71.65	71.69	72.22	71.84	73.54	73.74	73.95	73.51	73.18	72.66	71.76	72.14
21	71.66	71.89	72.53	72.07	73.54	73.82	73.93	73.63	73.24	72.81	71.46	72.12
22	71.75	71.83	72.54	72.50	73.65	73.44	74.04	73.53	73.31	72.34	72.32	72.33
23	72.05	71.84	72.64	72.46	73.57	73.44	74.04	73.36	73.39	72.01	72.41	72.35
24	71.75	71.95	72.45	72.36	73.71	73.63	73.92	73.62	73.08	72.57	72.26	72.29
25	71.77	72.13	72.11	72.66	73.55	73.29	73.93	73.62	73.24	72.06	72.04	72.24
26	72.05	71.58	72.79	72.66	73.65	73.88	73.58	73.64	73.41	72.09	72.03	72.21
27	72.05	71.88	72.53	72.57	73.72	74.06	73.98	73.80	73.48	72.28	71.88	72.18
28	72.12	72.28	72.48	72.63	73.71	74.02	74.01	73.80	73.50	72.01	72.22	72.12
29	72.14	72.28	72.49	72.71	---	73.90	74.03	71.66	73.44	72.06	72.61	72.18
30	71.92	72.37	72.46	72.70	---	73.86	73.98	71.91	73.49	72.17	72.80	72.18
31	72.04	---	72.13	72.61	---	73.94	---	72.08	---	71.99	72.84	---
MAX	72.14	72.37	72.79	72.71	73.87	74.07	74.14	74.09	73.50	73.52	72.84	73.07
WTR YR 1979	MEAN	72.72		HIGH	69.80		LOW	74.14				

GROUND-WATER RECORDS

389

MIAMI COUNTY

395848084085500. Local number, MI-3.

LOCATION.--Lat 39°58'48", long 84°08'55", Hydrologic Unit 05080001, 2.0 mi (3.2 km) 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 (0.13 m), depth 48 ft (14.6 m), cased.

DATUM.--Altitude of land-surface datum is 804.78 ft (245.297 m). (Levels by Miami Conservancy District.)

Measuring point: Floor of shelter 3.50 ft (1.067 m) above land-surface datum.

PERIOD OF RECORD.--October 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 15.61 ft (4.758 m) Feb. 4, 1971; minimum daily low, 7.53 ft (2.295 m) Feb. 25, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 11.56 ft (3.523 m) Nov. 16; minimum daily low, 8.27 ft (2.521 m) Mar. 4.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.38	11.41	11.39	10.21	10.40	8.96	10.15	10.33	---	11.33	---	---
2	11.54	11.42	11.40	9.76	10.42	8.61	10.14	10.16	---	11.32	---	---
3	11.55	11.43	11.38	9.63	10.45	8.55	10.14	10.17	---	11.29	---	---
4	11.44	11.43	11.00	9.61	10.49	8.27	10.13	10.26	---	11.29	---	9.92
5	11.44	11.44	10.72	9.62	10.52	8.30	10.04	10.28	---	11.29	---	9.96
6	11.40	11.46	10.62	9.66	10.53	8.39	10.02	10.08	---	11.29	---	10.01
7	11.40	11.48	10.57	9.72	10.57	8.50	10.02	10.11	---	11.13	---	10.07
8	11.42	11.48	10.54	9.78	10.61	8.63	9.99	10.15	---	10.73	---	10.13
9	11.44	11.50	10.18	9.83	10.63	8.72	10.01	10.18	---	10.68	---	10.16
10	11.44	11.51	10.06	9.89	10.66	8.82	10.03	10.21	---	10.67	---	10.21
11	11.44	11.52	10.00	9.92	10.67	8.91	10.04	10.25	---	10.66	---	10.25
12	11.48	11.53	9.99	9.96	10.73	8.99	9.94	10.28	---	10.65	---	10.28
13	11.48	11.53	10.00	9.97	10.74	9.05	9.92	---	---	10.60	---	10.28
14	11.39	11.55	10.02	10.07	10.75	9.18	9.35	---	---	10.62	---	10.27
15	11.36	11.55	10.09	10.09	10.79	9.26	8.99	---	---	10.65	---	9.87
16	11.31	11.56	10.15	10.12	10.83	9.32	8.97	---	---	10.67	---	9.87
17	11.32	11.55	10.19	10.16	10.83	9.38	9.02	---	---	10.70	---	9.89
18	11.31	11.44	10.22	10.19	10.85	9.43	9.08	---	---	10.72	---	9.95
19	11.31	11.41	10.23	10.19	10.87	9.50	9.13	---	---	10.74	---	10.01
20	11.31	11.39	10.27	10.20	10.87	9.57	9.19	---	---	10.74	---	10.06
21	11.31	11.37	10.32	10.18	10.87	9.63	9.27	---	---	10.41	---	10.12
22	11.32	11.37	10.36	10.20	10.67	9.67	9.34	---	---	10.05	---	10.19
23	11.34	11.34	10.38	10.21	10.27	9.69	9.41	---	---	9.68	---	10.23
24	11.34	11.34	10.41	10.19	8.79	9.77	9.44	---	---	---	---	10.27
25	11.34	11.34	10.45	10.13	8.82	9.84	9.55	---	---	---	---	10.28
26	11.37	11.34	10.50	10.16	8.85	9.91	9.56	---	---	---	---	---
27	11.38	11.34	10.54	10.18	8.95	9.96	9.59	---	11.40	---	---	---
28	11.39	11.36	10.56	10.26	8.99	9.99	9.73	---	11.44	---	---	---
29	11.40	11.36	10.58	10.29	---	10.04	10.26	---	11.43	---	---	---
30	11.40	11.37	10.60	10.32	---	10.08	9.83	---	11.35	---	---	---
31	11.40	---	10.60	10.36	---	10.13	---	---	---	---	---	---
MAX	11.55	11.56	11.40	10.36	10.87	10.13	10.26	10.33	11.44	11.33	---	10.28
WTR YR 1979	MEAN	10.39		HIGH	8.27		LOW	11.56				

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

GROUND-WATER RECORDS

MIAMI COUNTY--Continued

400208084112900. Local number, MI-44.

LOCATION.--Lat 40°02'08", long 84°11'29", Hydrologic Unit 05080001, on left bank of Great Miami River 0.7 mi (1.1 km) 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 (0.66 m), depth 105 ft (32.0 m) screened below 89 ft (27.1 m).

PERIOD OF RECORD.--August 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CAC03)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	BICARBONATE (MG/L AS HC03)	CARBONATE (MG/L AS C03)
NOV 30...	1030	730	7.2	13.0	330	78	34	366	0
FEB 27...	1330	720	7.6	13.5	330	76	34	370	0
MAY 14...	1630	660	7.1	14.0	320	75	33	360	0
AUG 02...	1415	695	7.5	14.5	320	77	32	366	0

DATE	ALKALINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS C02)	SULFATE DIS-SOLVED (MG/L AS S04)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C. TOTAL (MG/L)	NITROGEN, NITRATE (MG/L AS N)	NITROGEN, NITRITE (MG/L AS N)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
NOV 30...	300	37	60	23	1.4	413	.00	.00	--
FEB 27...	300	15	59	23	.8	420	.00	.00	--
MAY 14...	300	46	63	24	.6	468	.00	.00	--
AUG 02...	300	19	65	23	.6	413	.00	.01	20

DATE	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 30...	--	--	--	1500	--	--	40	--	--
FEB 27...	--	--	--	1500	--	--	40	--	--
MAY 14...	--	--	--	1500	--	--	40	--	--
AUG 02...	<10	16	2	1500	10	0	50	20	10

GROUND-WATER RECORDS

391

MONTGOMERY COUNTY

393853084170700. Local number, MT-63.

LOCATION.--Lat 39°38'53", long 84°17'07", Hydrologic Unit 05080002, on left bank of Great Miami River 0.4 mi (0.6 km) north of city hall in Miamisburg.

Owner: Miamisburg Box Board Company.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled industrial supply water-table well, diameter 16 in (0.41 m), depth 95 ft (29.0 m) cased below 73 ft (22.3 m).

PERIOD OF RECORD.--September 1972 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CAC03)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	BICARBONATE (MG/L AS HC03)	CARBONATE (MG/L AS C03)
NOV 27...	1030	971	7.2	14.5	420	110	36	454	0
FEB 27...	1100	1000	7.4	12.0	460	120	39	460	0
JUN 14...	1600	960	7.1	13.5	440	110	39	420	0
AUG 07...	1230	990	7.2	19.0	390	100	35	428	0

DATE	ALKALINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS-SOLVED (MG/L AS C02)	SULFATE DIS-SOLVED (MG/L AS S04)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)
NOV 27...	370	46	92	50	.5	574	.01	.00	--
FEB 27...	380	29	89	59	.4	579	.00	.00	--
JUN 14...	340	53	92	77	.2	562	.02	.00	--
AUG 07...	350	43	98	78	.2	692	.00	.01	20

DATE	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 27...	--	--	--	220	--	--	210	--	--
FEB 27...	--	--	--	1400	--	--	180	--	--
JUN 14...	--	--	--	2800	--	--	150	--	--
AUG 07...	<10	3	1	2600	5	2	170	120	30

GROUND-WATER RECORDS

MONTGOMERY COUNTY

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 (0.3 m), depth 84 ft (25.6 m), cased.

DATUM.--Altitude of land-surface datum is 717.6 ft (218.724 m). Measuring point: Floor of instrument shelter 0.30 ft (0.091 m) 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 (17.852 m) Nov. 24, 1974; minimum daily low, 28.82 ft (8.784 m) April 17, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 40.12 ft (12.229 m) Nov. 30, Dec. 2; minimum daily low, 28.82 ft (8.784 m) April 17.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38.47	38.95	40.09	38.13	35.83	32.91	31.08	30.20	31.51	33.54	33.58	30.10
2	38.65	39.07	40.12	37.96	35.84	32.70	31.08	30.23	31.49	33.61	33.44	29.85
3	38.77	39.05	40.05	37.48	35.06	32.47	31.10	30.23	31.37	33.70	33.25	30.04
4	38.85	39.02	40.06	37.16	35.59	32.01	31.04	30.25	31.48	33.67	33.06	29.84
5	38.90	38.96	39.96	37.04	35.66	31.22	31.09	30.33	31.69	33.59	33.04	29.86
6	37.67	39.16	39.66	36.94	35.87	30.82	30.11	30.12	31.94	33.75	32.95	29.98
7	37.50	39.16	39.52	36.81	35.90	30.30	30.82	30.22	31.91	33.71	32.92	30.14
8	37.34	39.29	39.32	36.38	36.00	29.96	30.70	30.37	31.96	33.78	32.89	30.27
9	37.17	39.27	39.30	36.50	36.04	29.69	30.78	30.42	31.95	33.80	32.90	30.35
10	37.20	39.28	39.02	36.61	36.09	29.74	30.86	30.54	31.89	33.86	32.79	30.42
11	37.14	39.45	38.64	36.69	36.08	29.79	30.83	30.68	31.85	33.92	32.72	30.59
12	36.45	39.42	38.67	36.58	35.93	29.84	30.74	30.71	31.93	34.02	32.58	30.65
13	36.39	39.35	38.66	36.41	36.03	29.81	30.58	30.69	32.18	34.10	32.45	30.77
14	36.26	39.52	38.76	36.50	36.06	29.94	30.30	30.84	32.16	34.15	32.48	30.69
15	35.97	39.51	38.64	36.33	36.09	30.14	29.81	31.00	32.37	34.27	32.51	30.13
16	36.12	39.65	38.77	35.62	36.18	30.19	28.90	31.06	32.57	34.29	32.65	29.40
17	35.96	39.64	38.50	36.29	36.11	30.21	28.82	31.16	32.55	34.40	32.79	29.29
18	36.79	39.64	38.43	36.78	36.00	30.18	28.86	31.21	32.74	34.48	32.87	29.50
19	37.49	39.50	38.57	36.40	36.07	30.22	29.01	31.32	33.04	34.66	32.88	29.65
20	37.83	39.57	38.46	36.31	36.24	30.49	28.96	31.41	33.11	34.66	32.47	29.63
21	37.82	39.64	38.57	35.87	36.38	30.58	28.94	31.53	33.02	34.68	32.44	29.58
22	37.82	39.63	38.53	35.88	36.38	30.70	28.96	31.70	33.08	34.59	32.09	29.53
23	38.01	39.53	38.33	35.90	36.29	30.72	29.13	31.71	33.15	34.69	31.82	29.52
24	38.21	39.38	38.31	36.10	36.26	30.72	29.43	31.83	33.29	34.74	31.64	29.56
25	38.26	39.23	37.81	36.30	35.70	30.67	29.48	31.94	33.49	34.64	31.34	29.64
26	38.50	39.37	38.08	36.16	34.54	30.80	29.57	31.82	33.53	34.61	30.86	29.85
27	38.55	39.54	38.22	35.33	33.62	30.16	29.81	31.56	33.61	34.61	30.62	30.02
28	38.54	39.54	38.40	35.86	33.26	30.94	29.87	31.39	33.50	34.66	30.61	29.98
29	38.44	40.00	38.52	35.82	---	31.09	29.86	31.33	33.80	34.57	30.60	29.92
30	38.60	40.12	38.40	35.89	---	31.18	30.06	31.37	33.86	34.11	30.47	29.72
31	38.78	---	38.28	35.81	---	31.24	---	31.40	---	33.88	30.28	---
MAX	38.90	40.12	40.12	38.13	36.38	32.91	31.10	31.94	33.86	34.74	33.58	30.77
WTR YR 1979	MEAN	34.06		HIGH	28.82		LOW	40.12				

MONTGOMERY COUNTY--Continued

394025084162800. Local number, MT-49.

LOCATION.--Lat 39°40'25", long 84°16'28", Hydrologic Unit 05080002, 1.2 mi (1.9 km) 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 (0.15 m), depth 220 ft (67.1 m), cased.

DATUM.--Altitude of land-surface datum is 714.61 ft (217.813 m). (Levels by Miami Conservancy District.)

Measuring point: Floor of shelter 2.50 ft (0.762 m) above land-surface datum.

PERIOD OF RECORD.--November 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 36.30 ft (11.064 m) Dec. 8, 1974; minimum daily low, 10.58 ft (3.225 m) Jan. 23, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 26.01 ft (7.928 m) Dec. 2; minimum daily low, 16.83 ft (5.130 m) Sept. 15.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.45	25.29	26.00	24.07	22.48	18.88		---	19.98	21.00	20.70	18.12
2	24.71	25.35	26.01	23.17	22.49	18.72		---	19.78	21.34	20.48	18.24
3	24.78	25.36	25.79	22.90	22.49	18.44		---	19.74	21.41	20.39	18.59
4	24.85	25.18	25.64	22.82	22.60	18.12		---	20.05	21.18	20.17	18.51
5	24.83	25.15	25.30	22.81	22.62	17.46		---	20.17	21.47	20.21	18.49
6	24.89	25.22	25.35	22.74	22.61	17.06		---	20.18	21.59	20.42	18.82
7	24.69	25.29	25.16	22.69	22.68	17.00		---	20.19	21.39	20.26	18.78
8	24.67	25.51	25.14	22.73	22.70	17.11		---	20.24	21.31	20.40	18.67
9	24.93	25.55	24.56	22.71	22.73	17.13		---	20.03	21.59	20.51	18.94
10	24.95	25.65	24.22	22.71	22.74	17.21		---	19.97	21.68	20.52	19.06
11	24.97	25.51	24.35	22.71	22.74	17.29		---	20.27	21.72	20.27	19.12
12	24.96	25.48	24.37	22.62	22.81	17.40		---	20.36	21.61	20.03	19.15
13	24.95	25.70	24.45	22.56	22.80	17.39		---	20.45	21.70	20.37	19.09
14	24.86	25.83	24.40	22.73	22.76	17.67		---	20.48	21.50	20.50	17.34
15	24.66	25.85	24.48	22.73	22.83	17.72		---	20.59	21.44	20.56	16.83
16	24.78	25.82	24.43	22.65	22.94	17.76		19.26	20.46	21.73	20.64	17.21
17	24.77	25.83	24.30	22.61	22.96	17.79		19.31	20.42	21.81	20.72	17.35
18	24.81	25.79	24.48	22.69	22.89	17.86		19.35	20.74	21.82	20.49	17.54
19	24.81	25.62	24.48	22.61	22.98	17.90		19.18	20.81	21.64	20.42	17.63
20	24.85	25.65	24.48	22.51	22.95	---		19.17	20.83	21.61	20.00	17.68
21	24.72	25.68	24.35	22.57	22.99	---		19.53	20.82	21.59	19.58	17.73
22	24.65	25.69	24.30	22.62	22.95	---		19.62	20.89	21.60	19.03	17.68
23	24.93	25.48	24.28	22.54	22.64	---		19.74	20.69	21.97	18.82	18.04
24	24.95	25.77	24.18	22.44	21.78	---		19.86	20.72	22.00	18.25	18.18
25	24.98	25.80	24.22	22.46	19.90	---		19.87	20.97	21.86	17.93	18.27
26	25.10	25.63	24.31	22.38	19.17	---		19.64	21.09	21.87	17.85	18.33
27	25.13	25.82	24.35	22.33	19.13	---		19.46	21.17	21.84	18.18	18.32
28	25.01	25.93	24.37	22.41	19.02	---		19.42	21.23	21.62	18.28	18.28
29	24.96	25.91	24.36	22.44	---	---		19.71	21.28	21.12	18.16	18.09
30	25.18	25.96	24.37	22.43	---	---		19.82	21.04	20.60	18.12	18.29
31	25.16	---	24.35	22.43	---	---		19.89	---	20.59	18.20	---
MAX	25.18	25.96	26.01	24.07	22.99	18.88		19.89	21.28	22.00	20.72	19.15
WTR YR 1979	MEAN	21.81		HIGH	16.83		LOW	26.01				

GROUND-WATER RECORDS
MONTGOMERY COUNTY--Continued

394418084113200. Local number, MT-56.

LOCATION.--Lat 39°44'18", long 84°11'32", Hydrologic Unit 05060002, near Miami River and Dixie Highway, Dayton, Ohio.

Owner: National Cash Register Company.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 12 in (0.3 m), depth 118 ft (35.966 m), cased.

DATUM.--Altitude of land-surface datum is 740.75 ft (225.781 m), Measuring point: Top of platform 8.00 ft (2.438 m) below land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--July 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 85.17 ft (25.960 m) Feb. 19, 1971; minimum daily low, 28.39 ft (8.653 m) Sept. 17, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 42.20 ft (12.863 m) Nov. 14; minimum daily low, 28.39 ft (8.653 m) Sept. 17.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41.61	41.38	37.33	36.91	36.92	34.25	31.68	30.60	32.11	32.61	32.57	28.70
2	41.73	41.51	37.69	35.90	36.86	34.23	33.35	32.28	32.06	32.16	32.45	28.67
3	39.88	39.04	38.26	35.47	36.21	33.19	33.38	30.82	30.14	32.60	31.69	28.70
4	40.05	39.11	38.26	36.02	35.07	32.83	32.70	31.84	32.67	33.88	31.72	31.79
5	39.85	39.14	36.68	36.04	36.10	31.61	32.54	31.85	32.62	33.91	29.42	31.75
6	39.71	41.03	36.55	35.20	36.66	30.96	32.13	31.76	32.63	32.98	30.54	31.94
7	40.79	41.20	36.47	36.52	36.04	32.16	32.14	30.61	32.63	---	31.10	31.93
8	39.46	41.10	37.38	36.61	36.06	32.07	32.40	31.30	32.04	---	31.15	31.84
9	41.81	41.30	37.37	36.21	36.81	31.55	32.41	32.60	32.05	---	32.65	31.97
10	40.12	38.82	36.96	---	36.17	31.49	32.11	32.62	33.45	---	32.80	29.27
11	41.41	38.56	37.81	---	33.73	30.60	32.12	32.09	33.47	---	32.69	29.34
12	41.54	40.74	37.83	---	36.48	31.12	29.86	32.08	32.73	---	32.70	29.32
13	38.61	42.08	37.56	---	36.39	29.27	29.82	32.08	31.73	---	29.78	29.31
14	41.20	42.20	36.50	---	36.21	32.69	29.75	32.12	32.92	---	32.87	29.16
15	41.36	39.30	37.21	---	36.08	32.78	31.55	33.81	32.81	---	33.07	28.84
16	38.95	39.43	37.86	---	37.10	32.82	31.54	33.68	33.60	---	32.99	28.43
17	39.17	39.23	37.99	---	36.44	32.87	30.92	33.75	31.83	---	32.95	28.39
18	39.55	40.90	36.50	36.21	33.87	31.43	30.04	34.48	31.58	---	33.01	28.40
19	39.07	41.08	37.79	36.12	37.09	31.11	30.57	34.52	32.20	---	32.89	28.47
20	38.45	40.44	37.27	34.98	35.51	32.99	30.54	34.58	32.22	---	29.84	28.46
21	38.76	40.53	36.73	34.90	36.92	33.03	29.02	34.61	33.56	---	31.92	28.49
22	39.36	40.90	36.52	36.61	36.21	32.52	32.07	34.09	33.56	---	31.65	28.49
23	38.92	41.02	37.03	35.99	36.06	32.34	32.13	34.77	32.91	---	29.20	28.49
24	38.98	38.12	36.81	36.62	34.91	31.32	31.46	34.79	32.62	33.81	28.93	28.59
25	39.52	40.05	36.70	35.17	35.89	31.48	30.33	33.31	33.76	32.04	28.64	28.61
26	39.14	40.07	36.67	36.10	33.81	32.07	30.79	33.56	33.79	31.97	28.50	28.65
27	40.02	40.28	35.61	36.01	33.73	32.15	29.59	33.26	33.15	31.93	28.61	28.64
28	40.28	40.42	36.67	36.73	32.90	33.30	31.24	33.06	32.09	32.78	28.68	28.64
29	41.39	39.98	36.64	36.81	---	33.33	31.28	33.17	30.69	32.59	28.73	28.63
30	41.41	40.05	36.68	36.18	---	32.68	30.98	33.20	33.76	32.08	28.72	28.63
31	39.80	---	36.83	36.88	---	31.85	---	32.51	---	29.52	28.75	---
MAX	41.81	42.20	38.26	36.91	37.10	34.25	33.38	34.79	33.79	33.91	33.07	31.97
WTR YR 1979	MEAN	34.30		HIGH	28.39		LOW	42.20				

GROUND-WATER RECORDS

395

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 (0.2 m), depth 60 ft (18.3 m), cased.

DATUM.--Altitude of land-surface datum is 740 ft (226 m) from topographic map. Measuring point: Floor of instrument shelter 13.00 ft (3.962 m) below land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 60.20 ft (18.349 m) Oct. 2, 1970; minimum daily low, 22.20 ft (5.767 m) Mar. 10, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 32.20 ft (9.915 m) Oct. 1; minimum daily low, 22.20 ft (5.767 m) Mar. 10.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32.20	29.05	27.70	26.35	25.65	24.25	---	23.80	27.54	28.69	30.05	28.67
2	32.08	29.00	27.70	26.15	25.65	23.95	---	24.11	27.06	29.53	30.09	27.48
3	31.95	28.95	27.85	25.90	25.60	23.70	---	24.64	26.88	29.69	30.28	27.02
4	31.40	---	27.65	25.70	25.65	23.35	23.95	24.19	27.89	28.38	29.95	28.43
5	31.05	---	27.50	25.60	25.65	23.10	---	24.08	28.02	29.16	28.80	28.47
6	30.75	---	27.45	25.50	25.60	22.75	---	24.28	28.26	29.49	29.61	28.73
7	30.50	---	27.45	25.45	25.70	22.40	---	25.07	28.32	28.72	29.70	28.85
8	30.35	---	27.25	25.60	25.67	22.30	---	25.81	28.58	28.12	29.77	28.00
9	30.50	---	27.10	25.55	25.65	22.30	---	26.25	28.00	29.21	29.81	27.43
10	30.55	---	27.00	25.50	25.70	22.20	---	26.85	27.78	29.36	30.13	28.29
11	30.50	---	26.90	25.50	25.70	22.30	---	27.21	27.89	29.54	29.80	28.52
12	30.65	---	26.75	25.40	25.75	22.40	24.54	26.78	28.25	29.89	28.81	28.40
13	30.30	---	26.65	25.40	25.70	22.40	24.56	26.40	28.31	30.16	29.41	28.82
14	29.95	---	26.65	25.65	25.65	22.65	24.03	27.04	28.59	29.96	29.63	28.64
15	29.75	---	26.55	---	25.70	22.75	23.28	26.55	28.88	29.12	28.81	27.69
16	29.80	---	26.65	---	25.85	22.80	22.90	26.88	28.92	29.81	28.69	26.95
17	29.85	---	26.75	---	25.85	22.90	22.80	27.30	28.12	30.08	29.32	27.34
18	29.65	---	26.85	25.61	25.80	22.95	22.99	27.46	28.81	30.09	28.91	27.70
19	29.60	---	26.60	25.55	25.90	23.35	23.54	27.65	29.02	30.31	28.31	27.21
20	29.65	---	26.90	25.35	25.85	23.65	23.83	26.81	29.05	30.46	29.21	27.05
21	29.60	28.10	27.00	25.45	26.00	23.75	24.26	27.53	29.44	30.17	29.48	26.39
22	29.35	28.10	26.80	25.60	26.15	23.55	23.93	27.41	29.65	29.17	29.55	26.04
23	29.45	27.95	26.85	25.55	26.35	23.55	23.99	27.73	29.38	30.19	29.57	25.60
24	29.40	28.00	26.55	25.55	25.95	23.35	24.37	27.03	28.69	30.56	29.49	25.27
25	29.20	27.90	26.55	25.60	25.40	23.45	24.70	26.27	29.45	30.75	28.48	25.97
26	29.20	27.80	26.55	25.55	25.75	23.55	24.34	25.92	29.39	30.88	27.98	26.58
27	29.15	27.75	26.50	25.50	24.40	23.75	24.29	25.63	29.52	31.15	28.40	26.48
28	28.85	27.85	26.50	25.50	24.15	23.65	24.09	25.38	29.64	30.90	28.59	26.33
29	28.80	27.85	26.40	25.55	---	23.85	23.33	26.65	29.72	29.79	28.56	26.29
30	29.00	27.85	26.45	25.60	---	---	23.81	26.87	29.07	30.21	28.82	25.63
31	29.10	---	26.40	25.65	---	---	---	27.35	---	30.25	29.00	---
MAX	32.20	29.05	27.85	26.35	26.35	24.25	24.84	27.73	29.72	31.15	30.28	28.85

WTR YR 1979 MEAN 27.15 HIGH 22.20 LOW 32.20

GROUND-WATER RECORDS

MUSKINGUM COUNTY

395753081593500. Local number, MU-10.

LOCATION.--Lat 39°57'53", long 81°59'35", Hydrologic Unit 05040004, on left bank of Muskingum River 0.2 mi (0.3 km) north of waterworks at Zanesville.

Owner: City of Zanesville.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled public supply water-table well, diameter 18 in (0.46 m), depth 65 ft (19.8 m) cased.

PERIOD OF RECORD.--June 1967 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 14...	1070	7.3	7	120	25	52	260	0	210	21	150

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
NOV 14...	110	684	.09	.00	.09	.21	.00	10	830	0	480

MUSKINGUM COUNTY--Continued

395804081593200. Local number, MU-1A.

LOCATION.--Lat 39°58'04", long 81°59'32", Hydrologic Unit 05040004, 2.2 mi (3.5 km) 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 (0.15 m), depth 109 ft (33.2 m), cased.

DATUM.--Altitude of land-surface datum is 700 ft (213 m), from topographic map. Measuring point: Floor of instrument shelter 4.48 ft (1.366 m) 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 (40.2 m).

PERIOD OF RECORD.--May 1942 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 37.25 ft (11.354 m) Aug. 1-2, 1954; minimum daily low, 8.50 ft (2.591 m) May 25, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 26.16 ft (7.973 m) Feb. 23; minimum daily low, 13.16 ft (4.011 m) Apr. 16.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.57	23.49	24.28	22.33	24.14	24.81	16.08	15.54	16.10	19.46	21.14	19.65
2	21.38	23.59	24.38	22.68	24.19	24.38	16.04	16.04	15.90	19.17	21.09	19.00
3	21.46	23.69	24.21	22.72	24.26	24.20	16.04	16.05	15.65	19.33	21.09	18.82
4	21.65	23.73	24.31	22.37	24.15	23.42	16.04	15.91	15.74	19.43	21.14	18.95
5	21.70	23.72	24.49	22.24	24.28	23.11	16.01	15.90	16.39	18.75	21.17	19.97
6	21.87	23.62	24.23	21.39	24.52	22.58	15.75	15.89	16.77	18.65	21.16	19.99
7	21.92	23.78	24.09	20.72	24.58	21.68	15.56	16.05	16.99	18.84	21.40	20.00
8	21.72	23.82	24.21	20.93	24.84	20.84	14.90	16.05	16.04	18.49	21.37	19.96
9	21.95	23.97	23.87	20.99	24.91	20.21	15.11	16.90	16.90	18.15	20.99	19.79
10	22.01	24.02	23.64	21.55	24.96	19.20	14.90	17.19	17.04	18.52	20.95	19.10
11	22.10	24.09	22.81	21.60	24.67	---	14.25	17.24	17.06	19.20	21.16	19.84
12	22.25	24.10	22.99	21.70	24.72	---	14.08	17.34	17.65	18.93	20.64	20.21
13	22.53	23.95	23.07	22.13	24.74	---	13.61	17.14	17.77	18.76	20.36	20.50
14	22.59	24.21	22.86	22.31	24.80	---	13.77	17.00	18.18	18.77	20.38	20.51
15	22.06	24.34	22.69	22.39	24.90	---	13.36	17.35	18.08	18.74	19.99	19.82
16	22.23	24.52	22.28	22.94	25.11	---	13.16	17.64	18.54	19.29	20.23	19.00
17	22.39	24.55	22.17	23.12	25.20	---	13.27	17.69	18.13	19.86	20.03	18.79
18	22.45	24.64	22.17	23.15	25.29	---	13.34	17.99	17.80	20.12	20.23	18.58
19	22.60	24.70	22.29	23.30	25.22	---	13.16	18.19	18.33	20.58	19.90	18.62
20	22.76	24.49	22.12	22.84	25.59	---	13.40	17.91	18.91	20.90	19.48	17.94
21	22.84	24.70	22.09	23.17	25.79	---	13.24	17.93	18.99	21.01	19.71	18.25
22	22.75	24.75	22.70	23.71	25.86	---	13.42	17.88	19.51	20.67	20.42	18.50
23	22.78	24.62	22.72	23.96	26.16	---	13.69	18.06	19.42	20.72	20.89	17.15
24	22.58	24.51	22.21	24.20	26.15	---	14.26	18.26	18.62	21.12	20.99	17.99
25	22.79	24.24	21.90	24.34	25.93	---	14.59	18.15	18.21	21.47	20.99	18.13
26	22.99	24.23	22.27	24.18	25.43	---	14.81	17.59	18.75	21.62	20.82	17.79
27	23.20	24.17	22.50	23.88	25.38	---	15.39	17.73	18.86	21.82	19.97	17.90
28	23.28	24.31	23.23	23.61	24.99	---	15.02	16.51	19.12	21.88	19.88	17.58
29	23.29	24.35	23.17	23.71	---	---	15.15	15.98	19.71	21.56	20.14	16.99
30	23.09	24.30	23.30	24.08	---	16.59	15.57	16.29	19.71	20.99	19.77	16.11
31	23.31	---	23.05	24.09	---	16.37	---	16.37	---	21.05	19.71	---
MAX	23.31	24.75	24.49	24.34	26.16	24.81	16.08	18.26	19.71	21.88	21.40	20.51
WTR YR 1979	MEAN	20.58		HIGH	13.16		LOW	26.16				

GROUND-WATER RECORDS

PICKAWAY COUNTY

393327082571600. Local number, PK-7.

LOCATION.--Lat 39°33'27", long 82°57'16", Hydrologic Unit 05060002, 3.1 mi (5.0 km) south of Circleville.

Owner: State of Ohio.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 6 in (0.15 m) depth drilled 172 ft (52.4 m), present depth 169 ft (51.5 m), cased to 164 ft (50.0 m).

DATUM.--Altitude of land-surface datum is 705 ft (215 m), from topographic map. Measuring point: Floor of instrument shelter, 3.00 ft (0.914 m) above land-surface datum.

PERIOD OF RECORD.--July 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 54.80 ft (16.703 m) Sept. 15, 1977; minimum daily low, 41.38 ft (12.613 m) Sept. 30, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 48.77 ft (14.865 m) Nov. 30-Dec. 1; minimum recorded daily low, 41.38 ft (12.613 m) Sept. 30.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47.81	48.38	48.77	47.85	47.13	45.55	42.55	41.83	42.22	---	41.91	42.38
2	47.88	48.38	48.66	48.20	47.14	45.52	42.53	41.79	42.22	42.01	42.01	42.10
3	47.95	48.35	48.34	48.44	47.05	45.40	42.59	41.62	42.03	42.09	42.05	41.89
4	48.08	48.30	48.30	48.42	46.79	44.85	42.50	41.65	42.07	42.02	42.05	42.10
5	48.11	48.11	48.48	48.38	46.89	44.93	42.42	41.71	42.22	42.01	41.75	42.18
6	48.07	48.21	48.59	48.21	46.88	44.93	42.50	41.58	42.27	42.13	41.85	42.22
7	---	48.27	48.58	47.89	46.73	44.83	42.50	41.58	42.29	42.13	42.01	42.26
8	---	48.32	48.45	48.02	46.84	44.69	42.22	41.65	42.26	41.87	42.10	42.26
9	---	48.41	48.40	48.08	46.92	44.72	42.10	41.72	42.26	41.77	42.13	42.10
10	48.19	48.45	48.29	48.07	46.90	44.62	42.19	41.84	41.96	41.83	42.11	42.04
11	48.20	48.44	48.43	48.05	46.64	44.28	42.17	41.92	42.19	41.88	42.02	42.14
12	48.20	48.18	48.51	47.90	46.71	44.27	42.09	41.94	42.35	41.92	41.78	42.16
13	48.19	48.19	48.60	47.75	46.85	44.27	42.03	41.83	42.43	41.81	41.97	42.16
14	48.18	48.39	48.64	47.85	46.78	44.17	41.97	41.98	42.41	41.78	42.27	42.14
15	48.02	48.46	48.56	47.95	46.54	44.27	41.97	42.10	42.38	41.69	42.46	42.15
16	48.22	48.49	48.52	47.91	46.78	44.24	41.91	42.17	42.34	42.05	42.56	41.95
17	48.40	48.44	48.51	47.74	46.80	44.12	41.97	42.16	41.97	42.15	42.55	41.88
18	48.41	48.48	48.32	47.72	46.45	43.75	42.00	42.12	42.18	42.18	42.51	41.92
19	48.37	48.28	48.38	47.68	46.41	43.32	42.02	42.04	42.34	42.19	42.23	42.01
20	48.38	48.31	48.35	47.45	46.42	43.35	42.00	41.80	42.34	42.23	42.46	42.01
21	48.15	48.39	48.49	47.24	46.39	43.35	41.99	42.01	42.24	42.23	42.68	41.97
22	48.02	48.44	48.50	47.44	46.46	43.33	41.88	42.11	42.16	41.91	42.72	41.87
23	48.21	48.40	48.45	47.40	46.40	43.12	41.89	42.11	42.12	42.13	42.76	41.84
24	48.29	48.16	48.32	47.11	46.28	42.88	41.93	42.08	---	42.28	42.75	41.77
25	48.27	48.11	47.97	47.36	45.96	42.88	41.88	42.10	---	42.18	42.78	41.80
26	48.33	48.11	48.23	47.40	45.74	43.01	41.77	42.12	---	41.95	42.79	41.80
27	48.38	48.41	48.46	47.30	45.78	43.12	41.76	42.10	---	41.93	42.42	41.75
28	48.34	48.70	48.43	46.87	45.72	43.11	41.78	41.82	---	41.92	42.42	41.66
29	48.21	48.68	48.36	47.13	---	42.91	41.78	42.07	---	41.49	42.38	41.56
30	48.33	48.77	48.29	47.14	---	42.83	41.76	42.23	---	41.71	42.41	41.38
31	48.35	---	48.13	47.07	---	42.80	---	42.27	---	41.88	42.41	---
MAX	48.41	48.77	48.77	48.44	47.14	45.55	42.59	42.27	42.43	42.28	42.79	42.38
WTR YR 1979	MEAN	44.67		HIGH	41.38		LOW	48.77				

GROUND-WATER RECORDS

399

PICKAWAY COUNTY--Continued

393402082572500. Local number, Pk-4.

LOCATION.--Lat 39°34'02", long 82°57'25", Hydrologic Unit 05060002, 2 mi (3.2 km) 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 (0.15 m), depth 136 ft (41.5 m), cased.

