

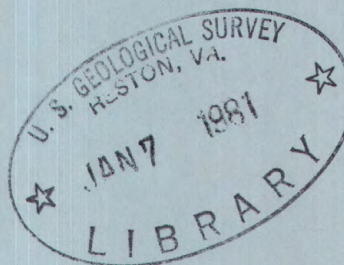
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Water Resources Data for Ohio

Water Year 1975

Volume 1. Ohio River Basin



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OH-75-1

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

CALENDAR FOR WATER YEAR 1975

1974

OCTOBER

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1975

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Water Resources Data for Ohio Water Year 1975

Volume 1. Ohio River Basin



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Preface

This report was prepared by the U.S. Geological Survey in cooperation with the State of Ohio and with other agencies by personnel of the Ohio district of the Water Resources Division, under the supervision of J. F. Blakey, District Chief, and J. T. Callahan, Regional Hydrologist, Northeastern Region.

This report is one of a series issued State by State under the general direction of J. S. Cragwall, Jr., Chief Hydrologist, and G. W. Whetstone, Assistant Chief Hydrologist for Scientific Publications and Data Management.

UNITED STATES DEPARTMENT OF THE INTERIOR

THOMAS S. KLEPPE, Secretary

GEOLOGICAL SURVEY

V. E. McKelvey, Director

Prepared in cooperation with

Ohio Department of Natural Resources
Ohio Environmental Protection Agency
Ohio Department of Transportation
Miami Conservancy District
City of Canton
City of Columbus
Three Rivers Watershed District
Corps of Engineers, U.S. Army

Water Resources Data for Ohio, 1975
are in two volumes:

Volume 1. Ohio River basin

Volume 2. St. Lawrence River basin

For additional information write to
District Chief, Water Resources Division
U.S. Geological Survey
975 West Third Avenue
Columbus, Ohio 43212

1976

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WATER RESOURCES DATA FOR OHIO, 1975

Volume 1. Ohio River Basin

INTRODUCTION

Water resources data for the 1975 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 wells. This report contains discharge records for 238 stations and monthend elevation and contents for 32 lakes and reservoirs; water quality for 174 stations, and 12 wells; and water levels for 25 observation wells. Additional water data were collected at various sites, not part of the systematic data collection program, and are published in separate tables. These data represent that part of the National Water Data System operated by the U. S. Geological Survey and cooperating State, Federal, and other governmental 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 water year 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."

Beginning with the 1961 water year and continuing through water year 1974, streamflow data have been released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records beginning with the 1964 water year, and ground-water data since the 1971 water year have been similarly released either in separate reports or in conjunction with streamflow records. These reports provided rapid release of preliminary water data shortly after the end of the water year. The final data were then released in the water-supply paper series mentioned above. Beginning with the 1975 water year, water data will be released on a State-boundary basis in final form and will not be republished in the water-supply paper series. The 1975 and subsequent water year reports will be in a series which will 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-75-1." These reports are for sale to the public for a nominal fee from the National

WATER RESOURCES DATA FOR OHIO, 1975

Technical Information Service, U.S. Department of Commerce, Springfield, Virginia, 22151. For more information on publications available, see "PUBLICATIONS" on a subsequent page.

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 water-quality records since 1946, and for groundwater records since 1938. Organizations that assisted in collecting data through cooperative agreements with the Survey are:

Ohio Department of Natural Resources, W. B. Nye, director, succeeded by R. W. Teater; H. R. Collins, chief, Division of Geological Survey, and W. S. Nichols, chief, Division of Water.

Ohio Environmental Protection Agency, I. L. Whitman, director, succeeded by N. E. Williams; Ernie Neal, chief, Division of Surveillance, P. M. Flanigan, chief, Office of Wastewater Pollution Control, and C. A. Wilhelm, Planning Coordinator.

Ohio Department of Transportation, J. P. Richley, director.

Miami Conservancy District, L. B. Coy, general manager.

Three Rivers Watershed District, G. H. Watkins, secretary-treasurer.

City of Columbus, Department of Public Service, R. D. Jackson, director.

City of Canton, R. F. Fisher, director of public service.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, in collecting records for 121 stations published in this report. Assistance was also furnished by National Weather Service, NOAA, U.S. Department of Commerce.

Organizations that supplied data are acknowledged in station descriptions.

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. See also table for converting English units to International System of units (SI) on page 30.

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 1,223 cubic metres.

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.

Bacteria are microscopic unicellular organisms, typically spherical, rod-like, 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 all the organisms which produce colonies with a golden-green metallic sheen 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 intestine or feces of warmblooded 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°C $\pm$ 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warmblooded 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 shifting portion of fragmented material of which the streambed is composed.

Biochemical oxygen demand (BOD) is the amount of oxygen required by bacteria while stabilizing decomposable organic matter under aerobic conditions.

Biomass is the amount of living matter present at any given time, expressed as the weight per unit area or volume of habitat.

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

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, or about 646,000 gallons or 2,445 cubic metres. It represents a runoff of approximately 0.0372 inch from 1 square mile or 0.3468 millimetre from 1 square kilometre.

Chemical oxygen demand (COD) indicates the quantity of oxidizable compounds in water and varies with water composition(s), temperature, period of contact, and other factors.

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

Contents is the volume of water in a reservoir, lake, stream or aquifer. Contents herein is that of a reservoir or lake and unless otherwise indicated, is computed on the basis of a level pool and does not include bank storage.

Continuing record station is a specified site which meets one or all conditions listed:

1. When chemical samples are collected daily or monthly for 10 or more months during the water year.

2. When water temperature records include observations taken once or more times daily.
3. When sediment discharge records include those periods for which sediment loads are computed and are considered to be representative of the runoff for the water year.

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.

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 (CFS,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 metres per second.

Discharge is the volume of water (or more broadly, total fluids), that passes a given point within a given period of time.

Instantaneous discharge is the discharge at a given time.

Mean discharge is the arithmetic average of individual daily mean discharges during a specific period.

Dissolved refers to the amount of a substance present in true chemical solution. In practice, however, the term includes all forms of the substance that will pass through a 0.45-micrometre membrane filter, and thus may include some very small (colloidal) suspended particles. Analyses are performed on filtered samples.

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

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or body of impounded surface water together with all tributary surface streams 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 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 gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

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).

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 litre (US/L, ug/l) is a unit expressing the concentration of chemical constituents in solution as the weight (micrograms) of solute per unit volume (litre) of water. One thousand micrograms per litre is equivalent to one milligram per litre.

Milligrams per litre (MG/L, mg/l) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per litre represents the weight of solute per unit volume of water. Milligrams or micrograms per litre may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per litre by multiplying by the factors in table 1, page 7. Concentration of suspended sediment also is expressed in mg/l, and is based on the weight of sediment per litre of water-sediment mixture. Sediment concentrations may be converted to parts per million by using the factors in table 2, p. 7.

Odor is reported in terms of the threshold number which is the dilution ratio at which odor is just detectable.

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Table 1.--Factors for conversion of chemical constituents in milligrams or micrograms per litre to milliequivalents per litre.

<u>Ion</u>	<u>Multi- ply by</u>	<u>Ion</u>	<u>Multi- ply by</u>
Aluminum (Al^{+3})*...	0.11119	Hydroxide (OH^{-1})..	0.05880
Ammonia as NH^{+1} ...	.05544	Iodide (I^{-1}).....	.00788
Arsenic (As^{+3}).....	.04004	Iron (Fe^{+3})*.....	.05372
Barium (Ba^{+2}).....	.01456	Lead (Pb^{+2})*.....	.00965
Bicarbonate (HCO^{-1})	.01639	Lithium (Li^{+1})*...	.14411
Bromide (Br^{-1}).....	.01251	Magnesium (Mg^{+2})..	.08226
Cadmium (Cd^{+2}).....	.01779	Manganese (Mn^{+2})*.	.03640
Calcium (Ca^{+2}).....	.04990	Nickel (Ni^{+2})*.....	.03406
Carbonate (CO^{-2})..	.03333	Nitrate (NO_3^{-1})...	.01613
Chloride (Cl^{-1}).....	.02821	Nitrite (NO_2^{-1})...	.02174
Chromium (Cr^{+6})*...	.11539	Phosphate (PO_4^{-3})..	.03159
Cobalt (Co^{+2})*.....	.03394	Potassium (K^{+1})...	.02557
Copper (Cu^{+2})*.....	.03148	Sodium (Na^{+1}).....	.04350
Cyanide (CN^{-1}).....	.03844	Strontium (Sr^{+2})*.	.02283
Fluoride (F^{-1}).....	.05264	Sulfate (SO_4^{-2})...	.02082
Hydrogen (H^{+1}).....	.99209	Zinc (Zn^{+2})*.....	.03060

*Constituent reported in micrograms per litre; multiply by factor and divide results by 1,000.

Table 2.--Factors for conversion of sediment concentration in milligrams per litre to parts per million*
(All values calculated to three significant figures)

Range of concentration in 1000 mg/l	Di- vide by	Range of concentration in 1000 mg/l	Di- vide by	Range of concentration in 1000 mg/l	Di- vide by	Range of concentration in 1000 mg/l	Di- vide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5 - 104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 - 120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 - 136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 - 152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 - 169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 - 185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 - 200	1.12	395-409	1.25	604-617	1.38		

*Based on water density of 1.000 g/ml and a specific gravity of sediment of 2.65.

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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 multi-celled and are counted according to the number of contained cells per sample volume, usually millilitres (ml) or litres (l).

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 metres (m²), acres, or hectares. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

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

Particle size is the diameter, in millimetres (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 distribution 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.

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.

Plankton is the floating (or weakly swimming) animal or plant life in a body of water consisting chiefly of minute plants (as diatoms and blue-green algae) and of minute animals (as protozoan, entomostracans, and various larvae).

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.

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 discharge 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 by volume, that is discharged in a given time. It is computed by multiplying discharge times mg/l times 0.0027.

Total sediment discharge or total sediment load is the sum of the suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight or volume, that is discharged during a given time.

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 litre of water-sediment mixture (mg/l).

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 and is expressed in micromhos per centimeter at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content in the water. Commonly, the amount of dissolved solids (in milligrams per litre) is about 65 percent of the specific conductance (in micromhos per cm at 25°C). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height and the 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." Streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the presence of a thermograph or a digital mechanism that automatically records water temperatures on paper tape.

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 water year.

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

Total (as used in tables of chemical analyses) refers to the amount of a substance that is present both in solution and in suspension. Analyses are performed on representative samples of water-suspended sediment mixtures.

Turbidity is the reduction of transparency of a liquid due to the presence of suspended particulate matter.

WRD is used as an abbreviation for "Water-Resources Data" in the summary REVISIONS paragraph to refer to previously published State annual basic-data reports.

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

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

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 is an accounting 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 in the network design. Areal configuration of the network is based on river-basin accounting units 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 water-quality conditions nationwide on a year-to-year basis and (2) to detect and assess long-term changes in stream quality.

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DOWNSTREAM ORDER AND STATION NUMBER

Stations are listed in downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the list of stations in the front of this report the rank of tributaries is indicated by indentation, each indentation representing one rank.

As an added means of identification, each water-quality station, gaging 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 and continuous-record stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the 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 03086500 which appears just to left of the station name includes the two-digit part number "03" plus the six-digit downstream order number "086500". In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in Volume 1 of this report are in Part 3 (Ohio River basin) and records in Volume 2 are in Part 4 (St. Lawrence River basin). All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

Miscellaneous 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 is a sequential number for wells within a 1-second grid. In the event that the latitude-longitude coordinates for a well and a miscellaneous site are the same, assign sequential numbers "01," "02," etc. as one would for wells. See figure below.

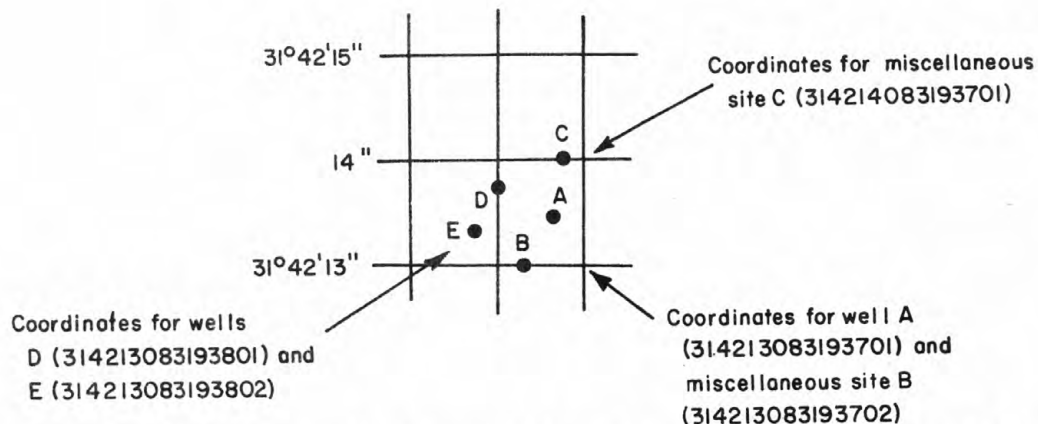


Figure 1. System for numbering wells and miscellaneous sites (latitude and longitude)

EXPLANATION OF 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 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 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 15-, 30-, or 60-minute intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks, in Water-Supply Paper 888, and in the 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), velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and the 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 hydrologists 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 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 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 the gage-height record and occasional winter discharge measurements, consideration being 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.

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, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information.

The water discharge 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. A calendar for the current water year is shown on the inside of the front cover to facilitate finding the day of the week for any date.

The description of the gaging station gives the location, drainage area, period of record, type and history of gages, average discharge, extremes of discharge or contents, general remarks, and notations of revisions of previously published records. 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." The type of gage currently in use, the datum of the present gage above mean sea level and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey unless otherwise qualified. 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. The maximum discharge (or contents) and the maximum gage height (or elevation), the minimum discharge if there is little or no regulation (or minimum contents), and the minimum gage height (or elevation) if it is significant are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge and gage height if they are abnormally low). In the first paragraph headed "Current year:" the data given are for the complete current water year unless otherwise specified. In the second paragraph under "EXTREMES" headed "Period of record:" the data given are for the period of record given in the PERIOD OF RECORD paragraph. Reliable information concerning major floods that occurred outside the period of record is given in the third or last paragraph under "EXTREMES." Unless otherwise qualified, the maximum discharge (or contents) corresponds 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 at the same time as the maximum discharge (or contents), it is given separately. Information pertaining to the accuracy of the discharge records, to conditions that affect the natural flow at the gaging station, and availability of water-quality records, 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 also given under "REMARKS."

Previously published 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 "REVISIONS (WATER YEARS)" 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, 1933 stands for the water year October 1, 1932, to September 30, 1933. If no daily, monthly, or annual figures of discharge were revised, that 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 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 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 following "MAX" are the maximum daily discharges for the calendar and water years; likewise, those following "MIN" are the minimum daily discharges.

Footnotes to the table of daily discharges 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-discharge 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.

Peak discharges and their times of occurrence, corresponding gage heights and current extremes for many stations are listed below the yearly summary. All independent peaks above the selected base are given. The base discharge, which is given in parentheses, is selected so that an average of about three peaks a year can be presented. Peak discharges are not published for any canals, 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 and 1:30 p.m. is 1330.

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

Data collected at partial-record stations and miscellaneous sites are combined with regular records in downstream order.

Accuracy of data

The accuracy of discharge 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 interpretation 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 of true value; "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 and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or 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. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or unadjusted losses are large in comparison with the observed discharge.

Publications

In each water-supply paper entitled, "Surface Water Supply of the United States" there is a list of numbers of preceding water-supply papers containing streamflow information for the area covered by that report. In addition, there is a list of numbers of water-supply papers containing detailed information on major floods in the area. Records for stations in Ohio for the period October 1960 to September 1965 are in Water-Supply Papers 1907, 1908, and 1912.

Two series of summary reports entitled, "Compilation of Records of Surface Waters of the United States" have been published; the first series covers the entire period of record through September 1950 and the second series covers the period October 1950 to September 1960. These reports contain summaries of monthly and annual discharge and monthend storage for all previously published records, as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station. Records for stations in Ohio are compiled in water-supply papers 1305 and 1307 through September 1950, and in 1725 and 1727 for October 1950 through September 1960.

Special reports on major floods or droughts or of other hydrologic studies for the area have been issued in publications other than water-supply papers. Information relative to these reports may be obtained from the district office.

Other data available

Information of a more detailed nature than that published for most of the gaging stations, such as 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.

EXPLANATION OF WATER QUALITY RECORDS

Collection and examination of data

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the chemical constituents and sediment loads.

The water quality data in this report include a description of the sampling station and tabulations of the samples analyzed. The description of the sampling station gives the location, drainage area, periods of record for the various water-quality data, extremes of the pertinent data, and general remarks, in a format similar to that used for water discharge stations. For ground-water sampling stations, 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 ground water.

Water-quality information is presented for chemical, biological, and microbiological quality, water temperature, and fluvial sediment. Chemical quality includes concentrations of individual dissolved constituents and certain properties or characteristics such as hardness, specific conductance, and pH. The biological information includes qualitative and quantitative analyses of plankton, bottom organisms, and particulate inorganic and amorphous matter present. Microbiological information includes quantitative identification of certain bacteriological indicator organisms. Water-temperature data represent once-daily observations except for stations where a continuous temperature recorder (thermograph) furnished information from which daily minimums and maximums are obtained. Fluvial-sediment information is given for suspended-sediment discharges and concentrations and for particle-size distribution of suspended sediment and bed material.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967, the U.S. Geological Survey began reporting data for chemical constituents and concentrations of suspended sediment in milligrams per litre (mg/l), and water temperatures in degrees Celsius (°C). In waters with a density of 1.000 g/ml (grams per millilitre), parts per million and milligrams per litre can be considered equal. In waters with a density greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per

litre. Temperature reported in degrees Celsius may be converted to degrees Fahrenheit by using table 3 p. 23.

In October 1968 the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per litre instead of milligrams per litre. (See "Definition of Terms," p. 6 and table for converting English units to SI units, p. 30).

Solutes

Most methods for collecting and analyzing water samples to determine the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman. The method for determining elemental constituents by emission spectrographic techniques is described by Barnett and Mallory. Analysis of pesticides, herbicides, and organic substances in water are described by Goerlitz and Lamar, Lamar, Goerlitz, and Law, and Goerlitz and Brown. The collection and analysis of aquatic, biological and microbiological samples are described by Slack and others.

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 the 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 the 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 noncontinuous-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 U.S. Geological Survey district office at the address given on the back of the title page of this report.

Ground water normally does not change significantly during short periods of time; infrequent sampling and analysis of ground water adequately defines ground-water quality at a given site. Water samples from wells are analyzed individually.

Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for surface-water stations. For daily stations, the water temperatures are taken at about the same time each day when the sample is collected. Large streams have a small diurnal 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 continuously recording thermographs are present, the records consist of maximum and minimum temperatures for each day and the monthly extremes.

Table 3.--Degrees Celsius (°C) to degrees Fahrenheit (°F) *
(Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

$$^{\circ}\text{C} = 5/9 \quad (^{\circ}\text{F} - 32) \text{ or } ^{\circ}\text{F} = 9/5 (^{\circ}\text{C}) + 32.$$

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 sub-divided 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 sub-divided 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.

Publications

The annual series of water-supply papers that contain information on quality of surface waters in Ohio are listed below.

<u>Water year</u>	<u>WSP No.</u>	<u>Water year</u>	<u>3-4</u>	<u>WSP No.</u>
1941	942	1958	-----	1571
1942	950	1959	-----	1642
1943	970	1960	-----	1742
1944	1022	1961	-----	1882
1945	1030	1962	-----	1942
1946	1050	1963	-----	1948
1947	1102	1964	-----	1955
1948	1132	1965	-----	1962
1949	1162	1966	-----	1992
1950	1186	1967	-----	2012
1951	1197	1968	Part 3	2093
1952	1251		Part 4	2094
1953	1290	1969	Part 3	2143
1954	1350		Part 4	2144
1955	1400	1970	Part 3	2153
1956	1451		Part 4	2154
1957	1520			

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of data

Only ground-water level data from a basic national network of observation wells are published herein. These water-level measurements are intended to provide a sampling and historical record of water-level changes in the nation's most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on the grid system of latitude and longitude as shown in figure 4, and (2) a local number that is provided for continuity with older reports and for other use as dictated by local needs.

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

Water-level measurements in this report are given in feet with reference to either mean sea level (msl) or land-surface datum (lsd). Mean sea level is the datum plane on which the national network of precise levels is based; land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum above mean sea level 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 of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

Ground-water data for observation wells in counties in the Lake Erie drainage may be found in volume 2 of this report.

WATER RESOURCES DATA FOR OHIO, 1975

Publications

Publication of ground-water level data for the United States in Water-Supply Papers was begun by the Geological Survey in 1935. From 1935 through 1939, a single Water-Supply Paper for each year covering the entire nation was issued (Water-Supply Papers 777, 817, 840, 845, and 886). From 1940 through 1974, separate Water-Supply Papers were issued for 6 sections of the United States. Water-level data for Ohio are in the Water-Supply Papers listed below, each report containing one or more calendar years (January-December) of data. Data in this report are for the 12-month water year ending September 30.

<u>Calendar</u> <u>year</u>	<u>WSP</u> <u>No.</u>	<u>Calendar</u> <u>year</u>	<u>WSP</u> <u>No.</u>	<u>Calendar</u> <u>year</u>	<u>WSP</u> <u>No.</u>	<u>Calendar</u> <u>year</u>	<u>WSP</u> <u>No.</u>
1935	777	1942	944	1949	1156	1956-57	1537
1936	817	1943	986	1950	1165	1958-62	1782
1937	840	1944	1016	1951	1191	1963-67	1977
1938	845	1945	1023	1952	1221	1968-72	2140
1939	886	1946	1071	1953	1265		
1940	906	1947	1096	1954	1321		
1941	936	1948	1126	1955	1404		

Information about reports and other data on ground water in Ohio may be obtained from the district office, at the address given on the back of the title page.

SELECTED REFERENCES

- American Public Health Association, and others 1971, Standard methods for the examination of water and wastewater, 13th ed.: Am. Public Health Assoc., New York, 874 p.
- Barker, F. B., and Johnson, J. O., 1964, Determination of radium in water: U.S. Geological Survey Water-Supply Paper 1969-B, 19 p.
- Barker, F. B., and others, 1965, Determination of uranium in natural water: U.S. Geol. Survey Water-Supply Paper 1969-C, 25 p.
- Barker, F. B., and Robinson, B. P., 1963, Determination of beta activity in water: U.S. Geol. Survey Water-Supply Paper 1696-A, 32 p.
- Barnett, P. R., and Mallory, Jr., E. C. 1971, Determination of minor elements in water by emission spectroscopy: U.S. Geol. Survey Techniques of Water Resources Inv., book 5, chap. A2, 31 p.
- Brown, Eugene, Skougstad, M. W., and Fishman, M. J., 1970, Methods for collection and analysis of water samples for dissolved minerals and gases: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. A1, 160 p.
- Carter, R. W., and Davidian, Jacob, 1968, General procedures for gaging streams: U.S. Geol. Survey Techniques Water-Resources Inv., book 3, chap. A6, 13 p.
- Colby, B. R., 1963, Fluvial sediments--a summary of source, transportation, deposition, and measurement of sediment discharge: U.S. Geol. Survey Bull. 1181-A, 47 p.
- Colby, B. R., and Hembree, C. H., 1955, Computations of total sediment discharge, Niobrara River near Cody, Nebraska: U.S. Geol. Survey Water-Supply Paper 1357, 187 p.
- Colby, B. R., and Hubbell, D. W., 1961, Simplified methods for computing total sediment discharge with the modified Einstein procedure: U.S. Geol. Survey Water-Supply Paper 1593, 17 p.

- Corbett, D. M., and others, 1943, reprinted 1957, Stream-gaging procedures, a manual describing methods and practices of the Geological Survey: U.S. Geol. Survey Water-Supply Paper 888, 245 p.
- Goerlitz, D. F., and Brown, Eugene, 1972, Methods for analysis of organic substances in water: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5 chap. A3, 40 p.
- Goerlitz, D. F., and Lamar, W. L., 1967, Determination of phenoxy acid herbicides in water by electron-capture and microcoulometric gas chromatography: U.S. Geol. Survey Water-Supply Paper 1817-C, 21 p.
- Guy, H. R., 1969, Laboratory theory and methods for sediment analysis: U. S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. C1, 58 p.
- 1970, Fluvial sediment concepts: U.S. Geol. Survey Techniques of Water-Resources Inv., book 3, chap. C1, 55 p.
- Guy, H. P. and Norman, V. W., 1970, Field methods for measurement of fluvial sediment: U.S. Geol. Survey Techniques of Water-Resources Inv., book 3, chap. C2, 59 p.
- Hem, J. D., 1970, Study and interpretation of the chemical characteristics of natural water, 2d ed.: U.S. Geol. Survey Water-Supply Paper 1473, 363 p.
- Lamar, W. L. Goerlitz, D. F., and Law, L. M., 1965, Identification and measurement of chlorinated organic pesticides in water by electron-capture gas chromatography: U.S. Geol. Survey Water-Supply Paper 1817-B 12 p.
- Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geol. Survey Water-Supply Paper 1541-A, 29 p.
- Lohman, S. W., and others, 1972, Definitions of selected ground-water terms--revisions and conceptual refinements: U.S. Geol. Survey Water-Supply Paper 1988, p. 2.
- Porterfield, George, 1972, Computations of fluvial-sediment discharge: U.S. Geol. Survey Techniques of Water Resources Inv., book 3, chap. C3, 66 p.

- Bitter, J. R., and Helley, E. J., 1969, Optical method for determining particle sizes of coarse sediment: U.S. Geol. Survey Techniques of Water-Resources Inv., book 5, chap. C3, 33 p (open file).
- Rose, Arthur and Elizabeth, 1966, The condensed chemical dictionary: Reinhold Pub. Corp., New York, 7th ed., p. 257.
- Slack, K. V., and others, 1973, Methods for collection and analysis of aquatic, biological and microbiological samples: U.S. Geol. Survey Techniques of Water Resources Inv., book 5, chap. A-4, 165 p.
- U.S. Inter-Agency Committee on Water Resources, Subcommittee on Sedimentation, A study of methods used in measurement and analysis of sediment loads in streams. Published by the St. Anthony Falls Hydraulic Laboratory, Minneapolis, Minn.
- 1941, Methods of analyzing sediment samples: Rept. 4.
- 1953, Accuracy of sediment size analyses made by the bottom-withdrawal-tube method: Rept. 10.
- 1957, The development and calibration of visual accumulation tube: Rept. 11.
- U.S. Inter-Agency Committee on Water Resources, Subcommittee on Sedimentation, A study of methods used in measurement and analysis of sediment loads in streams. Published by the St. Anthony Falls Hydraulic Laboratory, Minneapolis, Minn.
- 1957, Some fundamentals of particle-size analysis: Rept. 12.
- 1959, Federal Inter-agency sedimentation instruments and reports: Rept. AA.
- 1961, The single stage sampler for suspended sediment: Rept. 13.
- 1963, Determinations of fluvial sediment discharge: Rept. 14.

Table 4.--Factors for converting English units to International System units (SI)

The following factors may be used to convert the English units published herein to the International System of Units (SI). Subsequent reports will contain both the English and SI unit equivalents in the station manuscript descriptions until such time that all data will be published in SI units.

Multiply English units	By	To obtain SI units
<i>Length</i>		
inches (in)	25.4	millimetres (mm)
	.0254	metres (m)
feet (ft)	.3048	metres (m)
yards (yd)	.9144	metres (m)
rods	5.0292	metres (m)
miles (mi)	1.609	kilometres (km)
<i>Area</i>		
acres	4047	square metres (m ²)
	.4047	*hectares (ha)
	.4047	square hectometres (hm ²)
	.004047	square kilometres (km ²)
square miles (mi ²)	2.590	square kilometres (km ²)
<i>Volume</i>		
gallons (gal)	3.785	**litres (l)
	3.785	cubic decimetres (dm ³)
	3.785x10 ⁻³	cubic metres (m ³)
million gallons (10 ⁶ gal)	3785	cubic metres (m ³)
	3.785x10 ⁻³	cubic hectometres (hm ³)
cubic feet (ft ³)	28.32	cubic decimetres (dm ³)
	.02832	cubic metres (m ³)
cfs-days [(ft ³ /s) · d]	2447	cubic metres (m ³)
	2.447x10 ⁻³	cubic hectometres (hm ³)
acre-feet (acre-ft)	1233	cubic metres (m ³)
	1.233x10 ⁻³	cubic hectometres (hm ³)
	1.233x10 ⁻⁶	cubic kilometres (km ³)
<i>Flow</i>		
cubic feet per second (ft ³ /s)	28.32	litres per second (l/s)
	28.32	cubic decimetres per second (dm ³ /s)
	.02832	cubic metres per second (m ³ /s)
gallons per minute (gpm)	.06309	litres per second (l/s)
	.06309	cubic decimetres per second (dm ³ /s)
	6.309x10 ⁻⁵	cubic metres per second (m ³ /s)
million gallons per day (mgd)	43.81	cubic decimetres per second (dm ³ /s)
	.04381	cubic metres per second (m ³ /s)
<i>Mass</i>		
tons (short)	.9072	tonnes (t)

*The unit hectare is approved for use with the International System (SI) for a limited time. See NBS Special Bulletin 330, p.15, 1972 edition.

**The unit litre is accepted for use with the International System (SI). See NBS Special Bulletin 330, p. 13, 1972 edition.

SURFACE WATER RECORDS

OHIO RIVER BASIN

BEAVER RIVER BASIN

03086500 MAHONING RIVER AT ALLIANCE, OHIO

LOCATION.--Lat 40°55'58", long 81°05'41", in SE 1/4 sec. 24, T.19 N., R.6 W., Stark County, 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).

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 1,037.3 ft (316.17 m) above mean sea level, adjustment of 1912.

REMARKS.--Discharge records good. Flow slightly regulated by Westville Reservoir 9.3 mi (15.0 km) upstream from station.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--34 years, 84.6 ft³/s (2.396 m³/s), 12.88 in/yr (327 mm/yr), unadjusted for diversion 1941-55.

EXTREMES.--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.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	33	78	492	203	155	109	128	864	28	12	492
2	30	49	74	402	160	132	95	113	717	25	12	450
3	30	59	109	221	132	113	136	71	245	23	23	143
4	30	92	124	221	117	102	164	59	151	21	30	74
5	30	462	139	189	117	99	124	65	172	19	21	55
6	28	285	160	160	194	113	102	92	432	19	16	147
7	25	128	168	168	194	207	95	99	260	17	16	109
8	25	92	346	414	124	468	78	62	155	21	14	62
9	25	74	745	1310	110	212	62	49	120	28	12	46
10	25	62	528	724	92	139	62	43	100	21	11	35
11	25	59	290	368	85	120	55	35	85	21	28	43
12	28	240	221	240	80	207	55	33	295	17	30	385
13	30	280	346	176	75	385	49	81	217	17	25	245
14	30	139	335	136	75	240	49	65	132	28	143	85
15	68	99	315	106	85	155	46	46	90	21	65	55
16	109	78	285	90	168	164	46	40	70	17	49	46
17	81	74	374	78	368	230	43	38	60	16	33	46
18	68	65	290	85	731	534	35	35	81	16	23	176
19	59	59	198	113	420	633	52	33	68	21	17	577
20	49	92	155	90	221	871	52	33	78	55	16	564
21	46	132	120	80	147	330	43	35	50	265	16	408
22	43	160	117	70	124	189	38	181	30	99	17	176
23	43	106	136	70	352	155	35	124	60	40	16	102
24	40	88	850	81	1890	168	52	71	25	38	40	315
25	38	270	1130	151	1330	280	78	49	160	59	28	598
26	38	325	591	444	498	168	59	99	78	46	23	250
27	35	155	250	240	280	124	43	99	55	28	43	132
28	33	120	172	151	189	113	38	52	164	21	23	99
29	33	106	160	794	---	176	49	46	65	17	30	81
30	33	88	226	899	---	203	46	280	38	14	132	71
31	33	---	270	330	---	132	---	226	---	12	290	---
TOTAL	1248	4071	9302	9093	8561	7317	1990	2482	5117	1090	1254	6067
MEAN	40.3	136	300	293	306	236	66.3	80.1	171	35.2	40.5	202
MAX	109	462	1130	1310	1890	871	164	280	864	265	290	598
MIN	25	33	74	70	75	99	35	33	25	12	11	35
CFSM	.45	1.52	3.36	3.28	3.43	2.65	.74	.90	1.92	.39	.45	2.26
IN.	.52	1.70	3.88	3.79	3.57	3.05	.83	1.04	2.13	.45	.52	2.53

CAL YR 1974 TOTAL 53170 MEAN 146 MAX 1510 MIN 14 CFSM 1.64 IN 22.17
WTR YR 1975 TOTAL 57592 MEAN 158 MAX 1890 MIN 11 CFSM 1.77 IN 24.02

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-24	2200	3.81	1,310	01-29	2000	3.93	1,400	03-20	0100	3.67	1,200
01-09	1200	3.96	1,430	02-24	1500	*4.89	*2,270	06-01	2000	3.49	1,050

Minimum daily discharge: 11 ft³/s (0.31 m³/s) Aug. 10.

BEAVER RIVER BASIN
03086500 MAHONING RIVER AT ALLIANCE, OHIO--Continued
WATER QUALITY RECORDS
CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)
APR. 02...	1715	100	9.5	8.4	73	497	7.5	3.8	57	14	14	2.8
AUG. 26...	1000	19	24.0	4.1	48	580	7.3	8.1	70	24	18	5.5

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
APR. 02...	112	0	5.7	92	21	130	.4	.09	.02	.80	.11	299
AUG. 26...	167	0	13	137	23	130	.4	.12	.03	.51	.12	361

DATE	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
APR. 02...	200	110	120	310	--	--	--	--	--	--	--	--
AUG. 26...	270	140	30	90	3	10	10	9	30	<.5	11	3.3

03089500 MILL CREEK NEAR BERLIN CENTER, OHIO

LOCATION.--Lat 41°00'01", long 80°58'07", Mahoning County, at bridge on county road, 1 mi (2 km) upstream from flow line of Berlin Reservoir, 1.2 mi (1.9 km) upstream from Turkeybroth Creek, 2 mi (3 km) southwest of Berlin Center.

DRAINAGE AREA.--19.1 mi² (49.5 km²).

PERIOD OF RECORD.--Discharge, 1942 to 1971 (operated as a continuous-record station); 1972 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 24	6.23	1.899	1,310	37.1

BEAVER RIVER BASIN

35

03090000 BERLIN LAKE NEAR BERLIN CENTER, OHIO

LOCATION.--Lat 41°02'46", long 81°00'10", in T.1 N., R.6 W., Portage County, 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 at mean sea level (levels by Corps of Engineers).

EXTREMES.--Period of record: Maximum contents, 91,150 acre-ft (112 hm³) July 9, 1943, elevation, 1,032.0 ft (375.51 m); minimum, 1,540 acre-ft (1.90 hm³) Jan. 10, 1944, elevation, 978.82 ft (298.344 m).

REMARKS.--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.

COOPERATION.--Gage-heights and capacity curve furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	1,012.78	27,890	-
Oct. 31.....	1,010.80	24,580	-3,310
Nov. 30.....	1,012.36	27,160	+2,580
Dec. 31.....	1,014.67	31,430	+4,270
CAL YR 1974.....	-	-	-11,410
Jan. 31.....	1,018.06	38,770	+7,340
Feb. 28.....	1,024.16	56,400	+17,630
Mar. 31.....	1,023.84	55,300	-1,100
Apr. 30.....	1,024.15	56,360	+1,060
May 31.....	1,025.95	62,950	+6,590
June 30.....	1,024.65	58,130	-4,820
July 31.....	1,022.25	50,150	-7,980
Aug. 31.....	1,019.12	41,380	-8,770
Sept. 30.....	1,004.93	16,790	-24,590
WTR YR 1975.....	-	-	-11,100

EXTREMES.--Current year: Maximum contents, 71,550 acre-ft (88.2 hm³) June 3, elevation, 1,028.03 ft (313.344 m); minimum, 16,790 acre-ft (20.7 hm³) Sept. 30, elevation, 1,004.93 ft (306.303 m).

BEAVER RIVER BASIN

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

LOCATION.--Lat 41°02'54", long 81°00'05", in T.1 N., R.6 W., Mahoning County, 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).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 958.00 ft (291.998 m) above mean sea level, 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.--Discharge 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 DISCHARGE RECORDS

PERIOD OF RECORD.--October 1930 to current year. Prior to October 1942, published as "near Berlin Center".

AVERAGE DISCHARGE.--45 years, 229 ft³/s (6.485 m³/s) (unadjusted).

EXTREMES.--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.

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

REVISIONS (WATER YEARS).--WSP 743: 1932. WSP 853: 1936. WSP 873: 1932-34, 1935(M), 1936-38. WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	247	87	599	995	221	859	430	135	346	247	558	251
2	247	89	417	995	357	846	290	139	442	251	550	662
3	220	87	382	989	460	831	290	135	846	238	550	1020
4	199	89	602	986	529	815	295	135	1060	220	550	1010
5	179	89	605	982	521	798	295	151	1060	220	442	1010
6	163	87	606	973	523	782	295	167	1060	220	334	1000
7	163	155	602	968	541	472	242	167	1060	220	334	1000
8	143	228	604	974	534	270	155	167	1050	211	334	990
9	97	228	618	551	551	275	155	167	1050	199	340	980
10	97	228	724	196	545	275	159	167	1050	199	340	1020
11	97	228	908	290	528	275	159	167	1050	199	295	1050
12	97	270	988	524	527	275	159	167	934	199	117	1060
13	97	307	986	713	542	484	159	139	532	199	18	1060
14	97	348	986	1020	539	838	159	117	238	199	19	1050
15	97	391	986	1010	529	830	159	117	233	199	46	1040
16	103	391	986	1010	514	814	159	113	238	199	155	1030
17	109	391	986	997	519	814	123	94	238	211	233	1020
18	109	391	982	987	521	822	57	76	238	220	233	1020
19	109	391	981	978	524	566	57	76	171	220	238	1020
20	109	389	977	973	527	305	58	76	103	220	229	1020
21	109	390	971	704	526	614	58	78	103	220	175	1030
22	109	449	960	400	524	910	59	78	103	220	106	1020
23	109	509	954	397	530	902	58	78	103	220	131	1020
24	109	506	609	366	311	886	59	78	106	220	163	1010
25	103	412	184	312	369	886	97	78	106	220	183	1020
26	100	399	327	311	733	878	151	94	106	220	207	1010
27	97	558	733	314	879	870	151	113	106	220	220	1010
28	94	607	1010	312	867	758	147	143	106	400	224	990
29	91	607	1000	220	---	558	139	167	163	558	238	980
30	89	603	998	106	---	558	135	207	251	558	251	960
31	89	---	995	106	---	558	---	300	---	558	251	---
TOTAL	3878	9904	24266	20659	14791	20624	4909	4086	14252	7904	8064	29363
MEAN	125	330	783	666	528	665	164	132	475	255	260	979
MAX	247	607	1010	1020	879	910	430	300	1060	558	558	1060
MIN	89	87	184	106	221	270	57	76	103	199	18	251

CAL YR 1974 TOTAL 147511 MEAN 404 MAX 1140 MIN 32
WTR YR 1975 TOTAL 162700 MEAN 446 MAX 1060 MIN 18

EXTREMES.--Current year: Maximum discharge, 1,070 ft³/s (30.3 m³/s) June 2, 3, 5, Sept. 11, 12, gage height, 3.62 ft (1.103 m); minimum daily, 18 ft³/s (0.51 m³/s) Aug. 13.

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

BEAVER RIVER BASIN
03090500 MARONING RIVER BELOW BERLIN DAM, NEAR BERLIN CENTER, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
APR. 02...	1550	270	7.0	11.6	95	343	7.3	4.5	34	10	14	3.1
AUG. 26...	1150	194	28.5	8.0	94	430	7.2	1.2	48	14	15	3.8

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
APR. 02...	58	0	4.7	48	22	80	.4	.18	.02	.94	.08	197
AUG. 26...	93	0	9.4	76	25	96	.3	.18	.01	.23	.04	249

DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
APR. 02...	130	79	140	120	--	--	--	--	--	--	--	--
AUG. 26...	180	100	10	310	1	<10	10	4	50	<.5	5.5	1.8

BEAVER RIVER BASIN

39

03091000 MILTON RESERVOIR NEAR PRICETOWN, OHIO

LOCATION.--Lat 41°07'38", long 80°58'40", in T.2 N., R.5 W., Mahoning County, 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 at mean sea level (levels by city of Youngstown). Prior to Oct. 7, 1941, nonrecording gage at same site and datum.

EXTREMES.--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.

REMARKS.--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.

COOPERATION.--Capacity table computed from base data furnished by city of Youngstown, Division of Water.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	943.38	16,440	-
Oct. 31.....	941.59	14,150	-2,290
Nov. 30.....	942.82	15,700	+1,550
Dec. 31.....	943.62	16,750	+1,050
CAL YR 1974.....	-	-	-6,930
Jan. 31.....	943.83	17,030	+280
Feb. 28.....	945.74	19,770	+2,740
Mar. 31.....	944.26	17,620	-2,150
Apr. 30.....	944.02	17,290	-330
May 31.....	946.06	20,260	+2,970
June 30.....	947.81	23,190	+2,930
July 31.....	947.97	23,470	+280
Aug. 31.....	948.01	23,540	+70
Sept. 30.....	947.03	21,840	-1,700
WTR YR 1975.....	-	-	+5,400

EXTREMES.--Current year: Maximum contents, 23,930 acre-ft (29.5 hm³) Sept. 2, elevation, 948.23 ft (289.021 m); minimum, 13,960 acre-ft (17.2 hm³) Oct. 24, 25, elevation, 941.43 ft (286.948 m).

BEAVER RIVER BASIN

03091500 MAHONING RIVER AT PRICETOWN, OHIO

LOCATION.--Lat 41°07'53", long 80°58'17", in T.2 N., R.5 W., Mahoning County, 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).

GAGE.--Water-stage recorder. Datum of gage is 905.00 ft (275.844 m) above mean sea level, adjustment of 1912. Prior to Aug. 14, 1929 nonrecording gage at same site and datum.

REMARKS.--Discharge records good. 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 DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--46 years, 251 ft³/s (7.108 m³/s) (unadjusted).

EXTREMES.--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.

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

REVISIONS (WATER YEARS).--WSP 728: 1930(M). WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	255	102	788	987	328	1100	811	93	107	156	619	215
2	255	102	637	983	532	1090	583	93	543	158	619	769
3	255	102	493	987	528	1090	400	93	1160	172	619	1230
4	255	104	852	978	528	1080	434	93	1170	192	619	1230
5	249	104	848	978	535	1080	261	93	1090	192	459	1230
6	252	102	848	978	535	1060	261	93	1020	192	298	1240
7	252	102	844	969	535	787	166	93	1160	194	298	1220
8	252	102	844	983	536	273	90	93	1160	194	298	1210
9	252	102	844	644	539	272	91	93	1160	194	297	1210
10	249	102	884	258	532	272	91	93	1160	195	283	1200
11	249	102	996	319	535	272	91	94	1160	194	269	1200
12	192	140	978	560	535	274	91	95	1020	194	110	1210
13	123	258	978	838	535	453	91	95	650	196	114	1210
14	123	290	987	1100	535	820	91	95	209	197	111	1200
15	123	364	987	1100	535	820	91	95	127	197	111	1200
16	123	364	992	1100	535	820	91	95	127	197	176	1200
17	123	364	992	1100	538	822	91	95	128	202	291	1190
18	117	364	996	1100	546	826	91	95	129	227	290	1200
19	91	364	996	1080	546	601	91	95	130	229	290	1080
20	91	364	992	1060	546	272	91	95	131	230	290	898
21	91	364	992	1060	594	678	91	95	131	229	225	996
22	91	418	987	1040	644	1090	91	97	132	227	117	1200
23	91	532	987	1010	652	1090	91	96	133	226	138	1190
24	91	532	752	681	435	1090	91	96	134	232	179	1200
25	83	441	264	261	342	1090	91	96	134	229	190	1190
26	68	379	379	261	823	1090	91	96	134	228	209	1190
27	68	602	724	261	1110	1080	91	96	134	228	208	1190
28	68	800	992	261	1100	979	91	96	134	352	209	1180
29	68	792	987	193	---	824	91	97	134	622	211	1180
30	69	788	983	138	---	820	92	97	141	622	217	1170
31	81	---	983	138	---	819	---	100	---	621	220	---
TOTAL	4750	9646	26806	23406	16214	24734	5009	2941	14882	7718	8584	34028
MEAN	153	322	865	755	579	798	167	94.9	496	249	277	1134
MAX	255	800	996	1100	1110	1100	811	100	1170	622	619	1240
MIN	68	102	264	138	328	272	90	93	107	156	110	215

CAL YR 1974 TOTAL 161752 MEAN 443 MAX 1040 MIN 68
WTR YR 1975 TOTAL 178718 MEAN 490 MAX 1240 MIN 68

EXTREMES.--Current year: Maximum discharge, 1,250 ft³/s (35.4 m³/s) Sept. 5, gage height, 5.25 ft (1.600 m); minimum daily, 68 ft³/s (1.93 m³/s) Oct. 26-29.

BEAVER RIVER BASIN
03091500 MAHONING RIVER AT PRICETOWN, OHIO--Continued
WATER QUALITY RECORDS
CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
APR. 02...	1315	799	7.5	11.5	96	324	7.6	3.2	33	9.2	13	3.1
AUG. 21...	1405	218	24.0	6.6	77	400	7.9	1.3	44	14	16	3.8

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
APR. 02...	57	0	2.3	47	22	72	.4	.09	.02	.90	.51	184
AUG. 21...	99	0	2.0	81	23	87	.2	.18	.02	.12	.05	239

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (MG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
APR. 02...	120	74	150	30	--	--	--	--	--	--	--	--
AUG. 21...	170	86	60	710	4	10	0	1	10	<.5	5.6	1.6

BEAVER RIVER BASIN

03092000 KALE CREEK NEAR PRICETOWN, OHIO

LOCATION.--Lat 41°08'23", long 80°59'43", in T.3 N., R.5 W., Trumbull County, 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).

GAGE.--Water-stage recorder. Datum of gage is 914.70 ft (278.800 m) above mean sea level, adjustment of 1912. Prior to June 27, 1941, nonrecording gage at same site and datum.

REMARKS.--Discharge records good.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--35 years, 22.1 ft³/s (0.626 m³/s), 13.71 in/yr (348 mm/yr).

EXTREMES.--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.

REVISIONS (WATER YEARS).--WSP 973: 1942. WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	.79	9.6	117	21	9.7	8.3	10	676	1.4	1.4	681
2	1.0	.86	13	52	13	6.8	7.0	25	107	1.3	1.3	110
3	1.2	.86	21	26	8.5	5.2	26	14	44	1.2	1.3	25
4	1.0	4.3	39	22	6.0	4.4	46	8.9	30	1.1	1.7	11
5	1.0	144	53	19	5.2	4.1	22	15	64	1.1	5.7	10
6	1.0	62	59	17	9.0	5.4	14	22	119	1.0	4.6	320
7	1.0	21	47	21	8.0	49	12	32	57	1.1	2.5	67
8	.94	10	141	313	7.5	198	9.2	13	22	1.1	1.7	14
9	1.1	6.2	295	525	7.0	28	7.3	7.5	10	1.1	1.4	7.3
10	1.0	4.6	103	85	6.6	13	6.2	5.5	5.9	1.2	1.1	4.4
11	1.4	4.1	44	49	5.7	7.9	5.3	4.4	5.5	1.5	12	3.6
12	2.5	108	31	26	5.0	35	4.6	3.8	80	1.4	5.7	93
13	3.6	103	78	14	4.4	103	4.4	4.0	35	1.6	12	65
14	5.4	27	75	8.5	4.0	32	4.0	3.4	9.2	5.7	94	15
15	10	16	90	4.8	4.4	15	3.6	2.9	5.5	2.9	17	7.3
16	13	9.6	92	3.7	9.0	16	3.8	2.9	10	1.9	5.7	5.0
17	7.2	6.6	113	3.2	181	31	3.6	2.6	7.0	1.6	3.4	4.6
18	2.7	5.1	55	3.4	433	200	3.4	2.5	4.0	1.4	2.1	113
19	1.5	4.3	29	4.6	117	511	4.6	2.3	2.8	1.5	1.5	281
20	1.1	5.1	20	5.5	44	218	5.7	2.1	2.5	7.8	1.2	79
21	.79	22	18	4.0	16	41	5.3	2.3	2.0	106	1.1	87
22	.68	96	9.7	3.0	17	23	4.2	25	1.8	17	1.2	21
23	.68	35	28	3.2	171	18	3.8	17	3.4	6.2	1.2	9.2
24	.64	20	588	4.0	988	28	6.4	14	3.8	14	1.4	102
25	.68	151	469	16	315	52	20	8.9	6.7	79	1.3	96
26	.79	113	98	122	52	22	14	8.1	4.6	16	1.4	21
27	.79	31	31	38	26	13	7.5	19	2.9	5.5	2.5	10
28	.86	19	17	22	14	11	5.7	6.2	2.3	3.1	2.5	6.7
29	.79	17	14	504	---	12	6.2	4.0	1.9	2.3	2.3	4.6
30	.79	12	34	252	---	21	6.4	5.3	1.6	1.8	58	3.4
31	.79	---	54	37	---	12	---	13	---	1.6	515	---
TOTAL	66.92	1059.41	2768.3	2326.9	2498.3	1745.5	280.5	306.6	1327.4	291.4	765.2	2277.1
MEAN	2.16	35.3	89.3	75.1	89.2	56.3	9.35	9.89	44.2	9.40	24.7	75.9
MAX	13	151	588	525	988	511	46	32	676	106	515	681
MIN	.64	.79	9.6	3.0	4.0	4.1	3.4	2.1	1.6	1.0	1.1	3.4
CFSM	.10	1.61	4.08	3.43	4.07	2.57	.43	.45	2.02	.43	1.13	3.47
IN.	.11	1.80	4.70	3.95	4.24	2.96	.48	.52	2.25	.49	1.30	3.87

CAL YR 1974 TOTAL 14226.41 MEAN 39.0 MAX 1020 MIN .64 CFSM 1.78 IN 24.16
WTR YR 1975 TOTAL 15713.53 MEAN 43.1 MAX 988 MIN .64 CFSM 1.97 IN 26.69

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-24	1800	4.95	755	02-18	0600	4.67	628	06-01	1230	5.47	1,040
01-09	0130	5.23	902	02-24	1230	*5.67	*1,170	09-01	0030	5.51	1,070
01-29	1800	5.24	907	03-19	1800	4.86	712				

Minimum discharge: 0.61 ft³/s (0.017 m³/s) Oct. 22, 24, 25.

BEAVER RIVER BASIN
03092000 KALE CREEK NEAR PRICETOWN, OHIO--Continued
WATER QUALITY RECORDS
CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
APR. 02...	1415	5.1	9.5	12.5	110	435	7.7	1.7	48	14	23	2.5
AUG. 21...	1240	1.0	21.5	6.3	71	560	7.8	5.7	57	22	29	5.4

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
APR. 02...	85	0	2.7	70	30	110	.3	.05	.01	.00	.10	272
AUG. 21...	145	0	3.7	119	29	130	.0	.04	.01	.15	.05	350

DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
APR. 02...	180	110	240	100	--	--	--	--	--	--	--	--
AUG. 21...	230	110	320	220	3	<10	30	4	20	<.5	6.8	.8

BEAVER RIVER BASIN

03092090 WEST BRANCH MAHONING RIVER NEAR RAVENNA, OHIO

LOCATION.--Lat 41°09'41", long 81°11'50", in T.3 N., R.8 W., Portage County, 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).

GAGE.--Water-stage and continuous ethyl alcohol-actuated thermograph recorders. Datum of gage is 1,011.8 ft (308.40 m) above mean sea level, Portage County bench mark.

REMARKS.--Discharge records good. Interruptions in the temperature records were due to malfunctions of the instrument.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--10 years, 27.8 ft³/s (0.787 m³/s), 17.32 in/yr (440 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 2,090 ft³/s (59.2 m³/s) Apr. 15, 1972, gage height, 8.81 ft (2.685 m); minimum, 0.45 ft³/s (0.013 m³/s) Sept. 11, 1972.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	6.7	25	90	32	25	17	43	346	4.2	2.9	206
2	9.0	6.3	29	52	23	22	15	35	63	4.0	2.8	58
3	17	5.2	46	38	19	20	23	27	40	3.8	4.0	23
4	14	75	58	32	16	18	23	42	31	3.6	11	17
5	10	180	69	30	17	17	20	57	225	4.4	7.1	18
6	7.9	56	68	26	28	30	17	72	143	4.0	8.6	83
7	5.6	26	59	42	23	152	19	54	54	3.4	6.0	27
8	5.2	16	175	404	21	156	16	29	30	3.6	4.0	14
9	4.5	14	180	530	19	45	14	21	21	4.0	3.0	9.1
10	4.1	13	92	118	17	26	12	17	15	7.9	2.8	7.4
11	4.5	14	60	83	14	26	11	14	37	5.9	3.6	6.7
12	4.8	174	64	44	13	58	9.9	14	82	4.8	5.0	45
13	5.6	126	101	28	13	107	10	13	29	4.2	4.0	30
14	7.9	70	83	20	13	40	8.6	11	15	5.9	12	14
15	22	49	86	16	13	31	8.2	11	12	4.8	6.3	9.5
16	17	33	91	13	25	35	9.0	9.5	21	4.2	5.9	8.6
17	9.0	25	101	13	136	49	8.2	9.0	13	3.6	5.2	9.5
18	5.9	21	62	14	235	151	9.9	9.0	7.9	3.8	3.0	229
19	4.5	19	41	17	118	423	29	9.0	6.3	4.4	3.0	230
20	4.1	134	33	22	49	147	21	9.0	5.6	33	2.6	96
21	4.1	167	25	18	28	51	14	15	4.8	42	2.4	59
22	3.8	216	25	12	33	36	10	54	5.2	12	3.0	25
23	4.1	106	63	13	177	29	9.9	26	14	7.1	5.6	16
24	4.5	126	336	14	657	59	28	17	10	6.0	8.6	69
25	6.7	254	276	98	171	61	26	13	16	20	7.8	44
26	7.5	121	90	112	70	34	23	41	14	8.2	6.7	22
27	7.1	56	42	43	46	26	29	23	10	5.0	12	16
28	5.9	43	33	29	30	23	31	14	6.5	4.0	5.0	13
29	5.9	36	29	397	---	31	36	12	5.2	3.6	4.0	9.6
30	6.3	29	46	140	---	32	29	17	4.6	3.2	33	8.2
31	6.3	---	64	50	---	21	---	70	---	3.0	146	---
TOTAL	231.8	2217.2	2552	2558	2056	1981	536.7	807.5	1287.1	231.6	336.9	1422.6
MEAN	7.48	73.9	82.3	82.5	73.4	63.9	17.9	26.0	42.9	7.47	10.9	47.4
MAX	22	254	336	530	657	423	36	72	346	42	146	230
MIN	3.8	5.2	25	12	13	17	8.2	9.0	4.6	3.0	2.4	6.7
CFSM	.34	3.39	3.78	3.78	3.37	2.93	.82	1.19	1.97	.34	.50	2.17
IN.	.40	3.78	4.35	4.36	3.51	3.38	.92	1.38	2.20	.40	.57	2.43

CAL YR 1974 TOTAL 14066.5 MEAN 38.5 MAX 769 MIN 2.0 CFSM 1.77 IN 24.00
WTR YR 1975 TOTAL 16218.4 MEAN 44.4 MAX 657 MIN 2.4 CFSM 2.04 IN 27.67

EXTREMES.--Current year: Peak discharges above base of 450 ft³/s (12.7 m³/s) and maximums (*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-09	0500	6.11	808	02-24	0730	*6.39	*906	06-01	0500	5.15	528
01-29	1530	5.68	674	03-19	1400	5.17	532	09-18	2300	5.10	515

Minimum daily discharge: 2.4 ft³/s (0.068 m³/s) Aug. 21.

BEAVER RIVER BASIN

45

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

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1967 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
APR. 01...	1140	17	5.5	10.3	82	335	7.8	3.0	32	8.5	15	2.0
AUG. 21...	1015	2.4	19.5	8.6	92	460	8.2	8.0	54	14	25	3.1

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- TENTS) (MG/L)
APR. 01...	85	0	2.2	70	27	51	.3	.06	.01	.41	.03	181
AUG. 21...	170	0	1.7	139	38	48	.3	.01	.01	.53	.05	274

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
APR. 01...	120	45	210	90	--	--	--	--	--	--	--	--
AUG. 21...	190	53	100	120	1	90	20	5	20	<.5	4.2	.5

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

TEMPERATURE (°C) OF WATER

PERIOD OF RECORD.--1965 to current year.

EXTREMES.--Period of record: Maximum, 28.0°C Aug. 24, 1968; minimum, freezing point on many days during winter periods.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	9.0	13.5	11.5	3.0	0.0	1.5	1.0	3.0	1.5	1.5	0.5
2	9.5	8.5	14.0	12.0	0.0	0.0	1.5	1.0	2.0	1.0	1.0	0.5
3	8.5	8.0	14.0	13.5	0.0	0.0	1.5	1.0	1.5	1.0	1.0	0.5
4	8.0	6.5	14.0	12.0	0.0	0.0	2.0	1.5	1.0	1.0	1.0	0.5
5	10.5	7.0	12.0	11.0	0.0	0.0	2.0	1.0	1.5	1.0	2.0	0.5
6	11.5	9.0	11.0	9.5	0.0	0.0	1.5	1.0	1.5	1.5	4.5	1.5
7	11.0	10.0	9.5	8.5	0.5	0.0	3.0	1.5	0.5	0.0	3.5	3.0
8	10.0	8.0	8.5	6.5	0.5	0.0	3.0	2.0	0.0	0.0	3.0	1.0
9	10.0	8.0	8.0	6.0	0.0	0.0	3.5	2.0	0.0	0.0	1.5	0.5
10	11.0	9.0	8.0	6.5	0.0	0.0	3.5	2.0	0.0	0.0	1.5	1.0
11	11.0	9.0	9.0	7.0	0.0	0.0	5.5	3.5	0.0	0.0	2.0	1.0
12	11.5	10.0	9.0	8.5	1.0	0.0	4.5	2.0	0.0	0.0	3.5	2.0
13	12.0	11.5	8.5	6.0	1.0	1.0	2.0	0.0	0.0	0.0	4.0	3.0
14	14.0	12.0	6.0	4.5	1.5	1.0	0.0	0.0	0.5	0.0	4.0	0.0
15	14.0	12.0	4.5	3.5	1.5	1.0	0.0	0.0	0.0	0.0	2.0	0.0
16	13.0	11.0	4.0	2.0	1.5	1.0	0.0	0.0	0.0	0.0	2.0	0.0
17	11.5	9.5	5.5	4.0	1.5	1.0	0.0	0.0	0.0	0.0	5.0	1.0
18	11.0	9.0	5.0	4.0	1.0	0.5	0.0	0.0	0.5	0.0	5.5	1.5
19	9.0	8.0	6.0	4.0	0.5	0.0	0.0	0.0	0.5	0.5	5.5	4.5
20	8.0	6.0	8.5	6.0	0.0	0.0	0.5	0.0	1.0	0.5	7.0	4.5
21	8.5	6.0	8.0	4.5	0.0	0.0	0.0	0.0	2.0	0.5	7.0	4.5
22	8.0	5.0	4.5	4.0	0.0	0.0	0.0	0.0	4.0	1.0	7.0	6.5
23	9.0	8.0	5.0	3.5	1.0	0.0	0.0	0.0	6.0	4.0	8.5	5.0
24	10.0	8.0	7.0	5.0	1.0	0.5	0.5	0.0	7.0	5.5	10.0	7.0
25	11.0	10.0	7.0	4.5	1.0	0.5	0.0	0.0	5.5	2.0	9.5	6.5
26	10.5	8.5	4.5	3.0	0.5	0.5	0.0	0.0	3.0	1.5	6.5	4.0
27	9.5	7.0	3.0	1.5	1.0	0.5	0.0	0.0	2.0	1.0	4.0	1.5
28	9.0	6.5	3.5	2.0	1.5	1.0	0.5	0.0	1.5	0.5	4.0	2.0
29	9.5	7.0	3.5	3.0	2.0	1.5	3.5	0.5	---	---	8.0	4.0
30	11.0	9.5	3.5	2.0	3.0	2.0	3.0	1.5	---	---	7.0	4.0
31	13.0	10.5	---	---	2.0	1.0	2.0	1.5	---	---	6.0	1.5
MONTH	14.0	5.0	14.0	1.5	3.0	0.0	5.5	0.0	7.0	0.0	10.0	0.0
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	4.0	17.0	14.5	18.5	18.0	24.0	20.0	24.5	20.5	---	---
2	9.0	5.0	18.5	13.0	18.0	16.0	23.5	20.0	24.5	21.0	---	---
3	8.5	4.0	16.0	13.0	16.5	16.0	23.5	20.0	24.5	21.0	18.5	16.5
4	5.5	1.5	15.0	12.0	17.0	15.0	23.5	20.0	23.0	21.0	18.5	17.0
5	4.0	1.5	15.5	11.0	19.0	16.5	23.0	19.5	22.0	20.5	18.0	16.5
6	4.0	0.5	14.5	12.0	19.0	18.0	23.0	19.5	21.0	19.5	18.0	17.0
7	5.5	2.0	15.5	10.0	18.0	15.5	23.5	20.5	20.0	17.0	18.0	15.5
8	8.0	2.0	17.0	11.0	15.5	14.5	23.5	20.5	20.0	16.0	17.0	15.5
9	6.0	3.5	19.0	13.5	17.0	13.0	24.0	21.0	21.5	16.0	17.0	14.5
10	9.0	4.0	19.0	13.0	19.0	15.0	21.0	19.0	21.5	18.5	16.0	13.0
11	9.5	4.0	18.0	13.0	18.0	16.0	19.0	17.0	21.5	19.5	15.5	14.0
12	7.0	4.0	18.0	14.5	19.5	16.5	20.0	16.0	22.0	19.5	15.5	15.0
13	9.0	4.0	16.0	14.0	19.5	18.0	20.0	17.0	21.5	20.0	15.0	13.0
14	7.0	4.0	18.0	11.0	20.5	18.0	21.5	18.0	23.0	20.0	13.5	11.5
15	6.5	5.5	16.0	14.0	22.0	19.0	21.5	18.0	21.0	19.5	14.0	11.0
16	9.5	4.0	15.5	14.0	20.5	19.0	22.0	18.5	19.5	19.0	13.5	13.0
17	12.0	6.0	16.5	12.0	21.0	18.0	22.0	19.5	21.0	18.5	14.5	13.5
18	11.5	10.0	19.5	15.5	23.5	19.5	22.0	19.5	23.0	18.5	15.0	14.5
19	11.5	10.5	21.5	16.0	22.0	20.5	24.0	20.0	20.5	19.0	16.5	15.0
20	10.5	8.0	20.5	18.0	24.0	20.0	21.0	19.5	22.0	18.0	16.5	16.0
21	11.5	6.0	23.0	19.0	24.0	20.0	21.5	19.5	20.0	18.5	16.0	15.0
22	12.0	7.0	20.5	18.5	24.0	20.5	22.0	19.0	20.0	18.5	15.0	13.5
23	11.5	8.5	20.5	19.0	23.5	21.0	23.0	19.5	20.0	19.0	13.5	13.0
24	11.5	11.0	20.5	19.0	24.0	21.5	22.0	20.5	22.0	19.0	13.5	13.0
25	11.5	10.0	22.0	19.0	23.0	21.0	21.5	19.5	22.0	20.0	13.5	13.0
26	14.0	8.5	21.5	19.0	22.0	20.5	21.5	18.0	21.5	20.0	13.5	13.5
27	12.0	8.5	21.5	19.5	22.0	20.0	21.5	18.0	21.5	19.5	13.5	13.0
28	11.0	9.0	20.5	17.0	23.5	20.0	23.0	19.0	21.0	19.0	13.5	11.0
29	15.5	9.0	19.0	16.5	23.5	20.0	22.0	18.5	20.0	19.5	13.5	11.0
30	17.0	12.0	20.0	18.0	24.0	20.0	23.0	18.5	---	---	14.5	12.0
31	---	---	20.5	18.5	---	---	24.0	19.5	---	---	---	---
MONTH	17.0	0.5	23.0	10.0	24.0	13.0	24.0	16.0	24.5	16.0	18.5	11.0
YEAR	24.5	0.0										

BEAVER RIVER BASIN

47

03092099 HINKLEY CREEK AT CHARLESTOWN, OHIO

LOCATION.--Lat 41°09'16", long 81°08'51", Portage County, at bridge on Rock Spring Road, 0.6 mi (1.0 km) south of Charlestown, 2.2 mi (3.5 km) upstream from mouth.

DRAINAGE AREA.--7.85 mi² (20.33 km²).

PERIOD OF RECORD.--Discharge, 1969 to current year; chemical analyses, 1970 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Jan. 9	12.18	3.712	480	13.6

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	
AUG. 05...	1715	0.78	23.0	7.8	420	7.7	6.2	53	15	11	2.2	172	
DATE		CAP- BONATE (CO ₃) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
AUG. 05...		0	15	56	.1	.00	.01	.13	.01	243	190	50	40

BEAVER RIVER BASIN

49

03092450 MICHAEL J. KIRWAN RESERVOIR AT WAYLAND, OHIO

LOCATION.--Lat 41°09'24", long 81°04'47", in T.3 N., R.6 W., Portage County, 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 at mean sea level (levels by Corps of Engineers).

EXTREMES.--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).

REMARKS.--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.

COOPERATION.--Gage-heights and capacity curve furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	982.50	49,000	-
Oct. 31.....	979.37	41,700	-7,300
Nov. 30.....	978.57	39,950	-1,750
Dec. 31.....	979.75	42,550	+2,600
CAL YR 1974.....	-	-	-7,040
Jan. 31.....	979.71	42,460	-90
Feb. 28.....	982.78	49,690	+7,230
Mar. 31.....	985.09	55,570	+5,880
Apr. 30.....	985.17	55,780	+210
May 31.....	985.60	56,920	+1,140
June 30.....	984.95	55,200	-1,720
July 31.....	983.46	51,390	-3,810
Aug. 31.....	982.92	50,030	-1,360
Sept. 30.....	982.96	50,130	+100
WTR YR 1975.....	-	-	+1,130

EXTREMES.--Current year: Maximum contents, 60,620 acre-ft (74.7 hm³) June 6, elevation, 986.97 ft (300.828 m); minimum, 39,070 acre-ft (48.2 hm³) Nov. 20, elevation, 978.16 ft (298.143 m).

BEAVER RIVER BASIN

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

LOCATION.--Lat 41°09'25", long 81°04'19", in T.3 N., R.6 W., Portage County, 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).

GAGE.--Water-stage recorder. Datum of gage is 926.44 ft (282.379 m) above mean sea level, levels by Corps of Engineers. Prior to October 1971 at datum 0.89 ft (0.271 m) higher.

REMARKS.--Discharge records good. Flow completely regulated by Michael J. Kirwan Reservoir (see station 03092450).

WATER DISCHARGE RECORDS

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

EXTREMES.--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.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	199	182	234	138	97	143	43	78	116	81	93
2	109	198	156	189	175	96	98	43	61	117	81	85
3	108	196	149	188	174	96	99	43	137	109	81	83
4	108	204	194	188	173	96	73	43	184	100	81	82
5	108	204	194	231	173	96	44	43	202	100	81	85
6	109	196	194	276	174	95	44	44	187	100	80	92
7	110	193	192	276	173	103	44	43	184	100	80	82
8	111	192	204	322	173	99	40	43	182	100	80	81
9	111	189	198	213	176	97	42	43	181	100	79	80
10	111	188	224	93	174	96	42	43	180	101	79	80
11	111	187	285	117	173	96	43	58	183	93	121	80
12	111	200	283	193	172	98	42	78	189	82	156	82
13	112	188	285	238	176	99	42	77	182	82	143	80
14	115	186	286	287	178	96	42	77	181	82	109	79
15	120	185	284	289	176	97	42	85	181	82	79	78
16	116	183	287	282	172	96	42	96	182	82	62	96
17	116	182	285	408	184	99	42	96	181	82	44	156
18	156	181	281	498	183	108	42	96	181	81	43	186
19	203	180	280	492	176	124	43	96	181	83	43	182
20	203	180	279	490	172	102	42	96	181	88	44	184
21	202	187	277	485	105	136	42	96	182	84	52	181
22	202	188	276	480	43	180	42	99	197	82	117	180
23	202	184	287	439	56	180	42	61	189	82	119	179
24	202	187	266	474	85	183	44	9.6	184	82	83	188
25	203	156	207	479	50	181	43	24	185	82	82	234
26	203	143	184	476	46	180	42	41	184	82	84	316
27	201	184	191	472	70	180	42	41	184	82	84	421
28	201	183	189	318	97	180	42	40	166	82	83	495
29	200	182	189	199	---	180	42	40	147	81	85	495
30	201	180	234	100	---	180	42	41	134	81	93	496
31	201	---	281	97	---	180	---	60	---	81	108	---
TOTAL	4675	5585	7303	9523	4017	3926	1514	1838.6	5150	2781	2637	5231
MEAN	151	186	236	307	143	127	50.5	59.3	172	89.7	85.1	174
MAX	203	204	287	498	184	183	143	99	202	117	156	496
MIN	108	143	149	93	43	95	40	9.6	61	81	43	78

CAL YR 1974 TOTAL 52812.0 MEAN 145 MAX 935 MIN 18
WTR YR 1975 TOTAL 54180.6 MEAN 148 MAX 498 MIN 9.6

EXTREMES.--Current year: Maximum discharge, 501 ft³/s (14.2 m³/s) Jan. 17, 18, gage height, 7.67 ft (2.338 m); minimum daily, 9.6 ft³/s (0.27 m³/s) May 24.

BEAVER RIVER BASIN

51

03092460 WEST BRANCH MAHONING RIVER BELOW MICHAEL J. KIRWAN DAM, AT WAYLAND, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1969 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
APR. 01...	1245	136	5.5	10.4	82	316	7.3	4.1	29	8.9	14	2.5
AUG. 18...	1420	47	21.0	8.6	96	320	7.4	3.3	33	9.2	14	2.5

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
APR. 01...	68	0	5.5	56	25	53	.3	.09	.01	.48	.13	170
AUG. 18...	83	0	5.3	68	22	47	.2	.12	.01	.19	.04	173

DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
APR. 01...	110	53	50	10	--	--	--	--	--	--	--	--
AUG. 18...	120	52	210	980	5	<10	0	1	20	<.5	10	.4

BEAVER RIVER BASIN

03092500 WEST BRANCH MAHONING RIVER NEAR NEWTON FALLS, OHIO

LOCATION.--Lat 41°10'18", long 81°01'16", in T.3 N., R.6 W., Portage County, 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).

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

REMARKS.--Discharge records good. Flow regulated by Michael J. Kirwan Reservoir (see station 03092450) since December 1966.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--49 years, 97.5 ft³/s (2.761 m³/s).

EXTREMES.--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.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	111	184	184	344	125	111	165	53	370	120	84	341
2	111	184	175	228	171	109	109	53	97	120	84	131
3	111	182	142	213	167	107	118	50	142	116	85	96
4	110	193	202	220	165	105	109	52	199	102	86	89
5	111	276	207	234	167	105	58	57	309	102	84	89
6	110	216	206	297	170	107	55	66	285	102	84	237
7	110	195	200	308	170	150	54	65	219	102	84	113
8	111	189	266	542	171	178	49	53	201	102	84	93
9	111	188	303	610	171	122	48	49	195	102	84	88
10	111	186	237	120	170	111	48	48	192	102	84	86
11	111	186	305	131	167	109	48	55	195	99	104	84
12	111	249	301	170	165	127	47	87	252	84	165	111
13	111	218	300	230	164	152	47	88	207	84	149	104
14	109	195	306	301	169	120	47	88	193	87	145	91
15	114	189	348	300	171	114	47	92	191	84	89	88
16	116	186	356	293	169	116	47	107	191	83	78	95
17	113	184	362	364	257	125	47	107	188	82	46	154
18	129	182	322	494	307	215	47	107	187	83	45	264
19	182	182	301	493	239	419	53	106	186	87	44	292
20	182	184	292	494	150	198	53	106	186	105	44	218
21	180	195	284	490	137	150	49	106	185	133	44	207
22	180	225	279	484	52	193	47	126	198	90	104	188
23	182	195	305	452	129	189	47	100	259	85	133	180
24	182	195	581	481	561	200	55	18	187	85	88	242
25	182	237	431	503	193	202	64	18	202	93	86	251
26	182	165	251	533	93	189	54	50	187	87	89	311
27	182	191	218	497	86	186	50	50	186	84	89	412
28	182	188	209	391	114	184	49	47	174	84	86	494
29	182	186	206	497	---	188	50	46	149	84	91	496
30	182	184	244	213	---	189	49	48	142	84	135	496
31	182	---	324	122	---	184	---	97	---	84	317	---
TOTAL	4383	5909	8647	11049	5035	4954	1810	2195	6054	2941	3014	6141
MEAN	141	197	279	356	180	160	60.3	70.8	202	94.9	97.2	205
MAX	182	276	581	610	561	419	165	126	370	133	317	496
MIN	109	165	142	120	52	105	47	18	97	82	44	84

CAL YR 1974 TOTAL 57351 MEAN 157 MAX 876 MIN 21
WTR YR 1975 TOTAL 62132 MEAN 170 MAX 610 MIN 18

EXTREMES.--Current year: Maximum discharge, 814 ft³/s (23.1 m³/s) Jan. 9, gage height, 5.92 ft (1.804 m); minimum daily, 18 ft³/s (0.51 m³/s) May 24, 25.

BEAVER RIVER BASIN

53

03092500 WEST BRANCH MAHONING RIVER NEAR NEWTON FALLS, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
APR. 01...	1350	182	6.0	10.6	85	296	7.7	4.2	28	8.9	14	2.4
AUG. 18...	1620	44	21.0	7.8	87	320	7.8	3.6	34	9.5	15	2.8

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
APR. 01...	68	0	2.2	56	24	52	.4	.15	.01	.53	.17	168
AUG. 18...	88	0	2.2	72	23	50	.1	.04	.01	.26	.06	182

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
APR. 01...	110	51	120	30	--	--	--	--	--	--	--	--
AUG. 18...	120	52	180	510	0	<10	10	1	40	<.5	7.4	.5

BEAVER RIVER BASIN

03093000 EAGLE CREEK AT PHALANX STATION, OHIO

LOCATION.--Lat 41°15'40"N, long 80°57'16"W, Trumbull County, 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).

GAGE.--Water-stage recorder. Datum of gage is 887.42 ft (270.485 m) above mean sea level, adjustment of 1912, levels by Mahoning Valley Sanitary District. Prior to Sept. 14, 1929, nonrecording gage at same site and datum.

REMARKS.--Discharge records good. Low flow slightly regulated by mill several miles upstream from station.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--46 years, 106 ft³/s (3.002 m³/s), 14.75 in/yr (375 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 6,700 ft³/s (190 m³/s) Jan. 22, 1959, gage height, 13.12 ft (3.999 m); minimum daily, 0.9 ft³/s (0.025 m³/s) Aug. 4, 1939.

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

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	38	83	225	212	162	144	83	945	34	20	799
2	79	38	104	240	152	140	123	101	889	29	19	681
3	156	47	127	173	115	122	131	72	270	26	20	246
4	109	68	155	155	86	108	166	103	192	25	64	112
5	74	283	189	141	76	100	157	181	635	27	42	79
6	54	331	174	109	104	109	139	178	1120	31	28	194
7	40	152	178	116	121	173	128	250	438	24	27	227
8	35	78	201	289	110	542	115	156	237	24	25	84
9	34	52	371	1810	100	342	98	94	164	27	21	44
10	33	40	389	1050	90	188	88	72	116	27	19	29
11	32	41	268	371	77	151	81	56	96	126	21	21
12	43	130	188	264	69	158	76	48	275	62	35	89
13	58	375	246	179	60	264	81	48	299	35	24	146
14	37	194	269	120	55	260	67	42	145	102	41	74
15	52	114	268	95	54	166	59	37	92	57	40	40
16	112	76	272	77	70	162	61	33	83	32	46	27
17	86	56	303	64	186	166	58	31	77	26	40	29
18	60	43	261	61	517	286	56	31	52	23	26	105
19	48	36	182	75	528	875	125	29	43	28	21	866
20	45	99	134	90	326	1260	168	27	40	193	17	557
21	39	310	100	80	193	382	117	30	36	281	14	358
22	34	439	84	63	163	219	81	195	32	155	17	207
23	33	391	84	54	232	179	66	202	109	54	21	120
24	35	242	373	57	1570	176	116	87	79	40	21	174
25	36	379	889	88	1580	334	187	53	102	80	29	283
26	40	448	625	268	486	286	138	120	114	47	29	178
27	48	236	268	285	278	212	91	147	112	32	73	121
28	41	147	167	165	200	178	72	80	98	28	50	100
29	36	114	132	372	---	175	81	46	69	24	25	77
30	44	91	143	1150	---	220	80	50	45	22	44	60
31	44	---	199	367	---	183	---	108	---	21	319	---
TOTAL	1668	5088	7426	8653	7810	8278	3150	2790	7004	1742	1238	6127
MEAN	53.8	170	240	279	279	267	105	90.0	233	56.2	39.9	204
MAX	156	448	889	1810	1580	1260	187	250	1120	281	319	866
MIN	32	36	83	54	54	100	56	27	32	21	14	21
CFSM	.55	1.74	2.46	2.86	2.86	2.74	1.08	.92	2.39	.58	.41	2.09
IN.	.64	1.94	2.83	3.30	2.98	3.16	1.20	1.06	2.67	.66	.47	2.34

CAL YR 1974 TOTAL 55319 MEAN 152 MAX 2130 MIN 14 CFSM 1.56 IN 21.08
WTR YR 1975 TOTAL 60974 MEAN 167 MAX 1810 MIN 14 CFSM 1.71 IN 23.24

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-09	1700	11.89	2,350	02-24	1930	*12.22	*2,840	06-01	2130	10.97	1,710
01-30	0630	10.99	1,490	03-20	0430	11.23	1,660	06-06	0630	10.32	1,310

Minimum discharge: 14 ft³/s (0.40 m³/s) Aug. 21.