DATUM.--Altitude of land-surface datum is 707 ft (215 m), from topographic map. Measuring point: Floor of instrument shelter 3.50 ft (1.067 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--January, 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 80.15 ft (24.430 m) Nov. 3, 1972; minimum daily low, 47.40 ft (14.448 m) Feb. 25, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 70.69 ft (21.546 m) Oct. 4; minimum daily low, 59.80 ft (18.227 m) May 3.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69.08	57.90	70.20	67.85	66.75	54.70	63.25	---	65.20	65.95	---	57.85
2	69.11	57.35	68.85	68.40	66.25	54.50	67.35	---	---	66.05	---	57.80
3	68.90	57.85	68.00	69.00	66.25	54.30	62.50	59.80	---	66.05	56.65	57.50
4	70.69	57.45	67.65	68.40	65.75	54.10	---	60.05	---	66.05	56.65	57.35
5	68.98	57.55	67.80	68.15	66.40	54.35	---	60.40	---	66.71	56.65	57.65
6	70.06	57.50	68.20	68.05	66.50	54.15	61.50	60.40	---	66.05	56.90	57.75
7	70.25	57.50	68.05	67.55	65.75	53.65	61.45	60.90	64.85	66.10	56.95	57.67
8	70.50	57.60	67.55	67.40	66.10	54.05	61.00	61.00	65.00	66.00	57.30	58.05
9	---	58.30	68.60	67.40	66.35	53.95	61.50	60.85	64.95	---	57.15	57.85
10	---	57.65	69.15	67.80	66.40	53.80	---	64.50	65.35	---	56.85	58.25
11	---	57.45	69.00	67.70	65.70	53.70	---	63.95	65.40	---	57.00	58.45
12	---	57.20	68.50	67.45	66.70	53.70	---	63.40	65.50	---	56.95	58.40
13	---	57.40	68.65	67.15	66.80	53.55	---	63.70	65.55	---	57.00	58.85
14	---	57.45	68.95	68.15	65.45	53.55	---	63.70	65.40	---	57.00	58.60
15	---	57.35	68.95	68.15	65.05	53.85	---	64.15	65.50	---	57.25	57.65
16	---	57.05	68.65	67.55	66.00	53.70	---	64.15	65.50	---	57.00	57.55
17	68.43	56.65	68.55	66.55	65.60	54.05	---	64.25	65.40	---	57.35	58.40
18	68.43	57.15	68.65	66.35	65.70	53.55	---	63.80	65.50	---	57.20	58.20
19	68.48	56.60	68.40	66.30	65.90	53.50	---	63.70	65.55	---	57.05	58.50
20	68.60	57.85	68.00	68.50	65.90	53.20	---	63.35	65.55	---	57.35	58.75
21	68.80	57.80	68.25	68.30	65.70	53.25	---	63.75	65.55	---	57.65	58.75
22	69.00	58.55	67.95	68.15	66.60	53.30	---	64.50	65.55	---	57.55	55.20
23	68.80	57.75	68.15	67.30	65.75	53.00	---	64.60	65.60	---	57.55	54.30
24	68.40	57.95	68.70	65.95	65.10	53.10	---	64.55	65.65	---	57.55	55.00
25	69.30	57.35	67.80	66.20	64.75	53.30	---	64.65	67.10	---	57.50	54.60
26	67.15	59.70	67.60	66.50	64.65	53.20	---	64.70	65.90	---	57.45	54.75
27	67.85	59.60	68.15	66.55	64.70	53.45	---	64.80	65.95	---	57.25	54.95
28	67.55	70.24	68.35	65.25	64.30	53.15	---	64.85	65.90	---	57.85	---
29	67.45	70.20	67.80	65.60	---	52.90	---	64.90	65.85	---	57.95	---
30	67.50	70.10	68.15	65.70	---	52.95	---	64.95	65.85	---	58.00	---
31	68.10	---	67.65	65.25	---	53.40	---	65.10	---	---	58.15	---
MAX	70.69	70.24	70.20	69.00	66.80	54.70	67.85	65.10	67.10	66.71	58.15	58.85
WTR YR 1979	MEAN	66.40		HIGH	59.80		LOW	70.69				

GROUND-WATER RECORDS

PICKAWAY COUNTY--Continued

393638082572300. Local number, PK-6.

LOCATION.--Lat 39°36'38", long 82°57'23", Hydrologic Unit 05060002, water works plant 1 mi (1.6 km) northwest of Circleville.

Owner: Circleville Water Dept.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in (0.15 m), depth 120 ft (36.6 m), cased.

DATUM.--Altitude of land-surface datum is 672 ft (205 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--July 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 37.32 ft (11.375 m) Feb. 24, 1977; minimum daily low, 14.50 ft (4.420 m) Feb. 2, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 35.50 ft (10.820 m) Nov. 3; minimum daily low, 21.90 ft (6.675 m) Sept. 16.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34.35	35.30	34.55	31.05	---	25.40	25.35	28.55	30.65	32.20	27.80	28.75
2	34.38	35.49	33.50	30.15	---	25.45	25.40	28.95	30.60	32.20	27.70	28.80
3	34.40	35.50	32.70	30.10	31.95	24.95	25.25	29.05	30.70	32.15	27.65	29.25
4	34.40	35.10	34.25	28.75	32.10	24.65	25.50	28.10	30.70	32.15	27.65	27.65
5	34.26	35.40	34.30	---	---	24.05	27.55	25.25	---	32.15	27.75	---
6	34.31	33.92	32.15	---	31.55	23.35	25.20	29.05	---	32.15	27.80	29.80
7	34.41	34.40	31.95	29.05	32.35	23.80	23.70	29.60	31.05	32.15	27.75	30.05
8	---	35.05	32.25	29.90	---	24.40	23.90	29.75	31.00	31.55	27.90	30.10
9	---	35.20	31.60	29.95	---	24.75	27.40	30.05	30.50	32.05	28.00	30.15
10	---	34.40	30.35	30.75	---	24.85	27.75	30.15	30.55	32.35	28.00	30.45
11	---	35.28	28.00	30.85	---	25.10	27.55	30.20	30.50	32.40	28.00	30.65
12	---	34.26	31.70	31.00	---	25.70	23.95	30.40	30.70	32.40	27.15	30.75
13	---	34.68	31.05	30.95	---	25.85	23.70	30.45	30.80	32.45	27.35	30.85
14	---	35.00	31.30	31.15	---	25.90	23.75	30.30	30.90	32.50	27.45	30.80
15	---	35.00	31.15	31.00	---	26.45	23.45	30.45	30.85	32.50	30.45	26.80
16	---	35.05	30.80	31.20	---	26.85	23.00	30.60	31.05	32.45	31.55	21.90
17	34.03	34.80	31.70	31.30	---	27.25	24.45	31.00	30.90	32.35	29.45	22.80
18	34.05	34.90	32.15	31.35	---	27.30	24.70	31.00	31.00	28.75	31.85	24.55
19	34.05	30.90	28.70	31.45	---	26.25	24.95	31.10	31.30	28.80	31.00	25.40
20	34.02	34.10	31.18	31.45	---	27.55	25.10	31.10	31.45	28.80	31.65	25.50
21	34.06	33.50	30.80	31.25	32.90	27.35	26.15	31.10	30.50	28.65	29.55	23.95
22	34.09	34.35	31.85	30.60	32.75	27.20	22.50	31.35	31.50	28.30	30.40	25.10
23	34.10	32.80	32.10	30.25	32.60	26.00	25.50	31.45	31.40	29.00	26.85	26.05
24	34.05	34.50	31.35	31.40	31.30	27.60	26.80	31.55	31.65	29.05	28.90	26.85
25	34.05	33.00	31.85	31.00	29.40	26.00	26.40	31.65	30.50	28.30	29.45	26.95
26	34.14	34.45	28.20	---	24.85	27.95	27.50	31.10	31.90	28.15	29.90	26.95
27	34.45	33.00	31.40	---	23.45	28.10	27.75	31.30	32.00	28.40	29.00	24.00
28	34.48	34.70	32.00	31.55	24.75	28.80	28.30	31.10	32.10	28.20	29.10	26.75
29	34.50	33.35	32.35	31.30	---	27.60	27.55	30.65	32.15	26.70	28.25	22.85
30	34.48	34.65	32.60	31.55	---	28.15	27.05	30.75	34.20	27.40	28.00	26.10
31	34.40	---	30.15	31.60	---	28.70	---	---	---	27.60	28.35	---
MAX	34.50	35.50	34.55	31.60	32.90	28.80	28.30	31.65	34.20	32.50	31.85	30.85
WTR YR 1979	MEAN	29.96		HIGH	21.90		LOW	35.50				

GROUND-WATER RECORDS

401

PICKAWAY COUNTY--Continued

393639082564400, Local number, PK-3.

LOCATION.--Lat 39°36'39", long 82°56'44", Hydrologic Unit 05060002, State Highway garage, Circleville.

Owner: State of Ohio Highway Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 5 in (0.13 m), depth 87 ft (25.5 m), cased.

DATUM.--Altitude of land-surface datum is 680 ft (207 m), from topographic map. Measuring point: Floor of instrument shelter 3.20 ft (0.975 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--June 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 19.49 ft (5.940 m) Jan. 3, 1964; minimum daily low, 11.83 ft (3.605 m) May 29, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 17.88 ft (5.450 m) Nov. 5; minimum daily low, 12.72 ft (3.977 m) Sept. 17.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.49	17.53	17.80	16.59	15.90	14.16	14.88	14.64	15.00	15.20	15.13	14.29
2	17.50	17.54	17.80	16.34	15.92	14.17	14.78	14.65	15.01	15.23	15.17	14.33
3	17.52	17.55	17.80	16.13	15.93	14.16	14.54	14.65	15.02	15.25	15.19	14.37
4	17.54	17.57	17.77	16.06	15.96	14.14	14.51	14.61	---	15.25	15.22	---
5	17.55	17.88	17.60	16.03	15.99	14.13	14.51	14.57	---	15.31	15.25	---
6	17.58	17.60	17.53	16.01	16.00	14.11	14.52	14.54	---	15.33	15.26	14.50
7	17.59	17.61	17.48	16.00	16.06	13.99	14.54	14.59	15.14	15.35	15.29	14.56
8	---	17.63	17.47	16.01	16.10	14.04	14.52	14.64	14.90	15.36	15.31	14.62
9	---	17.64	17.32	16.03	16.13	14.10	14.49	14.68	14.67	15.37	15.34	14.66
10	---	17.65	16.89	16.07	16.16	14.13	14.43	14.72	14.70	15.39	15.35	14.68
11	---	17.66	16.75	16.08	16.18	14.17	14.44	14.76	14.75	15.42	15.35	14.74
12	---	17.68	16.71	16.09	16.19	14.23	14.43	14.80	14.80	15.44	15.20	14.77
13	---	17.69	16.69	16.09	16.22	14.24	14.43	14.83	14.85	15.46	15.17	14.80
14	---	17.74	16.68	16.08	16.24	14.25	14.38	14.86	14.88	15.49	15.18	14.74
15	---	17.76	16.68	16.10	16.26	14.35	14.28	14.89	14.91	15.52	15.22	13.55
16	---	17.77	16.68	16.10	16.29	14.38	14.18	14.92	14.93	15.54	15.26	13.10
17	17.45	17.77	16.71	16.10	16.33	14.41	14.17	14.95	14.96	15.56	15.27	12.72
18	17.45	17.73	16.71	16.09	16.34	14.43	14.22	14.98	15.02	15.58	15.31	12.97
19	17.45	17.69	16.69	16.09	16.37	14.47	14.24	15.00	15.08	15.60	15.31	13.13
20	17.45	17.68	16.68	16.08	16.39	14.50	14.27	15.03	15.11	15.62	15.29	13.27
21	17.45	17.68	16.69	16.03	16.39	14.53	14.30	15.08	14.95	15.64	15.24	13.31
22	17.46	17.69	16.70	15.93	16.38	14.56	14.35	15.10	14.93	15.66	15.15	13.35
23	17.49	17.70	16.71	15.91	16.27	14.57	14.38	15.12	15.00	15.68	15.12	13.42
24	17.50	17.73	16.70	15.90	15.80	14.59	14.40	15.12	15.02	15.69	15.07	13.51
25	17.50	17.75	16.67	15.80	15.32	14.64	14.43	15.13	15.09	15.61	14.94	13.58
26	17.51	17.76	16.67	15.79	14.90	14.69	14.47	15.13	15.12	15.52	14.90	13.65
27	17.51	17.76	16.66	15.77	14.38	14.76	14.50	15.12	15.15	15.39	14.50	13.72
28	17.50	17.77	16.66	15.78	14.19	14.78	14.55	15.02	15.17	15.38	14.21	13.72
29	17.50	17.77	16.68	15.82	---	14.81	14.58	15.03	15.19	15.23	14.21	13.09
30	17.50	17.79	16.71	15.84	---	14.83	14.53	15.08	15.18	15.15	14.22	13.18
31	17.51	---	16.71	15.85	---	14.87	---	15.09	---	15.12	14.25	---
MAX	17.59	17.88	17.80	16.59	16.39	14.87	14.88	15.13	15.19	15.69	15.35	14.80
WTR YR 1979	MEAN	15.57		HIGH	12.72		LOW	17.88				

GROUND-WATER RECORDS

PIKE COUNTY

390359083015100. Local number, PI-2.

LOCATION.--Lat 39°03'59", long 83°01'51", Hydrologic Unit 05060002, 1 mi (1.6 km) west of Piketon.

Owner: Goodyear Atomic Corporation.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in (0.15 m), depth 60 ft (18.3 m), cased.

DATUM.--Altitude of land-surface datum is 550 ft (168 m), from topographic map. Measuring point: Floor of instrument shelter, 3.00 ft (0.914 m) above land-surface datum.

PERIOD OF RECORD.--September 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 27.46 ft (8.370 m) Feb. 15, 1977; minimum daily low, 10.06 ft (3.066 m) Mar. 1, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 25.95 ft (7.910 m) Oct. 14-15; minimum daily low, 10.06 ft (3.066 m) Mar. 1.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.67	25.66	25.59	21.40	20.77	10.06	17.19	18.25	21.47	22.37	23.67	21.82
2	25.70	25.66	25.56	21.43	20.83	10.22	17.28	18.40	21.46	22.44	23.61	21.61
3	25.72	25.67	25.54	21.43	20.89	10.40	17.38	18.58	21.44	22.50	23.57	21.45
4	25.75	25.70	25.38	21.33	20.99	10.70	17.44	18.74	21.42	22.57	23.54	21.33
5	25.77	25.73	25.34	21.13	21.09	10.84	17.54	18.87	21.41	22.63	23.52	21.25
6	25.79	25.75	25.27	20.91	21.16	11.00	17.58	18.99	21.42	22.68	23.50	21.20
7	25.82	25.78	25.19	20.71	21.27	11.21	17.59	19.12	21.46	22.73	23.48	21.24
8	25.84	25.80	24.98	20.57	21.37	11.42	17.53	19.23	21.48	22.77	23.47	21.29
9	25.86	25.82	24.37	20.50	21.49	11.64	17.52	19.35	21.48	22.82	23.47	21.35
10	25.88	25.84	23.94	20.43	21.59	11.85	17.58	19.45	21.48	22.87	23.47	21.42
11	25.89	25.86	23.03	20.41	21.66	12.07	17.70	19.59	21.47	22.93	23.47	21.51
12	25.93	25.87	21.93	20.41	21.79	12.30	17.71	19.71	21.44	22.98	23.45	21.60
13	25.94	25.89	21.19	20.42	21.87	12.51	17.71	19.83	21.45	23.03	23.45	21.67
14	25.95	25.91	20.84	20.60	21.95	12.83	17.73	19.94	21.46	23.07	23.44	21.68
15	25.95	25.92	20.60	20.66	22.05	13.10	17.74	20.07	21.49	23.13	23.42	21.74
16	25.93	25.93	20.49	20.73	22.20	13.34	17.73	20.19	21.51	23.18	23.40	21.74
17	25.89	25.91	20.40	20.76	22.27	13.63	17.64	20.28	21.57	23.22	23.37	21.64
18	25.82	25.88	20.36	20.85	22.35	13.98	17.50	20.39	21.64	23.26	23.37	21.40
19	25.76	25.88	20.33	20.86	22.44	14.33	17.36	20.49	21.71	23.32	23.40	20.94
20	25.73	25.86	20.34	20.86	22.50	14.54	17.24	20.61	21.77	23.36	23.42	20.31
21	25.71	25.82	20.47	20.80	22.55	14.73	17.16	20.74	21.81	23.41	23.39	19.85
22	25.69	25.77	20.56	20.85	22.53	14.92	17.17	20.84	21.85	23.46	23.36	19.28
23	25.68	25.73	20.63	20.83	22.26	15.30	17.20	20.95	21.92	23.52	23.32	18.98
24	25.67	25.71	20.70	20.72	21.94	15.50	17.23	21.05	21.98	23.56	23.26	18.57
25	25.68	25.70	20.83	20.67	21.66	15.73	17.29	21.17	22.02	23.61	23.16	18.38
26	25.70	25.69	20.96	20.66	20.59	15.96	17.42	21.27	22.06	23.65	23.04	18.28
27	25.70	25.66	21.06	20.63	14.34	16.20	17.58	21.37	22.12	23.69	22.85	18.24
28	25.70	25.64	21.16	20.59	10.21	16.43	17.75	21.45	22.16	23.71	22.66	18.23
29	25.70	25.62	21.25	20.61	---	16.67	17.89	21.49	22.22	23.73	22.45	18.10
30	25.69	25.61	21.35	20.63	---	16.91	18.08	21.52	22.29	23.73	22.23	18.04
31	25.67	---	21.40	20.69	---	17.07	---	21.52	---	23.73	22.03	---
MAX	25.95	25.93	25.59	21.43	22.55	17.07	18.08	21.52	22.29	23.73	23.67	21.82
WTR YR 1979	MEAN	21.28		HIGH	10.06		LOW	25.95				

GROUND-WATER RECORDS

403

PORTAGE COUNTY

411101081022000. Local number, PO-3.

LOCATION.--Lat 41°11'01"N, long 81°02'20"W, Hydrologic Unit 05030103, at Ravenna Army Ammunition Plant 10.9 mi (17.5 km) east of Ravenna.

Owner: U.S. Army.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in (0.30 m), depth 165 ft (50.3 m), cased.

DATUM.--Altitude of land-surface datum is 985 ft (300 m), from topographic map. Measuring point: Surface of instrument platform 2.80 ft (0.853 m) above land-surface datum.

REMARKS.--Water level affected by nearby pumping wells. Prior to water year 1978, well depth reported as 163 ft (49.7 m).

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 41.35 ft (12.603 m) Jan. 28, Feb. 6, 1954; minimum daily low, 19.34 ft (5.895 m) Mar. 31, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 26.56 ft (8.095 m) Nov. 14; minimum daily low, 21.43 ft (6.532 m) Apr. 27.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.33	25.12	24.59	23.12	25.09	25.00	23.04	23.00	21.98	21.81	23.73	23.65
2	24.27	23.94	23.78	24.48	24.03	26.27	23.57	23.04	21.88	23.29	22.80	23.35
3	23.23	23.78	23.68	25.05	23.82	24.96	22.89	22.95	22.99	23.23	24.09	24.70
4	24.16	24.74	24.27	25.37	24.69	25.55	23.24	22.01	21.69	22.25	23.08	23.55
5	24.46	23.61	23.31	25.45	23.75	25.26	22.42	21.81	22.79	23.66	23.80	24.53
6	24.91	23.53	23.69	25.12	23.65	25.51	23.51	22.95	21.71	23.82	24.22	23.53
7	25.09	24.82	24.67	24.67	23.24	25.06	22.72	23.01	22.87	22.73	23.07	23.48
8	24.05	23.71	23.58	25.02	24.49	24.11	22.43	23.24	23.01	22.55	24.19	24.87
9	25.23	23.57	24.29	25.13	23.58	24.03	22.68	21.99	21.97	22.56	23.28	24.98
10	24.13	24.78	24.58	25.33	24.79	23.79	22.23	23.10	22.69	22.32	24.10	24.00
11	24.78	23.79	23.83	25.45	23.84	23.59	23.43	21.94	22.85	23.58	23.07	24.88
12	23.73	23.78	24.68	24.06	24.35	24.83	23.04	23.11	21.92	22.47	24.11	23.95
13	23.79	24.97	23.42	23.95	24.62	24.61	22.08	22.34	23.37	23.38	24.45	23.61
14	23.73	23.75	23.46	23.68	23.45	24.35	21.75	21.94	22.20	22.31	23.24	24.63
15	23.70	23.82	24.26	24.15	24.13	23.91	22.76	23.26	23.19	23.34	24.59	23.98
16	25.02	25.03	23.31	23.84	25.38	24.71	21.93	22.31	22.13	23.74	24.51	23.76
17	24.24	23.84	23.31	24.32	25.96	24.10	23.12	23.15	22.54	22.65	24.35	24.74
18	24.06	23.75	24.27	23.82	25.96	24.72	22.08	23.29	23.13	23.85	23.29	23.63
19	24.89	25.06	23.27	24.35	25.77	24.54	21.94	21.90	22.19	22.76	23.23	23.47
20	23.74	24.18	22.94	23.31	25.80	23.57	21.77	22.83	23.28	23.86	24.51	23.40
21	23.69	23.91	23.89	22.58	25.37	24.34	21.59	21.89	22.07	22.87	23.42	24.43
22	23.64	24.90	23.08	23.94	25.61	23.31	21.57	23.14	23.08	22.64	23.32	23.40
23	24.76	23.68	23.20	23.27	25.13	23.80	22.94	22.05	22.13	23.90	24.47	23.47
24	24.83	23.46	23.73	23.45	26.04	22.39	22.98	22.78	23.07	22.79	23.28	24.56
25	23.69	24.79	23.00	22.90	26.07	23.87	22.74	22.82	23.55	23.68	24.36	23.54
26	23.48	23.91	24.53	24.07	25.81	23.25	22.39	21.80	23.14	22.66	24.72	23.43
27	24.85	23.43	25.03	23.07	26.49	24.41	21.43	22.81	23.65	23.90	23.40	24.46
28	23.90	24.89	25.20	22.74	26.56	23.43	22.71	21.78	22.25	22.81	24.46	23.45
29	25.31	23.91	24.07	24.01	---	24.08	22.95	23.06	23.12	22.71	23.51	23.17
30	24.34	23.56	23.75	24.14	---	23.14	22.73	21.90	22.00	24.00	23.44	24.35
31	23.96	---	23.55	24.68	---	24.08	---	23.05	---	22.77	24.69	---
MAX	25.31	25.12	25.20	25.45	26.56	26.27	23.51	23.29	23.65	24.00	24.72	24.98
WTR YR 1979	MEAN	23.68		HIGH	21.43		LOW	26.56				

GROUND-WATER RECORDS

PORTAGE COUNTY--Continued

411401081025000. Local number, PO-1.

LOCATION.--Lat 41°14'01"N, long 81°02'50"W Hydrologic Unit 05030103. Bauer Street in Windham.

Owner: Edward Liddle.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (0.15 m), depth 55 ft (16.8 m), cased.

DATUM.--Altitude of land-surface datum is 980 ft (298 m) from topographic map. Measuring point: Floor of instrument shelter 0.60 ft (0.183 m) 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 (7.035 m) Feb. 22, 1954; minimum daily low, 14.59 ft (4.448 m) June 24, 1947.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 21.50 ft (6.553 m) Nov. 21; minimum daily low, 19.59 ft (5.971 m) Sept. 15.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.97	21.07	21.40	21.24	20.97	20.92	20.57	19.97	19.76	19.73	19.87	19.94
2	21.00	21.06	21.45	21.22	20.98	20.92	20.58	19.95	19.76	19.78	19.84	19.92
3	21.00	21.09	21.43	21.22	20.95	20.86	20.52	19.92	19.74	19.86	19.85	19.95
4	21.00	21.09	21.30	21.20	20.97	20.80	20.49	19.92	19.72	19.82	19.87	19.95
5	21.02	21.11	21.32	21.19	20.97	20.80	20.43	19.91	19.74	19.85	19.87	19.95
6	21.03	21.13	---	21.14	20.96	20.78	20.48	19.88	19.73	19.87	19.86	19.95
7	21.03	21.14	21.37	21.13	20.94	20.77	20.49	19.88	19.75	19.87	19.86	20.00
8	21.07	21.20	21.32	21.18	20.99	20.82	20.45	19.89	19.76	19.84	19.88	20.02
9	21.07	21.19	21.22	21.17	21.03	20.83	20.37	19.89	19.75	19.82	19.90	20.02
10	21.07	21.20	21.29	21.19	21.07	20.81	20.38	19.88	19.72	19.83	19.85	20.00
11	21.06	21.23	21.28	21.20	21.07	20.82	20.37	19.87	19.71	19.84	19.85	20.04
12	21.06	21.24	21.25	21.15	21.06	20.86	20.30	19.88	19.72	19.84	19.88	20.04
13	21.05	21.22	21.24	21.12	21.07	20.82	20.26	19.88	19.74	19.82	19.88	20.04
14	20.94	21.33	21.25	21.18	21.07	20.88	20.26	19.94	19.73	19.83	19.91	19.93
15	20.93	21.33	21.26	21.19	21.02	20.90	20.22	19.92	19.71	19.85	19.94	19.59
16	20.93	21.34	21.26	21.13	21.15	20.88	20.22	19.92	19.69	19.87	19.95	19.62
17	20.93	21.31	21.29	21.09	21.17	20.88	20.21	19.91	19.68	19.87	19.93	19.62
18	20.90	21.35	21.28	21.13	21.14	20.84	20.20	19.87	19.75	19.87	19.90	19.61
19	20.88	21.38	21.26	21.10	21.12	20.84	20.18	19.86	19.77	19.88	19.93	19.67
20	20.89	21.42	21.23	20.99	21.12	20.83	20.17	19.89	19.76	19.88	19.93	19.67
21	20.92	21.50	21.27	21.02	21.14	20.93	20.12	19.94	19.74	19.87	19.94	19.63
22	20.93	21.45	21.27	21.09	21.15	20.90	20.13	19.94	19.70	19.87	19.94	19.68
23	21.03	21.40	21.29	21.06	21.06	20.84	20.12	19.91	19.74	19.88	19.93	19.69
24	21.03	21.43	21.25	20.94	20.96	20.78	20.08	19.87	19.76	19.88	19.95	19.68
25	20.98	21.43	21.28	20.97	20.94	20.81	20.03	19.82	19.79	19.86	19.96	19.67
26	21.04	21.43	21.29	20.97	---	20.84	20.01	19.76	19.78	19.86	19.96	19.68
27	21.05	21.38	21.31	20.95	---	20.87	19.97	19.79	19.76	19.88	19.94	19.67
28	21.08	21.44	21.34	20.93	20.91	20.83	19.98	19.78	19.77	19.88	19.92	19.65
29	21.09	21.43	21.33	20.95	---	20.74	19.98	19.78	19.75	---	19.95	19.64
30	21.08	21.41	21.32	20.95	---	20.81	19.93	19.79	19.71	19.89	19.95	19.64
31	21.07	---	21.30	20.93	---	20.67	---	19.78	---	19.87	19.95	---
MAX	21.09	21.50	21.45	21.24	21.17	20.93	20.57	19.97	19.79	19.89	19.96	20.04
WTR YR 1979	MEAN	20.49		HIGH	19.59		LOW	21.50				

GROUND-WATER RECORDS

405

PREBLE COUNTY

394438084335900. Local number, PR-2.

LOCATION.--Lat 39°44'38", long 84°33'59", Hydrologic Unit 05080002, Stover Rd 4 mi (6.4) east of Eaton.

Owner: Eaton Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (0.15 m), depth 78.5 ft (23.927 m), cased.

DATUM.--Altitude of land-surface datum is 900 ft (274 m), from topographic map. Measuring point: Floor of instrument shelter 1.50 ft (0.457 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--May 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 13.88 ft (4.231 m) Aug. 14, 1978; minimum daily low, 7.94 ft (2.420 m) May 4, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 13.01 ft (3.965 m) Nov. 15; minimum daily low, 8.78 ft (2.676 m) March 8.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.57	12.99	12.43	10.84	10.70	9.99	9.75	10.05	11.10	11.33	10.45	10.67
2	12.58	12.96	12.43	10.78	10.83	9.93	9.73	10.09	10.94	11.45	10.24	10.43
3	12.58	12.98	12.43	10.71	10.80	9.77	9.75	10.13	10.91	11.29	10.20	10.59
4	12.55	12.95	12.29	10.58	10.78	9.36	9.73	10.18	10.99	11.53	10.17	10.37
5	12.54	12.88	12.20	10.59	10.96	9.20	9.58	10.17	11.21	11.59	10.17	10.68
6	12.49	12.90	12.28	10.54	11.10	9.01	9.53	10.13	11.35	11.68	10.18	10.81
7	12.47	12.98	12.10	10.36	11.05	8.82	9.53	10.18	11.39	11.68	10.16	10.90
8	12.49	12.96	11.92	10.33	11.11	8.78	9.52	10.22	11.43	11.71	10.25	10.81
9	12.58	12.77	11.65	10.48	11.22	8.83	9.55	10.25	11.43	11.65	10.35	10.76
10	12.58	12.86	11.49	10.61	11.33	8.94	9.53	10.30	11.43	11.66	10.73	10.75
11	12.58	12.76	11.31	10.67	11.32	8.94	9.59	10.42	11.48	11.77	10.69	10.83
12	12.24	12.76	11.19	10.68	11.24	9.01	9.73	10.43	11.53	11.65	10.70	10.84
13	12.37	12.87	11.20	10.63	11.24	9.01	9.73	10.43	11.59	11.81	10.72	10.86
14	12.15	12.76	11.09	10.49	11.24	9.14	9.51	10.44	11.60	11.84	10.77	10.83
15	12.07	13.01	11.18	10.82	11.25	9.21	9.47	10.54	11.75	11.52	10.85	10.84
16	12.28	12.92	11.20	10.93	11.44	9.25	9.32	10.64	11.71	11.91	10.87	10.90
17	12.14	12.78	11.26	10.90	11.50	9.34	9.23	10.71	11.72	11.90	10.91	10.90
18	12.34	12.65	11.33	10.86	11.58	9.34	9.23	10.74	11.94	11.92	10.88	10.84
19	12.13	12.58	11.38	10.83	11.63	9.33	9.33	10.74	11.97	11.76	10.95	10.90
20	12.40	12.70	11.37	10.82	11.65	9.38	9.40	10.79	11.97	11.77	10.92	10.85
21	12.25	12.55	11.30	10.71	11.71	9.47	9.44	10.96	11.92	11.77	10.95	10.81
22	12.22	12.55	11.30	10.67	11.66	9.47	9.50	11.05	11.90	11.68	10.99	10.76
23	12.61	12.55	11.26	10.67	11.51	9.43	9.53	11.17	11.88	11.61	10.80	10.76
24	12.44	12.46	11.19	10.52	11.22	9.38	9.54	11.21	11.70	11.60	10.83	10.77
25	12.61	12.47	10.98	10.64	10.93	9.43	9.54	11.23	11.81	11.49	10.68	10.74
26	12.68	12.45	11.02	10.69	10.34	9.57	9.59	11.09	11.53	11.45	10.55	10.81
27	12.77	12.37	11.02	10.70	10.24	9.71	9.79	11.00	11.81	11.44	10.67	10.56
28	12.86	12.45	11.03	10.54	10.13	9.73	9.86	10.98	11.58	11.35	10.69	10.49
29	12.97	12.46	11.00	10.60	---	9.74	9.87	10.84	11.76	10.94	10.81	10.44
30	12.99	12.41	11.01	10.64	---	9.75	9.93	11.02	11.43	10.78	10.86	10.45
31	12.99	---	11.01	10.61	---	9.75	---	10.89	---	10.57	10.83	---
MAX	12.99	13.01	12.43	10.93	11.71	9.99	9.93	11.23	11.97	11.92	10.99	10.90
WTR YR 1979	MEAN	11.04		HIGH	8.78		LOW	13.01				

GROUND-WATER RECORDS

RICHLAND COUNTY

404625082305100. Local number, R-4.

LOCATION.--Lat 40°46'25", long 82°30'51", Hydrologic Unit 05040002, at Ohio Brass Plant in Mansfield.

Owner: Ohio Brass Company

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 14 in (0.36 m), depth 127 ft (38.7 m), cased.

DATUM.--Altitude of land-surface datum is 1150 ft (351 m) from topographic map. Measuring point: Top of platform 5.00 ft (1.524 m) 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 (18.318 m) Oct. 12, 13, 19, 20, 1962; minimum daily low, 10.14 ft (3.091 m) Sept. 24, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 16.20 ft (4.938 m) Oct. 1; minimum daily low, 10.14 ft (3.091 m) Sept. 24.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.20	---	13.05	12.15	---	11.60	11.45	10.65				---
2	15.50	---	13.10	11.95	---	11.80	11.30	10.85				---
3	15.10	---	13.10	---	---	11.80	11.25	10.85				---
4	15.10	---	12.85	---	---	11.75	11.25	10.90				---
5	15.15	---	12.65	---	---	11.60	11.25	---				---
6	15.10	---	12.80	---	---	11.55	11.25	---				---
7	15.09	---	13.00	---	---	11.60	11.30	---				---
8	15.10	---	13.00	---	---	11.55	11.25	---				---
9	14.95	---	13.00	---	---	11.60	10.85	---				---
10	14.60	---	12.75	---	---	11.65	10.80	---				---
11	14.70	---	12.55	---	---	11.65	10.90	---				---
12	14.70	---	12.50	---	---	11.55	10.95	---				---
13	14.70	---	12.50	---	---	11.65	10.95	---				---
14	14.70	---	12.65	---	---	11.65	10.60	---				---
15	14.65	---	12.80	---	---	11.80	10.35	---				---
16	14.30	---	12.80	---	---	11.85	10.15	---				---
17	14.00	---	12.80	---	---	11.85	10.30	---				---
18	14.10	---	12.65	---	---	11.85	10.45	---				---
19	14.10	---	12.65	---	---	11.60	10.55	---				10.25
20	14.10	---	12.65	---	---	11.50	10.60	---				10.35
21	14.10	---	12.60	---	12.35	11.65	10.60	---				10.35
22	---	---	12.60	---	12.30	11.65	10.55	---				10.35
23	---	---	12.55	11.89	12.15	11.65	10.30	---				10.25
24	---	12.85	12.45	11.90	11.80	11.55	10.60	---				10.14
25	---	12.65	12.10	11.89	11.65	11.30	10.55	---				10.25
26	---	12.45	11.90	---	11.40	11.30	10.65	---				10.35
27	---	12.25	12.15	---	11.30	11.45	10.70	---				10.40
28	---	12.50	12.35	---	11.50	11.55	10.70	---				10.40
29	---	12.75	12.45	---	---	11.55	10.70	---				10.40
30	---	13.00	12.45	---	---	11.50	10.45	---				10.34
31	---	---	12.35	---	---	11.50	---	---				---
MAX	16.20	13.00	13.10	12.15	12.35	11.85	11.45	10.90				10.40
WTR YR 1979	MEAN	12.05		HIGH	10.14		LOW	16.20				

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

GROUND-WATER RECORDS

407

ROSS COUNTY

391341083172200. Local number, RO-7.

LOCATION.--Lat 39°13'41", long 83°17'22", Hydrologic Unit 05060003, Highland County well field, 1 mi (1.6 km) 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 (0.15 m), depth 67 ft (20.4 m), cased.