BEAVER RIVER BASIN
03093000 EAGLE CREEK AT PHALANX STATION, OHIO--Continued
WATER QUALITY RECORDS
CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
APR. 01...	1530	160	7.5	11.6	97	289	7.6	3.8	33	8.6	12	1.8
AUG. 05...	1430	38	23.0	7.9	91	410	7.5	7.7	48	13	14	5.8

DATE	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LITY AS CACO ₃ (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
APR. 01...	84	0	3.4	69	22	45	.3	.11	.01	.34	.05	168
AUG. 05...	148	0	7.5	121	23	53	.3	.04	.05	.54	.09	238

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (MG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
APR. 01...	120	49	220	140	--	--	--	--	--	--	--	--
AUG. 05...	170	49	20	170	9	<10	10	0	10	<.5	7.6	1.3

BEAVER RIVER BASIN

03093800 MAHONING RIVER ABOVE DUCK CREEK, AT LEAVITTSBURG, OHIO

LOCATION.--Lat 41°14'22", long 80°52'56", Trumbull County, 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).

GAGE.--Water-quality recorder.

REMARKS.--Interruptions in the water-quality record were due to malfunctions of the instrument. Records of discharge are given for Mahoning River at Leavittsburg, Ohio (station 03094000, drainage area 575 mi² (1,489 km²)).

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--October 1951 to September 1953, July 1967 to September 1968 (published as "at Leavittsburg"), October 1968 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED POTAS- SIUM (K) (MG/L)
APR. 09...	1300	290	5.0	12.7	99	365	7.5	3.1	35	9.9	16	2.5
SEP. 02...	1400	2030	20.0	6.6	72	245	7.1	8.1	25	7.0	9.4	3.9

DATE	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LITY AS CACO ₃ (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)
APR. 09...	76	0	3.8	62	25	67	.2	.07	.01	.51	.09	197
SEP. 02...	48	0	6.1	39	13	46	.3	.02	.01	.33	.08	137

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	RIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
APR. 09...	130	66	160	170	--	--	--	--	--	--	--	--
SEP. 02...	91	52	150	130	3	<10	10	3	40	<.5	12	1.8

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C)

EXTREMES.--Period of record: Maximum, 780 micromhos May 27, 1969; minimum, 128 micromhos May 14, 1974.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	395	387	387	381	416	408	360	353	278	245	332	324
2	396	384	389	381	414	408	350	342	314	281	335	329
3	395	384	387	381	410	389	363	348	323	314	339	333
4	390	386	404	386	422	398	368	362	333	323	344	339
5	389	386	389	344	420	408	366	362	339	332	345	341
6	390	387	350	339	419	410	371	366	345	338	345	342
7	401	389	345	335	419	411	372	366	354	344	345	341
8	401	390	363	345	413	378	366	335	350	345	306	269
9	395	392	375	365	378	351	---	---	350	345	270	246
10	404	395	378	372	357	338	---	---	359	351	308	270
11	401	396	378	375	390	359	---	---	359	353	321	308
12	401	396	383	357	405	392	---	---	359	354	332	321
13	402	395	356	323	404	392	---	---	359	354	324	308
14	395	378	348	320	393	386	---	---	359	356	312	305
15	392	377	377	350	386	378	---	---	356	353	327	312
16	398	389	394	378	381	372	---	---	378	354	332	314
17	404	395	392	387	371	362	---	---	375	350	350	332
18	411	402	401	389	375	362	---	---	347	282	345	314
19	414	408	405	401	387	375	---	---	279	251	312	227
20	413	381	405	389	399	390	---	---	284	260	222	177
21	380	372	387	338	411	401	---	---	317	285	251	186
22	381	374	336	318	408	405	---	---	335	320	306	257
23	380	377	330	317	408	404	---	---	336	326	312	306
24	380	377	360	333	404	318	---	---	326	201	317	306
25	383	377	356	329	311	222	---	---	195	156	312	297
26	387	381	326	285	233	219	---	---	248	170	303	294
27	390	375	360	296	318	237	---	---	305	252	306	303
28	377	371	398	363	369	326	321	317	324	306	317	305
29	377	369	407	399	377	369	333	269	---	---	314	305
30	384	378	414	407	375	360	264	185	---	---	306	303
31	383	377	---	---	365	357	236	188	---	---	315	305
MONTH	414	369	414	285	422	219	---	---	378	156	350	177
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	317	305	368	360	354	203	353	345	384	380	330	234
2	320	305	371	360	203	180	363	353	389	377	261	230
3	327	305	366	360	314	207	371	360	378	377	357	266
4	333	327	378	362	323	314	375	365	381	371	374	359
5	---	---	380	356	320	240	375	360	386	380	380	374
6	---	---	359	347	236	212	365	363	384	380	378	341
7	332	329	360	336	290	228	365	362	389	380	351	324
8	338	323	347	333	320	291	393	362	392	386	377	353
9	345	338	353	333	335	321	368	363	390	386	386	377
10	354	345	360	342	348	336	365	357	399	386	390	386
11	359	353	360	350	350	339	368	363	390	378	393	390
12	368	354	375	347	348	299	363	339	383	380	393	390
13	356	353	353	345	320	279	362	347	381	366	390	378
14	366	341	359	351	333	294	366	354	375	368	398	386
15	351	345	359	356	330	294	354	338	368	360	399	393
16	375	351	363	357	324	300	360	342	359	356	401	399
17	362	359	362	354	330	306	372	360	389	357	401	398
18	369	360	386	347	350	303	375	374	411	390	398	386
19	378	360	386	333	353	320	374	368	398	392	---	---
20	371	365	345	333	351	326	431	351	399	395	---	---
21	368	353	353	336	348	345	348	318	401	395	---	---
22	357	351	365	348	350	344	339	314	399	395	---	---
23	375	359	345	326	353	341	362	339	399	392	---	---
24	380	372	357	339	339	321	371	359	392	372	---	---
25	372	359	384	357	350	338	396	368	392	372	---	---
26	362	353	392	372	344	335	398	345	387	383	---	---
27	377	357	371	351	347	342	365	350	395	387	---	---
28	378	372	353	348	350	336	369	365	395	386	---	---
29	374	360	362	354	342	336	381	371	398	389	---	---
30	374	360	377	360	348	342	380	377	396	387	---	---
31	---	---	377	357	---	---	383	378	386	342	---	---
MONTH	380	305	392	326	354	180	431	314	411	342	---	---
YEAR	431	156										

03093800 MAHONING RIVER ABOVE DUCK CREEK. AT LEAVITTSBURG, OHIO--Continued

PH (UNITS)

PERIOD OF RECORD.--July 1967 to current year.

EXTREMES.--Period of record: Maximum, 8.5 Aug. 5, 1968; minimum, 5.2 Jan. 8, 1973.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.6	7.4	7.3	7.2	7.7	7.4	7.4	7.3	7.1	6.9	7.4	7.3
2	7.6	7.3	7.3	7.2	7.6	7.3	7.4	7.1	7.3	7.0	7.4	7.3
3	7.7	7.3	7.3	7.2	7.4	7.1	7.4	7.3	7.3	7.1	7.5	7.3
4	7.8	7.3	7.3	7.2	7.7	7.4	7.8	7.3	7.3	7.3	7.6	7.3
5	7.9	7.5	7.2	7.1	7.7	7.5	7.4	7.1	7.3	7.0	7.5	7.2
6	7.9	7.6	7.1	7.0	7.7	7.4	7.6	7.3	7.4	7.3	7.5	7.3
7	8.2	7.7	7.1	7.0	7.7	7.2	7.6	7.4	7.5	7.3	7.5	7.3
8	7.9	7.4	7.2	7.0	7.4	7.2	7.6	7.3	7.4	7.3	7.5	6.7
9	7.9	7.5	7.3	7.2	7.3	7.1	7.3	7.0	7.4	7.0	7.1	6.0
10	8.0	7.7	7.3	7.2	7.3	7.0	7.0	6.9	7.4	6.8	7.5	7.0
11	7.9	7.8	7.3	7.2	7.4	7.2	---	---	7.3	6.7	7.5	7.1
12	7.8	7.7	7.3	7.2	7.5	7.4	---	---	7.6	7.3	7.3	7.2
13	7.7	7.6	7.2	7.1	7.5	7.5	---	---	7.7	6.9	7.5	7.3
14	---	---	7.2	7.0	7.7	7.5	---	---	7.1	5.8	7.5	7.3
15	---	---	7.4	7.2	7.8	7.7	---	---	7.0	6.5	7.4	7.1
16	7.4	7.3	7.5	7.3	7.7	7.4	---	---	6.6	6.3	7.5	6.5
17	7.5	7.4	7.5	7.4	7.5	7.4	---	---	7.5	5.4	7.5	7.2
18	7.5	7.4	7.5	7.3	7.5	7.4	---	---	7.4	6.9	7.5	7.3
19	7.5	7.4	7.5	7.4	7.5	7.4	---	---	7.2	6.8	7.4	7.1
20	7.6	7.5	7.4	7.3	7.5	7.3	---	---	7.0	6.9	7.1	6.8
21	7.5	7.4	7.3	7.1	7.6	7.4	---	---	7.3	6.8	7.2	7.0
22	7.5	7.4	7.1	7.0	7.5	7.4	---	---	7.2	7.0	7.6	7.3
23	7.5	7.4	7.1	6.8	7.6	7.4	---	---	7.3	7.2	7.7	7.4
24	7.5	7.3	7.2	7.1	7.5	7.1	---	---	7.2	6.9	7.7	7.6
25	7.5	7.4	7.2	7.1	7.1	6.8	---	---	7.0	6.4	7.8	7.7
26	7.5	7.4	7.2	6.9	6.9	6.8	---	---	7.1	6.8	7.8	7.6
27	7.5	7.3	7.3	7.1	7.1	6.9	---	---	6.9	6.5	7.8	7.7
28	7.5	7.3	7.5	7.3	7.4	7.1	7.4	7.2	7.3	6.6	7.8	7.6
29	7.5	7.3	7.6	7.6	7.4	7.3	7.3	7.0	---	---	7.8	7.6
30	7.5	7.4	7.7	7.4	7.4	7.2	7.1	6.7	---	---	7.9	7.7
31	7.4	7.1	---	---	7.4	7.3	6.9	6.7	---	---	7.9	7.7
MONTH	8.2	7.1	7.7	6.8	7.8	6.8	---	---	7.7	5.4	7.9	6.0
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	7.8	7.6	7.5	7.1	6.7	7.2	7.0	7.2	7.1	7.0	6.6
2	8.1	7.8	7.6	7.4	6.6	6.5	7.2	7.0	7.2	7.1	6.9	6.6
3	8.0	7.4	7.6	7.5	7.1	6.6	7.2	7.1	7.2	7.1	7.2	6.9
4	7.6	7.5	7.6	7.5	7.1	7.0	7.2	7.1	7.3	7.1	7.4	7.2
5	---	---	7.6	7.4	7.1	6.8	7.2	7.1	7.3	7.1	7.3	7.2
6	---	---	7.5	7.4	6.8	6.6	7.2	7.1	7.2	7.1	7.3	7.2
7	7.8	6.9	7.5	7.4	7.0	6.8	7.2	7.1	7.2	7.1	7.3	7.1
8	8.3	7.5	7.5	7.1	7.1	7.0	7.2	7.1	7.2	7.1	7.4	7.2
9	8.3	7.5	7.3	7.1	7.2	7.0	7.2	7.1	7.2	7.1	7.4	7.3
10	7.6	7.3	7.3	7.1	7.2	7.1	7.2	7.0	7.3	7.1	7.4	7.2
11	7.8	7.4	7.3	7.1	7.3	7.1	7.3	7.1	7.3	7.1	7.4	7.2
12	7.9	7.5	7.3	7.2	7.7	7.4	7.2	7.0	7.3	7.1	7.4	7.3
13	8.1	7.6	7.3	7.2	7.8	7.7	7.2	7.0	7.2	7.1	7.4	7.3
14	8.1	7.6	7.4	7.2	7.7	7.3	7.2	7.1	7.2	7.1	7.4	7.3
15	8.0	7.6	7.4	7.2	7.3	7.1	7.2	7.0	7.2	7.1	7.4	7.3
16	7.8	7.4	7.3	7.2	7.2	7.0	7.2	7.0	7.1	7.0	7.4	7.3
17	8.0	7.5	7.4	7.2	7.2	7.1	7.3	7.1	7.2	7.0	7.4	7.3
18	8.0	7.6	7.4	6.6	7.3	7.2	7.3	7.1	7.3	7.1	7.4	7.2
19	7.8	7.6	7.5	6.5	7.3	7.2	7.3	7.1	7.2	7.1	---	---
20	7.7	7.5	7.5	7.2	7.2	7.1	7.2	7.1	7.3	7.1	---	---
21	7.6	7.4	7.3	7.2	7.2	7.1	7.2	7.1	7.2	7.1	---	---
22	7.6	7.4	7.3	7.1	7.2	7.1	7.1	7.0	7.2	7.1	---	---
23	7.7	7.4	7.2	7.0	7.2	7.1	7.1	7.0	7.2	7.0	---	---
24	7.6	7.4	7.2	7.0	7.2	7.0	7.2	7.0	7.2	7.1	---	---
25	7.5	7.4	7.2	7.1	7.2	7.1	7.2	7.0	7.2	7.1	---	---
26	7.6	7.3	7.2	7.1	7.2	7.1	7.2	7.0	7.3	7.1	---	---
27	7.6	7.4	7.2	7.1	7.2	7.0	7.2	7.0	7.4	7.1	---	---
28	7.6	7.5	7.2	7.0	7.2	7.1	7.2	7.0	7.3	7.2	---	---
29	7.6	7.3	7.1	7.0	7.2	7.1	7.3	7.1	7.3	7.1	---	---
30	7.7	7.4	7.1	7.0	7.2	7.1	7.2	7.1	7.2	7.1	---	---
31	---	---	7.1	7.0	---	---	7.2	7.1	7.2	7.1	---	---
MONTH	8.3	6.9	7.6	6.5	7.8	6.5	7.3	7.0	7.4	7.0	---	---
YEAR	8.3	5.4										

03093800 MAHONING RIVER ABOVE DUCK CREEK, AT LEAVITTSBURG, OHIO--Continued

TEMPERATURE (°C) OF WATER

PERIOD OF RECORD.--July 1967 to current year.

EXTREMES.--Period of record: Maximum, 28.0°C June 29, 30, 1952; minimum, freezing point on many days during winter periods.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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

[illegible]

BEAVER RIVER BASIN

03094000 MAHONING RIVER AT LEAVITTSBURG, OHIO

LOCATION.--Lat 41°14'21", long 80°52'51", in T.4 N., R.4 W., Trumbull County, 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).

GAGE.--Water-stage recorder. Datum of gage is 871.25 ft (265.557 m) above mean sea level, adjustment 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.--Discharge 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 03090000, 03091000 and 03092450). Diversion upstream from station from Berlin Lake for part of municipal supply of Mahoning Valley Sanitary District (see station 03090500). Water-quality data collected at this site 1943 to 1971.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--35 years, 557 ft³/s (15.77 m³/s).

EXTREMES.--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. 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).

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

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	415	314	1110	1830	825	1480	1150	291	2230	332	711	2270
2	448	314	1090	1810	965	1410	1050	319	2650	321	711	2160
3	501	321	719	1590	940	1350	699	294	1760	318	715	1880
4	477	423	1180	1540	885	1320	913	284	1630	332	742	1550
5	436	895	1330	1510	865	1300	639	351	2420	332	738	1450
6	415	928	1320	1490	925	1300	528	397	3280	332	474	1860
7	399	623	1290	1510	970	1420	487	478	2450	328	434	2030
8	391	468	1590	2080	910	1580	337	398	1800	328	426	1520
9	386	403	2110	4400	884	1280	294	307	1580	335	422	1390
10	386	378	1930	3480	828	796	281	267	1470	342	414	1330
11	382	370	1710	1360	862	676	280	246	1450	410	426	1310
12	378	645	1660	1240	839	722	264	256	1750	386	410	1480
13	297	1100	1810	1140	832	1040	258	263	1610	335	339	1660
14	282	845	1950	1470	824	1400	250	261	820	422	458	1430
15	311	741	2000	1480	817	1240	241	254	508	398	374	1340
16	353	684	2040	1460	857	1220	241	261	522	339	297	1310
17	346	649	2160	1440	1210	1280	240	262	458	321	390	1350
18	307	628	1980	1560	2330	1800	241	264	414	328	402	1570
19	321	614	1710	1610	2310	3000	296	266	394	356	390	2530
20	321	671	1550	1590	1610	3620	352	260	386	470	382	2380
21	314	933	1470	1570	1170	1670	316	266	374	688	370	1910
22	311	1320	1440	1540	1040	1670	275	400	367	634	265	1720
23	307	1410	1430	1500	1210	1600	255	477	450	426	290	1550
24	307	1170	2240	1450	3750	1590	293	304	438	382	328	1640
25	311	1470	2950	980	5250	1770	397	229	446	508	328	1990
26	300	1460	2270	1160	2380	1710	371	269	470	442	356	1780
27	291	1220	1400	1240	1820	1520	302	353	434	382	382	1680
28	285	1210	1480	1030	1600	1440	270	283	434	367	390	1710
29	285	1180	1480	1520	---	1250	271	240	390	639	360	1700
30	285	1130	1470	2930	---	1260	284	324	349	706	430	1670
31	291	---	1620	1520	---	1220	---	433	---	706	1000	---
TOTAL	10839	24517	51489	52030	39708	45934	12075	9557	33734	12945	14154	51150
MEAN	350	817	1661	1678	1418	1482	403	308	1124	418	457	1705
MAX	501	1470	2950	4400	5250	3620	1150	478	3280	706	1000	2530
MIN	282	314	719	980	817	676	240	229	349	318	265	1310
CAL YR 1974	TOTAL	324583	MEAN	889	MAX	5360	MIN	207				
WTR YR 1975	TOTAL	358132	MEAN	981	MAX	5250	MIN	229				

EXTREMES.--Current year: Maximum discharge, 6,260 ft³/s (177 m³/s) Feb. 25, gage height, 12.85 ft (3.917 m); minimum daily, 229 ft³/s (6.49 m³/s) May 25.

BEAVER RIVER BASIN

63

03094900 WALNUT CREEK AT CORTLAND, OHIO

LOCATION.--Lat 41°19'49", long 80°43'28", Trumbull County, at Main Street Bridge in Cortland, 1.8 mi (2.9 km) upstream from mouth.

DRAINAGE AREA.--8.45 mi² (21.89 km²).

PERIOD OF RECORD.--Discharge, 1947 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 24	3.17	0.966	285	8.07

03095000 MOSQUITO CREEK LAKE NEAR CORTLAND, OHIO

LOCATION.--Lat 41°17'58", long 80°45'31", in T.5 N., R.3 W., Trumbull County, 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 at mean sea level (levels by Corps of Engineers).

EXTREMES.--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).

REMARKS.--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.

COOPERATION.--Gage-heights and capacity curve furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	899.95	69,430	-
Oct. 31.....	898.77	61,180	-8,250
Nov. 30.....	899.19	64,050	+2,870
Dec. 31.....	897.82	54,920	-9,130
CAL YR 1974.....	-	-	-12,170
Jan. 31.....	897.55	53,235	-1,690
Feb. 28.....	899.33	65,040	+11,810
Mar. 31.....	901.20	78,840	+13,800
Apr. 30.....	901.23	79,070	+230
May 31.....	901.33	79,860	+790
June 30.....	901.23	79,070	-790
Jly 31.....	899.97	69,570	-9,500
Aug. 31.....	899.65	67,310	-2,260
Sept. 30.....	899.30	64,830	-2,480
WTR YR 1975.....	-	-	-4,600

EXTREMES.--Current year: Maximum contents, 85,150 acre-ft (105 hm³) June 7, elevation, 902.00 ft (274.930 m); minimum, 49,500 acre-ft (61.0 hm³) Jan. 25, elevation, 896.95 ft (273.390 m).

BEAVER RIVER BASIN

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

LOCATION.--Lat 41°17'59", long 80°45'31", in T.5 N., R.3 W., Trumbull County, 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).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 873.98 ft (266.389 m) above mean sea level (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.--Discharge 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 DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--35 years, 86.9 ft³/s (2.461 m³/s) (unadjusted).

EXTREMES.--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.

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

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	165	410	153	76	27	22	23	12	190	41	47
2	43	165	290	153	76	27	21	23	46	168	41	42
3	62	165	283	153	76	27	22	23	82	143	41	42
4	82	165	410	153	76	28	22	22	82	143	41	44
5	82	165	410	153	76	28	22	22	82	143	41	46
6	82	165	410	153	76	28	23	23	84	143	41	47
7	82	165	410	153	76	28	22	23	84	143	41	48
8	82	165	410	153	76	28	22	23	84	131	41	49
9	82	165	410	106	76	28	23	23	84	117	41	49
10	125	165	430	76	76	28	23	23	82	117	41	51
11	168	165	446	114	76	28	23	23	84	105	42	52
12	168	165	446	158	76	28	23	23	84	92	41	55
13	168	165	446	283	76	28	23	23	84	92	41	59
14	168	165	446	406	76	28	22	23	84	92	41	60
15	168	165	446	410	76	28	22	24	84	92	42	62
16	168	165	446	410	76	28	22	24	84	92	42	63
17	168	163	442	410	76	28	22	24	128	92	42	89
18	168	163	442	410	77	23	22	24	193	92	42	114
19	168	163	325	410	63	21	22	23	193	92	42	109
20	168	163	218	406	48	21	19	24	193	92	42	116
21	168	165	402	402	34	22	17	24	193	92	44	119
22	168	165	402	398	26	22	17	24	193	92	44	121
23	165	165	402	394	26	22	16	15	193	92	44	124
24	165	165	279	276	27	22	20	12	193	92	44	127
25	165	168	153	150	27	22	23	12	193	90	44	128
26	165	168	153	150	27	22	23	12	193	53	44	131
27	165	290	153	150	27	22	23	11	193	21	44	133
28	165	414	153	150	27	22	23	11	190	41	45	136
29	165	414	153	104	---	22	23	11	190	41	45	265
30	165	410	153	76	---	22	23	12	190	41	47	342
31	165	---	153	76	---	22	---	12	---	41	47	---
TOTAL	4266	5816	10532	7149	1701	780	650	619	3854	3067	1319	2870
MEAN	138	194	340	231	60.8	25.2	21.7	20.0	128	98.9	42.5	95.7
MAX	168	414	446	410	77	28	23	24	193	190	47	342
MIN	43	163	153	76	26	21	16	11	12	21	41	42
(+)	22.7	21.2	20.4	21.2	20.4	19.8	19.1	21.2	22.8	23.7	22.9	22.7

CAL YR 1974 TOTAL 48054.3 MEAN 132 MAX 678 MIN 5.3 (+) 22.4
WTR YR 1975 TOTAL 42623.0 MEAN 117 MAX 446 MIN 11 (+) 21.5

EXTREMES.--Current year: Maximum discharge, 462 ft³/s (13.1 m³/s) Dec. 10, 11, 12, 14, 16, gage height, 3.13 ft (0.954 m); minimum daily, 11 ft³/s (0.31 m³/s) May 27-29.

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

BEAVER RIVER BASIN

65

03095500 MOSQUITO CREEK BELOW MOSQUITO CREEK DAM, NEAR CORTLAND, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
APR. 01...	1650	21	6.0	11.6	93	240	7.4	.1	22	5.6	12	2.5
SEP. 03...	1250	43	22.0	8.1	92	240	7.6	1.0	23	5.9	13	3.1

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
APR. 01...	54	0	3.4	44	21	35	.3	.12	.01	.24	.05	125
SEP. 03...	59	0	2.4	48	21	33	.2	.19	.01	.02	.06	129

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (MG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
APR. 01...	78	34	100	20	--	--	--	--	--	--	--	--
SEP. 03...	82	33	20	20	0	<10	0	3	10	<.5	10	3.5

BEAVER RIVER BASIN

67

03097000 MEANDER CREEK RESERVOIR NEAR MINERAL RIDGE, OHIO

LOCATION.--Lat 41°09'12", long 80°46'45", in T.3 N., R.3 W., Trumbull County, 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 at mean sea level (levels by Mahoning Valley Sanitary District).

EXTREMES.--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).

REMARKS.--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.

COOPERATION.--Gage-heights furnished by Mahoning Valley Sanitary District. Capacity table computed from base data furnished by Mahoning Valley Sanitary District.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	902.95	28,510	-
Oct. 31.....	901.32	25,650	-2,860
Nov. 30.....	902.47	27,660	+2,010
Dec. 31.....	903.12	28,820	+1,160
CAL YR 1974.....	-	-	+2,070
Jan. 31.....	903.03	28,660	-160
Feb. 28.....	906.67	35,870	+7,210
Mar. 31.....	906.53	35,570	-300
Apr. 30.....	905.73	33,880	-1,690
May 31.....	906.15	34,750	+870
June 30.....	906.15	34,750	0
July 31.....	905.03	32,470	-2,280
Aug. 31.....	904.91	32,240	-230
Sept. 30.....	906.47	35,440	+3,200
WTR YR 1975.....	-	-	+6,930

EXTREMES.--Current year: Maximum contents, 37,860 acre-ft (46.7 hm³) Mar. 19, elevation, 907.57 ft (276.627 m); minimum, 25,360 acre-ft (31.3 hm³) Nov. 4, elevation, 901.15 ft (274.671 m).

BEAVER RIVER BASIN

03098000 MAHONING RIVER AT YOUNGSTOWN, OHIO

LOCATION.--Lat 41°06'40", long 80°40'23", Mahoning County, 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).

GAGE.--Water-stage recorder. Datum of gage is 826.53 ft (251.926 m) above mean sea level, adjustment 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.--Discharge 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 DISCHARGE RECORDS

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.

AVERAGE DISCHARGE.--54 years, 848 ft³/s (24.02 m³/s).

EXTREMES.--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.

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.

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

REVISIONS (WATER YEARS).--WSP 623: 1924(M). WSP 1907: Drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	566	490	1970	2690	1490	1990	1470	432	4820	622	832	2810
2	631	502	2060	2790	1220	1840	1350	450	4840	594	825	2830
3	734	496	1880	2530	1230	1730	1300	438	2940	559	909	2300
4	720	839	1850	2330	1150	1660	1330	414	2360	524	951	1930
5	650	1640	2280	2260	1130	1620	1140	462	3910	524	909	1800
6	598	1830	2290	2120	1260	1610	839	601	4830	517	734	2270
7	566	1390	2220	2060	1330	1970	762	657	3900	531	492	2480
8	540	951	3200	3210	1210	2670	622	629	2760	552	468	1940
9	533	776	3630	6050	1140	2350	486	468	2200	559	462	1690
10	527	699	3200	7380	1030	1400	450	390	1950	650	456	1600
11	553	671	2770	3380	1090	1080	432	342	1950	643	650	1610
12	598	1070	2720	1950	1060	1170	414	336	2550	601	587	2490
13	579	1720	2890	1750	1040	1760	390	354	2410	486	587	2360
14	502	1620	3120	1850	1030	2100	372	348	1490	531	706	1970
15	664	1250	3190	2050	1010	1960	360	342	881	587	580	1720
16	678	1120	3230	2130	1240	1820	354	336	846	498	396	1640
17	657	1030	3340	2110	2260	2020	342	342	755	462	396	1640
18	579	993	3160	2220	4030	2940	336	342	713	456	468	2330
19	533	965	2780	2330	4400	5050	456	348	727	566	456	3710
20	533	1040	2490	2290	2630	6380	517	342	706	706	438	3980
21	508	1430	2170	2230	1780	3870	492	378	671	853	432	3180
22	508	2040	2170	2250	1420	2380	408	636	664	923	426	2540
23	502	2170	2550	2170	1800	2220	360	818	685	636	306	2140
24	502	1960	4080	2130	5130	2250	438	573	769	671	366	2560
25	514	2390	5120	1890	7290	2510	559	354	785	790	408	2920
26	496	2600	4670	1810	5190	2400	594	480	1060	706	462	2640
27	472	2130	3270	2310	2730	2060	474	608	926	498	456	2280
28	466	1890	2220	1640	2250	1880	384	480	853	450	468	2170
29	460	1980	2250	3150	---	1760	408	360	778	587	498	2160
30	466	1970	2470	5160	---	1700	396	636	685	832	867	2200
31	454	---	2540	3680	---	1640	---	874	---	832	1740	---
TOTAL	17289	41652	87780	83900	59570	69790	18235	14570	55414	18946	18731	69890
MEAN	558	1388	2832	2706	2128	2251	608	470	1847	611	604	2330
MAX	734	2600	5120	7380	7290	6380	1470	874	4840	923	1740	3980
MIN	454	490	1850	1640	1010	1080	336	336	664	450	306	1600
CAL YR 1974 TOTAL	513891			1408	8720							
WTR YR 1975 TOTAL	555767			1523	7380							

EXTREMES.--Current year: Maximum discharge, 7,760 ft³/s (220 m³/s) Feb. 25; maximum gage height, 11.51 ft (3.508 m) Feb. 25 (backwater from Mill Creek); minimum daily discharge, 306 ft³/s (8.67 m³/s) Aug. 23.

BEAVER RIVER BASIN

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03098000 MAHONING RIVER AT YOUNGSTOWN, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1951, 1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
APR. 02...	1140	1320	9.5	9.2	78	379	7.4	3.9	35	9.6	18	3.7
AUG. 20...	0915	424	30.0	5.4	71	500	8.0	5.0	45	13	26	5.2

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
APR. 02...	72	0	4.6	59	29	77	.4	.70	.04	.78	.27	212
AUG. 20...	108	0	1.7	89	35	92	.6	1.3	.15	.58	.11	275

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
APR. 02...	130	68	180	160	--	--	--	--	--	--	--	--
AUG. 20...	170	77	90	170	2	10	10	57	170	<.5	7.4	2.2

03098500 MILL CREEK AT YOUNGSTOWN, OHIO

LOCATION.--Lat 41°04'19", long 80°41'26", Mahoning County, 600 ft (200 m) upstream from suspension bridge in Mill Creek Park at Youngstown, 1 mi (2 km) downstream from Newport Dam, 2.5 mi (4.0 km) upstream from mouth.

DRAINAGE AREA.--66.3 mi² (171.7 km²).

PERIOD OF RECORD.--Discharge, 1944 to 1971 (operated as a continuous-record station); 1972 to 1975.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 24	4.32	1.317	1,410	39.9

03098700 CRAB CREEK AT YOUNGSTOWN, OHIO

LOCATION.--Lat 41°07'20", long 80°38'08", Mahoning County, at bridge on Hubbard Road at Youngstown, 2 mi (3 km) upstream from mouth.

DRAINAGE AREA.--14.0 mi² (36.3 km²).

PERIOD OF RECORD.--Discharge, 1959 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Aug. 11	6.69	2.039	760	21.5

BEAVER RIVER BASIN

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03099500 MAHONING RIVER AT LOWELLVILLE, OHIO

LOCATION.--Lat 41°02'12", long 80°32'11", in T.1 N., R.1 W., Mahoning County, 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).

GAGE.--Water-stage recorder. Datum of gage is 796.84 ft (242.877 m) above mean sea level, adjustment of 1912. Prior to Oct. 26, 1944, nonrecording gage at site 300 ft (91 m) downstream at same datum.

REMARKS.--Discharge 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.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--33 years, 1,056 ft³/s (29.91 m³/s).

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

REVISIONS (WATER YEARS).--WSP 1555: 1946(M), 1952(M), 1955(M), 1956. WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	699	640	1900	2850	1890	2070	1670	608	5500	807	950	3010
2	760	675	2070	2880	1520	1900	1520	678	5500	738	1000	2950
3	832	661	2050	2650	1550	1790	1590	629	3500	696	1100	2310
4	832	1040	1870	2440	1430	1700	1520	552	2700	647	1100	1930
5	776	1860	2220	2350	1340	1680	1370	559	4000	632	1000	1790
6	720	1880	2240	2210	1540	1670	1040	713	5500	621	900	2380
7	713	1520	2180	2130	1590	2080	943	728	4000	627	600	2350
8	678	1110	3660	3400	1450	2850	816	713	3000	633	550	1920
9	671	918	4220	6890	1370	2510	664	566	2300	732	550	1650
10	678	835	3470	7540	1250	1700	608	486	1900	844	550	1550
11	685	802	2780	3740	1300	1300	580	462	2000	882	750	1560
12	744	1260	2650	2160	1280	1460	552	462	2660	708	700	3150
13	744	1700	2830	1970	1250	2070	510	456	2550	603	700	2300
14	671	1670	3090	1900	1220	2260	498	456	1800	698	800	1950
15	925	1320	3140	2070	1200	2120	492	462	1090	687	600	1700
16	872	1200	3210	2130	1480	2000	486	462	1040	606	480	1600
17	840	1120	3300	2110	2550	2280	480	462	923	561	480	1570
18	760	1080	3090	2210	4390	3450	474	456	850	547	550	2290
19	685	1060	2730	2310	4430	6360	573	456	868	658	550	3610
20	685	1150	2420	2270	2840	7270	615	456	848	921	540	4170
21	671	1420	2130	2190	2040	4240	594	468	773	1020	547	3350
22	664	1960	2070	2200	1690	2560	510	664	909	1010	581	2570
23	650	2070	2330	2130	2270	2360	480	832	826	757	509	2180
24	664	1930	4450	2110	7860	2470	587	650	921	882	514	2990
25	685	2330	5740	2130	8500	2650	685	462	1520	1160	536	3040
26	650	2550	4940	2260	5560	2510	706	685	1460	902	581	2720
27	636	2130	3420	2410	2860	2180	587	678	1860	673	604	2280
28	622	1850	2320	1880	2350	2000	504	566	1870	581	576	2080
29	615	1900	2290	4100	---	1950	510	498	1360	550	761	2030
30	636	1890	2450	5700	---	1880	498	776	976	700	1230	2020
31	622	---	2550	4010	---	1810	---	900	---	850	2120	---
TOTAL	22085	43531	89810	89330	70000	77130	22662	18001	65004	22933	23009	71000
MEAN	712	1451	2897	2882	2500	2488	755	581	2167	740	742	2367
MAX	925	2550	5740	7540	8500	7270	1670	900	5500	1160	2120	4170
MIN	615	640	1870	1880	1200	1300	474	456	773	547	480	1550

CAL YR 1974 TOTAL 578912 MEAN 1586 MAX 9920 MIN 402
WTR YR 1975 TOTAL 614495 MEAN 1684 MAX 8500 MIN 456

EXTREMES.--Current year: Maximum discharge, 8,890 ft³/s (252 m³/s) Feb. 24, gage height, 8.87 ft (2.704 m); minimum daily, 456 ft³/s (12.9 m³/s) May 13, 14, 18-20.

BEAVER RIVER BASIN

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

LOCATION.--Lat 41°01'53", long 80°31'10", Mahoning County, 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).

GAGE.--Water-quality recorder.

REMARKS.--Interruptions in the daily water-quality records were due to malfunctions of the instrument. Records of discharge are given for Mahoning River at Lowellville, Ohio, station 03099500, drainage area 1,073 mi² (2,779 km²).

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--January 1967 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)
APR. 09...	0955	678	14.0	7.7	74	570	7.3	6.2	52	11	35	6.7
AUG. 20...	1145	559	30.5	3.6	47	535	7.6	7.3	49	14	33	7.6

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CAC03 (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
APR. 09...	108	0	8.7	89	56	110	.6	3.8	.12	.78	.72	331
AUG. 20...	110	0	4.4	90	44	110	.8	3.2	.27	.54	.88	321

DATE	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (MG) (UG/L)	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
APR. 09...	180	87	50	290	--	--	--	--	--	--	--
AUG. 20...	180	90	660	350	2	10	80	29	150	<.5	4.5

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C)

EXTREMES.--Period of record: Maximum, 1,480 micromhos Feb. 5, 1971; minimum, 219 micromhos Dec. 24, 1972.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	606	573	588	549	537	410	---	---	416	366	444	426
2	599	558	585	548	551	461	---	---	431	413	461	435
3	573	540	555	531	557	510	---	---	458	413	473	443
4	561	543	566	402	540	515	---	---	482	449	471	449
5	576	542	494	393	506	465	---	---	567	473	477	441
6	569	539	494	455	492	467	---	---	615	543	464	450
7	560	534	462	435	485	458	---	---	563	540	626	450
8	572	542	477	449	522	453	---	---	545	507	491	449
9	585	551	486	461	452	407	---	---	602	510	452	411
10	593	573	501	462	408	390	---	---	591	509	480	408
11	602	575	531	488	419	390	---	---	615	518	492	458
12	591	552	534	434	441	411	---	---	708	527	557	488
13	564	516	482	445	455	435	---	---	695	540	515	480
14	569	528	446	426	447	435	---	---	587	534	479	435
15	554	482	456	422	441	426	431	420	572	521	651	435
16	548	524	473	434	441	426	425	414	633	555	620	494
17	552	524	482	447	429	414	426	407	633	540	551	494
18	563	528	510	459	416	410	638	405	540	435	507	455
19	570	525	503	472	416	405	488	428	434	380	465	366
20	575	524	513	486	---	---	443	416	395	365	362	299
21	576	516	498	471	---	---	437	411	438	390	---	---
22	570	540	485	435	---	---	440	417	470	431	---	---
23	566	548	437	403	474	447	437	413	500	431	---	---
24	581	543	434	403	474	446	440	419	431	356	---	---
25	570	540	431	411	440	363	528	423	350	266	---	---
26	564	540	456	410	359	341	566	512	330	270	426	407
27	572	537	413	392	402	350	518	453	384	333	435	416
28	575	531	443	398	422	402	479	453	431	387	441	422
29	563	537	438	407	449	413	524	443	---	---	468	428
30	588	552	443	402	462	435	434	345	---	---	456	434
31	590	555	---	---	468	450	380	317	---	---	465	431
MONTH	606	482	588	392	557	341	---	---	708	266	651	299
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	462	438	671	561	486	372	512	477	546	518	456	426
2	471	440	650	536	377	294	536	506	543	519	417	380
3	504	440	651	626	351	293	536	504	539	512	395	374
4	513	486	638	593	422	347	539	515	509	476	473	378
5	536	476	627	585	416	357	542	516	521	488	488	461

BEAVER RIVER BASIN

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

PH (UNITS)

PERIOD OF RECORD.--January 1967 to current year.

EXTREMES.--Period of record: Maximum, 9.9 Jan. 26, 1969; minimum, 3.0 Jan. 24, 1967.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

[illegible]

BEAVER RIVER BASIN

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

TEMPERATURE (°C) OF WATER

PERIOD OF RECORD.--January 1967 to current year.

EXTREMES.--Period of record: Maximum, 39.0°C June 29, 1971; minimum, 2.0°C Feb. 21, 1971.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	25.0	24.0	27.0	26.0	7.0	6.0	---	---	6.5	5.0	6.5	5.5
2	24.0	22.5	26.5	25.5	6.5	5.5	---	---	7.0	6.5	6.5	5.5
3	23.0	21.5	25.5	24.0	6.5	6.0	---	---	7.0	6.0	6.5	5.5
4	21.5	20.0	24.5	19.0	7.0	6.0	---	---	8.0	6.5	7.0	5.5
5	22.5	20.0	19.0	17.5	6.5	6.0	---	---	9.0	7.0	7.5	6.0
6	22.5	20.5	17.5	15.5	6.5	6.0	---	---	8.5	7.5	8.5	7.0
7	23.0	22.0	16.0	15.5	6.0	5.5	---	---	8.0	6.5	8.0	6.5
8	24.0	21.5	17.5	15.5	6.0	4.5	---	---	7.5	6.0	6.0	4.5
9	23.5	22.0	17.5	16.5	4.5	3.0	---	---	6.0	5.5	5.5	4.5
10	25.0	23.0	18.0	16.0	4.0	3.0	---	---	7.0	5.5	6.5	4.5
11	26.0	23.5	19.5	17.0	5.0	4.0	---	---	8.5	6.5	9.5	7.0
12	25.5	23.0	20.0	16.0	6.0	5.0	---	---	8.5	7.5	9.5	9.0
13	24.0	22.5	16.5	13.5	6.0	5.5	---	---	8.0	7.0	9.0	7.5
14	25.0	22.5	13.0	12.5	5.5	5.0	---	---	9.0	7.0	7.5	5.5
15	25.0	21.5	12.5	11.5	5.0	4.5	5.0	4.5	8.5	8.0	6.5	5.5
16	22.5	21.0	12.5	11.0	5.0	4.5	5.0	4.0	8.0	7.0	6.5	4.5
17	22.5	20.5	12.0	11.0	5.5	5.0	5.0	4.0	7.0	5.5	7.5	5.5
18	21.5	20.0	13.0	11.5	5.0	4.5	5.0	4.5	5.0	3.5	7.0	5.5
19	20.5	19.0	15.0	12.5	4.5	4.5	4.5	4.0	3.5	3.5	7.0	6.0
20	19.0	17.0	16.0	14.5	---	---	4.5	3.5	4.5	3.5	7.0	6.0
21	19.5	16.5	15.0	13.5	---	---	4.5	3.5	6.0	4.0	---	---
22	21.0	18.0	11.0	9.5	---	---	5.5	4.5	8.5	5.5	---	---
23	21.5	20.0	10.0	9.5	5.5	5.0	6.0	5.0	8.5	7.5	---	---
24	22.0	20.5	11.0	9.5	5.0	3.5	6.5	5.0	7.5	7.0	---	---
25	22.5	21.5	11.0	9.0	3.5	3.0	6.5	5.0	7.0	6.0	---	---
26	21.5	20.5	9.0	8.5	3.5	2.5	5.0	4.5	6.0	5.5	9.5	8.5
27	22.0	20.0	8.0	7.5	4.5	3.0	5.0	4.0	6.5	6.0	9.0	8.0
28	22.0	20.0	8.5	7.0	5.5	4.5	7.0	5.0	6.5	6.0	9.0	8.5
29	23.5	21.0	7.5	6.5	5.5	4.5	7.0	4.5	---	---	9.5	8.0
30	25.5	23.5	7.0	6.5	5.5	4.5	4.5	4.0	---	---	9.5	8.0
31	26.5	25.0	---	---	5.0	4.5	5.0	3.5	---	---	9.5	7.5
MONTH	26.5	16.5	27.0	6.5	7.0	2.5	---	---	9.0	3.5	9.5	4.5
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	9.0	26.5	22.5	24.5	20.0	28.5	25.5	31.5	29.5	24.5	23.5
2	13.0	10.5	25.0	21.5	20.0	19.0	30.0	27.0	33.0	30.5	23.5	23.0
3	13.0	10.0	24.5	22.5	20.0	19.0	30.0	28.5	33.5	32.0	25.0	23.0
4	10.5	9.5	23.5	21.5	21.5	19.5	30.5	29.0	31.0	30.0	26.5	24.5
5	10.0	9.0	22.0	20.5	20.0	19.0	31.0	28.5	31.5	30.0	27.0	25.5
6	9.5	8.0	21.5	20.5	20.0	19.0	31.0	29.0	30.5	29.0	25.5	24.0
7	11.0	9.0	23.5	20.5	19.5	19.0	31.5	29.0	30.0	28.0	24.5	23.5
8	14.5	11.0	23.5	21.0	19.0	17.5	31.5	29.5	31.5	28.5	25.0	23.5
9	16.0	13.5	25.0	22.0	19.5	17.0	31.0	28.5	32.0	29.0	26.0	24.5
10	17.5	15.0	27.0	23.5	21.0	19.0	31.0	26.5	31.5	30.5	26.0	24.0
11	19.0	16.0	27.0	24.5	20.5	19.5	28.0	26.0	31.0	29.0	25.5	24.5
12	18.0	16.5	27.0	25.5	20.5	19.0	27.0	26.0	31.5	30.0	24.5	22.0
13	18.5	16.5	27.5	25.5	21.5	20.5	28.0	26.5	32.5	29.5	23.0	21.0
14	17.5	15.0	29.5	25.0	23.5	21.5	28.5	26.0	32.5	29.5	21.5	20.5
15	18.0	17.0	29.0	27.0	25.5	22.5	28.5	26.0	31.5	30.0	22.5	21.0
16	21.5	16.5	29.0	26.5	26.5	24.0	30.5	27.5	31.0	30.0	23.5	22.0
17	23.5	19.5	29.0	26.5	28.0	25.0	31.0	28.5	31.5	30.0	24.5	23.0
18	24.0	21.0	28.0	26.5	29.0	26.5	31.5	29.5	31.5	29.5	23.5	20.0
19	22.5	20.5	30.0	27.5	29.5	28.0	32.0	29.5	32.0	30.0	20.5	20.0
20	20.5	17.0	30.0	28.0	30.5	28.0	30.0	26.5	33.5	30.5	20.0	19.0
21	18.5	17.0	32.0	29.0	30.0	28.0	29.0	26.0	33.0	31.0	19.5	19.0
22	22.5	17.5	30.5	28.0	30.0	26.5	30.0	27.0	33.0	31.5	19.5	19.0
23	23.5	21.0	29.5	27.5	30.5	25.5	31.5	28.0	33.0	31.0	20.0	19.5
24	22.5	20.5	28.5	26.5	32.0	28.0	32.5	28.0	32.0	30.5	20.0	18.0
25	22.5	20.0	29.5	27.5	28.0	26.0	29.0	27.0	33.0	31.0	19.5	18.5
26	21.0	19.0	29.0	25.5	28.0	24.5	30.0	27.5	34.0	32.0	19.0	18.5
27	20.0	18.5	29.0	26.0	26.0	23.0	30.0	28.0	34.0	32.0	19.0	18.5
28	19.0	18.5	30.0	27.0	26.0	22.5	30.5	28.5	33.5	32.0	19.0	17.5
29	24.0	19.0	30.0	27.0	26.0	24.0	32.5	29.0	33.0	29.0	19.5	17.5
30	25.5	21.0	28.0	26.0	27.0	24.5	32.0	30.5	30.5	27.5	20.5	19.0
31	---	---	28.5	26.5	---	---	31.5	29.0	27.5	24.5	---	---
MONTH	25.5	8.0	32.0	20.5	32.0	17.0	32.5	25.5	34.0	24.5	27.0	17.5
YEAR	34.0	2.5										

BEAVER RIVER BASIN

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03102900 CLEAR CREEK AT DILWORTH, OHIO

LOCATION.--Lat 41°26'45", long 80°39'56", Trumbull County, at bridge on State Highway 170 at Dilworth, 1.1 mi (1.8 km) south of Gustavus, 3 mi (5 km) upstream from mouth.

DRAINAGE AREA.--1.13 mi² (2.93 km²).

PERIOD OF RECORD.--Discharge, 1947 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 24	9.91	3.021	39	1.10

BEAVER RIVER BASIN

03102950 PYMATUNING CREEK AT KINSMAN, OHIO

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

GAGE.--Water-stage recorder. Datum of gage is 906.8 ft (276.39 m) above mean sea level.

REMARKS.--Discharge records good.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--10 years, 118 ft³/s (3.342 m³/s), 16.58 in/yr (421 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 1,660 ft³/s (47.0 m³/s) Mar. 3, 1972, gage height, 11.54 ft (3.517 m) from rating curve extended above 800 ft³/s (22.7 m³/s); maximum gage height, 11.61 ft (3.539 m) Dec. 29, 1968; minimum discharge, 0.10 ft³/s (0.003 m³/s) Aug. 8, 1972.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	35	189	159	534	290	124	47	355	57	4.4	143
2	91	33	154	174	359	192	121	41	539	34	4.6	169
3	117	33	149	164	223	143	125	36	512	21	5.9	153
4	120	41	153	162	141	118	128	37	443	14	7.1	99
5	111	178	150	148	100	101	124	42	472	11	6.4	57
6	97	250	142	131	80	103	112	46	754	8.9	5.9	40
7	81	244	126	120	70	166	101	44	865	7.6	5.9	36
8	67	237	255	186	80	427	90	38	720	7.6	5.9	34
9	53	201	495	628	70	405	82	32	508	7.1	5.4	29
10	43	154	418	680	65	383	75	26	341	7.1	4.9	22
11	34	112	383	610	60	300	68	21	213	29	6.1	17
12	26	131	340	464	55	228	62	15	176	35	6.6	26
13	24	243	336	323	52	303	56	12	171	28	6.6	26
14	26	266	323	200	48	311	50	13	158	19	11	21
15	57	270	336	141	45	282	45	12	137	13	13	16
16	91	250	323	85	57	255	43	13	109	9.9	17	14
17	88	196	311	60	128	211	41	12	86	7.9	15	13
18	81	145	267	56	439	250	39	12	81	6.6	15	29
19	72	106	205	51	555	762	49	11	69	8.9	14	91
20	62	155	171	53	525	1070	63	11	54	21	13	108
21	53	472	138	49	420	808	87	15	42	23	12	135
22	45	799	105	43	341	547	89	58	34	18	14	121
23	38	840	90	40	333	368	70	185	27	13	16	92
24	34	758	148	40	977	263	71	196	22	12	19	75
25	34	826	293	63	1340	272	95	161	19	11	25	84
26	38	708	359	136	977	252	101	115	18	8.6	30	77
27	38	555	306	150	649	219	87	97	24	7.1	48	63
28	35	452	263	160	423	174	69	112	56	6.9	48	51
29	32	355	198	357	---	140	59	115	104	6.1	37	39
30	32	269	160	676	---	130	52	97	95	5.6	36	31
31	35	---	143	684	---	125	---	80	---	5.1	80	---
TOTAL	1813	9314	7429	6993	9146	9598	2378	1752	7204	470.0	538.7	1911
MEAN	58.5	310	240	226	327	310	79.3	56.5	240	15.2	17.4	63.7
MAX	120	840	495	684	1340	1070	128	196	865	57	80	169
MIN	24	33	90	40	45	101	39	11	18	5.1	4.4	13
CFSM	.60	3.21	2.48	2.34	3.38	3.21	.82	.58	2.48	.16	.18	.66
IN.	.70	3.58	2.86	2.69	3.52	3.69	.91	.67	2.77	.18	.21	.74

CAL YR 1974 TOTAL 59254.6 MEAN 162 MAX 1490 MIN 1.7 CFSM 1.68 IN 22.79
WTR YR 1975 TOTAL 58546.7 MEAN 160 MAX 1340 MIN 4.4 CFSM 1.65 IN 22.52

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-23	0200	10.49	875	01-31	0300	10.12	708	03-20	0100	10.91	1,140
01-09	1500	10.17	728	02-25	0400	*11.28	*1,420	06-07	0800	10.52	891

Minimum discharge: 4.2 ft³/s (0.119 m³/s) Aug. 1, 2.

BEAVER RIVER BASIN
03102950 PYMATUNING CREEK AT KINSMAN, OHIO--Continued
WATER QUALITY RECORDS
CHEMICAL ANALYSES

PERIOD OF RECORD.--1966 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 26...	1300	237	5.0	9.9	77	195	6.8	1.1	23	5.4	6.8	2.2
SEP. 03...	1435	136	18.5	3.6	38	290	6.8	11	32	8.5	10	4.4

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 26...	54	0	14	44	13	30	.2	.08	.01	.40	.07	108
SEP. 03...	86	0	22	71	17	44	.2	.07	.01	.20	.16	170

DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 26...	80	35	100	20	--	--	--	--	--	--	--	--
SEP. 03...	120	44	300	110	1	<10	10	3	10	<.5	13	1.2

LITTLE BEAVER CREEK BASIN

03109000 LISBON CREEK AT LISBON, OHIO

LOCATION.--Lat 40°46'55", long 80°45'53", Columbiana County, at city water works of Lisbon, 800 ft (200 m) upstream from bridge on State Highway 164.

DRAINAGE AREA.--6.19 mi² (16.13 km²).

PERIOD OF RECORD.--1946 to 1962 (operated as a continuous-record station), 1963 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 24	4.08	1.244	434	12.3

03109100 MIDDLE FORK LITTLE BEAVER CREEK NEAR ROGERS, OHIO

LOCATION.--Lat 40°43'22", long 80°38'03", Columbiana County, at bridge on State Highway 7, 0.4 mi (0.6 km) upstream from West Fork Little Beaver Creek, 5 mi (8 km) south of Rogers.

DRAINAGE AREA.--149 mi² (386 km²).

PERIOD OF RECORD.--Discharge, 1972 to current year; chemical analyses, 1971 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)
AUG. 27...	1400	55	25.0	9.0	710	7.9	7.4	92	26	30	4.6	150

DATE	CAR- BONATE (C03) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (MG/L)	DIS- SOLVED MAN- GANESE (MN) (MG/L)
AUG. 27...	0	39	200	.4	.02	.01	1.1	.09	473	340	30	90

LITTLE BEAVER CREEK BASIN

81

03109200 WEST FORK LITTLE BEAVER CREEK AT WEST POINT, OHIO

LOCATION.--Lat 40°42'38", long 80°41'49", Columbiana County, at bridge on U.S. Highway 30, 0.3 mi (0.4 km) downstream from Patterson Creek, at West Point.

DRAINAGE AREA.--99.9 mi² (258.7 km²).

PERIOD OF RECORD.--Discharge, 1959, 1972 to current year; chemical analyses, 1971 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)
AUG. 27...	1000	23	23.0	8.6	540	7.6	2.5	61	23	15	3.4	99
DATE	TIME	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
AUG. 27...	0	27	150	.6	.04	.02	2.5	.04	332	250	70	120

03109400 NORTH FORK LITTLE BEAVER CREEK NEAR NEGLEY, OHIO

LOCATION.--Lat 40°46'30", long 80°32'36", Columbiana County, at county road bridge at Achor, 0.5 mi (0.8 km) downstream from Bull Creek, 1.1 mi (1.8 km) south of Negley.

DRAINAGE AREA.--166 mi² (430 km²).

PERIOD OF RECORD.--Discharge, 1959, 1972 to current year; chemical analyses, 1971 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	
AUG. 27...	1525	48	24.5	7.3	950	7.8	6.1	140	36	26	3.7	182	
DATE		CAR- BONATE (CO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
AUG. 27...	0	83	260	.2	.11	.04	.68	.09	645	500	20	290	

LITTLE BEAVER CREEK BASIN

03109500 LITTLE BEAVER CREEK NEAR EAST LIVERPOOL, OHIO

LOCATION.--Lat 40°40'33", long 80°32'27", Columbiana County, on right bank at downstream side of Grimes 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).

GAGE.--Water-stage recorder. Datum of gage is 702.77 ft (214.204 m) above mean sea level, adjustment of 1912. Prior to Sept. 22, 1926, nonrecording gage at same site and datum.

REMARKS.--Discharge records good. Sediment data collected at this site 1969 to 1974.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--60 years, 514 ft³/s (14.56 m³/s), 14.08 in/yr (358 mm/yr).

EXTREMES.--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.

REVISIONS (WATER YEARS).--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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	205	128	487	2180	1600	1360	781	526	1770	301	103	2340
2	183	144	647	1840	1240	1130	702	614	1600	259	97	1760
3	170	175	825	1440	1010	967	934	614	1190	229	104	844
4	163	228	763	1360	862	850	1020	536	835	223	112	484
5	155	1110	688	1140	816	779	839	514	734	208	110	346
6	150	860	691	972	1090	762	748	565	1740	187	114	1340
7	142	571	673	919	1080	1000	706	578	1630	172	104	942
8	136	426	2150	1280	750	1590	649	494	1120	164	93	554
9	134	351	3030	3460	650	1190	591	434	792	349	84	470
10	130	305	2080	3120	591	949	559	396	615	346	83	357
11	130	281	1420	2100	550	852	524	363	549	257	95	318
12	124	430	1170	1490	500	1390	486	352	1510	212	201	643
13	121	680	1350	1160	450	1970	454	434	1420	182	176	648
14	121	543	1440	939	430	1690	423	459	883	172	448	450
15	163	434	1480	700	450	1370	418	372	676	174	455	346
16	309	385	1580	600	598	1240	425	350	603	153	284	300
17	284	352	1810	500	1340	1550	398	314	500	136	253	282
18	220	326	1520	470	2630	2740	377	290	418	143	176	543
19	185	319	1220	700	2300	4190	406	278	370	142	138	1370
20	166	387	999	650	1620	4800	418	254	429	195	120	1280
21	155	486	814	500	1190	2780	376	240	374	413	107	1300
22	146	552	761	450	1010	1890	338	317	300	350	114	933
23	140	542	705	420	2200	1460	321	525	266	210	113	621
24	142	483	2500	500	9740	1490	389	426	248	163	119	2190
25	140	687	3870	719	7360	1680	586	315	627	279	107	2440
26	140	944	3000	1450	2790	1330	636	382	617	424	99	1520
27	136	748	1850	1140	2220	1050	484	471	1880	227	127	978
28	132	636	1350	884	1640	951	438	346	844	165	119	733
29	128	558	1120	3440	---	1030	467	271	556	137	115	584
30	128	489	1000	3850	---	1060	435	347	385	120	256	497
31	128	---	1100	2360	---	902	---	531	---	110	890	---
TOTAL	4906	14560	44093	42733	48707	48002	16328	12908	25481	6802	5516	27413
MEAN	158	465	1422	1378	1740	1548	544	416	849	219	178	914
MAX	309	1110	3870	3850	9740	4800	1020	614	1880	424	890	2440
MIN	121	128	487	420	430	762	321	240	248	110	83	282
CFSM	.32	.98	2.87	2.78	3.51	3.12	1.10	.84	1.71	.44	.36	1.84
IN.	.37	1.09	3.31	3.20	3.65	3.60	1.22	.97	1.91	.51	.41	2.06

CAL YR 1974 TOTAL 269746 MEAN 739 MAX 5660 MIN 72 CFSM 1.49 IN 20.23
WTR YR 1975 TOTAL 297449 MEAN 815 MAX 9740 MIN 83 CFSM 1.64 IN 22.31

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

DATE	TIME	G. H.	DISCHARGE
02-24	1000	*12.18	*11,200
03-19	1700	9.11	5,580

Minimum discharge: 78 ft³/s (2.21 m³/s) Aug. 10.

LITTLE BEAVER CREEK BASIN
03109500 LITTLE BEAVER CREEK NEAR EAST LIVERPOOL, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1964 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
APR. 07...	1330	748	5.0	11.6	91	541	8.1	4.9	67	18	15	2.0
AUG. 27...	1125	138	23.0	7.9	91	760	7.7	3.5	100	29	24	3.8

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
APR. 07...	84	0	1.1	69	30	170	.4	.02	.01	1.2	.22	349
AUG. 27...	150	0	4.8	123	51	210	.2	.06	.01	.87	.04	496

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
APR. 07...	240	170	70	430	--	--	--	--	--	--	--	--
AUG. 27...	370	250	30	50	0	10	10	4	20	<.5	4.9	1.0

YELLOW CREEK BASIN

03110000 YELLOW CREEK NEAR HAMMONDSVILLE, OHIO

LOCATION.--Lat 40°32'16", long 80°43'31", in sec. 29, T.8 N., R.2 W., Jefferson County, 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).

GAGE.--Water-stage recorder. Datum of gage is 692.10 ft (210.952 m) above mean sea level, Ohio State Highway Department bench mark.

REMARKS.--Discharge records good. Sediment data collected at this site 1969 to 1974.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--35 years, 157 ft³/s (4.446 m³/s), 14.51 in./yr (369 mm/yr).

EXTREMES.--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.
The highest stage observed is reported to have occurred in 1912.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	30	169	556	546	440	279	296	347	29	11	511
2	44	36	311	416	426	368	255	332	217	26	9.3	191
3	42	50	322	376	343	318	332	273	190	24	8.9	106
4	38	242	275	384	297	281	299	254	160	23	9.7	73
5	35	565	242	315	292	254	264	227	151	23	13	56
6	33	284	227	278	507	244	247	296	276	21	16	234
7	31	208	219	263	470	288	231	279	197	19	12	188
8	30	150	1030	284	373	394	212	242	160	18	10	113
9	30	120	1180	725	270	303	193	217	135	20	8.5	92
10	28	110	660	601	220	293	182	194	113	27	7.3	68
11	28	100	456	508	190	271	170	178	112	26	6.9	58
12	28	90	400	380	170	547	159	169	202	29	7.3	283
13	27	250	432	325	150	724	148	214	158	21	10	248
14	27	208	440	250	140	608	135	175	122	23	26	158
15	39	161	452	220	150	516	133	160	107	22	44	115
16	86	131	504	180	180	437	129	159	123	17	133	92
17	78	113	534	150	407	518	119	126	95	14	56	82
18	56	100	452	140	728	897	116	124	82	19	30	201
19	45	92	384	200	594	1280	128	119	76	21	20	410
20	40	120	322	170	458	1320	123	103	84	24	15	275
21	36	202	278	140	367	798	106	93	68	42	12	219
22	34	202	254	130	314	603	95	98	58	29	10	161
23	32	177	227	120	581	465	92	132	52	18	10	136
24	32	171	592	130	4060	512	119	140	47	15	11	967
25	30	269	861	201	1980	669	201	137	42	129	9.3	769
26	30	350	673	565	954	486	422	215	40	64	8.5	384
27	30	287	492	384	664	393	270	173	40	32	8.9	266
28	30	257	400	325	508	356	236	130	48	23	7.7	205
29	30	199	332	1890	---	379	239	109	45	18	7.3	161
30	30	158	297	1500	---	369	205	140	34	14	50	134
31	30	---	290	757	---	311	---	112	---	12	167	---
TOTAL	1159	5432	13707	12863	16339	15642	5839	5616	3581	842	755.6	6956
MEAN	37.4	181	442	415	584	505	195	181	119	27.2	24.4	232
MAX	86	565	1180	1890	4060	1320	422	332	347	129	167	967
MIN	27	30	169	120	140	244	92	93	34	12	6.9	56
CFSM	.25	1.23	3.01	2.82	3.97	3.44	1.33	1.23	.81	.19	.17	1.58
IN.	.29	1.37	3.47	3.26	4.13	3.96	1.48	1.42	.91	.21	.19	1.76

CAL YR 1974 TOTAL 75087.0 MEAN 206 MAX 1760 MIN 14 CFSM 1.40 IN 19.00
WTR YR 1975 TOTAL 88731.6 MEAN 243 MAX 4060 MIN 6.9 CFSM 1.65 IN 22.45

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

DATE	TIME	G. H.	DISCHARGE
01-29	1700	6.81	2,670
02-24	1630	*9.29	*5,290

Minimum discharge: 6.0 ft³/s (0.17 m³/s) Aug. 29.

YELLOW CREEK BASIN
03110000 YELLOW CREEK NEAR HAMMONDSVILLE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
APR. 07...	1445	231	6.5	10.0	81	364	7.1	7.0	40	11	11	1.5
AUG. 28...	1045	9.1	22.0	8.3	94	800	7.2	6.6	88	27	47	3.5

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
APR. 07...	44	0	5.6	36	9.9	130	.3	.03	.01	.67	.03	233
AUG. 28...	27	0	2.7	22	29	340	.1	.01	.01	.07	.01	555

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
APR. 07...	150	110	490	310	--	--	--	--	--	--	--
AUG. 28...	330	310	30	170	0	10	10	0	30	<.5	.4

SHORT CREEK BASIN

03111500 SHORT CREEK NEAR DILLONVALE, OHIO

LOCATION.--Lat 40°11'36", long 80°44'04", in sec. 30, T.4 N., R.2 W., Jefferson County, 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).

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

REMARKS.--Discharge records good, except those for periods of doubtful gage-height record, which are fair. Sediment data collected at this site 1969 to 1974.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--34 years, 123 ft³/s (3,398 m³/s), 13.58 in./yr (344.9 mm/yr).

EXTREMES.--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.

REVISIONS (WATER YEARS).--WSP 1003: 1942-43. WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	57	159	353	323	360	260	295	116	60	41	1010
2	97	64	290	263	298	300	243	460	113	60	41	250
3	97	69	270	253	260	250	355	283	186	58	42	200
4	91	68	234	268	241	230	285	300	180	58	44	160
5	86	275	205	234	260	210	253	246	159	57	49	140
6	84	151	188	216	505	210	241	253	221	56	46	210
7	83	123	182	212	390	250	228	219	176	54	43	140
8	82	109	817	212	305	330	221	198	136	53	39	90
9	80	100	597	313	260	260	206	184	116	83	37	75
10	77	97	359	263	230	240	196	172	105	78	39	60
11	75	92	285	240	220	300	186	163	124	67	74	80
12	73	131	283	210	220	958	178	159	209	60	53	700
13	73	141	299	190	221	637	170	159	133	58	46	250
14	71	121	289	170	202	480	161	146	118	71	101	150
15	71	109	272	160	200	450	161	146	113	58	83	120
16	103	101	350	150	251	420	155	154	136	53	134	102
17	97	97	358	150	348	517	148	136	102	51	77	95
18	78	92	288	150	353	556	145	133	148	50	59	121
19	73	90	263	209	305	797	155	127	118	55	51	174
20	70	172	239	188	260	724	141	119	111	60	50	113
21	65	227	220	170	234	490	133	114	93	55	46	102
22	62	180	209	150	223	433	126	110	86	49	50	86
23	62	150	199	140	926	385	126	110	80	47	49	78
24	62	139	288	130	3010	460	186	136	75	54	47	1470
25	62	218	385	255	1130	450	694	113	74	111	43	490
26	63	227	310	373	694	370	616	116	75	62	41	300
27	63	180	255	255	535	330	315	113	77	53	49	200
28	63	166	241	232	458	320	263	107	74	48	40	150
29	62	146	225	718	---	330	246	99	69	45	42	130
30	57	134	212	511	---	318	213	155	65	44	79	110
31	57	---	227	370	---	280	---	113	---	42	586	---
TOTAL	2343	4026	8998	7708	12862	12645	7006	5338	3588	1810	2221	7356
MEAN	75.6	134	290	249	459	408	234	172	120	58.4	71.6	245
MAX	104	275	817	718	3010	958	694	460	221	111	586	1470
MIN	57	57	159	130	200	210	126	99	65	42	37	60
CFSM	.61	1.09	2.36	2.02	3.73	3.32	1.90	1.40	.98	.47	.58	1.99
IN.	.71	1.22	2.72	2.33	3.89	3.82	2.12	1.61	1.09	.55	.67	2.22
CAL YR 1974	TOTAL	63371	MEAN 174	MAX 1400	MIN 49	CFSM 1.41	IN 19.17					
WTR YR 1975	TOTAL	75901	MEAN 208	MAX 3010	MIN 37	CFSM 1.69	IN 22.96					

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
02-24	1100	*8.49	*3,690	09-01	0100	6.94	2,610
03-12	1500	5.42	1,710	09-24	1100	6.66	2,410
04-25	2200	5.94	1,970				

Minimum discharge: 36 ft³/s (1.02 m³/s) Aug. 10.

Note: No gage-height record Feb. 23, 24. Maximum gage height determined from high water marks.

SHORT CREEK BASIN
03111500 SHORT CREEK NEAR DILLONVALE, OHIO--Continued
WATER QUALITY RECORDS
CHEMICAL ANALYSES

PERIOD OF RECORD.--1964 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
APR. 07...	1630	228	7.5	9.6	80	2000	7.5	5.3	250	110	79	4.1
AUG. 12...	1450	49	25.0	8.7	100	2500	7.7	5.3	260	120	140	6.8

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
APR. 07...	238	0	12	195	24	1000	.4	.10	.01	.42	.07	1590
AUG. 12...	160	0	5.1	131	58	1280	.3	.11	.37	.04	.01	1950

DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
APR. 07...	1100	880	160	420	--	--	--	--	--	--	--	--
AUG. 12...	1100	1000	40	430	2	10	10	2	40	<.5	6.6	1.4

CAPTINA CREEK BASIN

03114000 CAPTINA CREEK AT ARMSTRONGS MILLS, OHIO

LOCATION.--Lat 39°54'31", long 80°55'27", in NE 1/4 sec. 10, T.5 N., R.4 W., Belmont County, 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).

GAGE.--Water-stage recorder. Datum of gage is 739.53 ft (225.409 m) above mean sea level. Aug. 20, 1926, to Sept. 30, 1935, nonrecording gage at same site, at datum 1.0 ft (0.30 m) higher.

REMARKS.--Discharge records good except those for periods of no gage-height record which are poor. Sediment data collected at this site 1969 to 1974.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--26 years, 159 ft³/s (4.503 m³/s), 16.12 in./yr (409 mm/yr).

EXTREMES.--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.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	33	178	800	328	291	239	410	210	18	3.0	4960
2	61	33	253	500	307	244	211	326	150	16	2.5	819
3	53	33	283	350	265	215	412	248	120	33	2.2	416
4	50	34	250	500	253	193	301	293	110	43	2.0	282
5	49	80	232	350	770	174	243	222	100	26	3.5	211
6	47	73	217	250	692	173	211	192	160	22	16	324
7	45	61	232	280	402	508	189	166	130	60	10	214
8	39	58	2540	410	335	586	166	141	100	30	6.0	156
9	41	50	1070	318	235	335	149	124	85	20	4.0	119
10	41	46	460	253	200	288	140	110	75	30	3.0	90
11	40	43	321	223	170	252	125	98	70	70	60	87
12	41	111	335	200	160	1090	113	94	130	46	22	898
13	41	181	378	180	160	845	102	110	100	26	17	431
14	39	138	353	150	180	1070	91	90	85	20	135	263
15	42	104	256	130	226	1050	89	84	70	16	76	194
16	100	82	187	120	360	615	85	101	80	12	603	160
17	82	73	328	120	410	492	78	80	60	10	276	141
18	53	64	530	158	363	371	75	94	50	9.0	96	368
19	45	61	380	465	342	726	100	85	48	12	54	415
20	40	93	300	211	272	704	86	70	55	20	39	303
21	36	120	240	170	235	442	71	61	44	15	36	273
22	33	143	210	140	211	373	66	58	40	11	28	211
23	33	130	200	130	2740	303	67	64	34	9.0	35	210
24	35	118	250	205	4270	795	513	61	30	20	29	4580
25	36	272	450	1090	1280	564	1030	56	28	60	23	1120
26	37	311	350	515	668	359	827	130	26	20	23	557
27	35	223	280	339	443	280	384	100	32	10	19	378
28	35	184	230	328	349	254	288	85	31	7.0	17	282
29	34	145	200	515	---	319	243	70	27	5.0	14	215
30	33	120	180	356	---	324	200	65	22	4.0	159	174
31	33	---	350	335	---	272	---	70	---	3.5	5280	---
TOTAL	1398	3217	12023	10091	16626	14507	6894	3958	2302	703.5	7093.2	18851
MEAN	45.1	107	388	326	594	468	230	128	76.7	22.7	229	628
MAX	100	311	2540	1090	4270	1090	1030	410	210	70	5280	4960
MIN	33	33	178	120	160	173	66	56	22	3.5	2.0	87
CFSM	.34	.80	2.90	2.43	4.43	3.49	1.72	.96	.57	.17	1.71	4.69
IN.	.39	.89	3.34	2.80	4.62	4.03	1.91	1.10	.64	.20	1.97	5.23

CAL YR 1974 TOTAL 83135.4 MEAN 228 MAX 2540 MIN 3.3 CFSM 1.70 IN 23.08
WTR YR 1975 TOTAL 97663.7 MEAN 268 MAX 5280 MIN 2.0 CFSM 2.00 IN 27.11

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-08	0430	6.85	3,050	09-01	0330	*13.61	*12,000
02-24	0100	11.61	8,900	09-24	0600	11.92	9,370

Minimum daily discharge: 2.0 ft³/s (0.06 m³/s) Aug. 4.

Note: No gage-height record Dec. 19 to Jan. 7, May 25 to June 27, July 7 to Aug. 12.

CAPTINA CREEK BASIN

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03114000 CAPTINA CREEK AT ARMSTRONGS MILLS, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)
MAR. 11...	1430	244	3.0	13.4	99	320	7.6	5.3	43	9.0	10	1.4
AUG. 12...	1115	22	25.5	9.5	110	490	7.9	3.5	62	13	24	3.1

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CAC03 (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 11...	116	0	4.7	95	13	48	.2	.03	.02	.72	.08	187
AUG. 12...	169	0	3.4	139	22	75	.2	.03	.00	.09	.04	286

DATE	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (MG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 11...	140	49	20	10	--	--	--	--	--	--	--	--
AUG. 12...	210	70	10	10	1	<10	0	5	20	<.5	6.2	1.8

LITTLE MUSKINGUM RIVER BASIN

03115300 LITTLE MUSKINGUM RIVER NEAR RINARD MILLS, OHIO

LOCATION.--Lat 39°36'25", long 81°07'21", Monroe County, at bridge on County Road 68, 1.5 mi (2.4 km) upstream from Straight Fork, 2.3 mi (3.7 km) northeast of Rinard Mills.

DRAINAGE AREA.--130 mi² (336 km²).

PERIOD OF RECORD.--Discharge, 1972 to current year; chemical analyses, 1971 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	INSTANTANEOUS DISCHARGE (ft ³ /s)	(m ³ /s)
Oct. 9	17	0.481
July 15	12	.340

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
AUG. 07...	1100	2.1	21.0	6.7	401	7.1	5.4	43	9.9	21	2.4	140

DATE	CARBONATE (CO3) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
AUG. 07...	0	44	21	.1	.12	.02	.05	.03	216	150	30	200

LITTLE MUSKINGUM RIVER BASIN

03115400 LITTLE MUSKINGUM RIVER AT BLOOMFIELD, OHIO

LOCATION.--Lat 39°33'47", long 81°12'14", in sec. 22, T.3 N., R.6 W., Washington County, 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).

GAGE.--Water-stage recorder. Datum of gage is 645.99 ft (196.898 m) above mean sea level.

REMARKS.--Discharge records good. Sediment data collected at this site 1969 to 1974.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--17 years, 250 ft³/s (7.080 m³/s), 16.17 in/yr (411 mm/yr).

EXTREMES.--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.

REVISIONS (WATER YEARS).--WSP 1705: 1959.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	35	645	1230	1030	315	408	598	249	24	4.2	3370
2	69	35	996	705	795	261	330	458	165	20	3.8	623
3	57	34	1150	518	565	225	683	330	140	20	3.2	315
4	48	35	840	795	430	189	560	992	140	183	3.0	195
5	45	57	583	588	480	159	384	563	145	112	4.6	125
6	43	110	453	425	1870	153	315	366	315	63	25	95
7	40	110	428	348	958	270	267	285	219	40	14	75
8	37	100	2940	294	543	595	228	225	140	29	8.6	59
9	35	96	2190	415	425	372	201	186	104	29	5.7	48
10	33	86	723	405	291	300	180	150	83	56	4.6	42
11	31	80	478	372	240	258	156	125	82	108	96	38
12	29	161	408	309	260	1070	138	112	186	65	69	465
13	28	338	395	282	553	1580	123	106	140	37	31	638
14	26	296	357	237	363	1210	110	104	115	30	575	252
15	25	257	330	207	330	1530	104	91	130	24	838	143
16	88	212	700	200	336	650	98	119	148	19	2390	102
17	176	179	593	180	458	453	93	117	123	15	758	83
18	105	152	408	204	425	351	87	198	138	13	288	219
19	75	131	333	543	375	713	102	216	140	19	145	1250
20	62	203	321	863	312	1150	108	135	448	31	91	473
21	51	344	297	470	264	595	87	100	210	22	68	315
22	44	356	318	378	234	458	79	83	119	18	48	219
23	41	359	297	318	2580	408	79	98	82	13	143	231
24	40	311	321	309	5860	1910	763	93	63	29	102	6130
25	38	439	675	1130	2690	1380	2150	79	51	85	59	4420
26	41	680	723	1920	788	563	2170	112	56	31	42	608
27	41	446	463	658	488	384	633	145	54	16	30	387
28	38	344	398	475	381	318	413	93	63	11	24	279
29	35	272	327	458	---	465	410	74	42	7.8	19	210
30	34	227	285	585	---	748	345	273	30	6.6	18	162
31	35	---	279	738	---	550	---	568	---	5.1	3180	---
TOTAL	1576	6485	19654	16559	24364	19583	11804	7194	4120	1181.5	9090.7	21571
MEAN	50.8	216	634	534	870	632	393	232	137	38.1	293	719
MAX	176	680	2940	1920	5860	1910	2170	992	448	183	3180	6130
MIN	25	34	279	180	234	153	79	74	30	5.1	3.0	38
CFSM	.24	1.03	3.02	2.54	4.14	3.01	1.87	1.10	.65	.18	1.40	3.42
IN.	.28	1.15	3.48	2.93	4.32	3.47	2.09	1.27	.73	.21	1.61	3.82

CAL YR 1974 TOTAL 131035.9 MEAN 359 MAX 5440 MIN 3.1 CFSM 1.71 IN 23.21
WTR YR 1975 TOTAL 143182.2 MEAN 392 MAX 6130 MIN 3.0 CFSM 1.87 IN 25.36

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-08	2200	17.93	3,960	04-26	0400	16.33	3,230	09-01	0100	20.20	5,400
02-24	1300	21.13	6,100	08-16	0600	17.06	3,530	09-24	2100	*24.85	*9,640
03-24	1700	15.73	3,020								

Minimum discharge: 3.0 ft³/s (0.085 m³/s) Aug. 3-5.