DATUM.--Altitude of land-surface datum is 740 ft (226 m) from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) 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, 39.24 ft (11.960 m) Feb. 5, 1977; minimum daily low, 20.93 ft (6.379 m) Feb. 28, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 37.02 ft (11.284 m) Aug. 10; minimum daily low, 29.22 ft (9.906 m) Mar. 11.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36.18	34.06	34.31	31.86	33.36	32.20	33.68	33.07	35.19	34.89	36.10	34.66
2	36.26	34.43	34.32	32.08	33.44	31.87	33.92	33.19	34.74	34.99	36.65	34.83
3	36.26	34.85	34.27	32.00	33.95	31.66	33.98	33.23	34.74	35.33	36.80	34.51
4	36.34	34.69	33.98	31.65	34.05	31.23	34.03	33.46	34.66	35.67	36.75	34.73
5	36.52	35.07	33.92	31.96	34.44	30.82	34.05	33.57	34.62	35.75	36.73	34.80
6	36.55	34.85	33.93	31.92	34.41	30.90	33.82	33.78	34.58	35.86	36.57	34.87
7	36.69	34.85	33.72	32.36	34.37	30.55	33.78	33.97	35.08	36.13	36.78	34.85
8	36.73	34.82	33.17	31.71	34.97	30.02	33.50	34.27	34.88	35.95	36.77	35.00
9	36.84	34.88	33.06	31.59	34.92	29.85	33.38	34.20	34.85	35.75	36.97	35.16
10	36.86	34.85	31.82	31.56	35.32	29.58	33.43	34.27	34.66	35.87	37.02	35.36
11	36.62	34.86	31.51	31.96	35.45	29.22	33.41	34.46	34.55	35.82	36.83	35.40
12	36.67	35.17	31.34	31.99	35.55	29.35	33.52	34.80	34.41	36.24	36.85	35.54
13	36.70	34.72	31.13	32.35	35.86	29.25	33.14	34.79	34.86	36.26	36.74	35.77
14	36.72	35.01	31.04	32.72	35.88	29.29	33.22	34.74	35.04	35.93	36.68	35.78
15	36.18	35.01	30.77	32.87	36.26	29.64	33.27	35.03	34.81	36.23	36.21	35.13
16	36.20	35.18	30.44	33.05	36.23	29.95	33.15	34.97	35.24	36.28	36.12	35.01
17	35.91	35.24	30.32	33.58	36.38	30.18	33.15	35.06	35.22	36.32	36.75	34.58
18	35.93	34.88	30.30	33.44	36.39	30.33	33.19	35.29	35.33	36.36	36.97	34.70
19	35.45	34.89	30.32	33.59	36.51	30.95	33.12	35.82	35.48	36.27	36.77	34.78
20	35.57	34.63	30.17	33.62	36.51	31.26	32.91	35.96	35.27	36.19	36.74	34.37
21	35.56	34.40	30.43	33.40	36.43	31.47	32.86	36.05	35.09	36.81	36.61	34.00
22	35.22	34.18	30.64	33.12	36.13	31.79	32.76	35.86	34.93	36.86	36.37	33.57
23	35.34	33.84	30.61	33.15	35.37	31.97	32.79	35.76	34.91	36.92	36.24	33.17
24	35.38	34.04	30.73	33.13	34.52	32.35	32.84	35.72	34.90	36.94	36.24	32.70
25	35.16	34.18	30.99	33.30	34.41	32.77	32.54	35.41	34.90	36.88	35.96	32.08
26	35.02	34.34	30.87	33.20	33.71	33.02	32.69	35.20	34.91	36.53	36.41	31.53
27	34.90	34.07	31.29	32.66	33.08	33.00	32.72	35.76	34.94	36.35	36.00	30.92
28	34.88	34.07	31.28	32.84	32.67	33.14	32.57	35.68	34.98	36.45	35.75	30.60
29	35.06	33.90	31.40	32.94	---	33.39	32.70	35.20	35.00	36.34	35.32	30.22
30	34.39	34.11	31.80	33.10	---	33.47	32.99	35.19	35.03	36.07	35.07	29.78
31	34.47	---	32.04	33.18	---	33.65	---	35.19	---	35.88	34.65	---
MAX	36.86	35.24	34.32	33.62	36.51	33.65	34.05	36.05	35.48	36.94	37.02	35.78
WTR YR 1979	MEAN	34.21		HIGH	29.22		LOW	37.02				

GROUND-WATER RECORDS

ROSS COUNTY

391922082580000. Local number, RD-3.

LOCATION.--Lat 39°19'22", long 82°58'00", Hydrologic Unit 05060003, 1.1 mi (1.8 km) southeast of courthouse in Chillicothe.

Owner: The Mead Corporation.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 30 in (0.76 m), depth 56.5 ft (17.2 m), cased.

DATUM.--Altitude of land-surface datum is 610 ft (186 m), from topographic map. Measuring point: Floor of instrument shelter 4.71 ft (1.436 m) above land-surface datum.

REMARKS.--Prior to water year 1978, well depth reported as 60 ft (18.3 m).

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 42.92 ft (13.082 m) Dec. 24, 1949; minimum daily low, 17.20 ft (5.243 m) Mar. 21, 1943.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 26.85 ft (8.184 m) Nov. 16; minimum daily low, 20.83 ft (6.349 m) Apr. 24.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.26	26.73	26.48	23.64	23.04	22.14	21.91	21.06	21.30	22.00	23.55	23.11
2	26.29	26.73	26.40	23.55	23.05	22.08	21.80	21.06	21.27	22.17	23.61	23.09
3	26.32	26.73	26.34	23.44	23.02	21.94	21.55	21.06	21.24	22.21	23.64	23.07
4	26.40	26.72	26.24	23.34	23.07	21.80	21.41	21.04	21.24	22.29	23.68	23.04
5	26.42	26.73	26.13	23.27	23.09	21.74	21.29	21.01	21.27	22.39	23.71	22.95
6	26.47	26.75	26.03	23.19	23.10	21.65	21.25	20.95	21.34	22.47	23.74	22.90
7	26.51	26.78	25.92	23.10	23.12	21.57	21.20	20.95	21.38	22.55	23.77	22.89
8	26.56	26.79	25.81	23.04	23.23	21.56	21.12	21.01	21.40	22.62	23.82	22.91
9	26.59	26.80	25.56	23.04	23.37	21.57	21.17	21.04	21.37	22.69	23.86	22.91
10	26.63	26.81	25.22	23.03	23.47	21.51	21.20	21.05	21.31	22.78	23.88	22.93
11	26.65	26.84	25.01	23.03	23.52	21.45	21.19	21.03	21.34	22.87	23.89	23.05
12	26.70	26.84	24.75	23.01	23.57	21.42	21.15	21.05	21.34	22.94	23.88	23.13
13	26.70	26.81	24.61	22.98	23.59	21.35	21.14	21.11	21.38	23.00	23.89	23.18
14	26.48	26.81	24.53	23.04	23.59	21.29	21.13	21.14	21.39	23.09	23.90	23.15
15	26.42	26.83	24.37	23.05	23.66	21.31	21.06	21.20	21.40	23.16	23.94	23.00
16	26.38	26.85	24.26	23.02	23.80	21.27	21.04	21.22	21.41	23.22	23.97	22.64
17	26.39	26.84	24.17	23.02	23.85	21.26	21.03	21.23	21.44	23.29	23.98	22.47
18	26.38	26.83	24.11	23.09	23.89	21.28	21.03	21.23	21.50	23.33	24.01	22.37
19	26.38	26.82	24.02	23.08	23.97	21.31	20.99	21.26	21.56	23.39	24.02	22.41
20	26.42	26.80	23.94	22.99	24.00	21.34	20.91	21.31	21.58	23.43	24.02	22.41
21	26.47	26.77	23.93	22.94	24.07	21.40	20.85	21.39	21.59	23.48	23.98	22.36
22	26.51	26.73	23.93	22.99	24.08	21.42	20.86	21.41	21.62	23.52	23.85	22.21
23	26.57	26.68	23.89	22.96	23.97	21.42	20.84	21.39	21.67	23.57	23.78	22.10
24	26.59	26.71	23.83	22.88	23.74	21.50	20.83	21.35	21.71	23.60	23.74	22.00
25	26.61	26.71	23.83	22.91	23.45	21.63	20.84	21.36	21.76	23.59	23.72	21.89
26	26.61	26.68	23.81	22.91	23.05	21.75	20.88	21.36	21.79	23.60	23.67	21.78
27	26.57	26.67	23.81	22.89	22.60	21.78	20.94	21.36	21.82	23.63	23.66	21.67
28	26.55	26.73	23.78	22.93	22.34	21.78	20.99	21.35	21.84	23.64	23.41	21.57
29	26.63	26.72	23.76	22.97	---	21.79	21.01	21.32	21.86	23.60	23.29	21.38
30	26.68	26.57	23.72	22.98	---	21.83	21.01	21.34	21.78	23.54	23.20	21.19
31	26.70	---	23.70	22.99	---	21.90	---	21.34	---	23.53	23.15	---
MAX	26.70	26.85	26.48	23.64	24.08	22.14	21.91	21.41	21.86	23.64	24.02	23.18
WTR YR 1979	MEAN	23.27		HIGH	20.83		LOW	26.85				

GROUND-WATER RECORDS

409

SCIOTO COUNTY

384451082561900. Local number, SC-1.

LOCATION.--Lat 38°44'51", long 82°56'19", Hydrologic Unit 05090103, at the Detroit Steel Corporation plant in New Boston.

Owner: Detroit Steel Corporation.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 26 in (0.66 m), depth 80 ft (24.4 m), cased.

DATUM.--Altitude of land-surface datum is 525 ft (160 m), from topographic map. Measuring point: Surface of instrument platform 6.00 ft (1.829 m) below land-surface datum.

REMARKS.--Water level affected by Ohio River stage.

PERIOD OF RECORD.--May 1955 to November 1961; October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 58.81 ft (17.93 m) Nov. 19, 1957; minimum daily low, 23.97 ft (7.306 m) Mar. 10, 1979

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 50.93 ft (15.523 m) Nov. 18; minimum daily low, 23.97 ft (7.306 m) Mar. 10.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50.50	50.54	50.39	40.14	34.36	30.94	37.52	41.03	42.08	45.79	47.77	46.45
2	50.53	50.55	50.30	40.11	35.18	28.45	37.50	41.31	41.91	45.97	47.70	46.31
3	50.56	50.57	50.20	39.60	36.10	27.11	37.57	41.70	41.94	46.10	47.69	46.31
4	50.59	50.61	50.19	38.23	37.24	26.47	37.06	42.06	42.08	46.31	47.73	46.38
5	50.62	50.64	49.99	36.65	38.21	26.47	36.52	42.16	42.26	46.45	47.76	46.45
6	50.62	50.66	49.69	34.99	39.10	26.29	35.87	42.16	42.44	46.54	47.84	46.58
7	50.65	50.72	49.20	33.84	40.05	25.73	35.26	41.97	42.66	46.62	47.92	46.68
8	50.68	50.74	48.65	33.77	40.75	24.94	34.74	41.90	42.91	46.72	48.01	46.71
9	50.68	50.75	48.11	33.74	41.33	24.35	35.01	42.09	43.13	46.85	48.06	46.71
10	50.69	50.78	47.36	33.37	41.79	23.97	35.13	42.31	43.36	46.99	48.13	46.78
11	50.71	50.80	46.19	33.07	42.22	24.66	35.08	42.61	43.50	47.12	48.21	46.88
12	50.74	50.82	44.02	33.27	42.72	25.60	34.57	42.91	43.67	47.23	48.23	46.99
13	50.77	50.82	40.87	33.66	43.07	26.30	34.20	43.16	43.83	47.35	48.21	47.06
14	50.77	50.88	38.20	34.63	43.40	27.57	33.95	43.21	44.00	47.46	48.13	47.28
15	50.75	50.88	36.85	34.99	43.74	28.60	33.89	43.20	44.19	47.56	48.10	47.34
16	50.66	50.91	36.98	35.23	44.12	29.30	34.06	43.12	44.42	47.66	48.10	47.34
17	50.66	50.89	37.56	35.58	44.17	29.96	34.28	43.01	44.69	47.73	48.16	47.29
18	50.57	50.93	37.97	36.07	44.06	30.72	34.57	43.11	44.96	47.79	48.25	47.17
19	50.54	50.83	38.54	36.30	43.88	31.59	34.90	43.30	45.20	47.86	48.32	47.07
20	50.57	50.75	39.18	36.57	43.70	32.45	35.26	43.53	45.41	47.94	48.35	46.99
21	50.59	50.67	39.67	36.80	43.62	33.29	35.78	43.80	45.54	48.04	48.33	46.95
22	50.63	50.66	39.63	36.74	43.63	33.96	36.43	44.04	45.60	48.14	48.25	46.91
23	50.68	50.64	39.29	35.90	43.44	34.64	37.10	44.25	45.59	48.24	48.10	46.78
24	50.67	50.70	38.72	34.49	43.16	35.52	37.88	44.50	45.47	48.30	47.98	46.39
25	50.69	50.67	38.50	33.44	42.25	36.22	38.71	44.65	45.29	48.35	47.92	45.91
26	50.76	50.65	38.65	32.54	40.51	36.44	39.51	44.66	45.14	48.40	47.82	45.43
27	50.78	50.66	38.66	31.52	37.83	36.46	40.18	44.54	45.14	48.40	47.71	45.05
28	50.68	50.66	38.60	31.70	34.79	36.40	40.50	44.32	45.25	48.36	47.51	44.82
29	50.61	50.60	38.89	32.29	---	36.54	40.56	43.89	45.37	48.22	47.23	44.75
30	50.55	50.50	39.44	32.80	---	36.82	40.77	43.20	45.59	48.09	46.93	44.60
31	50.52	---	39.92	33.52	---	37.27	---	42.51	---	47.92	46.68	---
MAX	50.78	50.93	50.39	40.14	44.17	37.27	40.77	44.66	45.60	48.40	48.35	47.34
WTR YR 1979	MEAN	42.99		HIGH	23.97		LOW	50.93				

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 (0.3 m), depth 132 ft (40.2 m), cased.

DATUM.--Altitude of land-surface datum is 1060 ft (323 m), from topographic map. Measuring point: Floor of instrument shelter 1.00 ft (0.305 m) 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 (16.459 m) Feb. 10, 1956; minimum daily low, 26.13 ft (7.964 m) May 18, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 43.08 ft (13.13 m) Mar. 2; minimum daily low, 36.68 ft (11.18 m) June 11.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39.99	39.80	40.62	39.35	40.83	42.92	41.10	38.60	37.37	37.61	39.38	39.33
2	40.60	40.20	40.39	40.20	41.26	43.08	41.30	38.54	36.94	37.58	39.07	39.02
3	40.76	40.06	40.34	40.89	41.14	42.95	41.17	38.62	37.79	37.75	39.24	38.80
4	40.71	40.00	40.51	40.94	41.08	43.01	41.42	38.55	37.59	37.72	38.95	39.54
5	40.30	39.96	40.73	40.72	41.07	42.93	41.30	38.10	37.29	37.60	38.60	39.84
6	39.98	39.85	41.16	41.06	41.18	42.95	41.30	38.06	37.77	37.43	38.85	39.80
7	40.02	40.13	40.71	41.16	41.68	42.84	40.79	38.48	37.15	37.37	39.00	39.94
8	40.35	40.05	40.66	41.34	41.87	42.65	40.50	39.06	36.93	37.31	38.90	39.41
9	40.67	40.40	40.22	41.31	41.85	42.71	40.57	38.76	36.99	37.33	38.97	40.67
10	40.87	41.48	40.09	40.85	41.63	41.91	41.02	38.75	37.20	37.22	38.98	41.31
11	41.03	42.04	41.24	40.86	41.89	41.66	40.96	38.77	36.68	37.20	38.39	41.35
12	40.86	41.10	41.42	40.61	42.21	41.93	40.89	38.20	37.42	37.84	38.40	41.38
13	40.75	40.93	40.61	40.43	42.14	42.20	40.51	38.00	37.00	37.79	38.78	40.82
14	40.21	41.06	41.13	40.34	---	42.42	40.24	38.52	37.59	38.02	38.73	40.53
15	39.21	40.90	41.15	40.75	---	42.29	39.70	---	37.93	38.45	38.96	40.00
16	40.31	40.20	41.19	40.38	---	42.35	40.22	37.88	37.07	---	38.89	39.53
17	40.55	40.85	40.71	40.80	---	42.22	40.57	38.16	37.09	38.84	38.67	39.30
18	40.25	40.40	41.23	40.53	---	41.97	40.58	38.55	36.94	38.84	38.48	38.89
19	40.91	39.90	41.56	40.45	---	41.70	40.47	38.26	37.45	38.55	38.45	38.70
20	40.25	40.62	41.55	40.20	---	41.88	40.48	38.08	38.02	38.83	38.97	38.40
21	---	40.35	41.45	---	42.85	41.80	40.24	38.45	37.18	38.80	39.11	38.25
22	---	40.38	41.35	40.46	42.48	42.01	39.38	38.11	37.79	38.51	38.75	38.07
23	---	40.25	40.43	40.84	42.32	42.24	40.15	37.94	37.39	38.49	38.85	37.82
24	---	40.31	40.38	40.21	42.83	42.00	39.34	37.92	37.04	38.25	38.94	38.29
25	---	40.32	40.43	41.23	42.80	41.35	39.73	37.88	37.59	38.50	38.78	37.71
26	39.25	40.21	39.97	41.53	42.32	41.63	39.42	37.79	37.82	38.39	38.63	37.54
27	39.52	40.36	40.35	41.05	42.39	41.63	39.27	37.56	37.95	38.37	39.14	37.41
28	39.08	40.05	40.35	40.63	42.58	41.45	39.03	38.11	37.85	38.36	39.13	37.35
29	39.85	40.57	40.43	40.77	---	41.54	38.92	37.86	38.13	38.19	39.17	37.28
30	39.90	40.29	40.33	40.69	---	41.36	38.75	37.59	37.98	38.40	39.42	37.19
31	39.83	---	39.81	40.71	---	41.24	---	37.58	---	38.74	39.63	---
MAX	41.03	42.04	41.56	41.53	42.85	43.08	41.42	39.06	38.13	38.84	39.63	41.38
WTR YR 1979	MEAN	39.80		HIGH	36.68		LOW	43.08				

GROUND-WATER RECORDS

411

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 (0.2 m) depth 70 ft (21.3 m), cased.

DATUM.--Altitude of land-surface datum is 1060 ft (323 m), from topographic map. Measuring point: Floor of instrument shelter 1.50 ft (0.457 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--September 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 16.00 ft (4.879 m) July 27, 28, 1978; minimum daily low, 9.37 ft (2.856 m) July 17, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 15.00 ft (4.572 m) Nov. 5, 26, 27; minimum daily low, 9.79 ft (2.984 m) Sept. 22, 23.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.20	14.70	14.57	14.80	14.02	13.90	12.99	---	11.96	11.86	12.40	12.80
2	14.95	14.80	14.66	14.45	13.99	13.93	12.99	---	12.09	12.18	12.32	12.83
3	14.10	14.78	14.55	14.52	14.12	13.73	12.91	---	11.97	12.25	12.33	12.81
4	13.70	14.50	14.84	14.40	14.11	13.61	12.82	---	12.01	12.22	12.38	12.79
5	13.74	15.00	14.55	14.21	14.05	13.51	12.75	---	11.96	12.12	12.39	12.75
6	13.80	14.80	14.29	14.17	14.06	13.49	12.52	---	12.12	11.95	12.39	12.79
7	13.82	14.50	14.38	14.14	14.15	13.59	12.47	---	12.01	11.91	12.34	12.78
8	13.80	14.65	14.30	14.02	14.18	13.45	12.41	---	11.96	11.75	12.37	12.83
9	13.95	14.82	14.29	13.98	14.20	13.24	12.32	---	11.96	11.87	12.49	12.85
10	14.05	14.63	14.17	13.95	14.20	13.11	12.24	---	11.76	11.75	12.50	13.09
11	14.15	13.95	14.44	13.94	14.24	13.02	12.17	---	11.79	11.60	12.53	13.11
12	14.20	13.73	14.51	13.94	14.24	12.88	12.12	---	11.80	11.73	12.53	13.16
13	13.75	14.17	14.69	13.92	---	12.87	12.02	---	11.78	11.71	12.54	13.15
14	14.14	14.08	14.52	13.85	---	12.88	12.01	---	11.89	11.58	12.59	13.07
15	14.25	14.20	14.09	13.85	---	12.86	11.98	---	11.84	11.49	12.60	12.44
16	14.20	14.24	13.98	13.85	---	12.83	11.93	---	11.85	11.43	12.60	11.47
17	14.15	14.50	14.01	13.85	---	12.89	11.93	12.67	---	11.73	12.50	10.87
18	14.11	14.50	13.99	13.85	---	12.94	---	12.75	11.92	11.99	12.48	10.47
19	14.00	14.78	14.21	13.80	---	12.97	---	12.80	11.94	12.05	12.60	10.13
20	13.90	14.68	14.58	13.80	---	---	---	12.87	12.03	12.04	12.60	9.90
21	---	14.70	14.64	---	14.59	12.95	---	12.87	11.91	12.07	12.79	9.82
22	---	14.55	14.41	13.96	14.68	12.96	---	12.84	11.72	12.12	12.91	9.79
23	---	14.20	14.19	13.97	14.72	12.95	---	12.88	11.80	12.24	12.91	9.79
24	---	14.55	14.50	14.23	14.81	12.95	---	12.81	11.94	12.25	12.87	9.89
25	---	14.55	14.32	14.20	14.63	12.95	---	12.75	12.06	12.28	12.84	10.02
26	---	15.00	14.17	14.15	14.46	12.91	---	12.56	12.02	12.27	12.91	10.08
27	---	15.00	14.19	14.12	14.00	12.83	---	12.25	11.85	12.22	12.99	10.05
28	14.82	14.42	14.18	14.17	13.84	12.89	---	12.00	11.94	12.14	12.93	---
29	14.55	14.30	14.57	14.17	---	12.93	---	11.92	11.89	12.16	12.86	---
30	14.25	14.47	14.68	14.14	---	12.95	---	11.84	11.89	12.14	12.78	---
31	14.75	---	14.79	14.11	---	12.95	---	12.05	---	12.28	12.75	---
MAX	14.95	15.00	14.84	14.80	14.81	13.93	12.99	12.88	12.12	12.28	12.99	13.16
WTR YR 1979	MEAN	13.16		HIGH	9.79		LOW	15.00				

GROUND-WATER RECORDS

STARK COUNTY

405052081193700. Local number, ST-4.

LOCATION.--Lat 40°50'52", long 81°19'37", Hydrologic Unit 05040001, northeast of Canton on Harmont Avenue.

Owner: Adessi Brothers.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 4 in (0.10 m), depth 73 ft (22.3 m), cased.

DATUM.--Altitude of land-surface datum is 1,075 ft (328 m), from topographic map. Measuring point: Top of casing

4.00 ft (1.219 m) above land-surface datum.

REMARKS.--Prior to water year 1976 well depth reported as 190 ft (57.9 m).

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 23.49 ft (7.160 m) Sept. 22, 1978; minimum daily low, 6.93 ft (2.112 m) Feb. 6, 1952.

EXTREMES FOR CURRENT YEAR.--Maximum recorded daily low, 13.46 ft (4.103 m) Oct. 12-13; minimum daily low, 9.96 ft (3.036 m) Sept. 16.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.31			---	12.58	11.41	11.71	11.73	11.61	12.10	12.37	12.91
2	13.31			---	12.61	11.38	11.59	11.76	11.64	12.11	12.38	12.94
3	13.32			---	12.61	11.23	11.55	11.79	11.66	12.12	12.40	12.96
4	13.32			---	12.62	11.08	11.34	11.81	11.68	12.12	12.41	12.99
5	13.31			---	12.66	10.86	11.18	11.83	11.72	12.12	12.43	13.01
6	13.33			---	12.68	10.72	11.03	11.84	11.76	12.12	12.44	13.03
7	13.36			---	12.70	10.74	10.98	11.86	11.79	12.12	12.46	13.05
8	13.37			---	12.73	10.82	10.94	11.90	11.82	12.14	12.48	13.07
9	13.40			---	12.75	10.90	10.91	11.94	11.83	12.15	12.50	13.09
10	13.42			---	12.78	10.94	10.85	11.95	11.83	12.15	12.51	13.11
11	13.44			---	12.81	11.01	10.76	11.99	11.83	12.17	12.52	13.13
12	13.46			---	12.81	11.08	10.73	12.02	11.83	12.18	12.53	13.15
13	13.46			---	12.84	11.11	10.71	12.02	11.83	12.20	12.54	13.18
14	13.39			---	12.84	11.17	10.72	12.02	11.85	12.22	12.57	13.18
15	---			---	12.88	11.22	10.74	12.05	11.89	12.23	12.60	11.61
16	---			---	12.92	11.29	10.78	12.09	11.91	12.25	12.62	9.96
17	---			---	12.96	11.34	10.90	12.11	11.93	12.27	12.64	10.13
18	---			---	12.97	11.38	11.03	12.14	11.94	12.29	12.66	10.44
19	---			---	12.99	11.42	11.16	12.16	11.95	12.31	12.66	10.73
20	---			---	13.00	11.47	11.25	12.17	11.99	12.33	12.66	10.95
21	---			---	13.01	11.52	11.32	12.17	12.00	12.35	12.67	11.15
22	---			---	13.01	11.56	11.39	12.18	12.00	12.37	12.68	11.31
23	---			---	13.00	11.60	11.44	12.19	12.00	12.37	12.69	11.43
24	---			12.63	12.71	11.61	11.51	12.19	12.02	12.35	12.71	11.56
25	---			12.59	12.25	11.61	11.55	12.19	12.03	12.30	12.76	11.66
26	---			12.53	11.94	11.57	11.50	12.05	12.06	12.26	12.82	11.78
27	---			12.51	11.56	11.61	11.52	11.77	12.07	12.29	12.87	11.85
28	---			12.50	11.43	11.64	11.63	11.60	12.09	12.32	12.90	11.90
29	---			12.52	---	11.68	11.55	11.53	12.10	12.33	12.90	11.90
30	---			12.53	---	11.69	11.58	11.54	12.10	12.34	12.88	11.83
31	---			12.54	---	11.71	---	11.58	---	12.35	12.88	---
MAX	13.46			12.63	13.01	11.71	11.71	12.19	12.10	12.37	12.90	13.18
WTR YR 1979	MEAN	12.08		HIGH	9.96		LOW	13.46				

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

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 (0.2 m), depth 55 ft (16.8 m), cased.

DATUM.--Altitude of land-surface datum is 1060 ft (323 m), from topographic map. Measuring point: Floor of instrument shelter 2.50 ft (0.762 m) 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, 33.10 ft (10.089 m) Dec. 15, 1978; minimum daily low, 7.78 ft (2.371 m) July 18, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 28.80 ft (8.778 m) Mar. 18; minimum daily low, 8.30 ft (2.530 m) June 18.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET). WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	14.98	23.00	12.70	10.85	15.45	15.05	10.45	9.95	11.10	20.30	14.00
2	---	14.40	21.50	12.30	12.90	18.75	14.20	14.45	8.50	21.20	14.80	13.55
3	---	15.90	20.00	12.00	10.85	22.15	13.50	10.60	8.40	23.15	---	13.20
4	---	13.80	22.20	11.90	10.75	23.40	12.85	10.20	8.40	18.30	---	19.10
5	---	13.50	22.65	11.75	10.75	24.60	12.25	10.05	8.45	19.35	---	14.40
6	---	13.20	22.75	11.60	10.75	23.05	22.15	9.90	8.50	22.00	---	13.25
7	---	13.09	22.85	11.50	10.75	22.90	24.85	9.80	8.55	21.60	---	---
8	---	19.12	22.70	11.40	10.80	22.55	25.90	9.75	10.20	17.30	---	12.50
9	---	22.80	21.20	11.35	10.85	23.20	26.05	9.70	8.45	14.00	---	12.45
10	---	22.60	17.20	11.35	10.85	21.35	26.50	9.70	8.35	20.05	---	12.20
11	---	17.30	20.50	11.30	10.85	20.55	26.90	11.35	8.30	20.55	---	12.10
12	---	22.30	15.55	16.35	10.80	22.85	27.40	9.70	8.40	13.35	---	12.00
13	---	22.30	14.45	12.20	10.80	25.05	22.00	9.65	8.40	14.65	---	11.95
14	---	22.60	20.90	11.45	10.80	26.35	21.05	9.55	11.00	13.00	---	20.15
15	---	18.00	21.45	19.40	10.90	27.55	18.55	9.50	17.55	16.75	12.12	---
16	---	20.75	17.20	19.40	10.95	28.00	22.45	9.55	18.40	14.80	12.10	---
17	---	---	19.30	13.35	10.95	28.50	22.70	16.60	18.10	13.95	11.95	20.10
18	---	---	21.55	12.50	10.90	28.80	23.40	13.20	---	13.35	11.80	20.60
19	---	---	20.65	13.15	10.85	24.40	18.10	10.25	---	19.40	11.70	23.00
20	---	---	22.00	11.80	10.85	19.00	16.45	9.95	23.20	21.90	18.40	24.85
21	---	---	22.35	---	10.85	16.95	13.55	12.10	23.95	22.80	19.75	23.80
22	---	---	22.05	---	10.85	16.25	12.85	16.30	23.70	21.70	22.50	---
23	---	---	17.75	---	10.80	21.00	17.00	12.90	21.20	23.95	23.60	---
24	---	---	19.10	---	10.55	23.90	20.00	12.55	21.60	24.00	23.75	---
25	---	22.30	15.45	11.10	10.15	25.45	13.25	16.00	18.05	21.60	23.60	---
26	---	19.00	14.45	11.05	9.75	26.50	13.40	10.75	13.80	15.70	18.10	23.70
27	---	23.70	14.00	11.00	9.45	26.30	11.55	9.35	12.85	14.60	23.55	17.05
28	20.90	23.50	13.70	10.80	9.80	27.25	11.25	8.90	12.25	13.95	20.30	15.15
29	19.50	23.40	13.40	11.65	---	21.35	10.95	8.70	12.95	15.39	15.20	14.20
30	21.55	23.10	13.15	12.30	---	17.55	10.50	8.60	11.40	19.20	15.00	13.40
31	16.39	---	13.00	10.80	---	16.00	---	8.55	---	19.45	---	---
MAX	21.55	23.70	23.00	19.40	12.90	28.80	27.40	16.60	23.95	24.00	23.75	24.85
WTR YR 1979	MEAN	16.28		HIGH	8.30		LOW	28.80				

GROUND-WATER RECORDS

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 (0.15 m), depth 60 ft (18.3 m), cased.

DATUM.--Altitude of land-surface datum is 970 ft (296 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) 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 (12.984 m) Oct. 21, 1966; minimum daily low, 3.45 ft (1.052 m) Jan. 23, 1959.

EXTREMES FOR CURRENT YEAR>--Maximum daily low, 21.04 ft (6.413 m) Sept 14; minimum daily low, 5.55 ft (1.692 m) Apr. 15-18.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.65	---	---	---	7.30	6.45	6.00	7.42	10.44	15.59	17.38	20.04
2	17.65	15.25	---	---	7.30	6.40	5.95	7.56	10.55	15.50	17.49	20.22
3	17.49	15.25	---	---	7.35	6.30	5.90	7.71	10.56	15.43	17.61	20.31
4	17.46	15.15	---	---	7.35	6.20	5.85	7.85	10.76	15.36	17.84	20.40
5	17.50	14.80	---	---	7.35	6.10	5.75	7.99	10.98	15.28	18.05	20.49
6	17.59	14.45	---	---	7.35	6.05	5.75	8.13	11.16	15.20	18.17	20.59
7	17.63	14.10	---	---	7.35	6.00	5.70	8.25	11.39	15.12	18.28	20.67
8	17.65	13.85	---	---	7.35	5.95	5.70	8.41	11.63	15.06	18.41	20.71
9	17.65	13.60	---	---	7.35	5.95	5.65	8.53	11.74	15.01	18.51	20.73
10	17.65	13.40	---	---	7.35	5.95	5.55	8.64	11.74	14.96	18.62	20.78
11	17.73	13.10	---	---	7.40	5.95	5.65	8.76	11.87	14.90	18.65	20.85
12	17.81	12.85	---	---	7.40	5.95	5.55	8.83	12.06	14.86	18.65	20.93
13	17.89	12.60	---	---	7.40	5.95	5.60	8.88	12.27	14.87	18.66	21.03
14	17.90	12.45	---	---	7.40	5.95	5.60	9.14	12.52	14.87	18.73	21.04
15	17.85	12.30	---	---	7.40	6.00	5.55	9.41	12.87	14.86	18.79	18.15
16	17.51	---	---	---	7.40	6.00	5.55	9.69	13.13	15.05	18.87	15.07
17	17.30	---	---	---	7.40	6.05	5.55	9.97	13.25	15.27	18.92	14.11
18	17.10	---	---	---	7.40	6.05	5.60	10.24	13.51	15.48	18.93	13.92
19	16.84	---	---	---	7.40	6.05	5.63	10.42	13.79	15.69	18.93	13.92
20	16.50	---	---	---	7.40	6.05	5.74	10.53	14.07	15.91	18.99	14.01
21	---	---	---	---	7.35	6.05	5.88	10.75	14.33	16.03	19.08	14.09
22	---	---	---	---	7.30	6.10	6.05	10.99	14.56	16.12	19.18	14.18
23	---	---	---	---	7.30	6.10	6.21	11.21	14.73	16.29	19.30	14.18
24	---	---	---	---	7.15	6.10	6.36	11.43	14.77	16.47	19.42	14.39
25	---	---	---	---	7.05	6.10	6.50	11.47	14.93	16.66	19.45	14.64
26	---	---	---	7.40	---	6.05	6.66	11.42	15.10	16.83	19.46	14.89
27	---	---	---	7.35	---	6.05	6.80	10.95	15.31	16.99	19.52	15.13
28	---	10.78	8.14	7.30	6.65	6.05	6.96	10.37	15.51	17.07	19.63	15.34
29	---	---	---	7.30	---	6.05	7.12	10.16	15.67	17.12	19.70	15.38
30	---	---	---	7.30	---	6.05	7.26	10.27	15.67	17.22	19.77	15.25
31	---	---	---	7.30	---	6.00	---	10.27	---	17.27	19.87	---
MAX	17.90	15.25	8.14	7.40	7.40	6.45	7.26	11.47	15.67	17.27	19.87	21.04
WTR YR 1979	MEAN	12.23		HIGH	5.55		LOW	21.04				

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

GROUND-WATER RECORDS

415

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 (0.3 m), depth 125 ft (38.1 m), cased.

DATUM.--Altitude of land-surface datum is 890 ft (271 m), from topographic map. Measuring point: Floor of instrument shelter 2.50 ft (0.762 m) 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 (18.379 m) July 2, 1975; minimum daily low, 32.38 ft (9.869 m) Dec. 26, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 58.27 ft (17.761 m) Nov. 15; minimum daily low, 32.38 ft (9.869 m) Dec. 26.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57.75	56.94	54.36	34.22	40.79	45.30	48.16	51.62	55.67	55.98	52.59	52.02
2	57.60	56.87	51.72	34.68	41.09	45.63	47.86	51.28	55.19	56.03	51.95	51.36
3	57.32	56.90	49.59	35.16	41.07	45.58	47.85	51.59	54.66	56.49	52.34	50.16
4	56.96	56.85	47.17	35.65	40.77	45.49	47.80	52.11	54.45	56.36	52.77	47.73
5	56.84	57.06	44.86	36.07	40.70	45.86	47.66	51.90	54.78	56.45	51.61	46.38
6	56.99	57.32	43.43	36.71	41.06	45.85	47.98	51.78	55.22	56.64	51.59	46.38
7	56.76	57.18	42.11	36.76	40.81	45.68	47.94	52.10	55.67	56.50	51.68	47.02
8	56.63	56.98	40.17	38.14	41.08	45.93	47.84	52.83	55.78	56.06	52.14	47.32
9	56.64	57.13	37.84	39.59	41.30	46.07	47.58	53.14	55.74	55.79	52.58	47.16
10	56.82	57.22	37.15	40.55	41.62	46.09	48.79	53.88	55.34	55.65	52.35	46.02
11	56.64	57.65	36.70	41.23	41.62	46.05	49.61	53.59	56.35	56.30	52.12	46.55
12	56.81	57.65	35.77	41.60	41.54	46.11	50.01	53.93	56.32	57.50	51.51	46.72
13	56.50	57.89	35.01	41.67	41.64	46.15	49.97	53.71	56.25	58.00	50.59	46.80
14	56.19	58.02	34.80	43.36	41.59	46.25	49.55	54.00	56.05	54.61	51.30	46.24
15	56.10	58.27	34.55	43.37	41.51	46.54	49.46	53.90	56.48	53.23	51.62	45.51
16	55.94	58.01	34.46	42.65	41.84	46.54	49.40	53.76	56.56	52.53	52.09	45.11
17	56.03	57.59	34.60	42.04	41.89	46.55	49.55	53.89	56.32	52.28	52.13	44.57
18	55.83	57.33	34.32	41.93	41.86	46.55	50.08	53.87	56.68	51.75	51.17	44.78
19	55.68	57.54	33.79	41.82	41.89	46.09	49.77	53.71	56.66	52.05	51.05	45.26
20	55.70	57.56	33.22	41.40	41.99	46.57	49.60	53.71	56.13	53.51	50.92	45.25
21	56.35	57.68	33.56	41.06	43.63	47.06	49.38	54.29	56.49	53.28	51.49	44.86
22	56.54	57.31	33.59	41.87	45.28	47.07	49.06	54.25	56.66	52.50	51.01	44.70
23	56.44	56.77	33.58	41.96	45.41	47.17	48.85	54.00	56.28	52.80	51.12	44.34
24	56.40	56.47	33.29	41.74	44.98	46.79	48.94	54.14	55.68	52.84	50.76	44.78
25	56.30	56.31	32.44	41.82	44.91	46.91	48.86	53.79	55.10	52.94	51.31	45.91
26	56.66	56.11	32.38	42.19	44.72	47.24	48.85	53.63	55.16	52.87	51.73	46.09
27	56.90	55.93	33.07	42.17	44.98	47.64	49.64	54.63	55.49	52.10	51.97	45.94
28	56.68	56.40	33.79	41.76	44.98	47.79	50.09	55.35	55.93	51.74	51.24	45.41
29	56.50	56.73	34.17	40.79	---	47.66	50.40	56.24	56.15	50.60	51.32	44.89
30	56.59	56.78	34.68	40.44	---	47.64	50.92	56.54	56.16	50.85	51.14	44.32
31	56.91	---	34.68	40.25	---	47.86	---	56.23	---	51.78	51.93	---
MAX	57.75	58.27	54.36	43.37	45.41	47.86	50.92	56.54	56.68	58.00	52.77	52.02
WTR YR 1979	MEAN	49.27		HIGH	32.38		LOW	58.27				

GROUND-WATER RECORDS

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 (0.15 m), depth 62 ft (18.9 m), cased.

DATUM.--Altitude of land-surface datum is 880 ft (268 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.

PERIOD OF RECORD.--May 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 19.35 ft (5.898 m) Nov. 29-30, Dec. 6-8, 1962; minimum daily low, 3.20 ft (0.975 m) July 15, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 10.72 ft (3.267 m) Dec. 2; minimum daily low, 5.11 ft (1.558 m) Sept. 30.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.97	10.12	10.71	9.21	8.92	7.73	7.05	6.45	6.81	7.56	8.98	7.91
2	9.90	10.15	10.72	8.77	8.96	7.49	6.98	6.48	6.78	7.64	8.84	7.87
3	9.91	10.15	10.71	8.52	8.95	7.09	6.57	6.53	6.75	7.68	8.88	7.99
4	9.91	10.18	10.64	8.15	9.01	6.95	6.15	6.57	6.91	7.57	8.90	8.29
5	9.93	10.21	10.13	7.87	9.08	6.74	6.11	6.60	7.03	7.62	8.82	8.37
6	9.99	10.25	9.43	7.95	9.08	6.67	6.04	6.63	7.14	7.61	8.96	8.40
7	9.97	10.30	9.26	8.08	9.16	6.55	6.11	6.73	7.20	7.62	8.98	8.45
8	9.99	10.31	9.28	8.25	9.23	6.54	6.05	6.79	7.20	7.63	8.84	8.47
9	10.05	10.33	9.10	8.33	9.25	6.46	6.00	6.79	7.10	7.71	8.81	8.46
10	10.08	10.44	8.77	8.42	9.31	6.34	5.99	6.80	6.98	7.77	8.98	8.60
11	10.11	10.44	8.88	8.52	9.37	6.44	5.86	7.03	7.20	7.82	8.86	8.68
12	10.12	10.41	8.89	8.50	9.48	6.51	5.58	6.98	7.26	7.88	8.80	8.72
13	10.04	10.43	8.75	8.44	9.54	6.33	5.46	6.82	7.33	7.93	8.93	8.74
14	9.97	10.46	8.62	8.62	9.56	6.11	5.51	6.88	7.40	7.93	8.97	8.48
15	9.73	10.48	8.45	8.64	9.62	6.04	5.43	7.03	7.47	7.95	9.02	6.46
16	9.73	10.52	8.44	8.66	9.73	6.11	5.54	7.11	7.54	8.11	9.04	6.34
17	9.71	10.49	8.64	8.66	9.85	6.34	5.70	7.16	7.54	8.30	9.04	6.19
18	9.72	10.52	8.69	8.74	9.85	6.42	5.85	7.26	7.66	8.42	9.00	6.12
19	9.75	10.52	8.81	8.71	9.92	6.59	5.93	7.29	7.76	8.55	8.87	6.40
20	9.85	10.51	8.77	8.70	9.94	6.63	6.01	7.28	7.79	8.64	8.98	6.32
21	9.85	10.57	8.95	8.75	9.98	6.70	5.99	7.36	7.80	8.71	9.01	5.99
22	9.87	10.58	8.95	8.80	9.93	6.78	5.97	7.41	7.71	8.42	8.99	5.91
23	9.93	10.58	8.99	8.76	9.75	6.79	6.11	7.44	7.73	8.70	8.86	5.68
24	9.94	10.59	8.96	8.75	8.74	6.78	6.17	7.30	7.63	8.68	8.63	5.53
25	9.96	10.60	9.05	8.71	7.91	6.73	6.21	7.20	7.85	8.62	8.46	5.45
26	9.99	10.58	9.18	8.71	7.67	6.91	6.28	6.95	7.95	8.69	8.37	5.45
27	10.01	10.62	9.25	8.61	7.78	6.91	6.30	6.72	8.02	8.66	8.45	5.32
28	10.00	10.67	9.33	8.60	7.80	6.99	6.23	6.45	8.03	8.64	8.44	5.18
29	10.02	10.65	9.37	8.74	---	7.01	6.17	6.62	7.92	8.61	8.34	5.26
30	10.06	10.67	9.37	8.81	---	7.05	6.42	6.68	7.67	8.82	8.05	5.11
31	10.09	---	9.33	8.85	---	7.05	---	6.74	---	8.94	7.84	---
MAX	10.12	10.67	10.72	9.21	9.98	7.73	7.05	7.44	8.03	8.94	9.04	8.74
WTR YR 1979	MEAN	8.20		HIGH	5.11		LOW	10.72				

GROUND-WATER RECORDS

417

TUSCARAWAS COUNTY--Continued

403210081293100. Local number, TU-10.

LOCATION.--Lat 40°32'10", long 81°29'31", Hydrologic Unit 05040001, 1.8 mi (2.9 km) northwest of fairgrounds in Dover.

Owner: City of Dover.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled public supply water-table well, diameter 20 in (0.51 m), depth 103 ft (31.4 m), screened below 85 ft (25.9 m).

PERIOD OF RECORD.--June 1967 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT 11...	591	7.7	4	75	21	4.6	206	0	170	6.6	120

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
OCT 11...	9.1	395	.44	.01	.45	.02	.00	<10	40	2	270

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 (0.15 m), depth 42.5 ft (13.0 m), cased.

DATUM.--Altitude of land-surface datum is 920 ft (280 m), from topographic map. Measuring point: Floor of instrument shelter 3.50 ft (1.067 m) 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, 10.48 ft (3.194 m) Feb. 6, 1977; minimum daily low, 4.05 ft (1.234 m) July 13, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 9.87 ft (3.008 m) Nov. 30; minimum daily low, 6.15 ft (1.875 m) Apr. 17.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.48	9.58	9.84	8.73	8.43	7.58	7.06	6.93	7.26	8.28	9.14	8.63
2	9.41	9.64	9.84	8.44	8.39	7.38	7.00	6.96	7.36	8.36	9.14	8.57
3	9.47	9.60	9.81	8.32	8.44	7.38	6.89	6.92	7.32	8.45	9.07	8.56
4	9.49	9.63	9.61	8.23	8.43	7.13	6.75	7.02	7.38	8.17	9.11	8.64
5	9.48	9.63	9.22	8.20	8.47	7.13	6.53	7.03	7.37	8.19	9.14	8.60
6	9.50	9.66	9.09	8.19	8.51	6.98	6.55	7.10	7.51	8.31	9.15	8.67
7	9.53	9.70	9.12	8.11	8.49	6.98	6.51	7.20	7.50	8.31	9.18	8.77
8	9.46	9.70	9.00	8.25	8.58	6.99	6.53	7.21	7.63	8.33	9.25	8.81
9	9.53	9.70	8.79	8.29	8.56	6.95	6.44	7.26	7.70	8.38	9.17	8.84
10	9.54	9.75	8.59	8.36	8.67	6.82	6.49	7.23	7.63	8.42	9.26	8.85
11	9.56	9.75	8.66	8.35	8.63	6.75	6.35	7.35	7.64	8.47	9.25	8.93
12	9.58	9.75	8.64	8.45	8.77	6.83	6.35	7.43	7.66	8.42	9.22	8.90
13	9.51	9.75	8.60	8.41	8.65	6.70	6.24	7.22	7.71	8.50	9.25	8.99
14	9.42	9.81	8.46	8.44	8.75	6.64	6.26	7.20	7.71	8.52	9.27	8.61
15	9.31	9.79	8.43	8.42	8.80	6.58	6.32	7.28	7.80	8.55	9.35	7.61
16	9.30	9.83	8.43	8.39	8.80	6.64	6.24	7.34	7.94	8.64	9.29	7.65
17	9.34	9.79	8.50	8.38	8.90	6.63	6.15	7.41	7.95	8.77	9.37	7.69
18	9.31	9.81	8.52	8.51	8.79	6.69	6.30	7.46	7.96	8.73	9.40	7.54
19	9.29	9.76	8.57	8.44	8.81	6.82	6.33	7.51	---	8.84	9.31	7.58
20	9.54	9.80	8.58	8.50	8.88	6.82	6.35	7.56	7.97	8.78	9.20	7.49
21	9.53	9.85	8.69	8.43	8.77	6.85	6.49	7.58	8.04	8.83	9.23	7.49
22	9.62	9.85	8.72	8.55	8.83	6.95	6.50	7.61	8.10	8.82	9.29	7.34
23	9.60	9.72	8.82	8.42	8.60	6.97	6.55	7.61	8.07	8.83	9.02	7.24
24	---	9.78	8.69	8.46	8.28	6.90	6.62	7.60	8.10	8.92	9.00	7.25
25	---	9.82	8.73	8.42	8.11	6.94	6.54	7.45	8.20	8.91	8.90	7.06
26	---	9.82	8.77	8.31	7.63	6.90	6.74	7.39	8.19	8.96	8.83	7.04
27	---	9.85	8.89	8.24	7.62	7.02	6.74	7.25	8.23	8.92	8.95	6.96
28	---	9.86	8.92	8.25	7.66	6.98	6.70	7.15	8.29	8.95	8.84	6.89
29	---	9.85	8.90	8.42	---	7.10	6.82	7.16	8.36	8.97	8.68	6.79
30	---	9.87	8.89	8.30	---	7.12	6.87	7.24	8.29	9.00	8.58	6.74
31	---	---	8.90	8.32	---	7.17	---	7.21	---	9.10	8.49	---
MAX	9.62	9.87	9.84	8.73	8.90	7.58	7.06	7.61	8.36	9.10	9.40	8.99
WTR YR 1979	MEAN	8.25	HIGH	6.15	LOW	9.87						

GROUND-WATER RECORDS

419

TUSCARAWAS COUNTY--continued

403653081321800. Local number, TU-1.

LOCATION.--Lat 40°36'53", long 81°32'18", Hydrologic Unit 05040001, 1.3 mi (2.1 km) north of Strasburg.

Owner: Everett Waltz.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in (0.1 m), depth 23 ft (7.0 m), cased.

DATUM.--Altitude of land-surface datum is 928.24 ft (282.928 m). Measuring point: Floor of instrument shelter 0.90 ft (0.274 m) 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, 15.10 ft (4.602 m) Oct. 31, Nov. 1, 1966; minimum daily low, 6.64 ft (2.024 m) July 14, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 14.52 ft (4.426 m) Dec. 2, 3; minimum daily low, 9.42 ft (2.81 m) Apr. 15-16.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	14.51	13.13	12.30	11.30	10.76	10.35	10.95	12.57	13.51	12.49
2		---	14.52	12.88	12.36	11.18	10.75	10.40	11.03	12.62	13.53	12.55
3		14.22	14.52	12.60	12.39	11.02	10.56	10.48	11.11	12.65	13.55	12.62
4		14.23	14.46	12.38	12.46	10.87	10.58	10.51	11.17	12.65	13.59	12.68
5		14.23	14.20	12.23	12.50	10.70	10.48	10.54	11.24	12.55	13.63	12.74
6		14.24	13.95	12.14	12.52	10.55	10.33	10.62	11.30	12.52	13.66	12.81
7		14.25	13.77	12.18	12.57	10.45	10.19	10.70	11.36	12.57	13.69	12.87
8		14.27	13.70	12.24	12.62	10.37	10.01	10.74	11.43	12.63	13.73	12.92
9		14.28	13.55	12.26	12.66	10.31	9.88	10.86	11.50	12.67	13.72	12.98
10		14.29	13.22	12.32	12.68	10.22	9.70	10.93	11.56	12.70	13.74	13.02
11		14.30	13.10	12.35	12.71	10.18	9.56	11.00	11.62	12.74	13.75	13.06
12		14.31	13.00	12.38	12.77	10.19	9.49	11.10	11.68	12.77	13.75	13.10
13		14.32	12.89	12.39	12.79	10.17	9.45	11.03	11.74	12.82	13.77	13.11
14		14.33	12.79	12.50	12.83	10.12	9.43	11.02	11.80	12.85	13.80	12.45
15		14.34	12.65	12.50	12.90	10.13	9.42	11.10	11.86	12.90	13.83	10.67
16		14.35	12.65	12.46	12.96	10.11	9.42	11.17	11.92	12.94	13.85	10.59
17		14.37	12.68	12.50	12.97	10.19	9.43	11.23	11.98	12.99	13.88	10.54
18		14.38	12.72	12.51	13.02	10.27	9.44	11.28	12.03	13.03	13.89	10.55
19		14.38	12.75	12.51	13.03	10.35	9.49	11.35	12.08	13.07	13.89	10.56
20		14.39	12.81	12.51	13.06	10.43	9.55	11.42	12.14	13.11	13.79	10.56
21		14.40	12.88	12.54	13.08	10.51	9.56	11.49	12.13	13.16	13.69	10.53
22		14.42	12.91	12.54	13.02	10.57	9.77	11.54	12.16	13.19	13.68	10.50
23		14.43	12.93	12.52	12.81	10.60	9.86	11.58	12.22	13.21	13.68	10.50
24		14.43	12.97	12.49	12.30	10.63	9.94	11.59	12.29	13.23	13.27	10.48
25		14.44	13.02	12.35	12.17	10.63	10.00	11.51	12.36	13.28	12.97	10.47
26		14.45	13.06	12.27	---	10.63	10.08	11.35	12.41	13.31	12.85	10.45
27		14.46	13.13	12.20	---	10.67	10.11	11.20	12.47	13.35	12.81	10.43
28		14.47	13.14	12.15	11.42	10.68	10.15	11.07	12.50	13.39	12.78	10.43
29		14.49	13.16	12.18	---	10.71	10.18	10.95	12.52	13.42	12.77	10.35
30		14.50	13.19	12.20	---	10.71	10.25	10.88	12.55	---	12.63	10.30
31		---	13.20	12.24	---	10.75	---	10.87	---	13.47	12.57	---
MAX		14.50	14.52	13.13	13.08	11.30	10.76	11.59	12.55	13.47	13.89	13.11
WTR YR 1979	MEAN	12.17			HIGH	9.42		LOW	14.52			

GROUND-WATER RECORDS

TUSCARAWAS COUNTY--Continued

403813081325200. Local number, TU-2.

LOCATION.--Lat 40°38'13", long 81°32'52", Hydrologic Unit 05040001. State Rt. 21 at Sugar Creek near Strasburg.

Owner: Canton Water Dept.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in (0.15 m) depth 100 ft (61.0 m), cased.

DATUM.--Altitude of land-surface datum is 938.23 ft (285.973 m). Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--October 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 13.10 ft (3.993 m) Feb. 24, 25, 1977; minimum daily low, 0.93 ft (0.283 m) above land surface July 6, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 10.22 ft (3.115 m) Aug. 17, 18; minimum daily low, 2.80 ft (0.853 m) Mar. 15.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.40	9.64	10.19	7.76	---	6.67	5.30	6.23	6.67	9.03	---	8.02
2	9.40	9.68	10.19	7.58	---	6.21	5.31	6.39	6.78	8.95	---	7.95
3	9.38	9.73	10.20	7.22	---	5.63	5.29	6.58	6.86	8.90	---	7.95
4	9.37	9.75	10.17	6.50	---	4.94	5.11	6.71	6.89	9.00	---	8.05
5	9.36	9.75	10.09	5.45	---	4.43	4.93	6.77	7.07	8.95	---	8.13
6	9.43	9.75	9.55	5.10	---	4.04	4.62	6.81	7.30	8.81	---	8.32
7	9.44	9.74	8.85	5.07	---	3.68	4.39	6.80	7.54	8.77	---	8.48
8	9.44	9.74	8.64	5.33	---	3.51	4.44	6.89	7.75	8.77	---	8.49
9	9.43	9.82	8.64	5.78	---	3.30	4.49	7.00	7.92	8.75	---	8.10
10	9.44	9.87	8.64	6.13	---	3.06	4.56	7.13	7.97	8.80	---	9.54
11	9.50	9.94	8.59	6.50	---	3.01	4.58	7.28	7.97	8.88	---	7.32
12	9.56	10.00	8.10	6.81	---	2.98	4.58	7.42	7.99	8.98	---	7.70
13	9.65	10.00	8.06	7.02	---	2.98	4.53	7.48	8.08	9.08	---	8.16
14	9.65	10.00	7.88	7.25	---	2.88	4.26	7.48	8.19	9.15	---	8.22
15	9.60	10.01	7.68	7.40	---	2.80	4.19	7.47	8.31	9.15	10.12	7.43
16	9.43	10.04	7.43	7.53	---	2.92	4.07	7.54	8.42	9.12	10.17	5.77
17	9.27	10.06	6.82	7.68	---	3.16	4.07	7.67	8.47	9.12	10.22	4.94
18	9.27	10.06	6.78	7.76	---	3.48	4.18	7.78	8.52	9.25	10.22	4.88
19	9.29	10.06	6.81	7.82	---	3.75	4.29	7.84	---	---	10.18	4.85
20	9.33	10.07	6.82	7.88	---	4.02	4.51	7.85	8.79	---	10.05	4.85
21	---	10.07	6.70	7.93	9.00	4.19	4.74	7.90	8.89	---	10.02	4.64
22	---	10.10	6.77	7.97	9.03	4.40	4.89	7.97	8.93	---	10.05	4.28
23	---	10.15	7.03	8.00	9.03	4.54	5.06	8.05	8.94	---	10.06	3.92
24	---	10.15	7.08	8.03	8.93	4.67	5.34	8.14	8.89	---	10.06	3.53
25	---	10.15	7.15	8.04	8.53	4.73	5.59	8.17	8.83	---	10.00	3.32
26	---	10.06	7.15	7.93	8.10	4.79	5.92	8.17	8.83	---	9.70	3.33
27	---	9.99	7.20	7.75	7.56	4.88	5.95	7.73	8.91	---	9.34	3.33
28	9.66	9.97	7.55	7.68	7.26	4.98	5.95	7.24	9.01	---	9.22	3.26
29	9.65	10.10	7.63	7.76	---	5.10	5.94	6.73	9.11	---	9.21	3.27
30	9.58	10.15	7.72	7.83	---	5.19	6.07	6.55	9.12	---	9.10	3.24
31	9.58	---	7.76	---	---	5.27	---	6.51	---	---	8.45	---
MAX	9.66	10.15	10.20	8.04	9.03	6.67	6.07	8.17	9.12	9.25	10.22	9.54
WTR YR 1979	MEAN	7.47		HIGH	2.80		LOW	10.22				

GROUND-WATER RECORDS

421

TUSCARAWAS COUNTY--Continued.

403823081324200. Local number, TU-5.

LOCATION.--Lat 40°38'23"N, long 81°32'42"W, 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 (0.15 m), depth 100 ft (30.5 m), cased.

DATUM.--Altitude of land-surface datum is 937.93 ft (285.881). Measuring point: Floor of instrument shelter 4.00 ft (1.219 m) 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 (3.865 m) Feb. 14, 24, 1977; minimum daily low, 1.05 ft (0.320 m) July 9, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 9.87 ft (3.008 m) Aug. 16; minimum daily low, 2.04 ft (0.622 m) Mar. 13.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.70	9.15	9.53	6.55	---	5.25	4.42	---	6.66	8.45	9.52	7.23
2	8.78	9.15	9.56	5.98	---	---	4.58	---	6.67	8.59	9.54	7.38
3	8.78	9.14	9.50	5.79	---	4.17	4.31	---	6.74	8.67	9.57	7.60
4	8.70	9.15	9.38	5.04	---	3.24	3.92	---	6.90	8.35	9.55	7.91
5	8.95	9.10	8.50	5.04	---	3.05	3.79	---	7.08	8.24	9.52	7.85
6	9.06	9.20	7.92	---	---	---	3.43	---	7.32	8.29	9.54	8.10
7	8.95	9.20	7.95	---	---	2.45	3.31	---	7.52	8.37	9.66	8.21
8	8.45	9.28	7.99	---	---	2.57	3.86	---	7.60	8.25	9.73	7.95
9	8.95	9.33	7.90	---	---	2.53	3.98	---	7.63	8.44	9.77	5.94
10	8.98	9.40	7.05	---	---	2.50	3.90	---	7.45	8.49	9.82	6.01
11	9.13	9.41	7.08	---	---	2.46	3.40	---	7.54	8.64	9.74	7.24
12	9.12	9.25	6.90	---	---	2.31	3.33	---	7.75	8.74	9.50	7.64
13	9.22	9.33	6.89	6.78	---	2.04	3.43	---	7.86	8.84	9.55	8.00
14	8.74	9.43	6.32	6.71	---	2.18	3.54	---	8.01	8.70	9.70	7.70
15	8.66	9.60	5.69	---	---	2.22	3.53	---	8.11	8.25	9.81	3.88
16	8.64	9.55	6.06	---	---	2.60	3.55	---	8.14	8.60	9.87	3.58
17	9.15	9.38	5.92	7.20	---	2.85	3.74	7.51	---	8.87	9.52	3.94
18	9.19	9.41	5.86	7.27	---	3.17	---	7.60	---	9.00	9.33	4.06
19	9.11	9.51	5.59	---	---	3.41	---	7.62	---	9.07	9.43	4.34
20	9.00	9.55	6.33	---	---	3.67	---	7.60	8.50	9.15	9.54	3.87
21	8.50	9.59	6.45	7.35	8.14	3.85	---	7.67	8.53	9.20	9.85	3.42
22	8.95	9.45	6.50	7.50	8.11	3.79	---	7.75	8.52	9.22	9.84	3.01
23	---	9.35	6.63	7.38	7.97	3.95	---	7.88	8.09	9.23	9.72	2.64
24	---	9.25	6.38	7.44	7.46	4.25	---	7.90	7.95	9.32	9.27	2.52
25	---	9.25	6.61	6.71	6.94	3.80	---	7.52	8.44	9.37	8.61	2.57
26	---	9.25	6.75	6.87	6.08	4.42	---	6.70	8.57	9.42	8.35	2.53
27	---	9.51	6.88	7.05	5.81	4.51	---	6.60	8.70	9.45	8.60	2.42
28	8.50	9.59	7.14	7.02	5.78	4.72	---	5.81	8.79	9.43	8.63	2.25
29	8.95	9.60	6.98	7.28	---	4.54	---	6.08	8.80	9.27	8.05	2.21
30	9.03	9.60	7.03	7.33	---	4.77	---	6.28	8.44	9.42	7.62	2.22
31	9.16	---	7.07	7.58	---	4.42	---	6.48	---	9.48	7.25	---
MAX	9.22	9.60	9.56	7.58	8.14	5.25	4.58	7.90	8.80	9.48	9.87	8.21
WTR YR 1979	MEAN	7.21		HIGH	2.04		LOW	9.87				

GROUND-WATER RECORDS

UNION COUNTY

401826083255200. Local number, U-4.

LOCATION.--Lat 40°18'26", long 83°25'52", Hydrologic Unit 05060001, 2.6 mi (4.2 km) southeast of Raymond.

Owner: State of Ohio.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in (0.3 m), depth 350 ft (106.7 m), cased to 37 ft (11.3 m).

DATUM.--altitude of land-surface datum is 1,040 ft (317 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) above land-surface datum.

PERIOD OF RECORD.--January 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 24.34 ft (7.419 m) Sept. 11, 1977; minimum daily low, 19.32 ft (5.889 m) Feb. 24, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 24.01 ft (7.318 m) Nov. 14; minimum daily low, 20.25 ft (6.172 m) Apr. 14.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.86	23.88	23.81	22.33	22.88	21.39	22.02	21.84	21.92	22.38	22.07	
2	23.85	23.88	23.82	22.01	22.90	21.36	21.74	21.81	21.94	22.50	21.59	
3	23.79	23.86	23.80	22.21	22.86	21.11	21.50	21.76	21.90	22.52	21.68	
4	23.83	23.84	23.16	22.35	22.90	20.40	21.53	21.81	21.91	22.53	21.79	
5	23.81	23.81	23.01	22.38	22.92	20.44	21.05	21.84	21.93	22.65	21.81	
6	23.78	23.83	23.19	22.34	22.87	20.60	21.31	21.84	21.98	22.71	21.79	
7	23.83	23.88	23.17	22.35	22.82	20.67	21.36	21.86	22.04	22.72	21.82	
8	23.89	23.90	23.08	22.53	22.93	20.86	21.24	21.93	22.14	22.68	21.93	
9	23.92	23.87	22.66	22.60	22.98	20.92	21.23	21.99	22.14	22.62	21.96	
10	23.92	23.92	22.86	22.70	23.03	20.94	21.36	22.02	22.07	22.58	21.87	
11	23.83	23.96	22.87	22.69	23.01	21.13	21.39	22.02	22.16	22.57	21.77	
12	23.81	23.96	22.88	22.63	22.97	21.28	21.19	22.05	22.21	22.61	21.78	
13	23.78	23.93	22.93	22.53	22.99	21.27	21.11	22.10	22.28	22.57	21.83	
14	23.75	24.01	22.93	22.74	22.94	21.39	20.25	22.14	22.29	22.60	21.94	
15	23.73	23.99	22.91	22.78	22.84	21.59	20.48	22.19	22.31	22.72	22.02	
16	23.88	23.98	22.95	22.72	23.07	21.64	20.57	22.29	22.29	22.76	22.10	
17	23.91	23.90	23.05	22.66	23.20	21.66	20.94	22.30	22.25	22.82	22.08	
18	23.89	23.89	23.06	22.77	23.09	21.66	20.99	22.24	22.38	22.84	22.01	
19	23.78	23.95	23.00	22.75	23.08	21.66	21.06	22.21	22.43	22.89	22.08	
20	23.74	23.96	22.88	22.53	23.02	21.73	21.13	22.21	22.46	22.89	22.14	
21	23.80	23.93	22.93	22.47	22.94	21.78	21.24	22.32	22.37	22.90	21.68	
22	23.80	23.89	22.96	22.73	22.87	21.75	21.35	22.38	22.37	22.89	21.55	
23	23.85	23.77	23.03	22.67	22.50	21.64	21.40	22.32	22.43	22.99	21.51	
24	23.86	23.86	22.90	22.49	21.46	21.61	21.39	22.28	22.51	23.00	21.31	
25	23.71	23.84	23.02	22.68	21.11	21.82	21.38	22.20	22.60	22.90	21.42	
26	23.78	23.81	23.15	22.68	21.31	22.01	21.35	21.77	22.59	22.96	21.43	
27	23.81	23.74	23.24	22.65	21.37	22.11	21.46	21.65	22.56	22.92	21.29	
28	23.90	23.87	23.24	22.69	---	22.09	21.62	21.69	22.55	22.19	21.23	
29	23.94	23.83	23.22	22.79	---	21.99	21.70	21.77	22.47	21.93	20.90	
30	23.93	23.82	23.17	22.81	---	21.98	21.75	21.85	22.37	21.93	21.01	
31	23.89	---	23.15	22.75	---	22.00	---	21.89	---	22.04	---	
MAX	23.94	24.01	23.82	22.81	23.20	22.11	22.02	22.38	22.60	23.00	22.14	
WTR YR 1979	MEAN	22.49		HIGH	20.25		LOW	24.01				

GROUND-WATER RECORDS

423

VINTON COUNTY

391452082282900. Local number, V-1.

LOCATION.--Lat 39°14'52", long 82°28'29", Hydrologic Unit 05090101, State Highway garage in Vinton.

Owner: Ohio Department of Highways.

AQUIFER.--Sandstone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in (0.15 m), depth 218 ft (66.4 m), cased.

DATUM.--Altitude of land-surface datum is 730 ft (223 m) from topographic map. Measuring Point: Top of platform 2.50 ft (0.762 m) 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 (28.417 m); Apr. 12, 1979; minimum daily low, 49.55 ft (15.103 m) Mar. 20, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 93.23 ft (28.417 m) Apr. 12; minimum daily low, 80.24 ft (24.457 m), Sept. 29.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89.02	89.03	90.70	91.09	91.45	92.24	92.78	91.09	88.08	85.70	83.35	81.88
2	89.02	89.03	90.78	91.17	91.77	92.25	92.57	90.95	88.05	85.64	83.34	81.88
3	89.02	89.03	90.79	91.21	91.59	92.15	92.85	90.74	87.90	85.62	83.49	81.88
4	89.02	89.03	90.49	91.35	91.67	92.22	92.77	90.64	87.65	85.52	83.65	81.88
5	89.02	89.03	90.78	91.44	91.77	92.33	92.77	90.52	87.49	85.63	83.69	81.88
6	89.02	89.03	91.06	91.36	91.79	92.39	93.09	90.51	87.49	85.67	83.47	81.37
7	89.02	89.03	91.15	91.20	91.70	92.36	93.11	90.45	87.38	85.60	83.29	81.41
8	89.02	89.03	91.08	91.21	91.88	92.42	92.98	90.31	87.39	85.41	83.27	81.41
9	89.03	89.03	91.27	91.24	91.92	92.49	92.91	90.28	87.39	85.19	83.29	81.37
10	89.03	89.03	91.31	91.31	92.00	92.55	93.13	90.18	87.40	84.99	83.20	81.17
11	89.03	89.03	91.31	91.27	92.02	92.52	93.17	90.10	87.30	84.93	83.04	81.12
12	89.02	89.03	91.26	91.10	91.82	92.68	93.23	90.01	87.13	84.88	83.00	81.11
13	89.03	89.03	91.19	90.94	91.87	92.65	93.05	89.91	87.17	84.86	82.94	81.07
14	89.02	90.55	91.29	91.10	91.87	92.70	92.93	89.82	87.04	84.86	82.82	80.94
15	89.02	90.57	91.19	91.19	91.74	92.83	92.76	89.72	87.01	84.86	82.82	81.04
16	89.02	90.48	91.17	91.25	92.16	92.91	92.56	89.70	86.92	84.86	82.82	81.04
17	89.03	90.48	91.21	91.16	92.35	93.00	92.49	89.75	86.74	84.86	82.82	81.01
18	89.03	90.55	91.21	91.24	92.26	92.90	92.53	89.56	86.77	84.36	82.69	80.88
19	89.03	90.56	91.13	91.26	92.22	92.84	92.43	89.52	86.93	84.27	82.65	80.81
20	89.03	90.49	91.16	90.98	92.22	92.93	92.25	89.41	86.86	84.22	82.44	80.74
21	89.03	90.34	91.31	90.85	92.18	92.92	92.06	89.23	86.73	84.19	82.26	80.64
22	89.03	90.37	91.35	91.14	92.18	92.92	92.03	89.18	86.58	84.19	82.24	80.54
23	89.03	90.26	91.40	91.08	92.17	92.78	91.92	89.07	86.60	84.04	82.21	80.43
24	89.03	90.21	91.37	90.95	92.30	92.70	91.79	88.99	86.53	83.97	82.11	80.44
25	89.03	90.20	91.27	91.22	92.25	92.76	91.56	88.94	86.45	83.84	82.20	80.32
26	89.03	90.22	91.22	91.32	91.96	92.87	91.36	88.84	86.25	83.67	82.11	80.35
27	89.03	90.25	91.34	91.33	92.15	93.01	91.37	88.73	86.24	83.72	81.89	80.38
28	89.03	90.53	91.37	91.17	92.16	93.04	91.31	88.56	86.04	83.64	81.88	80.27
29	89.03	90.53	91.37	91.27	---	93.14	91.31	88.40	85.93	83.52	81.88	80.24
30	89.03	90.66	91.36	91.28	---	93.16	91.04	88.34	85.74	83.51	81.88	80.27
31	89.03	---	91.33	91.26	---	92.89	---	88.29	---	83.43	81.88	---
MAX	89.03	90.66	91.40	91.44	92.35	93.16	93.23	91.09	88.08	85.70	83.69	81.88
WTR YR 1979	MEAN	88.59		HIGH	80.24		LOW	93.23				

GROUND-WATER RECORDS

WARREN COUNTY

392511084182500. Local number, W-14.

LOCATION.--Lat 39°25'11", long 84°18'31", Hydrologic Unit 05090202, 3.3 mi (5.3 km) east of Monroe.