LITTLE MUSKINGUM RIVER BASIN

91

03115400 LITTLE MUSKINGUM RIVER AT BLOOMFIELD, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1964 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 11...	1630	282	2.5	13.4	98	250	7.2	5.0	32	8.0	9.2	1.2
AUG. 07...	0930	14	21.5	4.7	53	385	7.4	5.3	44	9.4	14	2.5

DATE	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 11...	89	0	9.0	73	13	37	.1	.02	.01	.34	.05	149
AUG. 07...	143	0	9.1	117	26	25	.2	.14	.02	.11	.04	197

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 11...	110	40	30	30	--	--	--	--	--	--	--	--
AUG. 07...	150	31	30	90	0	<10	10	0	10	<.5	3.8	.0

DUCK CREEK BASIN

03115600 BARNES RUN NEAR SUMMERFIELD, OHIO

LOCATION.--Lat 39°46'20", long 81°22'26", Noble County, at bridge on county road adjacent to State Highway 78, 2.5 mi (4.0 km) southwest of Summerfield.

DRAINAGE AREA.--3.46 mi² (8.96 km²).

PERIOD OF RECORD.--Discharge, 1947 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Sept. 24	12.06	3.676	612	17.3

03115650 EAST FORK DUCK CREEK AT LOWER SALEM, OHIO

LOCATION.--Lat 39°34'26", long 81°23'25", Washington County, at bridge on Township Road 319, 0.9 mi (1.4 km) northeast of Lower Salem, 1.0 mi (1.6 km) upstream from Pawpaw Creek.

DRAINAGE AREA.--111 mi² (287 km²).

PERIOD OF RECORD.--Discharge, 1959, 1972 to current year; chemical analyses, 1971 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	INSTANTANEOUS DISCHARGE	
	(ft ³ /s)	(m ³ /s)
Oct. 8	29	0.82
May 29	52	1.47
July 15	30	.85

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICHO- MHOS)	PH (UNITS)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	HYDRO- GEN SULFIDE (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	HARD- NESS (CA+MG) (MG/L)
MAY 29...	1330	52	7.7	20.0	780	7.2	89	7.0	270	.0	9.0	490

DATE	TUR- BID- ITY (JTU)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHLO- RIDE (CL) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL MERCURY (HG) (UG/L)
MAY 29...	15	0	2.3	0	20	10	900	3200	40	1000	<.5

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)
AUG. 07...	1245	16	20.0	7.9	880	6.7	9.9	120	38	7.5	2.8	21

DATE	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
AUG. 07...	0	4.5	450	.3	.06	.03	.25	.09	649	460	30	5200

DUCK CREEK BASIN

93

03115700 WEST FORK DUCK CREEK AT DEXTER CITY, OHIO

LOCATION.--Lat 40°39'45", long 81°28'25", Noble County, at bridge on State Highway 821 at Dexter City, 0.7 mi (1.1 km) upstream from Buffalo Run.

DRAINAGE AREA.--75.4 mi² (195.3 km²).

PERIOD OF RECORD.--Discharge, 1965 to 1969, 1972 to 1975 (discontinued); chemical analyses, 1966 to 1975 (discontinued).

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	INSTANTANEOUS DISCHARGE	
	(ft ³ /s)	(m ³ /s)
Oct. 8	14	0.40
Sept. 24	2/1,810	51.3

a/ Not base flow.

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	BICAR- BONATE (HCO ₃) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	HYDRO- GEN SULFIDE (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	HAR- NESS (CA+MG) (MG/L)
JUNE 13...	1000	E70	7.7	19.5	580	7.4	179	18	110	.0	11	320

DATE	TUR- BID- ITY (JTU)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CM) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL MERCURY (MG) (UG/L)
JUNE 13...	55	0	4.5	1	30	20	3200	430	40	2600	<.5

MUSKINGUM RIVER BASIN

03115890 TUSCARAWAS RIVER AT UNIONTOWN, OHIO

LOCATION.--Lat 40°59'18", long 81°24'04", Stark County, at culvert on Pontius Street, 0.9 mi (1.4 km) north of Uniontown.

DRAINAGE AREA.--8.26 mi (21.39 km²).

PERIOD OF RECORD.--Discharge, 1974 to current year; chemical analyses, 1974 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)
JULY 29...	1300	4.2	19.0	8.4	750	7.7	11	110	23	20	2.6	285

DATE	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (MG/L)	DIS- SOLVED MAN- GANESE (MN) (MG/L)
JULY 29...	0	35	120	.1	.01	.04	.56	.08	462	370	30	130

MUSKINGUM RIVER BASIN

03115900 TUSCARAWAS RIVER NEAR EAST LIBERTY, OHIO

LOCATION.--Lat 41°00'25", long 81°29'31", Summit County, at bridge on Arlington Road, 2.3 mi (3.7 km) north of East Liberty.

DRAINAGE AREA.--33.1 mi² (85.7 km²).

PERIOD OF RECORD.--Discharge, 1960 to 1967, 1969 to current year; chemical analyses, 1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)
JULY 28...	1500	19	22.5	8.4	575	7.9	8.2	77	17	19	2.9	212
DATE		CAR- BONATE (CO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
JULY 28...	0	29	80	.2	.05	.04	.71	.05	338	260	20	80

03115920 TUSCARAWAS RIVER AT BARBERTON, OHIO

LOCATION.--Lat 41°01'40", long 81°35'15", Summit County, at bridge on East State Street in Barberton.

DRAINAGE AREA.--72.5 mi² (187.8 km²).

PERIOD OF RECORD.--Discharge, 1947, 1951, 1974 to current year; chemical analyses, 1974 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	TIME	INSTANTANEOUS DISCHARGE
		(ft ³ /s) (m ³ /s)
July 30	0900	<u>a</u> /32 0.91

a/ Discharge includes both Tuscarawas River and Ohio Canal.

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)
JULY 30...	0900	b/4.0	20.5	5.8	970	7.4	11	110	23	66	3.0	245
DATE	TIME	CAR-BONATE (CO3) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	HARD-NESS (CA+MG) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)
JULY 30...	0	110	130	.1	.07	.03	.13	.03	574	370	40	260

b/ Discharge does not include Ohio Canal discharge.

MUSKINGUM RIVER BASIN

95

03115990 WOLF CREEK NEAR BARBERTON, OHIO

LOCATION.--Lat 41°02'56", long 81°36'00", Summit County, at bridge on Summit Road, 200 ft (61 m) downstream from mouth of Pigeon Creek, 2.5 mi (4.0 km) north of Barberton.

DRAINAGE AREA.--53.9 mi² (139.6 km²).

PERIOD OF RECORD.--Discharge, 1950, 1960 to 1961, 1974 to current year; chemical analyses, 1974 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	
JULY 30...	1200	6.2	20.5	6.2	620	7.3	5.7	76	14	31	2.7	200	
DATE		CAR- BONATE (CO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
JULY 30...	0	40	90	.2	.05	.02	.18	.04	358	250	70	170	

MUSKINGUM RIVER BASIN

03116000 TUSCARAWAS RIVER AT CLINTON, OHIO

LOCATION.--Lat 40°55'40", long 81°37'58", in NW 1/4 sec. 32, T.2 N., R.10 W., Summit County, on right bank 100 ft (30 m) downstream from highway bridge at Clinton, and 1 mi (2 km) upstream from Chippewa Creek.

DRAINAGE AREA.--174 mi² (451 km²).

GAGE.--Water-stage recorder. Datum of gage is 933.28 ft (284.464 m) above mean sea level, adjustment of 1912. Prior to Nov. 18, 1928, nonrecording gage at site 100 ft (30 m) upstream at datum 4.00 ft (1.219 m) higher. Nov. 18, 1928, to July 24, 1930, nonrecording gage at same site at present datum.

REMARKS.--Discharge records fair. Some water diverted through the Portage Lakes into the Ohio Canal at Long Lake 12 mi (19 km) upstream and 3 mi (5 km) south of Akron. Part of the diverted water flows through the Ohio Canal into the Cuyahoga River basin. Flow affected by industrial plants upstream from station and supplemented at times by diversion from Minisila Reservoir, capacity, 6,500 acre-ft (8.01 km³), since 1939.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--46 years, (1929-75), 144 ft³/s (4.078 m³/s).

EXTREMES.--Period of record: Maximum discharge, 2,700 ft³/s (76.5 m³/s) Aug. 8, 1935; maximum gage height, 17.00 ft (5.182 m) July 7, 1969 (backwater from Chippewa Creek); minimum daily discharge, 10 ft³/s (0.28 m³/s) Nov. 6, 1928.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	68	173	650	800	857	249	170	1000	85	68	280
2	82	81	219	550	730	614	196	147	1100	82	66	300
3	99	68	318	500	460	412	235	130	885	83	71	262
4	98	108	300	479	266	323	267	146	538	90	84	90
5	92	230	286	345	243	275	227	165	468	80	75	89
6	90	180	239	283	431	298	193	305	590	78	75	200
7	92	127	221	292	348	655	179	366	386	78	74	237
8	93	89	553	797	257	800	155	205	259	79	71	142
9	93	84	650	1490	235	800	155	155	213	76	69	89
10	100	81	600	1510	181	700	144	133	185	77	68	78
11	112	89	508	1290	186	629	149	105	151	79	68	77
12	111	190	395	1090	186	618	145	105	227	78	69	121
13	96	203	500	832	205	700	129	117	154	76	73	133
14	74	182	540	508	179	650	126	104	141	84	82	141
15	86	119	540	284	171	600	127	95	150	75	72	77
16	82	102	560	233	221	562	130	93	196	75	80	74
17	102	87	580	194	630	534	132	92	139	73	69	75
18	99	83	500	185	900	829	122	92	119	74	67	168
19	89	81	476	244	850	950	154	93	110	75	67	441
20	74	149	352	203	700	1100	138	99	108	91	65	309
21	74	279	253	146	500	900	118	147	101	84	65	294
22	72	290	191	153	402	790	115	450	102	73	82	175
23	70	225	201	128	760	529	111	520	289	72	74	117
24	71	191	909	132	1500	423	174	310	119	76	70	233
25	71	400	1100	318	1800	380	168	176	108	84	96	255
26	75	310	1000	450	1700	254	134	355	109	71	98	189
27	70	270	900	550	1460	212	118	228	146	67	114	119
28	68	250	866	492	1100	163	120	142	119	69	78	107
29	66	198	618	975	---	320	148	131	96	68	77	106
30	71	175	519	1100	---	385	130	165	89	69	95	121
31	75	---	589	1000	---	286	---	291	---	69	149	---
TOTAL	2615	4989	15656	17403	17401	17548	4688	5832	8397	2390	2431	5099
MEAN	84.4	166	505	561	621	566	156	188	280	77.1	78.4	170
MAX	112	400	1100	1510	1800	1100	267	520	1100	91	149	441
MIN	66	68	173	128	171	163	111	92	89	67	65	74
CAL YR 1974	TOTAL	92605	MEAN	254	MAX	1400	MIN	66				
WTR YR 1975	TOTAL	104449	MEAN	286	MAX	1800	MIN	65				

EXTREMES.--Current year: Maximum daily discharge, 1,800 ft³/s (51.0 m³/s) Feb. 25; maximum gage height, 13.99 ft (4.264 m) Feb. 25 (backwater from Chippewa Creek); minimum daily discharge, 65 ft³/s (1.84 m³/s) Aug. 20, 21.

MUSKINGUM RIVER BASIN

97

03116000 TUSCARAWAS RIVER AT CLINTON, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE	TEMPER- ATURE	DIS- SOLVED OXYGEN	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE	PH	DIS- SOLVED SILICA	DIS- SOLVED CAL- CIUM	DIS- SOLVED MAG- NE- SIUM	DIS- SOLVED SODIUM	DIS- SOLVED PO- TAS- SIUM	
		(CFS)	(DEG C)	(MG/L)		(MICRO- MHOS)		(UNITS)	(SIO2)	(CA)			(MG)
MAR. 25...	0910	523	8.5	8.8	75	2540	8.2	7.2	230	11	270	4.4	
JULY 29...	0900	72	22.0	5.9	67	9260	8.0	8.0	970	18	980	15	
DATE		BICAR- BONATE (HCO3)	CAR- BONATE (CO3)	CARBON DIOXIDE (CO2)	ALKA- LINITY AS CACO3	DIS- SOLVED CHLO- RIDE (CL)	DIS- SOLVED SULFATE (SO4)	DIS- SOLVED FLUO- RIDE (F)	AMMONIA NITRO- GEN (N)	TOTAL NITRITE (N)	TOTAL NITRATE (N)	TOTAL PHOS- PHORUS (P)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS)
		(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
MAR. 25...	144	0	1.5	118	700	82	.1	.43	.03	.74	.14	1380	
JULY 29...	144	0	2.3	118	3100	75	.1	1.9	.10	.11	.10	5240	
DATE		HARD- NESS (CA+MG)	NON- CAR- BONATE HARD- NESS	DIS- SOLVED IRON (FE)	DIS- SOLVED MAN- GANESE (MN)	TOTAL ARSENIC (AS)	TOTAL CHRO- MIUM (CR)	TOTAL COPPER (CU)	TOTAL LEAD (PB)	TOTAL ZINC (ZN)	TOTAL MERCURY (HG)	TOTAL ORGANIC CARBON (C)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY
		(MG/L)	(MG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(MG/L)	(MG/L)
MAR. 25...	620	500	40	130	--	--	--	--	--	--	--	--	--
JULY 29...	2500	2400	70	310	1	20	30	2	30	<.5	5.8	6.9	

03116080 CHIPPEWA CREEK AT STERLING, OHIO

LOCATION.--Lat 40°57'24", long 81°50'31", Wayne County, at bridge on County Road 60, 0.8 mi (1.3 km) south of Sterling.

DRAINAGE AREA.--64.4 mi² (166.8 km²).

PERIOD OF RECORD.--Discharge, 1974 to current year; chemical analyses, 1974 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	INSTANTANEOUS DISCHARGE
	(ft ³ /s) (m ³ /s)
Oct. 22	7.7 0.218

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	
JULY 31...	1130	1.7	24.0	4.8	930	7.7	2.4	98	22	72	6.9	311	
DATE		CAR- BONATE (CO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
JULY 31...	0	80	120	.2	.32	.11	.80	.32	555	340	20	300	

MUSKINGUM RIVER BASIN

03116200 CHIPPEWA CREEK AT EASTON, OHIO

LOCATION.--Lat 40°56'47", long 81°44'35", in SW 1/4 sec. 17, T.18 N., R.11 W., Wayne County, 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).

GAGE.--water-stage recorder. Datum of gage is 939.72 ft (286.427 m) (corrected) above mean sea level. Prior to June 10, 1960, nonrecording gage at same site and datum.

REMARKS.--Discharge records good. Sediment data collected at this site 1969 to 1974. Low flow slightly regulated by industry at Rittman 2.5 mi (4.0 km) upstream.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--15 years, 130 ft³/s (3.682 m³/s), 12.10 in/yr (307 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 12,500 ft³/s (354 m³/s) July 5, 1969, gage height, 16.02 ft (4.883 m); minimum daily, 3.2 ft³/s (0.091 m³/s) July 6, 1963.
Flood of Jan. 21, 1959 reached a stage of 14.17 ft (4.319 m), discharge, 10,100 ft³/s (286 m³/s), by contracted-opening measurement of peak flow.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	18	118	698	718	458	142	134	716	16	10	82
2	19	22	157	526	450	316	125	87	495	16	9.9	38
3	20	22	166	388	289	234	137	61	322	21	17	22
4	19	46	173	361	206	201	124	72	217	48	26	28
5	18	235	177	272	192	182	104	103	267	20	13	28
6	16	112	176	223	266	196	91	255	380	15	14	123
7	15	63	175	225	226	487	89	262	187	13	13	58
8	16	48	438	611	165	863	82	153	131	14	10	35
9	16	40	629	1130	143	748	75	115	102	13	9.5	28
10	15	34	450	1290	130	522	73	87	82	13	8.7	23
11	14	32	316	1060	120	382	69	69	76	16	9.5	19
12	29	198	284	785	121	483	64	59	123	13	7.1	33
13	30	178	442	500	105	654	60	53	79	12	13	39
14	26	127	436	326	111	475	56	44	60	15	37	26
15	39	106	475	215	97	351	52	40	54	13	32	18
16	37	79	494	173	157	323	50	36	118	11	56	17
17	30	64	560	145	543	362	47	34	67	11	20	25
18	26	55	444	145	878	712	47	32	50	11	15	91
19	26	51	320	182	870	789	63	32	45	16	14	138
20	26	184	236	151	629	833	52	34	58	18	13	100
21	22	336	187	130	406	579	43	43	36	14	12	90
22	21	341	161	115	288	401	39	86	33	13	17	60
23	22	243	166	106	680	282	40	141	35	12	13	55
24	22	206	807	113	2000	258	81	100	32	13	12	72
25	23	549	1110	296	2470	248	78	77	28	17	11	99
26	25	358	1210	737	1570	187	56	193	26	11	18	79
27	19	236	918	475	1010	159	43	114	26	9.9	46	60
28	16	183	595	313	686	150	47	70	44	9.5	14	48
29	15	152	422	792	---	249	74	56	23	11	20	39
30	18	128	452	1210	---	232	57	67	17	9.9	53	34
31	18	---	481	1070	---	163	---	101	---	9.5	67	---
TOTAL	675	4446	13175	14763	15516	12479	2160	2810	3929	454.8	630.7	1607
MEAN	21.8	148	425	476	554	403	72.0	90.6	131	14.7	20.3	53.6
MAX	39	549	1210	1290	2470	863	142	262	716	48	67	138
MIN	14	18	118	106	97	150	39	32	17	9.5	7.1	17
CFSM	.15	1.01	2.91	3.26	3.79	2.76	.49	.62	.90	.10	.14	.37
IN.	.17	1.13	3.36	3.76	3.95	3.18	.55	.72	1.00	.12	.16	.41

CAL YR 1974 TOTAL 75155.0 MEAN 206 MAX 1430 MIN 10 CFSM 1.41 IN 19.15
WTR YR 1975 TOTAL 72645.5 MEAN 199 MAX 2470 MIN 7.1 CFSM 1.36 IN 18.51

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	0400	11.24	1,260	01-30	1600	11.26	1,270
01-10	0900	11.37	1,320	02-24	2400	*13.10	*2,960

Minimum daily discharge: 7.1 ft³/s (0.20 m³/s) Aug. 12.

MUSKINGUM RIVER BASIN

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03116200 CHIPPEWA CREEK AT EASTON, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	
MAR. 25...	1015	304	8.0	8.7	73	685	7.3	5.1	50	13	62	3.9	
JULY 31...	0930	8.4	24.0	1.0	120	1310	7.3	12	86	25	140	15	
DATE		BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)
MAR. 25...	107	0	8.6	88	116	86	.1	.63	.04	1.4	.44		389
JULY 31...	300	0	24	246	150	180	.5	6.9	.18	.26	2.8		757
DATE		HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 25...	180	91	70	110	--	--	--	--	--	--	--	--	--
JULY 31...	320	72	110	560	10	10	10	8	30	<.5	13		8.5

03116410 NINISILA CREEK NEAR CANAL FULTON, OHIO

LOCATION.--Lat 40°54'57", long 81°33'43", Summit County, at bridge on State Highway 93, 2.5 mi (4.0 km) northeast of Canal Fulton, Stark County.

DRAINAGE AREA.--23.1 mi² (59.8 km²).

PERIOD OF RECORD.--Discharge, 1960 to 1961, 1974 to current year, chemical analyses, 1974 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	
JULY 29...	1100	7.3	18.0	8.1	475	7.6	8.7	63	16	13	1.7	224	
DATE		CAR- BONATE (CO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
JULY 29...	0	25	37	.2	.01	.01	.24	.03	275	220	30	120	

MUSKINGUM RIVER BASIN

03117000 TUSCARAWAS RIVER AT MASSILLON, OHIO

LOCATION.--Lat 40°46'13", long 81°31'27", in sec. 20 T.10 N., R.9 W., Stark County, 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.

DRAINAGE AREA.--518 mi² (1,342 km²).

GAGE.--Water-stage recorder. Datum of gage is 916.00 ft (279.197 m) above mean sea level, adjustment of 1912. Prior to Aug. 19, 1944, nonrecording gage at same site and datum.

REMARKS.--Discharge records good. Diversion from basin and regulation at Portage Lakes (including Nimisila Reservoir since 1939). See REMARKS for station 03116000.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--38 years, 424 ft³/s (12.01 m³/s).

EXTREMES.--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.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	159	136	434	1510	2030	1830	594	413	2290	183	108	658
2	161	170	470	1360	1510	1290	486	396	2550	174	96	651
3	221	151	643	1170	1030	894	579	306	1940	206	94	510
4	203	196	623	1030	667	720	626	321	1250	288	134	270
5	190	704	610	810	578	623	527	382	1070	211	134	206
6	179	628	551	688	906	625	438	588	1340	176	111	484
7	184	424	527	590	838	1040	418	804	922	172	111	504
8	185	320	1050	1740	619	1720	366	533	623	204	104	321
9	187	275	1540	3180	544	1730	352	402	495	167	98	218
10	189	255	1360	3120	439	1490	344	336	432	185	94	165
11	208	255	1070	2910	457	1200	326	275	366	216	111	172
12	208	602	820	2300	447	1270	334	258	594	174	108	438
13	206	651	1090	1750	450	1530	298	263	424	159	170	360
14	171	510	1180	1090	409	1480	268	258	334	176	235	303
15	210	410	1200	705	393	1310	273	226	328	161	238	206
16	199	335	1250	569	489	1140	270	221	424	150	273	172
17	202	296	1340	515	1430	1140	283	206	355	142	167	172
18	197	282	1240	500	2010	1670	263	204	290	146	123	458
19	188	271	1000	614	2010	2070	318	211	285	148	110	1110
20	148	323	786	575	1750	2390	318	218	273	190	104	841
21	142	660	621	443	1360	2120	263	263	238	167	110	754
22	142	681	495	435	909	1630	245	729	216	134	134	484
23	141	587	504	398	2180	1150	253	845	427	123	121	339
24	139	483	1840	393	4410	949	342	616	283	123	121	597
25	138	954	2490	575	4780	1020	407	413	233	174	142	664
26	140	1180	2600	1450	4790	766	308	588	231	136	179	501
27	131	831	2160	1370	3840	640	258	539	298	111	255	355
28	126	616	1720	1050	2750	526	253	350	280	108	176	288
29	121	510	1240	2260	---	818	328	285	231	106	170	265
30	125	447	1050	2550	---	914	334	360	195	110	240	260
31	139	---	1150	2430	---	674	---	513	---	106	548	---
TOTAL	5279	14143	34654	40080	44025	38369	10672	12322	19217	5026	4919	12726
MEAN	170	471	1118	1293	1572	1238	356	397	641	162	159	424
MAX	221	1180	2600	3180	4790	2390	626	845	2550	288	548	1110
MIN	121	136	434	393	393	526	245	204	195	106	94	165

CAL YR 1974 TOTAL 219321 MEAN 601 MAX 4050 MIN 101
WTR YR 1975 TOTAL 241432 MEAN 661 MAX 4790 MIN 94

EXTREMES.--Current year: Maximum discharge, 5,030 ft³/s (142 m³/s) Feb. 25, 26, gage height, 10.59 ft (3.228 m); minimum daily, 94 ft³/s (2.66 m³/s) Aug. 3, 10.

MUSKINGUM RIVER BASIN
 03117000 TUSCARAWAS RIVER AT MASSILLON, OHIO--Continued
 WATER QUALITY RECORDS
 CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	
MAR. 25...	1155	1040	9.5	8.9	77	1300	7.6	5.8	120	13	130	3.5	
JULY 30...	1330	111	27.0	16.0	200	5260	8.0	1.0	500	19	540	10	
DATE		BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- TUNTS) (MG/L)
MAR. 25...	130	0	5.2	107	320	81	.1	.40	.05	1.1	.31	738	
JULY 30...	100	0	1.6	82	1700	88	.1	.26	.33	.25	.05	2910	
DATE		HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 25...	350	250	50	110	--	--	--	--	--	--	--	--	--
JULY 30...	1300	1200	40	230	2	10	20	5	20	<.5	6.2	7.1	

MUSKINGUM RIVER BASIN

03117100 TUSCARAWAS RIVER AT NAVARRE, OHIO

LOCATION.--Lat 40°43'36", long 81°31'47", Stark County, 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).

GAGE.--Water-quality recorder.

REMARKS.--Interruptions in the daily water-quality records were due to malfunctions of the instrument. Records of discharge are given for Tuscarawas River at Massillon, Ohio, station 03117000, drainage area 518 mi² (1,342 km²).

WATER QUALITY RECORDS

CHEMICAL ANALYSES

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

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DISSOLVED SILICA (SIO2) (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	
APR. 10...	0930	339	7.5	8.0	67	2550	7.6	5.9	250	13	240	4.9	
JULY 30...	1430	111	24.5	8.7	100	4730	7.7	1.2	450	21	480	9.3	
DATE		BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
APR. 10...	186	0	7.5	153	670	97	.2	1.3	.06	.84	.34	1370	
JULY 30...	136	0	4.3	112	1400	94	.5	.90	.16	.56	.27	2520	
DATE		HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED IRON (FE) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
APR. 10...	680	530	60	240	--	--	--	--	--	--	--	--	--
JULY 30...	1200	1100	40	360	2	20	20	5	40	<.5	7.0	7.8	

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C)

EXTREMES.--Period of record: Maximum, 16,700 micromhos Jan. 27, 1970; minimum, 236 micromhos Jan. 17, 1974.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	4590	4080	5040	3990	3720	3390	1110	990	1020	750	1260	1080
2	5280	4230	4620	2970	3660	3120	1080	900	1230	1020	1410	1260
3	5850	4140	4770	3450	3660	2400	1290	1080	1500	1260	1470	1320
4	3990	3150	3570	2220	2850	2460	1380	1230	1800	1440	1620	1350
5	3840	3570	3630	1260	2940	2580	1530	1290	1890	1650	2740	1530
6	3870	3540	1920	1380	2850	2610	1680	1470	1950	1320	1770	1620
7	3930	3690	2490	1920	3000	2400	1860	1560	1590	1260	1800	1140
8	4200	3690	2820	2400	2400	1380	1740	600	1740	1470	1140	750
9	4050	3600	3840	2880	1410	1080	630	540	2010	1620	930	750
10	3810	3540	4350	3450	1350	1170	720	630	2160	1710	1140	930
11	4170	3720	4410	3840	1470	1320	900	660	2550	1890	1500	1170
12	3870	3210	3660	1660	1980	1410	1050	900	2460	1920	1560	1320
13	3630	3120	2040	1440	1680	1290	1350	1020	2550	2010	1290	990
14	3360	3030	2700	1950	1320	1140	1590	1200	2460	1980	1110	1020
15	4230	2550	2610	2070	1320	1200	1740	1590	2550	1830	1230	1050
16	4380	3480	3360	2550	1320	1260	1980	1590	2520	1920	1410	1230
17	5130	3090	3390	2790	1230	1050	2610	1980	1950	870	1530	1080
18	4590	3090	3660	2910	1320	1200	3000	2550	930	690	1170	750
19	4290	3030	3870	3150	1530	1290	3060	2040	840	750	900	720
20	3780	3210	4200	3150	1680	1500	2310	1800	1020	810	780	570
21	4980	3660	4710	1500	1830	1630	2400	1860	1230	930	900	750
22	5070	4350	2100	1680	2370	1740	2790	2160	1410	1110	1230	930
23	5880	3900	2100	1800	2430	1770	2370	2070	1410	480	1320	1140
24	5520	3750	2730	1980	1740	720	2700	2130	510	390	1470	1320
25	5130	4170	2760	1380	720	660	2400	1650	570	510	1410	1260
26	4950	4410	1650	1290	750	660	1740	900	600	480	1650	1410
27	5250	4590	2190	1500	900	720	1110	960	810	480	1890	1620
28	4980	4110	2760	2130	1140	840	1380	1080	1110	840	2070	1680
29	4950	4110	3270	2760	1290	1110	1440	720	---	---	2130	1320
30	5100	4080	3510	3120	1710	1170	750	660	---	---	1560	1290
31	5940	4470	---	---	1410	1050	780	690	---	---	1680	1440
MONTH	5940	2550	5040	1260	3720	660	3060	540	2550	390	2130	570
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1920	1650	2370	1560	1900	360	3990	3420	4230	3960	1860	930
2	2010	1800	1950	1560	720	540	4170	3480	4680	4050	1200	1080
3	2160	1890	2100	1710	1080	720	3930	3120	4560	3510	1380	1200
4	2250	1380	2610	2130	1440	1080	3660	2490	3990	3090	1740	1260
5	1890	1740	2310	1920	1680	1200	3390	2490	3840	2220	2520	1800
6	2100	1800	1890	1440	1260	840	3660	2820	3600	2550	2820	1380
7	2220	1980	1470	810	1620	1140	3990	3540	3930	3270	1440	1080
8	2310	1800	1410	1110	1920	1650	4380	3270	3570	2760	1740	1470
9	---	---	1710	1410	2250	1950	4110	3120	3810	3120	2220	1800
10	2640	1800	1980	1590	2670	2280	4380	3420	4260	3780	2580	1890
11	2370	2220	2160	2010	2910	2250	3630	3000	4410	3390	2850	2400
12	2520	2160	2640	2040	2670	1530	3840	3360	4230	3780	1920	990
13	3360	2160	2700	2580	1980	1500	4050	3780	4290	1320	2040	1650
14	3420	2430	2760	2190	2520	2040	4380	4050	2970	1560	2190	1650
15	2730	2490	2910	2070	2970	2310	4890	4440	3180	630	1860	1590
16	2640	2490	3300	2580	3060	1920	4680	3540	2520	990	2640	1680
17	2730	2520	3300	2970	2130	1770	4620	3750	2400	1740	3000	2520
18	4500	2340	3210	2910	2670	2130	4470	3900	2460	1950	3150	1290
19	2730	2400	3420	2970	2970	1980	4350	3870	3000	2280	2220	840
20	3030	2010	3600	2680	3060	2430	4740	4140	3300	2700	1320	990
21	2520	2070	3870	2910	3030	2850	4530	3150	3240	2940	1410	1200
22	2670	2490	3690	750	3600	2910	3780	3090	3180	2550	1890	1380
23	2670	2520	1680	1170	4560	990	3840	3150	3870	2970	2100	1860
24	2970	2250	1710	1260	2100	990	4380	3570	3120	2670	2130	1380
25	2730	1680	2130	1680	3360	2190	4890	3690	4290	2340	1800	1260
26	2160	1710	2910	1320	3570	3060	4200	2760	4380	1650	1830	1500
27	2370	2190	1860	1290	3750	2940	3990	2910	3390	1860	1950	1620
28	2700	2340	2520	1920	3090	1770	4140	3690	2400	2040	2640	2040
29	2790	2520	2910	2340	3120	2370	4350	3690	2790	2310	2820	2670
30	2370	1770	3150	2340	3420	2940	4650	3990	3120	2400	3030	2820
31	---	---	2340	1470	---	---	4290	3930	3030	750	---	---
MONTH	4500	1380	3870	750	4560	360	4890	2490	4680	630	3150	840
YEAR	5940	360										

MUSKINGUM RIVER BASIN

03117100 TUSCARAWAS RIVER AT NAVARRE, OHIO--Continued

PH (UNITS)

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

EXTREMES.--Period of record: Maximum, 10.7 Oct. 27, 1971; minimum, 3.9 Oct. 26, 1969.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.2	7.1	7.4	7.3	8.1	7.9	7.8	7.7	7.6	7.5	7.4	7.3
2	7.2	6.7	7.4	7.2	8.2	7.8	7.8	7.5	7.7	7.6	7.5	7.3
3	7.3	7.1	7.5	7.2	8.4	8.0	8.1	7.6	7.7	7.5	7.3	7.2
4	7.3	7.0	7.4	7.1	8.2	7.7	8.1	7.7	7.8	7.5	7.5	7.1
5	7.5	7.2	7.5	7.2	8.0	7.7	8.1	7.7	7.8	7.4	7.6	7.5
6	7.6	7.1	7.5	7.4	8.1	7.6	8.0	7.8	7.7	7.5	7.8	7.6
7	7.5	7.1	7.5	7.3	8.2	7.2	8.3	7.8	7.6	7.3	7.8	7.5
8	7.3	7.1	7.5	7.3	8.2	7.8	8.2	7.7	7.8	7.4	8.0	7.4
9	7.3	7.1	7.6	7.2	8.3	7.6	7.7	7.5	7.9	7.7	7.5	7.3
10	7.3	7.0	7.7	7.5	7.7	7.4	7.7	7.6	7.9	7.2	7.5	7.3
11	7.4	7.3	7.6	7.3	7.5	7.2	7.8	7.6	7.6	6.7	7.6	6.9
12	7.4	6.7	7.8	7.5	7.7	7.3	7.8	7.7	7.5	6.9	7.2	7.0
13	7.5	7.1	7.6	7.4	7.8	7.5	7.8	7.6	7.6	7.1	7.5	7.2
14	7.5	7.3	7.8	7.5	7.6	7.1	7.7	7.6	7.4	7.1	7.6	7.2
15	7.3	7.1	7.8	7.5	7.9	7.3	7.9	7.7	7.8	7.2	7.9	7.2
16	7.4	7.3	7.7	7.5	7.8	7.6	7.8	7.4	7.7	7.5	7.7	7.5
17	7.4	6.9	7.8	7.2	8.7	7.6	7.8	7.7	7.9	7.2	7.6	7.4
18	7.4	7.3	7.8	7.4	9.2	7.8	7.9	7.5	7.9	6.9	7.8	7.3
19	7.5	7.3	7.7	7.3	7.9	7.8	8.0	7.9	7.0	6.8	7.5	7.1
20	7.5	7.3	7.8	7.6	8.1	7.7	8.0	7.7	7.1	6.7	7.5	7.2
21	7.4	7.3	7.8	7.4	8.1	7.8	7.9	7.5	7.2	6.9	7.5	7.1
22	7.5	7.2	7.6	7.5	8.1	7.9	7.9	7.6	7.5	7.2	7.4	7.0
23	7.5	7.4	7.8	7.5	8.1	7.7	7.8	7.6	7.6	7.3	7.6	7.1
24	7.6	7.3	9.6	7.8	7.9	7.6	7.9	7.2	7.5	7.3	7.8	7.6
25	7.5	7.3	7.9	7.7	7.8	7.7	8.0	7.3	7.5	7.2	7.7	7.4
26	7.5	7.3	7.7	7.5	7.8	7.7	8.1	7.6	7.3	7.2	7.7	7.4
27	7.6	7.4	7.7	7.4	7.7	7.3	7.6	7.5	7.4	7.2	7.7	7.3
28	7.5	7.2	7.8	7.6	7.6	7.5	7.7	7.5	7.4	7.3	7.8	7.2
29	7.4	7.3	7.8	7.6	7.8	7.6	8.0	7.5	---	---	8.1	7.2
30	7.4	7.2	8.1	7.8	8.0	7.7	7.6	7.2	---	---	7.7	7.4
31	7.3	7.2	---	---	8.1	7.3	7.6	7.4	---	---	7.6	7.2
MONTH	7.6	6.7	9.6	7.1	9.2	7.1	8.3	7.2	7.9	6.7	8.1	6.9
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	7.2	7.4	7.1	7.5	7.2	7.6	7.4	7.6	6.8	7.4	7.1
2	7.8	7.3	7.4	7.0	7.4	7.2	7.6	7.3	7.7	6.8	7.5	7.3
3	7.7	7.5	7.4	7.1	7.4	7.2	7.5	7.2	7.3	7.0	7.4	7.3
4	7.8	7.4	7.4	7.2	7.4	7.2	7.3	7.2	7.4	7.3	7.4	7.2
5	7.9	7.7	7.5	7.1	7.5	7.4	7.4	7.2	7.5	7.1	7.4	7.2
6	8.1	7.8	7.4	7.1	7.5	7.2	7.4	7.2	7.4	7.1	7.5	7.2
7	8.0	7.5	7.5	6.9	7.5	7.4	7.4	7.2	7.4	7.2	7.4	7.3
8	7.8	7.6	7.7	7.4	7.7	7.4	7.4	7.3	7.5	7.0	7.5	7.3
9	---	---	7.6	7.4	7.7	7.5	7.4	7.3	7.8	7.3	7.4	7.3
10	7.8	7.1	7.6	7.4	7.7	7.4	7.5	7.3	7.4	7.3	7.4	7.2
11	7.8	7.3	7.7	7.4	7.6	7.3	7.4	7.2	7.5	7.4	7.7	7.3
12	7.9	7.5	7.5	7.4	7.5	7.4	7.4	7.3	7.6	7.3	7.4	7.1
13	8.1	7.6	7.5	7.4	7.5	7.2	7.5	7.3	7.4	7.2	7.4	7.3
14	8.0	7.5	7.6	7.4	7.6	7.4	7.4	7.2	7.4	7.0	7.5	7.2
15	7.7	7.3	7.6	7.4	7.7	7.5	7.4	7.2	7.4	7.1	7.4	7.3
16	7.9	7.4	7.6	7.4	7.6	7.5	7.4	7.3	7.3	7.0	7.3	7.2
17	8.0	7.5	7.7	7.4	7.5	7.4	7.5	7.2	7.3	7.2	7.3	7.2
18	7.9	7.4	7.6	7.5	7.5	7.2	7.4	7.2	7.4	7.2	7.3	7.1
19	7.8	7.4	7.5	7.4	7.5	7.4	7.5	7.2	7.4	7.2	7.3	7.2
20	7.7	7.5	7.5	7.4	7.6	7.1	7.4	7.3	7.4	7.3	7.4	7.2
21	7.7	7.3	7.5	7.2	7.6	7.4	9.0	7.3	7.4	7.3	7.4	7.3
22	7.6	7.3	7.5	7.3	7.6	7.5	8.8	7.5	7.5	7.3	7.5	7.2
23	7.7	7.3	7.4	7.3	7.6	7.3	7.5	7.3	7.5	7.3	7.4	7.3
24	7.4	7.2	7.5	7.3	7.5	7.3	8.0	7.2	7.5	7.4	7.4	7.1
25	7.4	7.3	7.6	7.4	7.6	6.9	8.1	7.1	7.7	7.4	7.4	7.2
26	7.6	7.2	7.5	7.3	7.6	7.4	8.2	7.2	7.5	7.3	7.4	7.3
27	7.6	7.3	7.4	7.3	7.6	7.4	8.4	7.2	7.5	7.3	7.5	7.3
28	7.5	7.3	7.5	7.2	7.7	7.4	7.8	7.1	7.5	7.1	7.5	7.4
29	7.7	7.2	7.5	7.3	7.7	7.5	7.9	7.0	7.4	7.3	7.5	6.7
30	7.5	7.2	7.5	7.3	7.7	7.4	7.6	6.9	7.4	7.3	7.5	7.3
31	---	---	7.4	7.2	---	---	7.8	6.9	7.4	7.1	---	---
MONTH	8.1	7.1	7.7	6.9	7.7	6.9	9.0	6.9	7.8	6.8	7.7	6.7
YEAR	9.6	6.7										

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITRE

EXTREMES.--Period of record: Maximum, 13.5 mg/l July 27, 1975; minimum, 0.0 mg/l on many days during 1971 to 1973.

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	3.1	1.9	.7	.4	10.5	9.8	11.0	10.8	10.3	9.9	8.4	7.4
2	3.4	2.1	1.2	.5	11.1	10.5	11.2	10.9	10.1	10.0	7.6	6.8
3	6.1	2.7	.9	.6	11.0	10.7	11.0	10.7	10.4	10.1	6.7	5.9
4	5.2	3.3	3.2	.7	10.9	10.6	10.8	10.7	10.4	9.9	10.6	6.3
5	5.1	3.2	4.9	2.9	10.8	10.5	11.3	10.6	10.2	9.8	10.6	9.7
6	4.4	3.2	6.4	5.2	10.9	10.7	10.9	10.5	10.2	9.9	9.9	9.5
7	3.5	2.0	6.6	5.1	10.8	9.8	10.7	10.4	10.5	10.1	10.4	9.2
8	3.3	1.2	6.1	4.7	10.8	10.3	11.2	10.3	10.8	10.4	10.8	10.5
9	2.5	1.5	5.5	4.6	10.9	10.6	10.9	10.3	10.9	10.7	11.1	10.8
10	1.7	.9	5.8	4.6	10.9	10.6	10.4	10.2	10.9	10.5	11.0	10.5
11	1.9	.8	5.3	4.5	10.6	10.2	10.2	9.7	10.5	9.8	10.7	10.3
12	2.4	.9	6.0	5.6	10.3	9.9	10.5	9.8	10.0	9.5	10.4	10.2
13	2.7	1.1	6.7	5.9	10.4	10.0	10.9	10.4	10.3	9.5	10.5	10.2
14	2.2	1.1	7.3	6.5	10.5	10.3	11.1	10.9	10.2	10.0	11.0	10.4
15	2.3	1.2	8.5	7.1	10.6	10.4	11.0	10.1	10.3	9.9	11.4	11.0
16	1.9	1.0	8.9	8.3	10.6	10.1	10.8	10.1	10.3	9.6	11.3	10.9
17	2.7	1.0	8.9	8.1	10.2	10.0	10.6	10.4	10.9	10.2	11.0	10.6
18	2.1	.9	8.3	6.9	10.3	10.1	10.7	10.3	10.7	10.2	10.8	10.5
19	3.4	1.3	7.0	6.0	10.3	10.0	10.5	10.2	10.4	10.2	10.5	9.9
20	4.5	2.6	6.3	5.3	10.2	9.8	10.7	10.4	10.8	10.2	10.3	9.8
21	4.2	2.1	7.7	6.3	10.1	9.7	10.8	10.5	10.8	10.6	10.1	10.0
22	2.9	1.3	9.3	7.6	9.9	9.4	10.5	10.0	10.6	9.8	10.1	9.6
23	1.9	.6	9.5	8.9	10.0	9.4	10.1	9.6	10.3	9.6	10.1	9.6
24	1.2	.6	9.0	8.1	10.4	10.0	9.7	9.4	9.8	9.2	10.0	9.2
25	.7	.6	8.7	7.9	10.4	10.2	10.2	9.4	9.4	8.0	9.4	9.2
26	1.0	.7	9.9	8.4	10.6	10.3	10.8	10.2	9.5	8.5	10.3	9.3
27	1.8	.8	10.2	9.8	10.7	10.4	10.8	10.5	9.1	8.4	10.5	9.9
28	1.4	.8	10.0	9.7	10.4	10.0	10.5	10.0	8.9	8.3	10.6	6.7
29	1.1	.8	10.1	9.7	10.2	9.8	10.5	9.7	---	---	9.9	9.6
30	1.5	.6	10.0	9.7	10.1	9.9	10.3	9.7	---	---	9.9	9.3
31	1.2	.4	---	---	10.9	10.1	10.2	10.1	---	---	10.5	9.8
MONTH	6.1	.4	10.2	.4	11.1	9.4	11.3	9.4	10.9	8.0	11.4	5.9

[illegible]

MUSKINGUM RIVER BASIN

03117100 TUSCARAWAS RIVER AT NAVARRE, OHIO--Continued

TEMPERATURE (°C) OF WATER

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

EXTREMES.--Period of record: Maximum, 30.0°C June 27, 28, 1969, Aug. 25, 1975; minimum, freezing point on several days during winter periods.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	13.5	18.0	15.5	4.5	2.0	4.0	3.0	3.5	3.0	4.0	3.5
2	13.5	11.5	18.0	16.5	2.0	1.0	3.0	2.5	4.0	3.0	4.0	3.5
3	12.5	10.5	17.5	16.5	2.5	1.5	3.0	2.5	4.0	3.0	5.0	4.0
4	11.5	9.5	17.5	14.5	3.0	2.0	3.5	3.0	4.0	3.0	4.0	3.0
5	14.0	10.0	15.0	13.0	3.0	1.5	3.5	2.5	4.0	3.5	5.0	3.0
6	15.5	12.0	13.0	12.0	3.0	1.0	4.0	3.0	4.5	3.5	6.5	4.5
7	15.5	14.0	12.5	11.5	4.0	2.0	5.0	4.0	3.5	2.0	6.0	5.0
8	14.5	12.5	12.5	10.0	3.5	3.0	5.0	4.0	3.0	1.5	5.0	3.0
9	15.0	12.0	12.0	9.5	3.0	1.5	5.0	4.0	3.0	1.0	3.0	2.0
10	16.0	13.0	11.0	10.0	2.5	1.0	5.0	4.0	2.5	0.0	3.5	3.0
11	16.5	13.5	11.0	10.5	3.0	1.5	6.0	5.0	4.0	1.5	4.5	3.5
12	17.0	15.0	11.5	10.5	5.0	3.0	5.5	3.5	4.0	2.5	6.0	4.5
13	17.5	16.0	10.0	8.5	5.0	4.5	3.5	2.0	4.5	2.0	6.5	5.5
14	18.0	16.5	8.5	6.5	5.0	4.0	2.0	1.5	4.0	1.5	5.5	2.5
15	17.5	15.0	6.5	5.0	4.5	3.5	2.5	1.0	4.5	2.5	3.5	2.0
16	16.5	14.5	6.5	4.0	4.5	3.5	3.0	2.0	5.0	4.0	5.5	3.5
17	16.0	13.5	7.5	5.5	4.5	4.0	3.0	1.5	4.0	3.5	7.0	4.0
18	15.0	13.0	9.0	6.5	4.0	3.0	3.0	2.0	3.5	3.0	7.5	5.5
19	13.0	11.0	10.5	8.0	3.0	2.5	3.5	3.0	3.0	2.5	7.5	7.0
20	11.0	10.0	11.0	9.5	3.5	2.5	3.0	2.0	3.0	2.5	8.5	7.0
21	12.5	9.0	9.5	7.0	3.5	2.0	3.0	1.0	4.5	2.5	8.5	7.5
22	12.5	9.0	7.0	6.0	4.0	3.0	4.0	2.0	6.5	4.0	9.5	8.5
23	13.0	11.5	7.5	5.0	5.5	3.5	5.5	3.5	8.0	6.5	9.5	8.0
24	15.5	12.0	8.5	7.5	4.5	3.5	6.0	3.5	8.5	7.5	11.5	8.5
25	15.5	14.0	9.0	7.0	3.5	2.0	5.5	4.0	7.5	5.5	10.5	9.0
26	15.0	12.5	6.5	4.5	2.0	1.0	4.0	2.0	5.5	4.5	8.5	6.5
27	14.5	11.5	4.5	3.5	2.0	1.0	2.5	1.5	4.5	3.5	6.5	5.5
28	15.0	11.0	5.0	4.0	2.5	2.0	3.5	2.5	4.0	3.0	6.0	5.0
29	15.0	12.0	5.0	4.0	4.0	3.0	5.5	3.5	---	---	8.5	6.0
30	16.0	14.0	5.0	4.0	5.0	4.0	5.0	3.5	---	---	8.5	6.5
31	17.5	15.0	---	---	4.5	3.5	3.5	3.0	---	---	8.0	5.0
MONTH	18.0	9.0	18.0	3.5	5.5	1.0	6.0	1.0	8.5	0.0	11.5	2.0
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	6.5	21.0	17.5	21.0	19.5	28.0	23.5	29.5	24.0	20.5	20.0
2	12.5	8.5	21.0	17.0	19.5	18.5	28.0	24.0	28.5	24.5	22.5	20.0
3	11.0	8.0	19.5	17.0	19.0	18.0	27.0	24.0	27.5	24.5	23.0	20.5
4	8.0	5.5	18.0	15.5	19.0	18.0	26.0	23.5	27.0	24.0	24.0	20.5
5	5.5	4.5	18.0	14.5	20.5	19.0	26.5	22.5	26.5	24.5	22.0	20.5
6	7.0	4.0	17.5	15.5	21.0	19.5	27.0	23.0	25.0	22.5	22.0	20.0
7	9.0	5.0	17.0	14.5	19.5	18.0	27.5	23.5	25.0	20.5	22.0	19.0
8	10.5	6.0	18.0	14.5	17.5	16.5	26.5	24.0	25.0	19.5	22.0	19.0
9	---	---	20.5	16.0	19.5	15.5	27.0	23.5	26.0	20.0	21.5	18.5
10	11.5	8.0	21.5	16.5	22.5	17.5	25.5	22.5	25.0	22.0	20.5	17.0
11	12.0	8.0	21.0	16.5	20.5	20.0	23.5	21.0	25.5	21.5	19.5	18.0
12	12.0	8.5	20.0	17.0	22.0	19.5	24.5	20.0	27.0	22.0	19.5	17.5
13	12.5	8.5	19.0	16.5	23.5	20.0	23.5	21.0	---	---	17.5	15.5
14	11.5	8.5	20.5	15.5	24.0	20.5	25.0	20.5	---	---	17.5	14.0
15	10.5	9.0	18.5	17.0	24.5	21.0	25.5	21.0	---	---	17.5	14.5
16	11.5	8.5	17.5	16.5	24.0	21.0	25.5	21.5	---	---	16.5	16.0
17	14.5	9.0	17.0	15.0	25.0	21.0	26.0	22.0	---	---	18.5	16.0
18	15.0	12.5	19.0	16.0	26.5	22.0	25.5	21.5	---	---	18.0	17.0
19	15.0	13.0	22.5	17.0	26.5	24.0	26.5	22.0	---	---	18.0	17.0
20	13.0	11.0	23.0	19.5	27.5	24.0	25.5	23.5	---	---	18.5	17.5
21	14.0	9.5	24.5	21.0	27.5	24.0	26.5	22.5	---	---	18.0	17.0
22	15.0	10.5	23.0	21.0	27.5	24.5	27.5	22.5	---	---	17.0	15.5
23	14.0	12.0	22.5	20.0	29.0	25.0	28.0	23.5	---	---	16.5	15.0
24	15.0	13.5	24.0	21.5	28.0	24.5	27.0	24.0	---	---	15.5	14.0
25	14.5	13.0	26.0	22.0	27.5	25.5	27.0	24.0	20.0	23.5	15.0	14.5
26	16.0	11.5	25.5	22.0	26.5	25.0	26.5	22.0	25.0	23.0	15.5	15.0
27	14.5	12.0	24.0	22.0	26.5	23.5	27.0	22.5	26.0	22.0	15.5	14.5
28	13.5	12.5	25.0	21.0	26.5	23.0	27.5	22.0	25.0	21.5	16.5	13.0
29	17.5	12.0	22.5	20.5	27.5	23.5	27.5	22.0	24.0	22.0	16.5	13.5
30	19.5	15.0	23.0	21.0	28.0	24.0	28.0	22.5	22.5	21.5	17.5	14.5
31	---	---	23.0	21.0	---	---	28.5	23.0	21.5	20.5	---	---
MONTH	19.5	4.0	26.0	14.5	29.0	15.5	28.5	20.0	---	---	24.0	13.0
YEAR	29.5	0.0										

MUSKINGUM RIVER BASIN

107

03117150 SANDY CREEK AT MINERVA, OHIO

LOCATION.--Lat 40°43'53", long 81°05'57", Stark County, at bridge on U.S. Highway 30 in Minerva.

DRAINAGE AREA.--61.9 mi² (160.3 km²).

PERIOD OF RECORD.--Discharge, 1974 to current year; chemical analyses, 1974 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	INSTANTANEOUS DISCHARGE	
	(ft ³ /s)	(m ³ /s)
Oct. 23	14	0.40
May 21	34	.96

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	
SEP. 10...	1030	32	14.0	9.8	370	7.8	10	45	11	12	3.0	118	
DATE	TIME	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
SEP. 10...	0	19	57	.2	.03	.03	.76	.06	216	160	70	140	

03117160 STILL FORK NEAR MINERVA, OHIO

LOCATION.--Lat 40°39'49", long 81°02'24", Carroll County, at bridge on State Highway 9, 1.4 mi (2.3 km) downstream from Pipes Fork, 5.5 mi (8.8 km) southeast of Minerva, Stark County.

DRAINAGE AREA.--36.2 mi² (93.8 km²).

PERIOD OF RECORD.--Discharge, 1974 to current year; chemical analyses, 1974 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	INSTANTANEOUS DISCHARGE	
	(ft ³ /s)	(m ³ /s)
Oct. 23	5.2	0.147
May 21	7.8	.221

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	
SEP. 10...	1200	32	16.5	7.9	200	6.9	11	18	6.5	6.2	2.5	44	
DATE	TIME	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
SEP. 10...	0	7.7	34	.1	.02	.44	.43	.10	108	72	400	80	

MUSKINGUM RIVER BASIN

03117500 SANDY CREEK AT WAYNESBURG, OHIO

LOCATION.--Lat 40°40'21", long 81°15'36", in sec. 21, T.17 N., R.7 W., Stark County, 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).

GAGE.--Water-stage recorder. Datum of gage is 955.00 ft (291.084 m) above mean sea level, adjustment of 1912.

REMARKS.--Discharge records good. Sediment data collected at this site 1969 to 1974.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--37 years, 261 ft³/s (7.392 m³/s), 14.01 in/yr (356 mm/yr).

EXTREMES.--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.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	71	239	1140	1030	783	385	465	1220	88	80	500
2	91	86	247	943	737	653	352	684	1030	88	85	400
3	89	112	384	790	545	563	485	415	823	94	87	300
4	86	143	416	754	444	509	535	358	627	95	93	240
5	82	739	395	633	416	471	424	348	517	88	89	220
6	76	586	388	517	633	466	377	433	663	84	85	500
7	71	458	398	500	593	536	351	427	528	82	85	650
8	71	337	862	943	430	795	321	312	396	82	80	350
9	70	251	1330	1990	360	570	290	263	322	132	80	250
10	69	212	1200	1590	300	484	268	226	263	107	75	220
11	67	186	903	1280	300	453	245	199	259	100	75	183
12	65	423	689	952	300	663	223	205	535	91	80	310
13	63	528	750	709	280	897	206	362	432	87	102	346
14	64	405	733	531	250	772	188	253	300	96	230	239
15	106	313	733	419	247	692	182	202	241	89	163	183
16	169	250	750	380	322	664	181	188	241	82	233	165
17	157	219	835	355	772	764	169	172	198	80	151	160
18	131	196	745	352	1170	1140	164	165	166	80	121	358
19	116	180	629	444	1010	1530	194	158	154	80	102	1170
20	109	193	524	395	831	1910	191	145	149	93	98	1190
21	106	228	426	325	633	1390	162	139	134	199	102	1110
22	102	259	388	307	510	1020	148	251	120	146	105	750
23	98	217	391	289	1230	782	145	206	112	107	100	514
24	98	193	1450	292	3540	710	190	214	104	89	100	970
25	98	444	1870	454	4220	746	233	163	106	151	107	1160
26	91	557	1490	844	2610	585	260	249	103	144	114	988
27	75	409	1040	645	1450	485	196	236	109	112	128	754
28	72	355	790	517	996	434	174	166	101	93	105	535
29	91	304	637	1490	---	525	219	151	95	87	100	364
30	92	253	649	1960	---	546	202	399	90	85	118	301
31	83	---	673	1530	---	440	---	363	---	80	250	---
TOTAL	2860	9107	22954	24270	26159	22978	7660	8517	10138	3111	3523	15380
MEAN	92.3	304	740	783	934	741	255	275	338	100	114	513
MAX	169	739	1870	1990	4220	1910	535	684	1220	199	250	1190
MIN	63	71	239	289	247	434	145	139	90	80	75	160
CFSM	.36	1.20	2.92	3.09	3.69	2.93	1.01	1.09	1.34	.40	.45	2.03
IN.	.42	1.34	3.38	3.57	3.85	3.38	1.13	1.25	1.49	.46	.52	2.26

CAL YR 1974 TOTAL 140717 MEAN 386 MAX 2840 MIN 47 CFSM 1.53 IN 20.69
WTR YR 1975 TOTAL 156657 MEAN 429 MAX 4220 MIN 63 CFSM 1.70 IN 23.03

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-25	1230	4.87	1,920	02-25	0330	*7.79	*4,580
01-09	1530	5.32	2,190	03-19	2400	5.32	2,190
01-30	0030	5.14	2,080				

Minimum discharge: 63 ft³/s (1.78 m³/s) Oct. 12-14.

MUSKINGUM RIVER BASIN
03117500 SANDY CREEK AT WAYNESBURG, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1964 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 25...	1605	734	8.5	9.8	84	273	7.4	6.2	32	9.1	7.7	2.0
SEP. 10...	1415	216	19.0	8.4	89	310	7.5	9.2	35	10	9.5	3.0

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 25...	62	0	3.9	51	14	63	.2	.04	.01	.96	.17	165
SEP. 10...	72	0	3.6	59	13	58	.1	.01	.01	.54	.09	174

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 25...	120	67	60	150	--	--	--	--	--	--	--	--
SEP. 10...	130	70	170	270	1	<10	10	10	50	<.5	5.3	1.2

MUSKINGUM RIVER BASIN

03118000 MIDDLE BRANCH NIMISHILLEN CREEK AT CANTON, OHIO

LOCATION.--Lat 40°50'29", long 81°21'14", in NE 1/4 sec. 27, T.11 N., R.8 W., Stark County, 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).

GAGE.--Water-stage recorder. Datum of gage is 1,046.60 ft (319.004 m) above mean sea level, adjustment of 1912.

REMARKS.--Discharge 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 1975, 11.7 ft³/s (0.33 m³/s). At times low flow regulated by small pools above station.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--34 years, 33.6 ft³/s (0.952 m³/s).

EXTREMES.--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.

REVISIONS (WATER YEARS).--WSP 1033: 1942 (H), 1943 (P), 1944 (H). WSP 1305: 1946 (H). WSP 1143: 1948. WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	13	29	196	105	90	63	53	173	21	12	131
2	13	15	35	137	83	80	59	63	106	21	12	78
3	15	13	54	94	70	72	88	46	63	21	13	45
4	14	25	53	94	62	68	82	44	50	19	28	29
5	13	110	66	77	64	66	66	49	69	18	23	24
6	12	57	62	68	93	69	59	66	241	17	15	57
7	11	35	69	76	79	114	57	67	112	17	13	46
8	11	26	170	228	63	199	53	46	54	19	12	27
9	12	22	256	592	59	97	48	39	39	21	12	22
10	12	19	155	335	59	78	47	35	35	18	11	18
11	10	17	100	185	55	72	45	34	36	22	11	19
12	10	63	86	123	53	114	43	31	93	19	12	178
13	10	66	145	90	50	174	44	29	75	16	14	142
14	11	43	130	74	48	106	41	27	43	16	20	57
15	22	33	130	62	47	77	42	24	35	15	14	35
16	27	27	126	57	68	80	41	24	36	15	14	28
17	17	24	158	54	196	96	40	22	30	15	13	26
18	14	22	118	54	289	215	39	22	25	15	12	105
19	13	21	86	66	178	298	46	21	24	15	13	269
20	12	29	69	60	114	312	42	22	39	16	12	153
21	11	46	57	52	83	139	39	23	28	22	12	123
22	11	63	50	48	77	103	38	26	24	19	17	65
23	11	41	60	47	272	87	38	23	170	14	13	46
24	11	31	323	50	724	97	51	21	101	14	14	115
25	11	89	409	82	432	98	51	20	48	71	16	129
26	11	97	230	157	185	75	43	31	37	28	20	68
27	11	51	108	82	131	63	39	25	31	17	28	49
28	11	41	81	69	104	61	39	21	28	14	17	39
29	11	35	74	304	---	109	44	21	24	13	17	35
30	12	31	109	375	---	105	41	41	22	13	51	31
31	13	---	128	149	---	71	---	43	---	12	65	---
TOTAL	396	1205	3726	4137	3843	3485	1468	1059	1891	593	556	2189
MEAN	12.8	40.2	120	133	137	112	48.9	34.2	63.0	19.1	17.9	73.0
MAX	27	110	409	592	724	312	88	67	241	71	65	269
MIN	10	13	29	47	47	61	38	20	22	12	11	18
CAL YR 1974 TOTAL	19127		MEAN 52.4	MAX 434	MIN 10							
WTR YR 1975 TOTAL	24548		MEAN 67.3	MAX 724	MIN 10							

EXTREMES.--Current year: Maximum discharge, 842 ft³/s (23.8 m³/s) Feb. 24, gage height, 5.97 ft (1.820 m); minimum daily, 10 ft³/s (0.28 m³/s) Oct. 11-13.

MUSKINGUM RIVER BASIN

111

03118000 MIDDLE BRANCH NIMISHILLEN CREEK AT CANTON, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 25...	1315	88	9.5	11.2	97	600	7.8	5.8	85	15	24	3.3
JULY 29...	1400	13	27.0	11.6	140	635	8.3	5.7	89	18	18	5.3

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 25...	180	0	4.6	148	52	110	.2	.13	.02	1.0	.13	384
JULY 29...	187	3	1.5	158	31	130	.2	.02	.05	.91	.08	392

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 25...	270	130	70	110	--	--	--	--	--	--	--	--
JULY 29...	300	140	20	50	2	10	0	2	10	<.5	7.4	3.1

MUSKINGUM RIVER BASIN

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03118100 EAST BRANCH NIMISHILLEN CREEK NEAR CANTON, OHIO

LOCATION.--Lat 40°49'24", long 81°17'55", Stark County, at bridge on Broadway Avenue, 1 mi (1.6 km) east of Canton city limits, 3.5 mi (5.6 km) upstream from Middle Branch Nimishillen Creek.

DRAINAGE AREA.--33.4 mi² (86.5 km²).

PERIOD OF RECORD.--Discharge, 1974 to current year; chemical analyses, 1974 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	INSTANTANEOUS DISCHARGE (ft ³ /s)	(m ³ /s)
Oct. 23	9.3	0.263
May 21	10	.28

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)
SEP. 10...	0930	7.7	14.5	8.0	1100	7.8	9.9	92	18	120	13	216

DATE	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA,MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
SEP. 10...	0	98	200	4.0	.49	.22	12	.47	662	300	20	180

03118300 WEST BRANCH NIMISHILLEN CREEK AT CANTON, OHIO

LOCATION.--Lat 40°47'48", long 81°23'26", Stark County, at bridge on Sixth Street, 1.3 mi (2.1 km) upstream from mouth at Canton.

DRAINAGE AREA.--43.9 mi² (113.7 km²).

PERIOD OF RECORD.--Discharge, 1974 to current year; chemical analyses, 1974 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)
SEP. 11...	1030	21	17.5	10.4	820	8.2	7.1	100	23	44	3.0	249

DATE	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA,MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
SEP. 11...	0	76	120	.7	.04	.05	.74	.09	497	340	10	140

MUSKINGUM RIVER BASIN

03118500 NIMISHILLEN CREEK AT NORTH INDUSTRY, OHIO

LOCATION.--Lat 40°44'03", long 81°21'08", in sec. 35, T.10 N., R.8 W., Stark County, 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).

GAGE.--Water-stage recorder. Datum of gage is 970.77 ft (295.891 m) above mean sea level, adjustment of 1912. Prior to Dec. 13, 1923, nonrecording gage at site 1 mi (2 km) upstream at different datum.

REMARKS.--Discharge records good. Low flow slightly regulated by plants at Canton. Records include diversion from Sugar Creek well field. Mean pumpage for the 1975 water year 16.7 ft³/s (0.47 m³/s). See REMARKS for station 03124500.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1921 to September 1975 (discontinued).

AVERAGE DISCHARGE.--54 years, 174 ft³/s (4.928 m³/s).

EXTREMES.--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.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	97	179	761	386	389	298	336	1200	121	102	568
2	119	191	239	446	319	350	277	247	409	117	95	284
3	112	108	333	397	280	333	389	202	336	158	196	196
4	110	416	326	385	259	315	336	211	265	117	155	153
5	102	680	326	310	277	312	291	220	350	102	121	220
6	95	287	304	296	498	326	268	382	513	99	108	375
7	106	201	294	323	358	559	268	268	326	128	102	190
8	97	167	1050	1420	274	626	256	214	214	138	97	150
9	97	144	913	2010	256	357	244	190	193	138	91	135
10	97	129	507	939	241	322	238	175	175	153	91	124
11	97	143	372	601	247	305	229	160	277	140	155	114
12	91	529	409	412	244	525	220	172	375	110	104	848
13	86	318	545	350	226	608	214	169	265	102	453	377
14	112	230	511	298	220	413	217	160	190	121	301	205
15	268	190	476	258	220	389	226	158	190	112	371	167
16	160	160	534	250	406	401	226	155	202	108	274	167
17	126	147	561	235	893	517	217	148	166	110	124	149
18	110	145	426	277	893	830	214	145	155	133	112	860
19	102	141	356	298	556	1290	277	148	178	112	108	789
20	99	326	300	259	386	980	217	153	184	108	106	590
21	102	316	255	232	312	521	202	172	148	117	135	401
22	102	308	233	220	291	429	199	205	130	112	153	263
23	104	215	379	220	1620	364	214	169	253	104	104	217
24	104	213	1550	226	2850	437	322	145	235	128	97	750
25	102	578	1330	394	1300	401	253	133	163	226	112	444
26	95	415	658	538	690	333	205	226	153	130	166	287
27	89	267	388	308	529	301	181	160	150	102	163	229
28	93	223	324	274	445	291	211	145	143	106	117	196
29	95	192	303	1460	---	509	238	232	119	102	145	183
30	104	174	408	1160	---	417	214	329	124	102	226	172
31	97	---	557	529	---	322	---	333	---	102	361	---
TOTAL	3381	7650	15346	16086	15476	14472	7361	6262	7781	3758	5045	9803
MEAN	109	255	495	519	553	467	245	202	259	121	163	327
MAX	268	680	1550	2010	2850	1290	389	382	1200	226	453	860
MIN	86	97	179	220	220	291	181	133	119	99	91	114

CAL YR 1974 TOTAL 99949 MEAN 274 MAX 2040 MIN 86
WTR YR 1975 TOTAL 112421 MEAN 308 MAX 2850 MIN 86

EXTREMES.--Current year: Maximum discharge, 3,720 ft³/s (105 m³/s) Feb. 24, gage height, 7.24 ft (2.207 m); minimum daily, 86 ft³/s (2.44 m³/s) Oct. 13.

MUSKINGUM RIVER BASIN
03118500 MINISHILLEN CREEK AT NORTH INDUSTRY, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1964, 1966 to 1969, 1975 (discontinued).

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 25...	1450	390	9.5	9.8	85	832	7.6	8.1	95	18	45	3.9
SEP. 11...	0915	112	18.5	6.6	70	1100	7.7	10	120	26	78	7.3

DATE	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 25...	196	0	7.9	161	83	140	.4	2.6	.07	1.9	.72	491
SEP. 11...	274	0	8.7	225	110	210	.8	3.0	1.5	.70	.47	698

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 25...	310	150	50	600	--	--	--	--	--	--	--	--
SEP. 11...	410	180	20	660	1	20	10	12	150	<.5	8.1	8.2

MUSKINGUM RIVER BASIN

03119500 BOLIVAR RESERVOIR NEAR BOLIVAR, OHIO

LOCATION.--Lat 40°38'56", long 81°25'57", Tuscarawas County, 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) above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level.

EXTREMES.--Period of record: Maximum contents, 63,320 acre-ft (78.1 hm³) Jan. 26, 1959, elevation, 944.01 ft (287.734 m); minimum, 62 acre-ft (76,400 m³) Oct. 9, 1933, elevation, 896.30 ft (273.192 m).

REMARKS.--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.

COOPERATION.--Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	898.10	196	-
Oct. 31.....	897.57	151	-45
Nov. 30.....	899.50	356	+205
Dec. 31.....	908.38	2,890	+2,534
CAL YR 1974.....	-	-	+2,259
Jan. 31.....	922.45	14,730	+11,840
Feb. 28.....	936.72	41,860	+27,130
Mar. 31.....	901.30	635	-41,225
Apr. 30.....	899.75	388	-247
May 31.....	902.50	878	+490
June 30.....	897.90	178	-700
July 31.....	897.30	129	-49
Aug. 31.....	902.95	976	+847
Sept. 30.....	899.34	335	-641
WTR YR 1975.....	-	-	+139

EXTREMES.--Current year: Maximum contents, 42,330 acre-ft (52.2 hm³) Mar. 1, 2, elevation, 936.90 ft (285.567 m); minimum, 113 acre-ft (139,000 m³) Aug. 10, 11, elevation, 897.10 ft (273.436 m).

MUSKINGUM RIVER BASIN

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03119580 TUSCARAWAS RIVER AT ZOAR, OHIO

LOCATION.--Lat 40°36'28", long 81°25'36", Tuscarawas County, at bridge on County Road 82, 0.5 mi (0.8 km) southwest of Zoar, 3 mi (5 km) upstream from Conotton Creek.

DRAINAGE AREA.--1,102 mi² (2,854 km²).

PERIOD OF RECORD.--Discharge, 1974 to current year; chemical analyses, 1974 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	
SEP. 09...	1300	946	19.5	5.8	950	7.5	9.9	96	17	75	5.0	130	
DATE		CAR- BONATE (CO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
SEP. 09...	0	170	110	.2	.53	.01	1.3	.29	548	310	40	560	

03119600 JEFFERSON CREEK NEAR JEWETT, OHIO

LOCATION.--Lat 40°22'57", long 80°58'36", Harrison County, at culvert adjacent to State Highway 9, 1.4 mi (2.3 km) northeast of Jewett.

DRAINAGE AREA.--2.54 mi² (6.58 km²).

PERIOD OF RECORD.--Discharge, 1947 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 24	11.79	3.534	132	3.74

MUSKINGUM RIVER BASIN

03119700 CONOTTON CREEK AT JEWETT, OHIO

LOCATION.--Lat 40°21'59", long 81°00'13", Harrison County, at bridge on State Highway 9 in Jewett.

DRAINAGE AREA.--14.3 mi² (37.0 km²).

PERIOD OF RECORD.--Discharge, 1947 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 24	13.78	4.200	880	24.9

03119900 CONOTTON CREEK AT LEESVILLE, OHIO

LOCATION.--Lat 40°26'44", long 81°11'49", Carroll County, at bridge on State Highway 164, 0.9 mi (1.5 km) southeast of Leesville, 2.5 mi (4.0 km) upstream from McGuire Creek.

DRAINAGE AREA.--87.1 mi² (225.6 km²).

PERIOD OF RECORD.--Discharge, 1959, 1972 to current year; chemical analyses, 1971 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)
AUG. 12...	1700	10	24.0	9.0	780	7.6	7.5	68	22	59	4.4	146

DATE	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
AUG. 12...	0	85	150	.2	.12	.04	.64	.05	469	260	10	500

MUSKINGUM RIVER BASIN

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03120000 LEESVILLE LAKE NEAR LEESVILLE, OHIO

LOCATION.--Lat 40°28'15", long 81°11'40", in E 1/4 sec. 36, T.13 N., R.6 W., Carroll County, 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) above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level.

EXTREMES.--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.

REMARKS.--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.

COOPERATION.--Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	962.81	18,980	-
Oct. 31.....	962.70	18,870	-110
Nov. 30.....	960.50	16,770	-2,100
Dec. 31.....	958.72	15,170	-1,600
CAL YR 1974.....	-	-	+990
Jan. 31.....	960.70	16,950	+1,780
Feb. 28.....	965.27	21,520	+4,570
Mar. 31.....	964.38	20,570	-950
Apr. 30.....	963.06	19,230	-1,340
May 31.....	962.82	18,990	-240
June 30.....	962.69	18,860	-130
July 31.....	962.59	18,760	-100
Aug. 31.....	962.95	19,120	+360
Sept. 30.....	960.06	16,380	-2,740
WTR YR 1975.....	-	-	-2,600

EXTREMES.--Current year: Maximum contents, 21,550 acre-ft (26.6 hm³) Mar. 3, 4, elevation, 965.30 ft (294.223 m); minimum, 13,680 acre-ft (16.9 hm³) Jan. 23, elevation, 957.01 ft (291.697 m).

MUSKINGUM RIVER BASIN

03120500 MCGUIRE CREEK BELOW LEESVILLE DAM, NEAR LEESVILLE, OHIO

LOCATION.--Lat 40°28'13", long 81°11'48", in E 1/2 sec. 36, T.13 N., R.6 W., Carroll County, 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).

GAGE.--Water-stage recorder and V-notch weir. Datum of gage is 915.00 ft (278.892 m) above mean sea level. Prior to May 27, 1942, nonrecording gage at site 100 ft (30 m) upstream at present datum.

REMARKS.--Discharge records good. Flow regulated by Leesville Lake (see station 03120000).

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to current year. Published as McGuire Creek near Leesville 1938-39.

AVERAGE DISCHARGE.--37 years, 52.2 ft³/s (1.478 m³/s).

EXTREMES.--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.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	9.6	168	180	59	120	186	90	72	8.5	4.5	75
2	16	11	168	179	60	120	184	93	76	7.8	4.1	71
3	15	13	168	179	125	120	181	93	73	7.4	4.0	68
4	13	28	179	179	183	120	176	90	68	7.6	4.9	82
5	12	81	184	177	181	120	140	89	61	7.0	5.5	167
6	11	87	182	177	176	160	95	90	69	6.5	5.2	109
7	10	88	182	179	174	185	81	90	72	5.9	4.6	24
8	9.9	85	178	179	174	185	78	85	66	5.8	3.9	75
9	9.6	80	180	146	174	184	72	81	58	9.1	3.4	92
10	9.4	73	181	124	177	182	68	75	48	9.1	3.1	142
11	9.1	67	179	124	181	180	64	68	46	9.1	3.1	63
12	8.8	82	179	124	180	141	59	64	57	8.5	2.9	61
13	8.8	94	180	158	180	118	54	66	53	7.8	2.8	80
14	9.1	94	180	180	146	144	50	61	44	7.4	3.6	82
15	14	128	181	179	122	158	45	57	39	7.0	4.5	35
16	21	135	183	177	122	158	44	52	36	6.5	8.5	15
17	19	113	182	69	122	174	41	45	29	5.9	8.8	26
18	16	139	180	35	96	184	40	42	23	5.5	8.3	50
19	14	166	179	60	70	144	44	38	21	5.9	7.8	144
20	12	171	179	94	51	141	43	34	16	6.5	7.2	182
21	11	170	179	97	22	180	39	30	16	6.3	6.6	182
22	10	171	180	67	13	175	35	27	14	5.8	6.8	212
23	9.9	168	179	21	13	172	32	28	12	5.2	6.6	247
24	9.9	168	180	26	201	181	43	25	11	4.9	6.1	234
25	10	168	180	38	352	188	58	22	10	8.0	5.6	252
26	10	169	178	65	192	185	84	53	10	7.8	5.0	256
27	9.9	170	179	122	127	194	85	51	10	7.2	4.9	264
28	9.6	170	179	167	120	187	84	46	10	6.6	4.4	270
29	9.4	168	179	86	---	188	84	34	9.6	6.1	4.6	266
30	9.6	168	180	14	---	187	82	35	9.1	5.5	8.2	293
31	9.6	---	179	41	---	186	---	34	---	5.0	4.6	---
TOTAL	364.6	3434.6	5544	3643	3793	5051	2371	1782	1140.7	213.2	205.5	4119
MEAN	11.8	114	179	118	135	163	79.0	57.5	38.0	6.88	6.63	137
MAX	21	171	184	180	352	188	186	93	76	9.1	4.6	293
MIN	8.8	9.6	168	14	13	118	32	22	9.1	4.9	2.8	15

CAL YR 1974 TOTAL 26182.2 MEAN 71.7 MAX 230 MIN 1.4
WTR YR 1975 TOTAL 31661.6 MEAN 86.7 MAX 352 MIN 2.8

EXTREMES.--Current year: Maximum discharge, 384 ft³/s (10.9 m³/s) Feb. 25, gage height, 5.25 ft (1.600 m); minimum daily, 2.8 ft³/s (0.079 m³/s) Aug. 13.