Owner: State of Ohio.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in (0.15 m), depth drilled 81 ft (24.7 m), present depth 73 ft (22.3 m) cased to 75 ft (22.9 m). depth drilled 81 ft (24.7 m), present depth 73 ft (22.3 m), cased to 75 ft (22.9 m).

DATUM.--Altitude of land-surface datum is 660 ft (201 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m), above land-surface datum.

PERIOD OF RECORD.--July 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 16.48 ft (5.023 m) Sept. 29, 1977; minimum daily low, 6.43 ft (1.960 m) Feb. 19-20, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 12.45 ft (3.795 m) Oct. 12; minimum daily low, 6.45 ft (1.966 m) Sept. 16.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.19	11.86	11.85	9.27	9.63	7.14	9.48	8.77	10.11	11.26	11.26	9.52
2	12.25	11.88	11.87	8.30	9.69	7.36	9.14	8.88	10.20	11.36	9.02	9.60
3	12.23	11.89	11.80	8.58	9.62	7.52	8.54	8.89	10.20	11.35	8.13	9.70
4	12.31	11.92	10.71	8.95	9.76	7.67	8.55	8.80	10.29	11.34	7.91	9.85
5	12.26	11.98	10.62	8.94	9.78	7.89	8.04	8.61	10.40	11.36	8.02	9.97
6	12.32	12.06	10.74	8.92	9.76	8.01	8.27	8.59	10.56	11.39	8.64	10.12
7	12.40	12.08	10.72	8.79	9.85	8.04	8.30	8.80	10.58	11.44	9.05	10.15
8	12.42	12.08	10.64	9.26	9.94	8.17	8.23	8.94	10.49	11.39	9.41	10.21
9	12.41	12.09	9.07	9.57	10.04	8.24	8.31	9.00	10.33	11.30	9.55	10.23
10	12.43	12.09	9.14	9.59	10.06	8.23	8.38	9.12	10.36	11.43	9.62	10.34
11	12.43	12.09	9.20	9.58	10.05	8.54	8.39	9.23	10.43	11.44	9.55	10.43
12	12.45	12.16	9.22	9.59	10.10	8.59	8.30	9.24	10.58	11.44	9.10	10.49
13	12.39	12.16	9.38	9.47	10.12	8.56	8.10	9.19	10.68	11.42	9.24	10.50
14	11.91	12.28	9.41	9.67	10.08	8.78	7.75	9.37	10.72	11.43	9.47	9.55
15	11.50	12.25	9.54	9.65	10.06	8.87	7.40	9.55	10.81	11.43	9.61	7.20
16	11.42	12.24	9.61	9.68	10.25	8.91	7.22	9.59	10.86	11.54	9.77	6.45
17	11.45	12.12	9.62	9.60	10.25	8.94	7.30	9.65	10.93	11.64	9.82	6.68
18	11.40	11.95	9.63	9.72	10.14	9.03	7.54	9.75	11.07	11.70	9.92	7.13
19	11.37	11.88	9.73	9.65	10.25	9.02	7.77	9.88	11.07	11.80	9.97	7.46
20	11.47	11.77	9.71	9.34	10.25	9.00	7.94	9.93	11.03	11.87	10.00	7.74
21	11.54	11.75	9.87	9.36	10.07	9.07	8.08	10.13	11.04	11.93	9.04	7.94
22	11.58	11.71	9.94	9.56	9.76	9.08	8.08	10.15	11.02	11.92	9.18	8.13
23	11.71	11.61	9.93	9.50	8.66	9.06	8.18	10.11	11.14	11.66	9.31	8.22
24	11.66	11.66	9.80	9.26	7.87	9.08	8.23	10.07	11.15	11.52	9.28	8.39
25	11.61	11.64	9.91	9.34	7.42	9.22	8.30	10.02	11.19	11.33	9.43	8.51
26	11.81	11.61	10.07	9.33	7.15	9.36	8.34	9.90	11.21	11.29	9.46	8.56
27	11.78	11.64	10.08	9.28	7.00	9.31	8.47	9.87	11.29	11.27	9.31	8.67
28	11.85	11.80	10.14	9.40	6.85	9.36	8.58	9.91	11.36	11.23	9.32	8.63
29	11.85	11.77	10.15	9.54	---	9.43	8.57	10.00	11.37	11.17	9.28	8.49
30	11.84	11.86	10.11	9.55	---	9.41	8.59	10.13	11.38	11.19	9.33	8.46
31	11.80	---	10.08	9.57	---	9.51	---	10.11	---	11.25	9.47	---
MAX	12.45	12.28	11.87	9.72	10.25	9.51	9.48	10.15	11.38	11.93	11.26	10.50
WTR YR 1979	MEAN	9.97	HIGH	6.45	LOW	12.45						

GROUND-WATER RECORDS

425

WARREN COUNTY--Continued.

392712084191700. Local number, W-5.

LOCATION.--Lat 39°27'12", long 84°19'17", Hydrologic Unit 05080202, Union Rd., 2 mi (3.2 km) east of Monroe.

Owner: Bob Proeschel.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in (0.3 m), depth 121 ft (36.9 m), cased.

DATUM.--Altitude of land-surface datum is 660 ft (201 m), from topographic map. Measuring point: Floor of instrument shelter 3.50 ft (1.067 m) above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--March 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 40.07 ft (12.213 m) Oct. 19, 1977; minimum daily low, 17.70 ft (5.395 m) Apr. 30, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 35.10 ft (10.698 m) Dec. 29; minimum daily low, 30.55 ft (9.312 m) Apr. 25, Sept. 28, 30.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34.08	34.07	34.40	34.30	33.95	33.10	31.70	31.35	31.30	32.20	32.40	31.85
2	33.99	34.09	34.55	34.70	33.90	33.20	31.85	31.00	31.45	32.25	32.50	31.65
3	33.91	34.09	34.20	34.75	33.70	32.70	32.20	30.70	31.45	32.20	32.30	31.75
4	33.95	34.07	34.45	34.50	33.75	32.60	31.70	30.75	31.45	32.00	32.55	31.75
5	33.90	34.09	34.50	34.50	33.65	32.80	32.10	30.85	31.60	32.45	32.30	31.85
6	34.00	34.18	34.75	34.60	33.60	32.60	32.05	30.75	31.60	32.35	32.30	32.00
7	34.03	34.25	34.55	34.25	33.50	32.40	31.70	31.00	31.80	32.30	32.35	32.05
8	33.84	34.23	34.55	34.50	33.65	32.50	31.15	31.05	31.60	32.25	32.20	32.15
9	34.08	34.23	34.65	34.45	33.85	32.65	31.50	31.15	31.25	32.35	32.40	31.95
10	34.03	34.30	34.80	34.45	33.70	32.35	31.50	31.15	30.90	32.25	32.20	32.25
11	33.90	34.40	34.70	34.40	33.60	32.25	31.30	31.25	31.00	32.40	32.20	32.55
12	34.00	34.40	34.70	34.10	33.45	32.60	31.30	31.70	31.35	32.40	31.90	32.55
13	34.40	34.37	34.65	33.80	33.55	32.30	31.10	31.45	31.35	32.45	31.90	32.40
14	33.95	34.43	34.65	34.35	33.35	32.35	31.00	31.60	31.40	32.45	32.15	32.30
15	34.01	34.42	34.45	34.45	33.45	32.55	31.30	31.70	32.20	32.70	32.15	32.40
16	34.11	34.40	34.50	34.60	33.95	32.60	31.10	31.70	32.00	32.60	31.95	32.15
17	34.13	34.38	34.75	34.20	33.80	32.50	31.00	31.55	31.80	32.40	31.95	31.95
18	33.95	34.39	34.50	34.55	33.50	32.20	31.20	31.55	32.15	32.80	31.70	31.80
19	33.79	34.36	34.50	34.00	33.75	32.05	31.10	31.55	32.20	32.90	31.65	31.70
20	33.80	34.40	34.75	33.50	33.50	32.30	31.10	31.80	31.95	32.60	31.65	31.70
21	33.91	34.40	34.80	33.80	33.60	32.10	31.05	31.75	31.85	32.80	31.75	31.40
22	33.89	34.39	34.70	34.30	33.55	32.25	30.90	31.60	32.05	32.95	31.75	31.80
23	34.01	34.29	34.70	33.75	33.25	31.80	30.85	31.65	32.20	32.80	31.80	31.60
24	---	34.12	34.55	33.40	33.55	32.10	30.70	31.40	31.90	32.65	31.85	31.55
25	33.76	34.13	34.60	---	33.00	32.20	30.55	31.15	32.15	32.40	31.85	31.55
26	34.00	34.00	35.05	---	33.25	32.55	30.60	31.25	32.00	32.60	31.75	31.25
27	34.35	33.90	34.90	---	33.00	32.60	30.85	31.10	32.05	32.60	32.00	30.90
28	34.10	33.71	34.80	34.05	33.15	32.15	30.75	31.40	32.15	32.65	31.60	30.55
29	34.15	33.65	35.10	34.15	---	32.25	30.75	31.25	32.40	32.55	31.60	30.60
30	34.10	34.55	34.80	34.00	---	32.15	30.90	31.30	32.10	32.55	31.95	30.55
31	34.00	---	34.40	33.90	---	32.20	---	31.45	---	32.65	32.00	---
MAX	34.40	34.55	35.10	34.75	33.95	33.20	32.20	31.80	32.40	32.95	32.55	32.55
WTR YR 1979	MEAN	32.79		HIGH	30.55		LOW	35.10				

GROUND-WATER RECORDS

WASHINGTON COUNTY

392458081271100. Local number, WA-1.

LOCATION.--Lat 39°24'58", long 81°27'11", Hydrologic Unit 05040004, at Third and Putnam Streets, Marietta.

Owner: City of Marietta.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in (0.15 m), depth 63 ft (19.2 m), cased.

DATUM.--Altitude of land-surface datum is 610 ft (186 m), from topographic map. Measuring point: Floor of instrument shelter 4.80 ft (1.463 m) above land-surface datum.

REMARKS.--Prior to water year 1978, well depth reported as 42 ft (12.8 m).

PERIOD OF RECORD.--May 1942 to June 1974, May 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 30.70 ft (9.357 m) Sept. 9, 1962; minimum daily low, 18.83 ft (5.739 m) Mar. 25, 1945.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 27.61 ft (8.416 m) Nov. 14-15; minimum daily low, 19.15 ft (5.837 m) Mar. 7.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.43	27.39	27.35	24.54	23.35	21.09	22.16	23.53		---		
2	27.42	27.41	27.36	23.91	23.35	21.07	21.99	23.70		---		
3	27.41	27.44	27.31	23.10	23.35	20.83	21.92	23.72		---		
4	27.42	27.44	27.18	22.55	24.10	20.60	21.41	23.66		---		
5	27.41	27.46	26.76	22.84	24.22	20.49	21.36	23.57		---		
6	27.43	27.47	26.43	22.88	24.33	19.96	21.46	23.67		---		
7	27.42	27.46	26.36	22.96	24.58	19.15	21.51	23.86		---		
8	27.43	27.48	26.31	22.96	24.60	19.16	21.51	23.98		---		
9	27.46	27.50	25.83	22.92	24.72	19.31	21.73	24.14		---		
10	27.46	27.55	24.77	22.98	24.85	19.50	21.46	24.19		---		
11	27.43	27.55	24.07	23.04	24.92	19.60	20.72	24.33		---		
12	27.46	27.58	24.48	23.09	25.06	19.66	20.55	24.36		---		
13	27.47	27.59	24.60	23.19	25.12	19.69	20.76	24.31		---		
14	27.43	27.61	24.62	23.44	25.15	20.03	20.76	24.24		---		
15	27.38	27.61	24.69	23.30	25.19	20.17	20.89	24.29		---		
16	27.34	27.58	24.75	23.22	25.30	20.20	21.05	24.34		---		
17	27.36	27.53	24.80	23.30	25.28	20.30	21.13	24.48		---		
18	27.37	27.52	24.82	23.42	25.10	20.68	21.23	24.52		---		
19	27.37	27.50	24.83	23.39	25.15	20.95	21.28	24.61		---		
20	27.41	27.49	24.83	23.49	25.21	21.23	21.62	24.68		---		
21	27.42	27.53	24.87	23.32	25.26	21.25	21.99	24.78		---		
22	27.43	27.55	24.56	23.04	25.25	21.42	22.21	24.81		---		
23	27.46	27.52	24.33	22.96	24.97	21.55	22.36	24.85		---		
24	27.47	27.57	24.46	23.06	24.40	21.90	22.36	24.82		26.28		
25	27.48	27.58	24.52	22.92	23.49	21.98	22.36	24.66		26.30		
26	27.48	27.55	24.29	22.63	22.43	22.05	23.07	24.31		---		
27	27.46	27.54	24.44	22.66	21.06	22.05	23.07	23.91		---		
28	27.40	27.51	24.50	22.81	20.53	22.14	23.04	23.59		---		
29	27.41	27.39	24.57	22.93	---	22.30	23.16	23.46		---		
30	27.43	27.35	24.61	23.07	---	22.34	23.47	23.55		---		
31	27.40	---	24.60	23.29	---	22.29	---	23.61		---		
MAX	27.48	27.61	27.36	24.54	25.30	22.34	23.47	24.85		26.30		
WTR YR 1979	MEAN	24.30		HIGH	19.15		LOW	27.61				

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

GROUND-WATER RECORDS

427

WASHINGTON COUNTY--Continued

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 (0.2 m) depth 50 ft (15.2 m), cased.

DATUM.--Altitude of land-surface datum is 605 ft (184 m), from topographic map. Measuring point: Floor of instrument shelter 3.00 ft (0.914 m) 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, 33.73 ft (10.281 m) Feb. 11, 1977; minimum daily low, 18.72 ft (5.706 m) June 28, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 32.76 ft (9.985 m) Nov. 14; minimum daily low, 13.35 ft (4.069 m) Feb. 27.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31.13	32.45	32.37	28.06	28.05	20.21	26.85	28.67	28.30	30.50	30.99	29.32
2	31.67	32.56	32.37	25.57	28.88	21.52	---	28.90	28.68	30.92	31.17	29.34
3	31.59	32.42	31.32	24.24	29.10	21.37	---	28.90	28.21	30.84	31.10	29.54
4	31.66	31.56	30.59	23.45	29.40	21.73	---	29.35	29.58	30.40	31.09	29.51
5	31.72	31.27	29.66	25.05	29.58	21.73	---	28.58	29.81	30.68	30.83	29.90
6	32.05	32.43	29.90	25.42	29.58	20.75	26.17	28.77	29.85	30.43	30.91	30.15
7	32.16	32.50	30.05	27.05	29.75	19.08	25.55	29.15	30.28	30.56	30.94	30.15
8	32.35	32.65	29.97	25.80	30.03	20.73	25.77	29.69	30.25	30.42	31.12	30.08
9	31.70	32.65	27.39	25.88	30.94	21.63	25.91	29.94	30.24	30.59	31.21	30.00
10	31.85	31.77	21.15	26.57	31.00	22.12	25.18	30.44	29.92	30.68	31.21	30.30
11	32.00	30.84	23.52	26.93	30.42	22.47	23.90	30.87	30.25	30.58	30.90	30.60
12	32.15	30.69	25.26	27.83	30.52	22.80	23.97	30.68	30.44	30.73	30.29	30.35
13	32.16	32.68	26.02	27.81	30.67	23.54	24.02	30.25	30.41	30.84	30.40	30.68
14	32.13	32.76	26.51	28.07	31.39	23.78	24.18	29.93	30.25	30.43	30.22	30.86
15	30.75	31.73	27.11	27.76	31.18	24.00	24.45	29.16	30.77	30.41	30.59	30.60
16	30.50	31.88	27.10	27.60	31.32	24.25	24.55	30.29	30.58	31.12	30.68	29.57
17	31.80	31.92	27.65	27.81	31.30	24.47	24.99	30.13	30.42	31.35	30.71	30.54
18	32.40	31.83	27.99	27.91	31.00	25.00	25.22	30.74	30.97	31.38	30.53	30.19
19	32.39	31.73	28.14	28.17	30.96	25.31	25.45	30.54	31.06	31.24	30.22	30.71
20	32.20	31.68	28.23	28.26	31.07	26.64	26.04	30.23	31.17	31.34	30.11	30.25
21	31.13	31.75	28.09	28.10	31.08	26.43	26.43	30.22	30.94	31.29	29.66	30.38
22	30.80	31.77	27.64	26.88	31.09	25.96	26.33	30.61	31.04	31.27	29.90	30.44
23	30.91	31.73	27.88	27.06	30.74	27.04	26.98	30.77	30.70	31.34	29.93	29.77
24	32.47	31.75	28.23	27.19	29.57	26.75	27.03	30.39	30.91	31.44	30.00	30.15
25	30.91	31.62	27.69	26.71	27.00	26.82	27.30	29.73	30.62	30.76	29.36	30.28
26	32.47	31.53	28.76	26.46	22.35	26.92	27.75	29.06	30.80	31.26	29.01	30.42
27	32.51	32.31	28.41	26.38	13.35	27.04	27.91	27.95	30.80	31.40	28.30	30.47
28	32.44	32.31	28.60	26.65	13.47	27.33	27.88	26.90	30.58	31.43	28.77	30.57
29	32.35	32.11	28.68	27.27	---	27.22	27.96	26.20	30.90	30.62	28.80	29.39
30	31.37	32.16	28.46	27.73	---	27.33	28.30	27.61	30.95	30.45	28.89	28.40
31	31.50	---	28.97	28.25	---	27.28	---	27.84	---	30.80	29.15	---
MAX	32.51	32.76	32.37	28.26	31.39	27.33	28.30	30.87	31.17	31.44	31.21	30.86
WTR YR 1979	MEAN	29.09		HIGH	13.35		LOW	32.76				

GROUND-WATER RECORDS

WASHINGTON COUNTY--Continued

392556081281500. Local number WA-10.

LOCATION.--Lat 39°25'56", long 81°28'15", Hydrologic Unit 05040004, on left bank of Muskingum River 0.2 mi (0.3 km) north of fairgrounds in Marietta.

Owner: City of Marietta.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled public supply water-table well, diameter 17 in (0.43 m), depth 56 ft (17.1 m), screened below 34 ft (10.4 m).

PERIOD OF RECORD.--June 1973 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	FLOW RATE (GPM)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LILITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 09...	1000	747	7.3	0	75	21	30	168	0	140	13	130

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
NOV 09...	66	499	.06	.00	.06	.06	.00	<10	310	5	970

GROUND-WATER RECORDS

429

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 (0.2 m) depth 20 ft (6.1 m), case1.

DATUM.--Altitude of land-surface datum is 1040 ft (317 m), from topographic map. Measuring point: Floor of instrument shelter 3.50 ft (1.067 m) 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 (4.929 m) Jan. 27, 29, 1956; minimum daily low, 10.55 ft (3.216 m) Jan. 22, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 14.67 ft (4.471 m) Feb. 21; minimum daily low, 10.57 ft (3.222 m) Sept. 14.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	14.48	11.15	13.16	11.20	12.98	---	12.55	11.85	13.94	12.35
2	---	---	14.48	11.15	13.33	11.00	12.98	---	12.70	12.00	13.95	12.52
3	---	---	14.48	---	13.43	11.13	11.23	---	12.75	12.25	13.95	12.69
4	---	---	11.33	---	13.57	11.02	11.51	---	12.99	12.28	13.98	12.87
5	---	---	11.92	---	13.68	11.13	11.14	---	13.10	11.72	13.99	13.00
6	---	---	12.05	---	13.79	11.43	11.36	---	13.18	11.93	14.01	13.12
7	---	---	12.23	---	13.85	11.70	11.80	---	13.25	12.05	14.02	13.19
8	---	---	12.26	---	13.96	11.84	11.88	---	13.27	12.22	14.03	13.25
9	---	---	11.15	---	14.05	11.97	11.47	---	13.31	12.32	14.05	13.34
10	---	---	11.73	---	14.10	12.07	11.13	---	13.35	12.38	14.05	13.43
11	---	---	11.98	---	14.17	12.16	11.33	---	13.40	12.46	14.04	13.51
12	---	---	12.08	---	14.22	12.30	11.48	---	13.45	12.51	14.03	13.58
13	---	---	12.16	---	14.27	12.45	11.80	---	13.53	12.58	14.01	13.62
14	---	---	12.31	---	14.33	12.54	11.55	---	13.62	12.65	14.01	10.57
15	---	---	12.44	---	14.38	12.66	11.19	---	13.70	12.75	14.02	11.00
16	---	---	12.58	---	14.44	12.81	11.55	14.02	13.77	12.85	14.04	11.15
17	---	---	12.74	---	14.49	12.95	11.90	14.07	---	12.96	14.06	---
18	---	---	12.88	---	14.54	13.07	12.01	14.12	---	13.05	14.08	11.83
19	13.66	---	12.97	---	14.58	13.19	---	14.14	13.95	13.16	14.07	11.95
20	---	---	13.05	---	14.63	13.29	---	14.17	13.99	13.27	13.94	12.07
21	---	---	13.10	---	14.67	13.41	---	14.18	14.00	13.36	13.89	12.15
22	---	---	13.17	---	11.17	13.50	---	14.15	12.00	13.45	13.89	12.19
23	---	---	13.26	12.83	10.97	13.56	---	14.14	12.25	13.55	13.89	12.32
24	---	14.57	13.37	12.88	10.89	13.58	---	14.13	12.51	13.62	13.89	12.43
25	---	14.57	13.46	11.65	11.13	12.00	---	14.13	12.79	13.70	13.85	12.57
26	---	14.57	13.55	12.00	11.01	12.13	---	11.23	13.00	13.76	13.83	12.70
27	---	14.57	13.64	12.19	11.20	12.36	---	11.55	13.18	13.80	13.83	12.87
28	---	14.57	13.74	12.39	11.60	12.58	---	11.98	13.30	13.84	13.77	12.90
29	---	14.51	13.83	12.58	---	12.67	---	12.13	13.30	13.86	12.50	11.57
30	---	14.48	13.89	12.78	---	12.76	---	12.25	13.30	13.88	11.97	11.91
31	---	---	13.91	12.98	---	12.87	---	12.48	---	13.90	12.17	---
MAX	13.66	14.57	14.48	12.98	14.67	13.58	12.98	14.18	14.00	13.90	14.08	13.62
WTR YR 1979	MEAN	12.94		HIGH	10.57		LOW	14.67				

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

GROUND-WATER RECORDS

WAYNE COUNTY--Continued.

404802081583100. Local number, WN-2A.

LOCATION.--Lat 40°48'02", long 81°56'31", Hydrologic Unit 05040003, in well field by Killbuck Creek near Wooster.

Owner: Wooster Water Dept.

AQUIFER.--Sand and gravel of Pleistocene.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in (0.15 m), depth 65 ft (19.8 m), cased.

DATUM.--Altitude of land-surface datum is 855 ft (261 m), from topographic map. Measuring point: Floor of instrument shelter 6.00 ft (1.829 m) 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 (10.500 m) Feb. 17, 1972; minimum daily low, 2.35 ft (0.716 m) Jan. 28, 1952.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 23.93 (7.294 m) Jan. 6-11, 15; minimum daily low, 14.64 ft (4.462 m) Apr. 24-26.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.08	---	23.08	23.90	23.83	---	15.13	14.68	15.60	16.03	17.52	19.11
2	20.15	---	23.13	23.91	23.82	---	15.15	14.72	15.52	16.07	17.57	19.15
3	20.20	---	23.15	23.91	23.81	---	15.18	14.74	15.47	16.11	17.63	19.20
4	20.25	---	23.19	23.92	23.81	---	15.21	14.77	15.45	16.15	17.67	19.24
5	20.30	---	23.26	23.92	23.79	---	15.22	14.81	15.38	16.20	17.73	19.32
6	20.35	---	23.33	23.93	23.79	---	15.24	14.83	15.35	16.25	17.77	19.37
7	20.40	---	23.42	23.93	23.78	---	15.25	14.86	15.34	16.31	17.82	19.41
8	20.45	---	23.48	23.93	23.78	---	15.25	14.89	15.34	16.35	17.88	19.47
9	20.50	---	23.54	23.93	23.78	---	15.24	14.93	15.35	16.40	17.93	19.50
10	20.55	---	23.54	23.93	23.77	---	15.20	14.97	15.37	16.47	17.99	19.54
11	20.60	---	23.56	23.93	23.77	---	15.17	14.99	15.38	16.52	18.04	19.53
12	20.65	---	23.60	23.92	23.77	---	15.11	15.03	15.40	16.57	18.09	19.55
13	20.70	---	23.63	23.92	23.77	---	15.03	15.07	15.42	16.63	18.12	19.59
14	20.75	---	23.67	23.92	23.77	---	14.98	15.12	15.43	16.68	18.17	19.59
15	20.80	---	23.71	23.93	23.77	---	14.93	15.17	15.45	16.72	18.22	19.20
16	20.85	---	23.73	23.92	23.77	---	14.93	15.24	15.45	16.78	18.28	---
17	20.90	---	23.74	---	23.77	---	14.73	15.29	---	16.84	18.33	---
18	20.94	---	23.75	23.92	23.77	---	14.59	15.35	---	16.90	18.38	---
19	20.98	---	23.77	23.92	23.77	---	14.58	15.40	15.54	16.93	18.43	17.75
20	21.00	---	23.78	23.92	23.77	---	14.56	15.47	15.57	16.98	18.49	17.05
21	21.05	---	23.80	---	23.78	---	14.55	15.54	15.59	17.03	18.53	16.67
22	---	---	23.83	---	23.78	15.12	14.55	15.60	15.63	17.07	18.58	16.33
23	---	---	23.84	23.86	---	15.12	14.55	15.68	15.66	17.12	18.62	16.02
24	22.70	22.70	23.85	23.86	---	15.05	14.54	15.75	15.70	17.15	18.68	15.79
25	---	22.73	23.85	23.86	---	15.01	14.54	15.84	15.73	17.19	18.73	15.63
26	---	22.76	23.85	23.86	---	14.99	14.54	15.89	15.75	17.24	18.77	15.49
27	---	22.81	23.80	23.85	---	15.00	14.55	15.91	15.82	17.28	18.83	15.35
28	---	22.87	23.87	23.85	---	15.02	14.55	15.90	15.88	17.32	18.90	15.25
29	---	22.94	23.89	23.84	---	15.04	14.55	15.84	15.93	17.37	18.95	15.17
30	---	23.00	23.90	23.84	---	15.08	14.56	15.76	15.99	17.42	19.01	15.08
31	---	---	23.90	23.83	---	15.12	---	15.68	---	17.48	19.06	---
MAX	22.70	23.00	23.90	23.93	23.83	15.12	15.25	15.91	15.99	17.48	19.06	19.59
WTR YR 1979	MEAN	18.84		HIGH	14.64		LOW	23.93				

GROUND-WATER RECORDS

431

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 (0.2 m), depth 123 ft (37.5 m), cased.

DATUM.--Altitude of land-surface datum is 965 ft (294 m), from topographic map. Measuring point: Floor of instrument shelter 5.00 ft (1.524 m) 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, 7.13 ft (2.173 m) Aug. 16-18, 26, 1979; minimum daily low, 5.50 ft (1.676 m) Apr. 27, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 7.13 ft (2.173 m) Aug. 16-18, 26; minimum daily low, 5.50 ft (1.676 m) Apr. 27.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							---	5.57	---	6.26	6.96	7.11
2							---	5.59	---	6.26	7.00	7.10
3							---	5.59	---	6.32	7.00	7.07
4							---	5.57	---	6.32	7.01	7.09
5							---	5.61	---	6.32	7.01	7.10
6							---	5.61	---	6.33	7.02	7.05
7							---	5.60	---	6.38	7.02	7.02
8							---	5.66	---	6.39	7.02	7.01
9							---	5.68	---	6.40	7.03	7.01
10							5.79	5.75	---	6.39	7.02	7.01
11							5.78	5.78	---	6.43	7.01	7.01
12							5.74	5.87	---	6.47	7.03	7.07
13							5.79	5.87	---	6.48	7.04	7.07
14							5.53	5.84	---	6.47	7.06	7.04
15							5.51	5.87	---	6.48	7.12	6.99
16							5.58	5.96	---	6.53	7.13	---
17							5.59	5.96	---	6.56	7.13	---
18							5.59	6.01	---	6.59	7.13	---
19							5.50	6.02	---	6.73	7.05	6.34
20							5.50	6.03	---	6.75	7.04	6.33
21							5.58	6.05	6.17	6.80	7.05	6.29
22							5.58	6.07	6.19	6.82	7.10	6.24
23							5.58	6.03	6.20	6.85	7.09	6.19
24							5.58	6.08	6.21	6.87	7.04	6.18
25							5.57	---	6.26	6.87	7.05	6.17
26							5.55	---	6.29	6.85	7.13	6.16
27							5.50	---	6.32	6.86	7.12	6.14
28							5.54	---	6.33	6.87	7.10	6.13
29							5.54	---	6.33	6.87	7.07	6.02
30							5.54	---	6.30	6.90	7.07	6.00
31							---	---	---	6.94	7.11	---
MAX							5.79	6.08	6.33	6.94	7.13	7.11
WTR YR 1979	MEAN	6.41		HIGH	5.50	LOW	7.13					

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

GROUND-WATER RECORDS

WAYNE COUNTY--Continued

405805081462300. Local number, WN-6.

LOCATION.--Lat 40°58'05", long 81°46'23", Hydrologic Unit 05040001, Salt Street, Rittman.

Owner: Tenneco, Inc.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in (0.2 m), depth 180 ft (54.9 m), cased.

DATUM.--Altitude of land-surface datum is 960 ft (293 m), from topographic map. Measuring point: Floor of instrument shelter 2.30 ft (0.701 m) 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 (28.285 m) July 21, 1971; minimum daily low, 74.30 ft (22.647 m) June 29, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily low, 84.75 ft (25.832 m) May 16, 17; minimum daily low, 76.90 ft (23.439 m) Sept. 2

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83.35	---	82.10	82.40	82.05	84.00	83.53	84.05	84.15	83.85	92.40	92.65
2	83.40	---	82.30	82.40	82.15	84.15	83.50	83.85	84.10	84.18	92.45	76.90
3	83.35	---	81.95	80.90	82.00	83.95	83.70	84.00	84.10	84.10	92.50	77.75
4	82.65	---	81.70	81.10	82.05	83.75	83.55	84.00	84.10	83.90	92.50	92.65
5	82.90	---	81.90	81.05	82.10	83.85	83.35	83.85	84.10	83.55	92.50	92.65
6	82.80	---	82.40	80.75	82.05	83.75	83.55	83.85	84.40	83.50	92.50	92.65
7	82.95	---	82.35	80.50	81.80	83.60	83.55	83.85	84.40	83.15	92.45	92.90
8	83.15	---	82.20	80.75	82.00	83.75	82.75	83.85	84.25	83.80	92.90	93.10
9	---	---	82.25	80.80	82.25	83.80	83.70	83.85	84.25	82.95	92.90	93.10
10	83.20	---	82.50	80.90	---	83.75	83.90	83.75	84.30	82.90	92.70	92.95
11	83.10	---	82.45	80.95	---	83.75	84.15	83.70	84.45	83.00	92.75	93.00
12	82.85	---	82.40	80.80	---	83.95	83.90	83.65	84.55	83.00	92.80	93.00
13	82.95	---	80.60	80.25	---	83.80	83.80	83.50	84.50	82.75	92.80	92.85
14	83.00	---	81.10	80.80	---	84.00	83.75	83.50	84.40	82.75	92.80	92.85
15	82.95	---	81.05	80.90	---	84.20	82.80	84.50	84.30	82.85	92.90	---
16	83.25	---	81.20	80.80	---	84.20	84.25	84.75	84.20	82.90	92.95	---
17	83.40	---	81.90	80.60	---	84.15	84.60	84.75	84.20	82.95	92.85	---
18	83.25	92.40	81.75	80.85	---	83.90	84.55	84.60	84.35	82.90	92.65	---
19	83.05	92.65	81.75	80.70	84.60	83.75	84.45	84.40	84.45	82.90	92.60	93.00
20	82.95	92.75	81.60	---	84.55	83.70	84.10	84.25	84.40	82.90	92.65	92.95
21	---	92.75	82.00	---	84.05	83.70	84.05	84.30	84.35	82.85	92.65	92.65
22	---	92.60	82.05	---	84.15	83.65	84.20	84.50	84.00	82.70	92.60	92.85
23	---	92.05	82.35	---	83.85	83.40	84.20	84.50	84.15	82.70	92.50	92.90
24	---	92.05	82.85	---	84.00	82.95	84.15	84.25	84.25	82.75	92.50	92.80
25	---	92.15	83.35	---	83.90	---	84.00	84.15	84.35	82.65	92.75	92.80
26	---	92.10	83.30	80.20	83.75	83.70	83.70	84.20	84.35	82.55	92.75	92.85
27	---	91.85	83.50	80.15	83.95	83.95	83.75	84.30	84.25	82.55	92.60	92.75
28	---	92.30	83.65	79.90	83.95	83.90	83.95	84.30	84.05	82.60	92.55	92.65
29	---	92.15	83.60	79.90	---	83.60	84.00	84.30	84.05	82.55	92.50	92.75
30	---	92.10	83.05	79.95	---	83.55	84.10	84.35	83.80	82.55	92.65	92.75
31	---	---	82.55	79.85	---	83.60	---	84.30	---	82.45	92.65	---
MAX	83.40	92.75	83.65	82.40	84.60	84.20	84.55	84.75	84.55	84.18	92.95	93.10
WTR YR 1979	MEAN	83.04		HIGH	76.90		LOW	84.75				

The following table contains water level measurements and chemical analyses from observation wells located in five small watersheds associated with different coal seams. The data will be used to document ground-water flow and water quality during pre- and post- mining conditions.

COSHOCTON COUNTY

400944081444700. Local number, C06 W10-3.

LOCATION.--Lat 40°09'44", long 81°44'47", Hydrologic Unit 05040005, near Plainfield.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 62 ft (18.9 m), cased to 19 ft (5.8 m).

DATUM.--Altitude of land-surface datum is 820.47 ft (250.079 m). Measuring point: Top of casing, 2.0 ft (0.61 m) above land-surface datum.

PERIOD OF RECORD.--July 1977 to August 1979.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.31 ft (3.752 m) below land-surface datum, June 10 and July 6-7, 1979; lowest, 18.16 ft (5.535 m) below land-surface datum, Oct. 29, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.29	14.05	13.79	---	13.15	---	---	12.62	12.57	12.38	12.68	
10	14.45	14.25	13.79	---	13.33	---	---	12.70	12.31	12.55	12.59	
15	14.11	14.35	13.40	---	13.02	---	---	12.94	12.58	12.42	12.70	
20	13.92	14.41	---	12.87	13.33	---	---	12.83	12.72	---	12.43	
25	14.00	14.23	---	13.04	---	---	12.50	12.57	12.71	---	---	
EOM	14.14	14.09	---	12.96	---	---	12.66	12.57	12.73	12.44	---	
MAX	14.48	14.44	14.20	13.38	13.70	---	12.66	13.09	12.73	12.89	12.76	

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN, DIS-SOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM DIS-SOLVED (MG/L AS Mg)
OCT 23...	1300	995	8.9	12.5	500	--	.2	13	0	2.7	1.4
JAN 17...	1130	220	7.2	9.5	40	--	.0	140	24	29	17
MAY 01...	1700	295	7.0	13.5	5	.06	1.5	120	8	26	14
JUL 25...	1200	270	6.8	14.5	0	.14	.0	130	10	28	15

DATE	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE, DIS-SOLVED (MG/L AS CO2)	SULFATE, DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS Cl)
OCT 23...	250	97	31	1.2	448	40	434	1.1	42	58
JAN 17...	3.6	5	.1	.4	144	0	118	15	18	1.6
MAY 01...	4.4	7	.2	.4	140	0	115	22	19	1.2
JUL 25...	3.8	6	.1	.4	148	0	121	38	20	1.5

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3, DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA, DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC, DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	ALUMINUM, DIS-SOLVED (UG/L AS AL)	ANTIMONY, DIS-SOLVED (UG/L AS Sb)
OCT 23...	3.2	3.8	635	.86	.00	.15	.05	.09	30	16
JAN 17...	.2	15	157	.21	.08	.00	.00	.00	30	0
MAY 01...	.2	15	150	.20	.06	.00	.00	.00	--	--
JUL 25...	.2	15	158	.21	.12	.02	.00	.00	30	0

GROUND-WATER RECORDS IN STRIP MINES

COSHOCOTON COUNTY--Continued

400944081444700. Local number, C06 W10-3.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 23...	2	100	5	0	4600	19000	5700	1400	70	60
JAN 17...	1	100	18	2	1	20000	140	140	200	40
MAY 01...	--	--	--	--	--	16000	310	--	100	30
JUL 25...	1	70	0	10	1	33000	10	0	380	20

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	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)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
OCT 23...	6.4	29	0	0	120	0	5.1	1.2	.00	0
JAN 17...	<.5	0	0	0	80	10	23	.0	.00	0
MAY 01...	--	--	--	--	--	--	.6	.1	--	0
JUL 25...	<.5	2	0	0	50	20	3.2	.0	.00	1

GROUND-WATER RECORDS IN STRIP MINES

435

COSHOCKTON COUNTY--Continued

400947081444800. Local number, C06 Postmining spring.
 LOCATION.--Lat 40°09'47", long 81°44'48", Hydrologic Unit 05040005, near Plainfield.
 AQUIFER.--Overburden spoils, replaced after mining.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN, DIS-SOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)
MAY 01...	1645	2680	6.2	13.0	50	.50	2.0	1800	1500	460	150

DATE	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS Cl)
MAY 01...	16	2	.2	5.2	356	0	292	359	1500	.8

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	ALUMINUM, DIS-SOLVED (MG/L AS AL)	ANTIMONY, DIS-SOLVED (MG/L AS Sb)
MAY 01...	.1	12	2350	3.43	.00	.48	.02	.02	10	0

DATE	ARSENIC, DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS Ba)	CADMIUM, DIS-SOLVED (UG/L AS Cd)	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS Pb)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DIS-SOLVED (UG/L AS MN)
MAY 01...	2	0	0	4	0	4800	4500	3	21000	21000

DATE	MERCURY, DIS-SOLVED (UG/L AS Hg)	NICKEL, DIS-SOLVED (UG/L AS Ni)	SELENIUM, DIS-SOLVED (UG/L AS Se)	SILVER, DIS-SOLVED (UG/L AS Ag)	STRONTIUM, DIS-SOLVED (UG/L AS Sr)	ZINC, DIS-SOLVED (UG/L AS Zn)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
MAY 01...	<.5	39	0	0	840	20	3.8	.1	.00	0

GROUND-WATER RECORDS IN STRIP MINES

COSHOCOTON COUNTY--Continued

400951081450202. Local number, C06 P1-1.

LOCATION.--Lat 40°09'51", long 81°45'02", Hydrologic Unit 05040005, near Plainfield.

AQUIFER.--Overburden spoils, replaced after mining.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 60 ft (18.3 m), cased to 60 ft (18.3 m), bottom 10 ft (3.0 m) slotted.

DATUM.--Altitude of land-surface datum is 979.20 ft (298.460 m). Measuring point: Top of casing, 1.0 ft (0.30 m) above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 54.77 (16.694 m) below land-surface datum, Mar. 25, 1979; lowest, 55.97 ft (17.060 m) below land-surface datum, Sept. 14, 1979.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		---	54.83	55.28		---	54.97	55.17	55.30	55.36	55.39	55.30
10		---	55.09	---		---	55.01	55.15	55.36	55.43	55.35	55.19
15		---	55.02	---		---	55.04	55.21	55.45	55.46	55.27	---
20		55.05	54.95	---		---	55.22	55.19	55.40	55.33	55.32	55.29
25		54.89	54.94	---		54.77	55.17	55.17	55.44	55.39	55.33	55.23
EOM		54.92	55.21	---		55.05	55.13	55.31	---	55.36	55.27	55.33
MAX		55.05	55.31	55.28		55.05	55.22	55.32	55.47	55.46	55.39	55.36

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

GROUND-WATER RECORDS IN STRIP MINES

437

COSHOCKTON COUNTY--Continued

400951081450203. Local number, C06 P2-2.

LOCATION.--Lat 40°09'51", long 81°45'02", Hydrologic Unit 05040005, near Plainfield.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 166 ft (50.6 m), cased to 69.2 ft (21.1 m).

DATUM.--Altitude of land-surface datum is 979.02 ft (298.405 m). Measuring point: Top of casing, 2.5 ft (0.76 m) above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 111.83 ft (34.086 m) below land-surface datum, Dec. 20, 1978; lowest, 113.23 ft (34.512 m) below land-surface datum, Mar. 15, 1979.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		---	111.98	112.11	112.91	113.00	113.02	112.29	112.22	111.96	112.38	112.28
10		---	112.25	112.13	112.92	112.90	113.15	112.26	112.27	112.08	112.22	112.26
15		---	112.02	112.47	112.83	113.23	112.99	112.30	112.26	112.01	112.36	112.49
20		112.07	111.83	112.55	112.88	112.87	112.91	112.20	112.28	112.06	112.29	112.34
25		112.02	112.19	112.98	112.86	113.05	112.89	112.22	112.34	---	112.38	112.33
EOM		111.99	111.95	112.83	112.94	112.94	112.98	112.25	112.21	112.36	112.33	112.29
MAX		112.22	112.25	113.11	113.22	113.23	113.15	113.05	112.37	112.49	112.42	112.49

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 25...	0915	425	6.7	11.0	30	--	.0	190	22	44	20
JAN 17...	1430	340	6.5	8.5	6	--	.0	200	41	45	20
MAY 02...	1015	380	6.3	11.5	5	.36	.3	160	21	38	16
JUL 23...	1515	370	6.5	14.0	0	.54	.0	170	17	40	16

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 25...	15	14	.5	2.7	208	0	171	66	61	1.4
JAN 17...	12	12	.4	2.2	188	0	154	95	54	2.0
MAY 02...	12	14	.4	2.3	170	0	139	136	58	1.7
JUL 23...	13	14	.4	2.2	182	0	149	92	57	1.7

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (MG/L AS AL)	ANTI- MONY, DIS- SOLVED (UG/L AS SB)
OCT 25...	.3	12	261	.36	.00	.19	.13	.00	40	1
JAN 17...	.3	12	244	.33	.01	.16	.00	.00	20	0
MAY 02...	.3	12	227	.31	.00	.12	.24	.01	--	--
JUL 23...	.3	12	236	.32	.03	.25	.26	.01	200	0

GROUND-WATER RECORDS IN STRIP MINES

COSHOCKTON COUNTY--Continued

400951081450203. Local number, C06 P2-2.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 25...	2	200	1	0	2	4500	230	29	850	850
JAN 17...	3	100	29	0	0	6300	1600	140	960	960
MAY 02...	--	--	--	--	--	5700	2200	--	960	930
JUL 23...	3	100	1	10	5	21000	2600	11	1200	1000

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	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)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
OCT 25...	<.5	5	0	0	460	20	.8	1.1	.00	0
JAN 17...	<.5	0	0	0	380	40	3.7	.2	.00	6
MAY 02...	--	--	--	--	--	--	1.3	.2	--	0
JUL 23...	<.5	6	0	0	330	50	2.4	.0	.00	3

COSHOCOTON COUNTY--Continued

400952081445701. Local number, C06 P4-2.

LOCATION.--Lat 40°09'52", long 81°44'57", Hydrologic Unit 05040005, near Plainfield.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 99 ft (30.2 m), cased to 55.0 ft (16.8 m).

DATUM.--Altitude of land-surface datum is 915.26 ft (278.971 m). Measuring point: Top of casing, 2.0 ft (0.61 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN, DIS-SOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM, DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)
JUL 25...	1345	610	7.2	11.5	0	.57	.0	290	0	78	23

DATE	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE, DIS-SOLVED (MG/L AS CO2)	SULFATE, DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS Cl)
JUL 25...	15	10	.4	2.9	364	0	299	37	33	3.0

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3, DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA, DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC, DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	ALUMINUM, DIS-SOLVED (UG/L AS AL)	ANTIMONY, DIS-SOLVED (UG/L AS Sb)
JUL 25...	.3	16	353	.48	.05	.00	.52	.00	30	0

DATE	ARSENIC, DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS Ba)	CADMIUM, DIS-SOLVED (UG/L AS Cd)	CHROMIUM, DIS-SOLVED (UG/L AS Cr)	COPPER, DIS-SOLVED (UG/L AS Cu)	IRON, TOTAL RECOVERABLE (UG/L AS Fe)	IRON, DIS-SOLVED (UG/L AS Fe)	LEAD, DIS-SOLVED (UG/L AS Pb)	MANGANESE, TOTAL RECOVERABLE (UG/L AS Mn)	MANGANESE, DIS-SOLVED (UG/L AS Mn)
JUL 25...	2	100	1	20	3	2300	670	1	240	230

DATE	MERCURY, DIS-SOLVED (UG/L AS Hg)	NICKEL, DIS-SOLVED (UG/L AS Ni)	SELENIUM, DIS-SOLVED (UG/L AS Se)	SILVER, DIS-SOLVED (UG/L AS Ag)	STRONTIUM, DIS-SOLVED (UG/L AS Sr)	ZINC, DIS-SOLVED (UG/L AS Zn)	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC, SUSPENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
JUL 25...	<.5	3	0	0	620	50	2.2	.0	.00	0

GROUND-WATER RECORDS IN STRIP MINES

COSHOCTON COUNTY--Continued

400952081445901. Local number, C06 P3-2.

LOCATION.--Lat 40°09'52", long 81°44'59", Hydrologic Unit 05040005, near Plainfield.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 8 in (0.20 m), depth 60 ft (18.3 m), cased to 60 ft (18.3 m), bottom 10 ft (3.0 m) slotted.

DATUM.--Altitude of land-surface datum is 943.10 ft (287.456 m). Measuring point: Top of casing, 1.5 ft (0.46 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN, DIS-SOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)
JUL 25...	1545	1850	6.6	13.5	39	3.2	8.8	850	33	160	110

DATE	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)
JUL 25...	12	3	.2	18	1000	0	820	402	.0	18

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	ALUMINUM, DIS-SOLVED (UG/L AS AL)	ANTIMONY, DIS-SOLVED (UG/L AS SB)
JUL 25...	.1	24	949	1.29	.04	.54	2.7	.02	200	0

DATE	ARSENIC, DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DIS-SOLVED (UG/L AS MN)
JUL 25...	3	300	10	10	0	180000	110000	0	3200	2000

DATE	MERCURY, DIS-SOLVED (UG/L AS HG)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELENIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRONTIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
JUL 25...	<.5	5	0	0	970	40	40	.3	.00	440

GROUND-WATER RECORDS IN STRIP MINES

441

COSHOCKTON COUNTY--Continued

400958081444904. Local number, C06 P7-2

LOCATION.--Lat 40°09'58", long 81°44'49", Hydrologic Unit 05040005, near Plainfield.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 142 ft (43.3 m), cased to 142 ft (43.3 m), bottom 10 ft (3.0 m) slotted.

DATUM.--Altitude of land-surface datum is 957.98 ft (291.992 m). Measuring point: Top of casing, 2.5 ft (0.76 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L AS CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
MAY 01...	1430	322	8.4	13.0	5	.54	.8	84	0	18	9.4
JUL 26...	1515	320	7.1	12.5	0	.58	.0	63	0	12	8.0

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS C03)	ALKA- LINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
MAY 01...	37	47	1.8	4.3	196	8	174	1.4	15	1.2
JUL 26...	37	54	2.0	4.0	160	0	131	20	15	1.2

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (MG/L AS AL)	ANTI- MONY, DIS- SOLVED (MG/L AS SB)
MAY 01...	.4	1.1	192	.25	.01	.51	.02	.01	--	--
JUL 26...	.3	1.8	159	.22	.03	.04	.51	.01	50	0

DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
MAY 01...	--	--	--	--	--	3400	0	--	120	70
JUL 26...	2	100	1	10	1	34000	80	1	740	190

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	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)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
MAY 01...	--	--	--	--	--	--	1.9	.1	--	0
JUL 26...	<.5	3	0	0	390	2	3.2	.1	.00	6

GROUND-WATER RECORDS IN STRIP MINES

COSHOCKTON COUNTY--Continued

400958081444905. Local number, C06 P7-2a.

LOCATION.--Lat 40°09'58", long 81°44'49", Hydrologic Unit 05040005, near Plainfield.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 144 ft (43.9 m), cased to 67.3 ft (20.5 m).

DATUM.--Altitude of land-surface datum is 957.99 ft (291.995 m). Measuring point: Top of casing, 2.5 ft (0.76 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN, DIS-SOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)
JAN 16...	1200	560	7.5	10.0	5	--	.0	300	47	78	26
MAY 01...	1345	1400	7.2	13.0	5	1.5	1.0	230	0	58	20
JUL 26...	1445	1400	6.6	20.0	6	1.8	.5	220	0	56	19

DATE	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE, DIS-SOLVED (MG/L AS CO2)	SULFATE, DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)
JAN 16...	15	10	.4	4.6	314	0	258	16	43	6.4
MAY 01...	230	68	6.6	7.5	440	0	361	44	400	7.5
JUL 26...	250	71	7.4	7.4	588	0	482	236	160	13

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS. PER AC-FT)	NITROGEN, NO2+NO3, DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA, DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC, DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	ALUMINUM, DIS-SOLVED (UG/L AS AL)	ANTIMONY, DIS-SOLVED (UG/L AS SB)
JAN 16...	.4	7.6	340	.46	.01	.48	.07	.00	20	4
MAY 01...	.6	8.4	951	1.29	.01	1.2	.30	.07	--	--
JUL 26...	1.5	11	826	1.12	.05	.00	1.7	.05	2000	0

DATE	ARSENIC, DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DIS-SOLVED (UG/L AS MN)
JAN 16...	3	200	1	0	0	7200	1100	10	580	580
MAY 01...	--	--	--	--	--	6800	500	--	580	490
JUL 26...	3	200	6	30	54	45000	13000	28	1300	750

DATE	MERCURY, DIS-SOLVED (UG/L AS Hg)	NICKEL, DIS-SOLVED (UG/L AS Ni)	SELENIUM, DIS-SOLVED (UG/L AS Se)	SILVER, DIS-SOLVED (UG/L AS Ag)	STRONTIUM, DIS-SOLVED (UG/L AS Sr)	ZINC, DIS-SOLVED (UG/L AS Zn)	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC, SUSPENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
JAN 16...	<.5	0	0	0	2000	20	1.5	.6	.00	2
MAY 01...	--	--	--	--	--	--	5.5	--	--	0
JUL 26...	<.5	28	0	0	1700	460	4.8	--	.00	0

COSHOCKTON COUNTY--Continued

400958081444906. Local number, C06 P7-2b.

LOCATION.--Lat 40°09'58", long 81°44'49", Hydrologic Unit 05040005, near Plainfield.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 8 in (0.20 m), depth 144 ft (43.9 m) cased to 70.0 ft (21.3 m).

DATUM.--Altitude of land-surface datum is 957.76 ft (291.925 m). Measuring point: Top of casing, 2.0 ft (0.61 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN, DIS-SOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)
JAN 16...	1400	590	7.0	9.5	45	--	.0	140	0	37	11
MAY 01...	1300	620	7.0	13.0	5	2.4	.8	94	0	25	7.5
JUL 26...	1545	800	6.3	15.0	2	2.7	.0	110	0	30	8.5

DATE	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE, DIS-SOLVED (MG/L AS CO2)	SULFATE, DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)
JAN 16...	100	60	3.7	4.8	429	0	352	69	9.0	1.5
MAY 01...	110	71	5.0	4.8	390	0	320	62	11	1.3
JUL 26...	140	72	5.8	4.9	444	0	364	356	13	1.6

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3, DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA, DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC, DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	ALUMINUM, DIS-SOLVED (UG/L AS AL)	ANTIMONY, DIS-SOLVED (UG/L AS SB)
JAN 16...	.4	7.3	397	.54	2.7	.65	.28	.00	30	3
MAY 01...	.4	7.0	369	.50	1.7	.63	.05	.00	--	--
JUL 26...	.4	8.7	446	.61	1.8	.57	.33	.07	4900	0

DATE	ARSENIC, DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DIS-SOLVED (UG/L AS MN)
JAN 16...	1	500	1	0	1	7300	270	11	160	160
MAY 01...	--	--	--	--	--	2100	20	--	230	220
JUL 26...	2	500	1	20	13	8500	4800	13	390	330

DATE	MERCURY, DIS-SOLVED (UG/L AS HG)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELENIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRONTIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
JAN 16...	<.5	0	1	0	1100	30	1.3	.4	.00	0
MAY 01...	--	--	--	--	860	--	4.2	.4	--	4
JUL 26...	<.5	15	0	0	920	120	2.9	.0	.00	3

GROUND-WATER RECORDS IN STRIP MINES

COSHOCKTON COUNTY--Continued

400958081444907. Local number, C06 P8-3.

LOCATION.--Lat 40°09'58", long 81°44'49", Hydrologic Unit 05040005, near Plainfield.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 205 ft (62.5 m), cased to 144.0 ft (43.9 m).

DATUM.--Altitude of land-surface datum is 958.42 ft (292.126 m). Measuring point: Top of casing, 3.0 ft (0.91 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN, DIS-SOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM, DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)
OCT 25...	1230	1200	8.6	12.5	500	--	.2	9	0	2.4	.8
JAN 16...	1500	1050	8.6	8.5	25	--	.0	6	0	1.5	.5
MAY 01...	1500	1780	8.4	15.0	25	1.2	1.2	6	0	1.5	.5
JUL 23...	1800	1250	8.6	14.5	36	1.1	.0	6	0	1.6	.5

DATE	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE, DIS-SOLVED (MG/L AS CO2)	SULFATE, DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS Cl)
OCT 25...	330	98	47	2.2	783	24	682	3.3	14	20
JAN 16...	310	99	56	1.8	793	20	684	3.2	8.2	18
MAY 01...	320	99	58	2.1	840	20	722	5.6	6.5	24
JUL 23...	340	99	60	2.2	764	28	673	3.3	150	14

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (MG/L PER AC-FT)	NITROGEN, NO2+NO3, DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA, DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC, DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	ALUMINUM, DIS-SOLVED (UG/L AS AL)	ANTIMONY, DIS-SOLVED (UG/L AS Sb)
OCT 25...	2.5	6.6	791	1.08	.06	.30	.56	.12	610	1
JAN 16...	2.7	7.1	762	1.04	.22	.42	.15	.11	40	3
MAY 01...	2.8	6.5	801	1.09	.45	.42	.31	.10	--	--
JUL 23...	1.7	6.5	924	1.26	.48	.42	.22	.17	80	0

DATE	ARSENIC, DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS Ba)	CADMIUM, DIS-SOLVED (UG/L AS Cd)	CHROMIUM, DIS-SOLVED (UG/L AS Cr)	COPPER, DIS-SOLVED (UG/L AS Cu)	IRON, TOTAL RECOVERABLE (UG/L AS Fe)	IRON, DIS-SOLVED (UG/L AS Fe)	LEAD, DIS-SOLVED (UG/L AS Pb)	MANGANESE, TOTAL RECOVERABLE (UG/L AS Mn)	MANGANESE, DIS-SOLVED (UG/L AS Mn)
OCT 25...	2	0	1	1	7	18000	630	18	190	0
JAN 16...	2	100	2	0	2	3200	230	22	40	20
MAY 01...	--	--	--	--	--	2900	10	--	36	6
JUL 23...	2	50	1	20	6	14000	50	3	160	10

DATE	MERCURY, DIS-SOLVED (UG/L AS Hg)	NICKEL, DIS-SOLVED (UG/L AS Ni)	SELENIUM, DIS-SOLVED (UG/L AS Se)	SILVER, DIS-SOLVED (UG/L AS Ag)	STRONTIUM, DIS-SOLVED (UG/L AS Sr)	ZINC, DIS-SOLVED (UG/L AS Zn)	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
OCT 25...	<.5	5	2	0	90	0	3.7	2.7	.00	4
JAN 16...	<.5	0	5	0	90	20	2.8	.2	.00	8
MAY 01...	--	--	--	--	--	--	4.8	.4	--	1
JUL 23...	<.5	5	1	0	40	10	13	.2	.00	1

GROUND-WATER RECORDS IN STRIP MINES

445

COSHOCTON COUNTY--Continued

402156081481300. Local number, A06 W10-3.

LOCATION.--Lat 40°21'56", long 81°48'13", Hydrologic Unit 05040003, near Coshocton.

AQUIFER.--Sand, shale, and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 66 ft (20.1 m), cased to 17.4 ft (5.3 m) (revised).

DATUM.--Altitude of land-surface datum is 1011.87 ft (308.418 m). Measuring point: Top of casing, 2.58 ft (0.786 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN, DIS-SOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)
OCT 19...	1345	1900	7.5	12.0	20	--	.2	490	150	120	47	260
APR 05...	1415	1810	7.8	10.5	5	3.8	.4	450	120	110	43	230

DATE	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE, DIS-SOLVED (MG/L AS CO2)	SULFATE, DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)
OCT 19...	53	5.1	6.0	424	0	348	21	680	3.7	.3	11	1340
APR 05...	52	4.7	15	400	0	328	10	630	4.8	.1	10	1250

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	PHENOLS (UG/L)
OCT 19...	1.82	.02	3.7	.00	.01	8300	2100	110	80	3.0	.4	13
APR 05...	1.70	.05	3.7	.00	.00	11000	6100	150	110	5.0	.0	2

GROUND-WATER RECORDS IN STRIP MINES

COSHOCKTON COUNTY--Continued

402201081481200. Local number, A06 (ARS Watershed 172) Spring.
 LOCATION.--Lat 40°22'01", long 81°48'12", Hydrologic Unit 05040003, near Coshocton.
 AQUIFER.--Sand, shales and coals of Pennsylvanian Age.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (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)
OCT 18...	1315	525	7.4	12.0	10	--	.2	190	0	53	14	33
APR 04...	1645	315	7.0	9.0	5	1.5	.0	110	23	29	8.0	17

DATE	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	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, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)
OCT 18...	27	1.0	2.4	234	0	192	15	65	12	.3	12	309
APR 04...	26	.7	2.2	100	0	82	16	50	5.0	.1	11	177

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDEED TOTAL (MG/L AS C)	PHENOLS (UG/L)
OCT 18...	.42	.34	.01	.04	.01	60	50	20	10	15	.6	0
APR 04...	.24	1.1	.04	.37	.03	220	50	30	10	7.1	.1	1

GROUND-WATER RECORDS IN STRIP MINES

447

COSHOCOTON COUNTY--Continued

402208081481001. Local number, A06 W6-2.

LOCATION.--Lat 40°22'08", long 81°48'10", Hydrologic Unit 05040003, near Coshocton.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 98 ft (29.9 m), cased to 18.7 ft (5.7 m).

DATUM.--Altitude of land-surface datum is 1136.32 ft (346.350 m). Measuring point: Top of casing, 2.3 ft (0.70 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN, DIS-SOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)
OCT 19...	1230	370	6.1	10.5	20	--	.0	140	28	32	14	14
APR 05...	1120	335	6.6	--	5	21	.2	120	9	30	12	12

DATE	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)
OCT 19...	18	.5	3.4	134	0	110	170	75	1.9	.2	7.1	225
APR 05...	17	.5	3.6	140	0	115	56	72	2.2	.1	8.3	321

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	PHENOLS (UG/L)
OCT 19...	.31	.00	.14	.00	.00	59000	11000	420	390	2.1	1.8	1
APR 05...	.44	21	.11	.00	.02	19000	18000	500	480	.7	.1	0

GROUND-WATER RECORDS IN STRIP MINES

COSHOCTON COUNTY--Continued

402208081481200. Local number, A06 W157.

LOCATION.--Lat 40°22'08", long 81°48'12", Hydrologic Unit 05040003, near Coshocton.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Hand-dug well, diameter 3 ft (0.9 m), depth 13.9 ft (4.2 m).

DATUM.--Altitude of land-surface datum is 1115.45 ft (339.989 m).

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN, DIS-SOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)
OCT 18...	1655	575	6.5	13.5	10	--	.0	260	150	56	29	13
APR 05...	0900	235	6.5	6.0	30	.36	.0	89	66	22	8.3	4.2

DATE	SODIUM PERCENT	SODIUM AD-SORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)
OCT 18...	10	.4	3.1	133	0	109	67	180	2.6	.3	10	363
APR 05...	9	.2	2.7	28	0	23	14	70	3.1	.1	11	136

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	PHENOLS (UG/L)
OCT 18...	.49	.00	.12	.02	.01	1600	1600	1200	1200	1.7	1.1	1
APR 05...	.19	.16	.03	.17	.01	780	240	160	150	8.4	.5	13

COSHOCTON COUNTY--Continued

402208081481300. Local number, A06 W11-2.

LOCATION.--Lat 40°22'08", long 81°48'13", Hydrologic Unit 05040003, near Coshocton.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 56 ft (17.1 m), cased to 18.4 ft (5.6 m).

DATUM.--Altitude of land-surface datum is 1092.35 ft (332.948 m). Measuring point: Top of casing, 1.6 ft (0.49 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN, DIS-SOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)
OCT 18...	1745	850	7.0	10.5	10	--	.2	360	85	110	20	48
APR 05...	0930	770	7.2	8.0	5	5.3	.2	360	95	110	20	21

DATE	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)
OCT 18...	22	1.1	3.2	332	0	272	53	180	1.8	.3	16	545
APR 05...	11	.5	3.0	320	0	262	32	140	2.3	.2	16	496

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	PHENOLS (UG/L)
OCT 18...	.74	.02	.29	.11	.01	3600	820	430	430	4.4	.7	54
APR 05...	.67	4.9	.19	.17	.00	4300	3100	550	550	.8	.1	8

GROUND-WATER RECORDS IN STRIP MINES

COSHOCOTON COUNTY--Continued

402210081481600. Local number, A06 W7-1.

LOCATION.--Lat 40°22'10", long 81°48'16", Hydrologic Unit 05040003, near Coshocoton.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 12 ft (3.6 m), cased to 9.7 ft (3.0 m).

DATUM.--Altitude of land-surface datum is 1138.28 ft (346.948 m). Measuring point: Top of casing, 2.3 ft (0.70 m) above land-surface datum.

PERIOD OF RECORD.--June 1977 to November 1978.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.02 ft (0.006 m) below land-surface datum, Jan. 29, 1978; lowest, 10.35 ft (3.155 m) below land-surface datum, Nov. 7-8, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.80	9.65										
10	9.86	9.82										
15	9.17	9.95										
20	8.29	---										
25	8.83	---										
EOM	9.38	---										
MAX	9.86	9.95										

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (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)
OCT 19...	0915	265	7.0	11.5	20	--	.0	89	0	23	7.6	4.3
APR 04...	1445	310	7.0	7.5	5	1.4	.0	100	27	27	8.7	4.9

DATE	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	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, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)
OCT 19...	9	.2	2.2	116	0	95	19	48	3.8	.1	7.0	175
APR 04...	9	.2	2.3	93	0	76	15	54	3.0	.1	3.2	179

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)	PHENOLS (UG/L)
OCT 19...	.20	.03	.43	.15	.00	22000	20000	890	890	4.1	1.3	3
APR 04...	.24	.81	.48	.08	.00	100000	25000	1100	810	3.0	.6	0

COSHOCTON COUNTY--Continued

402210081481601. Local number, A06 W8-2.

LOCATION.--Lat 40°22'10", long 81°48'16", Hydrologic Unit 05040003, near Coshocton.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 101 ft (30.8 m), cased to 18.6 ft (5.7 m).

DATUM.--Altitude of land-surface datum is 1138.64 ft (347.057 m). Measuring point: Top of casing, 1.4 ft (0.43 m) above land-surface datum.

PERIOD OF RECORD.--June 1977 to November 1978.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 28.00 ft (8.534 m) below land-surface datum, May 30, 1978; lowest, 33.19 ft (10.116 m) below land-surface datum, Nov. 21, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	32.13										
10	---	32.07										
15	---	32.14										
20	31.79	---										
25	31.94	---										
EOM	31.82	---										
MAX	32.14	32.14										

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (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)
OCT 19...	1115	540	6.0	10.5	20	--	.4	190	100	43	20	8.5
APR 04...	1515	595	6.2	10.5	0	.67	.1	210	130	48	21	7.2

DATE	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	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, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)
OCT 19...	9	.3	3.4	104	0	85	166	180	2.6	.3	14	355
APR 04...	7	.2	4.0	94	0	77	95	200	1.8	.2	16	380

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	PHENOLS (UG/L)
OCT 19...	.48	.00	.10	.00	.09	32000	31000	1200	1200	8.6	.8	1
APR 04...	.47	.44	.13	.10	.01	33000	32000	1500	1500	2.5	.1	0

GROUND-WATER RECORDS IN STRIP MINES

COSHOCTON COUNTY--Continued

402210081481602. Local number, A06 W9-3.

LOCATION.--Lat 40°22'10", long 81°48'16", Hydrologic Unit 05040003, near Coshocton.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 183 ft (55.8 m), cased to 114.5 ft (34.9 m). After Oct. 18, 1976, 4 in (0.10 m) slotted casing to bottom of well.

DATUM.--Altitude of land-surface datum is 1138.35 ft (346.969 m). Measuring point: Top of casing, 1.5 ft (0.46 m) above land-surface datum.

REMARKS.--Well redrilled October 18, 1976 after cave-in.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
OCT 19...	1000	1700	9.2	11.5	20	--	.7	18	0	4.4	1.8	400
APR 04...	1545	1150	9.4	10.5	0	1.5	.6	29	0	6.3	3.2	260

DATE	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	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, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)
OCT 19...	98	41	2.6	830	172	967	1.2	10	21	3.0	1.9	1030
APR 04...	94	21	3.7	510	98	581	.5	47	12	2.5	2.4	696

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)	PHENOLS (UG/L)
OCT 19...	1.51	.04	.48	.38	.02	2700	450	40	40	2.7	.5	5
APR 04...	.95	.71	.41	.33	.03	7900	5200	170	170	7.5	.3	5

GROUND-WATER RECORDS IN STRIP MINES

453

COSHOCTON COUNTY--Continued

402210081480700. Local number, A06 W3-1.

LOCATION.--Lat 40°22'10", long 81°48'07", Hydrologic Unit 05040003, near Coshocton.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in (0.15 m), depth 75 ft (22.9 m), cased to 18.5 ft (5.6 m).

DATUM.--Altitude of land-surface datum is 1206.26 ft (367.688 m). Measuring point: Top of casing, 1.5 ft (0.46 m) above land-surface datum.

REMARKS.--Water-level data collected November 1976 to June 1977.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	NITROGEN, DIS-SOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)
OCT 18...	1430	455	7.4	10.0	10	--	.0	210	31	56	18	7.7
APR 05...	1015	395	7.4	9.5	0	.88	.0	170	43	45	15	6.5

DATE	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)
OCT 18...	7	.2	1.9	223	0	183	14	57	3.1	.2	16	270
APR 05...	7	.2	2.0	160	0	131	10	59	5.2	.1	14	232

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	PHENOLS (UG/L)
OCT 18...	.37	.06	.02	.00	.00	3000	60	1100	180	3.1	1.0	0
APR 05...	.32	.71	.01	.16	.00	6800	2200	1900	760	1.3	.3	0

GROUND-WATER RECORDS IN STRIP MINES

COSHOCTON COUNTY--Continued

402210081480701. Local number, A06 W4-2.

LOCATION.--Lat 40°22'10", long 81°48'07", Hydrologic Unit 05040003, near Coshocton.

AQUIFER.--Shales and sands of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 170 ft (51.8 m) cased to 78.9 ft (24.0 m). After Oct. 18, 1976, 4 in (0.10 m) slotted casing to bottom of well.

DATUM.--Altitude of land-surface datum is 1206.07 ft (367.610 m). Measuring point: Top of casing, 2.1 ft (0.64 m) above land-surface datum.

REMARKS.--Well redrilled Oct. 18, 1976 after cave-in. Water-level data collected November 1976 to June 1977.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN, DIS-SOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)
OCT 18...	1515	540	7.7	12.0	50	--	.3	120	0	28	13	65
APR 05...	1045	520	8.0	9.5	0	.72	2.0	110	0	25	11	62

DATE	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)
OCT 18...	52	2.5	5.0	294	0	241	9.4	43	4.8	.4	4.5	314
APR 05...	54	2.6	4.9	290	0	238	4.6	32	5.3	.3	8.5	342

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	PHENOLS (UG/L)
OCT 18...	.43	.00	.58	.00	.00	22000	4800	150	150	13	.8	3
APR 05...	.47	.09	.59	.04	.00	49000	49000	160	160	3.6	.1	0

GROUND-WATER RECORDS IN STRIP MINES

455

COSHOCKTON COUNTY--Continued

402213081481700. Local number, A06 W1-1.

LOCATION.--Lat 40°22'13", long 81°48'17", Hydrologic Unit 05040003, near Coshockton.

AQUIFER.--Shales of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 90 ft (27.4 m) cased to 18.8 ft (5.7 m).

DATUM.--Altitude of land-surface datum is 1207.84 ft (368.150 m). Measuring point: Top of casing, 1.2 ft (0.37 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN, DIS-SOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)
OCT 18...	0900	283	6.6	10.0	60	--	.3	140	57	36	12	3.6
APR 04...	1300	210	7.6	10.0	30	6.0	.0	98	51	27	7.4	3.4

DATE	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)
OCT 18...	5	.1	3.0	100	0	82	40	44	1.5	.1	5.5	177
APR 04...	7	.2	3.6	57	0	47	2.3	41	1.1	.1	4.0	138

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	PHENOLS (UG/L)
OCT 18...	.24	4.9	.00	1.0	.01	3600	70	120	10	9.6	1.3	0
APR 04...	.19	4.9	.02	1.1	.03	1200	100	50	20	8.3	.4	1

GROUND-WATER RECORDS IN STRIP MINES

COSHOCTON COUNTY--Continued

402213081481701. Local number, 106 W2-2.

LOCATION.--Lat 40°22'13", long 81°48'17", Hydrologic Unit 05040003, near Coshocton.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 169 ft (51.5 m), cased to 98.8 ft (30.1 m).

DATUM.--Altitude of land-surface datum is 1207.29 ft (367.982 m). Measuring point: Top of casing, 2.2 ft (0.67 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (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)
OCT 18...	0930	1100	7.1	10.5	10	--	.2	400	120	100	37	110
APR 04...	1300	1080	7.4	10.0	0	3.0	.0	390	56	96	37	88

DATE	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	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, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)
OCT 18...	37	2.4	10	350	0	287	44	410	2.0	.3	4.9	851
APR 04...	32	1.9	10	410	0	336	26	310	2.3	.2	5.1	759

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	PHENOLS (UG/L)
OCT 18...	1.16	.10	2.0	.00	.01	3000	300	480	440	3.6	1.1	2
APR 04...	1.03	.85	1.7	.40	.03	3600	1500	380	360	1.9	.4	5

JEFFERSON COUNTY

401002080521800. Local number, J11 W4-1.

LOCATION.--Lat 40°10'02", long 80°52'18", Hydrologic Unit 05030106 (revised), near Harrisville.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 60 ft (18.3 m), cased to 18.80 ft (5.73 m).