03120500 McGUIRE CREEK BELOW LEESVILLE DAM, NEAR LEESVILLE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATURATION	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SIO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)
MAR. 24...	1845	189	7.0	12.0	98	137	7.2	6.7	18	3.6	3.2	1.6
AUG. 26...	1550	4.5	16.0	8.7	87	190	6.9	7.9	20	4.6	3.6	1.7

DATE	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKALINITY AS CaCO ₃ (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 24...	34	0	3.4	28	5.6	28	.0	.04	.01	.70	.03	84
AUG. 26...	69	0	14	57	4.0	21	.2	.69	.01	.04	.06	101

DATE	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 24...	60	32	70	50	--	--	--	--	--	--	--	--
AUG. 26...	69	12	1000	2800	3	<10	10	3	30	<.5	3.8	1.2

03121000 ATWOOD LAKE NEAR NEW CUMBERLAND, OHIO

LOCATION.--Lat 40°31'34", long 81°17'09", in SE 1/4 sec, 28, T.15 N., R.7 W., Tuscarawas County, 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) above mean sea level; gage readings have been reduced to elevations above mean sea level. Prior to Oct. 11, 1938, nonrecording gage at same site and datum.

EXTREMES.--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).REMARKS.--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.

COOPERATION.--Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	927.70	23,140	-
Oct. 31.....	927.65	23,070	-70
Nov. 30.....	924.94	19,110	-3,960
Dec. 31.....	923.75	17,570	-1,540
CAL YR 1974.....	-	-	+540
Jan. 31.....	925.87	20,410	+2,840
Feb. 28.....	930.80	28,230	+7,820
Mar. 31.....	929.62	26,180	-2,050
Apr. 30.....	927.87	23,400	-2,780
May 31.....	927.92	23,470	+70
June 30.....	927.65	23,070	-400
July 31.....	927.62	23,020	-50
Aug. 31.....	928.35	24,150	+1,130
Sept. 30.....	928.88	25,000	+850
WTR YR 1975.....	-	-	+1,860

EXTREMES.--Current year: Maximum contents, 30,090 acre-ft (37.1 hm³) Mar. 23, elevation, 931.83 ft (284.022 m); minimum, 15,790 acre-ft (19.5 hm³) Dec. 23, elevation, 922.33 ft (281.126 m).

MUSKINGUM RIVER BASIN

03121500 INDIAN FORK BELOW ATWOOD DAM, NEAR NEW CUMBERLAND, OHIO

LOCATION.--Lat 40°31'31", long 81°17'18", in SE 1/4 sec. 28, T.15 N., R.7 W., Tuscarawas County, on left bank 500 ft (152 m) downstream from Atwood Dam, 0.5 mi (0.8 km) upstream from mouth, and 1.5 mi (2.4 km) southeast of New Cumberland.

DRAINAGE AREA.--70.0 mi² (181 km²).

GAGE.--Water-stage recorder and masonry control. Datum of gage is 884.00 ft (269.443 m) above mean sea level, adjustment of 1912. Prior to Aug. 28, 1943, nonrecording gage at site 250 ft (76 m) upstream at same datum.

REMARKS.--Discharge records good. Flow completely regulated by Atwood Lake (see station 03121000).

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to September 1975 (discontinued). Published as Indian Fork near New Cumberland prior to 1940.

AVERAGE DISCHARGE.--37 years, 72.1 ft³/s (2.042 m³/s).

EXTREMES.--Period of record: Maximum discharge, 1,610 ft³/s (45.6 m³/s) Apr. 7, 1945; maximum gage height, 21.23 ft (6.471 m) July 12, 1969 (from floodmark in gage house), backwater from Dover Lake; minimum daily discharge, 0.10 ft³/s (0.003 m³/s) at times during 1939, 1947, 1952, 1975, when gates at Atwood Lake were closed.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	13	284	304	125	125	492	85	83	10	8.3	109
2	20	16	282	305	128	125	500	96	177	9.3	8.0	114
3	18	20	281	305	259	125	402	93	218	9.2	7.6	353
4	17	36	280	304	372	125	259	92	133	9.7	7.8	316
5	15	75	280	303	333	125	128	92	87	9.2	7.7	81
6	14	92	283	303	307	208	105	91	96	8.5	7.2	94
7	13	239	282	254	306	256	77	85	96	8.2	6.8	104
8	13	211	278	183	307	255	79	85	92	8.5	6.1	223
9	12	72	253	102	306	255	77	83	86	12	5.5	215
10	12	69	240	61	306	255	76	81	79	12	5.4	86
11	12	67	241	63	266	254	76	85	76	12	5.5	80
12	12	75	243	63	114	172	71	80	84	11	5.5	87
13	12	234	243	179	3.6	125	69	80	83	11	6.0	90
14	12	150	243	325	3.6	144	64	76	79	10	12	84
15	23	176	243	441	3.6	138	60	70	75	9.7	17	79
16	29	201	341	478	6.0	172	56	66	72	8.8	61	72
17	24	166	419	335	7.0	216	53	61	68	8.3	55	69
18	25	210	421	124	8.0	245	49	55	60	8.3	45	79
19	18	231	418	124	4.8	170	48	50	53	7.8	30	100
20	16	231	348	60	.10	126	48	45	48	7.6	18	116
21	17	230	242	22	.10	135	48	38	36	7.2	14	120
22	14	230	242	57	.10	182	43	33	28	6.8	16	258
23	14	229	80	82	.10	206	38	34	19	6.7	14	348
24	15	228	100	55	67	244	48	32	14	6.7	12	203
25	15	227	120	28	123	208	53	28	14	14	11	122
26	16	267	121	37	125	270	58	38	13	14	11	124
27	15	287	122	217	125	379	56	45	12	12	11	124
28	14	287	123	309	125	458	55	37	12	11	10	124
29	13	286	123	98	---	477	57	32	11	10	9.6	320
30	13	285	198	.10	---	474	57	38	11	9.5	13	530
31	13	---	284	80	---	483	---	53	---	8.8	68	---
TOTAL	496	5140	7658	5601.10	3731.00	7132	3302	1959	2015	297.8	515.0	4824
MEAN	16.0	171	247	181	133	230	110	63.2	67.2	9.61	16.6	161
MAX	29	287	421	478	372	483	500	96	218	14	68	530
MIN	12	13	80	.10	.10	125	38	28	11	6.7	5.4	69
CAL YR 1974	TOTAL	37740.10	MEAN	103	MAX	570	MIN	1.6				
WTR YR 1975	TOTAL	42670.90	MEAN	117	MAX	530	MIN	.10				

EXTREMES.--Current year: Maximum discharge, 601 ft³/s (17.0 m³/s) Sept. 30; maximum gage height, 13.29 ft (4.051 m) Feb. 25 (backwater from Conotton Creek); minimum daily discharge, 0.10 ft³/s (0.003 m³/s) Jan. 30, Feb. 20-23, when gates at Atwood Lake were closed.

MUSKINGUM RIVER BASIN

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03121500 INDIAN FORK BELOW ATWOOD DAM, NEAR NEW CUMBERLAND, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to 1975 (discontinued).

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)
MAR. 24...	1800	257	6.5	11.6	94	214	7.2	6.5	21	5.6	11	2.0
AUG. 25...	1445	11	21.0	7.4	82	290	7.0	9.3	26	8.0	13	2.3

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 24...	34	0	3.4	28	21	35	.0	.09	.01	.83	.06	119
AUG. 25...	95	0	15	78	21	22	.2	1.3	.01	.07	.10	155

DATE	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 24...	76	48	30	110	--	--	--	--	--	--	--	--
AUG. 25...	98	20	10	6000	24	<10	10	4	10	<.5	6.0	3.7

03121600 CONOTTON CREEK AT NEW CUMBERLAND, OHIO

LOCATION.--Lat 40°32'30", long 81°18'27", Tuscarawas County, at bridge on State Highway 212, 0.4 mi (0.6 km) southwest of New Cumberland, 3.0 mi (4.8 km) downstream from Indian Fork.

DRAINAGE AREA.--250 mi² (648 km²).

PERIOD OF RECORD.--Discharge, 1935, 1965, 1974 to current year; chemical analyses, 1964, 1965, 1974 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	INSTANTANEOUS DISCHARGE
	(ft ³ /s) (m ³ /s)
May 21	148 4.19

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
SEP. 10...	1615	282	20.0	8.5	280	7.4	6.1	27	7.7	10	2.2	64

DATE	CARBONATE (CO3) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
SEP. 10...	0	18	44	.1	.12	.01	.27	.08	147	99	110	600

MUSKINGUM RIVER BASIN

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03122000 DOVER LAKE NEAR DOVER, OHIO

LOCATION.--Lat 40°33'29", long 81°24'46", in SW 1/4 sec. 6, T.9 N., R.1 W., Tuscarawas County, 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) above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Prior to Sept. 22, 1938, nonrecording gage at same site and datum.

EXTREMES.--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.

REMARKS.--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.

COOPERATION.--Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	865.79	4.0	-
Oct. 31.....	865.27	1.4	-2.6
Nov. 30.....	869.78	166	+164.6
Dec. 31.....	872.79	644	+478
CAL YR 1974.....	-	-	+423
Jan. 31.....	873.82	945	+301
Feb. 28.....	893.17	40,050	+39,105
Mar. 31.....	870.38	226	-39,824
Apr. 30.....	868.05	67	-159
May 31.....	868.55	90	+23
June 30.....	865.62	3.1	-86.9
July 31.....	865.00	0	-3.1
Aug. 31.....	869.36	136	+136
Sept. 30.....	869.52	147	+11
WTR YR 1975.....	-	-	+143

EXTREMES.--Current year: Maximum contents, 40,050 acre-ft (49.4 hm³) Feb. 28 and Mar. 1, elevation, 893.17 ft (272.238 m); no contents several days in July and August.

MUSKINGUM RIVER BASIN

03122500 TUSCARAWAS RIVER BELOW DOVER DAM, NEAR DOVER, OHIO

LOCATION.--Lat 40°31'47", long 81°25'48", in T.9 N., R.2 W., Tuscarawas County, 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).

GAGE.--Water-stage recorder. Datum of gage is 861.51 ft (262.588 m) above mean sea level, adjustment of 1912. Prior to Aug. 30, 1930, nonrecording gage at same site and datum.

REMARKS.--Discharge records good. Diversion from basin at Portage Lakes (see REMARKS for stations 03116000 and 03117000). Records include diversion from Sugar Creek well field. Mean pumpage for the 1975 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 DISCHARGE RECORDS

PERIOD OF RECORD.--October 1923 to current year. Published as Tuscarawas River near Dover 1923-39.

AVERAGE DISCHARGE.--52 years, 1,387 ft³/s (39.28 m³/s).

EXTREMES.--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. Flood in March 1913 reached a stage of about 23.5 ft (7.16 m), discharge, 62,000 ft³/s (1,760 m³/s), computed by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 803: 1933(M). WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	663	573	1950	5040	5340	5790	3060	1890	3680	566	301	2660
2	612	647	2130	4950	4620	5810	2830	2630	5130	531	298	2810
3	619	769	2480	4480	4590	5780	2950	2240	4840	538	274	2160
4	644	798	2640	4030	5070	5820	3210	1920	4340	746	448	1720
5	613	2460	2560	3630	4730	5810	2780	1860	3110	622	430	1040
6	577	2850	2480	3100	4560	5650	2380	2170	3560	524	369	1900
7	549	2350	2410	2870	4440	5660	2030	2680	3400	475	318	2050
8	555	2000	3150	3560	3530	5800	1980	2260	2510	538	302	1480
9	552	1530	4770	5810	2970	5810	1800	1820	1980	658	280	1340
10	539	1280	4980	5750	2620	5780	1730	1600	1710	618	260	988
11	538	1180	4610	5550	2530	5800	1640	1440	1540	661	311	827
12	553	1780	4170	5190	2460	5690	1570	1340	2180	589	334	1610
13	542	2790	3940	4650	2160	5750	1500	1430	2300	508	312	2040
14	547	2440	4060	4830	1930	5710	1390	1460	1730	507	1230	1420
15	765	1960	4100	5230	1810	5660	1360	1270	1450	504	650	1050
16	932	1780	4100	4520	1900	5600	1350	1180	1480	463	1370	786
17	857	1600	4400	3800	3220	5600	1290	1120	1480	432	767	712
18	813	1430	4450	2320	4860	5710	1230	1060	1230	409	487	1280
19	732	1460	4100	2340	5350	5250	1340	1030	1070	459	386	3580
20	674	1540	3550	2370	5000	5230	1410	994	1180	460	331	3540
21	629	2080	2940	1980	4140	5710	1240	962	1000	513	288	3330
22	621	2260	2520	1770	3170	5760	1140	1170	858	623	432	2980
23	606	2150	2310	1780	3940	5570	1090	1710	834	480	374	2920
24	596	1870	3910	1670	2400	5550	1240	1610	1120	409	317	2950
25	600	2330	5220	1860	2400	5790	1540	1270	810	570	311	3440
26	600	3420	5500	3570	4750	5560	1580	1330	770	683	342	3360
27	578	3140	5560	3900	5550	4670	1480	1630	794	484	531	3280
28	537	2580	5170	3620	5840	3460	1310	1270	850	370	470	2580
29	538	2270	4780	4610	---	3300	1420	1050	730	338	348	1870
30	561	2030	4340	5370	---	3930	1450	1430	615	321	518	1790
31	584	---	4600	5110	---	3440	---	1630	---	310	1240	---
TOTAL	19326	57347	117880	119260	106080	166450	52320	48456	58281	15909	14629	63493
MEAN	623	1912	3803	3847	3789	5369	1744	1563	1943	513	472	2116
MAX	932	3420	5560	5810	5840	5820	3210	2680	5130	746	1370	3580
MIN	537	573	1950	1670	1810	3300	1090	962	615	310	260	712

CAL YR 1974 TOTAL 755148 MEAN 2069 MAX 5970 MIN 426
WTR YR 1975 TOTAL 839431 MEAN 2300 MAX 5840 MIN 260

EXTREMES.--Current year: Maximum discharge, 6,030 ft³/s (171 m³/s) Mar. 4, gage height, 7.19 ft (2.192 m); minimum daily, 260 ft³/s (7.36 m³/s) Aug. 10.

MUSKINGUM RIVER BASIN

127

03122500 TUSCARAWAS RIVER BELOW DOVER DAM, NEAR DOVER, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 24...	1615	5760	10.0	10.3	91	578	7.4	7.6	58	13	34	2.7
SEP. 09...	1000	1380	18.5	7.1	76	705	7.5	8.4	68	15	48	4.4

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 24...	72	0	4.6	59	79	110	.2	.28	.03	1.1	.25	341
SEP. 09...	99	0	5.0	81	110	96	.2	.08	.08	1.0	.09	400

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (MG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 24...	200	140	80	760	--	--	--	--	--	--	--	--
SEP. 09...	230	150	20	720	5	20	20	15	50	<.5	6.4	2.6

MUSKINGUM RIVER BASIN

03123000 SUGAR CREEK ABOVE BEACH CITY DAM, AT BEACH CITY, OHIO

LOCATION.--Lat 40°39'24", long 81°34'37", in NE 1/4 sec. 35, T.11 N., R.10 W., Stark County, on right bank at downstream side of Third Avenue bridge at Beach City, 2.3 mi (3.7 km) upstream from Beach City Dam.

DRAINAGE AREA.--160 mi² (414 km²).

GAGE.--Water-stage recorder. Datum of gage is 953.20 ft (290.535 m) above mean sea level, adjustment of 1912. Water-stage recorder for Beach City Lake (station 03123500) used as auxiliary gage for this station.

REMARKS.--Discharge records good. Sediment data collected at this site 1969 to 1974.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1944 to September 1975 (discontinued). Prior to May 1945 monthly discharge only, published in WSP 1305.

AVERAGE DISCHARGE.--31 years, 140 ft³/s (3.965 m³/s).

EXTREMES.--Period of record: Maximum daily discharge, 7,960 ft³/s (225 m³/s) Jan. 22, 1959; maximum gage height, 23.76 ft (7.242 m) July 6, 1969 (backwater from Beach City Lake); minimum discharge, 1.4 ft³/s (0.040 m³/s) Aug. 27, 1952.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	30	161	627	588	441	186	228	452	27	13	147
2	34	40	272	598	461	371	165	178	549	25	14	95
3	32	65	383	366	290	310	218	121	364	24	14	57
4	30	60	270	378	217	260	218	112	225	26	20	62
5	29	531	261	305	188	250	163	107	172	24	21	64
6	28	328	320	243	354	250	143	192	341	24	18	370
7	27	210	276	237	364	290	136	230	280	23	16	180
8	26	145	578	469	232	518	126	141	142	80	15	84
9	26	113	944	1830	180	364	118	112	101	48	15	59
10	26	97	805	1450	160	206	116	94	84	31	15	46
11	25	89	452	826	217	224	110	84	75	58	17	40
12	24	349	352	542	167	328	104	79	157	39	37	261
13	24	440	520	395	145	549	98	75	128	29	30	214
14	24	270	552	220	128	469	92	70	86	31	210	93
15	40	210	583	220	153	311	92	67	70	30	64	64
16	80	157	580	200	165	304	91	65	82	24	273	57
17	55	136	682	170	469	355	89	61	72	22	88	62
18	40	122	596	180	878	583	87	61	58	23	45	197
19	36	112	414	226	924	739	110	60	52	25	32	535
20	32	145	314	188	567	1470	107	58	57	29	27	407
21	32	285	250	140	325	474	88	57	50	29	24	332
22	30	309	219	160	252	364	81	55	41	22	31	174
23	29	248	212	124	676	278	60	59	38	19	29	117
24	29	188	808	136	3110	272	113	55	36	17	24	296
25	30	400	1400	261	1710	291	143	51	34	21	21	349
26	32	518	1080	593	1260	224	136	109	34	22	21	212
27	30	307	536	557	874	184	100	76	36	17	42	149
28	28	234	305	303	600	178	92	56	35	17	31	115
29	27	190	256	784	---	242	115	49	32	15	22	93
30	27	161	285	1590	---	320	106	58	29	13	31	81
31	27	---	332	837	---	222	---	101	---	12	84	---
TOTAL	1009	6489	14998	15155	15654	12145	3623	2921	3912	846	1344	5012
MEAN	32.5	216	484	489	559	392	121	94.2	130	27.3	43.4	167
MAX	80	531	1400	1830	3110	1470	218	230	549	80	273	535
MIN	24	30	161	124	128	178	80	49	29	12	13	40
CAL YR 1974 TOTAL	78930		MEAN 216	MAX 2080	MIN 11							
WTR YR 1975 TOTAL	83108		MEAN 228	MAX 3110	MIN 12							

EXTREMES.--Current year: Maximum discharge, 3,490 ft³/s (98.9 m³/s) Feb. 24; maximum gage height, 13.88 ft (4.249 m) Feb. 27 (backwater from Beach City Lake); minimum discharge, 12 ft³/s (0.34 m³/s) July 30, 31, Aug. 1, 2.

MUSKINGUM RIVER BASIN

129

03123000 SUGAR CREEK ABOVE BEACH CITY DAM, AT BEACH CITY, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to 1975 (discontinued).

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 26...	0930	229	5.5	9.4	75	394	7.5	5.8	46	13	10	2.8
SEP. 11...	1400	39	17.5	5.4	56	530	7.8	8.7	60	18	17	5.0

DATE	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 26...	106	0	5.4	87	19	76	.1	.08	.03	2.6	.16	225
SEP. 11...	176	0	4.5	144	25	86	.1	.25	.11	1.2	.11	307

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 26...	170	81	60	190	--	--	--	--	--	--	--	--
SEP. 11...	220	80	10	320	3	10	10	5	40	<.5	6.4	2.4

03123400 DUNDEE CREEK AT DUNDEE, OHIO

LOCATION.--Lat 40°35'35", long 81°36'13", Tuscarawas County, at culvert on State Highway 93, 0.4 mi (0.6 km) upstream from mouth, 0.5 mi (0.8 km) northeast of Dundee.

DRAINAGE AREA.--0.71 mi² (1.84 km²).

PERIOD OF RECORD.--Discharge, 1966 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Aug. 14	24.52	7.474	207	5.86

MUSKINGUM RIVER BASIN

131

03123500 BEACH CITY LAKE NEAR BEACH CITY, OHIO

LOCATION.--Lat 40°38'06", long 81°33'30", in T.10 N., R.3 W., Tuscarawas County, 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) above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Prior to Feb. 4, 1939, nonrecording gage at same site and datum.

EXTREMES.--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).

REMARKS.--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.

COOPERATION.--Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	948.63	1,990	-
Oct. 31.....	948.60	1,980	-10
Nov. 30.....	949.58	2,470	+490
Dec. 31.....	950.52	3,030	+560
CAL YR 1974.....	-	-	+490
Jan. 31.....	959.25	12,200	+9,170
Feb. 28.....	966.06	26,400	+14,200
Mar. 31.....	949.87	2,630	-23,770
Apr. 30.....	949.30	2,320	-310
May 31.....	949.53	2,450	+130
June 30.....	948.51	1,930	-520
July 31.....	948.29	1,830	-100
Aug. 31.....	949.62	2,490	+660
Sept. 30.....	949.25	2,300	-190
WTR YR 1975.....	-	-	+310

EXTREMES.--Current year: Maximum contents, 28,800 acre-ft (35.5 hm³) Feb. 27, elevation, 966.90 ft (294.711 m); minimum, 1,830 acre-ft (2.26 hm³) Aug. 1, 2, 3, elevation, 948.28 ft (289.036 m).

MUSKINGUM RIVER BASIN

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

LOCATION.--Lat 40°38'08", long 81°33'11", in T.10 N., R.3 W., Tuscarawas County, 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).

GAGE.--Water-stage recorder. Datum of gage is 928.00 ft (282.854 m) above mean sea level, adjustment 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.--Discharge records good. Flood flow regulated by Beach City Lake (see station 03123500).

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to current year. Published as Sugar Creek near Beach City prior to 1940.

AVERAGE DISCHARGE.--37 years, 265 ft³/s (7.505 m³/s).

EXTREMES.--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.

REVISIONS (WATER YEARS).--WSP 953: 1941. WRD Ohio 1969: 1968.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	52	270	1000	1610	1650	363	353	595	50	20	409
2	64	61	276	1170	1560	1620	322	605	986	47	20	407
3	59	105	379	789	1600	1640	345	525	786	44	24	235
4	55	110	379	736	1300	1650	386	347	520	44	72	160
5	53	677	356	665	552	1650	306	302	373	44	81	141
6	52	932	346	518	636	1770	264	331	514	41	52	462
7	50	521	336	468	769	1830	245	443	549	40	36	474
8	49	320	607	617	565	1810	230	315	357	72	29	246
9	49	234	1490	1520	465	1030	214	241	245	96	25	156
10	48	188	1480	1620	315	603	205	200	194	79	24	115
11	47	165	939	1660	399	500	197	173	170	106	27	96
12	45	338	629	1620	376	566	188	159	271	97	56	254
13	44	777	732	1600	328	1110	178	156	318	63	84	403
14	45	554	832	864	254	1120	167	146	214	55	227	224
15	72	383	879	440	289	802	162	132	167	55	178	146
16	147	287	894	428	321	695	162	127	158	46	392	119
17	110	236	1040	335	734	732	158	122	154	41	294	118
18	80	206	1000	318	1430	1000	153	118	123	40	136	205
19	67	184	744	429	1550	937	168	115	112	47	85	860
20	62	199	575	394	1080	1010	197	107	108	58	63	1020
21	59	342	457	271	702	1590	166	100	103	57	53	864
22	56	377	388	319	534	1530	146	95	88	46	57	547
23	53	340	348	270	833	792	140	97	78	37	61	348
24	53	271	892	267	719	598	170	98	71	34	50	466
25	55	414	1810	361	524	645	255	90	66	43	41	902
26	57	788	1710	938	533	526	289	152	64	49	38	778
27	56	578	1570	1000	802	424	248	209	76	37	46	497
28	51	422	804	646	1530	381	206	131	73	30	52	346
29	49	339	565	859	---	420	213	100	64	26	40	263
30	49	277	534	991	---	547	217	132	56	24	89	212
31	50	---	573	1420	---	446	---	178	---	22	211	---
TOTAL	1859	10677	23834	24533	22310	31624	6660	6399	7653	1570	2663	11473
MEAN	60.0	356	769	791	797	1020	222	206	255	50.6	85.9	382
MAX	147	932	1810	1660	1610	1830	386	605	986	106	392	1020
MIN	44	52	270	267	254	381	140	90	56	22	20	96
CAL YR 1974	TOTAL	132767	MEAN	364	MAX	1810	MIN	25				
WTR YR 1975	TOTAL	151255	MEAN	414	MAX	1830	MIN	20				

EXTREMES.--Current year: Maximum discharge, 2,140 ft³/s (60.6 m³/s) Dec. 25, gage height, 6.83 ft (2.082 m); minimum daily, 20 ft³/s (0.57 m³/s) Aug. 1, 2.

MUSKINGUM RIVER BASIN

133

03124000 SUGAR CREEK BELOW BEACH CITY DAM, NEAR BEACH CITY, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 26...	1020	536	6.0	10.6	85	536	7.3	7.0	60	25	11	3.0
AUG. 04...	1400	90	26.0	7.2	88	1080	7.6	6.7	120	72	27	6.3

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 26...	76	0	6.1	62	19	170	.3	.12	.03	2.2	.43	334
AUG. 04...	106	0	4.3	87	35	520	.5	.27	.06	.29	.14	845

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 26...	250	190	30	1500	--	--	--	--	--	--	--	--
AUG. 04...	600	510	30	5400	8	<10	0	0	20	<.5	5.6	.0

MUSKINGUM RIVER BASIN

03124500 SUGAR CREEK AT STRASBURG, OHIO

LOCATION.--Lat 40°35'15", long 81°31'24", in NW 1/4 sec. 1, T.9 N., R.3 W., Tuscarawas County, 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).

GAGE.--Water-stage recorder. Datum of gage is 896.24 ft (273.174 m) above mean sea level, adjustment 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.--Discharge records good. 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 1975, 16.7 ft³/s (0.47 m³/s).

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--18 years (1931-32, 1935-38, 1961-75), 293 ft³/s (8.298 m³/s).

EXTREMES.--Period of record: Maximum discharge, 19,700 ft³/s (558 m³/s) Aug. 7 1935, gage height, 14.70 ft (4.481 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.

REVISIONS (WATER YEARS).--WSP 1305: 1932-33(M). WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	65	304	1010	1680	1690	399	333	580	65	29	388
2	97	76	316	1240	1630	1670	354	616	1020	59	28	413
3	83	127	444	845	1650	1650	360	520	825	57	31	253
4	72	147	464	760	1380	1690	409	354	532	55	68	177
5	65	670	436	700	592	1730	333	336	367	55	91	155
6	63	1160	420	548	648	1830	288	333	490	52	63	444
7	59	685	408	490	790	1910	268	472	548	49	46	504
8	53	408	653	632	592	1870	256	351	348	70	37	270
9	52	285	1570	1630	486	1090	239	278	251	106	33	179
10	50	226	1560	1750	345	636	229	234	205	92	32	129
11	48	196	1010	1790	413	520	220	205	181	105	33	108
12	47	316	675	1730	399	568	212	187	263	114	50	227
13	47	894	755	1710	354	1090	198	181	330	76	94	402
14	47	710	865	970	275	1140	185	175	241	67	214	241
15	63	484	910	468	306	830	179	161	192	65	201	163
16	164	356	934	451	333	700	179	153	177	57	351	130
17	136	292	1060	357	725	740	173	149	177	51	312	125
18	96	246	1050	336	1410	1010	169	141	147	49	157	187
19	78	218	790	434	1610	1050	179	141	134	53	99	835
20	70	218	604	426	1150	988	207	134	125	63	76	1080
21	67	380	486	290	745	1630	179	129	122	67	67	910
22	64	436	413	339	564	1650	159	122	108	56	67	572
23	60	424	371	295	922	870	153	122	96	45	75	354
24	59	328	880	285	895	640	179	125	91	42	62	430
25	61	416	1880	360	560	670	261	120	86	48	54	916
26	63	894	1770	910	564	568	285	177	82	58	49	830
27	65	655	1670	1050	775	462	249	251	94	47	52	516
28	61	524	865	675	1570	409	212	169	95	39	63	351
29	59	420	592	964	---	430	216	129	82	35	52	273
30	59	336	544	1020	---	564	223	151	72	33	89	227
31	61	---	588	1460	---	483	---	203	---	30	209	---
TOTAL	2193	12582	25287	25925	23363	32778	7152	7152	8061	1860	2884	11789
MEAN	70.7	419	816	836	834	1057	238	231	269	60.0	93.0	393
MAX	164	1160	1880	1790	1680	1910	409	616	1020	114	351	1080
MIN	47	65	304	285	275	409	153	120	72	30	28	108

CAL YR 1974 TOTAL 150866 MEAN 413 MAX 1880 MIN 26
WTR YR 1975 TOTAL 161026 MEAN 441 MAX 1910 MIN 28

EXTREMES.--Current year: Maximum discharge, 2,260 ft³/s (64.0 m³/s) Dec. 25, gage height, 5.62 ft (1.713 m); minimum daily, 28 ft³/s (0.793 m³/s) Aug. 2.

MUSKINGUM RIVER BASIN

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03124500 SUGAR CREEK AT STRASBURG, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATURATION	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNE- SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTAS- SIUM (K) (MG/L)	
APR. 07...	1050	279	4.0	9.5	72	607	7.6	6.3	68	30	12	2.6	
AUG. 04...	1230	66	24.5	7.3	87	774	7.6	4.4	84	38	26	5.6	
DATE		BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)
APR. 07...	104	0	4.2	85	21	200	.4	.09	.03	2.0	.14	393	
AUG. 04...	172	0	6.9	141	37	230	.3	.22	.04	.38	.16	510	
DATE		HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
APR. 07...	290	210	40	1800	--	--	--	--	--	--	--	--	--
AUG. 04...	370	230	10	170	4	0	0	0	10	<.5	6.2	.0	

03124520 SUGAR CREEK AT DOVER, OHIO

LOCATION.--Lat 40°31'40", long 81°29'43", Tuscarawas County, at bridge on State Highway 39, 0.2 mi (0.3 km) west of Dover city limits, 1.8 mi (2.9 km) upstream from mouth.

DRAINAGE AREA.--348 mi² (901 km²).

PERIOD OF RECORD.--Discharge, 1940, 1974 to current year; chemical analyses, 1974 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	
SEP. 11...	1300	128	18.0	8.6	660	7.9	9.9	76	30	14	4.9	102	
DATE		CAR- BONATE (CO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
SEP. 11...	0	22	220	.2	.05	.06	1.4	.05	429	310	20	1600	

MUSKINGUM RIVER BASIN

03125000 HOME CREEK NEAR NEW PHILADELPHIA, OHIO

LOCATION.--Lat 40°28'06", long 81°24'10", Tuscarawas County, 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).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 872.49 ft (265.935 m) above mean sea level, adjustment of 1912.

REMARKS.--Discharge records good.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--38 years, 1.26 ft³/s (0.0357 m³/s), 10.44 in/yr (265 mm/yr).

EXTREMES.--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.

REVISIONS (WATER YEARS).--WSP 1173: 1941(M). WSP 1385: 1951-53(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.27	.42	1.6	4.1	3.4	2.3	1.3	3.1	8.8	.12	.04	6.5
2	.27	.52	3.1	2.7	2.7	2.0	1.3	1.5	2.5	.10	.04	1.9
3	.24	.32	3.0	3.4	2.3	1.8	4.7	1.3	2.2	.74	.16	1.2
4	.21	6.9	2.5	3.0	2.1	1.5	2.1	1.3	1.5	.36	.10	.77
5	.19	4.6	2.1	2.2	2.7	1.5	1.6	.96	1.6	.18	.06	1.5
6	.18	2.4	1.8	2.1	4.8	1.4	1.5	1.8	2.1	.13	.05	3.5
7	.16	2.0	3.0	2.0	3.2	3.6	1.4	1.0	1.5	.11	.04	1.3
8	.16	1.4	16	6.0	2.4	2.5	1.2	.80	1.0	.19	.03	.80
9	.16	1.1	6.5	9.6	2.0	1.8	1.1	.68	.74	.42	.03	.50
10	.10	.93	3.3	4.6	1.7	1.8	1.0	.59	.59	.27	.04	.44
11	.12	1.1	2.5	3.8	1.8	1.8	.88	.53	2.5	.24	.05	1.8
12	.10	5.8	4.1	2.5	1.8	8.3	.80	.65	2.1	.16	.04	3.6
13	.11	2.5	4.0	2.2	1.6	4.7	.71	.56	1.1	.18	.40	1.3
14	.11	1.8	4.4	1.8	1.4	3.6	.65	.46	.80	.11	.21	.74
15	1.2	1.4	3.8	1.3	1.4	3.8	.68	.46	.74	.08	2.4	.56
16	.64	1.1	5.6	1.2	3.1	3.9	.62	.42	.62	.07	.42	.59
17	.40	.94	3.8	1.1	5.3	6.2	.59	.38	.46	.10	.12	.48
18	.35	.84	2.7	2.2	4.1	4.8	.62	.42	.46	.21	.07	20
19	.49	.85	2.4	2.1	3.2	16	1.1	.34	.36	.12	.25	7.0
20	.42	.88	1.9	1.6	2.4	5.3	.62	.30	.32	.10	.06	4.7
21	.28	.96	1.7	1.3	1.9	3.4	.50	.27	.27	.08	1.5	2.5
22	.30	.79	1.7	1.2	1.8	3.0	.48	.38	.24	.06	.65	1.6
23	.25	.66	2.7	1.3	25	2.3	.74	.40	.40	.05	.15	1.4
24	.19	.90	8.1	1.6	30	4.0	1.2	.27	.62	1.6	.08	16
25	.18	3.7	6.5	6.2	7.0	2.4	2.2	.24	.62	.40	.05	3.4
26	.21	2.1	3.6	3.8	4.3	1.9	1.4	.50	.71	.11	.11	2.1
27	.18	1.7	2.9	2.5	3.2	1.6	.96	.27	.92	.07	.07	1.5
28	.12	1.4	2.6	3.4	2.6	1.7	1.1	.21	.28	.06	.04	1.1
29	.09	1.2	2.5	33	---	2.3	1.0	.77	.18	.05	1.6	.88
30	.04	1.0	2.5	6.4	---	1.8	1.2	.56	.13	.04	3.8	.74
31	.04	---	6.5	4.4	---	1.4	---	8.0	---	.04	28	---
TOTAL	7.76	52.21	119.4	124.6	129.2	104.4	35.25	29.42	36.36	6.55	40.66	90.40
MEAN	.25	1.74	3.85	4.02	4.61	3.37	1.18	.95	1.21	.21	1.31	3.01
MAX	1.2	6.9	16	33	30	16	4.7	8.0	8.8	1.6	28	20
MIN	.04	.32	1.6	1.1	1.4	1.4	.48	.21	.13	.04	.03	.44
CFSM	.15	1.06	2.35	2.45	2.81	2.05	.72	.58	.74	.13	.80	1.84
IN.	.18	1.18	2.71	2.82	2.93	2.37	.80	.67	.82	.15	.92	2.05

CAL YR 1974 TOTAL 772.45 MEAN 2.12 MAX 22 MIN 0 CFSM 1.29 IN 17.51
WTR YR 1975 TOTAL 776.21 MEAN 2.13 MAX 33 MIN .03 CFSM 1.30 IN 17.60

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-29	0115	2.80	73	05-31	2300	3.23	104	09-18	2130	3.16	99
02-23	2030	*3.50	*126	08-31	2130	3.12	103	09-24	0415	2.65	63
03-19	0745	2.47	52								

Minimum discharge: No flow several days in October, July, August (result of upstream construction).

03125000 HOME CREEK NEAR NEW PHILADELPHIA, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATURATION	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)
MAR. 24...	1430	4.0	12.0	9.8	91	580	6.8	9.8	63	25	8.7	2.9
AUG. 25...	1300	.07	24.0	8.2	96	950	7.5	15	120	44	32	6.5

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CAC03 (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 24...	48	0	12	39	13	220	.2	.19	.02	1.1	.30	367
AUG. 25...	80	0	4.0	66	34	430	.2	.19	.07	.56	.08	723

DATE	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 24...	260	220	50	590	--	--	--	--	--	--	--	--
AUG. 25...	480	420	80	1700	0	<10	10	4	20	<.5	7.2	.8

03125500 PIEDMONT LAKE AT PIEDMONT, OHIO

LOCATION.--Lat 40°11'31", long 81°12'57", in SE 1/4 sec. 35, T.10 N., R.6 W., Harrison County, 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) above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level.

EXTREMES.--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).REMARKS.--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.

COOPERATION.--Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	913.18	33,920	-
Oct. 31.....	912.62	32,660	-1,260
Nov. 30.....	911.00	29,080	-3,580
Dec. 31.....	910.94	28,960	-120
CAL YR 1974.....	-	-	+4,760
Jan. 31.....	910.08	27,190	-1,770
Feb. 28.....	913.90	35,570	+8,380
Mar. 31.....	915.30	38,900	+3,330
Apr. 30.....	914.24	36,370	-2,530
May 31.....	913.01	33,530	-2,840
June 30.....	912.84	33,150	-380
July 31.....	912.79	33,040	-110
Aug. 31.....	913.59	34,860	+1,820
Sept. 30.....	914.60	37,210	+2,350
WTR YR 1975.....	-	-	+3,290

EXTREMES.--Current year: Maximum contents, 39,830 acre-ft (49.1 hm³) Mar. 26, 27, elevation, 915.67 ft (279.096 m); minimum, 25,070 acre-ft (30.9 hm³) Jan. 24, elevation, 909.02 ft (277.069 m).

MUSKINGUM RIVER BASIN

03126000 STILLWATER CREEK AT PIEDMONT, OHIO

LOCATION.--Lat 40°11'41", long 81°12'56", in sec. 35, T.10 N., R.6 W., Harrison County, 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).

GAGE.--Water-stage recorder. Datum of gage is 872.00 ft (265.785 m) above mean sea level, adjustment 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.--Discharge records good. Flow regulated by Piedmont Lake (see station 03125500).

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--37 years, 133 ft³/s (3.767 m³/s).

EXTREMES.--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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	204	35	388	123	285	320	401	410	108	49	39	392
2	249	43	420	174	272	380	431	382	105	46	37	259
3	282	49	436	291	288	368	421	348	140	44	36	267
4	284	58	422	334	369	360	409	322	150	69	36	344
5	272	115	404	316	399	347	409	353	130	105	36	317
6	266	103	394	370	333	371	434	395	159	97	34	286
7	104	89	395	409	280	399	435	384	141	95	32	328
8	32	83	371	406	250	387	447	377	125	92	26	312
9	27	79	336	404	230	355	459	370	117	96	19	338
10	28	77	289	336	289	366	453	356	109	107	20	145
11	26	74	226	316	348	370	440	339	112	108	30	97
12	25	122	301	301	351	421	423	327	141	101	31	269
13	25	132	362	359	344	416	285	317	121	97	31	284
14	26	119	356	392	298	304	108	217	115	95	70	253
15	30	168	345	416	281	265	109	129	113	92	71	230
16	48	174	390	440	312	330	109	133	119	87	107	136
17	49	164	388	431	347	405	108	131	106	83	97	94
18	37	242	352	437	285	395	108	130	148	80	89	139
19	32	276	330	364	176	420	113	129	121	81	84	166
20	30	323	318	229	117	368	114	124	102	81	79	141
21	29	324	309	156	81	306	109	119	92	76	74	131
22	29	348	305	150	67	366	107	116	85	68	71	121
23	28	348	303	150	248	386	108	118	79	59	73	117
24	27	340	347	158	1110	399	169	114	72	54	69	521
25	27	396	389	245	752	364	338	109	64	60	63	492
26	28	349	366	285	390	372	508	113	65	64	55	298
27	30	386	335	292	268	395	291	103	71	56	51	188
28	30	404	321	348	227	398	284	96	64	51	48	159
29	31	389	310	356	---	413	332	90	57	47	45	287
30	32	382	305	243	---	413	333	120	53	44	55	392
31	33	---	288	250	---	400	---	103	---	41	185	---
TOTAL	2400	6241	10801	9501	8997	11559	8795	6874	3184	2325	1793	7503
MEAN	77.4	208	348	306	321	373	293	222	106	75.0	57.8	250
MAX	284	404	436	440	1110	421	508	410	159	108	185	521
MIN	25	35	226	123	67	265	107	90	53	41	19	94
CAL YR 1974 TOTAL	60622		MEAN 166	MAX 436	MIN 14							
WTR YR 1975 TOTAL	79973		MEAN 219	MAX 1110	MIN 19							

EXTREMES.--Current year: Maximum discharge, 1,180 ft³/s (33.4 m³/s) Feb. 24, gage height, 10.03 ft (3.057 m); minimum daily, 19 ft³/s (0.538 m³/s) Aug. 9.

03126000 STILLWATER CREEK AT PIEDMONT, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATURATION	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)
APR. 08...	0900	425	6.5	8.8	72	977	8.0	5.1	130	46	15	2.3
SEP. 08...	1430	307	24.0	8.1	95	1010	8.0	2.8	140	60	15	3.0

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CAC03 (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
APR. 08...	130	0	2.1	107	12	440	.3	.05	.01	.41	.04	715
SEP. 08...	94	0	1.5	77	9.7	510	.2	.10	.01	.09	.04	788

DATE	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (MG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
APR. 08...	510	410	40	630	--	--	--	--	--	--	--	--
SEP. 08...	600	520	20	450	1	<10	10	2	20	<.5	7.4	3.3

03126500 CLENDENING LAKE NEAR TIPPECANOE, OHIO

LOCATION.--Lat 40°16'10"N, long 81°16'43"W, in NW 1/4 sec. 16, T.12 N., R.7 W., Harrison County, 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 Clendening 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) above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level. Prior to July 11, 1938, nonrecording gage at same site and datum.

EXTREMES.--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 (7,270 m³) Nov. 4, 1938, elevation, 862.33 ft (262.838 m).

REMARKS.--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.

COOPERATION.--Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	897.87	26,250	-
Oct. 31.....	897.08	24,910	-1,340
Nov. 30.....	897.66	25,900	+990
Dec. 31.....	894.65	20,910	-4,990
CAL YR 1974.....	-	-	+2,550
Jan. 31.....	895.17	21,740	+830
Feb. 28.....	898.90	28,180	+6,440
Mar. 31.....	899.02	28,410	+230
Apr. 30.....	898.56	27,540	-870
May 31.....	897.85	26,220	-1,320
June 30.....	897.76	26,060	-160
July 31.....	897.55	25,710	-350
Aug. 31.....	897.98	26,440	+730
Sept. 30.....	898.61	27,630	+1,190
WTR YR 1975.....	-	-	+1,380

EXTREMES.--Current year: Maximum contents, 30,800 acre-ft (38.0 hm³) Mar. 26, 27, elevation, 900.28 ft (274.405 m); minimum, 18,260 acre-ft (22.5 hm³) Jan. 17, elevation, 892.85 ft (272.141 m).

MUSKINGUM RIVER BASIN

03127000 STILLWATER CREEK AT TIPPECANOE, OHIO

LOCATION.--Lat 40°16'13", long 81°17'26", in NW 1/4 sec. 22, T.12 N., R.7 W., Harrison County, 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).

GAGE.--Water-stage recorder. Datum of gage is 849.00 ft (258.775 m) above mean sea level, adjustment of 1912. Prior to Feb. 9, 1939, nonrecording gage at same site and datum.

REMARKS.--Discharge records fair. Flow regulated by Clendening Lake on Brushy Fork, 1.9 mi (3.1 km) upstream, and Piedmont Lake, 16 mi (26 km) upstream (see stations 03126500 and 03125500).

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--37 years, 309 ft³/s (8.751 m³/s).

EXTREMES.--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.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	301	77	582	805	1010	708	988	1170	207	102	49	840
2	462	82	644	886	1060	938	1020	1120	201	96	46	1020
3	450	92	727	876	1010	984	900	948	242	93	44	780
4	466	96	748	828	1030	976	759	856	289	205	51	533
5	449	198	736	834	1090	948	715	828	255	385	50	444
6	444	239	724	636	1070	739	684	834	314	271	49	673
7	398	179	804	598	1070	606	669	714	309	206	44	643
8	127	151	1080	625	864	756	621	529	262	168	36	462
9	49	133	1200	826	750	778	603	486	227	186	25	407
10	43	127	1080	813	664	784	595	463	205	198	20	332
11	44	125	776	721	757	775	588	440	199	217	25	99
12	43	241	642	633	738	884	571	421	294	194	54	429
13	44	397	868	705	625	1320	535	416	267	165	48	536
14	49	338	940	936	531	1270	284	374	231	153	98	429
15	59	288	920	786	486	948	255	231	229	141	102	355
16	75	295	950	660	531	868	251	227	233	130	185	283
17	110	262	1010	613	706	1030	238	216	219	122	168	178
18	97	270	924	595	756	1040	217	211	325	115	148	269
19	83	335	878	631	592	1130	224	211	335	114	120	540
20	78	395	890	540	442	1350	229	198	265	118	103	460
21	75	555	868	369	323	1120	214	185	213	113	93	366
22	70	554	858	359	265	824	202	176	181	101	89	298
23	68	537	878	348	538	762	203	184	159	89	88	259
24	67	492	958	351	2060	832	302	186	143	76	84	892
25	68	640	1010	480	3330	1020	748	169	135	76	76	1630
26	72	814	982	926	2560	884	1280	183	145	84	67	1560
27	73	788	950	908	1350	970	1280	183	157	81	60	912
28	72	714	882	960	750	994	747	163	147	69	54	455
29	71	638	862	1130	---	1020	756	150	128	62	52	459
30	72	583	920	1090	---	1000	922	169	113	56	62	718
31	75	---	904	878	---	964	---	183	---	53	431	---
TOTAL	4654	10635	27195	22346	26958	29222	17600	12824	6629	4239	2621	17261
MEAN	150	355	877	721	963	943	587	414	221	137	84.5	575
MAX	466	814	1200	1130	3330	1350	1280	1170	335	385	431	1630
MIN	43	77	582	348	265	606	202	150	113	53	20	99
CAL YR 1974	TOTAL	139989	MEAN	384	MAX	1210	MIN	22				
WTR YR 1975	TOTAL	182184	MEAN	499	MAX	3330	MIN	20				

EXTREMES.--Current year: Maximum discharge, 3,440 ft³/s (97.4 m³/s) Feb. 25, gage height, 15.99 ft (4.874 m); minimum daily, 20 ft³/s (0.57 m³/s) Aug. 10.

MUSKINGUM RIVER BASIN

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03127000 STILLWATER CREEK AT TIPPECANOE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	
DATE	TIME						(UNITS)						
MAR. 26... AUG. 05...	1400 0945	892 48	5.5 20.5	10.8 6.2	86 68	721 1010	7.3 7.5	5.5 4.7	95 140	36 56	9.0 25	2.0 3.2	
		BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITAS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
DATE													
MAR. 26... AUG. 05...	90 145	0 0	7.2 7.3	74 119	8.5 15	300 460	.2 .3	.02 .09	.01 .04	.34 .31	.02 .04	501 776	
		HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
DATE													
MAR. 26... AUG. 05...	390 580	310 460	30 20	540 740	-- 2	-- <10	-- 10	-- 1	-- 10	-- <.5	-- 3.6	-- .0	

03127100 CROOKED CREEK NEAR STILLWATER, OHIO

LOCATION.--Lat 40°18'29", long 81°19'26", Tuscarawas County, at bridge on State Highway 258, 0.7 mi (1.1 km) upstream from mouth, 1.2 mi (1.9 km) southwest of Stillwater.

DRAINAGE AREA.--47.5 mi² (123.0 km²).

PERIOD OF RECORD.--Discharge, 1974 to current year; chemical analyses, 1974 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	
SEP. 23...	0945	48	13.5	8.7	.240	7.1	9.6	24	6.9	7.1	1.8	68	
DATE		CAR- BONATE (CO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
SEP. 23...	0	11	30	.1	.04	.01	.22	.04	124	88	90	350	

MUSKINGUM RIVER BASIN

03127500 STILLWATER CREEK AT UHRICHSVILLE, OHIO

LOCATION.--Lat 40°23'10", long 81°20'50", Tuscarawas County, 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).

GAGE.--Water-stage recorder above concrete dam. Datum of gage is 839.37 ft (255.840 m) above mean sea level, adjustment 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.--Discharge records good. Flow regulated by Piedmont Lake, 35 mi (56 km) upstream, and Clendening 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 DISCHARGE RECORDS

PERIOD OF RECORD.--July 1922 to current year.

AVERAGE DISCHARGE.--53 years, 425 ft³/s (12.04 m³/s).

EXTREMES.--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.

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.

REVISIONS (WATER YEARS).--WSP 853: Drainage area. WSP 1113: 1923-24, 1926-31, 1932(M), 1933-35.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	262	98	776	1150	1200	1140	1080	1350	460	107	49	1200
2	459	102	836	1100	1280	1020	1080	1400	431	91	43	1290
3	528	86	935	1100	1190	1110	1150	1390	353	87	46	1120
4	528	115	962	1050	1130	1110	1020	1150	552	146	49	824
5	520	226	962	1030	1160	1090	880	1050	520	431	61	632
6	512	410	935	917	1300	1040	815	1020	824	416	55	797
7	496	375	971	768	1300	790	788	990	716	295	52	940
8	354	298	1290	776	1190	940	761	761	536	219	52	707
9	130	256	1500	1120	962	938	707	672	416	202	34	560
10	70	226	1400	1100	800	935	689	632	347	252	27	513
11	63	220	1200	1000	809	915	680	600	320	258	14	295
12	63	375	980	899	854	1100	664	568	490	264	18	664
13	67	696	1070	792	776	1610	632	568	513	213	58	930
14	70	624	1190	926	672	1810	498	544	395	186	128	672
15	78	496	1210	998	600	1640	314	423	360	171	171	520
16	98	466	1230	800	624	1260	289	320	340	151	327	438
17	120	445	1360	736	845	1290	283	307	327	141	307	314
18	120	403	1270	696	1030	1390	277	295	307	141	230	353
19	102	445	1130	736	917	1500	283	295	475	141	191	950
20	78	504	1070	728	712	1800	301	277	416	132	151	870
21	67	696	1030	560	536	1600	277	252	340	132	128	632
22	70	768	998	459	410	1300	258	235	270	124	124	483
23	78	752	1010	431	800	1110	246	224	219	107	120	387
24	74	712	1220	424	3300	1020	295	241	197	107	111	950
25	78	752	1300	520	3950	1380	734	230	171	124	107	1740
26	82	998	1300	1080	3300	1260	1380	241	166	87	94	1870
27	90	1030	1200	1120	1950	1130	1540	264	171	94	80	1690
28	98	971	1180	1060	1500	1150	1300	230	186	87	68	980
29	94	881	1060	1200	---	1170	930	197	156	72	65	576
30	94	800	1050	1400	---	1200	1020	191	128	58	124	648
31	94	---	1090	1100	---	1120	---	230	---	55	725	---
TOTAL	5637	15226	34715	27776	35097	37868	21171	17147	11102	5091	3809	24545
MEAN	182	508	1120	896	1253	1222	706	553	370	164	123	818
MAX	528	1030	1500	1400	3950	1810	1540	1400	824	431	725	1870
MIN	63	86	776	424	410	790	246	191	128	55	14	285
(+)	1.49	1.56	1.59	1.66	1.70	1.72	1.83	1.72	1.73	1.83	2.03	1.86

CAL YR 1974 TOTAL 192364 MEAN 527 MAX 1700 MIN 25 (+) 1.57
WTR YR 1975 TOTAL 239184 MEAN 655 MAX 3950 MIN 14 (+) 1.73

EXTREMES.--Current year: Maximum discharge, 3,970 ft³/s (112 m³/s) Feb. 25; gage height, 6.73 ft (2.051 m); minimum daily, 14 ft³/s (0.396 m³/s) Aug. 11.

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

MUSKINGUM RIVER BASIN

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03127500 STILLWATER CREEK AT UHRICHSVILLE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 26...	1130	1230	7.0	10.1	83	595	7.3	6.0	85	25	13	2.1
AUG. 05...	1300	64	24.0	6.6	78	1660	7.3	2.9	140	56	130	7.3
DATE	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 26...	76	0	6.1	62	18	230	.2	.12	.05	.32	.05	417
AUG. 05...	144	0	12	118	190	480	.3	.96	.09	.23	.01	1080
DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 26...	320	250	20	340	--	--	--	--	--	--	--	--
AUG. 05...	580	460	20	960	0	<10	10	0	10	<.5	28	.3

03128000 TAPPAN LAKE NEAR TAPPAN, OHIO

LOCATION.--Lat 40°21'24", long 81°13'38", in NW 1/4 sec. 4, T.13 N., E.7 W., Harrison County, 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) above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level.

EXTREMES.--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.

REMARKS.--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.

COOPERATION.--Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	899.28	35,030	-
Oct. 31.....	894.60	24,850	-10,180
Nov. 30.....	894.34	24,350	-520
Dec. 31.....	894.23	24,110	-220
CAL YR 1974.....	-	-	-3,290
Jan. 31.....	894.61	24,870	+760
Feb. 28.....	894.76	25,170	+300
Mar. 31.....	898.47	33,140	+7,970
Apr. 30.....	899.60	35,790	+2,650
May 31.....	899.31	35,100	-690
June 30.....	899.20	34,850	-270
July 31.....	899.07	34,520	-310
Aug. 31.....	899.23	34,910	+390
Sept. 30.....	900.00	36,750	+1,840
WTR YR 1975.....	-	-	+1,720

EXTREMES.--Current year: Maximum contents, 37,500 acre-ft (46.2 hm³) Sept. 28 and 29, elevation, 900.31 ft (274.414 m); minimum, 16,030 acre-ft (19.8 hm³) Feb. 18, elevation, 889.67 ft (271.171 m).

MUSKINGUM RIVER BASIN

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

LOCATION.--Lat 40°21'25", long 81°13'49", in NW 1/4 sec. 4, T.13 N., R.7 W., Harrison County, 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).

GAGE.--Water-stage recorder and masonry control. Datum of gage is 861.00 ft (262.433 m) above mean sea level, adjustment 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.--Discharge records good. Flow completely regulated by Tappan Lake (see station 03128000).

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to current year. Published as Little Stillwater Creek at Tappan 1938-39.

AVERAGE DISCHARGE.--37 years, 74.6 ft³/s (2.113 m³/s).

EXTREMES.--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.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	219	159	254	445	11	2.4	247	61	11	5.8	76
2	165	219	159	251	440	11	1.9	257	61	11	5.5	80
3	180	219	159	126	436	11	2.2	260	198	9.8	5.0	74
4	177	71	159	22	431	12	3.1	257	244	9.3	5.0	67
5	177	2.0	156	22	431	12	4.1	356	107	8.8	4.8	61
6	174	2.0	156	71	431	12	5.3	348	63	8.3	4.6	72
7	174	2.0	156	94	431	12	6.8	214	74	7.8	4.4	74
8	174	2.0	159	94	436	12	8.6	92	74	7.3	4.4	67
9	174	2.0	159	94	431	12	11	34	203	7.8	4.1	56
10	183	2.4	159	94	431	12	13	40	247	8.3	3.8	52
11	174	42	159	94	431	8.8	18	41	98	8.8	3.8	47
12	174	98	195	94	431	2.8	24	44	30	8.3	3.6	72
13	174	98	213	177	431	2.9	30	49	39	7.8	3.7	78
14	174	144	213	349	418	2.8	34	49	41	7.3	6.1	76
15	174	192	213	440	409	2.8	35	50	43	6.8	7.3	70
16	207	159	240	298	400	2.8	37	52	46	6.4	11	63
17	225	156	258	2.0	400	2.8	40	50	44	6.1	12	58
18	225	52	258	2.0	148	2.8	40	49	44	6.1	12	70
19	222	2.1	258	2.0	1.3	3.6	40	49	44	6.4	11	88
20	222	2.1	258	2.0	84	244	43	46	43	6.1	12	94
21	222	2.1	258	2.0	179	309	40	43	37	5.8	12	94
22	198	2.1	254	45	189	244	40	41	29	5.5	13	90
23	73	2.1	254	201	192	241	40	44	24	5.3	12	86
24	82	2.1	237	374	94	241	50	43	20	5.3	12	112
25	222	87	210	234	1.7	247	72	40	18	9.8	11	121
26	222	159	210	150	1.6	247	96	47	17	9.8	11	121
27	222	159	210	150	4.8	360	101	49	16	9.3	10	121
28	219	159	207	286	11	423	181	46	16	8.3	9.8	121
29	219	159	207	370	---	418	238	41	14	7.8	11	280
30	146	159	234	321	---	414	235	40	13	6.8	16	427
31	219	---	254	450	---	140	---	36	---	6.4	41	---
TOTAL	5691	2576.0	6381	5165.0	8169.4	3677.1	1492.6	3054	2008	239.6	288.7	2970
MEAN	184	85.9	206	167	292	119	49.8	98.5	66.9	7.73	9.31	99.0
MAX	225	219	258	450	445	423	238	356	247	11	41	427
MIN	73	2.0	156	2.0	1.3	2.8	1.9	34	13	5.3	3.6	47
CAL YR 1974 TOTAL	35404.6											
WTR YR 1975 TOTAL	41712.4											
MEAN 1974	97.0											
MAX 1974	400											
MIN 1974	1.1											
MEAN 1975	114											
MAX 1975	450											
MIN 1975	1.3											

EXTREMES.--Current year: Maximum discharge, 465 ft³/s (13.2 m³/s) Jan. 29, gage height, 6.55 ft (1.996 m); minimum daily, 1.3 ft³/s (0.037 m³/s) Feb. 19.

MUSKINGUM RIVER BASIN

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03128500 LITTLE STILLWATER CREEK BELOW TAPPAN DAM, AT TAPPAN, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATURATION	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)
MAR. 26...	1300	244	5.5	11.2	89	592	7.6	5.4	77	29	5.9	2.0
AUG. 11...	1530	3.8	19.0	7.6	81	680	7.3	7.6	84	34	6.7	2.2

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 26...	86	0	3.5	71	8.0	240	.1	.04	.01	.37	.03	410
AUG. 11...	152	0	12	125	5.5	240	.1	1.3	.09	.00	.21	458

DATE	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 26...	310	240	20	30	--	--	--	--	--	--	--	--
AUG. 11...	350	230	10	3400	4	<10	0	1	10	<.5	6.6	2.7

03128600 LITTLE STILLWATER CREEK NEAR DENNISON, OHIO

LOCATION.--Lat 40°24'19", long 81°17'18", Tuscarawas County, at county road bridge, 1.3 mi (2.1 km) upstream from Irish Run, 2.5 mi (4.0 km) east of Dennison.

DRAINAGE AREA.--96.4 mi² (249.7 km²).

PERIOD OF RECORD.--Discharge, 1974 to current year; chemical analyses, 1974 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	INSTANTANEOUS DISCHARGE (ft ³ /s)	(m ³ /s)
May 22	52	1.47

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)
SEP. 16...	1445	83	18.5	8.6	640	7.7	6.5	76	28	15	2.2	114

DATE	CARBONATE (CO3) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
SEP. 16...	0	11	230	.1	.38	.01	.28	.17	426	310	20	1100

MUSKINGUM RIVER BASIN

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03128700 TUSCARAWAS RIVER AT TUSCARAWAS, OHIO

LOCATION.--Lat 40°23'37", long 81°23'26", Tuscarawas County, at bridge on County Road 62, 0.4 mi (0.6 km) east of Tuscarawas, 2.6 mi (4.2 km) downstream from Stillwater Creek.

DRAINAGE AREA.--2,367 mi² (6,130 km²).

PERIOD OF RECORD.--Discharge, 1974 to current year; chemical analyses, 1974 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	
SEP. 16...	1400	1850	16.5	7.9	890	7.5	8.0	96	27	45	4.5	109	
DATE		CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
SEP. 16...	0	97	220	.2	.20	.09	.88	.09	552	350	50	680	

MUSKINGUM RIVER BASIN

03129000 TUSCARAWAS RIVER AT NEWCOMERSTOWN, OHIO

LOCATION.--Lat 40°15'41", long 81°36'33", in T.5 N., R.3 W., Tuscarawas County, 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).

GAGE.--Water-stage recorder. Datum of gage is 780.00 ft (237.744 m) above mean sea level, adjustment 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.--Discharge records good. Diversion from basin at Portage Lakes (see REMARKS for stations 03116000 and 03117000). Flow regulated by eight flood-control reservoirs at points 40 mi (64 km) to 64 mi (103 km) upstream.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--54 years, 2,453 ft³/s (69.47 m³/s).

EXTREMES.--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. 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.

REVISIONS (WATER YEAR).--WSP 728: 1929(M). WSP 873: 1935. WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1260	1100	3550	7760	9350	9700	5310	3900	4080	1070	584	5260
2	1280	1140	3620	8130	9030	9100	4900	5290	6040	1000	561	5450
3	1440	1250	3940	7830	8410	9060	5100	5430	6380	940	543	4660
4	1500	1390	4330	7010	8400	9130	5210	4570	6120	1010	575	3660
5	1510	2580	4410	6400	8240	9100	4840	4020	5410	1190	694	2780
6	1470	4260	4310	5750	7860	9010	4220	4060	4730	1290	735	3100
7	1430	4220	4190	5060	8070	8990	3760	4530	5260	1160	677	4260
8	1390	3220	4710	4840	7290	9270	3490	4460	4670	1010	607	3560
9	1250	2640	7610	7640	6080	9130	3270	3560	3590	1070	558	2720
10	1080	2090	8740	9640	5220	8350	3100	3040	3060	1190	517	2340
11	1020	1860	8330	9400	4680	7980	3000	2750	2740	1190	494	1950
12	1000	2260	7080	8820	4730	8490	2860	2530	2860	1190	526	2570
13	1010	3880	6650	7950	4490	9350	2740	2510	3440	1120	563	4190
14	998	4470	6710	7660	4010	9630	2580	2550	3230	1010	766	3520
15	1030	3760	7020	7600	3650	9400	2270	2410	2630	923	1780	2590
16	1320	3140	7170	7170	3580	8870	2150	2100	2320	886	2070	2090
17	1510	2820	7470	6170	4230	8610	2100	1960	2250	831	2320	1800
18	1480	2550	7650	4830	6700	9130	2040	1860	2140	796	1490	2100
19	1410	2280	7200	3940	8150	10200	2070	1800	1970	804	1120	5960
20	1300	2320	6560	4110	7970	10100	2190	1750	1960	808	966	6660
21	1220	2590	5780	3710	6930	10000	2130	1670	1900	812	822	5970
22	1150	3360	5050	3140	5640	10300	1930	1610	1680	841	865	5120
23	1110	3480	4590	3040	5270	9470	1830	1940	1490	886	898	4510
24	1000	3290	5140	3060	12800	8500	1960	2270	1460	803	786	5740
25	948	3170	8590	3280	10100	8760	2700	2120	1520	871	710	6980
26	1100	4530	9490	4740	9500	8650	4120	1960	1310	959	702	6930
27	1110	5490	9380	6540	9940	7840	4060	2200	1260	964	747	6510
28	1090	4970	8860	6400	10100	6770	3770	2250	1410	841	911	5470
29	1060	4300	7720	7900	---	5880	3350	1830	1370	727	794	3970
30	1060	3830	6890	10600	---	6290	3300	1760	1210	657	986	3600
31	1040	---	6750	9570	---	6340	---	2230	---	613	2900	---
TOTAL	37576	92240	199490	199690	200420	271400	96350	86920	89490	29462	29267	126020
MEAN	1212	3075	6435	6442	7158	8755	3212	2804	2983	950	944	4201
MAX	1510	5490	9490	10600	12800	10300	5310	5430	6380	1290	2900	6980
MIN	948	1100	3550	3040	3580	5880	1830	1610	1210	613	494	1800
CAL YR 1974 TOTAL	1257333											
WTR YR 1975 TOTAL	1458325											
MEAN	3445											
MAX	11200											
MIN	494											

EXTREMES.--Current year: Maximum discharge, 13,800 ft³/s (391 m³/s) Feb. 24, gage height, 10.22 ft (3.115 m); minimum daily, 494 ft³/s (14.0 m³/s) Aug. 11.

MUSKINGUM RIVER BASIN

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03129000 TUSCARAWAS RIVER AT NEWCOMERSTOWN, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1946 to 1949, 1955 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	DIS-SOLVED SILICA (SIO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)
MAR. 24...	1130	8440	10.0	10.2	90	618	7.2	7.2	64	16	30	2.8
SEP. 16...	0925	2040	15.5	7.9	79	800	7.6	8.7	92	26	45	4.7

DATE	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKALINITY AS CaCO ₃ (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 24...	72	0	7.3	59	67	140	.1	.14	.03	1.2	.42	363
SEP. 16...	113	0	4.5	93	97	190	.2	.13	.08	1.1	.31	520

DATE	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (MG)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 24...	230	170	40	700	--	--	--	--	--	--	--	--
SEP. 16...	340	240	20	330	3	10	10	6	170	<.5	13	1.7

03129100 WHITE EYES CREEK NEAR FRESNO, OHIO

LOCATION.--Lat 40°18'17", long 81°45'01", Coshocton County, at bridge on private road adjacent to State Highway 93, 2 mi (3 km) south of Fresno.

DRAINAGE AREA.--52.1 mi² (134.9 km²).

PERIOD OF RECORD.--Discharge, 1972 to current year; chemical analyses, 1972 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	INSTANTANEOUS DISCHARGE (ft ³ /s)	INSTANTANEOUS DISCHARGE (ft ³ /s)
Oct. 18	11	0.31

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	DIS-SOLVED SILICA (SIO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)
SEP. 23...	1500	75	14.0	8.7	320	7.2	11	35	9.8	5.9	2.3	78

DATE	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
SEP. 23...	0	8.7	60	.1	.09	.03	2.4	.05	171	130	60	100

MUSKINGUM RIVER BASIN

03129150 TUSCARAWAS RIVER AT COSHOCTON, OHIO

LOCATION.--Lat 40°16'44", long 81°52'15", Coshocton County, at bridge on Bridge Street at Coshocton city limits, 0.3 mi (0.5 km) upstream from junction with Walhonding River.

DRAINAGE AREA.--2,596 mi² (6,724 km²).

PERIOD OF RECORD.--Discharge, 1974 to current year; chemical analyses, 1974 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TEMPER-ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HC03) (MG/L)	
SEP. 15...	1115	2760	16.0	8.0	740	7.7	8.5	80	20	42	4.6	108	
DATE		CAR-BONATE (CO3) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED FLUO-RIDE (F) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L)	HARD-NESS (CA+MG) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)
SEP. 15...	0	91	160	.3	.08	.02	.27	.10	460	280	50	150	

03129300 WHETSTONE CREEK TRIBUTARY NEAR OLIVESBURG, OHIO

LOCATION.--Lat 40°53'15", long 82°24'25", Ashland County, at culvert on State Highway 96, 1.1 mi (1.8 km) east of Olivesburg.

DRAINAGE AREA.--0.236 mi² (0.611 km²).

PERIOD OF RECORD.--Discharge, 1950 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 24	4.78	1.457	29	0.82

MUSKINGUM RIVER BASIN

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03129500 CHARLES MILL LAKE NEAR MIFFLIN, OHIO

LOCATION.--Lat 40°44'26", long 82°21'47", in NE 1/4 sec. 35, T.23 N., R.17 W., Ashland County, 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) above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level.

EXTREMES.--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).

REMARKS.--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.

COOPERATION.--Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	997.46	7,730	-
Oct. 31.....	997.24	7,430	-300
Nov. 30.....	998.25	8,860	+1,430
Dec. 31.....	998.58	9,360	+500
CAL YR 1974.....	-	-	-510
Jan. 31.....	1,000.88	13,170	+3,810
Feb. 28.....	1,006.85	28,020	+14,850
Mar. 31.....	997.74	8,130	-19,890
Apr. 30.....	997.51	7,800	-330
May 31.....	997.47	7,750	-50
June 30.....	997.20	7,370	-380
July 31.....	997.02	7,120	-250
Aug. 31.....	997.34	7,570	+450
Sept. 30.....	997.20	7,370	-200
WTR YR 1975.....	-	-	-360

EXTREMES.--Current year: Maximum contents, 29,930 acre-ft (36.9 hm³) Feb. 26 and 27, elevation, 1,007.45 ft (307.071 m); minimum, 7,090 acre-ft (8.74 hm³) Aug. 3, elevation, 997.00 ft (303.886 m).

MUSKINGUM RIVER BASIN

03130000 BLACK FORK BELOW CHARLES MILL DAM, NEAR HIFFLIN, OHIO

LOCATION.--Lat 40°44'16", long 82°21'48", in NE 1/4 sec. 35, T.23 N., R.17 W., Ashland County, 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).

GAGE.--Water-stage recorder. Datum of gage is 981.56 ft (299.179 m) above mean sea level, adjustment of 1912. Dec. 3, 1941, to Dec. 5, 1944, water-stage recorder at site 300 ft (91 m) downstream at same datum.

REMARKS.--Discharge records good. Flow regulated by Charles Mill Lake (see station 03129500).

WATER DISCHARGE RECORDS

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.

AVERAGE DISCHARGE.--37 years, 196 ft³/s (5.551 m³/s).

EXTREMES.--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.

Flood in March 1913 reached a discharge of 11,700 ft³/s (331 m³/s), computed by Corps of Engineers.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	182	40	484	613	949	1250	344	155	265	36	17	55
2	160	60	427	595	949	1220	327	150	258	32	17	69
3	74	64	350	604	940	1200	321	146	257	30	18	72
4	32	77	305	604	923	1180	290	148	243	31	21	72
5	34	111	275	568	892	1150	260	139	199	28	22	72
6	35	232	260	521	807	1120	235	170	220	26	23	101
7	38	318	260	461	673	597	187	287	237	25	24	111
8	35	334	293	465	547	655	160	370	216	25	25	200
9	34	311	357	344	446	598	134	374	156	24	23	217
10	36	280	442	699	352	988	117	337	109	24	22	130
11	34	246	521	748	305	1070	115	284	83	24	23	51
12	34	237	604	817	275	1050	111	217	85	23	30	44
13	34	242	651	909	245	1020	109	150	87	26	30	44
14	33	267	669	883	222	912	95	123	95	36	32	45
15	38	283	703	775	208	781	92	93	101	37	34	45
16	37	292	752	632	205	678	92	93	111	37	40	45
17	38	289	817	492	235	588	92	90	126	34	41	44
18	38	269	861	402	380	646	92	61	141	33	41	61
19	37	239	874	344	632	696	97	44	153	30	37	149
20	37	233	849	308	812	700	103	51	173	28	32	208
21	33	264	761	281	862	686	103	56	196	28	28	204
22	32	297	646	257	835	655	103	65	201	26	30	227
23	33	334	529	237	200	577	103	112	178	24	26	220
24	36	377	542	225	122	500	117	133	149	24	23	188
25	37	419	655	240	45	431	130	123	113	23	21	102
26	36	449	793	299	689	370	143	189	83	21	25	84
27	36	465	883	364	1260	318	148	327	50	21	27	92
28	36	631	896	424	1260	278	148	386	36	20	25	93
29	36	662	870	222	---	281	150	350	40	23	27	88
30	38	564	770	591	---	299	148	298	38	19	34	84
31	40	---	669	931	---	321	---	250	---	18	41	---
TOTAL	1413	8886	18768	15855	16270	22805	4666	5771	4399	836	859	3217
MEAN	45.6	296	605	511	581	736	156	186	147	27.0	27.7	107
MAX	182	662	896	931	1260	1250	344	386	265	37	41	227
MIN	32	40	260	222	45	278	92	44	36	18	17	44

CAL YR 1974 TOTAL 108921 MEAN 298 MAX 1370 MIN 11
WTR YR 1975 TOTAL 103745 MEAN 284 MAX 1260 MIN 17

EXTREMES.--Current year: Maximum discharge, 1,280 ft³/s (36.2 m³/s) Feb. 27, gage height, 5.65 ft (1.722 m); minimum daily, 17 ft³/s (0.48 m³/s) Aug. 1, 2.

MUSKINGUM RIVER BASIN

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03130000 BLACK FORK BELOW CHARLES HILL DAM, NEAR HIFFLIN, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 19...	1050	699	6.0	10.4	83	389	7.8	5.6	46	13	12	2.2
SEP. 17...	1255	44	17.0	8.7	90	440	8.0	2.0	50	16	16	3.3

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 19...	136	0	3.4	112	23	54	.2	.17	.02	1.6	.11	223
SEP. 17...	167	0	2.7	137	22	64	.3	.17	.01	.03	.09	256

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND (5 DAY) (MG/L)
MAR. 19...	170	57	20	30	--	--	--	--	--	--	--	--
SEP. 17...	190	54	20	10	4	<10	0	0	10	<.5	7.2	3.9

MUSKINGUM RIVER BASIN

03130500 TOUBY RUN AT MANSFIELD, OHIO

LOCATION.--Lat 40°45'53", long 82°32'43", in NW 1/4 sec. 20, T-21 N., R-18 W., Richland County, on left bank 100 ft (30 m) downstream from West 4th Street Bridge at west edge of Mansfield, and 2 mi (3 km) upstream from mouth.

DRAINAGE AREA.--5.44 mi² (14.1 km²).

GAGE.--Water-stage recorder and broad-crested weir. Datum of gage is 1,216.42 ft (370.765 m) above mean sea level, adjustment of 1912 (levels by city of Mansfield).

REMARKS.--Discharge records poor.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--29 years, 5.10 ft³/s (0.144 m³/s), 12.73 in/yr (323 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 965 ft³/s (27.3 m³/s) June 6, 1947, gage height, 4.17 ft (1.271 m), from rating curve extended above 160 ft³/s (4.53 m³/s) on the basis of slope-area measurements at gage heights 2.49 ft (0.759 m) and 4.17 ft (1.27 m) and computation of flow over dam at gage height 3.94 ft (1.201 m); no flow July 29, 1975 and part of each day Sept. 4, 1965, Nov. 10, 1967, July 30, 31, Aug. 1, 1975.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.85	.75	7.5	15	6.8	5.5	5.0	6.6	10	1.1	.20	5.3
2	.79	.95	10	12	5.6	5.0	4.9	5.0	3.0	.95	4.3	2.0
3	.79	6.0	9.0	13	5.4	4.6	8.8	6.6	4.4	.85	15	17
4	.87	18	8.0	12	5.4	4.2	5.4	6.1	4.0	.75	1.2	10
5	.93	22	7.0	10	7.8	4.0	4.2	5.0	4.2	.70	1.2	32
6	.93	8.0	6.5	9.0	7.6	4.9	3.6	21	3.6	.65	.97	25
7	.80	6.0	10	8.5	6.1	51	3.4	5.5	2.8	.60	.64	3.4
8	.70	4.6	50	15	5.0	12	3.2	5.0	2.4	1.2	.64	2.0
9	.65	4.0	20	50	4.4	7.2	3.0	4.4	2.0	.97	.64	1.7
10	.60	3.8	10	20	4.2	6.2	2.8	4.0	1.8	1.4	1.4	1.2
11	.60	7.0	9.0	12	4.6	5.7	2.6	3.6	3.0	1.4	.64	3.4
12	.55	19	13	8.4	3.8	22	2.4	3.4	6.0	1.2	.64	6.0
13	.55	9.0	15	6.5	3.4	11	2.3	3.2	3.2	8.5	17	3.0
14	.55	7.0	14	5.5	3.6	6.6	2.3	2.9	2.6	3.4	6.5	2.4
15	3.0	5.5	16	5.0	5.4	9.9	2.3	2.7	2.2	.50	12	1.7
16	1.8	4.8	21	4.6	22	9.7	2.1	2.5	2.2	.40	2.0	1.6
17	1.0	4.2	15	4.4	57	12	1.9	2.3	1.7	.50	1.4	1.5
18	.85	4.0	12	4.8	18	8.1	2.1	2.0	1.7	.50	.79	60
19	.80	4.4	10	5.5	9.7	21	6.6	1.9	1.5	.97	.64	9.8
20	.75	30	9.0	4.6	6.8	8.1	4.0	1.8	1.7	.64	.64	18
21	.70	17	8.0	4.0	5.5	6.2	2.0	1.7	1.2	.50	4.8	3.8
22	.70	11	8.0	3.6	10	6.9	3.0	1.6	1.0	.40	2.6	2.3
23	.75	9.0	10	3.6	196	5.5	6.1	1.6	.90	.40	.64	2.0
24	.80	20	45	3.6	81	8.4	14	4.4	.80	.30	.64	19
25	.90	65	25	59	13	5.5	5.5	9.0	.75	.30	.64	3.8
26	.80	28	14	13	8.4	5.0	5.0	3.9	.80	.30	9.8	2.6
27	.70	16	12	6.8	6.9	4.9	5.0	1.8	3.0	.30	.97	2.0
28	.70	10	10	8.2	6.0	5.0	6.1	1.2	11	.20	.64	1.7
29	.70	8.0	9.0	168	---	23	6.1	1.5	2.5	0	13	1.4
30	.75	7.0	9.0	13	---	6.8	5.5	2.0	1.4	.10	15	1.4
31	.80	---	19	8.1	---	5.4	---	1.8	---	.10	36	---
TOTAL	26.66	360.00	441.0	516.7	519.4	301.3	131.2	126.0	87.35	30.08	153.17	247.0
MEAN	.86	12.0	14.2	16.7	18.6	9.72	4.37	4.06	2.91	.97	4.94	8.23
MAX	3.0	65	50	168	196	51	14	21	11	8.5	36	60
MIN	.55	.75	6.5	3.6	3.4	4.0	1.9	1.2	.75	0	.20	1.2
CFSM	.16	2.21	2.61	3.07	3.42	1.79	.80	.75	.53	.18	.91	1.51
IN.	.18	2.46	3.02	3.53	3.55	2.06	.90	.86	.60	.21	1.05	1.69
CAL YR 1974 TOTAL	2398.52											
WTR YR 1975 TOTAL	2439.86											
MEAN	6.57											
MAX	86											
MIN	.27											
CFSM	1.21											
IN	16.40											
CFSM	1.48											
IN	20.10											

EXTREMES.--Current year: Peak discharges above base of 200 ft³/s (5.66 m³/s) and maximums (*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-29	0400	*2.69	*532	08-03	1530	1.83	219
02-23	2300	2.34	396				

Minimum discharge: No flow July 29 and part of each day July 30, 31, Aug. 1.

MUSKINGUM RIVER BASIN

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03130500 TOUBY RUN AT MANSFIELD, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 19...	0905	24	6.0	10.0	80	556	7.6	5.1	40	10	56	2.2
SEP. 18...	1450	75	17.0	8.8	91	320	7.6	6.5	34	7.1	17	3.4

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARRON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)
MAR. 19...	106	0	4.3	87	91	49	.2	.26	.03	.52	.26	306
SEP. 18...	89	0	3.6	73	19	47	.3	.06	.04	.77	.36	178

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (MG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 19...	140	54	40	50	--	--	--	--	--	--	--	--
SEP. 18...	110	41	30	40	9	10	10	33	60	<.5	9.7	4.0

MUSKINGUM RIVER BASIN

03131500 BLACK FORK AT LOUDONVILLE, OHIO

LOCATION.--Lat 40°38'09", long 82°14'22", in NW 1/4 sec. 1, T.19 N., R. 16 W., Ashland County, on right bank at upstream side of bridge on State Highway 3 at Loudonville, 1.5 mi (2.4 km) downstream from Big Run.

DRAINAGE AREA.--349 mi² (904 km²).

GAGE.--Water-stage and water-quality recorder. Datum of gage is 929.16 ft (283.208 m) above mean sea level. Prior to Oct. 23, 1941, nonrecording gage at same site and datum.

REMARKS.--Discharge records good. Interruptions in the water-quality record were due to malfunctions of the instrument. 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 03132000).

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--44 years, 340 ft³/s (9.629 m³/s).

EXTREMES.--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.

REVISIONS (WATER YEARS).--WSP 873: 1935. WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	282	126	639	1100	1210	1570	600	376	648	126	90	250
2	259	345	611	837	1170	1520	582	324	422	123	90	190
3	211	225	543	846	1140	1480	616	297	434	121	96	150
4	123	231	481	890	1110	1430	557	333	394	131	155	190
5	123	555	441	769	1090	1390	499	300	422	121	103	180
6	121	376	419	710	1100	1350	450	530	434	112	114	550
7	121	438	422	667	904	1350	397	481	391	110	101	300
8	123	444	868	1130	754	1040	345	540	351	114	99	500
9	123	416	781	1280	655	1060	324	530	297	112	99	350
10	123	382	667	1080	548	1150	291	490	236	110	96	180
11	121	354	689	1110	504	1310	285	431	203	121	116	130
12	121	568	812	1010	470	1470	279	382	250	110	112	200
13	118	431	944	1100	429	1420	273	288	206	110	114	180
14	116	502	934	1060	395	1230	256	262	206	198	262	150
15	138	456	1000	944	385	1060	248	220	239	131	162	130
16	141	419	1230	800	467	1000	248	214	291	123	220	120
17	126	403	1130	664	852	938	242	209	239	121	136	120
18	126	382	1080	593	1050	982	242	196	256	118	133	310
19	123	357	1060	583	931	1130	288	170	250	114	126	450
20	121	530	1020	487	1020	1060	262	162	324	112	118	450
21	116	527	928	431	1070	952	250	175	300	105	112	379
22	116	521	806	403	1040	928	248	172	303	105	126	345
23	118	506	732	381	2120	841	250	248	285	103	116	354
24	131	596	1320	374	3770	784	403	250	259	101	105	450
25	126	969	1170	691	1340	703	342	231	231	105	99	312
26	123	717	1040	873	867	621	306	462	188	99	107	223
27	118	645	1070	602	1690	549	297	419	167	94	162	220
28	116	720	1080	626	1630	504	306	499	150	90	107	214
29	121	794	1050	1890	---	659	351	478	131	92	112	203
30	131	704	966	1090	---	609	312	444	126	90	248	201
31	133	---	902	1260	---	586	---	391	---	90	160	---
TOTAL	4209	14639	26835	26281	29711	32676	10349	10504	8633	3512	3996	7981
MEAN	136	488	866	848	1061	1054	345	339	288	113	129	266
MAX	282	969	1320	1890	3770	1570	616	540	648	198	262	550
MIN	116	126	419	374	385	504	242	162	126	90	90	120

CAL YR 1974 TOTAL 175150 MEAN 480 MAX 1710 MIN 92
WTR YR 1975 TOTAL 179326 MEAN 491 MAX 3770 MIN 90

EXTREMES.--Current year: Maximum discharge, 4,270 ft³/s (121 m³/s) Feb. 24, gage height, 11.17 ft (3.405 m); minimum daily, 90 ft³/s (2.55 m³/s) July 28, July 30 to Aug. 2.

MUSKINGUM RIVER BASIN

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03131500 BLACK FORK AT LOUDONVILLE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1957-58, April 1968 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 05...	1500	1380	2.5	11.8	86	340	7.6	5.5	38	10	12	2.6
SEP. 18...	1000	155	16.0	7.6	76	525	7.7	7.5	64	20	23	4.1

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 05...	108	0	4.3	89	21	43	.3	.39	.04	1.6	.27	186
SEP. 18...	204	0	6.5	167	33	61	.3	.17	.05	1.6	.21	314

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 05...	140	47	80	20	--	--	--	--	--	--	--	--
SEP. 18...	240	75	20	70	3	230	10	11	50	<.5	6.0	3.8

MUSKINGUM RIVER BASIN

03131500 BLACK FORK AT LOUDONVILLE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C))

PERIOD OF RECORD.--1968 to current year.

EXTREMES.--Period of record: Maximum, 1,270 micromhos Dec. 20, 1973; minimum, 84 micromhos Aug. 18, 1972.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
1	483	471	603	558	---	---	649	382	373	331	306	291	
2	510	489	615	336	---	---	427	388	331	313	303	288	
3	516	495	486	423	---	---	571	425	325	313	318	303	
4	594	504	486	459	---	---	652	445	334	325	336	312	
5	594	573	---	---	---	---	445	436	363	331	324	315	
6	585	573	---	---	---	---	448	442	432	369	321	312	
7	573	564	---	---	---	---	463	442	495	417	531	312	
8	579	555	---	---	---	---	463	352	486	462	438	342	
9	594	564	---	---	---	---	373	319	486	447	387	351	
10	597	576	---	---	511	508	433	364	---	---	381	360	
11	597	573	---	---	533	515	439	400	465	459	399	363	
12	600	570	---	---	518	500	403	373	552	456	423	378	
13	588	570	---	---	510	435	376	355	525	501	387	375	
14	582	561	---	---	456	438	379	367	528	492	393	378	
15	582	543	---	---	463	427	391	379	549	513	441	390	
16	636	555	---	---	442	394	418	391	729	531	627	438	
17	570	546	---	---	416	401	466	418	756	405	450	408	
18	576	558	---	---	428	416	490	454	444	363	435	399	
19	576	558	---	---	435	402	724	481	480	450	444	402	
20	573	555	---	---	498	405	544	490	474	393	435	420	
21	582	552	---	---	436	412	532	490	393	369	435	426	
22	576	555	---	---	424	412	553	514	369	363	438	429	
23	585	561	---	---	479	431	556	523	390	225	444	429	
24	621	564	---	---	576	378	592	547	243	189	447	429	
25	618	561	---	---	408	397	634	421	363	249	462	441	
26	594	588	504	483	427	403	490	373	531	333	456	444	
27	588	564	531	498	397	367	583	505	342	306	471	450	
28	579	564	540	486	365	350	553	505	330	303	477	462	
29	570	552	504	465	356	350	508	283	---	---	576	450	
30	603	555	552	465	384	357	415	325	---	---	477	447	
31	639	552	---	---	396	381	421	367	---	---	480	459	
MONTH	639	471	---	---	---	---	724	283	756	189	627	288	
		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
1	498	468	564	486	525	351	531	525	567	549	477	381	
2	483	471	507	483	444	426	543	522	579	552	504	471	
3	516	468	501	492	489	447	543	528	582	546	510	489	
4	552	471	534	483	480	453	552	531	666	438	618	387	
5	495	480	507	486	549	420	591	498	504	441	498	462	
6	486	471	585	396	549	444	525	495	636	504	567	336	
7	489	474	486	438	474	447	534	513	582	477	489	450	
8	492	480	492	471	480	471	540	516	555	513	492	474	
9	504	483	492	480	486	477	558	537	585	549	483	477	
10	516	495	489	477	504	486	552	531	558	528	495	459	
11	513	495	480	462	522	501	597	528	600	534	693	465	
12	516	501	483	465	549	489	555	507	555	480	618	444	
13	510	495	498	480	522	501	537	528	537	426	537	450	
14	501	486	501	483	519	507	609	432	552	381	561	519	
15	507	483	516	495	582	507	486	441	498	429	645	522	
16	519	498	525	507	543	447	516	489	579	429	564	522	
17	516	471	507	495	489	474	543	516	495	453	579	522	
18	513	498	516	495	513	492	552	519	525	498	642	351	
19	561	489	576	507	507	495	549	528	525	510	471	360	
20	549	495	537	501	567	471	561	531	537	513	510	468	
21	513	492	561	510	486	462	546	522	552	531	477	465	
22	513	492	534	510	495	477	534	522	591	531	486	477	
23	519	489	519	447	498	486	540	531	570	504	492	480	
24	555	471	495	468	498	483	546	531	549	528	582	432	
25	495	474	522	489	498	480	555	522	549	534	516	465	
26	501	486	573	372	519	480	561	537	540	489	540	516	
27	504	492	465	438	522	492	555	531	654	438	546	534	
28	501	492	549	438	648	483	549	531	516	483	540	522	
29	525	495	---	---	525	483	558	528	549	492	537	525	
30	501	483	---	---	534	519	573	537	606	363	552	528	
31	---	---	468	420	---	---	570	546	498	288	---	---	
MONTH	561	468	585	372	648	351	609	432	666	288	693	336	
YEAR	756	189											

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PERIOD OF RECORD.--1968 to current year.

PH (UNITS)

EXTREMES.--Period of record: Maximum, 10.9 Mar. 15, 1971; minimum, 4.7 June 30, July 1, 1971.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITRE

EXTREMES.--Period of record: Maximum, 14.9 mg/l Feb. 28, 1973, minimum, 0.0 mg/l July 30, 1970.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	8.3	9.6	7.0	---	---	11.4	10.9	11.3	11.1	11.4	10.8
2	10.3	9.1	7.5	1.8	---	---	11.7	11.4	11.2	11.1	11.4	9.6
3	11.1	9.6	8.1	7.0	---	---	11.4	11.2	11.3	11.1	10.7	9.8
4	10.4	9.5	8.0	7.3	---	---	11.4	11.2	11.2	10.9	10.8	10.2
5	9.6	9.2	8.6	6.7	---	---	11.8	11.4	11.2	10.8	11.6	10.6
6	9.7	9.0	9.2	8.6	---	---	11.5	11.3	11.2	10.7	10.6	10.4
7	9.7	8.5	9.9	9.1	---	---	11.3	11.0	11.1	10.8	11.4	10.2
8	10.2	9.1	10.1	9.2	---	---	11.2	10.8	11.1	10.9	11.0	9.8
9	10.0	9.1	10	8.5	---	---	10.9	10.5	11.3	10.9	11.1	10.7
10	9.5	8.9	8.9	8.3	12.2	11.7	11.1	10.8	---	---	10.9	10.7
11	9.7	8.7	8.5	8.2	11.8	11.4	11.1	10.6	11.7	11.3	10.9	10.6
12	9.3	8.3	8.6	7.8	11.4	11.2	11.4	11.1	11.5	11.2	10.7	10.3
13	9.6	8.0	9.0	8.5	11.4	11.2	11.6	11.4	11.6	11.3	10.7	10.2
14	9.5	7.2	9.0	8.8	11.6	11.3	12.3	11.5	12.1	11.4	10.7	10.4
15	8.2	6.6	9.7	9.3	11.6	11.4	12.3	11.9	11.7	11.1	10.7	10.3
16	8.6	7.5	10.2	9.8	11.5	11.3	11.9	11.7	11.4	11.1	10.5	10.2
17	9.4	7.5	10.4	10.0	11.5	11.3	11.9	11.6	11.7	11.3	10.3	9.8
18	9.6	7.7	10.6	10.2	12.0	11.5	11.6	11.3	11.8	10.9	9.9	9.6
19	9.7	8.3	10.4	9.9	11.7	11.4	11.3	11.1	11.6	10.9	9.7	9.5
20	10.3	9.0	10.0	9.0	11.9	11.6	11.5	11.3	11.7	11.3	11.1	9.5
21	10.5	8.9	10.6	9.6	11.6	11.5	11.5	11.2	11.5	11.2	10.7	10.1
22	10.4	9.0	11.1	10.6	11.6	11.4	11.5	11.1	11.5	11.0	10.3	10.0
23	9.5	7.4	11.1	10.8	11.4	11.1	11.4	11.1	11.1	9.8	10.4	9.9
24	8.2	6.8	10.9	10.2	11.5	10.8	11.2	10.7	9.8	9.5	9.9	9.5
25	7.0	5.8	11.1	10.2	11.5	11.2	11.3	10.4	10.4	9.6	10.2	9.5
26	8.8	6.1	11.5	10.2	11.7	11.5	11.4	11.3	11.1	9.7	11.2	10.5
27	9.9	8.2	10.2	9.8	11.7	11.5	11.4	11.2	11.6	9.8	11.5	11.2
28	10.1	8.3	10.2	9.8	11.6	11.5	11.2	11.0	11.7	10.7	11.3	10.9
29	9.8	8.1	10.7	9.5	11.6	11.5	11.3	10.5	---	---	10.9	10.2
30	9.3	7.4	11.9	10.6	11.5	11.4	11.4	10.6	---	---	11.5	10.5
31	9.3	6.8	---	---	11.5	11.3	11.3	11.2	---	---	12.0	11.2
MONTH	11.1	5.8	11.9	1.8	---	---	12.3	10.4	12.1	9.5	12.0	9.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.8	10.9	8.7	7.4	6.3	4.0	8.0	6.2	7.8	5.8	6.1	5.4
2	11.6	10.5	10.3	7.6	6.8	6.3	8.0	5.9	7.2	5.5	6.7	6.2
3	10.7	9.8	9.5	7.3	6.7	6.4	8.1	6.0	6.8	5.4	6.9	6.2
4	11.3	10.1	7.9	6.9	7.2	6.5	8.0	6.0	5.4	3.0	6.3	4.1
5	11.6	10.4	9.6	7.2	7.1	5.8	8.3	5.6	7.5	5.1	8.0	5.8
6	11.8	10.5	7.8	3.3	6.9	5.4	9.0	6.0	6.1	5.2	7.9	6.7
7	11.7	10.5	9.3	7.4	7.5	6.6	8.9	6.0	7.3	5.1	8.4	8.0
8	11.3	10.1	9.6	7.6	7.8	6.9	9.0	5.9	7.7	5.9	8.6	8.0
9	11.2	9.8	9.4	7.5	8.1	7.1	9.0	5.9	7.7	6.2	8.9	7.9
10	11.0	9.6	10.0	7.5	7.2	6.3	8.6	6.1	7.4	6.2	8.6	7.8
11	10.6	9.4	10.0	7.5	6.5	5.7	8.2	6.2	6.8	5.7	7.8	6.7
12	10.6	9.3	9.5	7.2	6.2	5.3	8.3	6.5	7.9	5.1	7.2	6.3
13	10.7	9.2	9.2	7.0	7.0	5.8	8.2	6.4	7.6	4.5	8.0	7.1
14	10.8	9.2	9.3	7.2	7.9	6.0	6.8	5.5	6.0	1.1	8.0	7.6
15	10.5	8.9	9.0	6.9	7.3	5.1	7.8	6.2	6.3	5.3	8.3	7.7
16	11.1	9.1	8.8	6.9	6.7	5.3	8.1	6.5	5.7	5.0	7.9	7.1
17	11.0	9.0	9.0	7.4	8.0	6.3	7.8	6.1	6.5	5.7	7.8	7.2
18	9.4	7.7	8.7	7.1	7.2	5.7	7.2	5.9	6.5	5.8	8.1	6.8
19	9.5	6.3	7.8	6.6	7.1	5.6	6.5	5.5	6.6	5.4	7.8	7.1
20	10.4	7.2	8.4	5.9	6.6	4.7	6.5	5.2	6.3	5.5	8.0	7.4
21	12.3	8.8	8.3	5.3	7.3	5.7	6.5	5.2	6.5	5.6	8.7	7.5
22	12.1	8.4	7.7	5.5	6.4	5.2	6.9	5.1	6.3	5.3	9.1	7.7
23	11.1	7.9	6.5	3.2	6.5	5.1	6.5	5.0	6.1	5.0	9.0	7.8
24	8.6	7.0	7.1	5.3	7.0	5.5	5.7	4.8	6.3	5.5	8.9	7.7
25	9.2	7.4	6.3	5.3	7.1	5.4	6.3	4.7	6.4	5.5	8.7	7.8
26	11.3	8.6	5.5	1.3	7.0	5.5	6.3	5.2	6.4	5.5	8.4	7.7
27	10.8	8.5	6.2	5.2	6.5	5.5	6.4	5.1	6.3	4.5	8.9	7.8
28	9.9	8.3	6.8	5.7	6.2	5.0	6.3	5.0	6.8	5.8	8.9	7.8
29	10.0	8.1	6.2	5.7	7.1	5.9	6.5	5.2	6.6	5.8	8.8	7.8
30	10.2	7.5	6.0	5.5	7.3	6.0	6.6	4.9	6.1	3.7	8.4	7.4
31	---	---	6.1	5.4	---	---	8.2	4.8	5.7	4.2	---	---
MONTH	12.3	6.3	10.3	1.3	8.1	4.0	9.0	4.7	7.9	1.1	9.1	4.1
YEAR	12.3	1.1										

TEMPERATURE (°C) OF WATER

EXTREMES.--Period of record: Maximum, 28.0°C July 12, 1969; minimum, freezing point on Feb. 12-14, 1970, Jan. 9, 1974, Jan. 14-15, 1975.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	12.5	14.0	13.0	---	---	3.5	2.5	3.5	3.0	3.5	3.5
2	12.5	10.5	15.5	13.5	---	---	3.0	2.0	3.5	2.5	3.0	2.5
3	10.5	10.0	14.0	13.0	---	---	3.0	2.5	3.0	2.5	2.5	2.0
4	10.0	8.5	14.0	13.0	---	---	3.0	2.5	3.0	2.5	3.0	2.0
5	12.0	9.0	13.0	11.0	---	---	2.5	1.5	3.0	3.0	3.0	2.0
6	13.0	11.0	11.0	10.5	---	---	3.0	2.0	3.0	2.5	4.0	2.5
7	12.5	11.0	11.0	10.0	---	---	3.5	3.0	2.5	1.5	4.5	3.5
8	11.0	10.0	10.0	9.0	---	---	4.5	3.5	2.5	1.5	4.5	2.5
9	11.5	9.5	10.0	8.5	---	---	5.0	4.0	2.0	1.0	3.5	1.5
10	12.0	10.5	9.5	8.0	2.5	2.0	5.0	3.5	---	---	3.0	3.0
11	12.5	10.5	9.5	9.0	3.0	2.0	5.5	4.0	3.0	2.5	4.0	3.0
12	13.5	12.0	9.5	9.0	3.5	3.0	4.0	3.0	3.0	2.0	4.5	3.5
13	14.0	13.0	8.5	7.5	3.5	3.0	3.0	2.0	2.5	1.5	4.5	4.0
14	15.0	13.5	7.0	5.5	3.0	3.0	2.0	0.5	3.0	1.0	4.0	2.5
15	14.0	12.5	5.5	4.5	3.0	2.5	1.5	0.5	4.0	2.5	4.5	2.5
16	13.0	11.5	5.0	3.5	3.0	2.5	2.0	1.5	4.0	3.5	4.5	3.5
17	12.5	10.5	6.0	4.5	3.0	2.5	2.0	1.0	4.0	3.0	6.5	4.0
18	11.5	10.0	6.0	5.0	2.5	2.5	2.5	1.5	3.5	3.0	7.0	5.5
19	10.0	8.5	7.0	5.5	2.5	2.0	3.0	2.0	3.5	2.5	7.0	6.5
20	8.5	8.0	9.0	7.0	2.5	1.5	2.5	1.5	3.0	2.0	8.5	7.0
21	8.5	6.5	8.0	5.0	2.5	1.5	2.5	1.0	3.5	2.0	9.0	7.5
22	9.0	6.5	5.5	5.0	2.5	2.0	3.5	2.0	4.0	2.5	9.0	8.5
23	10.0	8.5	6.5	4.5	3.5	2.0	3.5	3.0	8.0	4.0	9.5	7.5
24	12.0	10.0	7.5	6.5	4.0	3.5	4.0	2.5	8.5	7.0	11.0	9.0
25	12.5	11.5	8.0	5.0	3.5	2.5	4.5	2.5	6.5	4.0	10.5	8.0
26	11.5	10.0	5.0	4.0	2.5	2.0	2.5	2.0	4.5	3.0	8.0	6.5
27	10.5	8.5	4.0	3.5	2.5	2.0	3.0	2.0	4.0	3.5	6.0	5.0
28	10.5	8.5	4.0	3.0	2.5	2.5	3.5	3.0	4.0	3.5	6.0	5.0
29	10.5	9.0	3.0	2.5	2.5	2.5	5.5	3.0	---	---	8.5	6.0
30	13.0	10.5	3.5	2.5	3.0	2.5	5.0	3.0	---	---	8.0	5.5
31	14.5	12.5	---	---	3.0	2.5	3.0	3.0	---	---	7.0	4.5
MONTH	15.0	6.5	15.5	2.5	---	---	5.5	0.5	8.5	1.0	11.0	1.5
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	5.5	16.0	14.0	20.5	19.5	23.0	21.0	23.5	20.5	21.0	20.0
2	10.0	7.0	16.5	13.5	19.5	18.5	23.0	20.5	23.0	21.0	20.5	19.5
3	9.5	6.5	16.0	14.5	19.0	17.5	22.5	21.0	22.5	21.0	21.0	19.0
4	7.0	5.0	15.0	13.0	20.0	18.0	22.5	20.5	23.5	21.5	21.5	20.5
5	6.5	4.5	16.0	12.0	20.0	19.0	22.5	20.0	22.5	21.5	21.0	19.5
6	7.0	4.5	15.5	15.0	20.5	18.5	22.5	20.0	21.0	19.5	21.0	19.5
7	8.0	5.0	16.5	13.5	20.0	18.5	22.5	20.5	20.0	18.0	20.0	18.5
8	9.0	6.0	17.0	14.0	18.0	17.0	22.5	20.0	20.5	17.5	20.5	18.5
9	8.0	7.0	18.5	15.0	19.0	16.5	23.0	20.5	21.0	17.5	20.5	19.5
10	10.0	7.0	19.0	16.0	19.5	17.5	21.5	19.5	21.0	19.5	20.0	18.5
11	10.0	7.5	18.5	16.0	19.5	18.0	20.0	18.5	22.5	19.5	19.0	18.0
12	9.5	7.5	18.0	16.5	20.5	18.0	19.5	17.5	23.0	20.5	18.5	17.0
13	10.5	7.5	18.0	16.0	21.0	18.5	20.0	18.0	23.0	21.0	17.0	14.5
14	9.5	7.5	18.5	15.0	21.5	19.0	20.0	18.5	23.0	20.0	15.0	13.0
15	8.5	8.0	17.5	16.0	21.5	20.0	20.0	18.0	22.0	20.0	15.5	13.5
16	9.0	7.0	16.0	14.5	21.5	19.5	21.0	18.5	21.5	20.5	16.0	15.0
17	11.5	7.0	15.0	13.5	22.0	19.5	21.5	20.0	20.0	20.0	16.5	15.0
18	12.5	11.0	17.5	14.5	23.5	21.0	20.5	19.0	22.5	20.0	18.0	16.0
19	12.5	11.5	20.0	16.0	23.5	22.5	22.5	19.5	22.0	20.5	17.5	16.5
20	11.0	9.5	20.5	17.5	25.0	22.5	22.0	20.5	22.5	20.5	18.5	17.0
21	11.5	8.5	21.5	19.5	26.0	23.5	23.0	20.5	22.0	20.5	18.0	17.0
22	12.5	10.0	21.0	19.0	26.0	24.5	22.5	20.0	22.0	21.0	16.5	15.5
23	12.0	10.5	20.0	19.0	25.5	24.0	23.0	20.5	22.5	21.0	16.0	15.5
24	13.0	11.5	22.0	19.5	25.5	24.0	23.5	21.5	23.5	21.0	16.0	15.0
25	12.5	11.0	23.0	20.5	25.5	24.0	22.5	21.0	23.5	22.0	15.0	15.0
26	13.0	9.5	22.5	20.5	24.5	23.0	21.5	19.0	22.5	22.0	14.5	14.5
27	12.0	11.0	23.5	21.5	23.0	22.0	22.0	19.0	23.0	21.0	15.0	14.0
28	11.0	10.0	23.5	21.5	23.0	21.0	22.5	19.5	22.0	20.0	15.0	13.0
29	14.0	10.0	23.0	20.5	23.0	21.0	22.5	19.5	21.5	20.0	15.5	13.5
30	15.5	12.5	22.0	20.5	23.5	21.0	22.5	19.5	21.5	20.5	16.0	14.0
31	---	---	22.0	20.5	---	---	23.0	20.0	21.0	20.5	---	---
MONTH	15.5	4.5	23.5	12.0	26.0	16.5	23.5	17.5	23.5	17.5	21.5	13.0
YEAR	26.0	0.5										

MUSKINGUM RIVER BASIN

03132000 CLEAR FORK AT BUTLER, OHIO

LOCATION.--Lat 40°35'37", long 82°25'20", in NE 1/4 sec.20, T.21 N., R.17 W., Richland County, on left bank at downstream side of bridge on State Highway 95, 0.3 mi (0.5 km) northeast of Butler.

DRAINAGE AREA.--136 mi² (352 km²).

GAGE.--Water-stage recorder. Datum of gage is 1,057.20 ft (322.234 m) above mean sea level.

REMARKS.--Discharge records good except period of no gage height record, which is poor. Flow regulated by Clear Fork Reservoir, capacity, 10,740 acre-ft (13.2 km³), 16 mi (26 km) upstream from station since 1949. Water diverted from Clear Fork Reservoir for municipal supply of city of Mansfield since 1953; diversion not included in figures of daily discharge.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1944 to September 1975 (discontinued). Prior to June 1945 monthly discharge only, published in WSP 1305.

AVERAGE DISCHARGE.--31 years, 142 ft³/s (4.021 m³/s) (unadjusted).

EXTREMES.--Period of record: Maximum discharge, 14,300 ft³/s (405 m³/s) Jan. 21, 1959, gage height, 9.43 ft (2.874 m), from rating curve extended above 3,000 ft³/s (85.0 m³/s) on basis of computed reservoir inflow; minimum, 12 ft³/s (0.34 m³/s) Sept. 12, 18, 1949.

REVISIONS (WATER YEARS).--WSP 1385: 1951-54. WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	29	143	540	420	250	158	122	127	43	34	53
2	33	33	172	350	315	220	146	118	84	42	32	45
3	31	51	180	298	258	200	192	102	102	41	36	40
4	29	50	155	325	223	190	217	118	108	43	50	65
5	26	153	134	253	215	180	144	118	123	41	40	57
6	26	107	132	215	263	170	120	217	116	39	37	192
7	26	85	134	201	233	400	113	199	96	42	37	77
8	26	78	492	677	201	280	105	152	81	47	36	53
9	26	68	489	1180	192	240	101	125	68	41	34	45
10	26	61	350	792	180	230	99	108	60	40	36	41
11	26	61	253	624	170	220	96	99	65	40	44	43
12	26	161	233	426	160	1100	93	95	81	38	38	69
13	25	132	313	310	150	700	95	96	66	44	36	65
14	25	138	313	245	140	450	87	84	60	63	49	49
15	26	131	378	201	150	380	86	77	63	46	50	44
16	28	104	504	180	300	400	87	77	69	41	61	43
17	28	85	441	161	600	430	86	73	62	40	42	43
18	26	79	338	169	450	400	81	71	66	39	38	123
19	25	75	260	199	350	1000	105	68	58	40	36	195
20	26	174	213	183	280	400	108	66	67	41	35	122
21	26	273	185	165	240	289	96	63	56	39	34	98
22	26	213	167	155	220	262	80	62	51	37	41	72
23	26	178	185	147	1500	244	83	65	49	36	38	63
24	26	265	782	145	2600	222	181	61	48	36	36	101
25	27	617	680	462	1000	215	158	58	47	36	35	105
26	27	438	474	628	500	197	131	160	47	35	35	81
27	26	295	310	411	350	152	112	81	47	35	36	71
28	26	213	243	298	300	148	113	66	45	35	34	63
29	26	176	210	1600	---	227	127	58	43	35	34	59
30	28	143	205	1100	---	246	115	58	42	34	43	54
31	30	---	255	624	---	199	---	63	---	34	46	---
TOTAL	844	4666	9323	13264	11960	10241	3515	2980	2097	1243	1213	2231
MEAN	27.2	156	301	428	427	330	117	96.1	69.9	40.1	39.1	74.4
MAX	40	617	782	1600	2600	1100	217	217	127	63	61	195
MIN	25	29	132	145	140	148	80	58	42	34	32	40
(+)	10.1	11.1	10.1	10.1	10.2	9.93	9.78	10.1	9.20	13.1	13.9	15.8

CAL YR 1974 TOTAL 59620 MEAN 163 MAX 2610 MIN 25 (+) 10.6
WTR YR 1975 TOTAL 63577 MEAN 174 MAX 2600 MIN 25 (+) 11.1

EXTREMES.--Current year: Maximum discharge, 6,600 ft³/s (187 m³/s) Feb. 24, gage height, 8.50 ft (2.591 m) from floodmark; minimum, 25 ft³/s (0.71 m³/s) Oct. 13, 14, 19, 20, 21.

Note: No gage-height record Feb. 10 to Mar. 20.

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

MUSKINGUM RIVER BASIN

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03132000 CLEAR FORK AT BUTLER, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to 1975 (discontinued).

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SIO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)
MAR. 18...	1240	339	7.0	10.6	87	306	7.8	4.9	36	11	8.6	1.7
SEP. 17...	1500	44	18.0	13.3	140	450	8.4	7.6	68	21	10	1.8

DATE	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKALINITY AS CaCO ₃ (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 18...	122	0	3.1	100	18	32	.2	.07	.01	1.2	.07	173
SEP. 17...	222	6	1.5	192	18	36	.1	.16	.01	.60	.17	278

DATE	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 18...	140	40	60	20	--	--	--	--	--	--	--	--
SEP. 17...	260	64	50	20	2	<10	10	2	10	<.5	3.4	1.9

03133000 PLEASANT HILL LAKE NEAR PERRYVILLE, OHIO

LOCATION.--Lat 40°37'26", long 82°19'33", in NE 1/4 sec. 7, T.19 N., R.16 W., Ashland County, 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) above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level.

EXTREMES.--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).REMARKS.--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.

COOPERATION.--Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	1,019.39	13,010	-
Oct. 31.....	1,019.33	12,960	-50
Nov. 30.....	1,019.84	13,380	+420
Dec. 31.....	1,018.57	12,340	-1,040
CAL YR 1974.....	-	-	-820
Jan. 31.....	1,020.55	14,010	+1,670
Feb. 28.....	1,027.66	20,890	+6,880
Mar. 31.....	1,020.42	13,898	-7,000
Apr. 30.....	1,020.04	13,550	-340
May 31.....	1,019.92	13,450	-100
June 30.....	1,019.46	13,070	-380
July 31.....	1,019.33	12,960	-110
Aug. 31.....	1,019.50	13,100	+140
Sept. 30.....	1,019.63	13,210	+110
WTR YR 1975.....	-	-	+200

EXTREMES.--Current year: Maximum contents, 24,440 acre-ft (30.1 hm³) Feb. 25, elevation, 1,030.71 ft (314.160 m); minimum, 7,850 acre-ft (9.68 hm³) Feb. 10, elevation, 1,012.20 ft (308.519 m).

MUSKINGUM RIVER BASIN

03133500 CLEAR FORK BELOW PLEASANT HILL DAM, NEAR PERRYSVILLE, OHIO

LOCATION.--Lat 40°37'13", long 82°19'28", in NE 1/4 sec. 7, T.19 N., R.16 W., Ashland County, on right bank 0.2 mi (0.3 km) downstream from Pleasant Hill Dam, 2.8 mi (4.5 km) south of Perrysville, and 4.7 mi (7.6 km) upstream from the confluence of Clear Fork and Black Fork.

DRAINAGE AREA.--198 mi² (513 km²).

GAGE.--Water-stage recorder. Datum of gage is 967.00 ft (294.741 m) above mean sea level, adjustment 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.--Discharge records good. Flow regulated by Pleasant Hill Lake (see station 03133000). See REMARKS for station 03132000 for diversion by city of Mansfield.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to current year. Published as Clear Fork near Perrysville prior to 1940. Monthly discharge only for October 1938, published in WSP 1305.

AVERAGE DISCHARGE.--37 years, 194 ft³/s (5.494 m³/s).

EXTREMES.--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.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	41	211	413	798	864	303	249	234	52	31	62
2	42	48	303	436	636	702	276	246	240	50	30	62
3	38	52	291	428	720	618	276	237	234	49	34	58
4	36	61	255	432	828	595	297	243	255	50	52	68
5	35	104	228	417	816	580	279	246	264	49	54	74
6	48	125	264	648	804	560	246	291	297	46	45	136
7	33	114	285	900	786	550	219	347	261	46	37	145
8	32	101	291	888	648	565	195	336	217	49	34	113
9	33	90	460	906	354	565	182	306	180	50	30	88
10	33	82	525	918	234	648	177	273	147	48	31	72
11	33	76	460	924	200	714	170	243	134	48	31	66
12	33	116	417	912	234	702	246	222	155	45	30	86
13	33	159	410	900	246	702	217	208	143	48	24	90
14	35	166	410	888	228	696	97	190	123	62	28	82
15	41	173	413	870	217	684	117	172	119	61	55	72
16	41	154	452	690	217	666	127	157	127	57	105	68
17	40	136	510	309	219	654	134	140	117	53	85	65
18	36	121	496	258	347	642	138	129	113	50	68	90
19	33	110	452	282	560	642	160	121	107	49	55	203
20	32	121	417	282	738	648	172	113	102	50	48	211
21	32	212	410	237	738	636	167	105	95	49	42	195
22	34	242	406	217	580	595	157	100	88	45	42	155
23	33	230	406	217	448	505	155	100	78	43	42	127
24	37	233	410	205	942	444	211	100	75	41	40	129
25	40	540	520	231	1430	410	282	95	69	41	36	147
26	40	630	618	336	1420	371	276	123	64	37	36	140
27	38	496	550	630	1380	249	255	134	61	35	36	125
28	37	375	468	852	1180	217	243	117	61	34	33	111
29	36	267	420	440	---	267	249	107	58	32	33	98
30	38	214	410	570	---	326	243	119	54	31	44	90
31	41	---	410	930	---	329	---	123	---	31	53	---
TOTAL	1139	5589	12578	17566	17948	17346	6266	5692	4272	1431	1344	3228
MEAN	36.7	186	406	567	641	560	209	184	142	46.2	43.4	108
MAX	48	630	618	930	1430	864	303	347	297	62	105	211
MIN	32	41	211	205	200	217	97	95	54	31	24	58
CAL YR 1974	TOTAL	83181	MEAN	228	MAX	1030	MIN	30				
WTR YR 1975	TOTAL	94399	MEAN	259	MAX	1430	MIN	24				

EXTREMES.--Current year: Maximum discharge, 1,450 ft³/s (41.1 m³/s) Feb. 25, gage height, 3.90 ft (1.189 m); minimum daily, 24 ft³/s (0.680 m³/s) Aug. 13.

MUSKINGUM RIVER BASIN

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03133500 CLEAR FORK BELOW PLEASANT HILL DAM, NEAR PERRYVILLE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATURATION	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SIO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)
MAR. 18...	1450	630	6.0	11.6	92	290	7.6	6.0	30	9.6	8.0	1.9
SEP. 18...	1250	89	18.5	9.5	101	345	7.9	2.8	41	14	8.3	1.9

DATE	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKALINITY AS CaCO ₃ (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 18...	103	0	4.1	85	16	29	.2	.12	.01	1.2	.07	152
SEP. 18...	167	0	3.4	137	14	26	.2	.22	.01	.09	.06	191

DATE	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 18...	110	30	60	10	--	--	--	--	--	--	--	--
SEP. 18...	160	23	10	0	2	<10	10	1	0	<.5	3.7	2.2

03134300 MUDDY FORK NEAR ROWSBURG, OHIO

LOCATION.--Lat 40°50'10", long 82°08'16", Ashland County, at bridge on Township Road 1550, 1.8 mi (2.9 km) southeast of Rowsburg.

DRAINAGE AREA.--66.2 mi² (171.5 km²).

PERIOD OF RECORD.--Discharge, 1972 to current year; chemical analyses, 1972 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SIO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)
SEP. 17...	1020	9.9	14.5	8.5	675	7.8	6.8	76	22	35	3.8	228

DATE	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
SEP. 17...	0	51	97	.3	.02	.01	.82	.05	404	280	30	70

MUSKINGUM RIVER BASIN

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03134500 MOHICANVILLE RESERVOIR NEAR MOHICANVILLE, OHIO

LOCATION.--Lat 40°43'28", long 82°09'08", in SE 1/4 sec. 34, T.21 N., R.15 W., Ashland County, 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) above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level.

EXTREMES.--Period of record: Maximum contents, 96,330 acre-ft (119 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.

REMARKS.--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.

COOPERATION.--Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	934.18	75	-
Oct. 31.....	934.65	101	+26
Nov. 30.....	934.47	91	-10
Dec. 31.....	939.90	615	+524
CAL YR 1974.....	-	-	+428
Jan. 31.....	946.40	8,780	+8,165
Feb. 28.....	953.02	33,180	+24,400
Mar. 31.....	944.95	5,580	-27,600
Apr. 30.....	934.38	86	-5,494
May 31.....	934.94	117	+31
June 30.....	933.49	45	-72
July 31.....	933.15	32	-13
Aug. 31.....	934.57	96	+64
Sept. 30.....	933.63	51	-45
WTR YR 1975.....	-	-	-24

EXTREMES.--Current year: Maximum contents, 34,920 acre-ft (43.1 hm³) Mar. 3, elevation, 953.36 ft (290.584 m); minimum, 31 acre-ft (38,220 m³) several days in August, elevation, 933.14 ft (284.421 m).

MUSKINGUM RIVER BASIN

03135000 LAKE FORK BELOW MOHICANVILLE DAM, NEAR MOHICANVILLE, OHIO

LOCATION.--Lat 40°43'24", long 82°09'18", in sec. 3, T.20 N., R.15 W., Ashland County, 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 Jerome and Muddy Forks.

DRAINAGE AREA.--271 mi² (702 km²).

GAGE.--Water-stage recorder. Datum of gage is 930.00 ft (283.464 m) above mean sea level, adjustment of 1912. Prior to July 25, 1949, water-stage recorder at site 500 ft (152 m) downstream at same datum.

REMARKS.--Discharge records good except period of indefinite stage-discharge relation which is fair. Flow regulated by Mohicanville Reservoir (see station 03134500).

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--37 years, 233 ft³/s (6.599 m³/s).

EXTREMES.--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.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	40	176	1120	1140	19	1180	225	415	44	23	177
2	70	70	188	923	1090	19	1100	210	774	39	23	110
3	50	90	236	661	1130	432	700	151	596	38	31	93
4	40	65	250	691	1060	882	490	171	501	293	41	113
5	34	364	246	482	848	948	370	167	436	134	33	106
6	36	238	240	372	758	948	287	568	700	70	27	410
7	34	139	279	334	576	973	229	726	356	56	26	199
8	34	106	646	848	417	980	199	334	222	46	25	90
9	32	86	991	1170	334	977	175	222	169	42	24	61
10	34	76	862	1110	300	1060	163	165	138	38	22	47
11	34	73	557	1110	260	1100	151	136	127	39	42	42
12	32	330	520	1070	243	1120	140	127	177	36	58	88
13	34	385	842	1060	216	1160	130	118	134	45	44	93
14	34	299	783	1050	200	1220	121	102	105	199	59	61
15	40	279	809	628	195	1220	121	93	100	94	72	47
16	46	178	869	436	264	1220	120	91	163	56	181	44
17	40	143	906	322	876	1230	114	85	113	44	63	45
18	36	128	646	280	1110	1250	113	85	90	41	41	161
19	34	119	459	334	1120	1180	147	88	85	39	31	488
20	34	340	339	267	1060	1100	140	99	348	41	28	265
21	34	735	271	227	946	1100	118	127	134	38	24	243
22	34	546	239	208	722	1110	106	105	93	33	31	130
23	34	367	265	191	988	1110	106	506	71	31	30	96
24	36	309	1120	201	394	1160	161	346	63	31	24	163
25	38	815	1230	512	28	1210	210	167	57	32	20	239
26	40	761	1190	1080	23	1210	159	646	56	28	33	179
27	40	429	1090	923	20	1210	127	628	61	27	75	134
28	38	299	1090	596	20	1210	125	258	159	24	32	103
29	36	230	1030	1050	---	1200	173	157	66	24	26	85
30	38	190	793	1160	---	1210	161	197	52	24	70	72
31	42	---	780	1170	---	1190	---	183	---	24	116	---
TOTAL	1220	8249	19942	21566	16388	31958	7656	7283	6961	1750	1375	4184
MEAN	39.4	275	643	696	585	1031	255	235	232	56.5	44.4	139
MAX	82	815	1230	1170	1140	1250	1180	726	815	293	181	488
MIN	32	40	176	191	20	19	106	85	52	24	20	42

CAL YR 1974 TOTAL 113599 MEAN 311 MAX 1230 MIN 19
WTR YR 1975 TOTAL 128552 MEAN 352 MAX 1250 MIN 19

EXTREMES.--Current year: Maximum discharge, 1,340 ft³/s (37.9 m³/s) Dec. 9, gage height, 8.11 ft (2.472 m); minimum daily, 19 ft³/s (0.54 m³/s) Mar. 1, 2.

Note: Indefinite stage-discharge relation Oct. 2 to Nov. 4.

MUSKINGUM RIVER BASIN

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03135000 LAKE FORK BELOW MOHICANVILLE DAM, NEAR MOHICANVILLE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 19...	1210	1120	5.5	10.8	86	339	7.3	5.5	36	10	15	3.0
SEP. 24...	1000	120	12.0	7.5	69	590	7.4	9.6	68	18	23	4.4

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 19...	94	0	7.5	77	26	49	.1	.24	.03	1.9	.15	191
SEP. 24...	194	0	12	159	34	74	.2	.13	.07	1.4	.38	327

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 19...	130	54	110	20	--	--	--	--	--	--	--	--
SEP. 24...	240	85	100	100	3	<10	0	2	170	<.5	2.1	1.4

MUSKINGUM RIVER BASIN

03136000 MOHICAN RIVER AT GREER, OHIO

LOCATION.--Lat 40°30'53"N, long 82°11'44"W, in NW 1/4 sec. 10, T.8 N., R.10 W., Knox County, 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).

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

REMARKS.--Discharge records good. Flow regulated by Charles Mill 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 DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--54 years, 895 ft³/s (25.35 m³/s).

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

REVISIONS (WATER YEARS).-- WSP 623: 1924(M). WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	426	245	1200	2930	3610	2900	2210	990	2060	265	155	679
2	390	425	1220	2580	3280	2600	2120	1000	1840	252	150	480
3	350	530	1240	2220	3150	2600	1890	882	1630	240	150	399
4	220	390	1130	2300	3260	3140	1600	918	1520	435	284	570
5	205	1120	1070	2000	3060	3180	1390	894	1470	462	225	462
6	220	966	1000	1870	2970	3110	1220	1300	1870	291	215	1130
7	200	858	1130	2080	2590	3100	1070	1830	1490	252	191	870
8	205	786	1800	3010	2140	2960	954	1510	1130	245	182	580
9	200	714	2430	4410	1670	2920	882	1290	942	240	173	591
10	205	657	2330	3670	1350	3000	810	1150	762	235	177	490
11	205	602	1980	3700	1240	3420	774	1010	668	240	205	350
12	200	1010	1880	3350	1170	3680	846	918	798	230	235	490
13	205	1250	2300	3320	1110	3800	786	786	690	220	225	560
14	205	1120	2340	3240	1040	3610	613	702	602	444	408	408
15	240	1130	2460	2790	1000	3320	613	635	591	399	297	318
16	284	942	2640	2290	1060	3210	624	591	750	284	646	284
17	235	834	2860	1640	1890	3140	613	560	635	252	382	278
18	225	762	2540	1350	2940	3320	613	540	602	245	291	426
19	220	702	2230	1460	2940	3760	714	490	560	235	252	1410
20	215	846	2010	1290	2800	3520	726	462	894	235	225	1200
21	210	1670	1810	1150	2600	3140	668	530	726	225	205	1120
22	210	1490	1660	1050	2760	3010	635	480	613	215	215	846
23	210	1350	1510	978	4480	2800	635	894	550	205	215	750
24	230	1240	2930	966	7870	2670	966	918	500	195	195	882
25	245	2300	3420	1420	4790	2600	1150	690	453	200	182	1000
26	235	2420	3220	2920	2810	2420	1000	1160	390	186	177	762
27	230	1880	2970	2460	3640	2220	906	1410	366	177	304	657
28	220	1580	2820	2400	3380	2100	870	1130	435	168	215	570
29	220	1510	2690	4560	---	2300	954	930	334	164	191	500
30	230	1290	2360	3740	---	2330	918	954	284	159	390	453
31	258	---	2270	3990	---	2230	---	978	---	155	550	---
TOTAL	7353	32619	65450	77134	76600	92110	29770	28532	26155	7750	7907	19515
MEAN	237	1087	2111	2488	2736	2971	992	920	872	250	255	651
MAX	426	2420	3420	4560	7870	3800	2210	1830	2060	462	646	1410
MIN	200	245	1000	966	1000	2100	613	462	284	155	150	278

CAL YR 1974 TOTAL 430128 MEAN 1178 MAX 5690 MIN 164
WTR YR 1975 TOTAL 470895 MEAN 1290 MAX 7870 MIN 150

EXTREMES.--Current year: Maximum discharge, 8,290 ft³/s (235 m³/s) Feb. 24, gage height, 7.98 ft (2.43 m); minimum daily, 150 ft³/s (4.25 m³/s) Aug. 2, 3.

MUSKINGUM RIVER BASIN

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03136000 MOHICAN RIVER AT GREER, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)
MAR. 19...	1345	4110	6.0	10.6	85	311	7.6	5.8	36	10	11
SEP. 24...	1215	821	14.5	8.7	84	480	7.7	6.1	46	15	14

DATE	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)
MAR. 19...	2.5	102	0	4.1	84	22	40	.2	.20	.03	1.6
SEP. 24...	3.2	161	0	5.1	132	23	45	.1	.03	.02	.95

DATE	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 19...	.19	178	130	47	50	20	--	--	--	--
SEP. 24...	.21	232	180	45	60	10	4	<.5	5.6	2.3

03136300 NORTH BRANCH KOKOSING RIVER LAKE NEAR FREDERICKTOWN, OHIO

LOCATION.--Lat 40°30'24", long 82°34'36", in SW 1/4 sec. 19, T.8 N., R.14 W., Knox County, 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 at mean sea level (levels by Corps of Engineers).

EXTREMES.--Period of record: Maximum contents, 5,620 acre-ft (6.93 hm³) Feb. 24, 1975; elevation, 1,134.98 ft (345.942 m); minimum, 877 acre-ft (1.08 hm³) Oct. 17, 1974, elevation, 1,120.56 ft (341.547 m).

REMARKS.--Lake is formed by earth 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).

COOPERATION.--Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	1,121.34	996	-
Oct. 31.....	1,120.83	916	-80
Nov. 30.....	1,121.72	1,060	+144
Dec. 31.....	1,122.93	1,280	+220
CAL YR 1974.....	-	-	+170
Jan. 31.....	1,122.57	1,210	-70
Feb. 28.....	1,123.29	1,350	+140
Mar. 31.....	1,121.95	1,100	-250
Apr. 30.....	1,121.77	1,070	-30
May 31.....	1,121.50	1,020	-50
June 30.....	1,121.26	983	-37
July 31.....	1,121.10	956	-27
Aug. 31.....	1,121.28	986	+30
Sept. 30.....	1,121.35	998	+12
WTR YR 1975.....	-	-	+2

EXTREMES.--Current year: Maximum contents, 5,620 acre-ft (6.93 hm³) Feb. 24, elevation, 1,134.98 ft (345.942 m); minimum, 877 acre-ft (1.08 hm³) Oct. 17, elevation, 1,120.56 ft (341.547 m).

MUSKINGUM RIVER BASIN

03136400 NORTH BRANCH KOKOSING RIVER NEAR FREDERICKTOWN, OHIO

LOCATION.--Lat 40°30'15", long 82°33'46", Knox County, on left bank, 0.8 mi (1.3 km) downstream from dam for North Branch Kokosing River Lake, 1.7 mi (2.7 km) northwest of Fredericktown, and 2.2 mi (3.5 km) upstream from East Branch.

DRAINAGE AREA.--46.0 mi² (119 km²). Area at site used prior to October 1, 1974, 45.5 mi² (118 km²).

GAGE.--Water-stage recorder. Datum of gage is 1,086.07 ft (331.034 m) above mean sea level. Prior to Oct. 1, 1974 at site 0.3 mi (0.5 km) upstream at datum 5.96 ft (1.817 m) higher.

REMARKS.--Discharge records good, except for period October 1 to February 5, which are fair. Flow partially regulated by North Branch Kokosing River Lake 0.8 mi (1.3 km) upstream (see station 03136300), since June 1972.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional discharge measurements, water years 1962-72, and annual maximum, water years 1963-72, July 1973 to current year.

EXTREMES.--Period of record: Maximum discharge, 6,000 ft³/s (170 m³/s) May 19, 1969, gage height, 9.95 ft (3.033 m) from rating extended above 3,700 ft³/s (105 m³/s) at site and datum then in use; minimum daily, 1.5 ft³/s (0.042 m³/s) Aug. 2, 1975.
Flood in January 1959 reached a stage of 13.4 ft (4.08 m) at site and datum then in use, from floodmarks, discharge not determined.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	2.8	27	171	130	133	58	54	43	6.9	1.8	9.6
2	4.0	2.8	29	72	90	73	52	47	41	6.5	1.5	7.9
3	3.1	2.8	29	48	68	63	52	42	58	6.1	1.8	6.9
4	3.5	3.2	27	54	50	56	49	45	84	6.1	7.9	13
5	4.7	17	17	42	33	52	42	45	89	6.1	14	13
6	4.1	23	19	32	40	50	38	42	105	6.1	9.6	19
7	4.0	19	23	29	39	112	36	42	61	5.6	6.9	17
8	3.5	16	72	211	34	186	34	38	43	7.9	5.2	11
9	3.7	12	173	578	31	107	32	35	32	8.5	4.0	8.5
10	3.5	9.4	70	224	27	84	30	31	26	6.9	3.2	6.5
11	3.5	9.0	44	192	26	71	29	29	23	6.1	9.6	6.1
12	3.4	38	42	100	26	164	28	28	45	5.2	9.1	13
13	3.2	49	67	65	25	205	26	27	43	5.2	6.9	14
14	3.4	38	69	48	23	119	25	25	30	13	5.6	11
15	17	36	80	40	22	90	24	23	26	12	5.6	8.5
16	29	29	131	34	22	102	24	21	34	9.1	6.5	7.4
17	4.3	21	91	30	147	109	23	18	28	7.4	6.5	7.4
18	3.4	17	56	34	258	109	23	18	35	6.5	5.2	26
19	3.2	16	42	40	95	149	27	18	30	6.1	4.4	81
20	3.2	26	35	38	52	149	29	17	23	6.1	3.6	56
21	3.1	67	30	34	40	94	26	16	18	6.1	3.2	40
22	3.4	58	27	30	36	86	24	15	15	5.2	4.0	27
23	3.4	58	29	28	500	79	25	15	13	4.4	4.0	20
24	3.5	73	194	38	849	73	97	15	12	3.6	3.6	24
25	3.5	323	157	480	805	74	110	15	11	3.6	2.8	35
26	3.4	155	67	450	741	63	79	43	11	2.8	2.8	30
27	3.4	70	42	160	675	54	58	38	10	2.5	3.2	24
28	3.2	46	34	80	534	50	54	24	9.6	2.5	2.8	19
29	3.2	34	30	620	---	68	71	18	8.5	2.3	2.5	16
30	3.4	28	30	597	---	86	61	15	7.9	2.0	3.6	14
31	3.2	---	41	264	---	67	---	15	---	1.8	6.5	---
TOTAL	151.0	1299.0	1824	4863	5418	2977	1286	874	1015.0	180.2	157.9	591.8
MEAN	4.87	43.3	58.8	157	194	96.0	42.9	28.2	33.8	5.81	5.09	19.7
MAX	29	323	194	620	849	205	110	54	105	13	14	81
MIN	3.1	2.8	17	28	22	50	23	15	7.9	1.8	1.5	6.1

CAL YR 1974 TOTAL 17922.1 MEAN 49.1 MAX 721 MIN 2.1
WTR YR 1975 TOTAL 20636.9 MEAN 56.5 MAX 849 MIN 1.5

EXTREMES.--Current year: Maximum discharge, 884 ft³/s (25.0 m³/s) Feb. 24, gage height, 5.32 ft (1.622 m); minimum daily, 1.5 ft³/s (0.042 m³/s) Aug. 2.

MUSKINGUM RIVER BASIN

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03136400 NORTH BRANCH KOKOSING RIVER NEAR FREDERICKTOWN, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to 1971, 1973 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATURATION	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	
MAR. 18...	1115	108	6.0	10.8	86	370	7.8	5.5	43	13	7.9	1.7	
JULY 24...	1400	3.4	21.5	7.8	88	371	6.9	6.4	53	19	6.9	1.8	
DATE		BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 18...	158	0	0	4.0	130	15	34	.1	.09	.01	1.3	.06	198
JULY 24...	200	0	0	40	164	14	36	.2	.00	.00	.05	.06	236
DATE		HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 18...	160	31	31	90	50	--	--	--	--	--	--	--	--
JULY 24...	210	46	46	20	20	1	<10	0	7	90	<.5	2.6	.8

MUSKINGUM RIVER BASIN

03136500 KOKOSING RIVER AT MOUNT VERNON, OHIO

LOCATION.--Lat 40°24'20", long 82°30'00", in sec. 2, T.6 N., R.13 W., Knox County, 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).

GAGE.--Water-stage recorder. Datum of gage is 984.16 ft (299.972 m) above mean sea level, levels by Corps of Engineers. Prior to Apr. 3, 1953, nonrecording gage at same site and datum.

REMARKS.--Discharge records good. 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 (see station 03136300), 10.0 mi (16.1 km) upstream on North Branch Kokosing River, beginning in June 1972.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--February 1953 to current year.

AVERAGE DISCHARGE.--22 years, 206 ft³/s (5.834 m³/s), 13.85 in./yr (352 mm/yr).

EXTREMES.--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.

REVISIONS.--WRD Ohio, 1966: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	34	178	868	624	557	256	234	479	45	31	127
2	49	37	193	538	481	397	234	208	286	44	29	89
3	45	38	180	389	384	337	272	188	272	42	35	68
4	40	54	160	436	328	303	250	199	323	45	65	80
5	40	129	140	337	309	279	217	194	323	42	76	72
6	38	151	140	285	401	272	197	180	553	42	56	87
7	37	122	150	258	372	459	186	173	347	49	48	84
8	36	106	588	798	290	750	175	155	237	59	41	70
9	36	90	941	1960	250	475	168	139	183	49	37	56
10	36	78	499	1220	230	386	162	127	152	46	41	49
11	34	74	337	961	220	333	155	118	144	45	50	50
12	33	158	309	624	200	605	147	116	175	44	61	99
13	34	233	472	423	190	848	139	114	168	48	50	99
14	33	190	462	331	180	557	132	107	137	68	46	78
15	42	195	514	240	180	427	132	103	130	63	52	63
16	80	154	750	210	270	487	130	99	165	56	68	58
17	62	127	598	190	792	519	125	95	142	52	56	56
18	44	112	418	220	1100	519	125	95	152	49	49	142
19	38	101	325	285	691	632	147	91	135	48	44	300
20	36	118	273	240	462	646	150	87	120	58	42	234
21	33	261	244	200	350	467	135	82	103	50	40	183
22	33	250	222	190	306	393	135	78	101	45	42	139
23	33	241	222	180	2340	357	155	87	150	41	41	112
24	33	233	750	180	5980	368	515	82	130	40	37	150
25	34	830	811	583	2540	350	557	80	91	39	35	162
26	34	662	504	1380	1220	296	397	109	59	37	33	144
27	34	347	337	646	995	263	279	114	56	35	36	120
28	33	252	285	436	853	250	259	93	55	33	33	103
29	32	206	258	2450	---	306	306	95	50	33	37	89
30	33	175	250	2250	---	361	256	103	48	32	58	78
31	34	---	315	1050	---	293	---	147	---	31	107	---
TOTAL	1216	5758	11825	20358	22538	13492	6493	3892	5466	1410	1476	3241
MEAN	39.2	192	381	657	805	435	216	126	182	45.5	47.6	108
MAX	80	830	941	2450	5980	848	557	234	553	68	107	300
MIN	32	34	140	180	180	250	125	78	48	31	29	49
CFSM	.19	.95	1.89	3.25	3.99	2.15	1.07	.62	.90	.23	.24	.53
IN.	.22	1.06	2.18	3.75	4.15	2.48	1.20	.72	1.01.	.26	.27	.60

CAL YR 1974 TOTAL 81772 MEAN 224 MAX 2790 MIN 25 CFSM 1.11 IN 15.06
WTR YR 1975 TOTAL 97165 MEAN 266 MAX 5980 MIN 29 CFSM 1.32 IN 17.89

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-09	1430	4.85	2,090	02-24	1030	*9.03	*7,630
01-29	1800	6.14	3,450				

Minimum daily discharge: 29 ft³/s (0.82 m³/s) Aug. 2.

MUSKINGUM RIVER BASIN
03136500 KOKOSING RIVER AT MOUNT VERNON, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	
DATE	TIME						(UNITS)						
MAR. 18...	1000	536	5.5	10.9	86	347	7.4	5.1	44	13	6.6	1.8	
SEP. 15...	1115	61	15.0	7.8	76	435	7.6	5.9	59	17	7.5	2.0	
DATE		BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARRON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
MAR. 18...	148	0	9.4	121	15	36	.2	.10	.01	1.6	.09		195
SEP. 15...	232	0	9.3	190	14	41	.3	.03	.02	.52	.06		261
DATE		HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 18...	160	39	60	20	--	--	--	--	--	--	--	--	--
SEP. 15...	220	27	10	20	2	<10	0	0	0	<.5	3.5	1.1	

03138000 MOHAWK RESERVOIR NEAR NELLIE, OHIO

LOCATION.--Lat 40°21'12", long 82°05'12", in SW 1/4 sec. 6, T.6 N., R.8 W., Coshocton County, 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) above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level.

EXTREMES.--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.

REMARKS.--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.

COOPERATION.--Water-stage graph and capacity curve furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	801.79	117	-
Oct. 31.....	801.54	103	-14
Nov. 30.....	806.46	534	+431
Dec. 31.....	811.85	1,460	+926
CAL YR 1974.....	-	-	+666
Jan. 31.....	837.48	29,030	+27,570
Feb. 28.....	857.04	91,250	+62,220
Mar. 31.....	808.47	805	-90,445
Apr. 30.....	805.55	431	-374
May 31.....	804.69	344	-87
June 30.....	802.05	132	-212
July 31.....	801.07	77	-55
Aug. 31.....	803.87	268	+191
Sept. 30.....	803.49	237	-31
WTR YR 1975.....	-	-	+120

EXTREMES.--Current year: Maximum contents, 94,130 acre-ft (116 hm³) Feb. 27, elevation, 857.71 ft (261.430 m); minimum, 75 acre-ft (92,500 m³) Aug. 3, elevation, 801.04 ft (244.157 m).

MUSKINGUM RIVER BASIN

03138500 WALHONDING RIVER BELOW MOHAWK DAM, AT NELLIE, OHIO

LOCATION.--Lat 40°20'29", long 82°03'56" (corrected), in T.6 N., R.8 W., Coshocton County, 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).

GAGE.--Water-stage recorder. Datum of gage is 790.00 ft (240.792 m) above mean level, adjustment 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.--Discharge records good. 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 DISCHARGE RECORDS

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.

AVERAGE DISCHARGE.--54 years, 1,475 ft³/s (41.77 m³/s).

EXTREMES.--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.
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.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	485	343	1760	4470	5650	6670	3090	1760	3650	457	267	1440
2	515	432	1760	4760	5610	6950	2960	1800	3130	437	267	1000
3	476	817	1830	3780	6250	7330	2890	1580	2480	417	277	764
4	406	685	1680	3800	6820	7390	2530	1530	2410	420	413	835
5	314	1400	1540	3430	6320	7440	2180	1540	2170	687	628	827
6	308	1440	1530	2900	6480	7410	1920	1550	3200	493	430	1190
7	316	1190	1630	3040	6430	7370	1740	2440	2740	420	389	1400
8	295	1060	2530	3410	4530	7390	1560	2140	1960	422	345	901
9	296	963	4800	5760	2980	7260	1440	1800	1560	441	318	779
10	294	867	4280	5940	2250	7300	1350	1600	1310	406	313	695
11	292	804	3330	6870	2180	7370	1280	1430	1140	388	378	586
12	290	1190	2910	6510	2030	7310	1230	1310	1300	390	480	764
13	290	1940	3510	5830	1880	7320	1230	1210	1260	378	407	952
14	288	1610	3750	5600	1690	7360	1150	1070	1060	435	350	702
15	340	1690	3920	5200	1650	7230	1010	994	950	675	467	572
16	392	1460	4380	3440	1710	7150	1010	932	1040	481	607	512
17	391	1240	5020	2680	3120	6910	994	887	1070	423	607	506
18	351	1080	4330	2140	5240	5800	978	863	966	408	486	650
19	323	997	3610	2330	5000	5780	1080	816	919	397	413	2330
20	309	1010	3110	2200	4660	6520	1180	766	1010	397	372	2100
21	297	1970	2740	1860	4410	5920	1060	769	1210	415	345	1990
22	289	2150	2460	1730	3960	4760	1010	770	909	373	329	1460
23	291	2010	2230	1580	4580	4340	1020	872	840	352	345	1190
24	301	1780	3920	1580	1750	4190	1790	1210	804	335	318	1460
25	320	3010	5280	1930	264	4130	2780	1010	750	330	282	1780
26	318	4260	5180	6020	1850	3690	2700	1130	699	326	258	1410
27	308	3240	5100	4610	4390	3350	2040	1710	614	306	297	1160
28	298	2470	4570	3950	6720	3090	1780	1470	575	296	361	987
29	290	2240	3800	4020	---	3260	1860	1160	620	279	287	359
30	295	1880	3490	4410	---	3520	1760	1340	500	276	926	764
31	313	---	3260	5120	---	3260	---	1320	---	272	1070	---
TOTAL	10291	47278	103240	120900	110384	184770	50602	40779	42846	12532	13032	32565
MEAN	332	1576	3330	3900	3942	5960	1687	1315	1428	404	420	1086
MAX	515	4260	5280	6870	6820	7440	3090	2440	3650	687	1070	2330
MIN	288	343	1530	1580	264	3090	978	766	500	272	258	506
CAL YR 1974 TOTAL	677905			MEAN 1857	MAX 7340	MIN 258						
WTR YR 1975 TOTAL	769219			MEAN 2107	MAX 7440	MIN 258						

EXTREMES.--Current year: Maximum discharge, 7,560 ft³/s (214 m³/s) Mar. 5, gage height, 11.45 ft (3.490 m); minimum daily, 258 ft³/s (7.31 m³/s) Aug. 26.

MUSKINGUM RIVER BASIN
03138500 WALHONDING RIVER BELOW MOHAWK DAM, AT NELLIE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1964 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 20...	1030	6650	7.0	11.4	93	320	7.5	6.1	33	10	10	2.2
SEP. 25...	1030	1820	14.0	9.5	91	420	7.5	7.1	43	14	12	2.9

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 20...	102	0	5.2	84	20	37	.1	.23	.02	1.7	.14	169
SEP. 25...	148	0	7.5	121	21	38	.2	.03	.01	.99	.19	211

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 20...	120	40	20	20	--	--	--	--	--	--	--	--
SEP. 25...	170	44	60	0	4	30	20	13	30	<.5	5.0	1.3

MUSKINGUM RIVER BASIN

179

03138800 KILLBUCK CREEK AT WOOSTER, OHIO

LOCATION.--Lat 40°48'03", long 81°58'30", Wayne County, at bridge on Old Mansfield Road, 2 mi (3 km) northwest of Wooster.

DRAINAGE AREA.--128 mi² (332 km²).

PERIOD OF RECORD.--Discharge, 1959, 1962 to 1967, 1970 to current year; chemical analyses, 1965 to 1967, 1970 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	INSTANTANEOUS DISCHARGE	
	(ft ³ /s)	(m ³ /s)
Oct. 17	10	0.28

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)
SEP. 22...	1645	76	14.5	8.4	520	7.6	9.0	58	18	16	4.6	169

DATE	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
SEP. 22...	0	28	71	.1	.02	.02	1.9	.10	288	220	40	60

03138900 JENNINGS DITCH TRIBUTARY NEAR WOOSTER, OHIO

LOCATION.--Lat 40°44'45", long 81°55'48", Wayne County, at culvert on State Highway 83, 0.8 mi (1.3 km) upstream from mouth, 4 mi (6 km) south of Wooster.

DRAINAGE AREA.--0.90 mi² (2.33 km²).

PERIOD OF RECORD.--Discharge, 1946, 1966 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Aug. 16	17.91	5.459	44	1.25

MUSKINGUM RIVER BASIN

03139000 KILLBUCK CREEK AT KILLBUCK, OHIO

LOCATION.--Lat 40°29'41" (corrected), long 81°59'12", Holmes County, on right bank at downstream side of highway bridge at Killbuck, 0.3 mi (0.5 km) downstream from Black Creek, and 0.9 mi (1.4 km) upstream from bridge on U.S. Highway 62.

DRAINAGE AREA.--462 mi² (1,197 km²).

GAGE.--Water-stage recorder and nonrecording gage read once daily. Datum of gage is 788.05 ft (240.198 m) above mean sea level, adjustment of 1912. Prior to Oct. 1, 1949, nonrecording gage at same site and datum.

REMARKS.--Discharge records good.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--45 years, 398 ft³/s (11.27 m³/s), 11.70 in/yr (297 mm/yr).

EXTREMES.--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; minimum, 23 ft³/s (0.65 m³/s) Sept. 10-15, 28-30, 1954.

REVISIONS (WATER YEARS).--WSP 873: 1935. WSP 1555: 1935. WSP 1907: Drainage area. WRD Ohio 1970: 1969.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	89	348	1580	2300	2670	669	518	1150	132	67	442
2	93	105	394	1460	2080	2140	592	471	970	125	66	334
3	90	159	463	1310	1780	1730	706	399	868	120	66	222
4	92	183	452	1320	1470	1420	668	371	804	120	87	201
5	88	870	416	1160	1120	1170	571	343	720	137	94	207
6	87	545	396	945	1170	984	509	475	855	139	79	430
7	85	343	403	804	1100	1050	468	579	792	116	85	435
8	84	264	1050	1200	879	1290	436	557	658	121	78	303
9	83	219	1490	2220	753	1200	412	450	502	121	70	203
10	81	194	1250	2300	589	1240	397	342	387	110	71	170
11	80	183	1000	2320	631	1240	372	273	331	116	95	156
12	79	574	871	2220	566	1360	346	275	432	109	165	463
13	77	625	984	2010	505	1620	315	258	359	105	135	345
14	80	463	990	1700	438	1570	284	240	290	142	331	237
15	121	366	1080	1330	463	1480	276	229	247	171	182	193
16	138	285	1180	1000	548	1400	272	221	317	114	485	174
17	108	244	1270	690	1040	1360	266	212	261	102	269	178
18	98	228	1180	610	1590	1480	263	210	241	101	174	358
19	96	216	1040	686	1580	1710	335	203	211	108	140	953
20	94	256	868	602	1550	2030	318	196	307	114	126	762
21	91	415	700	487	1510	1910	270	200	254	112	114	728
22	87	485	577	473	1370	1760	253	196	197	97	124	500
23	87	426	496	431	2160	1560	251	212	176	88	116	355
24	88	365	1330	438	4830	1410	393	308	165	84	108	645
25	90	643	1850	740	4310	1270	473	329	161	93	100	664
26	93	816	1780	1530	3490	1040	465	301	153	85	96	511
27	89	684	1690	1310	3260	816	388	336	151	76	133	397
28	87	547	1640	1180	3070	714	366	307	253	74	117	321
29	87	419	1510	2290	---	754	388	223	161	71	108	270
30	87	347	1290	2930	---	801	368	243	143	68	173	239
31	89	---	1130	2480	---	747	---	330	---	68	255	---
TOTAL	2828	11558	31118	41756	46152	42926	12090	9807	12516	3339	4309	11396
MEAN	91.2	385	1004	1347	1648	1385	403	316	417	108	139	380
MAX	138	870	1850	2930	4830	2670	706	579	1150	171	485	953
MIN	77	89	348	431	438	714	251	196	143	68	66	156
CFSM	.20	.83	2.17	2.92	3.57	3.00	.87	.68	.90	.23	.30	.82
IN.	.23	.93	2.51	3.36	3.72	3.46	.97	.79	1.01	.27	.35	.92

CAL YR 1974 TOTAL 192083 MEAN 526 MAX 2810 MIN 66 CFSM 1.14 IN 15.47
WTR YR 1975 TOTAL 229795 MEAN 630 MAX 4830 MIN 66 CFSM 1.36 IN 18.50

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-09	1800	14.74	2,420	02-24	1500	*16.82	*5,180
01-30	0200	15.51	3,160	03-20	0500	14.20	2,040

Minimum discharge: 64 ft³/s (1.81 m³/s) Aug. 2.

MUSKINGUM RIVER BASIN

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03139000 KILLBUCK CREEK AT KILLBUCK, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1962 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (NA) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 20...	1155	2060	7.0	11.1	91	324	7.5	4.5	37	10	9.8	2.7
SEP. 22...	1330	467	14.5	7.8	76	485	7.7	9.1	56	15	13	4.3

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
MAR. 20...	98	0	5.0	80	20	50	.1	.11	.02	1.9	.18	182
SEP. 22...	178	0	5.7	146	23	51	.1	.06	.03	1.5	.18	259

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 20...	130	50	60	50	--	--	--	--	--	--	--	--
SEP. 22...	200	56	60	70	2	<10	0	3	80	<.5	5.6	1.4

MUSKINGUM RIVER BASIN

03140000 MILL CREEK NEAR COSHOCTON, OHIO

LOCATION.--Lat 40°21'46", long 81°51'45", Coshocton County, 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).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 782.00 ft (238.354 m) above mean sea level, adjustment of 1912.

REMARKS.--Discharge records good.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--39 years, 27.6 ft³/s (0.782 m³/s), 13.78 in/yr (350 mm/yr).

EXTREMES.--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.

REVISIONS (WATER YEARS).--WSP 1143: 1946, 1947-48 (P). WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	3.5	34	94	74	54	30	180	59	6.6	1.6	70
2	4.2	3.8	50	56	61	46	28	71	18	5.7	1.6	19
3	3.6	4.8	51	65	51	42	33	53	28	5.2	2.4	12
4	3.6	87	42	65	46	38	25	48	25	4.8	35	10
5	3.6	112	36	51	55	35	22	40	26	4.2	11	26
6	3.5	42	33	46	95	34	21	51	27	3.8	5.5	91
7	3.2	34	36	42	62	81	20	38	20	3.5	4.2	23
8	3.2	26	235	163	50	65	19	33	16	7.9	3.2	16
9	3.2	22	125	288	43	47	18	29	13	19	2.7	12
10	3.1	19	69	150	36	45	18	26	11	8.7	4.6	10
11	2.9	19	54	126	40	42	16	23	19	11	4.8	12
12	2.8	109	68	76	36	230	15	23	40	5.5	19	47
13	2.8	51	72	61	30	112	14	21	20	4.8	5.2	24
14	2.6	36	65	49	26	79	14	18	16	9.0	8.2	17
15	15	30	77	36	26	73	14	18	14	4.4	19	14
16	8.7	25	105	30	58	82	13	17	14	3.8	24	14
17	5.5	22	84	28	123	87	12	15	11	3.5	9.0	13
18	4.2	20	61	38	104	78	12	15	11	5.3	6.6	154
19	3.9	19	53	42	75	252	20	14	9.0	5.7	5.0	82
20	3.8	26	45	30	57	119	14	12	11	4.8	4.1	83
21	3.5	25	41	29	49	76	12	11	7.4	5.2	3.4	52
22	3.4	24	37	27	44	67	12	11	6.4	3.2	3.5	39
23	3.2	21	42	27	467	53	14	14	5.7	2.6	3.4	32
24	3.9	22	222	31	568	85	41	10	5.2	2.4	3.1	213
25	4.1	72	158	109	173	61	101	9.4	4.8	7.2	2.8	69
26	4.4	51	81	85	103	49	59	12	5.0	2.9	2.6	51
27	3.6	42	61	51	74	42	40	8.4	25	2.4	2.7	42
28	3.4	37	53	50	62	42	37	7.4	72	2.0	2.2	34
29	3.4	29	47	524	---	46	34	8.4	12	1.7	4.6	29
30	3.5	26	42	163	---	40	43	13	8.4	1.6	30	24
31	3.8	---	78	97	---	34	---	11	---	1.6	31	---
TOTAL	128.4	1060.1	2257	2729	2688	2236	771	860.6	559.9	160.0	287.6	1334
MEAN	4.14	35.3	72.8	88.0	96.0	72.1	25.7	27.8	18.7	5.16	9.28	44.5
MAX	15	112	235	524	568	252	101	180	72	19	35	213
MIN	2.6	3.5	33	27	26	34	12	7.4	4.8	1.6	1.6	10
CFSM	.15	1.30	2.68	3.24	3.53	2.65	.94	1.02	.69	.19	.34	1.64
IN.	.18	1.45	3.09	3.73	3.68	3.06	1.05	1.18	.77	.22	.39	1.82

CAL YR 1974 TOTAL 12737.43 MEAN 34.9 MAX 560 MIN .30 CFSM 1.28 IN 17.42
WTR YR 1975 TOTAL 15071.60 MEAN 41.3 MAX 568 MIN 1.6 CFSM 1.52 IN 20.61

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

DATE	TIME	G. H.	DISCHARGE
01-29	1300	9.05	835
02-23	2315	*10.45	*1,380

Minimum discharge: 1.6 ft³/s (0.045 m³/s) July 29 to Aug. 3, gage height, 0.97 ft (0.296 m).

MUSKINGUM RIVER BASIN

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03140000 MILL CREEK NEAR COSHOCTON, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 20...	--	94	9.5	10.6	92	292	7.2	8.4	27	12	8.9	2.1
SEP. 23...	1230	32	15.0	8.9	87	285	7.2	10	34	9.0	6.0	2.8

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 20...	44	0	4.4	36	7.3	91	.1	.06	.01	1.2	.08	179
SEP. 23...	78	0	7.9	64	9.1	45	.1	.02	.01	1.3	.05	155

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (MG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 20...	120	84	120	590	--	--	--	--	--	--	--	--
SEP. 23...	120	58	80	180	0	<10	0	5	130	<.5	1.2	.5

MUSKINGUM RIVER BASIN

03140500 MUSKINGUM RIVER NEAR COSHOCTON, OHIO

LOCATION.--Lat 40°14'54", long 81°52'23", in T.5 N., R.6 W., Coshocton County, 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.

DRAINAGE AREA.--4,859 mi² (12,585 km²).

GAGE.--Water-stage recorder. Datum of gage is 730.00 ft (222.504 m) above mean sea level, adjustment of 1912. Prior to Sept. 19, 1936, nonrecording gage at same site and datum.

REMARKS.--Discharge records good. Flow regulated by 13 flood-control reservoirs at points 19 mi (31 km) to 88 mi (142 km) upstream.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--39 years, 4,847 ft³/s (137.3 m³/s).