DATUM.--Altitude of land-surface datum is 1251.37 ft (381.418 m). Measuring point: Top of casing, 1.2 ft (0.37 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN, DIS-SOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)
OCT 04...	0830	600	7.2	12.0	10	--	.0	290	110	88	17
APR 17...	1100	622	7.6	12.0	0	2.8	.0	270	120	84	15

DATE	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE, DIS-SOLVED (MG/L AS CO2)	SULFATE, DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS Cl)
OCT 04...	11	8	.3	2.4	221	0	181	22	100	26
APR 17...	11	8	.3	1.3	180	0	148	7.2	65	48

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	ALUMINUM, DIS-SOLVED (MG/L AS AL)	ANTIMONY, DIS-SOLVED (MG/L AS SB)
OCT 04...	.1	13	369	.50	.14	.61	.18	.02	10	2
APR 17...	.1	13	339	.46	2.7	.12	.00	.01	20	0

DATE	ARSENIC, DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS Ba)	CADMIUM, DIS-SOLVED (UG/L AS Cd)	CHROMIUM, DIS-SOLVED (UG/L AS Cr)	COPPER, DIS-SOLVED (UG/L AS Cu)	IRON, TOTAL RECOVERABLE (UG/L AS Fe)	IRON, DIS-SOLVED (UG/L AS Fe)	LEAD, DIS-SOLVED (UG/L AS Pb)	MANGANESE, TOTAL RECOVERABLE (UG/L AS Mn)	MANGANESE, DIS-SOLVED (UG/L AS Mn)
OCT 04...	1	200	8	0	1	2700	740	54	140	10
APR 17...	0	0	2	0	2	810	10	16	33	3

DATE	MERCURY, DIS-SOLVED (UG/L AS Hg)	NICKEL, DIS-SOLVED (UG/L AS Ni)	SELENIUM, DIS-SOLVED (UG/L AS Se)	SILVER, DIS-SOLVED (UG/L AS Ag)	STRONTIUM, DIS-SOLVED (UG/L AS Sr)	ZINC, DIS-SOLVED (UG/L AS Zn)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
OCT 04...	<.5	4	0	0	420	30	3.2	.2	.00	8
APR 17...	<.5	2	0	0	230	20	.7	.1	.00	0

GROUND-WATER RECORDS IN STRIP MINES

JEFFERSON COUNTY--Continued

401004080521900. Local number, J11 W6-1.

LOCATION.--Lat 40°10'04", long 80°52'19", Hydrologic Unit 05030106 (revised), near Harrisville.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 46 ft (14.0 m), cased to 17.8 ft (5.4 m).

DATUM.--Altitude of land-surface datum is 1237.36 ft (377.147 m). Measuring point: Top of casing, 3.2 ft (0.98 m) above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 29.76 ft (9.071 m) below land-surface datum, Feb. 26, 1979; lowest, 39.75 ft (12.116 m) below land-surface datum, Nov. 16-17, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		---	33.93	---	---	31.81	32.37	34.17	33.90	36.36	38.44	36.38
10		---	---	---	---	33.13	31.17	34.10	34.49	37.11	39.41	37.74
15		39.65	---	---	---	34.01	32.78	34.66	35.06	37.96	37.03	38.12
20		38.46	---	---	---	34.12	33.51	34.88	35.74	38.74	36.72	38.51
25		38.91	---	31.08	29.99	34.00	---	32.67	36.02	39.09	37.74	36.99
EOM		36.84	33.96	---	31.50	33.96	34.30	32.52	36.58	36.76	35.19	34.64
MAX		39.75	37.08	33.50	31.50	34.38	34.30	35.11	36.58	39.09	39.41	38.62

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	HYDRO- GEN SULFIDE (MG/L AS H2S)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 04...	1100	475	7.5	12.0	20	--	.0	220	120	68	11
APR 17...	1200	320	6.8	11.0	0	1.6	.2	150	130	40	12
DATE		SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 04...		9.4	9	.3	1.6	120	0	98	6.1	120	18
APR 17...		6.0	8	.2	1.2	20	0	16	5.1	120	7.5
DATE		FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (MG/L AS AL)	ANTI- MONY, DIS- SOLVED (MG/L AS SB)
OCT 04...		.2	15	303	.41	.04	.01	.41	.00	30	10
APR 17...		.2	19	223	.30	1.6	.00	.00	.00	30	0
DATE		ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 04...		1	0	7	0	1	46000	10	62	1700	30
APR 17...		0	0	3	0	1	470	20	13	80	40
DATE		MERCURY DIS- SOLVED (UG/L AS HG)	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)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
OCT 04...		<.5	1	0	0	330	40	4.8	1.4	.00	3
APR 17...		<.5	2	0	0	150	20	6.7	.2	.00	0

JEFFERSON COUNTY--Continued

401004080521901. Local number, J11 W7-2.

LOCATION.--Lat 40°10'04", long 80°52'19", Hydrologic Unit 05030106 (revised), near Harrisville.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 192 ft (58.5 m), cased to 53.8 ft (16.4 m).

DATUM.--Altitude of land-surface datum is 1237.25 ft (377.114 m). Measuring point: Top of casing, 3.0 ft (0.91 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)
OCT 04...	1145	910	8.0	12.5	5	.0	56	0	13	5.5
DATE	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS Cl)
OCT 04...	230	90	13	1.2	508	0	417	8.1	24	49
DATE	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	ALUMINUM, DIS-SOLVED (UG/L AS Al)	ANTIMONY, DIS-SOLVED (UG/L AS Sb)
OCT 04...	2.6	9.7	588	.80	.30	.01	.58	.02	30	1
DATE	ARSENIC DIS-SOLVED (UG/L AS As)	BARIUM, DIS-SOLVED (UG/L AS Ba)	CADMIUM, DIS-SOLVED (UG/L AS Cd)	CHROMIUM, DIS-SOLVED (UG/L AS Cr)	COPPER, DIS-SOLVED (UG/L AS Cu)	IRON, TOTAL RECOVERABLE (UG/L AS Fe)	IRON, DIS-SOLVED (UG/L AS Fe)	LEAD, DIS-SOLVED (UG/L AS Pb)	MANGANESE, TOTAL RECOVERABLE (UG/L AS Mn)	MANGANESE, DIS-SOLVED (UG/L AS Mn)
OCT 04...	0	100	11	0	7	1400	290	120	60	20
DATE	MERCURY DIS-SOLVED (UG/L AS Hg)	NICKEL, DIS-SOLVED (UG/L AS Ni)	SELENIUM, DIS-SOLVED (UG/L AS Se)	SILVER, DIS-SOLVED (UG/L AS Ag)	STRONTIUM, DIS-SOLVED (UG/L AS Sr)	ZINC, DIS-SOLVED (UG/L AS Zn)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
OCT 04...	<.5	6	0	1	720	30	3.7	4.2	.00	0

GROUND-WATER RECORDS IN STRIP MINES

JEFFERSON COUNTY--Continued

401007080522400. Local number J11 W8-2.

LOCATION.--Lat 40°10'07", long 80°52'24", Hydrologic Unit 05030106 (revised), near Harrisville.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 105 ft (32.0 m), cased to 20.43 ft (6.23 m).

DATUM.--Altitude of land-surface datum is 1156.67 ft (352.553 m). Measuring point: Top of casing, 0.57 ft (0.174 m) above land-surface datum.

PERIOD OF RECORD.--July 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 31.45 ft (9.586 m) below land-surface datum, May 19, 1978; lowest, 35.92 ft (10.948 m) below land-surface datum, July 21, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	35.80	34.23	32.74	32.85	---	32.60	33.24	33.63	33.08	35.14	35.47	33.97
10	35.65	34.45	31.77	33.59	---	33.25	33.04	33.73	33.57	34.77	35.69	34.44
15	35.36	34.51	32.99	33.73	---	33.98	33.13	34.03	34.03	34.96	35.05	34.73
20	34.79	34.42	33.36	33.05	---	33.85	32.70	34.05	34.45	35.32	34.92	34.73
25	34.74	34.40	33.16	32.51	---	34.11	32.91	33.53	34.67	35.36	34.91	34.33
EOM	34.07	33.94	33.46	---	32.18	33.98	33.44	32.17	---	34.95	33.58	33.44
MAX	35.91	34.51	34.01	33.73	32.18	34.20	33.98	34.23	34.67	35.47	35.76	34.76

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 04...	1700	580	7.5	12.0	5	--	.0	280	11	68	26
APR 17...	1515	625	7.6	12.0	0	.59	.0	290	17	74	25
JUN 28...	1400	680	7.6	14.5	3	1.1	--	130	0	32	13

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 04...	27	17	.7	1.7	326	0	267	16	51	12
APR 17...	11	8	.3	1.7	332	0	272	13	55	9.3
JUN 28...	99	61	3.7	1.8	400	0	328	16	29	12

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (MG/L AS AL)	ANTI- MONY, DIS- SOLVED (MG/L AS SB)
OCT 04...	.2	11	361	.49	.28	.00	.00	.00	30	0
APR 17...	.2	11	354	.48	.35	.00	.24	.00	30	0
JUN 28...	1.2	9.4	395	.54	.10	.21	.75	.01	--	--

GROUND-WATER RECORDS IN STRIP MINES

461

JEFFERSON COUNTY--Continued

401007080522400. Local number J11 W8-2.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 04...	0	300	0	0	2	3300	0	10	180	10
APR 17...	0	200	2	0	1	2100	10	17	300	1
JUN 28...	--	--	--	--	--	130	10	--	23	3

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	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)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
OCT 04...	<.5	1	0	1	1300	0	.8	.2	.00	0
APR 17...	<.5	0	0	0	870	0	.4	.1	.00	0
JUN 28...	--	--	--	--	--	--	2.7	.1	--	1

GROUND-WATER RECORDS IN STRIP MINES

JEFFERSON COUNTY--Continued

401010080521800. Local number, J11 W3-1.

LOCATION.--Lat 40°10'10"N, long 80°52'18"W, Hydrologic Unit 05030106 (revised), near Harrisville.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 38 ft (11.6 m), cased to 18.6 ft (5.7 m).

DATUM.--Altitude of land-surface datum is 1235.18 ft (376.483 m). Measuring point: Top of casing, 2.4 ft (0.73 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN, DIS-SOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)
APR 17...	1730	465	6.8	10.5	25	9.4	.0	150	12	42	12

DATE	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS Cl)
APR 17...	8.2	10	.3	3.0	174	0	143	44	63	11

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	ALUMINUM, DIS-SOLVED (UG/L AS AL)	ANTIMONY, DIS-SOLVED (UG/L AS Sb)
APR 17...	.1	17	258	.35	.09	8.0	1.3	.71	20	0

DATE	ARSENIC, DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS Ba)	CADMIUM, DIS-SOLVED (UG/L AS Cd)	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS Pb)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DIS-SOLVED (UG/L AS MN)
APR 17...	2	0	1	0	2	6900	5000	10	250	240

DATE	MERCURY, DIS-SOLVED (UG/L AS Hg)	NICKEL, DIS-SOLVED (UG/L AS Ni)	SELENIUM, DIS-SOLVED (UG/L AS Se)	SILVER, DIS-SOLVED (UG/L AS Ag)	STRONTIUM, DIS-SOLVED (UG/L AS Sr)	ZINC, DIS-SOLVED (UG/L AS Zn)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
APR 17...	<.5	2	0	0	160	10	4.3	1.0	.01	0

JEFFERSON COUNTY--Continued

401011080521600. Local number, J11 W1-1.

LOCATION.--Lat 40°10'11"N, long 80°52'16"W, Hydrologic Unit 05030106 (revised), near Harrisville.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 61.5 ft (18.7 m), cased to 18.5 ft (5.7 m).

DATUM.--Altitude of land-surface datum is 1259.50 ft (383.900 m) Measuring point: Top of casing, 2.5 ft (0.76 m) above land-surface datum.

PERIOD OF RECORD.--September 1976 to November 1978.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 38.33 ft (11.683 m) below land-surface datum, Mar. 6, 1978; lowest, 55.54 ft (16.929 m) below land-surface datum, Oct. 23-24, 1976.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	54.87	49.19										
10	52.96	49.77										
15	52.96	---										
20	52.33	---										
25	52.20	---										
EOM	49.19	---										
MAX	54.87	50.21										

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 04...	1445	760	7.2	12.5	10	--	.0	430	83	120	31
APR 17...	1615	810	7.5	11.0	0	11	.0	390	47	110	27

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 04...	6.7	3	.1	1.6	420	0	344	42	32	12
APR 17...	5.4	3	.1	1.3	414	0	340	21	38	13

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ANTI- MONY, DIS- SOLVED (UG/L AS SB)
OCT 04...	.1	11	471	.64	11	.01	.63	.00	20	2
APR 17...	.1	11	459	.62	11	.01	.12	.01	20	0

GROUND-WATER RECORDS IN STRIP MINES

JEFFERSON COUNTY--Continued

401011080521600. Local number, J11 W1-1.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 04...	1	200	12	0	3	2000	10	130	40	10
APR 17...	1	200	2	0	2	980	50	20	30	3

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	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)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS- (UG/L)
OCT 04...	<.5	3	2	0	470	30	2.5	.4	.00	0
APR 17...	<.5	3	0	0	410	10	6.5	.1	.00	0

JEFFERSON COUNTY--Continued

401011080521601. Local number, J11 W2-2.

LOCATION.--Lat 40°10'11", long 80°52'16", Hydrologic Unit 05030106 (revised), near Harrisville.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 211 ft (64.3 m), cased to 65 ft (19.8 m).

DATUM.--Altitude of land-surface datum is 1259.41 ft (383.868 m). Measuring point: Top of casing, 2.7 ft (0.82 m) (revised) above land-surface datum.

PERIOD OF RECORD.--September 1976 to October 1979.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 78.04 ft (23.787 m) below land-surface datum, Apr. 4, 1977; lowest, 87.77 ft (26.752 m) below land-surface datum, Sept. 29-30, 1977.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN, DIS-SOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)
OCT 04...	1530	890	7.1	12.5	5	--	.0	390	43	98	34
APR 17...	1700	840	7.2	11.0	5	.33	.0	360	16	93	31

DATE	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS Cl)
OCT 04...	33	16	.7	2.4	419	0	344	53	87	25
APR 17...	28	14	.6	2.3	422	0	346	43	85	26

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	ALUMINUM, DIS-SOLVED (UG/L AS AL)	ANTIMONY, DIS-SOLVED (UG/L AS Sb)
OCT 04...	.2	17	506	.69	.24	.01	.00	.00	10	2
APR 17...	.2	16	492	.67	.20	.00	.13	.00	20	0

DATE	ARSENIC, DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS Ba)	CADMIUM, DIS-SOLVED (UG/L AS Cd)	CHROMIUM, DIS-SOLVED (UG/L AS Cr)	COPPER, DIS-SOLVED (UG/L AS Cu)	IRON, TOTAL RECOVERABLE (UG/L AS Fe)	IRON, DIS-SOLVED (UG/L AS Fe)	LEAD, DIS-SOLVED (UG/L AS Pb)	MANGANESE, TOTAL RECOVERABLE (UG/L AS Mn)	MANGANESE, DIS-SOLVED (UG/L AS Mn)
OCT 04...	1	200	4	0	2	20	20	33	0	0
APR 17...	0	100	2	0	1	6500	10	11	180	7

DATE	MERCURY, DIS-SOLVED (UG/L AS Hg)	NICKEL, DIS-SOLVED (UG/L AS Ni)	SELENIUM, DIS-SOLVED (UG/L AS Se)	SILVER, DIS-SOLVED (UG/L AS Ag)	STRONTIUM, DIS-SOLVED (UG/L AS Sr)	ZINC, DIS-SOLVED (UG/L AS Zn)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
OCT 04...	<.5	3	0	0	1900	10	4.0	.3	.00	0
APR 17...	<.5	4	0	0	1500	10	.0	.2	.00	0

GROUND-WATER RECORDS IN STRIP MINES

JEFFERSON COUNTY--Continued

401119080480700. Local number, JO8 W5-1.

LOCATION.--Lat 40°11'19", long 80°48'07", Hydrologic Unit 05030106 (revised), near Mt. Pleasant.

AQUIFER.--Limestones and shales of Upper Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 125 ft (38.1 m) cased to 19.7 ft (6.0 m).

DATUM.--Altitude of land-surface datum is 1100 ft (335 m), from topographic map. Measuring point: Top of casing, 1.3 ft (0.40 m) above land-surface datum.

PERIOD OF RECORD.--June 1977 to November 1978.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 56.95 ft (17.358 m) below land-surface datum, May 19, 1978; lowest, 59.19 ft (18.041 m) below land-surface datum, October 1-3, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	59.07	58.93										
10	59.07	58.95										
15	59.07	---										
20	59.04	---										
25	59.04	---										
EOM	58.91	---										
MAX	59.19	58.97										

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 05...	1015	970	7.6	11.5	10	--	.0	600	330	150	53
APR 18...	0900	1280	7.4	11.5	5	.33	.0	710	460	200	51

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 05...	9.0	3	.2	2.5	324	0	266	13	300	3.3
APR 18...	6.2	2	.1	2.6	304	0	249	19	490	3.3

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ANTI- MONY, DIS- SOLVED (UG/L AS SB)
OCT 05...	.2	10	692	.94	.15	.01	.00	.00	10	0
APR 18...	.1	10	917	1.25	.32	.01	.00	.01	20	0

GROUND-WATER RECORDS IN STRIP MINES

467

JEFFERSON COUNTY--Continued

401119080480700. Local number, J08 W5-1.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 05...	0	100	0	0	3	2200	30	6	90	0
APR 18...	0	100	1	0	0	2200	10	13	92	2

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	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)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
OCT 05...	<.5	3	1	2	3500	10	3.0	.9	.00	2
APR 18...	<.5	2	1	0	2100	0	.5	.2	.00	2

GROUND-WATER RECORDS IN STRIP MINES

JEFFERSON COUNTY--Continued

401119080480701. Local number, J08 W2-2.

LOCATION.--Lat 40°11'19", long 80°48'07", Hydrologic Unit 05030106 (revised), near Mt. Pleasant.

AQUIFER.--Shales and limestones of Upper Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 220 ft (67.1 m) cased to 137.6 ft (41.9 m) (revised).

DATUM.--Altitude of land-surface datum is 1100 ft (335 m), from topographic map. Measuring point: Top of casing 2.2 ft (0.67 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN, DIS-SOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)
OCT 05...	1030	2400	8.0	15.0	10	--	.0	42	0	10	4.0
APR 18...	0945	2240	8.8	14.0	5	.43	.0	18	0	4.6	1.6

DATE	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE, DIS-SOLVED (MG/L AS CO2)	SULFATE, DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS Cl)
OCT 05...	600	97	41	3.0	1060	0	869	17	71	310
APR 18...	540	98	55	2.6	992	28	860	2.7	67	210

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3, DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA, DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC, DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	ALUMINUM, DIS-SOLVED (UG/L AS AL)	ANTIMONY, DIS-SOLVED (UG/L AS Sb)
OCT 05...	5.1	5.1	1530	2.08	.44	.04	.27	.02	30	1
APR 18...	5.5	4.8	1360	1.85	.36	.03	.04	.01	100	0

DATE	ARSENIC, DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS Ba)	CADMIUM, DIS-SOLVED (UG/L AS Cd)	CHROMIUM, DIS-SOLVED (UG/L AS Cr)	COPPER, DIS-SOLVED (UG/L AS Cu)	IRON, TOTAL RECOVERABLE (UG/L AS Fe)	IRON, DIS-SOLVED (UG/L AS Fe)	LEAD, DIS-SOLVED (UG/L AS Pb)	MANGANESE, TOTAL RECOVERABLE (UG/L AS Mn)	MANGANESE, DIS-SOLVED (UG/L AS Mn)
OCT 05...	0	100	2	0	6	1300	10	28	30	10
APR 18...	1	0	1	0	--	6800	50	--	160	0

DATE	MERCURY, DIS-SOLVED (UG/L AS Hg)	NICKEL, DIS-SOLVED (UG/L AS Ni)	SELENIUM, DIS-SOLVED (UG/L AS Se)	SILVER, DIS-SOLVED (UG/L AS Ag)	STRONTIUM, DIS-SOLVED (UG/L AS Sr)	ZINC, DIS-SOLVED (UG/L AS Zn)	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
OCT 05...	<.5	2	0	0	580	10	2.0	1.1	.00	10
APR 18...	<.5	--	0	0	340	20	2.9	1.4	.00	0

MUSKINGUM COUNTY

394841081463200. Local number, M09 W10-3.

LOCATION.--Lat 39°48'41", long 81°46'32", Hydrologic Unit 05040004, near Chandlersville.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 190 ft (57.9 m), cased to 41 ft (12.5 m). After Sept. 29, 1976, slotted casing to bottom of well.

DATUM.--Altitude of land-surface datum is 941.51 ft (286.972 m). Measuring point: Top of casing, 0.98 ft (0.30 m) above land-surface datum. Prior to September 29, 1976, top of casing 2.8 ft (0.84 m) above land-surface datum.

REMARKS.--Well redrilled September 29, 1976 because well collapsed.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L AS CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
JAN 09...	1330	980	9.1	9.5	200	--	.3	39	0	8.2	4.3
APR 19...	1445	1170	9.2	14.5	70	.14	.2	4	0	.9	.4

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
JAN 09...	250	93	18	.9	551	45	527	.8	44	47
APR 19...	270	99	60	.9	460	71	496	.6	43	64

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (MG/L AS AL)	ANTI- MONY, DIS- SOLVED (MG/L AS SB)
JAN 09...	2.7	3.5	688	.94	.09	.00	.45	.03	180	5
APR 19...	3.6	3.2	684	.93	.00	.13	.01	.05	--	--

DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
JAN 09...	1	100	2	0	6	9700	9700	16	240	160
APR 19...	--	--	--	--	--	17000	20	--	80	0

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	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)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDEED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
JAN 09...	<.5	5	0	0	220	20	12	.2	.00	1
APR 19...	--	--	--	--	--	--	2.7	.2	--	0

MUSKINGUM COUNTY--Continued

394852081462003. Local number, M09 P9-2.

LOCATION.--Lat 39°48'52", long 81°46'20", Hydrologic Unit 05040004, near Chandlersville.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 119 ft (36.3 m), cased to 60.0 ft (18.3 m).

DATUM.--Altitude of land-surface datum is 1039.24 ft (316.760 m). Measuring point: Top of casing, 3.0 ft (0.91 m) above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 55.77 ft (16.999 m) below land-surface datum, Aug. 30, 1979; lowest, 67.44 ft (20.556 m) below land-surface datum, Aug. 2, 1979.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		---	60.25	58.95	63.65	57.95	59.73	60.96	59.51		66.82	57.26
10		---	59.51	60.16	63.12	58.99	59.39	61.29	59.51		65.98	58.56
15		61.80	58.85	63.78	62.84	60.34	58.75	61.85	60.14		63.65	58.96
20		61.97	59.57	64.32	62.34	60.79	---	62.51	61.00		61.37	59.15
25		61.63	59.68	64.83	---	60.98	60.24	61.63	60.53		57.43	58.27
EOM		61.18	60.20	64.22	---	61.05	60.96	58.61	60.84		55.94	57.24
MAX		61.97	61.02	64.83	64.17	61.05	61.13	62.51	61.03		67.44	59.22

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 24...	1445	810	7.5	13.0	50	--	.0	350	0	86	32
JAN 10...	1400	855	7.3	7.0	5	--	.3	250	0	60	23
APR 19...	1000	820	7.6	12.5	0	.31	.0	220	0	54	21
JUL 18...	1530	946	7.0	14.0	5	.91	.0	330	0	88	25

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS C03)	ALKA- LINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 24...	80	33	1.9	2.7	464	0	381	23	120	6.2
JAN 10...	120	51	3.3	2.4	458	0	376	37	110	5.1
APR 19...	83	45	2.4	2.2	440	0	361	18	92	3.9
JUL 18...	99	40	2.4	2.2	430	0	353	69	170	8.9

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ANTI- MONY, DIS- SOLVED (UG/L AS SB)
OCT 24...	.3	12	572	.78	.39	.27	.30	.05	30	1
JAN 10...	.4	13	563	.77	.04	.24	.00	.00	150	5
APR 19...	.3	12	486	.66	.06	.25	.00	.00	--	--
JUL 18...	.3	13	628	.85	.31	.12	.48	.00	600	0

GROUND-WATER RECORDS IN STRIP MINES

471

MUSKINGUM COUNTY--Continued

394852081462003. Local number, M09 P9-2.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 24...	1	100	9	0	1	8000	600	78	110	70
JAN 10...	2	100	0	0	13	4800	750	12	150	120
APR 19...	--	--	--	--	--	7300	360	--	160	90
JUL 18...	3	200	8	30	1100	52000	3200	250	680	400

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	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)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
OCT 24...	<.5	3	0	0	1300	0	4.6	.9	.00	0
JAN 10...	<.5	2	0	0	1400	70	1.4	.2	.00	5
APR 19...	--	--	--	--	--	--	.8	.3	--	0
JUL 18...	3.5	32	0	22	2000	730	7.6	1.1	.00	7

GROUND-WATER RECORDS IN STRIP MINES

MUSKINGUM COUNTY--Continued

394845081462600. Local number, M09 W5-2.

LOCATION.--Lat 39°48'45", long 81°46'26", Hydrologic Unit 05040004, near Chandlersville.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 49 ft (14.9 m), cased to 17.3 ft (5.3 m).

DATUM.--Altitude of land-surface datum is 973.03 ft (296.580 m). Measuring point: Top of casing, 3.7 ft (1.13 m) above land-surface datum.

PERIOD OF RECORD.--June 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.15 ft (4.313 m) below land-surface datum, Jan. 26, 1978; lowest, 18.32 ft (5.584 m) below land-surface datum, Sept. 4, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.23	16.53	15.35	15.48	15.46	14.95	15.14	15.89	16.02	16.26	17.17	15.99
10	15.96	16.78	15.20	---	15.74	15.33	---	16.15	15.85	16.31	16.93	16.42
15	17.45	16.90	15.44	15.54	15.68	15.78	---	16.38	16.21	16.67	16.45	16.00
20	17.05	16.23	15.57	15.34	15.81	15.83	15.78	16.60	16.62	---	16.08	16.28
25	16.73	16.28	15.26	15.06	14.71	15.59	15.89	15.48	16.35	---	15.26	15.82
EOM	16.35	15.77	15.49	15.25	14.89	15.75	16.13	15.58	16.52	---	15.46	15.32
MAX	17.45	16.90	15.93	16.02	15.98	15.96	16.13	16.60	16.62	16.79	17.17	16.54

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 24...	1600	820	8.3	13.0	20	--	.0	20	0	5.2	1.6
APR 19...	1400	820	8.4	14.0	10	.19	.0	20	0	5.3	1.6
JUL 18...	1100	830	7.6	15.5	10	.28	.0	22	0	5.9	1.7

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS C03)	ALKA- LINITY (MG/L AS CAC03)	CARBON DIOXIDE DIS- SOLVED (MG/L AS C02)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 24...	220	96	22	1.4	504	4	420	4.1	40	3.8
APR 19...	180	95	18	1.3	480	6	404	3.1	39	4.7
JUL 18...	220	95	21	1.0	510	0	418	21	38	4.7

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ANTI- MONY, DIS- SOLVED (UG/L AS SB)
OCT 24...	1.8	6.8	535	.73	.19	.20	.16	.00	50	2
APR 19...	1.5	5.7	482	.66	.04	.15	.00	.00	--	--
JUL 18...	1.5	6.1	531	.72	.01	.13	.14	.00	90	0

MUSKINGUM COUNTY--Continued

394845081462600. Local number, M09 W5-2.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 24...	2	100	0	0	1	4600	140	12	0	0
APR 19...	--	--	--	--	--	9200	10	--	60	10
JUL 18...	3	100	0	20	1	19000	170	0	120	10

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	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)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
OCT 24...	<.5	1	0	0	300	0	1.6	.4	.00	0
APR 19...	--	--	--	--	--	--	.5	.1	--	0
JUL 18...	<.5	0	0	0	290	20	5.2	2.2	.00	8

GROUND-WATER RECORDS IN STRIP MINES

MUSKINGUM COUNTY--Continued

394853081462803. Local number, M09 P11-2.

LOCATION.--Lat 39°48'53", long 81°46'28", Hydrologic Unit 05040004, near Chandlersville.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 97 ft (29.6 m) cased to 26.8 ft (8.2 m).

DATUM.--Altitude of land-surface datum is 1022.15 ft (311.551 m). Measuring point: Top of casing, 2.5 ft (0.76 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 24...	1045	1220	7.6	12.5	0	--	.0	600	320	160	49
JAN 10...	1030	1400	7.4	10.5	0	--	.5	530	210	140	43
APR 18...	1600	1300	7.2	13.5	0	.08	.0	630	340	170	50
JUL 17...	1445	1250	6.9	15.0	20	.17	.0	620	330	170	48

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 24...	75	21	1.3	2.0	352	0	289	14	450	2.7
JAN 10...	120	33	2.3	1.6	385	0	316	25	430	3.4
APR 18...	42	13	.7	1.2	350	0	287	35	450	2.5
JUL 17...	38	12	.7	.8	358	0	294	72	440	2.6

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ANTI- MONY, DIS- SOLVED (UG/L AS SB)
OCT 24...	.2	15	931	1.27	.00	.15	.14	.00	930	1
JAN 10...	.3	13	944	1.28	.03	.14	.03	.00	90	3
APR 18...	.2	14	903	1.23	.00	.08	.00	.00	--	--
JUL 17...	.2	13	891	1.21	.00	.00	.17	.00	30	0

MUSKINGUM COUNTY--Continued

394853081462803. Local number, MO9 P11-2.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 24...	1	100	0	0	7	300	220	9	60	60
JAN 10...	1	100	0	0	6	780	520	7	60	60
APR 18...	--	--	--	--	--	1300	130	--	70	50
JUL 17...	2	70	0	30	1	18000	210	1	710	340

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	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)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
OCT 24...	<.5	0	0	0	2000	10	1.1	.3	.00	0
JAN 10...	<.5	0	0	0	1500	20	1.9	.1	.00	0
APR 18...	--	--	--	--	--	--	3.0	.2	--	2
JUL 17...	<.5	2	0	0	1100	20	6.6	.6	.00	0

MUSKINGUM COUNTY--Continued

394855081461603. Local number, M09 P7-2.

LOCATION.--Lat 39°48'55", long 81°46'16", Hydrologic Unit 05040004, near Chandlersville.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 170 ft (51.8 m), cased to 74.5 ft (22.7 m).

DATUM.--Altitude of land-surface datum is 1060.54 ft (323.253 m). Measuring point: Top of casing, 2.5 ft (0.76 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN, DIS-SOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)
OCT 24...	1245	1310	8.7	13.0	350	--	.0	35	0	10	2.4
JAN 10...	1215	1350	8.4	9.5	60	--	.0	26	0	7.1	1.8
APR 18...	1730	1380	8.4	12.0	10	1.0	.0	10	0	2.5	.8
JUL 18...	1345	1400	8.1	17.0	10	1.5	.0	67	0	20	4.0

DATE	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS Cl)
OCT 24...	360	95	27	1.9	590	28	531	2.1	37	170
JAN 10...	330	96	29	1.5	650	6	543	4.2	24	130
APR 18...	320	98	45	1.3	610	12	520	4.0	26	130
JUL 18...	360	92	19	1.7	648	0	531	8.2	25	140

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	ALUMINUM, DIS-SOLVED (UG/L AS AL)	ANTIMONY, DIS-SOLVED (UG/L AS Sb)
OCT 24...	4.6	4.7	914	1.24	.05	.31	.14	.13	1000	10
JAN 10...	4.3	6.0	895	1.22	14	.02	.33	.01	540	9
APR 18...	4.8	6.3	809	1.10	.91	.09	.04	.01	--	--
JUL 18...	4.4	8.5	895	1.22	.87	.00	.62	.13	1000	0

DATE	ARSENIC, DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS Ba)	CADMIUM, DIS-SOLVED (UG/L AS Cd)	CHROMIUM, DIS-SOLVED (UG/L AS Cr)	COPPER, DIS-SOLVED (UG/L AS Cu)	IRON, TOTAL RECOVERABLE (UG/L AS Fe)	IRON, DIS-SOLVED (UG/L AS Fe)	LEAD, DIS-SOLVED (UG/L AS Pb)	MANGANESE, TOTAL RECOVERABLE (UG/L AS Mn)	MANGANESE, DIS-SOLVED (UG/L AS Mn)
OCT 24...	11	200	0	1	21	13000	2500	35	110	0
JAN 10...	3	100	2	1	65	5900	1100	90	100	70
APR 18...	--	--	--	--	--	3700	30	--	65	5
JUL 18...	2	400	7	20	910	6600	3700	320	320	240

DATE	MERCURY, DIS-SOLVED (UG/L AS Hg)	NICKEL, DIS-SOLVED (UG/L AS Ni)	SELENIUM, DIS-SOLVED (UG/L AS Se)	SILVER, DIS-SOLVED (UG/L AS Ag)	STRONTIUM, DIS-SOLVED (UG/L AS Sr)	ZINC, DIS-SOLVED (UG/L AS Zn)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
OCT 24...	<.5	12	6	0	230	20	2.5	.8	.00	0
JAN 10...	<.5	6	0	0	270	20	4.5	.0	.00	5
APR 18...	--	--	--	--	--	--	4.3	.3	--	3
JUL 18...	4.4	43	0	6	420	910	3.4	1.3	.00	12

MUSKINGUM COUNTY--Continued

394845081462601. Local number, M09 P5-2a.

LOCATION.--Lat 39°48'45", long 81°46'26", Hydrologic Unit 05040004, near Chandlersville.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 50 ft (15.2 m), cased to 16.5 ft (5.0 m).

DATUM.--Altitude of land-surface datum is 974.17 ft (296.927 m). Measuring point: Top of casing, 3.0 ft (0.91 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN, DIS-SOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)
JAN 10...	1415	540	7.6	7.0	10	--	.0	210	0	60	15
APR 19...	1130	570	7.6	13.0	0	.95	.0	200	0	57	14
JUL 18...	1030	520	7.0	13.5	30	1.5	.0	220	0	64	15

DATE	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE, DIS-SOLVED (MG/L AS CO2)	SULFATE, DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)
JAN 10...	37	27	1.1	1.3	300	0	246	12	54	4.7
APR 19...	36	28	1.1	1.2	290	0	238	12	54	4.2
JUL 18...	37	27	1.1	.9	280	0	230	45	62	4.3

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3, DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA, DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC, DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	ALUMINUM, DIS-SOLVED (MG/L AS AL)	ANTIMONY, DIS-SOLVED (MG/L AS Sb)
JAN 10...	.3	8.0	347	.47	2.8	.13	.06	.00	210	1
APR 19...	.2	8.7	323	.44	.92	.03	.00	.01	--	--
JUL 18...	.2	10	339	.46	1.3	.01	.15	.00	40	0

DATE	ARSENIC, DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS Ba)	CADMIUM, DIS-SOLVED (UG/L AS Cd)	CHROMIUM, DIS-SOLVED (UG/L AS Cr)	COPPER, DIS-SOLVED (UG/L AS Cu)	IRON, TOTAL RECOVERABLE (UG/L AS Fe)	IRON, DIS-SOLVED (UG/L AS Fe)	LEAD, DIS-SOLVED (UG/L AS Pb)	MANGANESE, TOTAL RECOVERABLE (UG/L AS Mn)	MANGANESE, DIS-SOLVED (UG/L AS Mn)
JAN 10...	1	300	10	0	5	10000	4100	130	220	200
APR 19...	--	--	--	--	--	7300	30	--	250	80
JUL 18...	1	300	2	20	1	89000	100	14	1200	110

DATE	MERCURY, DIS-SOLVED (UG/L AS Hg)	NICKEL, DIS-SOLVED (UG/L AS Ni)	SELENIUM, DIS-SOLVED (UG/L AS Se)	SILVER, DIS-SOLVED (UG/L AS Ag)	STRONTIUM, DIS-SOLVED (UG/L AS Sr)	ZINC, DIS-SOLVED (UG/L AS Zn)	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
JAN 10...	<.5	1	0	0	850	10	1.1	.2	.00	0
APR 19...	--	--	--	--	--	--	.9	.1	--	0
JUL 18...	<.5	0	0	0	1100	20	4.0	.5	.00	5

MUSKINGUM COUNTY--Continued

394845081462602. Local number, M09 P5-2b.

LOCATION.--Lat 39°48'45", long 81°46'26", Hydrologic Unit 05040004, near Chandlersville.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 50 ft (15.2 m), cased to 17.5 ft (5.3 m).