EXTREMES.--Period of record: Maximum discharge, 78,700 ft³/s (2,230 m³/s) Jan. 26, 1937, gage height, 21.98 ft (6.700 m); minimum daily, 420 ft³/s (11.9 m³/s) Sept. 13, 1954.
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.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2010	1510	6000	13200	17900	20200	9380	7190	8300	1840	960	6330
2	2060	1650	6190	14200	17400	19000	8630	7940	10200	1720	930	6750
3	2190	2010	6710	13300	16500	18600	8720	7860	9660	1620	960	5850
4	2220	2340	6980	12500	16700	18200	8590	6920	9290	1620	1230	4800
5	2120	4530	6840	11500	16400	17800	7900	6240	8320	1970	1540	4210
6	2050	6320	6530	10200	15900	17500	7020	6120	8670	2070	1410	4690
7	2000	6080	6480	9410	15900	17300	6330	7220	8960	1830	1230	5950
8	1940	4940	8340	9540	14000	17800	5810	7210	7480	1710	1120	5110
9	1810	4190	13400	15000	10800	17700	5470	6060	5970	1820	1030	3980
10	1630	3490	14300	17300	8990	16900	5140	5250	5060	1970	990	3490
11	1560	3150	13200	18800	6180	16500	4940	4720	4580	1980	1010	3070
12	1520	4060	11600	17900	8080	17700	4720	4370	4960	1840	1410	3700
13	1500	6570	11300	16300	7600	18800	4580	4180	5350	1750	1450	5350
14	1490	7000	11700	14900	6820	18900	4350	4030	4620	1710	1430	4440
15	1590	6170	12100	14500	6380	18700	3970	3830	4070	1900	2650	3740
16	1960	5290	12700	12300	6380	18100	3790	3490	3800	1770	2870	3150
17	2140	4710	13700	10300	8410	17500	3700	3280	3830	1580	3640	2800
18	2030	4240	13400	8410	12900	16900	3620	3190	3620	1500	2550	3520
19	1910	3850	12400	7580	14400	18200	3730	3080	3310	1490	2070	8160
20	1790	3810	11100	7520	14500	19900	3940	2920	3280	1450	1720	9540
21	1700	4700	9800	6730	13200	18400	3790	2800	3580	1480	1540	8920
22	1620	6040	8700	5970	11600	17600	3550	2780	3010	1450	1430	7460
23	1570	6120	7850	5670	12600	16400	3420	2940	2700	1450	1520	6300
24	1500	5720	10200	5630	22800	15100	4040	3680	2550	1340	1410	8100
25	1410	6300	15200	6230	21400	14700	6330	3580	2630	1420	1260	9830
26	1580	9450	16100	11500	17200	14000	7940	3330	2370	1500	1180	9090
27	1570	9820	15900	12900	18400	12600	6920	4090	2210	1440	1180	8260
28	1530	8490	15400	11900	20500	11100	6310	4130	2710	1270	1440	7280
29	1480	7300	13400	15500	---	10100	5920	3500	2410	1130	1390	5740
30	1470	6420	12100	18000	---	10500	5700	3680	2050	1050	2170	4820
31	1440	---	11400	18500	---	10500	---	4100	---	1000	4500	---
TOTAL	54390	156270	341020	373190	381840	513200	168250	143710	149750	49670	51220	174830
MEAN	1755	5209	11000	12040	13640	16550	5608	4636	4992	1602	1652	5828
MAX	2220	9820	16100	18800	22800	20200	9380	7940	10200	2070	4500	9830
MIN	1410	1510	6000	5630	6380	10100	3420	2780	2050	1000	930	2800
CAL YR 1974 TOTAL	2248570			6160		24100		1010				
WTR YR 1975 TOTAL	2557340			7006		22800		930				

EXTREMES.--Current year: Maximum discharge, 25,200 ft³/s (714 m³/s) Feb. 24, gage height, 11.48 ft (3.499 m); minimum daily, 930 ft³/s (26.3 m³/s) Aug. 2.

03140500 MUSKINGUM RIVER NEAR COSHOCTON, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATURATION	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)
MAR. 20...	--	20000	8.0	9.6	81	405	7.5	6.7	42	12	17	2.5
SEP. 02...	1400	6870	21.5	6.4	72	610	7.2	8.1	68	14	40	4.8

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 20...	72	0	3.6	59	32	89	.1	.15	.03	1.3	.15	237
SEP. 02...	94	0	9.5	77	96	95	.3	.08	.05	1.2	.06	373

DATE	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 20...	150	91	100	370	--	--	--	--	--	--	--	--
SEP. 02...	230	150	20	410	6	20	20	23	100	<.5	15	4.1

03141000 SENECAVILLE LAKE NEAR SENECAVILLE, OHIO

LOCATION.--Lat 39°55'31"N, long 81°26'06"W, Guernsey County, 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) above mean sea level, adjustment 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.

EXTREMES.--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).REMARKS.--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.

COOPERATION.--Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	833.17	44,810	-
Oct. 31.....	831.69	39,530	-5,280
Nov. 30.....	830.15	34,390	-5,140
Dec. 31.....	828.36	28,950	-5,440
CAL YR 1974.....	-	-	+260
Jan. 31.....	828.22	28,550	-400
Feb. 28.....	833.75	47,010	+18,460
Mar. 31.....	832.74	43,240	-3,770
Apr. 30.....	833.51	46,100	+2,860
May 31.....	832.26	41,510	-4,590
June 30.....	832.20	41,300	-210
July 31.....	832.06	40,800	-500
Aug. 31.....	833.50	46,060	+5,260
Sept. 30.....	834.03	48,080	+2,020
WTR YR 1975.....	-	-	+3,270

EXTREMES.--Current year: Maximum contents, 50,910 acre-ft (62.8 hm³) Sept. 3, elevation, 834.74 ft (254.429 m); minimum, 27,600 acre-ft (34.0 hm³) Jan. 24, elevation, 827.69 ft (252.341 m).

MUSKINGUM RIVER BASIN

03141500 SENECA FORK BELOW SENECAVILLE DAM, NEAR SENECAVILLE, OHIO

LOCATION:--Lat 39°55'28", long 81°26'17", Guernsey County, 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).

GAGE:--Water-stage recorder and concrete control. Datum of gage is 799.00 ft (243.535 m) above mean sea level, adjustment of 1912. Prior to Jan. 24, 1942, at site 150 ft (46 m) downstream at same datum.

REMARKS:--Discharge records good. 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 DISCHARGE RECORDS

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

AVERAGE DISCHARGE:--37 years, 129 ft³/s (3.653 m³/s) (unadjusted).

EXTREMES:--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.

REVISIONS:--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	387	1.7	364	311	349	513	546	285	56	27	2.6	15
2	551	1.9	425	432	244	528	507	98	71	13	2.5	60
3	620	2.0	501	453	194	539	506	470	80	8.6	2.1	283
4	617	2.0	515	324	196	533	338	546	177	13	2.0	480
5	611	2.0	546	382	199	527	308	542	147	13	1.9	414
6	608	2.0	567	297	295	524	174	539	89	13	1.9	311
7	240	1.9	563	179	358	534	45	536	297	13	1.7	462
8	2.0	1.8	364	248	351	455	206	533	498	13	1.7	387
9	1.9	1.8	60	184	347	378	522	527	210	13	1.8	360
10	1.9	1.7	116	236	236	458	513	522	69	13	1.8	349
11	1.9	1.7	427	281	106	534	509	378	76	55	2.1	453
12	1.9	1.8	573	133	21	365	504	116	219	14	2.0	448
13	2.0	1.8	573	13	4.5	.58	215	121	111	14	2.3	382
14	2.0	1.8	566	13	3.9	2.3	42	189	42	14	2.6	382
15	2.0	1.33	587	177	2.6	3.2	121	41	42	14	2.5	306
16	1.9	201	383	215	2.6	2.6	116	61	147	14	2.6	378
17	1.9	204	91	111	2.1	324	44	14	133	14	106	382
18	2.0	206	542	60	2.5	630	44	14	39	14	210	364
19	2.0	369	545	163	2.8	264	108	250	41	14	230	367
20	2.0	495	540	266	3.0	47	144	136	236	14	226	385
21	1.9	488	534	264	2.5	232	72	9.6	177	14	221	383
22	1.9	488	528	264	2.1	531	42	9.3	35	15	219	298
23	1.9	480	524	264	57	513	43	69	34	15	219	246
24	1.9	476	326	121	121	425	184	89	33	14	82	258
25	1.9	338	199	133	1.8	108	23	80	35	14	58	8.6
26	1.9	256	376	367	1.9	279	19	76	72	14	94	8.6
27	1.8	297	459	355	258	527	19	101	46	14	65	163
28	1.8	326	328	351	503	513	306	71	48	7.2	12	337
29	1.8	347	324	358	---	524	522	38	49	3.2	12	561
30	1.8	358	423	351	---	522	531	56	41	2.6	12	521
31	1.8	---	387	347	---	534	---	69	---	2.5	13	---
TOTAL	3679.8	5487.9	13256	7653	3867.3	11869.68	7273	6585.9	3350	436.1	1813.1	9752.2
MEAN	119	183	428	247	138	383	242	212	112	14.1	58.5	325
MAX	620	495	587	453	503	630	546	546	498	55	230	561
MIN	1.8	1.7	60	13	1.8	.58	19	9.3	33	2.5	1.7	8.6
(+)	2.53	1.73	1.86	1.74	1.80	2.26	2.55	2.04	2.24	2.81	2.32	2.53

CAL YR 1974 TOTAL 65744.60 MEAN 180 MAX 632 MIN 1.3 (+) 2.30
 WTR YR 1975 TOTAL 75023.98 MEAN 206 MAX 630 MIN .58 (+) 2.20

EXTREMES:--Current year: Maximum discharge, 687 ft³/s (19.5 m³/s) Mar. 18, gage height, 8.58 ft (2.615 m); minimum daily, 0.58 ft³/s (0.016 m³/s) Mar. 13.

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

MUSKINGUM RIVER BASIN

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03141500 SENECA FORK BELOW SENECAVILLE DAM, NEAR SENECAVILLE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
APR. 08...	1045	46	7.0	9.4	77	352	7.7	4.4	50	12	6.1	1.5
AUG. 06...	1300	1.9	22.0	5.3	60	373	7.5	7.1	60	14	4.9	1.9

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
APR. 08...	140	0	4.5	115	4.7	65	.4	.06	.01	.22	.03	213
AUG. 06...	184	0	9.3	151	3.6	45	.2	.49	.02	.04	.10	231

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	HIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
APR. 08...	170	59	40	50	--	--	--	--	--	--	--	--
AUG. 06...	210	57	20	3800	10	<10	0	0	0	<.5	4.2	.0

MUSKINGUM RIVER BASIN

03142000 WILLS CREEK AT CAMBRIDGE, OHIO

LOCATION.--Lat 40°00'52", long 81°35'14", Guernsey County, 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).

GAGE.--Water-stage recorder. Datum of gage is 772.34 ft (235.409 m) above mean sea level. 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.--Discharge 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 DISCHARGE RECORDS

PERIOD OF RECORD.--June 1926 to September 1928, May 1937 to September 1975 (discontinued).

AVERAGE DISCHARGE.--40 years, 442 ft³/s (12.52 m³/s) (unadjusted).

EXTREMES.--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.

Flood of Aug. 8, 1935, reached a stage of 25.4 ft (7.74 m).

REVISIONS (WATER YEARS).--WSP 853: 1929(M). WSP 893: 1928. WSP 973: 1942.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	670	64	732	1280	1050	1520	1030	1370	410	98	23	1330
2	496	63	1090	1350	1090	1020	925	1840	406	78	34	1390
3	624	59	1280	1090	857	861	996	1670	562	67	36	613
4	661	61	1280	1200	696	824	1200	1170	582	87	34	520
5	661	145	1080	1060	672	793	822	967	584	348	54	553
6	652	260	956	872	1180	782	670	850	1070	187	87	575
7	633	143	932	710	1420	864	474	806	1080	108	51	608
8	280	111	1340	615	1030	1250	322	758	773	85	36	534
9	84	94	2020	881	837	1040	507	716	646	101	34	446
10	72	83	2110	914	690	802	721	685	374	279	32	410
11	74	80	1420	835	569	828	721	657	239	270	148	410
12	71	414	1090	767	525	1250	696	503	447	203	149	732
13	65	1090	1280	496	600	2050	668	347	535	108	107	1150
14	64	661	1300	330	340	2160	353	360	278	93	366	767
15	72	364	1190	250	250	2170	216	335	227	92	573	525
16	114	412	1330	490	350	2110	288	236	266	70	454	410
17	186	431	1540	487	500	1500	250	248	449	59	677	440
18	136	402	1160	349	700	1120	190	199	506	63	529	564
19	97	389	1060	485	600	1400	206	284	335	83	358	1120
20	81	703	1040	773	500	1990	300	454	376	131	312	905
21	74	1030	974	740	450	1850	294	260	555	112	316	725
22	70	925	956	663	400	1270	214	152	297	75	288	608
23	69	826	945	617	1000	1090	178	151	151	59	280	448
24	67	747	1100	630	2840	1150	527	216	127	60	264	1320
25	66	853	1270	668	4910	1640	1640	231	117	80	163	2300
26	72	1150	1220	1460	4640	1530	2110	208	126	107	119	2820
27	66	864	1050	1540	3430	1020	2180	244	178	74	133	2500
28	63	723	930	1070	2390	967	1420	260	150	58	105	1480
29	59	657	793	1040	---	1040	945	214	138	40	59	751
30	58	613	732	1260	---	1280	925	225	119	28	71	727
31	59	---	815	1060	---	1220	---	444	---	24	655	---
TOTAL	6516	14417	36015	25982	34516	40411	21988	17060	12103	3327	6547	27681
MEAN	210	481	1162	838	1233	1304	733	550	403	107	211	923
MAX	670	1150	2110	1540	4910	2170	2180	1840	1080	348	677	2820
MIN	58	59	732	250	250	782	178	151	117	24	23	410
(+)	4.83	4.53	4.37	4.68	4.67	4.46	4.37	4.61	5.14	5.69	5.64	5.79
CAL YR 1974 TOTAL	232036											
MEAN 636												
MAX 2780												
MIN 41 (+)												
4.70												
WTR YR 1975 TOTAL	246563											
MEAN 676												
MAX 4910												
MIN 23 (+)												
4.90												

EXTREMES.--Current year: Maximum discharge, 5,260 ft³/s (149 m³/s) Feb. 25, gage height, 18.70 ft (5.700 m); minimum daily, 23 ft³/s (0.65 m³/s) Aug. 1.

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

MUSKINGUM RIVER BASIN

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03142000 WILLS CREEK AT CAMBRIDGE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1964 to 1975 (discontinued).

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
APR. 08...	1205	318	7.0	9.0	74	657	7.5	6.2	49	15	10	1.7
AUG. 06...	1000	88	22.5	4.3	49	975	7.4	4.8	100	40	59	3.6

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
APR. 08...	134	0	6.8	110	11	130	.3	.06	.01	.39	.14	290
AUG. 06...	216	0	14	177	38	310	.2	.33	.05	.21	.22	663

DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROM- IUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (MG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
APR. 08...	180	70	70	400	--	--	--	--	--	--	--	--
AUG. 06...	410	240	20	870	1	10	20	5	30	<.5	42	.0

03142290 SALT FORK RESERVOIR NEAR CAMBRIDGE, OHIO

LOCATION.--Lat 40°06'15", long 81°33'15", in T.3 N., R.3 W., Guernsey County; 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) above mean sea level; gage readings have been reduced to elevations above mean sea level.

EXTREMES.--Period of record: Maximum contents, 60,500 acre-ft (74.6 hm³) Feb. 24, 1975, elevation, 805.46 ft (245.504 m); minimum, 12,200 acre-ft (15.0 hm³) Oct. 17, 1968, elevation, 786.53 ft (239.734 m).

REMARKS.--Reservoir is formed by earthfill dam with concrete morning-glory spillway and emergency spillway cut in natural rock; storage began Dec. 30, 1967. Usable capacity, 41,950 acre-ft (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.

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

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	801.08	45,310	-
Oct. 31.....	800.57	43,720	-1,590
Nov. 30.....	801.57	46,870	+3,150
Dec. 31.....	802.02	48,320	+1,450
CAL YR 1974.....	-	-	+1,610
Jan. 31.....	802.59	50,260	+1,940
Feb. 28.....	804.15	55,690	+5,430
Mar. 31.....	802.29	49,240	-6,450
Apr. 30.....	802.77	50,870	+1,630
May 31.....	801.18	45,630	-5,240
June 30.....	801.02	45,110	-520
July 31.....	800.46	43,380	-1,730
Aug. 31.....	801.25	45,850	+2,470
Sept. 30.....	802.20	48,930	+3,080
WTR YR 1975.....	-	-	+3,620

EXTREMES.--Current year: Maximum contents, 60,500 acre-ft (74.6 hm³) Feb. 24, elevation, 805.46 ft (245.504 m); minimum, 42,970 acre-ft (53.0 hm³) Aug. 10, elevation, 800.33 ft (243.941 m).

MUSKINGUM RIVER BASIN

03142295 SALT FORK BELOW SALT FORK DAM, NEAR CAMBRIDGE, OHIO

LOCATION.--Lat 40°06'15", long 81°33'15", T.3 N., R.3 W., Guernsey County, 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.

DRAINAGE AREA.--159 mi² (412 km²).

GAGE.--Water-stage recorder and morning-glory spillway control. Datum of gage is 700.00 ft (213.360 m) above mean sea level; gage readings have been reduced to elevations above mean sea level. Same gage and elevations as Salt Fork Reservoir (station 03142290).

REMARKS.--Discharge records good except those below 10 ft³/s (0.283 m³/s), which are fair. Flow completely regulated by Salt Fork Reservoir (see station 03142290).

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1970 to current year.

AVERAGE DISCHARGE.--5 years, 188 ft³/s (5.324 m³/s).

EXTREMES.--Period of record: Maximum discharge, 1,830 ft³/s (51.8 m³/s) Feb. 25, 1975, elevation, 805.46 ft (245.504 m) from rating curve extended above 650 ft³/s (18.4 m³/s); no flow at times in 1970-71, 1974.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	22	245	355	516	1050	415	480	129	83	14	143
2	77	21	268	382	506	872	388	740	134	71	14	206
3	72	16	272	400	492	716	364	740	141	61	17	217
4	72	20	275	376	464	638	364	489	145	64	23	214
5	72	27	272	367	430	565	346	460	144	80	23	207
6	68	32	265	340	451	502	319	460	185	101	23	207
7	58	34	255	322	484	451	298	460	185	106	21	205
8	50	35	328	316	474	442	285	337	186	107	16	197
9	52	35	492	358	439	430	285	310	143	97	14	189
10	50	34	568	400	409	409	272	310	142	88	15	143
11	49	39	551	400	397	391	252	210	140	88	25	138
12	46	77	509	373	355	470	228	185	145	88	31	144
13	44	129	484	349	310	666	210	185	134	75	31	145
14	37	145	467	316	298	744	192	185	135	72	35	145
15	39	145	457	295	275	760	181	185	135	71	46	140
16	44	143	460	272	275	768	132	185	136	59	58	136
17	41	135	506	245	298	768	132	185	134	50	64	133
18	32	131	484	238	331	733	132	185	186	45	72	138
19	31	125	474	238	334	788	111	185	189	45	69	188
20	27	139	445	240	319	896	106	133	189	45	66	196
21	25	175	412	235	308	868	106	132	189	44	61	197
22	22	208	376	212	298	780	106	132	188	39	55	193
23	22	212	355	205	373	722	108	132	136	33	53	191
24	22	215	364	198	1280	670	136	132	136	37	49	325
25	24	232	400	215	1800	660	199	109	133	43	44	492
26	22	252	421	305	1720	624	340	107	126	33	39	504
27	22	265	451	358	1540	565	460	107	109	26	34	499
28	22	260	436	367	1280	520	460	105	108	23	31	484
29	22	245	403	418	---	488	460	110	95	23	29	468
30	22	230	361	526	---	460	460	107	88	23	40	338
31	22	---	334	534	---	442	---	109	---	19	111	---
TOTAL	1293	3778	12390	10155	16456	19858	7847	7892	4365	1839	1223	7122
MEAN	41.7	126	400	328	588	641	262	255	146	59.3	39.5	237
MAX	85	265	568	534	1800	1050	460	740	189	107	111	504
MIN	22	16	245	198	275	391	106	106	88	19	14	133
CAL YR 1974 TOTAL	81897											
WTR YR 1975 TOTAL	94218											
MEAN 224												
MAX 1800												
MIN 14												

EXTREMES.--Current year: Maximum discharge, 1,830 ft³/s (51.8 m³/s) Feb. 25, elevation, 805.46 ft (245.504 m); minimum daily, 14 ft³/s (0.40 m³/s) Aug. 1, 2, 9.

MUSKINGUM RIVER BASIN

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03142295 SALT FORK BELOW SALT FORK DAM, NEAR CAMBRIDGE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1971 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SIO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)
APR. 08...	1435	278	8.0	9.7	82	221	7.1	6.3	24	7.4	7.3	1.8
AUG. 11...	1315	21	25.5	8.0	96	270	8.1	4.0	31	8.7	6.0	1.9

DATE	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKALINITY AS CaCO ₃ (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
APR. 08...	40	0	5.1	33	8.6	60	.3	.07	.01	.48	.12	136
AUG. 11...	63	0	.8	52	6.1	60	.0	.28	.03	.01	.04	149

DATE	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED IRON (FE) (MG/L)	DIS-SOLVED MANGANESE (MN) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
APR. 08...	90	58	90	170	--	--	--	--	--	--	--	--
AUG. 11...	110	62	30	40	0	<10	10	1	10	<.5	4.6	3.7

03143000 WILLS CREEK LAKE NEAR WILLS CREEK, OHIO

LOCATION.--Lat 40°09'25", long 81°51'00", in SE 1/4 sec. 23, T.4 N., R.6 W., Coshocton County, 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) above mean sea level, adjustment of 1912; gage readings have been reduced to elevations above mean sea level.

EXTREMES.--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).

REMARKS.--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.

COOPERATION.--Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	743.75	6,270	-
Oct. 31.....	741.94	4,370	-1,900
Nov. 30.....	744.25	6,890	+2,520
Dec. 31.....	744.68	7,460	+570
CAL YR 1974.....	-	-	+730
Jan. 31.....	746.03	9,470	+2,010
Feb. 28.....	764.04	70,460	+60,990
Mar. 31.....	745.61	8,820	-61,640
Apr. 30.....	745.85	9,190	+370
May 31.....	743.20	5,650	-3,560
June 30.....	742.60	5,010	-620
July 31.....	741.75	4,210	-800
Aug. 31.....	742.50	4,910	+700
Sept. 30.....	745.42	8,530	+3,620
WTR YR 1975.....	-	-	+2,260

EXTREMES.--Current year: Maximum contents, 72,930 acre-ft (89.9 hm³) Mar. 2, elevation, 764.46 ft (233.007 m); minimum, 4,070 acre-ft (5.02 hm³) Aug. 3, elevation, 741.58 ft (226.034 m).

MUSKINGUM RIVER BASIN

03143500 WILLS CREEK BELOW WILLS CREEK DAM, AT WILLS CREEK, OHIO

LOCATION.--Lat 40°09'34", long 81°50'51", in sec. 22, T.4 N., R.6 W., Coshocton County, 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).

GAGE.--Water-stage recorder. Datum of gage is 717.00 ft (218.542 m) above mean sea level, adjustment 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.--Discharge 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 DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to current year. Prior to October 1939, published as Wills Creek at Wills Creek.

AVERAGE DISCHARGE.--37 years, 905 ft³/s (25.63 m³/s).

EXTREMES.--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, when gates at Wills Creek Lake were closed.
Flood in March 1913 reached a discharge of 22,300 ft³/s (632 m³/s), computed by Corps of Engineers.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	869	151	1190	1890	3030	4860	2340	2490	1360	321	98	529
2	854	153	1310	2300	2780	5040	2130	2860	1580	287	84	1310
3	812	153	1700	2540	2610	5340	2060	3200	1230	249	80	1760
4	752	165	2020	2420	2420	5470	2080	3330	1130	218	88	1520
5	794	198	2090	2300	2160	5550	2110	3030	1170	196	92	1060
6	824	228	1930	2150	2220	5560	1920	2460	1160	223	94	985
7	827	305	1720	1880	2620	5540	1590	2040	1390	331	95	987
8	812	368	1840	1650	2840	5290	1330	1780	1570	341	107	977
9	719	347	2730	1870	2530	4900	1100	1590	1330	301	110	919
10	510	309	3290	2300	2030	4940	1020	1430	1140	267	102	812
11	343	277	3500	2580	1720	3410	1170	1320	959	299	96	754
12	263	337	3370	2390	1530	2530	1230	1240	886	398	142	986
13	221	558	2900	2100	1370	3370	1200	1160	917	433	181	1140
14	198	1190	2680	1740	1320	3900	1140	956	1000	375	276	1400
15	196	1320	2690	1390	1180	4260	998	839	872	301	320	1340
16	195	1000	2690	1080	1090	4420	773	800	704	249	588	1030
17	198	788	2800	963	1240	4480	659	704	608	218	685	821
18	228	749	2940	1020	1700	4370	650	683	728	207	731	833
19	277	725	2750	1040	1960	3590	620	647	1210	189	789	1370
20	285	704	2350	1060	1860	2700	598	593	1330	170	660	1800
21	257	886	2090	1200	1570	3210	590	614	1050	169	546	1770
22	227	1400	1940	1300	1300	4330	620	600	963	186	487	1410
23	206	1500	1800	1240	1590	4570	614	585	883	191	452	1170
24	193	1380	1900	1160	1810	4900	698	575	659	173	418	1480
25	182	1320	2440	1210	1.0	4220	1410	555	533	154	391	2640
26	177	1500	2850	1780	1160	3540	3060	548	525	139	355	3170
27	171	1780	2810	2440	3040	3300	3540	540	458	136	288	3480
28	168	1720	2560	2720	4450	2790	3040	515	418	142	227	3660
29	163	1430	2200	2820	---	2370	3500	515	395	136	198	3540
30	159	1250	1890	3170	---	2290	2760	578	358	122	184	2580
31	156	---	1680	3220	---	2370	---	580	---	111	272	---
TOTAL	12236	24191	72650	58923	55131.0	127410	47150	39357	28496	7232	9236	47233
MEAN	395	806	2344	1901	1969	4110	1572	1270	950	233	298	1574
MAX	869	1780	3500	3220	4450	5560	3640	3330	1580	433	789	3660
MIN	156	151	1190	963	1.0	2290	590	515	358	111	80	529
CAL YR 1974	TOTAL	473892.0	MEAN	1298	MAX	4400	MIN	87				
WTR YR 1975	TOTAL	529245.0	MEAN	1450	MAX	5560	MIN	1.0				

EXTREMES.--Current year: Maximum discharge, 5,730 ft³/s (162 m³/s) Mar. 5, gage height, 16.21 ft (4.941 m); minimum daily, 1.0 ft³/s (0.028 m³/s) Feb. 25, when gates at Wills Creek Lake were closed.

MUSKINGUM RIVER BASIN

193

03143500 WILLS CREEK BELOW WILLS CREEK DAM, AT WILLS CREEK, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1957, 1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
APR. 08...	1645	1280	7.5	9.8	82	423	7.4	5.2	79	29	16	1.6
SEP. 15...	1345	1320	18.0	9.1	96	385	7.7	5.5	44	14	9.8	2.6

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
APR. 08...	100	0	6.4	82	10	230	.3	.06	.01	.26	.25	421
SEP. 15...	112	0	3.6	92	8.8	85	.1	.03	.01	1.1	.09	225

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CP) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
APR. 08...	320	240	40	570	--	--	--	--	--	--	--	--
SEP. 15...	170	76	10	80	1	<10	0	1	20	<.5	7.1	1.9

MUSKINGUM RIVER BASIN

03144000 WAKATOMIKA CREEK NEAR FRAZEYSBURG, OHIO

LOCATION.--Lat 40°07'57", long 82°08'53", in NW 1/4 sec. 13, T.3 N., R.9 W., Muskingum County, 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).

GAGE.--Water-stage recorder. Datum of gage is 748.12 ft (228.027 m) above mean sea level, adjustment of 1912. Prior to Oct. 31, 1936, nonrecording gage at same site and datum.

REMARKS.--Discharge records good. Sediment data collected at this site 1969 to 1974.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--39 years, 148 ft³/s (4.191 m³/s), 14.36 in/yr (365 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 13,700 ft³/s (368 m³/s) Jan. 22, 1959, gage height, 13.15 ft (4.008 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).

REVISIONS (WATER YEARS).--WSP 1113: 1937(M). WSP 1555: 1952(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	30	134	433	442	316	227	515	129	19	9.4	64
2	20	31	186	309	383	265	217	460	75	18	9.0	46
3	18	33	217	288	305	214	220	319	69	18	10	34
4	17	49	184	364	261	181	217	275	63	19	50	50
5	17	330	151	288	265	175	186	223	57	19	47	43
6	17	167	144	237	455	154	170	181	102	17	24	82
7	16	110	144	217	392	244	156	151	97	16	18	62
8	16	89	620	275	270	312	146	129	63	17	15	41
9	16	76	782	841	210	214	134	114	53	16	13	30
10	16	69	412	665	160	204	125	102	47	16	13	25
11	16	67	285	764	150	189	116	94	46	24	16	24
12	15	233	291	496	130	751	108	91	79	17	29	92
13	17	278	429	360	120	934	100	89	60	16	20	83
14	18	198	400	285	110	590	92	79	49	23	16	52
15	43	146	416	210	100	487	88	73	44	20	21	41
16	64	116	544	160	170	501	83	72	42	16	23	35
17	43	100	515	130	349	455	80	67	38	19	22	35
18	30	91	379	140	487	383	77	67	62	43	22	86
19	25	85	298	240	387	915	86	67	56	36	19	195
20	22	98	254	198	305	915	100	62	51	35	15	118
21	21	121	204	150	247	554	86	57	42	38	13	118
22	20	112	186	130	211	429	77	53	34	24	12	80
23	20	102	167	120	1160	345	80	59	29	18	12	65
24	21	98	764	130	5010	510	285	53	27	15	14	302
25	22	186	846	251	1470	559	636	51	26	14	13	258
26	24	254	574	616	716	368	1070	47	34	13	11	141
27	25	186	383	345	491	281	539	43	31	12	10	102
28	25	164	309	278	379	247	372	39	31	11	11	82
29	26	127	258	1260	---	302	330	36	25	11	9.4	69
30	28	106	223	1060	---	319	254	48	21	9.9	34	60
31	29	---	208	590	---	275	---	53	---	9.4	100	---
TOTAL	730	3852	10907	11830	15135	12588	6457	3769	1582	599.3	650.8	2515
MEAN	23.5	128	352	382	541	406	215	122	52.7	19.3	21.0	83.8
MAX	64	330	846	1260	5010	934	1070	515	129	43	100	302
MIN	15	30	134	120	100	154	77	36	21	9.4	9.0	24
CF5M	.17	.91	2.51	2.73	3.86	2.90	1.54	.87	.38	.14	.15	.60
IN.	.19	1.02	2.90	3.14	4.02	3.34	1.72	1.00	.42	.16	.17	.67

CAL YR 1974 TOTAL 62865.9 MEAN 172 MAX 2560 MIN 9.9 CF5M 1.23 IN 16.70
WTR YR 1975 TOTAL 70615.1 MEAN 193 MAX 5010 MIN 9.0 CF5M 1.38 IN 18.76

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

DATE	TIME	G. H.	DISCHARGE
01-29	2230	6.13	2,090
02-24	1200	*10.21	*6,590

Minimum discharge: 8.6 ft³/s (0.24 m³/s) Aug. 3.

MUSKINGUM RIVER BASIN
03144000 WAKATOMIKA CREEK NEAR FRAZEYSBURG, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 10...	1500	212	2.0	12.4	90	240	7.1	7.3	22	8.0	11	1.7
JULY 23...	1005	16	23.5	7.6	88	356	6.6	5.0	31	10	20	3.3

DATE	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 10...	49	0	6.2	40	30	28	.3	.04	.01	.88	.03	133
JULY 23...	100	0	40	82	53	18	.2	.00	.01	.24	.03	190

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	RIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 10...	88	48	90	80	--	--	--	--	--	--	--	--
JULY 23...	120	37	50	110	1	0	40	7	110	<.5	2.4	.8

MUSKINGUM RIVER BASIN

03144500 MUSKINGUM RIVER AT DRESDEN, OHIO

LOCATION.--Lat 40°07'13", long 81°59'59", Muskingum County, 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).

GAGE.--Water-stage recorder. Datum of gage is 693.15 ft (211.272 m) above mean sea level, adjustment of 1912. Prior to Aug. 24, 1925, nonrecording gage at about same site and datum.

REMARKS.--Discharge records good. Flow regulated by 16 flood-control reservoirs at points 15 mi (24 km) to 105 mi (169 km) upstream. Water temperatures collected at this site 1952-61, 1963-74; sediment data collected at this site 1952-74.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--54 years, 6,175 ft³/s (174.9 m³/s).

EXTREMES.--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. 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.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3180	1750	7740	16100	22900	26500	13700	11300	11100	2600	1250	7100
2	3140	1840	8010	17900	22100	26000	12600	12500	13000	2430	1200	8850
3	3200	2090	8940	17700	20800	25500	12600	12800	12200	2280	1300	8510
4	3180	2600	9540	16800	20700	25500	12500	12000	11700	2200	1920	7320
5	3140	4350	9520	15500	20400	25100	11800	10900	11000	2450	2000	6170
6	3080	6740	9050	14000	19800	24900	10700	9980	10900	2670	1840	6120
7	3030	6800	8760	12700	20200	24700	9520	10400	11700	2580	1600	7610
8	2970	5850	10400	12200	19200	25100	8600	10400	10600	2450	1450	7140
9	2800	4950	16700	17300	15500	24500	7930	9070	8600	2410	1340	5760
10	2420	4200	18800	21000	12600	23700	7400	7900	7200	2610	1290	5020
11	2130	3720	18400	22900	11200	22200	7230	7140	6200	2750	1410	4500
12	1990	4340	16700	22400	10800	21600	7050	6640	6800	2630	1890	5120
13	1910	7160	15800	20700	10100	24500	6850	6330	7200	2620	1800	6950
14	1850	8570	15900	18500	9160	24700	6520	5910	6300	2520	1950	7170
15	1890	8100	16300	17700	8480	24900	5960	5570	5600	2560	3250	6010
16	2240	6920	17000	15400	8310	24700	5490	5130	5200	2510	3810	4940
17	2510	5950	18100	13200	10200	24200	5230	4750	5300	2200	4930	4290
18	2440	5370	18200	11000	15000	23400	5100	4650	4800	2130	4070	4520
19	2350	4910	17100	9840	17700	23900	5170	4490	4500	2070	3430	9140
20	2240	4770	15200	9670	17800	25000	5370	4240	4500	1980	2950	12200
21	2120	5470	13400	9020	16400	23600	5240	4080	4800	1990	2600	12000
22	2000	7550	11900	8160	14600	23800	4980	4120	4000	1990	2240	10300
23	1950	7980	10800	7840	15500	23300	4820	4280	3600	1980	2310	8660
24	1880	7590	12700	7570	28500	22300	5620	4950	3500	1810	2190	10100
25	1720	7670	19000	7970	28800	21900	8670	4740	3700	1680	1950	13600
26	1450	11000	20800	13200	21700	19800	13500	4520	3300	1850	1730	13600
27	1850	12300	20600	16500	22700	18200	12700	5310	3200	1760	1640	13100
28	1820	11100	20000	16100	25600	16100	11800	5110	3700	1630	1750	12400
29	1780	9490	17700	18700	---	14600	11200	4810	3100	1480	1760	10800
30	1760	8320	15800	23400	---	14500	10100	5200	2800	1390	2140	8750
31	1720	---	14500	23700	---	14700	---	6000	---	1300	5210	---
TOTAL	72140	169390	453360	474670	486750	703400	255970	215220	200100	67510	70200	247750
MEAN	2327	6313	14620	15310	17380	22690	8532	6943	6670	2178	2265	8258
MAX	3200	12300	20800	23700	26800	26500	13700	12800	13000	2750	5210	13600
MIN	1720	1750	7740	7570	8310	14500	4820	4080	2800	1300	1200	4290
CAL YR 1974 TOTAL	3004680			MEAN 8232		MAX 29600		MIN 1330				
WTR YR 1975 TOTAL	3436460			MEAN 9415		MAX 28800		MIN 1200				

EXTREMES.--Current year: Maximum discharge, 30,900 ft³/s (875 m³/s) Feb. 24, gage height, 18.08 ft (5.511 m); minimum daily, 1,200 ft³/s (34.0 m³/s) Aug. 2.

MUSKINGUM RIVER BASIN
03144500 MUSKINGUM RIVER AT DRESDEN, OHIO--Continued
WATER QUALITY RECORDS
CHEMICAL ANALYSES

PERIOD OF RECORD.--1966, 1969 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 10...	1600	23600	3.0	12.4	92	430	7.3	6.3	47	15	16	2.6
SEP. 02...	1130	8980	21.5	6.2	70	610	7.2	7.5	64	17	32	4.6

DATE	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 10...	88	0	7.1	72	31	96	.2	.15	.03	1.3	.34	258
SEP. 02...	89	0	9.0	73	71	120	.3	.08	.05	1.0	.05	361

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 10...	180	110	120	340	--	--	--	--	--	--	--	--
SEP. 02...	230	160	40	410	5	10	20	18	70	4.5	12	3.2

03144800 ETNA CREEK AT ETNA, OHIO

LOCATION.--Lat 39°58'08", long 82°40'55", Licking County, at culvert on State Highway 310, 0.7 mi (1.1 km) north of Etna.

DRAINAGE AREA.--1.10 mi² (2.85 km²).

PERIOD OF RECORD.--Discharge, 1966 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 24	10.52	3.206	76	2.15

MUSKINGUM RIVER BASIN

03145000 SOUTH FORK LICKING RIVER NEAR HEBRON, OHIO

LOCATION.--Lat 39°59'19", long 82°28'30", in NW 1/4 sec.3, T.1 N., R.12 W., Licking County, 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).

GAGE.--Water-stage recorder. Datum of gage is 856.08 ft (260.933 m) above mean sea level. Prior to Sept. 13, 1974 nonrecording gage at same site and datum.

REMARKS.--Discharge records good. Occasional regulation by Buckeye Lake, capacity, 27,300 acre-ft (33.7 hm³), on unnamed tributary 5.6 mi (9.0 km) upstream from station. Occasional diversion from Buckeye Lake into Jonathan Creek which bypasses station.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--16 years, 142 ft³/s (4.021 m³/s).

EXTREMES.--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.

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.

REVISIONS (WATER YEARS).--WSP 923: 1940. WSP 1033: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	20	495	539	571	573	146	214	61	20	4.8	294
2	20	19	635	348	513	541	111	172	61	16	4.5	108
3	18	19	575	298	359	516	257	108	69	14	11	45
4	18	67	406	351	153	378	156	85	69	28	23	29
5	18	321	311	289	139	124	107	97	50	17	31	27
6	18	290	193	229	391	107	83	160	152	14	24	74
7	18	190	181	106	296	186	71	160	176	14	18	74
8	19	47	644	149	156	378	64	127	76	14	12	30
9	18	34	808	706	110	236	59	48	43	19	8.6	20
10	18	30	413	609	85	181	55	36	32	14	7.2	14
11	18	31	401	557	70	156	51	33	34	11	8.1	20
12	18	372	434	273	60	726	47	31	68	9.7	11	299
13	23	450	517	166	54	1120	42	32	60	10	12	194
14	25	361	240	110	52	618	39	29	36	15	9.1	64
15	38	432	215	85	50	501	39	27	28	16	12	140
16	82	465	599	75	126	517	38	25	44	13	24	429
17	48	451	416	74	391	364	37	23	184	9.1	15	380
18	32	420	306	79	366	231	35	23	227	18	11	203
19	26	319	267	245	240	655	43	23	168	26	9.7	565
20	23	234	249	219	168	703	46	21	31	36	11	479
21	22	250	117	155	113	380	38	19	20	25	9.1	311
22	21	264	95	153	88	317	34	17	16	22	9.1	121
23	20	259	107	324	920	296	36	17	14	20	13	69
24	21	238	422	339	1950	723	251	18	14	19	13	467
25	20	396	560	454	2190	758	512	19	142	16	12	403
26	20	596	378	808	1130	471	879	17	377	7.2	9.7	197
27	19	488	285	266	712	411	432	16	119	5.6	18	115
28	19	451	256	224	623	402	351	14	49	5.9	12	76
29	19	427	244	741	---	635	349	19	30	5.9	7.2	107
30	19	409	235	787	---	590	243	25	23	5.2	15	352
31	21	---	265	538	---	355	---	23	---	5.2	199	---
TOTAL	740	8350	11269	10296	12076	14149	4651	1678	2473	470.8	584.1	5706
MEAN	23.9	278	364	332	431	456	155	54.1	82.4	15.2	18.8	190
MAX	82	596	808	808	2190	1120	879	214	377	36	199	565
MIN	18	19	95	74	50	107	34	14	14	5.2	4.5	14

CAL YR 1974 TOTAL 60451.0 MEAN 166 MAX 1320 MIN 14
WTR YR 1975 TOTAL 72442.9 MEAN 198 MAX 2190 MIN 4.5

EXTREMES.--Current year: Maximum discharge, 2,360 ft³/s (66.8 m³/s) Feb. 25, gage height, 10.46 ft (3.188 m); minimum daily, 4.5 ft³/s (0.13 m³/s) Aug. 2.

MUSKINGUM RIVER BASIN

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03145000 SOUTH FORK LICKING RIVER NEAR HEBRON, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALISES

PERIOD OF RECORD.--1969 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 11...	0915	151	2.0	12.8	93	475	7.5	5.3	57	18	17	1.9
JULY 28...	1200	6.5	24.0	7.4	87	600	7.5	7.1	68	22	29	3.7

DATE	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 11...	181	0	9.2	148	30	57	.3	.12	.03	2.1	.12	276
JULY 28...	240	0	12	197	43	54	.3	.72	.04	.55	.40	346

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 11...	220	68	20	50	--	--	--	--	--	--	--	--
JULY 28...	260	64	20	140	6	10	60	8	160	<.5	6.6	5.6

03145600 OTTER FORK NEAR CENTERBURG, OHIO

LOCATION.--Lat 40°17'35", long 82°43'09", Knox County, at culvert on State Highway 3, 1.2 mi (1.9 km) west of Centerburg.

DRAINAGE AREA.--3.17 mi² (8.21 km²).

PERIOD OF RECORD.--Discharge, 1947 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 23	13.07	3.984	175	4.96

MUSKINGUM RIVER BASIN

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03146000 NORTH FORK LICKING RIVER AT UTICA, OHIO

LOCATION.--Lat 40°13'41", long 82°27'06", in T.4 N., R.12 W., Licking County, 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).

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.--Discharge records good. Sediment data collected at this site 1969 to 1974.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--15 years, 133 ft³/s (3.767 m³/s), 15.57 in/yr (396 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 7,040 ft³/s (199 m³/s) June 18, 1973, gage height, 13.04 ft (3.975 m); minimum observed, 0.6 ft³/s (0.017 m³/s) Aug. 13, Oct. 2, 1944. Flood of Jan. 21, 1959 reached a stage of 15.8 ft (4.82 m), from floodmarks.

REVISIONS.--WRD Ohio 1970: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	7.1	82	685	338	148	96	130	1020	12	3.0	76
2	14	8.1	112	229	309	118	83	100	271	12	3.0	44
3	11	8.1	123	186	210	96	130	77	130	10	14	28
4	9.5	24	110	274	165	84	100	75	90	10	21	35
5	8.8	207	94	160	155	77	77	67	94	9.7	14	22
6	8.1	108	88	118	406	77	69	58	450	9.7	17	48
7	7.7	67	84	108	267	275	63	52	171	9.7	12	29
8	7.4	53	1200	724	180	388	58	47	91	9.7	7.7	19
9	7.0	39	916	1650	120	162	54	43	63	9.7	5.8	15
10	7.0	30	299	778	110	146	53	39	50	8.4	31	12
11	7.0	29	174	838	90	118	50	36	50	9.0	79	12
12	7.4	350	278	338	80	1480	47	35	112	8.4	36	85
13	7.0	246	530	204	74	1060	43	35	71	8.4	16	58
14	7.7	155	390	140	70	392	40	33	50	11	11	32
15	18	114	1340	110	66	244	40	30	42	10	11	21
16	28	76	610	95	250	396	39	29	44	8.4	12	18
17	23	61	354	86	898	357	37	27	44	7.7	9.7	18
18	17	52	213	82	665	241	37	27	42	8.4	8.4	156
19	12	44	149	198	330	746	65	26	51	7.7	7.1	251
20	11	108	121	149	204	429	68	24	118	8.4	30	162
21	9.8	168	102	110	152	198	49	22	44	8.4	12	119
22	8.8	168	92	95	128	162	47	20	31	7.1	7.7	62
23	8.4	125	100	98	3050	140	62	20	26	5.8	9.7	46
24	8.4	100	988	118	5060	320	672	20	22	5.4	8.4	257
25	8.1	680	706	844	1040	216	598	18	24	5.0	5.8	152
26	8.4	338	285	1340	446	126	614	17	38	4.6	5.0	87
27	8.1	149	157	313	285	99	195	23	22	4.6	4.6	63
28	8.1	108	130	207	190	93	148	20	18	4.1	4.1	49
29	7.7	87	121	3030	---	204	138	21	16	4.1	6.5	39
30	7.7	72	125	1250	---	185	103	90	14	3.6	106	33
31	7.7	---	174	455	---	114	---	77	---	3.6	100	---
TOTAL	330.8	3781.9	10247	15014	15318	8945	3875	1338	3309	244.6	618.5	2048
MEAN	10.7	126	331	484	547	289	129	43.2	110	7.89	20.0	68.3
MAX	28	680	1340	3030	5060	1480	672	130	1020	12	106	257
MIN	7.0	7.7	82	82	66	77	37	17	14	3.6	3.0	12
CFSM	.09	1.09	2.85	4.17	4.72	2.49	1.11	.37	.95	.07	.17	.59
IN.	.11	1.21	3.29	4.81	4.91	2.87	1.24	.43	1.06	.08	.20	.66

CAL YR 1974 TOTAL 52446.4 MEAN 144 MAX 2950 MIN 3.6 CFSM 1.24 IN 16.82
WTR YR 1975 TOTAL 65069.8 MEAN 178 MAX 5060 MIN 3.0 CFSM 1.53 IN 20.87

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-25	2400	7.60	2,540	02-24	0430	*12.90	*6,910
01-29	1600	9.91	4,380	03-12	1500	7.65	2,580

Minimum discharge: 3.0 ft³/s (0.085 m³/s) Aug. 1-3.

MUSKINGUM RIVER BASIN
03146000 NORTH FORK LICKING RIVER AT UTICA, OHIO--Continued

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WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1969 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	
DATE	TIME						(UNITS)						
MAR. 10...	1145	132	1.5	12.4	88	410	7.7	5.1	53	18	7.1	1.7	
JULY 24...	1130	5.6	24.5	7.7	92	547	7.3	5.2	66	25	14	2.6	
		BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARRON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)
DATE													
MAR. 10...	175	0	5.6	144	14	46	.4	.05	.01	2.6	.07		232
JULY 24...	294	0	24	241	15	57	.4	.00	.01	.15	.05		330
		HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ANSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
DATE													
MAR. 10...	210	63	40	20	--	--	--	--	--	--	--	--	--
JULY 24...	270	27	20	60	2	<10	20	63	110	<.5	2.6	.7	

03146250 NORTH FORK LICKING RIVER ABOVE NEWARK, OHIO

LOCATION.--Lat 40°06'19", long 82°25'02", Licking County, at American Aggregates plant, 1.3 mi (2.1 km) downstream from Dry Creek, 1.5 mi (2.4 km) upstream from Newark Water Supply plant.

DRAINAGE AREA.--224 mi² (580 km²).

PERIOD OF RECORD.--Discharge, 1944, 1964, 1972 to current year; chemical analyses, 1972 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	
JULY 23...	1510	42	25.0	8.4	565	7.1	7.8	79	24	8.7	2.2	274	
DATE		CAR- BONATE (CO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
JULY 23...	0	14	79	.1	.00	.01	.27	.04	350	300	30	20	

MUSKINGUM RIVER BASIN

03146500 LICKING RIVER NEAR NEWARK, OHIO

LOCATION.--Lat 40°03'33", long 82°20'23", in SW 1/4 T.2 N., R.11 W., Licking County, 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).

GAGE.--Water-stage and water-quality recorders. Datum of gage is 779.02 ft (237.445 m) above mean sea level. Prior to May 9, 1940, nonrecording gage at same site and datum.

REMARKS.--Discharge records good. Interruptions in the daily water-quality records were due to malfunctions of the instrument. Occasional regulation by Buckeye Lake, capacity, 27,300 acre-ft (33.7 km³), on South Fork 15.2 mi (24.5 km) upstream.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--36 years, 565 ft³/s (16.00 m³/s).

EXTREMES.--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.

REVISIONS (WATER YEARS).--WSP 973: 1940(M). WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	83	855	1850	1620	1660	831	1030	1040	140	76	628
2	116	85	1130	1190	1500	1490	704	805	753	133	74	323
3	103	80	977	1210	1360	1040	605	509	127	188	209	
4	94	130	891	1200	885	1200	824	545	406	146	180	157
5	92	964	725	943	816	851	645	484	333	140	146	157
6	89	754	544	777	1570	772	566	499	662	123	130	260
7	86	488	550	610	1310	1110	514	464	716	120	114	247
8	83	295	2850	1070	800	1720	479	440	406	120	98	164
9	82	225	2950	3520	700	1160	454	363	309	192	90	127
10	82	190	1400	2430	440	1040	440	318	260	143	83	111
11	80	193	1070	2430	460	913	423	299	268	120	140	146
12	77	1160	1150	1400	460	4030	400	290	363	111	133	645
13	75	1280	1650	980	440	4210	379	290	343	127	117	499
14	77	903	1190	750	420	2290	363	273	268	136	103	264
15	134	853	1170	520	400	1790	358	256	235	120	120	205
16	235	792	2580	460	730	1980	353	251	216	114	117	469
17	193	726	1520	400	1830	1630	348	239	309	224	109	464
18	145	663	1090	535	1790	1290	338	239	379	196	98	474
19	122	535	892	1010	1220	2870	395	231	338	146	88	1430
20	109	480	804	887	929	2440	406	220	277	168	93	1120
21	100	718	620	580	730	1510	358	212	224	140	95	864
22	95	738	539	540	610	1270	333	216	184	117	85	440
23	89	689	548	751	4260	1140	353	216	164	120	85	309
24	89	568	2120	807	14800	2180	1300	209	150	109	83	1310
25	89	1220	2300	1680	6190	2050	2270	196	281	103	80	1230
26	87	1480	1440	3480	3220	1360	2890	196	805	95	76	622
27	85	1010	997	1310	2220	1140	1450	180	313	85	74	440
28	84	863	851	932	1880	1090	1120	180	212	85	80	333
29	81	774	787	4090	---	1780	1070	201	168	83	72	268
30	83	705	755	3690	---	1710	844	247	150	80	168	440
31	83	---	801	1830	---	1200	---	281	---	76	588	---
TOTAL	3178	19644	37889	43629	53440	52226	22248	10480	11041	3939	3783	14355
MEAN	103	655	1222	1407	1909	1685	742	338	368	127	122	479
MAX	235	1480	2950	4090	14800	4210	2890	1030	1040	224	588	1430
MIN	75	80	539	400	400	772	333	180	150	76	72	111

CAL YR 1974 TOTAL 245581 MEAN 673 MAX 7430 MIN 75
WTR YR 1975 TOTAL 275852 MEAN 756 MAX 14800 MIN 72

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

DATE	TIME	G. H.	DISCHARGE
02-24	0600	*15.19	*16,800
03-12	2100	10.30	6,970

Minimum daily discharge: 72 ft³/s (2.04 m³/s) Aug. 29.

MUSKINGUM RIVER BASIN

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03146500 LICKING RIVER NEAR NEWARK, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

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

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
FEB. 04...	1145	876	3.3	11.3	85	470	7.8	6.3	56	18	2.6
JULY 23...	1225	107	24.0	7.0	82	826	6.8	7.5	82	25	12

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
FEB. 04...	186	0	4.7	153	22	58	.1	2.2	.02	2.6	.20	267
JULY 23...	218	0	55	179	74	93	.3	3.2	.27	.73	.48	444

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
FEB. 04...	210	57	10	30	--	--	--	--	--	--	--	--
JULY 23...	310	130	100	170	3	10	10	9	130	<.5	7.6	5.0

MUSKINGUM RIVER BASIN

03146500 LICKING RIVER NEAR NEWARK, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C)

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

EXTREMES.--Period of record: Maximum, 1,650 micromhos Feb. 4, 1971; minimum, 100 micromhos Aug. 18, 1969.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	815	701	828	780	477	444	501	408	---	---	480	423
2	843	696	809	749	---	---	531	438	---	---	450	435
3	960	717	800	749	---	---	519	492	---	---	561	447
4	759	729	778	586	---	---	513	486	495	474	525	465
5	765	744	632	416	---	---	531	501	504	483	639	531
6	759	747	492	414	---	---	543	516	480	369	606	567
7	1160	741	514	478	---	---	579	543	417	369	606	417
8	894	763	595	527	---	---	585	569	471	417	414	384
9	975	819	627	576	---	---	560	243	519	462	465	399
10	969	819	656	590	423	402	524	273	564	507	513	465
11	1020	801	691	625	507	426	453	303	540	525	537	507
12	879	801	664	460	525	444	615	462	606	537	525	186
13	837	783	663	459	408	426	645	456	870	549	285	195
14	855	780	681	594	534	447	552	486	705	567	396	288
15	876	615	683	650	540	453	588	543	687	561	423	384
16	684	600	690	636	408	291	588	567	675	447	399	372
17	690	609	713	689	522	399	609	582	435	324	432	384
18	825	684	744	720	585	516	717	556	366	321	468	423
19	735	693	775	736	615	534	549	501	423	369	477	264
20	741	708	809	773	549	534	534	498	450	426	369	279
21	741	690	786	738	603	546	570	516	495	456	435	372
22	792	756	538	448	600	579	567	549	513	492	453	435
23	852	747	504	483	585	567	567	519	519	159	477	453
24	825	738	501	492	552	324	522	507	171	144	477	303
25	873	769	495	402	396	339	---	---	255	177	384	321
26	809	737	447	399	474	393	---	---	354	258	426	384
27	779	734	504	423	504	459	---	---	399	357	447	426
28	789	741	465	456	534	510	---	---	426	402	453	444
29	829	715	474	462	537	528	---	---	---	---	429	375
30	812	757	474	459	543	507	---	---	---	---	396	366
31	783	705	---	---	546	504	---	---	---	---	468	396
MONTH	1160	600	828	399	---	---	---	---	870	144	639	186
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	507	471	474	417	576	387	726	645	963	813	456	363
2	537	510	477	441	555	411	738	666	831	795	537	459
3	537	381	492	477	585	486	753	699	1310	339	612	543
4	507	453	510	495	591	549	759	672	654	378	681	615
5	546	510	537	513	609	561	699	678	711	603	762	663
6	567	543	564	498	600	447	720	663	786	675	678	543
7	585	564	549	519	501	420	744	648	804	687	651	549
8	600	576	573	525	570	489	753	726	876	807	699	633
9	615	591	624	570	615	567	792	543	1220	843	705	660
10	627	576	648	594	660	609	819	612	1170	816	795	708
11	621	576	666	603	711	579	753	687	909	681	747	579
12	645	585	657	618	609	543	900	720	918	690	621	405
13	660	624	645	618	621	510	801	699	816	717	522	453
14	663	624	672	627	642	600	723	609	993	717	582	528
15	690	603	690	639	666	597	822	708	882	636	630	585
16	894	612	684	648	684	417	885	726	978	723	582	387
17	870	603	708	648	669	363	870	435	780	708	423	396
18	861	633	699	648	501	378	861	342	1050	750	552	414
19	828	564	729	654	576	492	780	708	888	777	465	381
20	612	562	807	696	597	522	756	594	1020	780	462	396
21	624	597	750	690	594	564	723	618	927	783	486	420
22	786	594	759	657	1110	588	873	723	879	822	537	468
23	663	582	720	645	675	636	840	732	831	801	570	537
24	600	345	708	687	684	654	837	729	855	762	627	312
25	351	246	768	687	804	312	798	741	915	807	420	366
26	315	246	702	687	420	237	870	756	939	855	516	411
27	402	324	717	696	537	414	864	774	957	837	555	486
28	435	354	765	711	600	513	1470	846	945	804	573	501
29	447	429	1010	570	636	534	933	861	930	801	810	558
30	474	453	708	543	639	567	1060	903	954	630	618	420
31	---	---	855	573	---	---	1020	819	525	348	---	---
MONTH	894	246	1010	417	1110	237	1470	342	1310	339	810	312
YEAR	1470	144										

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PH (UNITS)

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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

OCTOBER				NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN		
1	14.5	12.0	17.5	15.0	3.5	2.5	---	---	---	---	---	4.0	3.0	
2	13.0	10.0	17.5	15.5	---	---	5.5	4.5	---	---	---	3.5	2.0	
3	13.0	9.5	17.5	15.0	---	---	5.0	4.5	---	---	---	4.5	1.5	
4	12.0	9.0	17.0	15.5	---	---	5.0	4.5	3.0	2.5	5.0	3.5	---	
5	15.0	9.5	15.5	12.5	---	---	5.0	4.0	4.5	3.0	7.0	3.5	---	
6	16.5	12.5	12.5	11.5	---	---	5.0	4.0	4.0	2.5	7.5	5.5	---	
7	16.5	14.0	11.5	10.5	---	---	6.5	5.0	2.5	1.0	8.0	6.0	---	
8	14.5	11.0	11.0	8.5	---	---	---	---	2.5	1.0	6.0	4.5	---	
9	14.5	11.0	10.5	7.5	---	---	6.0	5.5	2.0	0.5	6.0	3.0	---	
10	16.0	12.0	10.5	8.5	4.0	2.5	7.0	5.0	2.0	0.0	5.0	3.5	---	
11	16.5	12.5	11.5	10.5	5.0	3.0	---	---	3.5	1.5	6.0	4.0	---	
12	16.5	14.5	11.5	9.5	---	---	---	---	3.5	2.5	5.5	4.0	---	
13	17.0	15.0	10.0	8.5	---	---	6.5	4.0	3.0	1.0	6.0	5.0	---	
14	18.0	16.0	9.5	8.5	---	---	5.5	1.5	3.5	1.0	4.5	3.5	---	
15	18.0	14.0	8.0	7.5	---	---	2.5	1.0	5.0	2.5	5.5	3.5	---	
16	15.5	12.5	8.5	6.5	---	---	3.0	2.0	5.0	3.5	5.5	4.0	---	
17	15.0	11.0	9.5	8.0	---	---	3.0	1.0	4.5	2.5	8.5	5.0	---	
18	13.5	11.5	10.0	8.5	---	---	3.5	2.0	5.5	4.0	9.5	7.0	---	
19	12.0	9.5	11.5	9.5	5.5	4.0	3.0	1.5	5.0	4.0	9.0	7.5	---	
20	10.0	8.5	12.5	10.0	4.5	3.5	2.5	1.0	5.0	3.0	10.0	7.5	---	
21	10.0	6.5	10.0	8.0	4.5	4.0	3.0	1.0	6.0	2.5	11.0	7.5	---	
22	11.5	7.0	8.5	6.0	5.5	4.5	3.5	2.0	6.0	4.0	10.5	9.5	---	
23	13.0	10.0	7.5	4.5	6.5	5.0	4.0	2.5	8.5	7.0	11.5	8.0	---	
24	15.0	12.5	8.5	7.5	---	---	4.5	2.5	9.0	7.5	12.5	10.5	---	
25	15.0	13.5	8.5	6.0	---	---	---	---	7.0	4.0	11.5	8.0	---	
26	14.5	11.5	6.0	4.5	5.0	4.0	---	---	4.0	2.5	8.0	6.0	---	
27	13.0	10.0	5.0	3.5	5.0	4.0	---	---	4.5	3.0	6.0	4.0	---	
28	14.0	10.5	5.0	4.0	5.5	5.0	---	---	5.0	3.5	6.0	5.0	---	
29	14.5	11.5	5.0	3.0	6.5	5.5	---	---	---	---	9.0	6.0	---	
30	17.0	14.5	4.5	3.0	6.5	6.0	---	---	---	---	8.0	6.0	---	
31	17.5	15.0	---	---	6.5	5.5	---	---	---	---	9.0	5.0	---	
MONTH	18.0	6.5	17.5	3.0	---	---	---	---	9.0	0.0	12.5	1.5	---	
APRIL				MAY		JUNE		JULY		AUGUST		SEPTEMBER		
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN		
1	11.5	6.5	17.5	14.5	19.5	18.0	27.0	21.5	29.0	25.0	22.0	21.0		
2	14.0	8.0	18.0	13.0	18.5	16.0	27.0	21.5	28.5	25.0	24.0	20.0		
3	13.0	7.0	16.0	13.5	18.0	15.5	25.5	21.0	27.5	24.5	24.5	20.0		
4	9.0	5.0	15.0	13.5	20.5	15.5	26.0	21.5	26.0	23.0	25.0	20.5		
5	8.5	5.0	17.5	12.0	20.5	18.0	26.0	20.5	25.0	23.0	24.5	20.5		
6	10.0	5.5	17.0	14.0	20.5	17.0	25.0	20.5	24.0	21.0	23.0	20.5		
7	11.5	6.0	18.0	12.5	19.0	17.0	26.5	21.0	24.5	18.5	23.0	18.5		
8	12.0	7.0	18.5	13.0	19.0	15.5	27.0	22.0	25.0	19.0	23.0	18.5		
9	10.0	7.0	20.5	14.5	20.5	14.5	26.0	20.5	26.0	20.0	22.5	19.0		
10	13.0	7.5	20.5	14.5	22.0	16.0	24.0	20.5	25.5	22.5	22.0	17.0		
11	12.5	8.0	19.5	14.5	20.5	18.0	22.5	19.5	25.0	21.5	21.5	18.5		
12	12.0	8.5	18.5	15.5	22.5	18.0	22.5	18.0	27.5	22.0	20.0	18.0		
13	13.5	8.5	18.5	14.5	23.0	18.0	23.0	19.0	28.5	23.5	17.5	15.0		
14	11.5	8.5	20.0	13.5	23.5	18.5	23.5	18.5	27.0	24.0	18.0	13.0		
15	10.0	9.0	18.0	15.5	23.0	19.5	23.0	19.0	24.5	21.5	18.5	14.0		
16	11.0	7.5	19.0	14.0	23.0	18.5	24.5	19.5	24.0	22.0	19.0	16.5		
17	14.0	8.5	17.0	14.5	24.5	19.0	23.5	20.5	25.5	21.5	20.5	18.0		
18	14.0	12.5	19.5	15.5	25.5	21.0	22.5	18.0	26.5	22.0	19.0	18.0		
19	14.0	12.0	23.0	16.5	27.5	22.0	26.0	19.5	25.5	22.0	19.0	18.0		
20	12.0	9.5	23.0	18.0	27.0	22.5	24.5	21.5	26.0	22.0	19.5	18.0		
21	14.5	9.0	24.0	19.5	25.5	21.5	26.5	21.5	27.0	22.0	18.0	16.5		
22	15.5	10.0	22.5	20.0	27.0	22.0	26.5	21.5	26.5	24.0	16.5	15.0		
23	14.0	12.0	21.0	18.5	26.5	22.5	26.5	21.5	27.5	24.0	16.0	14.5		
24	13.0	12.5	22.5	18.5	26.5	22.5	26.0	23.0	28.0	24.5	15.0	14.0		
25	13.0	11.5	24.5	19.5	25.5	22.0	26.5	21.5	28.0	24.5	14.5	14.0		
26	13.0	9.5	24.5	20.5	23.5	21.0	26.0	21.0	27.5	25.0	15.5	14.5		
27	12.0	10.0	24.0	20.5	25.0	21.0	26.0	21.0	27.0	23.0	16.5	14.5		
28	11.0	10.0	23.5	18.5	26.0	21.5	27.5	23.0	26.0	22.0	17.0	13.0		
29	15.5	10.0	21.5	18.5	26.5	21.5	26.5	22.0	26.0	23.5	17.0	13.0		
30	16.0	12.0	21.5	18.5	25.5	21.5	27.5	26.0	25.5	23.0	18.0	14.5		
31	---	---	22.0	19.0	---	---	28.5	24.0	23.0	22.0	---	---	---	
MONTH	16.0	5.0	24.5	12.0	27.5	14.5	28.5	18.0	29.0	18.5	25.0	13.0	---	
YEAR	29.0	0.0												

MUSKINGUM RIVER BASIN

209

03147300 DILLON LAKE NEAR DILLON FALLS, OHIO

LOCATION.--Lat 39°59'32", long 82°04'57", in T.1 N., R.8 W., Muskingum County, 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.

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 at mean sea level.

EXTREMES.--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).

REMARKS.--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.

COOPERATION.--Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

MONTH-END ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	737.12	17,650	-
Oct. 31.....	737.18	17,750	+100
Nov. 30.....	734.20	13,390	-4,360
Dec. 31.....	734.18	13,370	-20
CAL YR 1974.....	-	-	+290
Jan. 31.....	743.23	29,050	+15,680
Feb. 28.....	762.08	91,880	+62,830
Mar. 31.....	737.05	17,540	-74,340
Apr. 30.....	737.15	17,700	+160
May 31.....	737.44	18,160	+460
June 30.....	737.09	17,600	-560
July 31.....	737.18	17,750	+150
Aug. 31.....	737.77	18,690	+940
Sept. 30.....	737.34	18,000	-690
WTR YR 1975.....	-	-	+350

EXTREMES.--Current year: Maximum contents, 96,410 acre-ft (119 hm³) Feb. 27, elevation 763.16 ft (232.611 m); minimum, 12,760 acre-ft (15.7 hm³) Jan. 19; elevation 733.72 ft (223.638 m).

MUSKINGUM RIVER BASIN

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

LOCATION.--Lat 39°59'18", long 82°04'50", in T.1 N., R.8 W., Muskingum County, 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).

GAGE.--Water-stage and water-temperature recorders. Datum of gage is 700.0 ft (213.36 m) above mean sea level, 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.--Discharge records good. Interruptions in the water temperature records were due to malfunctions of the instrument. Flow regulated by Dillon Lake since December 1960 (see station 03147300).

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year. Prior to October 1962, published as Licking River at Dillon.

AVERAGE DISCHARGE.--36 years, 786 ft³/s (22.26 m³/s).

EXTREMES.--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, 68 ft³/s (1.93 m³/s) July 13.
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.

REVISIONS.--WRD Ohio, 1966: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	218	146	1120	1360	2280	4100	1270	1540	396	160	72	298
2	218	146	1340	1400	2350	4070	1010	1530	777	160	73	298
3	161	104	1450	1400	2700	4590	1390	1210	1200	161	75	298
4	125	179	1290	1400	3180	4710	1550	1060	1320	160	214	298
5	125	758	1030	1400	3310	4700	1060	763	1060	161	298	232
6	152	1200	785	1090	3180	4660	894	735	791	161	242	160
7	164	769	736	1050	3100	4600	877	807	790	161	164	255
8	164	527	893	953	2850	4480	723	730	812	161	131	373
9	140	413	1450	836	1560	4360	675	600	437	184	131	423
10	125	313	1810	1210	766	4470	671	532	248	406	131	218
11	125	221	2380	1400	1070	4600	637	464	488	386	132	167
12	128	561	2860	1400	1010	3490	585	401	543	80	153	893
13	128	1400	2850	1940	846	1820	545	401	375	68	194	945
14	149	1570	2880	2580	746	2390	519	402	408	89	251	529
15	211	1380	2770	2650	656	2230	504	403	413	140	230	358
16	362	1010	2750	2920	812	2830	471	383	326	140	193	292
17	354	953	2800	2400	1360	4280	451	399	248	141	192	629
18	241	819	2720	1500	1800	4900	448	350	576	384	143	785
19	208	780	1830	1230	2170	2800	477	299	616	445	100	1230
20	204	683	1210	1310	2450	1200	584	301	378	267	125	1800
21	170	720	1080	983	1450	3390	592	282	331	190	137	722
22	149	1000	808	876	963	4900	518	262	283	191	135	826
23	149	1310	725	996	1060	4720	460	376	238	192	136	712
24	149	1290	774	1080	262	3340	864	374	192	171	135	669
25	149	1160	774	1210	102	2950	1930	269	193	127	134	1930
26	149	1730	1620	1920	166	4190	3060	248	752	128	96	2140
27	149	1630	2150	2640	2520	4550	3090	248	809	128	71	856
28	149	1350	2110	2710	4080	3720	3150	217	406	94	89	679
29	149	1210	2040	2680	---	2730	2670	185	260	72	103	441
30	149	1010	1650	2450	---	2850	1540	248	203	72	108	324
31	149	---	1120	2270	---	1820	---	298	---	72	236	---
TOTAL	5362	26402	51805	51244	48799	114440	33215	16317	15869	5452	4624	19780
MEAN	173	880	1671	1653	1743	3692	1107	526	529	176	149	659
MAX	362	1730	2880	2920	4080	4900	3150	1540	1320	445	298	2140
MIN	125	146	725	836	102	1200	448	185	192	68	71	160

CAL YR 1974 TOTAL 355797 MEAN 975 MAX 4320 MIN 55
WTR YR 1975 TOTAL 393309 MEAN 1078 MAX 4900 MIN 68

EXTREMES.--Current year: Maximum discharge, 5,080 ft³/s (144 m³/s) Mar. 17, gage height, 9.92 ft (3.024 m); minimum daily, 68 ft³/s (1.93 m³/s) July 13.

MUSKINGUM RIVER BASIN

211

03147500 LICKING RIVER BELOW DILLON DAM, NEAR DILLON FALLS, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 11...	1130	4690	4.0	13.2	101	320	7.3	5.8	43	14	10	3.0
JULY 22...	1540	188	27.0	7.0	86	517	6.5	4.9	55	19	22	5.2

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 11...	134	0	11	110	19	43	.2	.31	.03	1.3	.14	204
JULY 22...	194	0	98	159	37	61	.2	.40	.10	1.0	.13	300

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 11...	170	55	50	20	--	--	--	--	--	--	--	--
JULY 22...	220	56	30	170	3	<10	70	11	110	<.5	5.2	1.8

TEMPERATURE (°C) OF WATER

EXTREMES.--Period of record: Maximum 29.0°C July 23, 24, 1973; minimum, freezing point Feb. 7-12, 1967.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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

MUSKINGUM RIVER BASIN

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03147900 TIMBER RUN NEAR ZANESVILLE, OHIO

LOCATION.--Lat 39°57'00", long 82°03'07", Muskingum County, at bridge on private road adjacent to old U.S. Highway 40, 0.5 mi (0.8 km) west of junction of Interstate 70 with old U.S. Highway 40, 2 mi (3 km) west of Zanesville.

DRAINAGE AREA.--10.1 mi² (25.9 km²).

PERIOD OF RECORD.--Discharge, 1947 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 23	12.90	3.932	1,050	29.7

03148300 MOXAHALA CREEK AT ROSEVILLE, OHIO

LOCATION.--Lat 39°48'38", long 82°04'13", Muskingum County, at pumping station about 2,500 ft (800 m) downstream from First Street bridge in Roseville.

DRAINAGE AREA.--80.6 mi² (208.8 km²).

PERIOD OF RECORD.--Discharge, 1964 to current year, water-quality analyses, 1975.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 23	11.37	3.466	1,950	55.2

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TOTAL ACIDITY AS H ⁺ (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	HYDRO- GEN SULFIDE (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)
MAY 14...	1350	E70	4.4	18.0	1790	3.7	4.6	0	20	770	.0	.0
SEP. 09...	1445	E50	7.8	23.0	2000	2.6	7.7	0	30	1100	.0	.0

DATE	HARD- NESS (CA,MG) (MG/L)	TUR- BID- ITY (JTU)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL MERCURY (HG) (UG/L)
MAY 14...	1100	65	9	6.6	2	80	30	36000	16000	400	22000	<.5
SEP. 09...	2100	4	0	1.6	0	10	20	32000	14000	560	30000	<.5

MUSKINGUM RIVER BASIN

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03148450 JONATHAN CREEK AT EAST FULTONHAM, OHIO

LOCATION.--Lat 39°51'20", long 82°07'35", Muskingum County, at bridge on old U.S. Highway 22, at East Fultonham, 1 mi (2 km) upstream from Buckeye Fork.

DRAINAGE AREA.--125 mi² (324 km²).

PERIOD OF RECORD.--Discharge, 1972 to current year; chemical analyses, 1972 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	INSTANTANEOUS DISCHARGE	
	(ft ³ /s)	(m ³ /s)
May 10	42	1.19

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)
JULY 22...	0920	25	23.0	7.6	518	6.8	5.9	68	17	13	4.3	145

DATE	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
JULY 22...	0	27	100	.2	.01	.02	.60	.05	308	240	20	130

MUSKINGUM RIVER BASIN

03150000 MUSKINGUM RIVER AT MCCONNELLSVILLE, OHIO
(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, on left bank just upstream from Dam 7, at McConnelville, and 3.5 mi (5.6 km) downstream from Oilspring Run. Water-quality recorder and sampling site located on left bank, 1.0 mi (1.6 km) upstream from gaging station, 240 ft (73 m) upstream from bridge on State Highways 37 and 78. Prior to January 1973 sampling site at gaging station.

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

GAGE.--Water-stage and water-quality recorders. Datum of gage is 650.31 ft (198.214 m) above mean sea level, adjustment of 1912. 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.--Discharge records good. Interruptions in the daily water-quality records were due to malfunctions of the instrument. Samples were collected each month as part of the National Stream Quality Accounting Network. 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.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--54 years, 7,323 ft³/s (207.4 m³/s).

EXTREMES.--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.

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.

REVISIONS (WATER YEARS).--WSP 783: 1913(M). WSP 853: 1933(M). WSP 1173: 1922-24, 1928(M). WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3730	2040	11000	18500	26300	30300	16100	14100	9860	3250	1580	7340
2	3500	2080	11500	20200	25400	30200	14400	15200	13900	2960	1470	9560
3	3450	2200	12200	20700	24200	29400	14700	15000	14400	2690	1500	9670
4	3420	2600	12400	20000	23800	29800	14900	14500	14400	2710	2080	8540
5	3350	3970	11900	18500	24200	29200	13700	13100	13500	2730	3110	7040
6	3350	7760	11200	16900	25000	29000	12500	11700	13500	3010	2890	6600
7	3370	8150	10600	14900	24100	28800	11300	11500	13300	3030	2360	7480
8	3320	7410	13900	14200	23400	29100	10300	11900	12700	2960	1980	8150
9	3250	6050	16700	17100	20000	28300	9420	11000	10600	3110	1770	6900
10	2990	5310	21000	22100	15300	27600	9160	9420	8580	3300	1670	5770
11	2650	4610	21200	24800	14000	27100	8540	8470	7790	3940	1860	5020
12	2520	6090	20800	25100	13400	29600	8220	7830	8540	3200	2520	8330
13	2400	8580	19700	23800	12600	29400	7970	7520	8010	2960	2320	8400
14	2320	10700	19400	21800	11400	30100	7620	7000	8080	2890	2710	8360
15	2360	10500	19700	20700	10600	30300	7140	6600	7340	2780	3200	7310
16	2690	9160	21600	19700	10500	28700	6670	6310	6600	2890	5430	5860
17	3200	7970	21500	17000	11800	28800	6280	5830	5990	2630	5310	5280
18	3150	7070	21500	14000	16100	28800	5930	5650	7340	2710	5050	6340
19	2920	6510	20300	12900	19800	32300	6020	5370	6640	3180	3830	9340
20	2750	6510	17900	12400	20500	29000	6250	5050	6280	2920	3370	13900
21	2600	6700	15800	11600	19100	28000	6210	4780	6090	2500	2960	13800
22	2480	8470	14200	10400	16300	28800	5860	4670	5680	2420	2650	11900
23	2340	9820	12800	9750	22400	28500	5560	4780	5050	2360	2520	10500
24	2280	9890	13400	9450	42700	28800	8470	5140	4470	2280	2540	16300
25	2190	9670	20000	10100	35900	27100	13300	5590	4300	2150	2440	16400
26	2130	12500	23000	14100	26300	25000	18100	5470	5110	2170	2260	16800
27	2200	14700	23000	19000	24800	23700	17700	5430	4810	2190	2060	14900
28	2190	13900	22500	19500	28500	21700	16400	5960	4160	2130	1980	13700
29	2110	12100	21000	20400	---	19400	15800	5650	4130	1860	2150	12400
30	2090	10600	18900	25700	---	19000	13700	5470	3700	1690	2280	10200
31	2060	---	16600	26400	---	17800	---	5740	---	1590	5470	---
TOTAL	85360	233820	539200	551700	588400	854100	318220	251730	244850	83190	85320	292090
MEAN	2754	7494	17390	17800	21010	27550	10610	8120	8162	2688	2752	9736
MAX	3730	14700	23000	26400	42700	32300	18100	15200	14400	3940	5470	16800
MIN	2060	2040	10600	9450	10500	17800	5560	4670	3700	1590	1470	5020
CAL YR 1974 TOTAL	3643870			MEAN 9983	MAX 31600	MIN 1440						
WTR YR 1975 TOTAL	4127980			MEAN 11310	MAX 42700	MIN 1470						

EXTREMES.--Current year: Maximum discharge, 44,500 ft³/s (1,260 m³/s) Feb. 24, gage height, 11.49 ft (3.502 m); minimum daily, 1,470 ft³/s (41.6 m³/s) Aug. 2.

MUSKINGUM RIVER BASIN

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03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1950 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	
OCT. 08-31	--	--	--	--	--	--	--	--	--	--	--	--	
NOV. 01-12	--	--	--	--	--	--	--	--	--	--	--	--	
OCT. 09...	1130	3280	13.5	5.9	96	26	48	4.3	134	0	100	200	
NOV. 12...	1100	5800	11.0	--	--	--	--	--	--	--	--	--	
DEC. 17...	1200	21500	4.0	--	--	--	--	--	--	--	--	--	
JAN. 22...	1030	10200	1.5	8.2	68	19	41	3.0	120	0	81	130	
FEB. 13...	1300	12500	2.0	--	--	--	--	--	--	--	--	--	
MAR. 19...	1100	34200	6.5	--	--	--	--	--	--	--	--	--	
APR. 15...	1400	7070	9.5	5.7	85	25	27	2.4	123	0	57	170	
15-30	--	--	--	--	--	--	--	--	--	--	--	--	
MAY 01-21	--	--	--	--	--	--	--	--	--	--	--	--	
06...	1100	11700	22.0	--	--	--	--	--	--	--	--	--	
JUNE 05...	1130	13200	20.0	--	--	--	--	--	--	--	--	--	
JULY 08...	0930	2870	27.5	1.3	84	26	48	3.8	118	0	110	170	
AUG. 01...	1230	1470	29.0	--	--	--	--	--	--	--	--	--	
SEP. 02...	1200	9740	22.0	--	--	--	--	--	--	--	--	--	
DATE		DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	PH (UNITS)
OCT. 08-31	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV. 01-12	--	--	--	--	--	--	--	--	--	--	--	--	--
OCT. 09...	.4	583	547	910	1.4	.61	.82	.09	6.3	7.4	70	7.8	
NOV. 12...	--	--	--	655	1.9	.58	1.3	.15	8.3	9.4	85	7.4	
DEC. 17...	--	--	--	450	2.5	.57	1.9	.16	11	11.4	87	7.4	
JAN. 22...	.0	453	410	680	2.0	.52	1.5	.11	8.9	13.4	96	7.4	
FEB. 13...	--	--	--	560	1.7	.37	1.3	.09	7.5	12.6	91	7.3	
MAR. 19...	--	--	--	425	1.6	.27	1.3	.08	7.0	11.7	95	7.3	
APR. 15...	.0	431	433	695	1.6	.45	1.1	.09	6.9	10.3	90	7.4	
15-30	--	--	--	--	--	--	--	--	--	--	--	--	
MAY 01-21	--	--	--	--	--	--	--	--	--	--	--	--	
06...	--	--	--	490	1.2	.42	.78	.15	5.3	9.5	95	7.4	
JUNE 05...	--	--	--	487	3.7	.95	2.7	.28	16	8.0	87	7.5	
JULY 08...	.2	551	502	830	.90	.85	.05	.11	4.0	6.6	82	7.6	
AUG. 01...	--	--	--	--	1.3	1.1	.17	.06	5.6	--	--	--	
SEP. 02...	--	--	--	655	1.5	.76	.77	.05	6.8	7.0	80	7.3	

MUSKINGUM RIVER BASIN
03150000 MUSKINGUM RIVER AT MCCONNELLSVILLE, OHIO--Continued

CHEMICAL ANALYSES--Continued

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975--Continued

DATE	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B MG/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A MG/SQ M	TOTAL PHYTO- PLANK- TON (CELLS PER ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TUR- BID- ITY (JTU)
OCT. 08-31	--	--	--	--	--	16	3.7	22	--	--	--	--
NOV. 01-12	--	--	--	--	--	16	3.7	22	--	--	--	--
OCT. 09...	3.4	110	350	240	6.0	--	--	--	66000	36	9	7
NOV. 12...	--	--	--	--	--	--	--	--	14000	400	720	--
DEC. 17...	--	--	--	--	--	--	--	--	15000	4200	5000	--
JAN. 22...	7.6	98	250	150	2.9	--	--	--	1700	2400	780	20
FEB. 13...	--	--	--	--	--	--	--	--	900	1200	510	--
MAR. 19...	--	--	--	--	--	--	--	--	200	920	970	--
APR. 15...	7.8	101	320	210	7.0	--	--	--	7400	320	60	10
15-30	--	--	--	--	--	24	3.4	39	--	--	--	--
MAY 01-21	--	--	--	--	--	24	3.4	39	--	--	--	--
06...	--	--	--	--	--	--	--	--	16000	600	91	--
JUNE 05...	--	--	--	--	--	--	--	--	6800	600	1100	--
JULY 08...	4.7	97	320	220	9.4	--	--	--	31000	1400	160	13
AUG. 01...	--	--	--	--	--	15	10	27	5900	64	36	--
SEP. 02...	--	--	--	--	--	--	--	--	42000	1200	930	--

ANALYSES OF MINOR ELEMENTS

DATE	TIME	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)
OCT. 09...	1130	1	1	1	1	<10	10	1	2	10	10	1000
JAN. 22...	1030	0	2	0	0	<10	10	1	3	10	10	1700
APR. 15...	1400	0	1	0	1	0	0	1	5	0	0	1400
JULY 08...	0930	0	0	0	0	<10	10	1	1	10	10	590

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY (HG) (UG/L)
OCT. 09...	60	3	8	680	450	20	100	2	2	<.5	.5
JAN. 22...	230	0	5	620	580	20	20	0	0	<.5	<.5
APR. 15...	20	1	7	660	560	10	10	0	1	<.5	<.5
JULY 08...	20	0	4	280	20	10	20	0	0	<.5	.6

MUSKINGUM RIVER BASIN

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OHIO--Continued

SUSPENDED SEDIMENT DISCHARGE

PERIOD OF RECORD.--1973 to current year (periodic instantaneous concentration and discharge).

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)
OCT.					
09...	1130	3280	13.5	23	204
NOV.					
12...	1100	5800	11.0	26	407
DEC.					
17...	1200	21500	4.0	170	9870
JAN.					
22...	1030	10200	1.5	33	909
FEB.					
13...	1300	12500	2.0	--	--
MAR.					
19...	1100	34200	6.5	17	1600
APR.					
15...	1400	7070	9.5	38	725
MAY					
06...	1100	11700	22.0	72	2270
JUNE					
05...	1130	13200	20.0	108	3850
JULY					
08...	0930	2870	27.5	18	139
AUG.					
01...	1230	1470	29.0	--	--
SEP.					
02...	1200	9740	22.0	147	3870

EXTREMES.--Period of record: Maximum, 1,440 micromhos July 7, 1974; minimum, 278 micromhos Feb. 25, 1975.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	751	721	1070	975	572	554	518	480	399	371	324	309
2	772	745	1070	1030	587	571	521	476	392	374	329	320
3	778	754	1030	1010	590	581	480	468	413	392	348	330
4	793	766	---	---	611	590	467	452	441	414	369	350
5	810	766	---	---	625	596	467	455	447	408	372	366
6	847	798	---	---	686	628	513	470	429	411	378	368
7	929	866	---	---	677	622	512	506	447	419	387	377
8	862	832	---	---	641	584	512	504	482	446	401	389
9	903	850	---	---	578	524	518	510	477	468	428	402
10	926	893	---	---	520	475	510	456	498	471	443	433
11	974	963	---	---	475	419	449	380	524	500	432	420
12	977	913	---	---	415	403	393	377	536	521	443	408
13	909	872	707	670	436	413	414	395	557	537	432	402
14	881	815	676	641	448	437	434	416	590	551	443	428
15	902	881	729	639	496	449	458	434	611	579	429	420
16	952	904	714	585	484	449	483	453	623	611	420	413
17	1010	965	576	548	458	446	510	467	627	614	429	410
18	1010	982	614	566	452	445	543	494	617	566	428	414
19	991	963	647	616	467	449	582	545	567	522	449	422
20	1010	973	614	595	472	460	594	575	506	425	450	423
21	1010	990	637	603	500	476	653	596	428	417	428	402
22	1010	994	666	639	535	500	742	657	447	431	414	407
23	997	900	654	628	549	540	771	678	446	365	426	413
24	939	892	686	627	561	548	707	645	359	261	425	408
25	1010	944	717	572	560	494	671	647	303	278	432	419
26	987	959	596	572	500	470	662	624	299	281	449	428
27	1000	950	569	535	462	402	621	513	332	287	470	447
28	1000	966	602	582	408	398	545	504	318	305	476	465
29	974	953	538	518	431	408	489	456	---	---	500	471
30	973	943	560	530	453	431	464	396	---	---	503	494
31	974	942	---	---	483	447	407	387	---	---	539	495
MONTH	1010	721	---	---	686	398	742	377	627	278	539	309
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	564	539	456	411	719	563	847	739	1100	1020	944	810
2	546	530	474	447	704	531	795	732	1020	975	800	635
3	542	536	484	455	584	527	837	799	980	971	729	621
4	540	531	482	429	575	479	837	807	1040	978	659	525
5	543	531	437	405	506	477	843	832	1040	984	599	539
6	573	539	443	405	569	509	892	831	1010	921	579	442
7	588	566	477	444	575	542	847	807	920	812	605	560
8	575	560	500	477	612	546	894	819	803	764	602	543
9	564	573	521	494	597	552	922	840	813	774	657	582
10	621	582	522	492	585	551	970	885	890	818	656	635
11	632	621	488	474	629	587	946	852	939	873	672	618
12	630	620	606	479	656	632	853	780	950	921	618	546
13	630	618	641	609	686	657	775	751	945	867	765	558
14	644	626	654	639	713	684	813	751	959	924	609	581
15	653	635	668	653	750	717	895	816	953	713	677	606
16	657	651	693	666	747	728	894	861	777	629	677	563
17	671	657	717	693	722	635	900	852	834	608	609	570
18	707	659	713	686	668	636	859	822	928	803	623	609
19	714	683	707	693	657	620	858	802	916	729	648	614
20	687	672	725	701	723	656	796	753	746	722	614	527
21	683	663	719	696	719	696	832	769	838	746	563	509
22	669	654	735	707	717	668	870	843	828	699	539	468
23	722	666	756	732	677	639	877	855	716	663	500	468
24	708	617	743	716	660	638	910	859	710	677	489	413
25	603	498	720	651	660	624	943	912	753	710	471	429
26	510	458	830	708	650	614	946	830	771	750	458	438
27	468	429	978	788	716	636	928	900	809	766	458	444
28	444	428	791	713	644	579	970	925	818	801	450	413
29	428	395	767	662	783	612	995	973	845	822	434	414
30	413	392	681	656	678	759	1030	987	876	822	464	435
31	---	---	732	657	---	---	1130	1030	878	726	---	---
MONTH	722	392	978	405	878	477	1130	732	1100	608	944	413
YEAR	1130	278										

PH (UNITS)

EXTREMES.--Period of record: Maximum, 9.3 Feb. 16, 1974; minimum, 5.4 Apr. 15, 1973.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITRE

PERIOD OF RECORD.--February 1973 to current year.

EXTREMES.--Period of record: Maximum, 14.7 mg/l Dec. 4, 1974, Jan. 16, 17, 1975; minimum, 2.8 mg/l July 24, Aug. 29, 1974.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.6	7.3	7.1	6.8	13.8	13.4	11.5	10.9	10.5	10.3	---	---
2	8.0	7.5	7.1	6.7	14.1	13.7	12.1	11.3	10.6	10.4	---	---
3	8.1	7.8	6.7	6.4	14.5	13.9	12.4	11.9	10.9	10.6	---	---
4	8.4	7.8	---	---	14.7	14.3	12.5	12.1	11.8	11.0	13.2	12.8
5	8.4	8.0	---	---	14.6	14.5	12.5	11.7	11.9	11.5	14.0	13.2
6	8.3	7.8	---	---	14.5	13.7	12.7	11.9	11.6	11.0	13.6	12.5
7	8.9	8.1	---	---	14.2	13.5	12.1	11.3	11.9	11.2	12.7	12.0
8	8.8	8.5	---	---	13.5	12.6	11.7	10.8	12.4	11.9	12.0	11.7
9	9.7	8.4	---	---	12.7	12.5	10.9	10.5	13.4	12.5	12.3	12.0
10	9.2	8.6	---	---	13.6	12.6	12.1	11.2	13.8	13.4	12.4	12.2
11	9.1	8.5	---	---	14.0	13.2	11.2	10.6	13.8	13.3	12.4	11.7
12	9.0	7.7	---	---	13.8	13.4	10.9	10.6	13.3	13.0	11.9	11.0
13	7.8	7.4	10.7	8.0	13.6	12.2	11.8	10.8	13.3	12.6	10.9	10.3
14	7.4	7.1	11.5	10.7	12.8	11.9	13.4	11.8	13.4	12.8	10.7	10.4
15	7.8	7.1	12.3	11.4	12.2	11.6	14.5	13.4	13.0	12.1	11.3	10.7
16	7.7	7.4	12.9	12.2	11.8	11.1	14.7	14.5	12.1	11.2	11.5	11.3
17	8.6	7.5	13.1	12.6	11.7	11.2	14.7	14.3	11.2	10.4	11.4	10.7
18	7.7	7.4	13.1	12.6	11.6	11.6	14.6	14.1	10.4	9.7	---	---
19	7.8	7.4	12.6	11.9	12.4	12.0	14.1	13.9	10.3	9.9	---	---
20	7.7	7.4	11.7	11.2	12.8	12.4	14.0	13.6	11.0	10.4	---	---
21	8.8	7.6	11.0	10.8	13.1	12.7	14.2	13.6	11.4	10.9	---	---
22	9.2	8.8	11.4	11.1	13.0	12.7	14.4	13.0	11.3	10.2	---	---
23	9.2	8.7	11.7	11.3	13.0	12.3	13.5	12.9	---	---	---	---
24	8.7	8.4	11.3	10.9	12.4	11.7	13.0	11.5	---	---	---	---
25	9.0	8.3	11.0	10.8	11.9	11.6	11.4	10.7	---	---	12.0	11.3
26	8.8	8.6	11.3	10.7	12.1	11.7	11.1	10.5	---	---	12.6	12.1
27	8.8	8.1	11.9	11.0	12.6	12.2	12.0	11.1	---	---	12.9	12.2
28	8.2	7.6	12.5	11.7	13.0	12.5	12.1	11.6	---	---	13.2	12.8
29	7.9	7.6	12.9	12.5	13.1	12.1	11.7	10.5	---	---	13.0	12.6
30	7.7	7.4	13.5	12.8	12.1	11.4	10.4	9.6	---	---	12.7	12.4
31	7.4	6.8	---	---	11.8	11.0	10.3	9.7	---	---	12.5	12.2
MONTH	9.7	6.8	---	---	14.7	11.0	14.7	9.6	13.8	9.7	---	---
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.3	11.2	9.5	9.0	7.2	6.5	12.2	9.2	---	---	6.7	6.2
2	11.2	10.1	9.1	8.9	7.9	6.6	11.7	8.6	---	---	7.9	6.7
3	10.1	9.9	9.1	8.9	8.2	7.9	10.7	8.5	---	---	8.2	7.8

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

MUSKINGUM RIVER BASIN

03150100 BELL CREEK AT MCCONNELLSVILLE, OHIO

LOCATION.--Lat 39°38'50", long 81°50'36", Morgan County, at culvert on State Highway 60, 0.1 mi (0.2 km) upstream from mouth, 0.5 mi (0.8 km) east of McConnelville.

DRAINAGE AREA.--1.07 mi² (2.77 km²).

PERIOD OF RECORD.--Discharge, 1947 to 1948, 1950 to 1975 (discontinued).

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 24	3.39	1.033	215	6.09

03150250 BEIGS CREEK NEAR BEVERLY, OHIO

LOCATION.--Lat 39°36'00", long 81°42'42", Morgan County, on right bank 400 ft (122 m) downstream from County Road bridge at Mill Grove, 0.4 mi (0.6 km) downstream from Perry Run, 2.2 mi (3.5 km) upstream from mouth, and 5.3 mi (8.5 km) northwest of Beverly.

REMARKS.--Discharge records collected at this site March 1972 to September 1974.

DRAINAGE AREA.--136 mi² (352 km²).

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1971 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HC03) (MG/L)	
FEB. 13...	1000	278	1.5	12.6	770	7.8	4.4	100	40	15	1.9	206	
DATE	TIME	CARBONATE (C03) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (S04) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
FEB. 13...	0	11	270	.2	.05	.01	.14	.04	544	410	20	180	
DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DIS-SOLVED OXYGEN (MG/L)	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	BICARBONATE (HC03) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (S04) (MG/L)	HYDROGEN SULFIDE (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	HARDNESS (CA+MG) (MG/L)	
JUNE 05...	1530	2200	7.7	20.5	965	7.7	214	15	290	.0	6.8	590	
DATE	TIME	TURBIDITY (JTU)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ALUMINUM (AL) (UG/L)	TOTAL MERCURY (HG) (UG/L)	
JUNE 05...	30	0	5.5	0	10	10	2300	210	20	1300	<.5		

MUSKINGUM RIVER BASIN

225

03150480 WEST BRANCH WOLF CREEK NEAR WATERFORD, OHIO

LOCATION.--Lat 39°31'43", long 81°39'22", Washington County, adjacent to State Highway 76, 400 ft (122 m) upstream from South Branch, 1.2 mi (1.9 km) southwest of Waterford.

DRAINAGE AREA.--144 mi² (373 km²).

PERIOD OF RECORD.--Discharge, 1959, 1972 to current year; chemical analyses, 1972 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	TIME	INSTANTANEOUS DISCHARGE	
		(ft ³ /s)	(m ³ /s)
Oct. 9		33	0.93
July 15		49	1.39

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)

DATE	TIME	CARBONATE (CO3) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)

03150490 SOUTH BRANCH WOLF CREEK NEAR WATERFORD, OHIO

LOCATION.--Lat 39°31'28", long 81°39'31", Washington County, at bridge on State Highway 76, 0.8 mi (1.3 km) upstream from mouth, 1.5 mi (2.4 km) southwest of Waterford.

DRAINAGE AREA.--79.3 mi² (205.4 km²)

PERIOD OF RECORD.--Discharge, 1972 to current year; chemical analyses, 1972 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	TIME	INSTANTANEOUS DISCHARGE	
		(ft ³ /s)	(m ³ /s)
Oct. 9		6.8	0.193
July 15		9.6	.272

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)

DATE	TIME	CARBONATE (CO3) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)

03150600 TUPPER CREEK AT DEVOLA, OHIO

LOCATION.--Lat 39°28'24", long 81°27'58", Washington County, at culvert on State Highway 60 at DeVola.

DRAINAGE AREA.--0.99 mi² (2.56 km²).

PERIOD OF RECORD.--1966 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Sept. 24	10.50	3.200	168	4.76

LITTLE HOCKING RIVER BASIN

227

03155800 LITTLE HOCKING RIVER NEAR LITTLE HOCKING, OHIO

LOCATION.--Lat 39°17'38", long 81°41'17", Washington County, at bridge on county road, 2.2 mi (3.5 km) north of Little Hocking, 3.2 mi (5.1 km) upstream from mouth.

DRAINAGE AREA.--47.9 mi² (124.1 km²).

PERIOD OF RECORD.--Discharge, 1959 to 1960, 1962 to 1975 (discontinued); chemical analyses, 1966 to 1974 (discontinued).

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	INSTANTANEOUS DISCHARGE	
	(ft ³ /s)	(m ³ /s)
Oct. 9	2.1	0.059

HOCKING RIVER BASIN

03156000 HUNTERS RUN AT LANCASTER, OHIO

LOCATION.--Lat 39°41'57", long 82°37'18", in NE 1/4 sec. 11, T.14 N., R.19 W., Fairfield County, 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.

DRAINAGE AREA.--10.0 mi² (25.9 km²).

GAGE.--Water-stage recorder. Datum of gage is 823.6 ft (251.03 m) above mean sea level.

REMARKS.--Discharge records fair. Flood peaks affected by temporary retention in four retarding basins upstream from station, combined capacity, 2,820 acre-ft (3.48 hm³). Controlled drainage area is 8.49 mi² (22.0 km²).

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--January 1956 to current year.

AVERAGE DISCHARGE.--19 years, 10.0 ft³/s (0.283 m³/s), 13.58 in/yr (345 mm/yr).

EXTREMES.--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, 0.31 ft³/s (0.009 m³/s) Aug. 3, 1969.

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.

REVISIONS.--WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	4.4	19	29	20	17	19	16	15	8.9	2.2	2.2
2	5.6	5.6	19	28	16	15	17	13	7.2	8.3	2.5	.99
3	6.4	5.0	23	29	14	13	18	12	5.6	8.3	3.8	.84
4	6.4	7.7	28	36	13	12	14	12	5.0	20	5.0	3.1
5	7.2	10	30	31	16	11	12	8.9	6.4	13	12	.84
6	5.0	7.2	28	29	24	11	12	7.7	20	9.5	6.4	.99
7	5.0	5.6	32	26	16	15	12	5.0	8.9	8.3	1.9	.84
8	6.4	5.6	51	26	14	18	12	6.4	5.6	7.7	1.4	.84
9	6.4	3.1	15	35	12	13	12	6.4	5.0	7.7	1.2	.70
10	6.4	3.1	8.9	36	14	12	11	5.0	4.4	6.4	14	.70
11	6.4	5.6	7.7	24	12	12	11	5.0	6.4	6.4	15	6.4
12	6.4	14	10	15	24	100	9.5	7.7	6.4	7.2	2.5	56
13	6.4	8.3	9.5	13	16	42	8.9	17	4.4	11	1.6	12
14	7.2	6.4	8.3	11	13	48	8.9	8.9	3.8	13	1.6	8.9
15	12	5.6	22	10	12	38	8.9	6.4	3.8	10	8.9	8.3
16	14	3.8	24	9.5	16	31	8.3	5.0	3.1	9.5	11	7.2
17	12	3.8	16	9.5	19	27	7.7	5.0	5.0	10	5.6	6.4
18	9.5	3.8	18	14	16	26	7.7	5.6	61	8.9	1.6	26
19	8.3	3.8	17	16	15	76	8.9	5.0	21	6.4	1.4	16
20	7.7	14	20	14	13	26	7.7	3.8	18	8.9	1.4	14
21	7.2	12	20	12	9.5	22	5.6	3.1	16	6.4	1.2	5.6
22	6.4	12	21	11	11	21	5.6	3.8	16	3.8	1.2	5.0
23	6.4	9.5	20	11	264	20	6.4	5.6	14	3.8	.99	4.4
24	6.4	8.9	22	11	249	60	36	5.0	13	5.0	.99	75
25	6.4	18	26	16	43	25	39	5.0	12	7.2	.99	41
26	6.4	13	24	16	29	21	25	5.0	14	3.8	.99	29
27	5.6	14	21	12	23	20	17	4.4	12	3.1	.84	21
28	5.6	14	15	12	20	21	18	3.8	8.9	3.1	.84	18
29	5.6	13	19	14	---	54	14	3.8	9.5	2.5	.84	15
30	5.6	12	19	13	---	24	14	6.4	9.5	2.2	.99	13
31	4.4	---	19	24	---	20	---	5.0	---	2.2	3.1	---
TOTAL	216.3	252.8	632.4	593.0	963.5	871	407.1	212.7	340.9	232.5	113.97	400.24
MEAN	6.98	8.43	20.4	19.1	34.4	28.1	13.6	6.86	11.4	7.50	3.68	13.3
MAX	14	18	51	36	264	100	39	17	61	20	15	75
MIN	4.4	3.1	7.7	9.5	9.5	11	5.6	3.1	3.1	2.2	.84	.70
CFSM	.70	.84	2.04	1.91	3.44	2.81	1.36	.69	1.14	.75	.37	1.33
IN.	.80	.94	2.35	2.21	3.58	3.24	1.51	.79	1.27	.86	.42	1.49

CAL YR 1974 TOTAL 4831.80 MEAN 13.2 MAX 111 MIN 1.7 CFSM 1.32 IN 17.97
WTR YR 1975 TOTAL 5236.41 MEAN 14.3 MAX 264 MIN .70 CFSM 1.43 IN 19.48

EXTREMES.--Current year: Peak discharges above base of 250 ft³/s (7.08 m³/s) and maximums (*):

DATE TIME G. H. DISCHARGE
02-23 2030 *6.53 *950

Minimum daily discharge: 0.70 ft³/s (0.020 m³/s) Sept. 9, 10.

HOCKING RIVER BASIN
03156000 HUNTERS RUN AT LANCASTER, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 13...	1230	41	4.5	11.2	86	420	7.6	7.2	60	17	5.7	2.8
JULY 28...	1520	2.5	25.5	8.8	110	559	8.0	7.1	80	29	7.6	2.6

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 13...	204	0	8.2	167	13	45	.2	.15	.02	1.5	.16	252
JULY 28...	312	0	5.0	256	12	44	.1	.00	.01	.37	.05	336

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 13...	220	53	60	50	--	--	--	--	--	--	--	--
JULY 28...	320	63	10	10	1	<10	0	4	90	<.5	2.2	.4

HOCKING RIVER BASIN

03157000 CLEAR CREEK NEAR ROCKBRIDGE, OHIO

LOCATION.--Lat 39°35'18", long 82°34'43", in NE 1/4 sec. 20, T.13 N., R.18 W., Hocking County, 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).

GAGE.--Water-stage recorder. Datum of gage is 760.13 ft (231.688 m) above mean sea level, adjustment of 1912. Prior to May 2, 1940, nonrecording gage at same site and datum.

REMARKS.--Discharge records good prior to February 24, fair thereafter.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--36 years, 86.2 ft³/s (2.441 m³/s), 13.15 in/yr (340 mm/yr).

EXTREMES.--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.

REVISIONS (WATER YEARS).--WSP 1305: 1940(M), 1943(M), 1945(M). WSP 1907: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	25	182	201	216	175	164	148	173	30	20	105
2	24	26	214	122	161	146	141	117	81	29	20	40
3	24	26	173	131	130	124	168	104	72	28	21	31
4	24	29	130	150	116	112	124	103	56	70	21	36
5	24	41	102	113	130	103	109	90	53	47	36	32
6	24	36	89	103	254	102	100	84	264	35	33	68
7	23	31	99	96	163	137	94	76	113	39	26	45
8	23	29	653	96	128	152	91	70	74	33	22	28
9	23	28	324	169	115	113	86	67	58	32	21	22
10	23	27	173	317	95	110	84	62	51	29	20	20
11	22	30	136	317	105	104	79	60	60	27	177	28
12	23	145	156	173	205	760	74	61	73	26	50	350
13	24	103	156	137	153	467	69	161	62	26	32	200
14	24	69	131	112	116	440	67	91	49	41	37	100
15	29	54	224	90	108	370	67	72	46	30	104	68
16	36	46	408	80	128	258	63	66	43	26	96	54
17	32	43	207	70	168	197	61	58	59	34	79	44
18	28	39	139	102	153	162	62	58	491	37	42	65
19	26	38	134	164	134	771	79	54	144	34	33	150
20	26	69	124	139	113	373	63	49	85	48	30	100
21	25	72	110	105	99	240	56	46	63	46	27	94
22	24	62	103	93	92	200	55	48	54	30	25	68
23	24	57	96	88	1250	157	57	58	47	27	24	62
24	25	53	136	91	2490	641	470	46	41	25	23	623
25	25	144	207	131	724	311	577	41	39	31	22	254
26	25	119	142	163	407	193	433	48	51	25	22	159
27	24	85	118	105	282	152	230	42	42	23	21	121
28	25	72	108	97	220	152	208	37	37	22	20	98
29	24	60	99	108	---	583	166	39	34	21	20	74
30	25	55	91	105	---	315	132	62	32	21	25	63
31	25	---	97	264	---	206	---	51	---	20	55	---
TOTAL	779	1713	5261	4232	8455	8326	4229	2169	2547	992	1204	3202
MEAN	25.1	57.1	170	137	302	269	141	70.0	84.9	32.0	38.8	107
MAX	36	145	653	317	2490	771	577	161	491	70	177	623
MIN	22	25	89	70	92	102	55	37	32	20	20	20
CFSM	.28	.64	1.91	1.54	3.39	3.02	1.58	.79	.95	.36	.44	1.20
IN.	.33	.72	2.20	1.77	3.53	3.48	1.77	.91	1.06	.41	.50	1.34
CAL YR 1974	TOTAL	39121	MEAN 107	MAX	990	MIN 20	CFSM 1.20	IN 16.35				
WTR YR 1975	TOTAL	43109	MEAN 118	MAX	2490	MIN 20	CFSM 1.33	IN 18.02				

EXTREMES.--Current year: Peak discharges above base of 1,900 ft³/s (42.5 m³/s) and maximums (*):

DATE	TIME	G. H.	DISCHARGE
02-24	0215	*11.10	*3,810

Minimum discharge: 19 ft³/s (0.54 m³/s) Aug. 1-3.

HOCKING RIVER BASIN
03157000 CLEAR CREEK NEAR ROCKBRIDGE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 13...	1045	469	5.0	11.2	88	315	7.5	7.2	39	13	3.7	2.5
JULY 29...	1140	21	21.5	8.2	92	361	7.8	5.0	49	17	4.5	2.1
DATE	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 13...	131	0	6.6	107	11	38	.2	.19	.03	2.7	.23	179
JULY 29...	212	0	5.4	174	5.3	23	.2	.00	.01	.28	.03	211
DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	SIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 13...	150	43	130	40	--	--	--	--	--	--	--	--
JULY 29...	190	18	10	40	0	<10	10	2	20	<.5	1.8	.8

HOCKING RIVER BASIN

03157500 HOCKING RIVER AT ENTERPRISE, OHIO

LOCATION.--Lat 39°33'54", long 82°28'29", in NW 1/4 sec. 5, T.14 N., R.17 W., Hocking County, on 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).

GAGE.--Water-stage recorder. Datum of gage is 723.58 ft (220.547 m) above mean sea level. Prior to Oct. 24, 1933, nonrecording gage at same site and datum.

REMARKS.--Discharge records good. Flood flow affected by temporary retention in eight retarding basins, combined capacity, 8,710 acre-ft (10.7 km³) constructed between 1955 and 1961 upstream from station.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--45 years, 445 ft³/s (12.60 m³/s), 13.17 in/yr (334 mm/yr).

EXTREMES.--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.

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.

REVISIONS (WATER YEARS).--WSP 873: 1938. WSP 1907: Drainage area. WRD Ohio 1970: 1969.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	168	118	692	1050	1320	1010	983	913	938	141	70	626
2	153	118	1400	845	1040	834	822	772	550	129	68	319
3	141	122	1100	733	806	722	1010	637	386	120	71	176
4	133	131	950	885	692	652	889	603	308	251	78	254
5	129	192	820	722	681	591	715	538	278	235	158	187
6	129	189	700	618	1260	580	641	487	783	155	178	360
7	122	153	800	572	1240	685	595	441	599	198	187	229
8	122	143	1000	546	857	861	557	398	371	148	122	143
9	120	131	1700	810	733	659	520	367	285	129	90	118
10	118	127	1400	1010	568	618	502	338	241	143	97	108
11	116	129	1100	1270	626	595	473	312	293	133	531	133
12	112	546	800	881	881	2040	441	312	572	114	367	1850
13	114	663	720	703	1000	2720	405	473	433	105	158	1290
14	114	445	740	540	696	2430	379	356	312	127	136	542
15	145	342	850	460	634	2200	371	308	264	112	360	349
16	189	289	1400	380	663	1690	360	300	289	99	995	268
17	181	251	1100	340	857	1260	349	271	251	112	733	232
18	148	232	873	450	966	995	342	282	1310	212	353	452
19	131	220	745	810	806	2490	421	285	756	251	248	787
20	124	327	726	795	696	2830	409	241	437	315	178	524
21	120	524	648	603	603	1940	335	220	315	245	145	502
22	116	413	630	557	546	1250	312	212	254	148	124	364
23	112	367	580	509	2480	995	312	264	218	118	110	297
24	114	331	644	509	8240	2080	1530	215	192	105	103	2180
25	116	487	974	587	7960	2150	2630	195	173	160	95	2110
26	124	700	877	974	4580	1390	2640	223	477	122	88	1430
27	122	535	681	692	2000	962	1550	257	390	95	83	749
28	116	462	622	580	1300	853	1130	192	238	86	78	572
29	112	398	572	603	---	1900	962	171	187	81	74	466
30	114	349	535	741	---	1920	764	223	158	76	85	375
31	116	---	513	942	---	1280	---	232	---	71	203	---
TOTAL	3991	9434	26892	21717	44731	43182	23349	11038	12258	4536	6366	17992
MEAN	129	314	867	701	1598	1393	778	356	409	146	205	600
MAX	189	700	1700	1270	8240	2830	2640	913	1310	315	995	2180
MIN	112	118	513	340	546	580	312	171	158	71	68	108
CFSM	.28	.68	1.89	1.53	3.48	3.03	1.69	.78	.89	.32	.45	1.31
IN.	.32	.76	2.18	1.76	3.63	3.50	1.89	.89	.99	.37	.52	1.46

CAL YR 1974 TOTAL 200555 MEAN 549 MAX 2790 MIN 98 CFSM 1.20 IN 16.25
WTR YR 1975 TOTAL 225486 MEAN 618 MAX 8240 MIN 68 CFSM 1.35 IN 18.27

EXTREMES.--Current year: Peak discharges above base of 3,500 ft³/s (99.1 m³/s) and maximums (*):

DATE	TIME	G. H.	DISCHARGE
02-24	1930	*15.49	*9,590
03-12	1800	9.34	3,640

Minimum daily discharge: 68 ft³/s (1.93 m³/s) Aug. 2.

HOCKING RIVER BASIN
03157500 HOCKING RIVER AT ENTERPRISE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 13...	0930	2570	5.0	11.2	88	271	7.3	6.3	29	10	7.4	2.6
JULY 31...	1845	71	26.5	9.5	120	780	7.8	6.3	76	30	42	3.4

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 13...	72	0	5.8	59	17	50	.1	.23	.03	1.4	.26	158
JULY 31...	204	0	5.2	167	68	120	.4	.02	.05	.89	.23	448

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 13...	110	55	130	340	--	--	--	--	--	--	--	--
JULY 31...	310	150	30	1400	3	<10	0	2	80	<.5	3.0	1.3

HOCKING RIVER BASIN

235

03158100 HAYDEN RUN AT HAYDENVILLE, OHIO

LOCATION.--Lat 39°28'57", long 82°19'06", Hocking County, at culvert on U.S. Highway 33, 0.5 mi (0.8 km) east of Haydenville.

DRAINAGE AREA.--1.04 mi² (2.69 km²).

PERIOD OF RECORD.--Discharge, 1966 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 24	21.30	6.492	64	1.81

03158500 BURR OAK RESERVOIR AT BURR OAK, OHIO

LOCATION.--Lat 39°32' 30", long 82°03'27", near center of sec.6, T.11 N., R.14 W., Athens County, 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 Glouster.

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 at mean sea level.

EXTREMES.--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).

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.--Water-stage recorder graph and capacity table furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	721.15	9,330	-
Oct. 31.....	721.30	9,430	+100
Nov. 30.....	721.25	9,400	-30
Dec. 31.....	721.28	9,420	+20
CAL YR 1974.....	-	-	-80
Jan. 31.....	721.68	9,690	+270
Feb. 28.....	724.53	11,760	+2,070
Mar. 31.....	721.20	9,360	-2,400
Apr. 30.....	721.34	9,460	+100
May 31.....	721.28	9,420	-40
June 30.....	721.06	9,270	-150
July 31.....	721.10	9,290	+20
Aug. 31.....	721.30	9,430	+140
Sept. 30.....	721.08	9,280	-150
WTR YR 1975.....	-	-	-50

EXTREMES.--Current year: Maximum contents, 13,740 acre-ft (16.9 hm³) Feb. 26, elevation 726.98 ft (221.584 m); minimum, 9,220 acre-ft (11.4 hm³) July 3, elevation 721.00 ft (219.761 m).

HOCKING RIVER BASIN

03159000 SUNDAY CREEK AT GLOUSTER, OHIO

LOCATION.--Lat 39°30'03", long 82°05'07", Athens County, on left bank 150 ft (46 m) downstream from West Branch Sunday Creek and 200 ft (61 m) upstream from bridge on State Highway 78 at Gloucester.

DRAINAGE AREA.--104 mi² (269 km²).

GAGE.--Water-stage recorder. Datum of gage is 665.18 ft (202.747 m) above mean sea level. Prior to Dec. 4, 1951, nonrecording gage at site 300 ft (91 m) downstream at same datum.

REMARKS.--Discharge records fair. Flow partially regulated by Burr Oak Reservoir 5.2 mi (8.4 km) upstream (see station 03158500). Most of small diversion downstream from Burr Oak Reservoir, average discharge 0.62 ft³/s (0.018 m³/s), is returned to stream upstream from station.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1951 to current year.

AVERAGE DISCHARGE.--24 years, 108 ft³/s (3.059 m³/s).

EXTREMES.--Period of record: Maximum discharge, 7,020 ft³/s (199 m³/s) Mar. 5, 1963, gage height, 17.81 ft (5.428 m), from rating curve extended above 3,600 ft³/s (102 m³/s) on basis of velocity-area study and flow over road estimate of peak discharge; minimum daily, 0.5 ft³/s (0.014 m³/s) Nov. 2, 3, Dec. 5, 1973. Flood in March 1907 reached a stage of 22.0 ft (6.71 m), from information by Corps of Engineers.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	17	547	221	484	611	200	456	123	14	7.9	20
2	25	17	649	250	413	580	175	551	73	14	8.3	13
3	23	17	652	271	255	380	216	288	63	13	7.9	10
4	22	19	385	296	186	143	183	166	51	50	7.9	10
5	23	73	228	216	218	122	161	138	61	26	135	8.7
6	22	54	157	170	500	110	149	123	420	15	35	11
7	21	39	153	155	414	125	127	110	317	15	19	10
8	20	46	343	149	279	146	105	85	139	25	12	9.1
9	20	56	377	202	188	119	98	61	72	76	60	7.9
10	19	54	264	184	151	130	95	54	43	273	60	7.9
11	18	58	155	182	155	138	89	49	51	256	61	10
12	18	740	152	155	206	515	84	49	70	132	41	205
13	18	506	137	145	202	667	68	65	61	39	18	263
14	18	399	126	110	160	824	55	50	46	37	15	72
15	21	237	152	83	152	802	54	45	45	27	100	18
16	41	105	339	70	157	350	51	51	97	25	448	15
17	35	93	299	65	177	213	47	41	117	24	373	14
18	25	85	280	74	180	181	47	257	138	24	99	90
19	22	81	179	110	172	802	77	323	113	30	27	129
20	21	130	142	124	154	569	70	142	66	26	19	152
21	19	139	136	156	140	418	56	83	29	25	15	139
22	18	125	133	199	131	327	52	83	26	23	13	32
23	18	114	124	156	903	209	51	364	23	17	11	26
24	21	109	134	120	2610	530	483	220	21	10	10	1250
25	17	205	204	231	722	548	957	150	18	11	10	530
26	18	272	260	344	318	408	820	109	17	12	9.1	577
27	17	265	230	261	586	268	643	125	16	9.5	8.3	516
28	17	195	164	241	643	161	629	61	16	9.5	7.5	168
29	16	128	150	240	---	353	527	41	15	8.3	7.5	41
30	16	97	121	204	---	475	236	58	14	7.9	7.5	31
31	18	---	109	356	---	366	---	49	---	7.9	25	---
TOTAL	670	4475	7481	5740	10856	11590	6605	4447	2361	1282.1	1677.9	4385.6
MEAN	21.6	149	241	185	388	374	220	143	78.7	41.4	54.1	146
MAX	43	740	652	356	2610	824	957	551	420	273	448	1250
MIN	16	17	109	65	131	110	47	41	14	7.9	7.5	7.9

CAL YR 1974 TOTAL 64068.0 MEAN 176 MAX 1340 MIN 13
WTR YR 1975 TOTAL 61570.6 MEAN 169 MAX 2610 MIN 7.5

EXTREMES.--Current year: Maximum discharge, 3,440 ft³/s (97.4 m³/s) Feb. 24, gage height, 16.07 ft (4.898 m); minimum daily, 7.5 ft³/s (0.21 m³/s) Aug. 28-30.

HOCKING RIVER BASIN

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03159000 SUNDAY CREEK AT GLOUSTER, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1964 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 12...	1515	807	5.0	10.6	83	323	6.6	7.1	29	10	16	1.9
JULY 31...	1550	7.9	25.5	6.8	82	2580	2.9	16	160	70	170	7.4

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)
MAR. 12...	24	0	9.6	20	19	110	.2	.09	.01	.21	.32	207
JULY 31...	0	0	.0	0	38	1300	.3	1.3	.01	.17	.10	2020

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	BIO- CHEM- ICAL OXYGEN DEMAND > DAY (MG/L)
MAR. 12...	110	94	1400	630	--	--	--	--	--	--	--
JULY 31...	690	690	240000	8700	6	10	10	0	470	<.5	8.4

HOCKING RIVER BASIN

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03159500 HOCKING RIVER AT ATHENS, OHIO

LOCATION.--Lat 39°19'44", long 82°05'16", in T.9 N., R.14 W., Athens County, on right bank 0.8 mi (1.3 km) east of business section of Athens, 1.4 mi (2.3 km) downstream from Coats Run, and 3.0 mi (4.8 km) downstream from Margaret Creek.

DRAINAGE AREA.--943 mi² (2,442 km²).

GAGE.--Water-stage recorder. Datum of gage is 611.26 ft (186.312 m) above mean sea level. Nonrecording gage prior to Aug. 17, 1931. Prior to June 19, 1970 at present site at datum 3.55 ft (1.082 m) higher. June 19, 1970, to Sept. 30, 1971 water-stage recorder at temporary site 5.3 mi (8.5 km) downstream at datum 11.26 ft (3.432 m) lower (nonrecording gage at this site and datum used as supplementary gage June 1, 1974 to Sept. 30, 1975.)

REMARKS.--Discharge records poor. Water-quality data collected at this site 1954 to 1974. Some regulation by Burr Oak Reservoir, capacity 26,900 acre-ft (33.2 hm³), on East Branch Sunday Creek 29 mi (47 km) upstream beginning 1952 (see station 03158500); by Hocking Lake, capacity 3,080 acre-ft (3.80 hm³), on Clear Fork 39.4 mi (63.4 km) upstream beginning in 1949; and by temporary retention in eight retarding basins, combined capacity, 8,710 acre-ft (10.7 hm³), constructed between 1955 and 1961 upstream from Lancaster (see station 03156400). Diurnal fluctuation at low flow caused by mill 3.2 mi (5.1 km) upstream from station. Channel work has destroyed stage-discharge relationship that existed prior to June 1970.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--60 years, 984 ft³/s (27.87 m³/s).

EXTREMES.--Period of record: Maximum discharge, 32,900 ft³/s (932 m³/s) Mar. 11, 1964, gage height, 24.18 ft (7.370 m), datum then is use; minimum daily, 10 ft³/s (0.28 m³/s) Oct. 11, 1930. Flood in March 1907 reached a stage of about 27 ft (8 m), datum then is use, from floodmarks, discharge, 50,000 ft³/s (1,420 m³/s), estimated by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 523: 1918-19(M). WSP 743: 1922(M). WSP 873: 1920, 1922, 1924-28, 1937. WSP 1113: 1932.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	410	220	1900	2380	3450	3200	2850	2910	670	270	140	240
2	350	220	3850	2320	3030	2550	2100	3090	1500	250	130	280
3	310	210	3950	2210	1770	2260	2100	2320	850	230	130	330
4	290	210	3280	2120	1360	1720	2160	1790	640	250	150	330
5	280	240	2260	1740	1600	1390	1880	1440	550	430	170	310
6	270	400	1660	1500	3090	1240	1550	1240	780	450	350	310
7	260	600	1290	1390	3400	1340	1410	1110	1770	330	330	480
8	240	370	2090	1190	2670	1660	1240	970	1190	320	240	410
9	230	280	3850	1420	1940	1600	1140	850	780	310	220	390
10	220	260	3090	1820	1390	1500	1070	740	610	390	190	340
11	220	970	2120	1680	1290	2290	990	640	540	550	350	220
12	220	2370	1600	1820	1660	4050	890	640	590	510	740	380
13	210	2110	1500	1570	1940	5480	850	700	790	320	440	2260
14	210	1650	1420	1110	1600	5870	780	640	670	280	410	2640
15	210	1070	1660	930	1390	5930	680	700	560	240	360	1190
16	290	860	3200	810	1310	4650	650	780	560	230	1590	550
17	400	750	2970	780	1500	3500	640	580	580	200	2550	400
18	340	710	2380	930	1550	2550	620	680	810	200	1440	450
19	260	560	1960	1190	1570	3400	780	1090	1820	300	610	1050
20	240	640	1630	1660	1520	6050	1500	1050	1190	360	450	1030
21	240	970	1500	1790	1220	5040	1550	740	670	410	330	850
22	220	830	1340	1290	1090	3650	1340	560	520	350	270	740
23	210	780	1290	1140	3050	2730	1260	930	460	260	250	520
24	200	740	1550	1050	8880	2970	2390	890	400	240	220	3540
25	200	810	1880	1240	16700	4650	6480	640	350	230	190	5640
26	210	1660	1940	2120	13700	4400	9000	510	340	220	180	4340
27	220	1390	1680	1940	8000	3090	6350	640	520	200	170	2670
28	220	1090	1360	1720	3900	2260	4300	610	490	190	150	1770
29	210	890	1140	1500	---	3150	3550	450	380	170	140	1010
30	210	780	1110	1500	---	4550	2550	480	310	160	130	740
31	220	---	1610	2260	---	4400	---	500	---	140	140	---
TOTAL	7820	24640	64060	48120	95570	103120	64650	30910	21890	8990	13160	35410
MEAN	252	821	2066	1552	3413	3326	2155	997	730	290	425	1180
MAX	410	2370	3950	2380	16700	6050	9000	3090	1820	550	2550	5640
MIN	200	210	1110	780	1090	1240	620	450	310	140	130	220

CAL YR 1974 TOTAL 465493 MEAN 1275 MAX 7950 MIN 149
WTR YR 1975 TOTAL 518340 MEAN 1420 MAX 16700 MIN 130

EXTREMES.--Current year: Maximum discharge, 17,600 ft³/s (498 m³/s) Feb. 25, gage height, 20.41 ft (6.221 m); minimum daily, 130 ft³/s (3.68 m³/s) Aug. 2, 3, 30.

HOCKING RIVER BASIN

03159510 HOCKING RIVER BELOW ATHENS, OHIO

LOCATION.--Lat 39°19'39", long 82°00'18", Athens County, at Harmony Lane Bridge, 5.5 mi (8.8 km) downstream from gaging station at Athens.

DRAINAGE AREA.--957 mi² (2,479 km²).

GAGE.--Water-quality recorder.

REMARKS.--Interruptions in the daily water-quality records were due to malfunctions of the instrument. Records of discharge are given for Hocking River at Athens, Ohio, station 03159500, drainage area 943 mi² (2,442 km²).

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--May 1966 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	
FEB. 05...	1400	1620	3.5	11.6	87	480	7.1	8.4	49	18	23	2.6	
AUG. 01...	1005	135	28.5	7.1	91	995	7.4	4.8	96	38	56	4.2	
DATE		BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITAS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
FEB. 05...	84	0	11	69	41	130	.1	.16	.04	.76	.10	.10	315
AUG. 01...	114	0	7.3	94	81	270	.3	.03	.01	.40	.03	.03	608
DATE		HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
FEB. 05...	200	130	580	800	--	--	--	--	--	--	--	--	--
AUG. 01...	400	300	260	730	0	<10	0	2	100	<.5	2.6	2.2	2.2

OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	763	736	947	905	---	---	---	---	450	396	449	422
2	772	745	944	905	---	---	474	462	419	387	476	449
3	789	753	939	915	---	---	468	429	452	411	485	467
4	797	759	956	903	---	---	474	441	492	449	563	482
5	839	772	981	915	---	---	473	456	513	473	596	566
6	880	820	974	912	492	455	507	464	464	404	620	566
7	889	841	1000	926	533	498	530	494	426	395	630	563
8	908	870	926	845	548	501	540	507	426	398	603	557
9	916	845	855	777	506	371	551	515	489	425	557	525
10	925	861	896	815	399	368	549	488	521	480	573	543
11	915	873	905	831	456	398	515	441	557	497	588	569
12	921	876	830	702	491	459	456	437	548	483	585	390
13	905	883	---	---	516	492	497	456	530	461	416	288
14	911	879	---	---	509	494	521	494	494	452	314	293
15	913	874	---	---	522	504	551	521	516	468	323	300
16	901	812	---	---	536	414	611	551	527	506	368	321
17	870	816	638	593	405	378	596	579	525	512	411	363
18	883	865	663	639	425	395	659	576	528	486	452	408
19	875	812	672	644	471	423	617	578	497	471	449	320
20	869	794	680	645	518	465	593	512	515	468	312	251
21	886	822	678	633	551	507	540	497	536	504	333	299
22	892	856	626	567	540	522	552	510	549	525	392	335
23	908	855	614	569	548	524	546	509	546	260	440	396
24	913	873	597	578	---	---	563	528	299	198	441	294
25	936	867	605	581	---	---	567	509	227	192	357	294
26	941	875	588	563	---	---	510	489	246	228	368	320
27	960	894	575	573	---	---	491	464	357	269	434	371
28	956	914	---	---	---	---	492	462	416	362	501	431
29	999	911	---	---	---	---	504	480	---	---	497	399
30	945	911	---	---	---	---	522	486	---	---	411	332
31	956	897	---	---	---	---	522	411	---	---	377	339
MONTH	999	736	---	---	---	---	659	411	557	192	630	251
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	450	378	420	363	717	659	---	---	969	912	896	765
2	491	453	405	372	677	518	---	---	908	756	932	729
3	495	464	435	392	558	471	---	---	986	725	693	446
4	479	458	470	438	614	558	---	---	968	893	519	404
5	500	461	510	480	662	602	---	---	1020	827	647	189
6	536	494	533	512	668	470	---	---	1500	740	710	206
7	543	524	---	---	662	411	---	---	746	668	726	491
8	---	---	585	564	525	423	768	659	495	177	695	570
9	---	---	608	587	542	513	771	687	---	---	768	692
10	---	---	639	605	591	525	899	782	---	---	897	743
11	---	---	668	636	653	579	923	239	---	---	843	786
12	---	---	689	660	690	635	615	417	---	---	875	740
13	---	---	681	626	713	600	599	548	504	477	875	392
14	---	---	671	615	647	594	731	612	632	513	465	395
15	---	---	642	599	680	636	792	668	662	593	572	473
16	---	---	683	618	669	620	833	803	741	395	623	548
17	---	---	713	668	716	677	---	---	512	389	666	620
18	---	---	699	671	702	525	---	---	423	288	690	585
19	---	---	672	410	617	383	---	---	554	419	699	632
20	---	---	495	440	489	428	779	743	594	536	---	---
21	---	---	593	500	521	488	774	719	668	587	---	---
22	---	---	663	593	---	---	860	722	719	669	---	---
23	---	---	681	570	---	---	821	684	785	696	---	---
24	---	---	602	506	---	---	747	711	789	729	---	---
25	---	---	572	536	749	699	815	734	854	759	347	311
26	---	---	609	551	755	729	810	711	836	675	368	345
27	---	---	693	609	---	---	845	719	879	863	407	363
28	---	---	693	608	---	---	851	842	891	828	518	398
29	---	---	681	624	---	---	921	857	900	858	567	495
30	411	395	717	648	---	---	869	662	888	800	---	---
31	---	---	723	606	---	---	977	908	876	765	---	---
MONTH	---	---	723	363	---	---	---	---	1500	177	932	189
YEAR	1500	177										

HOCKING RIVER BASIN

03159510 HOCKING RIVER BELOW ATHENS, OHIO--Continued

PH (UNITS)

PERIOD OF RECORD.--May 1966 to current year.

EXTREMES.--Period of record: Maximum, 8.4 Aug. 28, 1975; minimum, 3.3 Aug. 6, 1975.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	7.3	7.5	7.3	---	---	---	---	7.3	7.1	7.0	6.9
2	7.5	7.4	7.4	7.3	---	---	7.5	7.4	7.3	7.2	7.0	6.9
3	7.5	7.3	7.4	7.3	---	---	7.6	7.4	7.3	7.3	7.0	7.0
4	7.5	7.3	7.4	7.3	---	---	7.6	7.5	7.3	7.3	7.0	7.0
5	7.5	7.3	7.5	7.3	---	---	7.6	7.5	7.4	7.3	7.1	7.0
6	7.5	7.3	7.5	7.0	7.4	7.3	7.6	7.5	7.3	7.2	7.0	6.9
7	7.4	7.3	7.1	6.8	7.6	7.4	7.5	7.4	7.3	7.2	7.0	6.9
8	7.4	7.3	7.5	7.1	7.6	7.4	7.5	7.4	7.3	7.2	7.0	6.8
9	7.5	7.3	7.6	7.4	7.6	7.4	7.4	7.3	7.3	7.2	7.0	6.9
10	7.5	7.4	7.6	7.4	7.5	7.4	7.5	7.3	7.4	7.2	7.1	6.9
11	7.5	7.4	7.5	7.4	7.6	7.5	7.5	7.3	7.4	7.2	7.0	7.0
12	7.5	7.4	7.5	7.4	7.5	7.4	7.4	7.4	7.3	7.2	7.1	6.8
13	7.4	7.3	---	---	7.4	7.4	7.4	7.3	7.3	7.1	7.0	6.7
14	7.4	7.3	---	---	7.5	7.4	7.5	7.3	7.3	7.2	7.0	6.9
15	7.5	7.4	---	---	7.4	7.3	7.6	7.4	7.3	7.2	7.0	6.9
16	7.5	7.4	---	---	7.4	7.2	7.5	7.4	7.3	7.2	7.0	6.9
17	7.5	7.2	7.4	7.3	7.5	7.3	7.4	7.2	7.2	7.2	7.0	6.9
18	7.3	7.1	7.4	7.3	7.3	7.3	7.5	7.2	7.2	7.2	6.9	6.9
19	7.4	7.3	7.5	7.4	7.5	7.3	7.5	7.3	7.2	7.1	6.9	6.6
20	7.5	7.4	7.6	7.5	7.4	7.3	7.4	7.3	7.2	7.0	7.0	6.7
21	7.5	7.3	7.6	7.2	7.4	7.3	7.4	7.3	7.2	7.1	6.9	6.8
22	7.5	7.3	7.6	7.3	7.4	7.3	7.4	7.2	7.2	7.0	6.8	6.8
23	7.6	7.4	7.5	7.3	7.4	7.3	7.3	7.2	7.4	6.8	7.0	6.8
24	7.5	7.5	7.5	7.5	---	---	7.5	7.1	7.0	6.9	7.0	6.6
25	7.5	7.4	7.5	7.3	---	---	7.4	7.3	7.1	7.0	6.9	6.7
26	7.5	7.4	7.4	7.2	---	---	7.3	7.1	7.1	7.1	7.0	6.8
27	7.5	7.3	7.4	7.4	---	---	7.4	7.2	7.0	6.9	7.0	6.9
28	7.5	7.3	---	---	---	---	7.4	7.3	7.0	6.9	7.0	7.0
29	7.5	7.4	---	---	---	---	7.4	7.3	---	---	7.0	6.8
30	7.5	7.4	---	---	---	---	7.2	7.1	---	---	7.0	6.8
31	7.5	7.4	---	---	---	---	7.5	7.1	---	---	7.0	6.9
MONTH	7.6	7.1	---	---	---	---	7.6	7.1	7.4	6.8	7.1	6.6
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.0	6.9	6.9	6.8	7.1	6.8	---	---	8.1	7.6	7.8	7.6
2	7.0	6.9	6.9	6.8	7.2	6.8	---	---	8.0	7.7	7.6	7.0
3	7.0	6.8	6.9	6.8	7.1	6.9	---	---	8.1	7.6	7.3	7.0
4	6.9	6.8	7.0	6.8	7.1	6.9	---	---	7.8	7.6	7.1	7.0
5	6.9	6.8	7.0	6.9	7.2	6.9	---	---	7.6	7.5	7.1	6.9
6	6.8	6.8	7.0	6.9	7.2	7.1	---	---	7.6	3.3	7.0	6.9
7	6.9	6.8	---	---	---	---	---	---	7.3	6.5	7.1	6.7
8	---	---	6.9	6.9	---	---	7.9	7.7	7.6	7.3	7.5	6.8
9	---	---	7.1	6.9	---	---	7.9	7.7	---	---	7.7	7.3
10	---	---	7.0	6.9	---	---	7.9	7.1	---	---	7.5	7.3
11	---	---	7.0	6.9	---	---	7.1	6.2	---	---	7.4	7.3
12	---	---	7.0	6.9	---	---	7.1	6.8	---	---	7.5	7.1
13	---	---	7.0	6.8	---	---	7.3	7.1	---	---	7.3	6.6
14	---	---	7.1	6.8	---	---	7.5	7.3	7.4	7.2	7.4	7.3
15	---	---	7.1	7.0	---	---	7.4	7.0	7.5	7.3	7.5	7.4
16	---	---	7.0	7.0	---	---	7.3	7.2	7.4	6.5	7.6	7.5
17	---	---	7.1	6.9	---	---	---	---	7.1	6.9	7.6	7.5
18	---	---	7.1	6.9	---	---	---	---	7.2	6.9	7.6	7.5
19	---	---	6.9	6.1	---	---	---	---	7.3	7.1	7.5	7.2
20	---	---	6.9	6.8	---	---	7.4	7.1	7.4	7.3	---	---
21	---	---	7.0	6.9	---	---	7.2	7.0	7.6	7.4	---	---
22	---	---	7.0	6.8	---	---	7.2	7.0	7.6	7.4	---	---
23	---	---	7.1	6.2	---	---	7.2	7.0	7.7	7.6	---	---
24	---	---	6.9	6.3	---	---	7.3	7.2	7.9	7.5	---	---
25	---	---	7.0	6.9	---	---	7.5	7.2	8.1	7.2	7.1	7.1
26	---	---	7.1	6.9	---	---	7.6	7.4	8.2	8.0	7.3	7.1
27	---	---	7.1	6.9	---	---	8.0	7.5	8.3	8.0	7.3	7.3
28	---	---	7.1	6.7	---	---	8.0	7.6	8.4	8.2	7.7	7.3
29	---	---	7.1	7.1	---	---	8.0	7.5	8.3	8.1	7.5	7.4
30	7.0	6.9	7.1	6.9	---	---	7.9	7.5	8.3	8.0	---	---
31	---	---	7.0	6.7	---	---	8.0	7.3	8.0	7.7	---	---
MONTH	---	---	7.1	6.1	---	---	---	---	8.4	3.3	7.8	6.6
YEAR	8.4	3.3										

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITRE

EXTREMES.--Period of record: Maximum, 15.0 mg/l or higher Jan. 31, Feb. 1, 16-20, 1973; minimum, 0.4 mg/l June 9, 1966.

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

HOCKING RIVER BASIN

03159510 HOCKING RIVER BELOW ATHENS, OHIO--Continued

TEMPERATURE (°C) OF WATER

PERIOD OF RECORD.--May 1966 to current year.

EXTREMES.--Period of record: Maximum, 32.0°C Aug. 5, 30, 1969; minimum, freezing point on many days during winter periods.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.0	13.5	16.5	15.5	---	---	---	---	5.0	4.5	5.5	4.0
2	14.5	11.5	18.5	15.5	---	---	5.0	4.0	5.0	4.0	4.5	4.0
3	12.0	10.0	18.0	17.0	---	---	4.0	3.5	5.0	4.0	4.0	3.0
4	12.0	9.5	20.0	18.5	---	---	3.5	3.0	4.0	3.5	4.0	3.0
5	12.0	10.0	19.5	16.5	---	---	3.5	2.5	4.0	3.5	4.5	2.5
6	13.0	11.0	15.5	14.0	3.0	2.0	3.0	2.5	4.5	4.0	6.0	3.0
7	13.5	12.0	13.5	12.0	3.0	2.0	4.0	2.5	4.0	3.0	7.0	5.0
8	13.5	11.5	12.0	10.0	4.0	3.0	4.5	3.0	3.0	2.0	6.5	5.5
9	13.5	12.0	11.5	9.5	4.0	3.0	6.0	4.5	3.0	1.5	6.0	4.5
10	13.5	12.5	10.5	8.5	3.0	2.0	6.0	5.0	1.5	1.0	4.5	4.0
11	14.0	13.0	10.0	9.5	2.5	2.0	7.0	6.0	2.0	1.0	4.5	3.5
12	14.5	13.0	10.0	10.0	3.5	2.0	6.5	5.5	2.5	2.0	6.0	4.0
13	---	---	---	---	4.5	3.5	5.5	3.0	3.0	2.0	6.5	5.5
14	15.0	14.5	---	---	5.5	4.5	3.0	1.0	2.5	1.5	6.0	4.5
15	15.5	14.0	---	---	5.0	4.5	1.0	0.5	3.0	1.5	4.5	4.0
16	14.5	13.5	---	---	5.0	4.5	1.0	0.5	4.5	3.0	5.0	4.0
17	14.5	12.5	6.5	6.0	4.5	4.0	1.0	0.0	6.5	4.5	7.0	5.0
18	14.5	12.0	6.5	5.0	4.0	3.5	1.5	0.5	7.5	6.0	8.5	6.5
19	12.5	11.0	7.5	5.5	4.0	3.0	2.0	1.0	7.5	6.5	8.5	7.5
20	11.0	9.0	9.0	7.5	3.5	2.5	2.0	1.0	7.0	5.5	9.0	7.0
21	9.0	7.5	8.5	7.0	3.5	2.5	2.0	1.0	6.5	4.5	10.0	8.5
22	9.5	8.0	7.5	7.0	4.0	3.0	2.0	1.0	7.0	4.5	10.0	9.5
23	9.5	8.5	7.5	5.5	3.5	3.5	3.0	1.5	8.5	6.0	11.0	9.5
24	11.0	9.5	7.5	6.5	---	---	3.5	2.0	9.0	8.5	11.0	10.0
25	11.5	10.5	7.5	7.0	---	---	4.5	3.0	8.5	7.0	11.0	10.0
26	12.5	11.5	7.5	6.5	---	---	4.0	3.5	6.5	5.5	9.5	7.0
27	12.5	11.0	7.5	7.0	---	---	3.5	3.0	6.0	4.5	7.0	5.5
28	12.5	12.0	---	---	---	---	4.0	3.0	5.0	5.0	5.5	5.0
29	12.5	12.0	---	---	---	---	7.0	4.0	---	---	7.5	5.5
30	14.0	12.5	---	---	---	---	7.0	6.0	---	---	8.0	7.5
31	15.5	14.0	---	---	---	---	6.0	5.0	---	---	7.5	7.0
MONTH	16.0	7.5	---	---	---	---	7.0	0.0	9.0	1.0	11.0	2.5
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	7.0	16.5	15.5	22.5	21.0	---	---	29.5	27.0	---	---
2	11.5	8.5	17.5	16.0	21.0	19.0	---	---	29.5	27.5	---	---
3	11.0	9.0	17.0	16.0	21.5	18.5	---	---	29.0	27.5	---	---
4	9.0	8.0	17.0	16.0	23.0	19.5	---	---	28.5	27.0	---	---
5	8.5	7.0	18.0	15.5	22.5	21.0	---	---	---	---	---	---
6	9.0	6.5	19.0	16.0	22.0	20.5	---	---	---	---	---	---
7	7.5	7.0	---	---	20.5	19.0	---	---	---	---	---	---
8	---	---	20.0	16.5	20.5	18.5	25.5	23.5	---	---	---	---
9	---	---	20.5	17.5	21.0	18.0	26.0	23.5	---	---	---	---
10	---	---	21.5	18.0	22.0	19.0	25.0	24.0	---	---	---	---
11	---	---	21.5	18.5	22.0	19.0	24.5	22.0	---	---	---	---
12	---	---	20.5	18.5	23.0	20.0	23.0	20.5	---	---	---	---
13	---	---	20.0	19.0	24.0	20.5	23.0	21.0	---	---	---	---
14	---	---	19.0	18.0	23.5	21.5	23.0	21.5	---	---	---	---
15	---	---	19.0	17.0	24.5	21.5	23.0	22.0	---	---	---	---
16	---	---	19.0	16.5	25.5	22.0	23.0	22.0	---	---	---	---
17	---	---	18.5	16.5	26.0	22.5	---	---	---	---	---	---
18	---	---	19.0	17.5	26.0	23.0	---	---	---	---	---	---
19	---	---	19.5	17.0	25.0	23.0	---	---	---	---	---	---
20	---	---	21.5	18.0	27.5	24.0	24.5	23.0	---	---	---	---
21	---	---	23.0	19.5	28.0	24.5	26.0	23.5	---	---	---	---
22	---	---	23.0	21.0	28.5	25.5	26.5	24.0	---	---	---	---
23	---	---	23.0	21.0	29.5	27.0	26.5	23.0	---	---	---	---
24	---	---	23.0	20.5	29.5	27.0	26.5	21.0	---	---	---	---
25	---	---	24.5	21.5	29.0	27.0	26.5	25.5	---	---	---	---
26	---	---	25.0	22.0	29.5	27.0	25.5	25.0	---	---	---	---
27	---	---	25.0	22.5	---	---	25.5	22.5	---	---	---	---
28	---	---	24.0	22.0	---	---	26.5	25.0	---	---	---	---
29	---	---	23.5	21.5	---	---	26.5	25.5	---	---	---	---
30	16.0	15.0	23.0	21.0	---	---	27.0	25.5	---	---	---	---
31	---	---	23.0	21.5	---	---	28.5	27.5	---	---	---	---
MONTH	---	---	25.0	15.5	29.5	18.0	---	---	---	---	---	---
YEAR	29.5	0.0										

SHADE RIVER BASIN

03159540 SHADE RIVER NEAR CHESTER, OHIO

LOCATION.--Lat 39°03'49", long 81°52'55", in NE 1/4 sec. 10, T.3 N., R.12 W., Meigs County, 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.

GAGE.--Water-stage recorder. Datum of gage is 576.91 ft (175.842 m) above mean sea level.

REMARKS.--Discharge records good. Sediment data collected at this site 1969 to 1974.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1956, 1962-64, June 1965 to current year.

AVERAGE DISCHARGE.--10 years, 173 ft³/s (4.899 m³/s), 15.06 in./yr (382 mm/yr).

EXTREMES.--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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	13	728	574	774	180	305	414	227	7.7	2.1	3.4
2	20	14	860	371	357	146	232	394	148	6.8	1.9	3.0
3	16	14	651	315	274	121	713	272	116	6.2	2.1	2.2
4	13	15	330	479	211	108	386	687	98	5.9	2.8	2.7
5	12	17	201	258	329	95	234	369	78	5.9	2.1	3.0
6	12	27	144	184	1090	93	186	240	107	6.5	1.8	3.2
7	12	25	127	152	497	152	152	221	159	6.2	8.5	3.4
8	11	19	565	127	274	397	129	165	82	5.9	5.0	2.8
9	10	16	528	193	229	236	111	129	63	17	4.5	2.2
10	9.7	14	218	201	146	196	105	107	52	26	4.3	2.1
11	9.7	14	148	184	179	188	93	89	47	33	6.5	2.1
12	9.2	337	132	144	965	1390	83	81	71	12	8.8	16
13	10	379	113	123	807	1570	74	89	60	8.1	7.1	50
14	9.2	132	95	102	304	713	67	78	52	6.5	5.0	19
15	10	83	91	95	234	807	63	110	53	5.6	5.3	8.1
16	28	56	348	95	209	363	60	221	44	4.8	5.3	5.3
17	84	44	247	81	234	276	55	256	39	4.3	220	4.3
18	38	39	156	132	214	213	53	918	77	4.0	45	6.2
19	25	36	129	542	193	734	71	357	69	4.5	16	82
20	19	53	148	638	152	825	77	167	38	5.0	9.2	42
21	17	76	129	302	123	326	53	118	28	7.1	6.8	18
22	17	64	140	229	108	260	45	113	22	6.5	5.3	12
23	15	55	115	218	1720	238	45	1540	17	5.9	4.5	15
24	14	46	102	194	3770	1630	1380	460	14	4.5	3.8	1290
25	14	65	127	384	1000	1480	4140	227	12	4.0	3.4	965
26	15	148	188	710	380	345	1660	154	11	6.8	3.2	148
27	16	98	172	308	260	230	427	121	11	4.5	2.5	86
28	16	75	326	218	200	214	299	95	9.7	3.4	2.3	56
29	14	60	220	196	---	1220	850	104	9.7	2.8	2.1	39
30	30	47	165	204	---	1130	578	663	8.8	2.3	1.9	30
31	12	---	148	434	---	502	---	469	---	2.2	2.3	---
TOTAL	563.8	2081	7791	8387	15233	16378	12726	9428	1823.2	231.9	531.9	2922.0
MEAN	18.2	69.4	251	271	544	528	424	304	60.8	7.48	17.2	97.4
MAX	84	379	860	710	3770	1630	4140	1540	227	33	220	1290
MIN	9.2	13	91	81	108	93	45	78	8.8	2.2	1.9	2.1
CFSM	.12	.44	1.61	1.74	3.49	3.38	2.72	1.95	.39	.05	.11	.62
IN.	.13	.50	1.86	2.00	3.63	3.91	3.03	2.25	.43	.06	.13	.70

CAL YR 1974 TOTAL 70509.6 MEAN 193 MAX 4300 MIN 2.7 CFSM 1.24 IN 16.81
WTR YR 1975 TOTAL 78096.8 MEAN 214 MAX 4140 MIN 1.9 CFSM 1.37 IN 18.62

EXTREMES.--Current year: Peak discharges above base of 2,400 ft³/s (67.97 m³/s) and maximums(*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
02-24	1200	20.50	4,070	03-25	0230	16.18	2,560
03-12	1630	15.79	2,450	04-25	1100	*21.66	*4,550

Minimum discharge: 1.8 ft³/s (0.051 m³/s) Aug. 3.

SHADE RIVER BASIN

247

03159540 SHADE RIVER NEAR CHESTER, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

						SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION							
MAR. 12...	1200	1510	4.0	12.2	93	180	7.3	5.0	19	5.2	7.4	2.0
SEP. 11...	1035	2.2	19.0	5.7	61	370	7.6	6.0	43	10	11	3.5
DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
MAR. 12...	40	0	3.2	33	7.3	40	.1	.21	.03	.46	.27	106
SEP. 11...	119	0	4.8	98	9.2	68	.3	.07	.01	.14	.04	210
DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 12...	69	36	160	170	--	--	--	--	--	--	--	--
SEP. 11...	150	51	200	130	1	<10	10	2	40	<.5	4.1	1.5

LEADING CREEK BASIN

03160050 LEADING CREEK NEAR MIDDLEPORT, OHIO

LOCATION.--Lat 39°00'31", long 82°05'07", Meigs County, at first private bridge 1.5 mi (2.4 km) upstream from State Highway 7 bridge, 1.8 mi (2.9 km) northwest of Middleport.

DRAINAGE AREA.--117 mi² (303 km²).

PERIOD OF RECORD.--Discharge, 1956, 1962 to 1975 (discontinued); chemical analyses, 1966 to 1975 (discontinued).

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	INSTANTANEOUS DISCHARGE (ft ³ /s)	(m ³ /s)
Oct. 10	4.1	0.116

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	BICAR- BONATE (HCO ₃) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	HYDRO- GEN SULFIDE (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	HARD- NESS (CA, MG) (MG/L)
JULY 02...	1545	E3.0	8.2	32.0	645	7.0	142	62	110	.0	23	220

DATE	TUR- BIO- ITY (JTU)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL MERCURY (HG) (UG/L)
JULY 02...	10	0	3.6	0	10	0	610	550	10	300	<.5

RACCOON CREEK BASIN

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OHIO

LOCATION.--Lat 39°21'45", long 82°18'47", in NW 1/4 sec.11, T.11 N., R.16 W., Vinton County, 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).

GAGE.--Water stage and water-quality recorders. Water-stage recorder with concrete weir and 6-inch Parshall flume. Altitude of gage is 770.0 ft (234.70 m), from topographic map.

REMARKS.--Discharge records poor. Interruptions in the daily water-quality records were due to malfunctions of the instrument.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1970 to current year.

AVERAGE DISCHARGE.--5 years, 1.18 ft³/s (0.0334 m³/s), 16.35 in/yr (415 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 990 ft³/s (28.0 m³/s) June 22, 1974, gage-height, 5.01 ft (1.527 m) 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, gage height, 0.05 ft (0.015 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.11	8.0	3.5	3.8	1.3	1.0	9.8	.46	.06	.04	.08
2	.13	.10	6.5	1.7	2.4	.98	.60	4.2	.32	.06	.04	.04
3	.11	.13	3.1	2.8	1.7	.75	1.6	2.7	.28	.08	.05	.05
4	.12	.22	2.2	2.1	1.6	.62	1.0	2.1	.24	.17	.06	.09
5	.10	.30	1.9	1.6	5.4	.66	.90	1.5	2.0	.08	.17	.08
6	.11	.18	1.6	1.5	8.0	.62	.90	1.2	2.7	.07	.10	.07
7	.10	.18	3.6	1.2	2.0	2.1	.79	.93	.56	.07	.07	.04
8	.10	.20	8.6	1.3	1.7	1.6	.72	.83	.30	.40	.04	.04
9	.10	.20	3.1	1.2	1.5	1.2	.70	.75	.22	.15	.05	.04
10	.08	.22	1.8	1.2	1.4	1.1	.70	.64	.22	.16	.05	.04
11	.07	1.1	1.5	1.0	1.4	2.5	.56	.60	.54	.09	.09	.38
12	.07	8.4	1.3	.86	3.6	6.6	.45	1.7	.38	.07	.06	.61
13	.08	1.9	1.1	.80	2.0	5.2	.36	2.1	.32	.07	.03	.15
14	.10	1.0	1.0	.70	1.5	6.2	.39	1.0	.24	.05	.14	.09
15	.11	.62	4.0	.60	1.4	4.0	.41	1.1	.33	.05	.36	.08
16	.47	.52	3.6	.50	1.3	3.2	.36	.83	.21	.05	.45	.13
17	.25	.48	2.1	.44	1.5	2.0	.41	2.3	.35	.08	.13	.14
18	.15	.45	1.3	1.2	1.6	.70	.43	14	.70	.21	.08	.87
19	.10	.50	1.1	1.5	1.3	.60	1.1	4.8	.27	.23	.06	.32
20	.10	1.2	.98	1.4	.90	.55	.54	2.3	.22	.15	.06	.19
21	.07	.88	.88	1.3	.80	.52	.45	1.7	.17	.10	.05	.13
22	.11	.62	.82	1.1	1.0	.52	.52	1.8	.15	.05	.05	.12
23	.13	.64	.78	1.3	27	3.5	.62	.80	.13	.05	.05	.53
24	.10	.72	.90	1.4	19	6.2	15	.50	.12	.09	.05	7.9
25	.11	3.0	1.5	3.9	5.9	4.4	8.5	.39	.13	.07	.04	.33
26	.09	1.6	1.0	2.1	2.5	3.2	5.0	.38	.13	.04	.04	.15
27	.09	1.1	1.3	1.4	1.9	2.3	2.6	.28	.13	.05	.03	.11
28	.09	.80	1.3	1.5	1.7	3.0	2.4	.21	.09	.04	.03	.09
29	.09	.64	1.2	1.8	---	3.6	3.6	.31	.08	.04	.04	.09
30	.09	.84	1.0	1.3	---	3.9	6.0	.33	.08	.03	.04	.07
31	.10	---	1.5	7.1	---	2.1	---	.88	---	.04	.14	---
TOTAL	3.68	28.85	70.56	51.30	105.80	75.72	58.61	62.96	12.07	2.95	2.69	13.05
MEAN	.12	.96	2.28	1.65	3.78	2.44	1.95	2.03	.40	.095	.087	.44
MAX	.47	8.4	8.6	7.1	27	6.6	15	14	2.7	.40	.45	7.9
MIN	.07	.10	.78	.44	.80	.52	.36	.21	.08	.03	.03	.04
CFSM	.12	.98	2.33	1.68	3.86	2.49	1.99	2.07	.41	.10	.09	.45
IN.	.14	1.09	2.68	1.95	4.01	2.87	2.22	2.39	.46	.11	.10	.49

CAL YR 1974 TOTAL 530.15 MEAN 1.45 MAX 37 MIN .04 CFSM 1.48 IN 20.10
WTR YR 1975 TOTAL 488.24 MEAN 1.34 MAX 27 MIN .03 CFSM 1.37 IN 18.51

EXTREMES.--Current year: Maximum discharge, 48 ft³/s (1.36 m³/s) Apr. 24, gage height, 2.47 ft (0.753 m); minimum, 0.03 ft³/s (0.001 m³/s) July 28, 29, 30, 31, Aug. 1, 2, 3, 8, 9, 27, 28. No peaks above base of 50 ft³/s (1.42 m³/s).