DATUM.--Altitude of land-surface datum is 973.98 ft (296.869 m). Measuring point: Top of casing, 2.0 ft (0.61 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	HYDRO- GEN SULFIDE TOTAL (MG/L AS H2S)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
JAN 10...	1445	690	8.1	5.5	35	--	.0	35	0	9.1	2.8
APR 19...	1115	615	8.0	13.5	5	.85	.0	51	0	14	4.0
JUL 18...	1000	570	7.4	14.5	50	1.1	.0	92	0	25	7.0

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LITY (MG/L AS CACO3)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
JAN 10...	160	91	12	1.6	418	0	343	5.3	53	5.6
APR 19...	120	83	7.3	1.6	320	0	262	5.1	52	5.0
JUL 18...	110	72	5.0	1.6	310	0	254	20	55	4.9

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ANTI- MONY, DIS- SOLVED (UG/L AS SB)
JAN 10...	.9	8.0	464	.63	3.0	.19	.00	.03	420	5
APR 19...	.4	7.9	365	.50	.57	.19	.09	.00	--	--
JUL 18...	.3	9.0	371	.47	.92	.00	.13	.00	80	0

DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
JAN 10...	3	200	2	0	8	8000	2200	22	110	80
APR 19...	--	--	--	--	--	8100	10	--	140	50
JUL 18...	1	400	6	30	3	9300	340	24	160	90

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	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)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
JAN 10...	<.5	0	0	0	420	20	1.4	.3	.00	0
APR 19...	--	--	--	--	--	--	3.0	.2	--	0
JUL 18...	<.5	3	0	0	790	20	3.3	.8	.00	0

GROUND-WATER RECORDS IN STRIP MINES

479

MUSKINGUM COUNTY--Continued

394853081462804. Local number, M09 P4-3.

LOCATION.--lat 39°48'53", long 81°46'28", Hydrologic Unit 05040004, near Chandlersville.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in (0.15 m), depth 239 ft (72.8 m), cased to 99.5 ft (30.3 m).

DATUM.--Altitude of land-surface datum is 1023.47 ft (311.954 m). Measuring point: Top of casing, 2.5 ft (0.76 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN, DIS-SOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)
JUL 18...	1500	26000	8.0	16.5	20	31	.0	700	660	190	54

DATE	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS Cl)
JUL 18...	6000	95	99	17	46	0	38	.7	180	9300

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	ALUMINUM, DIS-SOLVED (UG/L AS AL)	ANTI-MONY, DIS-SOLVED (UG/L AS Sb)
JUL 18...	3.2	2.0	15900	21.6	29	.93	.97	.01	4400	0

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS Ba)	CADMIUM, DIS-SOLVED (UG/L AS Cd)	CHROMIUM, DIS-SOLVED (UG/L AS Cr)	COPPER, DIS-SOLVED (UG/L AS Cu)	IRON, TOTAL RECOVERABLE (UG/L AS Fe)	IRON, DIS-SOLVED (UG/L AS Fe)	LEAD, DIS-SOLVED (UG/L AS Pb)	MANGANESE, TOTAL RECOVERABLE (UG/L AS Mn)	MANGANESE, DIS-SOLVED (UG/L AS Mn)
JUL 18...	59	2000	3	70	86	28000	7300	83	6100	790

DATE	MERCURY DIS-SOLVED (UG/L AS Hg)	NICKEL, DIS-SOLVED (UG/L AS Ni)	SELENIUM, DIS-SOLVED (UG/L AS Se)	SILVER, DIS-SOLVED (UG/L AS Ag)	STRONTIUM, DIS-SOLVED (UG/L AS Sr)	ZINC, DIS-SOLVED (UG/L AS Zn)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
JUL 18...	3.0	21	10	0	3100	140	5.1	2.0	.01	3

GROUND-WATER RECORDS IN STRIP MINES

MUSKINGUM COUNTY--Continued

394855081462702. Local number, M09 P3-1.

LOCATION.--Lat 39°48'55", long 81°46'27", Hydrologic Unit 05040004, near Chandlersville.

AQUIFER.--Overburden spoils, replaced after mining.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 7 in (0.18 m), depth 24 ft (7.3 m), cased to 24.0 ft (7.3 m), bottom 10 ft (3.0 m) slotted.

DATUM.--Altitude of land-surface datum is 1023.06 ft (311.829 m). Measuring point: Top of casing, 2.5 ft (0.76 m) above land-surface datum.

PERIOD OF RECORD.--August 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.33 ft (4.977 m) below land-surface datum, Aug. 21, 1979; lowest, 19.88 ft (6.059 m) below land-surface datum, Aug. 10, 1979.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5											---	17.85
10											19.88	18.38
15											17.57	16.75
20											16.82	17.79
25											16.71	17.01
EOM											17.03	---
MAX											19.88	18.61

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

MUSKINGUM COUNTY--Continued

394859081462803. Local number, M09 P2-2.

LOCATION.--Lat 39°48'59", long 81°46'28", Hydrologic Unit 05040004, near Chandlersville.

AQUIFER.--Sand, shales and coals of Middle Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 7 in (0.18 m), depth 117 ft (35.7 m) cased to 40.0 ft (12.2 m).

DATUM.--Altitude of land-surface datum is 1038.56 ft (316.553 m). Measuring point: Top of casing, 3.0 ft (0.91 m) above land-surface datum.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	NITROGEN, DIS-SOLVED (MG/L AS N)	HYDROGEN SULFIDE TOTAL (MG/L AS H2S)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	HARDNESS, CARBONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)
OCT 24...	0900	1300	7.8	12.5	30	--	.0	180	0	38	21
JAN 10...	0900	1350	7.5	10.0	25	--	.0	310	0	67	33
APR 18...	1500	1550	7.7	15.5	0	.41	.0	330	0	72	36
JUL 17...	1330	1450	7.4	24.0	8	.77	.0	380	8	86	40

DATE	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	ALKALINITY (MG/L AS CaCO3)	CARBON DIOXIDE, DIS-SOLVED (MG/L AS CO2)	SULFATE, DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS Cl)
OCT 24...	280	77	9.0	2.7	490	0	402	12	350	3.3
JAN 10...	260	65	6.5	3.0	458	0	376	23	410	3.6
APR 18...	220	59	5.3	3.2	460	0	377	15	460	2.8
JUL 17...	230	57	5.1	2.7	456	0	374	29	500	2.9

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3, DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA, DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC, DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	ALUMINUM, DIS-SOLVED (UG/L AS AL)	ANTIMONY, DIS-SOLVED (UG/L AS Sb)
OCT 24...	.8	13	953	1.30	.06	.31	.30	.00	40	5
JAN 10...	.6	14	1020	1.39	.53	.24	.00	.00	150	2
APR 18...	.6	14	1040	1.41	.32	.09	.00	.01	--	--
JUL 17...	.5	13	1100	1.50	.41	.05	.31	.00	50	0

DATE	ARSENIC, DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS Ba)	CADMIUM, DIS-SOLVED (UG/L AS Cd)	CHROMIUM, DIS-SOLVED (UG/L AS Cr)	COPPER, DIS-SOLVED (UG/L AS Cu)	IRON, TOTAL RECOVERABLE (UG/L AS Fe)	IRON, DIS-SOLVED (UG/L AS Fe)	LEAD, DIS-SOLVED (UG/L AS Pb)	MANGANESE, TOTAL RECOVERABLE (UG/L AS Mn)	MANGANESE, DIS-SOLVED (UG/L AS Mn)
OCT 24...	2	100	0	0	2	1800	140	5	40	40
JAN 10...	2	100	0	0	10	1900	750	10	100	80
APR 18...	--	--	--	--	--	2700	10	--	120	30
JUL 17...	3	90	0	20	6	15000	0	0	520	60

DATE	MERCURY, DIS-SOLVED (UG/L AS Hg)	NICKEL, DIS-SOLVED (UG/L AS Ni)	SELENIUM, DIS-SOLVED (UG/L AS Se)	SILVER, DIS-SOLVED (UG/L AS Ag)	STRONTIUM, DIS-SOLVED (UG/L AS Sr)	ZINC, DIS-SOLVED (UG/L AS Zn)	CARBON, ORGANIC, DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
OCT 24...	<.5	3	0	0	1300	0	4.2	.3	.00	0
JAN 10...	<.5	3	0	0	2500	10	1.2	.1	.00	0
APR 18...	--	--	--	--	--	--	1.7	.1	--	2
JUL 17...	<.5	5	0	0	2300	80	12	4.8	.00	27

CHEMICAL CHARACTERISTICS AND BIOLOGICAL INDICES OF SELECTED LAKES

The following table lists the lakes at which chemical and physical characteristics and biological indices were obtained during water year 1979. These lakes were sampled to evaluate current conditions and existing or potential problems, determine chemical and physical characteristics of inflow from major tributaries, and provide basic information for determining the necessity for more intensive studies where problems exist. The results of these studies may be obtained by writing to the District Chief, WRD, 975 West Third Avenue, Columbus, Ohio, 43212. The complete study will be available in a separate report to be published in the near future.

Station No.	Lake Name	County
390116084091300	East Fork Lake	Clermont
410135083340000	Findlay City Reservoir	Hancock
400100083054000	Griggs Reservoir	Franklin
390320082410000	Hammertown Lake	Jackson
395652083393700	Lake Clark	Clark
410736080583900	Lake Milton	Mahoning
391033082811000	Lake Rupert	Vinton
390638083400000	Lake White	Pike
395159083223600	Madison Lake	Madison
410910080464500	Meander Creek Reservoir	Trumbull
403024082345100	North Branch Reservoir	Knox
392005082542200	Ross Lake	Ross
391459082112000	Snowden Lake	Athens
410550082393000	Willard City Reservoir	Huron

Page	Page
Accuracy of field data and computed results	10
Acre-foot, definition of	2
Adamsville, Raccoon Creek at	169-174
Africa, Alum Creek at	190
Alliance, Mahoning River at	16
Alum Creek, at Africa	190
at Columbus	191
near Kilbourne	189
Alum Creek Lake near Worthington ..	225,226
Anderson Fork near New Burlington ..	246
Aquifer, definition of	2
Armstrongs Mills, Captina Creek at	50
Artesian, definition of	2
Ash mass, definition of	3
Athens, Hocking River below	125-136
Atwood Lake near New Cumberland	115,118
Bacteria, definition of	2
Bainbridge, Paint Creek below Paint Creek Dam near	211
Paint Creek Lake near	225,226
Bantan, East Fork Lake near	259
Barnes Run near Summerfield	323
Barretts Mills, Rocky Fork near	212
Batavia, East Fork Little Miami River near	257
Beach City, Beach City Lake near ...	115,119
Sugar Creek below Beach City Dam near	64
Beach City Lake near Beach City	115,119
Beaver River basin, gaging-station records in	16-40
reservoirs in	41,42
Bed material, definition of	3
Bellepoint, Mill Creek near	178
Berlin Center, Berlin Lake near	41,42
Mahoning River near Berlin Dam near	17
Berlin Lake near Berlin Center	41,42
Bethel Road Creek at Columbus	185
Big Darby Creek at Darbyville	198
Big Four Hollow Creek below East Fork near Lake Hope	145-148
near Lake Hope	149-159
Big Walnut Creek, at Central College	188
at Rees	192
Biochemical oxygen demand, definition of	3
Biomass, definition of	3
Black Fork, at Loudonville	75
below Charles Mill Dam, near Mifflin	74
Blacklick Creek	326
Bloomfield, Little Muskingum River at	51
Bloomington, Consol Run near	47-48
Bokengehalas Creek near DeGraff	264
Bokes Creek near Warrensburg	320
Bolivar, Bolivar Reservoir at	115,118
Bolivar Reservoir at Bolivar	115,118
Bottom material (see Bed material) ..	3
Bourneville, Paint Creek near	213
Bradford, Greenville Creek near	275
Branson Run at Georgetown	322
Buffalo Run tributary near Dexter City	323
Bull Creek, at Negley	319
near Adelphi	324
Burr Oak Reservoir at Burr Oak	124
Caesar Creek Lake near Wellman	259
Caesar Creek near Xenia	245
Cambridge, Willis Creek at	86
Salt Fork below Salt Fork Dam near	87
Salt Fork Lake near	118,119
Camden, Sevenmile Creek at	309
Campaign Creek near Gallipolis	320
Canton, Middle Branch Nimishillen Creek at	60
Captina Creek basin gaging-station record in	50
Captina Creek at Armstrong Mills ...	50
Carthage, Mill Creek at	263
Center Branch Rush Creek near Junction City	320
Cells/volume, definition of	3
Centerfield, Rattlesnake Creek at ..	210
Central College, Big Walnut Creek at	188
Hoover Reservoir at	224,226
Cfs-day, definition of	3
Charles Mill Lake near Mifflin	116,119
Chemical characteristics and biological indices of selected lakes	482
Chemical oxygen demand, definition of	3
Cherry Valley Run at Leetonia	319
Chester, Shade River	137-138
Chickamauga Creek tributary	326
Chillicothe, Scioto River at	203-208
Chippewa Creek at Easton	52
Chlorophyll, definition of	3
Circleville, Scioto River at	199
Clarence J. Brown Reservoir, near Springfield	281
Claridon, Olentangy River at	180
Clear Creek (Hocking River basin) near Rockbridge	122
Clear Fork tributary near Hanover ..	70-71
Clear Fork below Pleasant Hill Dam, near Perrysville	76
Clear Fork near Jewett	323
Clendening Lake near Tippecanoe ..	116,119
Collection and computation of data .	8-9
Collection and examination of data .	10
Collection of the data	11
Collins Creek at Collinsville	325
Columbus, Alum Creek at	191
Bethel Road Creek at	185
Griggs Reservoir near	224,226
Linworth Road Creek at	184
Olentangy River at Henderson	186
Scioto River at	187
Conotton Creek at Jewett	323
Consol Run, at Bloomingdale	322
near Bloomingdale	47-48
Contents, definition of	3
Control, definition of	3
Control structure, definition of ...	3
Cooperation	1
Cortland, Mosquito Creek Lake near	41,42
Mosquito Creek near	32
Coshocton, Mill Creek near	83
Muskingum River near	84
Crab Creek at Youngstown	322
Crest-stage partial-record stations	322-325
Cross Creek basin gaging-stations records in	47-48
Cubic feet per second per square mile, definition of	3
Cubic foot per second, definition of	3
Darbyville, Big Darby Creek at	198
Dayton, Great Miami River at	289
Great Miami River near Stewart Street at	291-295
Mad River near	283-288
DeGraff, Bokengehalas Creek near ...	264
Deer Creek, at Mount Sterling	200
at Williamsport	202
near Pancoastburg	201
Deer Creek Lake near Pancoastburg	225-226
Definition of terms	2-7
Delaware, Olentangy River near	181
Delaware Lake near	224,226
Delaware Lake near Delaware	224,226
Devers Run at Lucasville	325
Dillon Falls, Dillon Lake near	118,120
Licking River near	104
Dillon Lake near Dillon Falls	118,120
Dillonvale, Short Creek near	49
Discharge, definition of	3
Discharge measurements made at miscellaneous sites during water year 1979	326
Dissolved, definition of	3
Dover, Dover Lake near	115,119
Tuscarawas River near	63
Dover Lake near Dover	115,119
Downstream order and station number	7
Drainage area, definition of	4
Drainage basin, definition of	4
Dresden, Muskingum River at	95

	Page		Page
Dry Run at Columbus	324	Hocking River, at Enterprise	123
Dublin, Scioto River near		below Athens	125-136
O'Shaughnessy Reservoir near ..	179	at Union Street, Lancaster	320
O'Shaughnessy Reservoir near	224, 226	Hocking River basin, gaging-	
Dundee Creek at Dundee	323	station records in	121-136
Eagle City, Mad River at St. Paris		reservoir in	124
Pike at	280	Home Creek near New Philadelphia ...	66
Eagle Creek at Phalanx Station	25	Hoover Reservoir at Central	
East Branch Middle Fork Little		College	224, 226
Beaver Creek at Leetonia	319	Hugle Run near Malvern	319
East Fork Lake near Bantan	259	Hull Hollow Creek near Lake Hope ...	160-164
East Fork Little Miami River,		Hunters Run at Lancaster	121
near Marathon	256	Hydrologic bench-mark station	227
near Batavia	257	Hydrologic bench-mark station,	
at Perintown	258	explanation of	8
East Liverpool, Little Beaver		Hydrologic conditions	2
Creek near	45	Hydrologic unit, definition of	4
Easton, Chippewa Creek at	52	Ingomar, Twin Creek near	302
Englewood, Stillwater River at	277	Instantaneous discharge,	
Enterprise, Hocking River at	123	definition of	3
Etna Creek at Etna	323	Introduction	1
Explanation, of ground-water		Jennings Ditch tributary	
level records	11	near Wooster	323
of stage and water-discharge		Kale Creek near Princetown	19
records	8-10	Kilbourne, Alum Creek near	189
of water-quality records	10-11	Killbuck, Killbuck Creek at	82
Factors for converting inch-pound		Killbuck Creek at Killbuck	82
units to International		Kinsman, Pymatuning Creek at	40
System (SI) units	Inside back cover	Kokosing River, at Mount Vernon	80
Fecal-coliform bacteria,		North Branch Lake near	
definition of	3	Fredericktown	117-119
Fecal streptococcal bacteria,		Lake Fork below Mohicanville	
definition of	3	Dam near Mohicanville	77
Figure 1	7	Lake Hope, Big Four Hollow	
Figure 2	14-15	Creek near	149-159
Fishinger and Kenny Road Creek		Big Four Hollow Creek below	
at Upper Arlington	324	East Fork near	145-148
Frazeysburg, Wakatomika Creek		Hull Hollow Creek near	160-164
near	89-90	Sandy Run above Big Four	
Fredericktown, North Branch		Hollow Creek near	139-144
Kokosing River Lake near	117, 119	Sandy Run below Hull Hollow Creek.	165-168
Fulton Creek near Radnor	320	Mine drainage (#88) above	
Gage height, definition of	4	Big Four Hollow Creek	175-176
Gaging station, definition of	4	Lakes, chemical characteristics	
Gaging-stations, in downstream		and biological indices of	
order, for which records		selected	482
are published	VI	Lakes and reservoirs:	
Georgetown, Whiteoak Creek near	236	Alum Creek Lake	225, 226
Germantown, Twin Creek near	303	Atwood Lake	115, 118
Glen Run near Doanville	324	Beach City Lake	115, 119
Graham Run near Bloomfield	323	Berlin Lake	41, 42
Great Miami River, at Dayton	289	Bolivar Reservoir	115, 118
at Hamilton	310	Burr Oak Reservoir	124
near Linden Avenue at Miamisburg..	297-301	Caesar Creek Lake	259
at Miamisburg	296	Charles Mill Lake	116, 119
at New Baltimore	311-318	Clarence J. Brown Reservoir	281
at Rockdale	304-308	Clendening Lake	116, 119
at Sidney	265	Deer Creek Lake	225-226
near Stewart Street at Dayton	291-295	Delaware Lake	224, 226
at Taylorsville	274	Dillon Lake	118, 120
at Tipp City	269-273	Dover Lake	115, 119
at Troy	268	East Fork Lake	259
Great Miami River basin, gaging-		Griggs Reservoir	224, 226
station records in	264-318	Hoover Reservoir	224, 226
reservoir record in	281	Leesville Lake	115, 118
Greenfield, Paint Creek near	209	Meander Creek Reservoir	41, 42
Greenhills, West Fork Mill		Michael J. Kirwan Reservoir	41, 42
Creek Lake near	261	Milton Reservoir	41, 42
Greenville Creek near Bradford	275	Mohawk Reservoir	117, 119
Greer, Mohican River at	78-79	Mohicanville Reservoir	117, 119
Griggs Reservoir near Columbus	224, 226	Mosquito Creek Lake	41, 42
Ground-water records	327-432	North Branch Kokosing River Lake .	117, 119
Ground-water records in		O'Shaughnessy Reservoir	224, 226
strip-mines	433-481	Paint Creek Lake	225, 226
Hamilton, Great Miami River at	310	Piedmont Lake	116, 119
Hammondsville, Yellow Creek near ...	46	Pleasant Hill Lake	116, 119
Hanover, Clear Fork tributary	70-71	Salt Fork Lake	118, 119
Hardness, definition of	4	Senecaville Lake	117, 119
Hebron, South Fork Licking		Tappan Lake	116, 119
River near	96	West Fork Mill Creek Lake	261
Higby, Scioto River at	214-223	Wills Creek Lake	118, 120
Hinkley Creek at Charlestown	322	Lancaster, Hunters Run at	121

	Page		Page
Leavittsburg, Mahoning River at	31	Mean concentration, definition of ..	6
Leavittsburg, Mahoning River		Mean discharge, definition of	3
above Duck Creek at	26-30	Meander Creek Reservoir,	
Leesville, Leesville Lake near	115,118	near Mineral Ridge	41,42
McGuire Creek, below		Methylene blue active substance,	
Leesville Dam near	62	definition of	4
Licking River, below Dillon Dam		Miamisburg, Great Miami River at ...	296
near Dillon Falls	104	Great Miami River near	
near Newark	98-103	Linden Avenue at	297-301
North Fork, at Utica	97	Michael J. Kirwan Reservoir,	
South Fork, near Hebron	96	at Wayland	41,42
Linworth Road Creek at Columbus	184	Micrograms per gram, definition of..	4
Lisbon Creek at Lisbon	322	Micrograms per kilogram,	
List of gaging-stations in		definition of	4
downstream order, for which		Micrograms per liter,	
records are published	VI-VIII	definition of	4
List of ground water stations for		Middle Branch Nimishillen Creek	
which records are published ...	VIII-X	at Canton	60
Little Beaver Creek,		Middle Fork Little Beaver Creek	
near East Liverpool	45	near Salem	319
at Alpha	321	Middle Fork Salt Creek near	
Little Beaver Creek basin, gaging-		Richmond Dale	320
station records in	43-45	Mifflin, Black Fork near	74
Little Blackjack Branch near		Charles Mill Lake near	116,119
South Bloomingville	324	Milford, Little Miami River at	247-255
Little Miami River, at Milford	247-255	Mill Creek basin, gaging-station	
East Fork, at Perintown	258	records in	260-263
near Batavia	257	reservoir record in	261
near Marathon	256	Mill Creek (Hocking River basin),	
at John Bryant State Park		near Chauncey	324
near Clifton	321	Mill Creek (Mill Creek basin),	
near Oldtown	237	at Carthage	263
near South Charleston	321	at Reading	260
near Spring Valley	239-244	West Fork, at Woodlawn	262
near Xenia	321	Mill Creek (Muskingum River basin),	
Little Miami River basin,		near Coshocton	83
gaging-station records in	237-258	Mill Creek (Scioto River basin),	
reservoir record in	259	near Bellepoint	178
Little Muskingum River basin		Millers Ditch at Tipp City	325
gaging-station record in	51	Milligrams per liter,	
Little Muskingum River,		definition of	4
at Bloomfield	51	Milton Reservoir near Pricetown	41,42
Little Piney Fork at Parlett	322	Mine drainage (#88) above	
Little Salt Creek,		Big Four Hollow Creek	
at Jackson	320	near Lake Hope	175-176
near Richmond Dale	320	Mineral Ridge, Meander Creek	
South Branch, near Jackson	325	Reservoir at	41,42
Little Stillwater Creek, below		Mohawk Reservoir near Nellie	117,119
Tappan Dam, at Tappan	72	Mohican River at Greer	78-79
Little Sugar Creek at Bellbrook	321	Mohicanville, Lake Fork near	77
Lockington, Loramie Creek at	267	Mohicanville Reservoir near	117,119
Loramie Creek, at Lockington	267	Moss Run near Wingett	323
near McCartyville	321	Mosquito Creek below Mosquito Creek	
near Newport	266	Dam near Cortland	32
Loudonville, Black Fork at	75	Mosquito Creek Lake near Cortland ..	41,42
Lowellville, Mahoning River at	34	Mount Sterling, Deer Creek at	200
Mahoning River at OH-PA		Mount Vernon, Kokosing River at	80
stateline below	35-39	Moxahala Creek at Roseville	323
Low-flow partial-record stations ...	319-321	Mud Run tributary at Wainwright	323
Lucasville, Devers Run at	325	Muskingum River, at Dresden	95
Ludlow Creek	326	at McConnellsville	105-114
		near Coshocton	84
Mad River, at St. Paris Pike		Muskingum River basin, gaging-	
at Eagle City	280	station records in	52-114
at Zanesfield	278	reservoirs in	115-120
near Dayton	283-288		
near Springfield	282	National Geodetic Vertical	
near Urbana	279	Datum of 1929 (NGVD)	4
Mahoning River, above Duck Creek		National stream-quality accounting	
at Leavittsburg	26-30	network, explanation of	8
at Alliance	16	Navarre, Tuscarawas River at	54-58
at Leavittsburg	31	Negley, Stateline Creek near	43-44
at Lowellville	34	Nellie, Mohawk Reservoir near	117,119
at Pricetown	18	Walhonding River at	81
at Youngstown	33	New Baltimore,	
below Berlin Dam, near		Great Miami River at	311-318
Berlin Center	17	New Burlington, Anderson Fork near..	246
below Lowellville, at OH-PA		New Cumberland, Atwood Lake near ...	115,118
stateline below	35-39	New Philadelphia, Home Creek near ..	66
West Branch, below Michael J.		Newark, Licking River near	98-103
Kirwan Dam, at Wayland	23	Newcomerstown, Tuscarawas	
near Newton Falls	24	River at	73
near Ravenna	20-22	Newman Creek near Massillon	319
Marathon, East Fork Little		Newport, Loramie Creek near	266
Miami River near	256	Newton Falls, West Branch	
Massies Creek at Wilberforce	238	Mahoning River near	24
Massillon, Tuscarawas River at	53	Nimishillen Creek, at	
McConnellsville, Muskingum River at..	105-114	North Industry	61
McGaw, Upper Twin Creek at	227-234	Middle Branch, at Canton	60
McGuire Creek below Leesville Dam		near Canal Fulton	319
near Leesville	62	North Branch Kokosing River Lake	
		near Fredericktown	117,119

	Page		Page
North Fork Licking River at Utica ..	97	Rocky Fork near Barretts Mills	212
North Industry, Nimishillen		Rose Run near Portsmouth	325
Creek at	61	Runoff in inches, definition of	5
Numbering system for wells and		Rush Run at Worthington	183
miscellaneous sites	7	Rush Creek near Junction City	320
O'Shaughnessy Reservoir,		Salt Creek, above damsite	
near Dublin	224,226	at Adelphi	320
Ohio Brush Creek basin,		at Richmond Dale	320
gaging-station records in	235	near Londonderry	324
Ohio Brush Creek near West Union ...	235	Salt Fork below Salt Fork Dam	
Oldtown, Little Miami River near ...	237	near Cambridge	87
Olentangy River, at Claridon	180	Salt Fork Lake near Cambridge	118,119
at Henderson Road, at Columbus ...	186	Sand Fork near Wakatomika	91-92
near Delaware	181	Sandusky Creek near Burlington	324
near Worthington	182	Sandy Creek at Waynesburg	59
Opossum Run tributary near		Sandy Run, above Big Four Hollow	
Wakatomika	93-94	Creek, near Lake Hope	139-144
Organism, definition of	4	below Hull Hollow Creek	
count/area, definition of	4	near Lake Hope	165-168
count/volume, definition of	4	Scioto Big Run at Briggsdale	324
Other data available	10	Scioto River at Chillicothe	203-208
Paint Creek, below Paint Creek		at Circleville	199
Dam, near Bainbridge	211	at Columbus	187
East Fork, near Sedalia	324	at Higby	214-223
near Bourneville	213	below O'Shaughnessy Dam, near	
near Greenfield	209	Dublin	179
Paint Creek Lake near Bainbridge ...	225,226	below Shadeville	193-197
Painter Creek	326	near Prospect	177
Pancoastburg, Deer Creek near	201	Scioto River basin, gaging-	
Deer Creek Lake near	225-226	station records in	177-223
Partial-record station,		reservoir records in	224-226
definition of	4	Sediment	11
Partial-record stations and		Sediment, definition of	5-6
miscellaneous sites	319-325	Seneca Fork below Senecaville	
Particle-size, definition of	4	Dam, near Senecaville	85
Particle-size classification,		Senecaville, Seneca Fork near	85
definition of	5	Senecaville Lake near	117,119
Percent composition, definition of..	5	Senecaville Lake near Senecaville ..	117,119
Perintown, East Fork Little		Sevenmile Creek at Camden	309
Miami River at	258	Shade River basin,	
Periphyton, definition of	5	gaging-station records in	137-138
Perrysville, Clear Fork near	76	Shade River near Chester	137-138
Pleasant Hill Lake near	116,119	Shadeville, Scioto River below	193-197
Pesticides, definition of	5	Short Creek basin,	
Pesticide program, explanation of ..	8	gaging-station record in	49
Phalanx Station, Eagle Creek at	25	Short Creek near Dillonvale	49
Phytoplankton, definition of	5	Sidney, Great Miami River at	265
Picocurie, definition of	5	Sloan Run tributary near	
Piedmont, Piedmont Lake at	116,119	Harrisville	322
Stillwater Creek at	67	Solute, definition of	6
Piedmont Lake near Piedmont	116,119	South Fork Licking River	
Piney Fork tributary		near Hebron	96
near Piney Fork	322	South Fork Short Creek at	
Plankton, definition of	5	Georgetown	322
Pleasant Hill, Stillwater River at..	276	Special networks and programs	8
Pleasant Hill Lake near Perrysville.	116,119	Specific conductance,	
Pleasant Run	326	definition of	6
Pricetown, Kale Creek near	19	Spring Valley, Little Miami	
Mahoning River at	18	River near	239-244
Milton Reservoir near	41,42	Springfield, Clarence J. Brown	
Prospect, Scioto River near	177	Reservoir near	281
Publications on techniques of		Mad River near	282
water-resources investigations.	12	Stage-discharge relation,	
Pymatuning Creek at Kinsman	40	definition of	6
Raccoon Creek at Adamsville	169-174	Starr Run near New Plymouth	324
Raccoon Creek basin, gaging-		Stateline Creek near Negley	43-44
station records in	139-176	Stillwater Creek, at Piedmont	67
Rattlesnake Creek near Centerfield..	210	at Tippecanoe	68
Ravenna, West Branch Mahoning		at Uhrichsville	69
River near	20-22	Stillwater River, at Englewood	277
Ray Run near Moscow	325	at Pleasant Hill	276
Reading, Mill Creek at	260	Strasburg, Sugar Creek at	65
Records of discharge collected		Streamflow, definition of	6
by agencies other than the		Sugar Creek, at Strasburg	65
Geological Survey	10	below Beach City Dam, near	
Recoverable from bottom material,		Beach City	64
definition of	5	near Bellbrook	321
Rees, Big Walnut Creek at	192	Suspended, definition of	6
Reservoirs (see		Suspended recoverable,	
Lakes and reservoirs)		definition of	6
in Beaver River basin	41-42	Suspended sediment, definition of ..	5
in Hocking River basin	124	Suspended sediment concentration,	
in Great Miami River basin	281	definition of	5
in Little Miami River basin	259	Suspended sediment discharge,	
in Mill Creek basin	261	definition of	5
in Muskingum River basin	115-120	Suspended sediment load,	
in Scioto River basin	224-226	definition of	5
Robinson Run near Hendrysburg	323	Suspended total, definition of	6
Rockbridge, Clear Creek near	122		
Rockdale, Great Miami River at	304-308	Tappan, Little Stillwater Creek at..	72
		Tappan Lake at	116,119

	Page
Taylorville, Great Miami River at..	274
Terms, definition of	2-7
Time-weighted average, definition of	6
Tipp City, Great Miami at	269-273
Tippecanoe, Clendening Lake near ...	116,119
Stillwater Creek at	68
Tons per day, definition of	6
Total, definition of	6
Total coliform bacteria, definition of	2
Total in bottom material, definition of	6
Total load, definition of	6
Total organism count, definition of	4
Total sediment discharge, definition of	6
Total recoverable, definition of....	7
Trail Run near Antioch	323
Trippets Branch at Camden	325
Trotwood, Wolf Creek at	290
Troy, Great Miami River at	268
Tupper Creek at DeVola	323
Turkey Run (Scioto River basin) at Upper Arlington	324
Tuscarawas River, at Massillon	53
at Navarre	54-58
at Newcomerstown	73
below Dover Dam, near Dover	63
Twin Creek, near Germantown	303
near Ingomar	302
Uhrichsville, Stillwater Creek at...	69
Upper Twin Creek at McGaw	227-234
Upper Twin Creek basin gaging-station records in	227-234
Urbana, Mad River near	279
Utica, North Fork Licking River at	97
Wakatomika, Opossum Run	93-94
Wakatomika Creek, near Frazeyburg..	89-90
Sand Fork	91-92
Walhonding River below Mohawk Dam, at Nellie	81
Water analysis	10
Water temperature	11
Wayland, Michael J. Kirwan Reservoir at	41,42
West Branch Mahoning River at	23
Wayne Creek at Waynesville	325
Waynesburg, Sandy Creek at	59
Wellman, Caesar Creek Lake near	259
West Fork Little Beaver Creek, at Guilford	319
at Woodlawn	262
West Fork Mill Creek Lake near Greenhills	261
West Union, Ohio Brush Creek near ..	235
Whiteoak Creek basin gaging-station records in	236
Whiteoak Creek near Georgetown	236
Wilberforce, Massies Creek at	238
Williamsport, Deer Creek at	202
Wills Creek, at Cambridge	86
below Wills Creek Dam at Wills Creek	88
Wills Creek Lake near	118,120
Wolf Creek (Great Miami River basin) at Trotwood	290
Woodlawn, West Fork Mill Creek at...	262
Wood Run near Woodfield	322
Worthington, Alum Creek Lake near...	225,226
Olentangy River near	182
Rush Run at	183
WDR, definition of	7
WRD, definition of	7
WSP, definition of	7
Xenia, Caesar Creek near	245
Yellow Creek basin gaging-station records in	46
Yellow Creek near Hammondsville	46
Youngstown, Mahoning River at	33
Zanesfield, Mad River at	278

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). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

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

3 1818 00453529 8



USGS LIBRARY - RESTON

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF THE INTERIOR
INT 413



U.S. DEPARTMENT OF THE INTERIOR
Geological Survey
975 West Third Avenue
Columbus, OH 43212

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300
SPECIAL 4TH CLASS BOOK RATE