RACCOON CREEK BASIN

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--April 1970 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICHO- MHOS)	PH (UNITS)	HICAP- MONATE (HCO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	HYDRO- GEN SULFIDE (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	HARD- NESS (CA+MG) (MG/L)
JULY 23...	1420	E.05	6.3	28.0	616	5.3	3	22	200	.1	24	280

DATE	TUR- BID- ITY (JTU)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL MERCURY (HG) (UG/L)
JULY 23...	4	0	.8	0	<10	10	32000	2600	130	3000	<.5

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C)

PERIOD OF RECORD.--January 1971 to current year.

EXTREMES.--Period of record: Maximum, 3,100 micromhos Oct. 21, 22, 1971; minimum, 116 micromhos May 12, 1974.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1400	1050	1630	1360	---	---	317	277	441	348	631	495
2	1290	880	1440	1350	---	---	623	290	518	459	602	484
3	1600	1260	1740	1430	---	---	672	373	564	483	614	465
4	1610	1480	1730	906	---	---	406	332	761	568	762	536
5	1600	1450	---	---	686	641	533	378	754	273	809	595
6	1680	1500	---	---	708	641	616	487	278	248	769	636
7	1670	1470	1110	944	713	340	592	453	347	263	763	325
8	1690	1480	1370	1160	334	278	735	521	456	358	426	324
9	1670	1520	1420	1220	454	310	509	363	467	371	619	346
10	1580	1460	1530	1340	628	449	729	411	1640	428	739	585
11	1560	1450	1520	285	649	567	676	374	637	419	611	454
12	1640	1540	359	188	624	471	591	314	602	289	647	186
13	1760	1570	596	354	623	473	729	607	496	307	351	198
14	1790	1620	634	417	694	547	656	542	549	416	503	240
15	1690	1030	564	417	793	271	776	527	606	519	309	235
16	1260	620	894	569	395	306	597	499	572	474	493	317
17	1210	977	908	797	509	422	649	339	594	456	530	447
18	1220	1060	1050	863	563	423	770	476	650	416	642	500
19	1240	1040	1140	1020	720	460	556	444	556	453	545	200
20	1290	1180	923	566	647	438	542	392	601	450	832	141
21	1220	1190	709	582	650	533	586	453	530	442	503	302
22	1570	1230	---	---	589	451	559	420	736	528	762	314
23	1600	1420	---	---	654	578	732	542	629	172	899	298
24	1530	1390	---	---	711	639	735	653	216	167	411	123
25	1440	1310	---	---	759	340	711	387	355	206	278	236
26	1310	1260	---	---	638	335	413	380	357	303	278	254
27	1540	1260	---	---	689	559	548	363	522	371	523	281
28	1540	1400	---	---	680	496	772	552	637	522	535	309
29	1520	1340	---	---	669	591	744	431	---	---	676	157
30	1350	1270	---	---	658	457	675	390	---	---	477	179
31	1640	1320	---	---	696	331	624	214	---	---	353	249
MONTH	1790	620	---	---	793	271	776	214	1640	167	899	123
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	416	337	184	146	737	377	1610	1520	2260	2040	2030	1130
2	586	381	275	183	982	737	1770	1590	2290	2140	2090	1600
3	503	192	395	270	1200	982	1840	1660	2270	2040	2140	2040
4	255	153	359	327	1120	1000	1800	683	2080	1480	2010	1120
5	335	182	370	295	---	---	1610	1530	1860	559	2290	1580
6	836	289	443	373	---	---	1730	1600	1790	1170	2000	1540
7	595	450	995	331	---	---	1720	1650	1780	1530	2080	2010
8	731	366	1150	387	---	---	1720	253	1850	1770	2150	2070
9	499	387	1170	562	---	---	1390	1060	2140	1850	2180	2140
10	895	439	726	569	---	---	1500	709	2150	2030	2420	2170
11	469	393	798	639	---	---	1490	1380	2130	1700	2390	445
12	445	403	759	193	---	---	1570	1500	2030	1960	1220	497
13	457	397	425	255	---	---	1710	1530	2060	2000	1600	1250
14	584	426	752	449	---	---	1710	1570	2120	564	1740	1600
15	581	511	861	438	---	---	1760	1620	1710	311	1980	1730
16	515	479	569	514	---	---	1870	1750	1630	273	2040	1890
17	586	520	765	216	---	---	1900	1480	1480	1080	1980	1490
18	616	583	273	124	---	---	1760	361	1680	1490	1210	415
19	603	224	415	262	---	---	1630	369	1760	1630	1270	805
20	230	213	513	390	---	---	1490	1180	1800	1620	1410	1270
21	237	212	632	468	---	---	1530	1460	2020	1790	1550	1420
22	991	249	595	250	---	---	1590	1510	2040	1930	1590	1520
23	422	370	707	547	---	---	1840	1590	2050	1980	1670	248
24	383	143	796	628	---	---	1880	1720	2170	2070	645	173
25	331	248	885	685	---	---	1800	1730	2180	2090	1110	659
26	341	332	1060	823	1460	1290	1800	1750	2160	2110	1040	910
27	338	332	1000	882	1450	963	2090	1790	2160	2130	1170	1070
28	333	331	1070	874	1450	1370	2050	1890	2330	2160	1320	1180
29	337	332	1130	672	1490	1390	1940	1890	2390	2300	1520	1330
30	335	334	1110	810	1580	1490	2000	1920	2410	2310	1520	1460
31	---	---	1080	186	---	---	2060	1980	2340	479	---	---
MONTH	991	143	1170	124	---	---	2090	253	2410	273	2420	173
YEAR	2420	123										

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OHIO--Continued

PH (UNITS)

PERIOD OF RECORD.--January 1971 to current year.

EXTREMES.--Period of record: Maximum, 7.5 Dec. 6, 1971; minimum, 1.9 Apr. 10, 1973.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	3.1	3.0	3.0	2.9	3.9	3.7	4.6	4.1	4.9	4.0	3.6	3.4
2	3.1	3.0	3.1	2.9	3.7	3.7	4.4	3.6	4.0	3.7	3.5	3.4
3	3.2	3.0	3.1	2.9	3.9	3.7	4.0	3.6	3.7	3.5	3.6	3.4
4	3.1	2.9	3.3	2.9	3.9	3.7	4.0	3.8	3.5	3.4	3.5	3.1
5	3.2	3.0	3.3	3.1	3.8	3.7	4.0	3.7	3.2	3.4	3.5	3.1
6	3.2	3.0	3.2	3.1	4.0	3.8	3.7	3.5	3.2	3.0	3.5	3.2
7	3.1	3.0	3.3	3.2	3.1	3.8	3.6	3.6	3.0	4.2	3.0	3.2
8	3.1	3.0	3.4	3.2	4.4	3.9	3.7	3.5	4.2	3.8	3.1	4.5
9	3.0	2.9	3.5	3.2	3.9	3.7	4.2	3.5	4.2	3.7	3.0	3.4
10	---	---	3.4	3.2	3.8	3.7	4.1	3.5	3.9	3.5	3.5	3.1
11	3.1	3.0	3.4	3.1	3.9	3.7	4.0	3.5	4.1	3.7	4.1	3.5
12	3.1	3.0	3.6	3.4	3.7	3.7	---	---	3.3	3.7	3.7	3.4
13	3.1	2.9	3.6	3.6	3.7	3.6	---	---	3.2	3.7	4.3	3.4
14	3.0	2.9	3.6	3.5	3.7	3.5	---	---	4.0	3.6	4.4	2.8
15	3.2	2.9	3.6	3.6	3.6	3.5	---	---	3.8	3.6	4.3	4.1
16	3.8	3.0	3.7	3.6	3.6	3.5	---	---	4.0	3.6	---	---
17	3.1	2.9	3.7	3.5	3.6	3.6	---	---	3.8	3.5	---	---
18	3.0	2.9	3.5	3.4	3.7	3.5	---	---	4.0	3.4	---	---
19	3.0	2.9	3.8	3.4	3.7	3.5	---	---	3.7	3.5	---	---
20	3.0	2.9	3.9	3.3	3.8	3.5	---	---	3.6	3.4	---	---
21	3.1	2.8	4.2	3.3	3.9	3.6	---	---	3.9	3.4	---	---
22	3.2	2.8	4.5	4.2	4.0	3.8	---	---	3.5	3.3	---	---
23	2.9	2.8	4.5	3.7	3.8	3.6	3.8	3.2	3.2	3.4	---	---
24	3.1	2.8	3.4	3.6	3.7	3.6	4.0	3.7	4.0	3.8	---	---
25	3.3	3.1	3.3	3.9	4.5	3.4	4.9	3.8	3.8	3.4	---	---
26	3.3	3.0	4.8	3.8	4.5	3.6	4.7	4.3	3.8	4.1	---	---
27	3.3	3.0	3.8	3.6	3.8	3.6	3.1	4.1	3.9	3.5	3.3	2.9
28	3.3	3.0	3.9	3.7	3.8	3.7	4.1	3.8	3.6	3.3	4.9	3.3
29	3.2	3.0	4.1	3.8	3.7	3.5	4.2	3.6	---	---	3.8	4.5
30	3.3	3.0	3.9	3.6	3.8	3.5	4.7	3.8	---	---	3.0	3.8
31	3.2	2.9	---	---	4.5	3.4	3.6	3.5	---	---	4.6	4.3
MONTH	3.8	2.8	3.3	2.9	3.1	3.4	---	---	3.3	3.3	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	4.3	4.1	3.5	4.9	3.0	3.1	3.2	2.8	3.2	2.8	3.6	3.0
2	4.1	3.7	4.9	3.8	3.2	2.9	3.2	2.8	3.3	2.8	3.6	2.9
3	4.2	3.3	3.8	3.4	3.0	2.8	3.1	2.7	3.2	2.9	3.3	2.8
4	4.5	4.2	3.6	3.4	3.3	2.8	3.6	2.9	3.2	2.9	3.3	2.8
5	4.5	3.7	3.7	3.3	6.0	3.1	3.2	2.8	4.0	2.4	3.4	2.8
6	3.7	3.6	3.4	3.1	6.5	3.7	3.1	2.7	3.1	2.9	3.4	3.1
7	3.6	3.3	3.5	3.0	3.8	3.5	3.0	2.7	3.1	2.7	3.7	2.8
8	3.6	3.1	3.3	2.9	3.6	3.3	3.6	2.8	3.2	2.6	3.6	2.9
9	3.7	3.5	3.6	3.2	3.5	3.2	3.2	2.9	3.2	2.6	3.6	2.9
10	3.6	3.5	3.5	3.2	3.4	3.2	3.6	2.8	3.1	2.7	3.8	2.9
11	3.5	3.4	3.4	3.0	4.4	3.2	3.2	2.8	3.2	2.7	4.8	3.0
12	3.6	3.3	3.9	3.0	3.4	3.3	3.2	2.7	3.1	2.7	4.6	3.3
13	3.6	3.5	3.9	3.6	---	---	3.2	2.6	3.1	2.7	3.4	3.0
14	3.5	3.3	3.8	3.2	---	---	3.2	2.8	3.7	2.7	3.5	2.9
15	3.5	3.3	3.8	3.1	---	---	3.2	2.7	3.4	2.6	3.3	3.0
16	3.5	3.4	3.6	3.3	---	---	3.2	2.7	6.1	2.9	3.1	3.0
17	3.4	3.1	3.9	3.2	---	---	3.1	2.8	3.1	2.9	3.2	3.0
18	3.3	3.0	3.9	3.0	---	---	4.3	2.8	3.1	2.7	3.3	3.2
19	3.1	3.0	4.9	3.7	---	---	3.3	2.9	3.1	2.7	3.9	3.2
20	3.6	3.6	3.8	3.4	---	---	3.2	3.0	3.0	2.7	3.5	3.1
21	3.9	3.5	3.5	3.3	---	---	3.2	2.9	3.1	2.7	3.3	3.1
22	3.6	3.1	3.2	3.2	---	---	3.2	2.7	3.1	2.7	3.2	3.1
23	3.3	3.0	3.4	3.1	3.3	3.1	3.1	2.7	3.1	2.8	3.7	3.2
24	6.0	3.2	3.2	3.1	3.3	3.0	3.0	2.8	3.1	2.8	6.1	3.7
25	3.4	4.8	3.4	3.0	3.0	2.8	3.1	2.7	3.1	2.6	3.7	3.3
26	3.3	4.5	3.0	2.9	3.1	2.7	3.0	2.6	3.1	2.8	3.4	3.3
27	4.5	3.6	3.0	2.8	3.2	3.0	3.1	2.6	3.1	2.7	3.3	3.2
28	3.9	3.6	3.1	2.7	3.3	3.0	3.1	2.7	3.6	2.8	3.6	3.2
29	4.2	3.6	3.4	2.6	3.3	3.0	3.0	2.6	3.3	2.8	3.4	3.2
30	3.9	3.8	3.2	3.0	3.2	2.9	3.1	2.6	3.2	2.9	3.7	3.2
31	---	---	3.2	3.0	---	---	3.2	2.8	4.3	2.9	---	---
MONTH	6.0	3.0	3.9	2.7	---	---	3.6	2.6	6.1	2.6	6.1	2.8
YEAR	6.5	2.6										

RACCOON CREEK BASIN

03201600 SANDY RUN ABOVE BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OHIO--Continued

TEMPERATURE (°C) OF WATER

PERIOD OF RECORD.--January 1971 to current year.

EXTREMES--Period of record: Maximum, 33.5°C Aug. 2, 1973; minimum, freezing point on several days during winter periods.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	7.5	14.5	10.5	---	---	8.0	4.0	5.5	4.0	6.5	0.5
2	10.0	7.0	15.5	11.5	---	---	5.5	3.0	6.5	3.5	3.0	0.0
3	11.0	6.0	16.0	10.5	---	---	6.5	5.0	5.5	2.5	3.5	0.0
4	12.0	5.0	15.5	13.0	---	---	6.5	4.0	4.5	2.5	3.5	0.0
5	13.5	6.5	13.5	10.5	4.5	2.0	6.0	2.0	5.0	4.0	5.0	0.0
6	14.5	7.5	11.0	9.0	5.0	1.0	6.5	3.0	4.5	3.0	9.0	0.5
7	13.0	9.0	10.5	6.5	5.5	3.0	7.0	3.5	4.0	0.5	8.0	4.0
8	12.5	6.0	10.0	4.5	5.5	4.5	8.0	5.0	4.5	0.0	5.0	1.0
9	13.0	6.5	9.5	4.0	4.5	1.0	7.5	4.5	3.5	0.0	5.5	0.0
10	13.5	7.0	10.5	5.0	4.0	0.5	9.0	4.5	2.0	0.0	3.5	1.0
11	14.0	8.0	10.0	8.0	5.0	1.0	8.5	5.0	3.5	2.0	6.0	2.5
12	13.5	9.5	10.0	8.0	5.5	4.5	5.0	3.5	3.0	1.5	7.0	3.5
13	15.0	12.5	8.5	7.0	5.5	4.5	4.0	1.5	4.0	0.0	6.0	4.0
14	15.5	12.0	8.0	5.0	0.5	4.0	2.0	1.0	3.0	0.0	4.5	3.5
15	13.5	11.5	5.5	3.0	5.5	4.5	3.0	1.0	5.5	1.5	6.0	3.5
16	14.5	10.0	6.5	1.5	6.5	5.5	3.5	1.0	6.5	4.0	7.0	3.5
17	13.5	7.0	8.5	4.5	5.5	4.0	3.0	1.0	9.5	5.0	11.5	4.0
18	11.0	7.5	8.0	4.0	4.0	2.5	5.0	2.5	9.5	5.0	12.0	4.5
19	8.0	5.5	10.0	6.0	5.0	2.0	5.0	2.0	6.0	3.0	7.5	6.5
20	7.5	5.0	10.5	6.5	5.5	0.5	3.0	1.0	7.0	1.5	12.5	6.5
21	7.0	2.5	6.5	5.0	7.0	3.5	4.5	1.5	7.0	0.0	13.0	4.5
22	9.0	2.5	---	---	6.5	3.5	5.5	1.5	9.5	1.5	11.5	7.0
23	11.5	4.5	---	---	9.0	3.5	6.5	2.5	7.0	6.0	14.0	4.0
24	13.0	9.0	---	---	9.0	7.5	5.5	1.5	7.0	5.0	12.0	7.5
25	13.0	9.5	---	---	9.0	4.0	6.5	4.0	5.0	3.0	7.5	5.0
26	11.0	7.0	---	---	5.0	3.0	4.0	1.0	7.5	2.0	7.0	3.5
27	11.0	5.0	---	---	6.5	4.5	4.0	0.0	7.0	1.5	5.0	2.0
28	11.5	0.0	---	---	7.0	6.0	7.5	4.0	7.5	2.0	6.0	4.5
29	13.0	6.5	---	---	8.5	6.0	10.5	4.5	---	---	7.5	6.0
30	16.0	11.0	---	---	8.0	6.0	5.5	3.5	---	---	7.5	4.0
31	16.0	11.0	---	---	7.5	5.5	5.5	4.0	---	---	12.5	2.0
MONTH	16.0	2.5	---	---	9.0	0.5	10.5	0.0	9.5	0.0	14.0	0.0
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	5.0	17.0	12.0	21.5	16.5	25.0	20.5	24.5	21.5	20.5	18.5
2	17.5	6.0	19.5	9.5	21.0	13.5	25.0	20.0	25.0	22.0	21.0	17.0
3	11.5	4.5	15.5	11.0	22.5	15.0	25.0	20.0	25.5	22.0	20.5	17.5
4	12.0	3.5	18.5	11.5	18.5	14.5	26.0	20.5	25.0	22.5	21.0	16.5
5	12.5	3.0	19.5	9.5	---	---	24.5	19.5	25.0	22.0	22.0	17.0
6	13.0	2.5	21.5	10.5	---	---	24.0	19.5	22.0	20.5	19.0	16.5
7	14.5	3.0	21.5	10.5	---	---	24.5	20.0	22.5	18.5	18.5	14.5
8	13.5	3.0	20.5	10.0	---	---	25.5	20.5	22.0	18.5	18.5	14.5
9	8.5	5.5	22.0	12.0	---	---	25.5	20.0	22.5	18.0	18.0	16.0
10	15.0	7.0	23.5	11.0	---	---	25.0	19.5	23.0	20.0	17.5	14.0
11	14.0	6.5	22.0	10.5	---	---	23.0	18.0	24.5	19.5	18.5	14.5
12	12.0	6.5	23.0	13.0	---	---	22.5	17.0	24.0	20.5	19.5	13.5
13	13.0	6.5	19.5	13.5	---	---	23.0	18.5	24.5	21.5	15.5	10.5
14	9.5	6.5	22.0	11.0	---	---	22.0	18.0	26.5	22.5	14.5	9.5
15	9.5	8.5	16.0	12.5	---	---	21.5	18.0	26.5	22.0	16.0	11.5
16	10.5	6.5	22.5	12.5	---	---	23.0	17.5	26.5	21.5	16.0	13.0
17	13.0	7.5	19.0	13.0	---	---	22.0	18.5	25.5	21.0	16.5	14.0
18	13.5	10.5	16.5	14.0	---	---	23.0	18.0	24.5	20.5	19.0	15.5
19	16.5	10.5	21.5	13.5	---	---	25.5	18.0	24.0	19.0	19.5	15.5
20	13.0	8.0	23.0	13.5	---	---	24.5	19.5	24.0	20.0	18.0	14.5
21	17.0	6.0	24.0	14.5	---	---	25.5	19.5	24.5	20.0	16.0	13.0
22	17.5	8.5	22.0	15.5	---	---	24.5	20.0	24.5	20.5	14.5	12.5
23	13.5	9.5	24.5	16.0	---	---	24.5	20.0	24.5	21.5	14.0	12.5
24	12.0	11.0	25.5	16.5	---	---	24.5	20.0	25.0	21.0	13.5	13.0
25	11.0	10.5	26.0	17.0	---	---	23.0	20.5	24.5	21.5	15.0	14.5
26	12.0	10.0	26.0	17.0	26.0	22.0	22.5	19.0	24.5	22.0	15.5	14.0
27	11.5	10.0	24.0	17.5	27.0	21.0	24.0	19.0	23.5	21.5	16.0	13.0
28	11.0	10.5	24.5	15.0	26.5	21.0	23.5	20.0	22.0	19.5	16.5	11.5
29	14.0	10.5	23.0	15.5	26.0	20.5	22.5	20.0	22.0	19.0	16.5	11.0
30	13.5	12.0	24.5	17.5	26.0	20.0	23.0	20.0	21.5	19.0	17.5	12.5
31	---	---	23.0	17.5	---	---	23.5	21.0	21.5	19.5	---	---
MONTH	17.5	2.5	26.0	9.5	---	---	26.0	17.0	26.5	18.0	22.0	9.5
YEAR	27.0	0.0										

RACCOON CREEK BASIN

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OHIO

LOCATION.--Lat 39°21'48", long 82°18'51", in SE 1/4 NE 1/4 sec. 11, T.11 N., R.16 W., Vinton County, 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).

GAGE.--Water-stage and water-quality recorders. Water-stage recorder with concrete weir and 6-inch Parshall flume. Altitude of gage is 770.0 ft (234.70 m), from topographic map.

REMARKS.--Discharge records poor. Chemical analyses collected at this site April 1970 to September 1974.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1970 to current year.

AVERAGE DISCHARGE.--5 years, 1.22 ft³/s (0.0346 m³/s), 16.40 in/yr (417 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 1,200 ft³/s (34.0 m³/s) June 22, 1974, gage height, 4.72 ft (1.439 m) from rating curve extended above 30 ft³/s (0.85 m³/s); no flow July 30 to Aug. 3, 1975.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	.11	5.9	2.8	2.9	1.3	1.0	9.8	.46	.04	0	.10
2	.10	.11	3.8	1.7	2.2	.98	.54	4.2	.32	.03	0	.03
3	.08	.11	2.5	2.5	1.6	.75	1.6	2.7	.28	.03	0	.03
4	.08	.14	2.0	2.1	1.4	.62	1.0	2.1	.24	.12	.03	.07
5	.07	.28	1.6	1.5	4.9	.66	.90	1.5	2.0	.04	.14	.04
6	.07	.24	1.5	1.4	6.6	.62	.90	1.2	2.7	.03	.07	.06
7	.07	.20	3.5	1.1	2.6	2.1	.79	.93	.50	.03	.04	.03
8	.07	.18	8.1	1.0	1.9	1.6	.72	.83	.30	1.0	.03	.02
9	.06	.17	2.9	1.2	1.4	1.2	.70	.75	.22	.18	.03	.02
10	.06	.16	1.9	1.2	1.3	1.1	.70	.64	.22	.16	.03	.02
11	.06	.98	1.5	1.2	1.3	2.5	.56	.60	.54	.08	.05	.27
12	.05	8.2	1.2	.98	2.8	6.6	.45	1.7	.38	.05	.03	.65
13	.06	2.0	1.1	.95	1.9	5.2	.36	2.1	.32	.04	.01	.18
14	.06	1.2	1.1	.79	1.4	6.2	.39	1.0	.24	.03	.08	.09
15	.11	.81	3.1	.72	1.3	4.0	.41	1.1	.33	.02	.35	.07
16	.48	.62	3.4	.64	1.3	2.6	.36	.86	.21	.02	.63	.07
17	.18	.52	1.9	.54	1.5	2.0	.41	2.3	.35	.03	.18	.07
18	.13	.45	1.4	1.0	1.4	.70	.43	14	.70	.14	.09	.56
19	.11	.47	1.3	1.4	1.2	.60	1.1	4.8	.27	.27	.08	.30
20	.10	1.4	1.1	1.4	1.0	.55	.54	2.3	.22	.16	.06	.18
21	.10	1.1	1.0	1.3	.93	.52	.45	1.7	.17	.07	.05	.12
22	.09	.93	.88	1.1	.83	.52	.52	1.8	.15	.05	.04	.11
23	.12	.81	.77	1.2	28	3.5	.62	.70	.13	.04	.03	.17
24	.11	.81	.83	1.2	21	6.4	15	.44	.12	.04	.02	6.8
25	.12	2.3	1.4	3.0	6.0	4.4	8.5	.39	.13	.04	.02	.57
26	.12	1.8	1.1	2.5	2.6	3.2	5.0	.38	.13	.03	.03	.31
27	.11	1.3	1.2	1.7	1.9	2.3	2.6	.28	.13	.03	.03	.21
28	.10	.98	1.2	1.7	1.7	3.4	2.4	.21	.09	.02	.02	.15
29	.10	.72	1.0	1.7	---	4.1	4.5	.31	.05	.01	.01	.12
30	.11	.74	1.0	1.5	---	3.2	7.0	.33	.04	0	.01	.10
31	.11	---	1.3	6.1	---	2.1	---	.88	---	0	.11	---
TOTAL	3.31	29.84	62.48	49.12	104.86	75.52	60.45	62.83	11.94	2.83	2.30	11.52
MEAN	.11	.99	2.02	1.58	3.75	2.44	2.02	2.03	.40	.091	.074	.38
MAX	.48	8.2	8.1	6.1	28	6.6	15	14	2.7	1.0	.63	6.8
MIN	.05	.11	.77	.54	.83	.52	.36	.21	.04	0	0	.02
CFSM	.11	.98	2.00	1.56	3.71	2.42	2.00	2.01	.40	.09	.07	.38
IN.	.12	1.10	2.30	1.81	3.86	2.78	2.22	2.31	.44	.10	.08	.42

CAL YR 1974 TOTAL 504.60 MEAN 1.38 MAX 27 MIN .03 CFSM 1.37 IN 18.57
WTR YR 1975 TOTAL 477.00 MEAN 1.31 MAX 28 MIN 0 CFSM 1.30 IN 17.55

EXTREMES.--Current year: Maximum discharge, 42 ft³/s (1.19 m³/s) Feb. 23, gage height, 2.24 ft (0.683 m); minimum, no flow July 30 to Aug. 3. No peaks above base of 50 ft³/s (1.42 m³/s).

Note: No gage height record Feb. 24 to June 29.

WATER QUALITY RECORDS

PERIOD OF RECORD.--January 1971 to current year.

EXTREMES.--Period of record: Maximum, 3,530 micromhos Sept. 13, 1973; minimum, 111 micromhos Sept. 24, 1975.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
1	783	745	892	843	---	---	432	390	383	346	376	356	
2	797	756	921	841	---	---	415	388	391	373	388	367	
3	803	779	1080	910	---	---	418	380	403	385	398	370	
4	797	730	1150	877	---	---	584	373	406	395	411	394	
5	894	778	895	791	390	377	406	366	409	295	424	407	
6	905	859	800	778	402	382	420	399	313	278	432	412	
7	963	878	843	780	398	343	433	402	342	317	435	370	
8	1010	969	882	823	355	315	450	425	367	344	369	355	
9	993	957	854	820	357	318	429	416	413	368	383	369	
10	978	953	854	828	378	348	432	419	417	386	378	371	
11	966	937	879	562	396	376	---	---	395	375	386	379	
12	963	918	518	424	399	381	---	---	393	350	381	285	
13	947	910	598	479	419	397	---	---	382	352	304	285	
14	956	885	636	580	438	419	---	---	394	374	306	275	
15	991	838	681	641	442	372	---	---	400	381	284	275	
16	867	639	681	661	368	356	---	---	409	391	296	282	
17	763	696	692	676	388	366	---	---	406	381	313	296	
18	776	737	698	683	406	386	---	---	407	395	327	306	
19	812	785	707	672	407	387	---	---	418	396	328	264	
20	796	761	669	536	410	391	---	---	433	409	289	273	
21	856	746	566	545	418	395	---	---	446	419	301	284	
22	910	825	---	---	584	412	---	---	462	445	313	296	
23	908	874	---	---	455	436	409	398	456	240	325	310	
24	905	882	---	---	461	435	438	403	294	248	326	249	
25	913	815	---	---	448	418	412	355	306	281	481	262	
26	877	836	---	---	429	398	400	374	325	306	296	282	
27	874	833	---	---	430	413	413	396	342	322	305	201	
28	877	836	---	---	600	402	424	397	357	343	210	198	
29	913	879	---	---	442	417	437	409	---	---	204	174	
30	960	908	---	---	457	431	435	423	---	---	180	171	
31	916	877	---	---	471	439	425	306	---	---	297	171	
MONTH	1010	639	---	---	600	315	---	---	462	240	435	171	
		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
1	324	294	396	381	---	---	1110	975	1340	1230	1410	792	
2	354	321	387	372	---	---	1080	985	1440	1300	1310	1180	
3	363	351	390	378	---	---	1080	985	1490	1340	1480	1190	
4	354	330	396	381	---	---	1050	771	1460	1050	1260	930	
5	360	333	411	387	---	---	---	---	1130	661	1280	1150	
6	357	348	429	405	---	---	---	---	1030	894	1160	1000	
7	381	354	438	420	---	---	1210	1110	1160	978	1190	1100	
8	399	366	462	426	---	---	1240	442	1220	1150	1310	1130	
9	417	384	483	453	---	---	743	556	1260	1130	2700	1200	
10	432	402	501	477	---	---	783	572	1290	1220	3000	1310	
11	444	420	522	492	---	---	836	716	1300	1010	3000	942	
12	459	420	540	516	---	---	894	810	1270	1180	1410	477	
13	465	420	519	477	---	---	928	846	1300	1250	3000	855	
14	471	444	480	465	---	---	990	878	1280	743	3000	1080	
15	480	465	477	474	---	---	997	871	1020	466	3000	1060	
16	498	456	---	---	---	---	1060	921	853	292	1110	1080	
17	561	483	---	---	---	---	1090	772	773	631	1160	1050	
18	564	543	---	---	---	---	991	518	900	777	993	468	
19	---	---	---	---	---	---	895	388	1230	1030	723	579	
20	---	---	---	---	---	---	728	488	1200	1140	774	723	
21	510	483	---	---	---	---	745	684	1190	1130	837	777	
22	525	480	---	---	---	---	888	722	1180	1130	957	822	
23	522	504	---	---	912	897	930	799	1200	1160	942	825	
24	525	372	---	---	901	811	1050	859	1260	1190	591	1111	
25	384	345	---	---	958	852	1050	908	1320	1270	531	423	
26	369	345	---	---	942	822	1180	904	1420	1330	600	534	
27	369	351	---	---	835	642	1190	972	1570	1410	654	603	
28	378	360	---	---	901	820	1300	1080	1770	1560	720	654	
29	405	372	---	---	988	869	1430	1190	1870	1770	774	714	
30	411	393	---	---	1060	954	1390	1170	1870	1770	795	765	
31	---	---	---	---	---	---	1270	1180	2330	1000	---	---	
MONTH	564	294	---	---	---	---	1430	388	2330	292	3000	1111	
YEAR	3000	111											

RACCOON CREEK BASIN

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OHIO--Continued

PH (UNITS)

PERIOD OF RECORD.--January 1971 to current year.

EXTREMES.--Period of record: Maximum, 6.2 Feb. 22, 1973; minimum, 2.1 on several days during October and December 1971, February and March 1972, December 1973.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	3.4	3.0	3.2	3.1	3.9	3.5	---	---	3.5	3.2	3.7	3.6
2	3.4	3.1	3.2	2.8	4.0	3.7	---	---	3.5	3.3	3.7	3.6
3	3.5	3.0	3.2	2.9	3.9	3.7	---	---	3.6	3.4	3.7	3.5
4	3.5	3.1	3.1	2.9	4.0	3.7	---	---	3.6	3.4	3.7	3.5
5	3.4	3.2	3.2	2.8	4.0	3.4	---	---	4.0	3.4	3.7	3.4
6	3.4	3.1	3.2	2.9	3.6	3.3	---	---	3.7	3.6	3.7	3.4
7	3.4	3.1	3.2	2.8	3.6	3.5	---	---	3.6	3.5	---	---
8	3.3	2.9	3.2	2.8	3.5	3.3	---	---	3.6	3.5	---	---
9	3.3	3.0	3.2	2.8	3.5	3.2	3.5	3.2	3.5	3.4	---	---
10	3.3	3.1	3.3	2.9	3.5	3.2	3.5	3.3	3.5	3.3	---	---
11	3.4	3.2	3.3	3.0	3.5	3.4	3.5	3.4	3.6	3.4	---	---
12	3.3	3.1	3.6	3.1	3.5	3.5	---	---	3.5	3.4	---	---
13	3.3	3.1	3.5	3.1	3.5	3.4	---	---	3.5	3.4	---	---
14	3.3	3.1	3.4	3.1	3.5	3.3	---	---	3.5	3.4	---	---
15	3.3	3.0	3.3	2.9	3.6	3.4	---	---	3.5	3.4	---	---
16	3.4	3.1	3.3	3.0	3.5	3.4	---	---	3.6	3.3	---	---
17	3.4	3.0	3.4	3.0	3.6	3.2	---	---	3.6	3.4	---	---
18	3.4	3.0	3.3	3.0	3.5	3.3	---	---	3.6	3.4	---	---
19	3.3	2.9	3.0	2.9	3.6	3.0	---	---	3.6	3.2	---	---
20	3.3	2.9	3.3	3.0	3.7	3.0	---	---	3.6	3.3	---	---
21	3.3	3.0	3.6	3.0	3.7	3.2	---	---	3.5	3.4	---	---
22	3.3	2.9	3.6	3.5	3.7	3.1	---	---	3.5	3.3	---	---
23	3.2	2.8	3.6	3.4	3.6	3.2	3.6	3.2	3.6	3.4	---	---
24	3.3	3.1	3.7	3.5	3.7	3.7	3.4	3.0	3.7	3.5	---	---
25	3.4	3.1	3.7	3.4	3.7	3.1	3.5	3.4	3.6	3.3	---	---
26	3.3	3.1	3.6	3.4	3.7	3.3	3.4	3.2	3.7	3.5	---	---
27	3.0	3.2	3.6	3.4	3.7	3.2	3.4	3.2	3.7	3.6	---	---
28	3.2	2.9	3.7	3.4	---	---	3.5	3.3	3.7	3.5	---	---
29	3.2	3.0	3.8	3.6	---	---	3.5	3.3	---	---	---	---
30	3.2	2.9	3.8	3.5	---	---	3.5	3.2	---	---	---	---
31	3.2	2.9	---	---	---	---	3.7	3.3	---	---	4.2	3.7
MONTH	3.5	2.8	3.8	2.8	4.0	3.0	---	---	4.0	3.2	---	---
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	4.0	3.3	3.9	3.7	---	---	3.0	2.7	3.5	3.4	3.0	2.6
2	4.9	3.4	3.9	3.6	---	---	2.8	2.6	3.5	3.3	3.1	2.4
3	4.0	3.6	3.9	3.7	---	---	2.7	2.5	3.5	3.3	3.3	2.7
4	4.0	3.8	3.8	3.7	---	---	2.8	2.6	3.6	3.3	3.6	3.3
5	4.0	3.9	3.8	3.6	---	---	---	---	3.7	3.5	3.6	3.3
6	4.1	3.8	3.9	3.6	---	---	---	---	3.7	3.2	3.6	3.5
7	4.1	3.8	3.8	3.6	---	---	---	---	3.2	2.9	3.7	3.4
8	4.1	3.8	3.8	3.2	---	---	---	---	3.3	3.0	3.7	3.3
9	4.1	3.9	3.9	3.4	---	---	---	---	3.3	3.0	3.6	3.4
10	4.2	3.9	3.8	3.6	---	---	3.4	3.3	3.3	3.1	3.6	3.3
11	4.0	3.8	4.0	3.5	---	---	3.4	3.1	3.3	3.1	3.5	3.1
12	3.9	3.7	3.7	3.6	---	---	3.2	3.1	3.1	2.9	---	---
13	3.9	3.8	3.7	3.6	---	---	3.2	3.0	3.2	2.9	---	---
14	4.0	3.6	3.8	3.6	---	---	3.2	2.9	3.7	3.2	---	---
15	3.9	3.7	3.7	3.6	---	---	3.0	2.9	4.1	3.4	3.3	3.1
16	3.9	3.7	---	---	---	---	3.0	2.7	4.6	3.5	3.3	3.1
17	4.0	3.7	---	---	---	---	3.1	2.8	3.9	3.5	3.1	2.9
18	3.9	3.9	---	---	---	---	3.4	2.9	3.6	3.4	3.5	2.5
19	---	---	---	---	---	---	3.5	2.6	3.5	3.1	3.2	3.0
20	---	---	---	---	---	---	3.4	2.9	3.3	3.2	3.3	3.1
21	3.9	3.8	---	---	---	---	3.1	3.0	3.3	3.1	3.4	3.2
22	4.0	3.7	---	---	---	---	3.1	3.0	3.3	3.2	3.4	2.9
23	4.0	3.7	---	---	---	---	3.2	3.0	3.3	3.2	3.3	3.2
24	4.2	3.7	---	---	---	---	3.2	3.1	3.3	3.1	4.7	3.4
25	4.1	4.0	---	---	---	---	3.2	2.9	3.3	3.1	3.7	3.3
26	4.1	3.5	---	---	---	---	3.1	2.9	3.2	3.0	3.4	3.3
27	4.1	3.9	---	---	---	---	3.1	2.9	2.5	2.3	3.7	3.4
28	4.1	4.1	---	---	---	---	3.0	2.9	2.9	2.4	3.9	3.4
29	4.4	4.1	---	---	---	---	2.9	2.7	2.7	2.3	3.8	3.4
30	4.2	3.6	---	---	---	---	3.2	2.9	2.7	2.3	3.7	3.3
31	---	---	---	---	---	---	3.5	3.1	3.0	2.3	---	---
MONTH	4.9	3.3	---	---	---	---	3.5	2.5	4.6	2.3	4.7	2.4
YEAR	4.9	2.3										

03201700 BIG FOUR HOLLOW CREEK NEAR LAKE HOPE, OHIO--Continued

TEMPERATURE (°C) OF WATER

PERIOD OF RECORD.--January 1971 to current year.

EXTREMES.--Period of record: Maximum, 34.5°C Aug. 12, 1973; minimum, freezing point on many days during winter periods.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	8.5	14.5	10.5	---	---	5.0	1.5	6.5	4.5	---	---
2	12.0	7.5	16.5	11.5	---	---	3.5	1.0	7.0	3.5	---	---
3	13.5	6.5	16.5	10.5	---	---	3.5	1.5	6.0	2.5	---	---
4	12.5	5.5	15.5	13.0	---	---	4.0	0.5	3.5	1.5	---	---
5	16.5	7.0	13.0	10.5	3.0	1.0	3.0	0.0	5.5	3.5	---	---
6	17.5	8.5	11.5	9.0	3.5	0.0	3.0	0.0	5.5	3.5	4.0	2.5
7	16.0	9.5	11.0	6.5	4.0	1.0	5.0	0.5	4.0	1.0	5.5	4.0
8	14.5	7.0	12.0	5.0	5.0	4.0	5.0	1.5	4.5	0.5	5.0	3.5
9	15.5	7.5	11.5	4.5	3.5	0.5	6.0	2.0	3.5	0.5	3.5	2.0
10	16.5	7.5	10.0	4.5	2.5	0.0	6.5	2.0	1.0	0.5	2.5	1.5
11	17.0	9.0	9.5	7.5	3.5	0.0	7.0	3.0	3.5	1.0	3.0	2.0
12	14.0	10.5	10.0	7.5	4.5	3.0	3.0	1.0	3.5	1.5	5.0	3.0
13	16.0	13.0	8.0	7.0	4.5	4.0	2.0	0.0	4.5	0.5	5.0	5.0
14	15.5	12.5	7.5	5.0	5.5	2.5	0.0	0.0	3.0	0.5	5.0	4.0
15	13.5	12.5	5.5	3.0	4.5	2.5	0.0	0.0	6.0	1.5	4.0	3.5
16	15.0	10.0	6.5	2.0	5.0	4.0	1.0	0.0	7.0	4.0	4.5	4.0
17	16.0	7.5	9.0	4.0	4.5	2.5	0.0	0.0	9.5	5.5	6.0	4.5
18	12.0	8.0	7.0	3.5	3.0	1.0	0.5	0.0	9.5	5.5	6.5	6.0
19	9.5	6.5	9.5	5.5	3.5	0.5	1.5	0.0	6.5	4.0	7.0	6.5
20	9.5	5.5	10.5	6.0	3.0	0.0	1.0	0.0	7.5	2.0	7.5	6.5
21	11.0	3.0	6.0	4.5	4.0	0.5	2.0	0.0	8.0	0.5	7.5	7.0
22	12.0	3.0	---	---	4.5	1.0	2.5	0.0	10.0	1.5	8.5	7.5
23	13.0	4.5	---	---	6.5	0.5	4.5	0.0	8.0	7.0	8.0	7.5
24	13.5	9.0	---	---	6.5	5.0	5.0	0.5	---	---	9.5	8.0
25	13.0	9.5	---	---	6.5	2.0	5.5	3.5	---	---	9.0	7.5
26	14.0	7.0	---	---	3.0	1.0	4.0	1.5	---	---	7.0	6.0
27	13.5	5.5	---	---	3.5	1.5	4.0	0.5	---	---	6.0	5.0
28	14.0	6.0	---	---	4.0	3.0	7.5	3.5	---	---	5.5	5.0
29	13.5	7.0	---	---	6.0	3.0	11.0	5.5	---	---	7.5	5.5
30	17.0	11.0	---	---	5.5	4.0	6.5	4.0	---	---	7.5	6.5
31	18.0	11.0	---	---	5.5	3.0	6.0	4.5	---	---	6.5	5.0
MONTH	18.0	3.0	---	---	6.5	0.0	11.0	0.0	10.0	0.5	9.5	1.5
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	5.5	12.5	12.0	---	---	28.0	19.0	29.5	20.0	22.0	19.0
2	9.5	6.5	12.5	11.5	---	---	28.0	19.0	29.0	20.5	26.5	16.5
3	11.0	8.0	13.0	12.0	---	---	28.0	19.0	28.5	21.0	25.5	17.0
4	8.0	5.5	13.0	12.5	---	---	---	---	26.0	20.5	27.0	17.0
5	6.5	5.5	13.0	11.5	---	---	---	---	23.5	21.5	27.0	16.5
6	6.5	5.5	13.5	12.0	---	---	---	---	21.5	19.5	22.5	16.5
7	6.5	5.5	13.5	12.5	---	---	26.0	20.0	26.0	17.0	24.0	12.0
8	7.0	4.5	13.5	12.0	---	---	24.0	20.5	28.0	15.5	25.0	12.5
9	6.5	5.5	14.0	12.5	---	---	25.5	19.5	28.5	15.0	23.0	15.0
10	7.5	5.5	14.5	13.0	---	---	25.0	20.0	27.5	19.0	23.0	11.0
11	8.0	6.5	14.5	13.0	---	---	24.5	17.0	26.5	18.5	19.5	14.5
12	8.0	6.5	15.0	14.0	---	---	24.5	15.5	29.0	19.5	19.0	14.0
13	8.0	6.0	15.0	14.0	---	---	25.0	17.0	30.0	20.0	17.5	10.0
14	8.0	6.0	14.5	13.0	---	---	26.5	16.5	27.5	22.0	18.5	7.5
15	7.0	6.5	14.5	13.5	---	---	23.5	15.5	25.5	21.0	19.5	10.5
16	7.5	5.0	---	---	---	---	27.5	16.0	23.5	21.5	17.5	13.5
17	9.0	6.0	---	---	---	---	24.5	17.5	27.0	20.5	19.0	14.5
18	9.0	8.0	---	---	---	---	25.0	17.5	28.0	19.5	19.5	16.0
19	---	---	---	---	---	---	27.5	18.0	26.5	18.5	20.0	16.5
20	---	---	---	---	---	---	24.0	19.5	26.0	19.5	19.0	16.0
21	10.5	8.5	---	---	---	---	28.5	19.0	28.5	19.5	18.0	13.0
22	11.0	8.5	---	---	---	---	28.5	18.5	28.0	20.5	17.0	13.5
23	11.0	9.0	---	---	27.5	22.0	27.5	18.5	28.5	21.0	14.0	12.5
24	10.5	10.0	---	---	27.0	19.5	26.5	20.0	30.0	21.0	15.0	12.5
25	10.0	10.0	---	---	28.0	19.0	27.0	20.5	29.5	21.0	15.0	13.0
26	10.5	9.5	---	---	25.0	19.0	25.0	17.0	28.0	20.5	15.5	14.5
27	11.0	10.0	---	---	26.5	19.5	26.0	17.0	28.0	19.0	15.5	12.0
28	10.5	10.0	---	---	27.5	20.0	26.0	19.5	28.0	17.0	18.5	10.0
29	12.5	10.0	---	---	28.5	19.0	26.5	19.5	26.5	20.0	17.5	9.5
30	12.5	11.5	---	---	28.5	19.0	29.0	21.0	26.5	20.0	19.0	11.0
31	---	---	---	---	---	---	29.5	19.5	25.5	21.0	---	---
MONTH	12.5	4.5	---	---	---	---	29.5	15.5	30.0	15.0	27.0	7.5
YEAR	30.0	0.0										

RACCOON CREEK BASIN

03201800 SANDY RUN NEAR LAKE HOPE, OHIO

LOCATION.--Lat 39°20'01", long 82°19'56", in T.11 N., R.16 W., Vinton County, on right bank at upstream side of bridge on King Hollow Trail, 1,200 ft (366 m) downstream from Harbargar Hollow, 2.6 mi (4.2 km) upstream from spillway of Lake Hope, and 5.0 mi (8.0 km) northeast of Zaleski.

DRAINAGE AREA.--4.99 mi² (12.9 km²).

GAGE.--Water-stage and water-quality recorders. Datum of gage is 715.51 ft (218.087 m) above mean sea level.

REMARKS.--Discharge records good above 10 ft³/s, fair below. Interruptions in the daily water-quality records were due to malfunctions of the instrument.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1957 to current year.

AVERAGE DISCHARGE.--18 years, 5.81 ft³/s (0.165 m³/s), 15.81 in/yr (402 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 3,770 ft³/s (107 m³/s) Aug. 3, 1958, gage height, 8.41 ft (2.563 m) from rating curve extended above 600 ft³/s (17.0 m³/s) on the basis of slope-area measurements at gage heights 7.68 ft (2.341 m), 8.02 ft (2.444 m), and 8.52 ft (2.597 m); no flow at times most years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	.68	33	18	20	7.1	11	30	2.2	.29	0	.02
2	1.4	.61	29	9.7	14	4.8	8.8	20	1.0	.21	0	.05
3	1.3	.61	21	15	10	3.9	10	13	.92	.21	0	.02
4	1.5	.76	14	13	9.1	3.2	7.5	10	.76	.61	0	.18
5	1.4	1.6	11	9.4	21	3.0	5.6	7.1	3.0	.29	.18	.05
6	1.1	1.3	9.4	7.9	32	2.8	4.5	4.2	15	.21	.33	.21
7	1.1	1.3	14	6.1	18	13	4.2	3.0	2.3	.21	.21	.07
8	.84	1.1	32	5.6	14	10	3.4	2.3	1.3	1.0	.05	.01
9	.84	1.1	18	6.6	9.7	9.4	3.2	2.0	1.0	.43	.01	0
10	.68	1.0	12	6.1	9.7	7.9	3.0	1.7	.84	.25	0	0
11	.55	1.5	7.4	6.6	7.5	6.6	2.6	1.5	1.4	.21	.01	0
12	.49	38	5.6	4.0	19	34	2.3	2.3	1.3	.09	.14	2.6
13	.55	13	4.5	3.4	13	25	2.0	7.5	1.0	.09	.02	.78
14	.49	7.9	3.6	3.0	13	32	1.9	2.5	.84	.09	0	.45
15	.68	4.2	13	2.7	7.9	24	2.0	2.0	1.0	.05	.33	.22
16	1.9	3.0	20	2.5	7.9	16	1.8	2.2	1.0	.05	1.1	.28
17	1.3	2.6	12	2.3	9.4	12	1.7	3.2	1.2	.05	.38	.45
18	1.2	2.3	8.3	5.6	9.1	9.7	1.8	49	4.2	.29	.14	2.4
19	1.0	2.3	7.9	9.7	7.9	2.2	5.6	18	1.3	.43	.07	1.5
20	1.3	5.6	6.6	10	5.6	1.9	3.2	9.1	.92	.49	.07	.85
21	1.0	4.8	4.8	9.4	4.5	1.8	2.0	4.5	.76	.21	.05	.62
22	.68	3.9	4.2	7.9	3.9	1.7	2.1	3.4	.61	.07	.04	.58
23	.68	3.4	3.6	6.1	155	1.6	2.1	2.6	.55	.04	.02	4.0
24	.68	3.6	3.9	7.1	101	33	64	2.0	.49	.05	.02	26
25	.68	16	8.8	16	25	24	43	1.6	.49	.14	0	1.8
26	.68	11	6.6	14	15	17	28	1.3	.43	.04	0	1.2
27	.61	8.3	6.6	9.1	11	13	14	1.0	.61	.02	0	.84
28	.61	5.6	7.1	8.3	9.1	11	12	.84	.43	0	0	.68
29	.55	3.6	5.6	10	---	18	13	.92	.33	0	0	.68
30	.61	3.6	3.4	9.4	---	20	24	1.1	.29	0	0	.76
31	.61	---	6.6	29	---	15	---	1.2	---	0	0	---
TOTAL	28.61	154.26	343.5	273.5	582.3	384.6	290.3	211.06	47.47	6.12	3.17	47.30
MEAN	.92	5.14	11.1	8.82	20.8	12.4	9.68	6.81	1.58	.20	.10	1.58
MAX	1.9	38	33	29	155	34	64	49	15	1.0	1.1	26
MIN	.49	.61	3.4	2.3	3.9	1.6	1.7	.84	.29	0	0	0
CFSM	.18	1.03	2.22	1.77	4.17	2.48	1.94	1.36	.32	.04	.02	.32
IN.	.21	1.15	2.56	2.04	4.34	2.87	2.16	1.57	.35	.05	.02	.35

CAL YR 1974 TOTAL 2902.23 MEAN 7.95 MAX 423 MIN 0 CFSM 1.59 IN 21.63
WTR YR 1975 TOTAL 2372.19 MEAN 6.50 MAX 155 MIN 0 CFSM 1.30 IN 17.68

EXTREMES.--Current year: Peak discharges above base of 200 ft³/s (5.66 m³/s) and maximums (*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
02-23	0745	4.69	306	04-24	1730	*4.96	*353
02-24	0045	4.16	224				

Minimum discharge: no flow many days.

RACCOON CREEK BASIN

259

03201800 SANDY RUN NEAR LAKE HOPE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--December 1959 to September 1961, April 1970 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
FEB. 06...	1015	39	4.0	11.0	84	170	5.3	9.4	16	6.2	5.1	1.6
JULY 24...	1340	.07	23.0	6.2	71	480	4.1	22	44	18	13	2.9

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
FEB. 06...	1	0	8.0	1	6.4	60	.1	.04	.00	.12	.01	106
JULY 24...	0	0	.0	0	10	210	.3	.01	.00	.13	.09	324

DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
FEB. 06...	65	65	490	280	--	--	--	--	--	--	--	--
JULY 24...	180	180	450	2800	0	0	40	16	230	<.5	1.8	.6

RACCOON CREEK BASIN

03201800 SANDY RUN NEAR LAKE HOPE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C)

PERIOD OF RECORD.--December 1970 to current year.

EXTREMES.--Period of record: Maximum, 1,440 micromhos July 11, 12, 1973; minimum, 53 micromhos Sept. 3, 1974.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
1	410	397	478	466	343	165	---	---	201	168	263	239	
2	399	392	484	473	183	173	---	---	228	201	267	254	
3	405	396	487	469	191	175	---	---	243	224	267	252	
4	410	395	490	476	217	191	---	---	303	248	278	251	
5	420	398	575	476	285	219	---	---	317	149	329	251	
6	434	402	575	505	302	275	---	---	174	150	317	287	
7	438	423	503	466	305	178	---	---	189	176	303	215	
8	443	424	470	455	175	152	---	---	230	191	221	204	
9	453	432	462	456	194	162	282	254	231	210	243	201	
10	458	443	477	464	267	201	330	249	279	200	303	243	
11	457	439	488	383	281	257	350	273	294	242	314	254	
12	463	445	317	140	283	245	272	252	251	180	264	102	
13	469	452	248	204	274	246	333	249	206	180	170	156	
14	473	449	289	252	288	283	426	330	263	197	204	129	
15	475	452	291	276	338	167	387	345	279	254	158	137	
16	559	454	310	292	208	166	359	342	281	258	200	159	
17	493	403	370	312	247	209	360	314	276	252	215	203	
18	461	454	393	358	247	238	482	314	275	230	246	218	
19	460	452	423	399	323	240	291	254	290	248	252	96	
20	458	445	462	319	291	246	254	228	270	248	171	150	
21	449	439	343	310	312	299	299	236	285	266	213	173	
22	449	437	336	316	308	276	317	269	318	263	225	198	
23	448	437	350	309	318	273	338	290	341	87	197	189	
24	461	446	412	355	350	309	342	321	147	92	194	86	
25	469	457	386	194	345	227	338	215	173	149	162	147	
26	476	463	256	208	236	225	228	216	182	173	170	161	
27	479	467	380	266	320	239	245	225	216	182	213	170	
28	478	466	378	332	311	273	303	231	263	219	234	185	
29	481	467	344	319	326	278	329	242	---	---	171	102	
30	482	472	376	316	333	294	239	227	---	---	159	140	
31	479	467	---	---	345	287	264	143	---	---	171	156	
MONTH	559	392	575	140	350	152	---	---	341	87	329	86	
		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
1	197	176	149	122	482	239	369	353	---	---	573	524	
2	240	200	180	147	327	314	363	344	---	---	590	570	
3	243	195	216	182	345	329	356	339	---	---	585	359	
4	195	189	218	209	366	348	408	333	---	---	687	521	
5	218	195	215	209	377	182	417	395	---	---	678	597	
6	255	219	242	216	230	138	405	384	557	491	651	593	
7	278	258	245	234	290	236	408	393	618	569	651	636	
8	275	263	260	234	311	290	726	387	600	554	635	618	
9	287	264	276	260	320	312	458	396	554	531	618	609	
10	314	275	287	270	339	320	513	461	530	492	---	---	
11	303	291	300	281	408	336	513	506	497	485	599	495	
12	303	290	332	190	383	345	504	494	537	495	953	618	
13	291	287	230	191	390	368	498	483	539	531	---	---	
14	299	290	294	230	383	360	491	473	530	510	---	---	
15	351	299	339	296	404	360	474	440	612	489	---	---	
16	344	314	302	282	473	401	449	440	791	438	---	---	
17	335	312	302	158	438	233	444	435	614	560	---	---	
18	389	333	176	89	318	254	542	443	626	615	---	---	
19	390	257	200	152	330	296	585	543	621	614	---	---	
20	264	257	216	203	347	330	717	638	618	602	---	---	
21	270	263	242	219	354	347	684	606	618	605	---	---	
22	303	267	327	242	356	351	605	567	605	593	---	---	
23	350	305	282	245	357	347	566	537	594	582	---	---	
24	357	78	294	275	356	345	537	512	584	573	---	---	
25	150	108	309	291	357	342	---	---	573	563	497	459	
26	161	126	321	302	357	339	---	---	563	527	530	498	
27	197	162	342	321	380	341	---	---	---	---	545	530	
28	216	191	342	330	395	374	---	---	---	---	552	543	
29	210	180	336	314	387	374	---	---	---	---	557	551	
30	194	191	380	339	377	362	---	---	---	---	561	555	
31	---	---	368	327	---	---	---	---	---	---	---	---	
MONTH	390	78	380	89	482	138	---	---	---	---	---	---	
YEAR	453	78											

PH (UNITS)

EXTREMES.--Period of record: Maximum, 5.6 Apr. 28, 1973; minimum, 2.1 Mar. 25, 1971, Aug. 31, 1972.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	4.1	3.9	3.9	3.8	4.5	3.4	---	---	5.0	4.7	4.0	3.6
2	4.1	4.0	3.9	3.8	4.6	4.5	---	---	4.7	4.3	4.0	3.6
3	4.2	4.0	3.9	3.8	4.7	4.6	---	---	4.5	4.2	4.0	3.9
4	4.1	3.9	3.9	3.9	4.6	4.3	---	---	4.1	3.9	4.0	3.8
5	4.2	3.9	3.9	3.6	4.2	3.7	---	---	5.2	3.9	4.0	3.7
6	4.2	3.9	3.8	3.6	3.8	3.6	---	---	5.3	5.1	3.8	3.6
7	4.1	4.0	3.8	3.7	4.6	3.7	---	---	5.1	5.0	4.6	3.8
8	4.1	3.9	3.9	3.6	4.9	4.6	---	---	4.9	4.3	4.8	4.6
9	4.1	3.9	3.8	3.6	4.8	4.4	4.3	3.9	4.5	4.2	4.8	4.5
10	4.0	3.7	3.7	3.6	4.4	3.7	4.3	3.7	4.6	3.8	4.4	3.8
11	3.9	3.6	3.7	3.6	3.9	3.7	4.0	3.6	4.2	3.6	4.2	3.8
12	3.5	3.3	4.6	3.6	4.0	3.7	4.2	4.1	5.1	4.2	5.1	4.3
13	3.3	3.1	4.5	4.2	4.0	3.8	4.2	3.3	5.1	4.9	5.1	5.0
14	3.2	3.1	4.2	3.9	3.8	3.7	3.5	3.0	4.8	4.1	5.4	4.9
15	3.1	2.9	3.9	3.9	4.6	3.4	3.4	3.2	4.0	3.7	5.3	5.1
16	3.0	2.7	3.9	3.8	4.7	4.5	3.4	3.3	4.2	3.7	5.1	4.6
17	3.1	2.8	3.8	3.6	4.5	4.0	3.6	3.4	4.1	3.9	4.6	4.4
18	3.1	3.0	3.6	3.5	4.0	4.0	3.6	3.0	4.3	4.0	4.3	4.0
19	3.2	3.2	3.5	3.4	4.0	3.6	4.3	3.7	4.1	3.7	5.3	4.0
20	3.4	3.3	3.8	3.3	4.2	3.8	4.4	4.0	4.1	3.9	5.0	4.9
21	3.6	3.5	3.8	3.6	3.8	3.7	4.4	3.8	3.9	3.6	4.8	4.4
22	3.9	3.7	3.8	3.7	3.9	3.7	3.9	3.5	3.9	3.5	4.5	4.2
23	4.0	3.9	3.9	3.6	3.9	3.7	3.9	3.6	5.4	3.5	4.7	4.5
24	4.1	3.7	3.6	3.3	3.7	3.6	3.7	3.6	5.3	4.7	5.4	4.6
25	3.8	3.7	4.5	3.5	4.4	3.6	4.7	3.6	4.7	4.5	5.0	4.9
26	3.9	3.6	4.5	4.1	4.4	4.3	4.7	4.5	4.6	4.5	4.9	4.9
27	3.9	3.6	4.0	3.4	4.3	3.6	4.5	4.3	4.5	4.1	4.9	4.3
28	4.0	3.6	3.7	3.4	3.9	3.7	4.4	3.7	4.0	3.7	4.7	4.0
29	3.9	3.7	3.7	3.5	3.9	3.6	4.2	3.6	---	---	5.5	4.9
30	4.0	3.8	3.7	3.3	3.8	3.6	4.4	4.2	---	---	5.3	5.0
31	4.0	3.8	---	---	3.8	3.6	5.0	4.0	---	---	5.1	4.9
MONTH	4.2	2.7	4.6	3.3	4.9	3.4	---	---	5.4	3.5	5.5	3.6
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	4.9	4.5	5.9	5.5	4.4	3.4	4.0	3.8	---	---	---	---
2	4.4	4.0	5.6	5.1	4.0	3.8	3.9	3.8	---	---	---	---
3	4.4	3.9	5.1	4.6	4.1	3.8	3.8	3.2	---	---	---	---
4	4.6	4.4	4.7	4.5	4.0	3.9	3.9	3.6	---	---	---	---
5	4.6	4.2	4.6	4.5	4.8	3.8	3.9	3.5	---	---	---	---
6	4.2	3.8	4.4	4.2	5.6	4.7	---	---	---	---	---	---
7	4.1	3.6	4.4	4.0	4.7	4.0	---	---	4.0	3.5	---	---
8	4.1	3.7	4.2	3.9	4.0	3.8	---	---	4.1	3.6	---	---
9	3.9	3.6	4.2	3.8	3.9	3.8	---	---	---	---	---	---
10	3.9	3.6	4.2	3.9	3.9	3.9	---	---	---	---	---	---
11	4.0	3.6	4.0	3.8	3.9	3.5	---	---	---	---	4.4	4.1
12	3.9	3.7	5.2	3.8	3.7	3.5	---	---	---	---	4.1	3.7
13	4.1	3.8	5.8	4.9	3.7	3.6	---	---	4.2	4.0	---	---
14	4.0	3.8	4.9	4.2	3.9	3.6	---	---	4.8	4.0	---	---
15	3.8	3.5	4.1	3.7	3.9	3.8	---	---	4.8	3.8	---	---
16	4.0	3.6	4.2	3.7	3.8	3.6	---	---	4.6	3.7	---	---
17	4.0	3.8	4.7	3.6	4.5	3.8	---	---	4.2	3.8	---	---
18	3.8	3.6	5.3	4.9	4.5	4.0	---	---	4.4	4.0	---	---
19	4.5	3.6	4.9	4.4	4.3	4.1	---	---	4.4	4.1	---	---
20	4.4	4.2	4.3	4.1	4.2	4.1	---	---	4.5	4.2	---	---
21	4.4	4.1	4.1	3.8	4.1	4.1	---	---	4.6	4.2	---	---
22	4.2	3.9	3.8	3.5	4.1	4.1	---	---	4.6	4.3	---	---
23	3.9	3.6	3.9	3.6	4.3	4.1	---	---	4.7	4.4	---	---
24	5.6	3.6	3.7	3.5	4.0	3.7	---	---	4.7	4.4	---	---
25	5.7	5.2	3.8	3.6	3.8	3.6	---	---	4.8	4.4	4.0	3.9
26	5.6	5.2	3.7	3.6	3.7	3.6	---	---	4.8	4.5	4.0	4.0
27	5.2	4.7	3.6	3.5	3.7	3.6	---	---	4.8	4.5	4.2	4.0
28	4.8	4.5	3.8	3.6	3.7	3.6	---	---	---	---	4.2	4.0
29	5.0	4.5	3.9	3.7	3.8	3.6	---	---	---	---	4.4	4.1
30	4.9	4.8	3.8	3.6	3.9	3.8	---	---	---	---	4.4	4.2
31	---	---	3.9	3.7	---	---	---	---	---	---	---	---
MONTH	5.7	3.5	5.9	3.5	5.6	3.4	---	---	---	---	---	---
YEAR	5.9	2.7										

RACCOON CREEK BASIN

03201800 SANDY RUN NEAR LAKE HOPE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITRE

PERIOD OF RECORD.--December 1970 to current year.

EXTREMES.--Period of record: Maximum, 15.0 mg/l or higher on many days during January, November and December 1971, January and February 1973; minimum, 2.0 mg/l Aug. 29, 30, 1973.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.9	11.8	8.8	7.7	12.7	11.3	---	---	---	---	13.2	10.8
2	13.1	12.0	8.6	7.9	11.4	11.0	---	---	---	---	13.9	12.3
3	13.5	12.2	8.6	7.7	11.8	11.0	---	---	---	---	14.0	12.7
4	13.3	12.0	8.3	7.6	12.3	11.2	---	---	---	---	14.1	12.6
5	12.3	10.6	9.2	7.7	13.7	11.6	---	---	---	---	14.1	12.1
6	11.0	9.7	9.9	9.2	13.3	11.3	---	---	11.9	11.0	13.5	10.4
7	10.0	9.1	10.2	9.2	12.2	10.7	---	---	13.9	12.0	11.5	10.3
8	10.2	9.0	10.7	9.6	10.9	10.5	---	---	14.4	12.2	13.0	11.6
9	10.2	9.0	11.1	9.8	12.4	10.9	11.6	10.2	14.5	11.9	14.1	11.8
10	9.8	8.3	11.2	9.9	13.6	11.6	11.8	9.6	14.7	14.1	13.8	12.6
11	9.0	7.8	10.2	9.5	13.4	11.0	10.6	9.6	14.3	12.8	12.8	11.4
12	8.6	7.6	10.3	9.5	11.3	10.6	12.4	10.9	13.7	12.9	12.3	10.5
13	7.8	7.1	10.6	10.1	11.0	10.7	14.0	12.3	14.4	12.9	12.0	11.1
14	7.3	6.2	11.4	10.2	11.1	10.4	14.0	13.2	14.6	13.2	12.4	11.9
15	7.3	6.1	12.1	11.3	11.6	10.9	14.0	12.9	13.9	11.7	12.6	11.4
16	8.7	7.4	13.2	11.4	10.9	10.4	13.5	12.8	12.1	11.0	12.6	10.8
17	9.6	8.2	12.0	10.6	11.3	10.6	13.4	12.5	11.4	10.2	12.0	9.8
18	9.2	8.7	11.9	10.7	12.0	11.4	13.4	12.7	11.5	9.9	12.1	9.8
19	10.2	9.3	11.0	9.3	12.1	11.1	13.2	12.4	11.8	10.7	11.1	10.5
20	10.7	9.8	10.1	8.9	13.4	11.6	13.8	12.7	12.9	11.1	11.1	9.5
21	12.0	10.1	11.3	10.3	12.5	10.9	13.9	12.4	14.2	11.2	12.0	9.3
22	12.0	9.6	11.1	10.3	11.6	10.8	13.8	12.3	13.6	10.2	10.5	9.6
23	11.0	8.9	12.2	10.1	12.1	10.0	13.2	11.2	10.8	10.1	12.1	9.2
24	9.6	8.7	10.2	9.3	10.2	9.4	13.0	10.9	11.2	10.0	10.5	9.4
25	9.0	8.3	11.4	9.7	11.5	9.4	11.2	10.2	12.0	11.3	11.8	10.6
26	9.7	8.4	12.7	11.6	12.1	11.3	12.2	10.9	12.4	10.4	12.5	11.3
27	10.6	9.0	13.3	11.3	12.0	10.8	12.9	11.0	12.7	10.7	13.6	12.3
28	10.6	9.0	12.7	11.4	10.9	10.5	11.2	10.0	12.9	10.5	12.4	11.5
29	10.3	8.6	13.5	12.2	11.1	9.7	---	---	---	---	11.5	10.0
30	8.9	8.0	13.3	12.0	10.3	9.7	---	---	---	---	11.9	10.6
31	8.6	7.6	---	---	10.7	9.7	---	---	---	---	13.0	9.6
MONTH	13.5	6.1	13.5	7.6	13.7	9.4	---	---	14.7	9.9	14.1	9.2
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.6	10.3	9.5	8.8	8.3	8.0	6.3	5.6	---	---	7.5	6.8
2	12.3	9.6	10.1	8.5	8.5	8.0	5.8	5.0	---	---	7.4	6.7
3	11.9	10.2	9.8	9.0	8.3	8.1	5.2	4.6	---	---	7.5	6.7
4	12.5	10.2	9.6	8.7	8.2	7.6	6.8	4.5	---	---	7.7	5.8
5	12.2	9.9	10.1	8.7	8.2	7.6	6.4	5.8	---	---	7.3	6.7
6	12.2	9.7	9.8	8.5	8.5	7.9	5.8	5.5	9.4	8.9	8.0	5.7
7	11.9	9.5	9.7	8.4	8.4	8.1	5.8	5.3	9.8	9.0	7.8	7.1
8	11.6	9.5	9.8	8.4	8.6	8.2	6.3	5.1	9.9	8.6	7.6	7.0
9	11.3	10.1	9.3	8.2	8.7	8.1	6.3	5.9	9.0	8.5	8.0	6.7
10	10.4	8.9	9.2	8.2	8.3	7.8	7.0	6.0	8.9	7.7	---	---
11	10.4	9.1	9.4	8.3	8.0	7.8	7.1	6.6	7.9	6.9	8.4	7.1
12	10.5	9.3	9.0	8.2	8.0	7.7	6.8	6.4	7.2	5.6	8.3	8.2
13	10.6	9.1	9.4	8.7	8.0	7.6	6.5	6.2	6.6	6.0	---	---
14	10.7	9.6	9.6	8.3	7.8	7.6	6.4	5.9	6.4	6.0	---	---
15	9.9	9.7	9.1	8.6	7.8	7.3	6.1	5.5	7.2	4.1	---	---
16	10.6	9.4	9.1	8.3	7.7	7.4	5.9	5.4	7.5	4.4	---	---
17	10.1	8.9	9.0	8.4	8.0	7.3	5.6	5.5	7.0	6.6	---	---
18	9.4	8.9	9.0	8.6	8.0	7.3	6.6	5.2	6.9	6.3	---	---
19	9.5	8.9	9.0	8.1	7.5	7.0	6.7	6.1	6.6	5.9	---	---
20	10.2	9.5	8.9	8.1	7.2	7.1	6.8	6.4	6.5	5.9	---	---
21	10.7	9.0	8.8	8.0	7.3	6.9	6.4	5.9	6.3	5.5	---	---
22	10.1	8.8	8.5	8.2	7.1	6.8	6.2	5.6	5.7	5.0	---	---
23	9.7	9.1	8.5	8.1	7.0	6.6	5.7	5.4	5.3	4.8	---	---
24	9.6	9.3	8.3	8.0	6.9	6.5	5.8	5.1	5.1	4.3	---	---
25	9.8	9.5	8.3	7.8	6.9	6.4	---	---	5.1	4.6	9.0	8.6
26	10.2	8.8	8.1	7.7	6.9	6.5	---	---	5.6	4.9	8.6	8.3
27	10.5	9.3	8.0	7.7	6.9	6.5	---	---	---	---	8.6	8.3
28	9.9	9.3	8.3	7.9	6.7	6.3	---	---	---	---	9.0	8.2
29	9.8	8.4	8.2	7.7	6.6	6.2	---	---	---	---	9.2	8.2
30	9.6	9.1	8.0	7.7	6.5	6.0	---	---	---	---	8.8	7.9
31	---	---	7.9	7.6	---	---	---	---	---	---	---	---
MONTH	12.6	8.4	10.1	7.6	8.7	6.0	---	---	---	---	---	---
YEAR	14.7	4.1										

03201800 SANDY RUN NEAR LAKE HOPE, OHIO--Continued

TEMPERATURE (°C) OF WATER

PERIOD OF RECORD.--December 1970 to current year.

EXTREMES.--Period of record: Maximum, 28.5°C Aug. 26, 1975; minimum, freezing point on many days during winter periods.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	9.0	13.5	11.0	4.5	3.0	---	---	5.5	4.0	5.5	1.0
2	11.0	8.0	15.0	12.0	4.5	4.0	---	---	6.0	3.0	2.0	0.0
3	10.0	6.5	14.5	11.5	4.5	3.0	---	---	5.0	2.0	2.0	0.0
4	9.5	5.5	15.0	13.5	4.5	2.0	---	---	2.5	2.0	2.5	0.0
5	11.5	6.5	14.0	11.5	3.5	0.0	---	---	4.5	3.0	3.0	0.0
6	13.0	8.5	11.0	9.5	3.5	0.5	---	---	4.5	3.0	7.0	0.5
7	13.0	10.0	11.0	8.0	4.5	2.0	---	---	3.5	0.5	7.5	4.5
8	11.0	7.5	10.0	6.0	5.0	4.5	---	---	3.5	0.0	4.5	2.0
9	11.5	7.5	9.5	5.5	4.0	1.0	6.5	4.0	2.5	0.0	4.0	0.0
10	12.0	8.0	9.0	5.5	2.5	0.0	7.0	3.0	0.5	0.0	2.5	0.5
11	13.0	9.0	9.5	7.5	4.0	0.5	7.5	5.0	2.5	0.5	4.5	2.0
12	12.5	10.5	10.5	8.5	5.0	3.5	4.5	2.0	2.5	1.5	7.0	3.0
13	14.0	12.5	8.5	7.5	5.0	4.5	2.0	0.0	3.0	0.0	6.0	4.0
14	14.5	13.0	8.0	5.5	6.0	4.5	0.5	0.0	2.0	0.0	4.0	3.0
15	13.5	12.5	5.5	4.0	4.5	3.5	0.5	0.0	4.5	1.0	5.5	3.0
16	13.0	11.0	5.5	2.5	5.5	4.5	1.0	0.0	6.0	3.5	6.5	3.0
17	13.0	8.5	7.5	4.5	5.0	3.5	0.5	0.0	8.5	5.0	10.5	4.0
18	11.0	9.0	6.5	4.0	3.0	2.0	0.5	0.5	8.5	5.0	10.0	4.0
19	8.5	6.5	9.5	6.0	3.5	2.0	1.5	0.5	6.5	3.5	7.5	6.5
20	8.0	5.5	10.5	7.5	3.0	0.0	1.0	0.0	6.0	2.0	11.5	6.0
21	8.0	3.0	7.0	4.5	4.0	2.0	1.5	0.0	5.5	0.5	11.5	4.5
22	8.5	3.0	7.0	5.0	4.5	3.0	2.0	0.0	8.0	1.0	10.5	7.5
23	10.0	4.5	7.5	3.0	6.0	2.0	3.5	1.0	7.5	6.5	12.0	4.0
24	12.0	9.0	9.5	7.5	7.0	5.5	3.5	0.0	7.5	5.0	12.0	8.0
25	12.0	10.0	8.5	5.0	7.5	3.0	5.0	3.0	5.0	3.5	7.5	5.0
26	12.0	8.5	5.0	3.0	3.5	2.0	3.5	1.5	7.0	2.5	6.5	3.5
27	11.0	6.0	5.0	1.5	4.0	2.5	3.0	0.0	6.0	1.5	4.0	2.0
28	11.0	6.5	5.0	2.5	4.5	4.0	6.5	3.0	6.5	2.0	5.0	3.5
29	12.0	7.0	3.5	1.5	6.0	4.0	9.5	5.5	---	---	9.0	5.5
30	14.5	10.5	4.0	2.0	6.5	5.5	5.5	3.5	---	---	7.0	4.0
31	15.5	11.5	---	---	6.0	4.5	5.0	4.0	---	---	10.0	2.0
MONTH	15.5	3.0	15.0	1.5	7.5	0.0	---	---	8.5	0.0	12.0	0.0
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.5	3.5	15.5	11.0	18.5	17.0	24.0	19.0	---	---	21.5	20.0
2	14.5	4.5	18.0	9.0	17.0	14.5	24.5	19.0	---	---	23.5	18.0
3	11.5	4.0	14.5	10.0	17.5	15.0	24.0	19.5	---	---	23.5	12.0
4	9.0	2.5	16.5	11.5	19.5	15.0	24.0	20.0	---	---	23.5	18.5
5	9.0	2.0	16.5	9.0	18.5	16.5	24.0	18.5	---	---	23.5	18.0
6	9.5	2.0	18.5	10.5	19.0	15.0	23.0	18.5	21.0	20.0	20.5	18.0
7	10.5	2.0	18.0	11.0	17.0	15.0	23.5	19.0	22.5	18.0	21.5	14.5
8	10.0	2.5	17.5	10.0	16.5	13.5	23.5	19.5	23.5	16.0	22.0	15.0
9	7.0	3.5	18.5	12.0	16.5	12.5	23.0	20.5	24.0	16.0	23.0	17.5
10	12.5	5.5	19.0	12.0	18.0	14.5	22.5	19.5	23.5	20.5	---	---
11	11.5	5.5	18.0	11.5	17.0	16.5	22.0	18.0	23.5	19.5	19.5	17.5
12	10.5	5.0	18.0	13.0	20.0	17.0	21.0	13.0	25.0	20.0	18.5	18.5
13	12.0	4.5	16.0	13.0	20.0	16.5	21.5	17.5	27.0	21.0	---	---
14	8.0	4.5	18.0	11.0	18.5	16.5	22.0	17.0	27.0	23.0	---	---
15	8.0	7.0	15.5	12.5	20.0	16.5	20.5	16.0	24.0	21.5	---	---
16	9.5	4.5	17.5	12.5	20.5	17.0	22.5	16.5	23.5	14.5	---	---
17	12.0	6.0	16.0	13.0	21.0	16.5	21.5	18.0	24.0	21.5	---	---
18	12.5	9.5	15.5	13.5	21.0	17.5	21.5	18.0	24.5	20.5	---	---
19	14.5	11.0	19.0	12.5	22.5	19.0	23.5	19.0	23.5	19.0	---	---
20	10.5	8.0	19.0	13.5	23.0	20.0	22.5	20.5	23.5	19.5	---	---
21	13.5	5.5	20.0	15.0	23.0	19.5	24.5	20.0	25.0	19.5	---	---
22	14.0	7.5	18.5	16.0	23.0	19.5	25.0	19.5	25.5	20.5	---	---
23	11.5	9.0	19.5	16.5	23.5	20.0	25.0	19.5	26.0	21.5	---	---
24	11.0	10.0	20.5	17.0	24.0	22.0	24.0	20.5	27.5	21.5	---	---
25	10.5	9.5	21.5	17.5	24.0	20.0	---	---	27.0	22.0	15.0	14.0
26	15.5	8.0	22.0	18.0	22.5	19.5	---	---	28.5	22.0	15.0	14.5
27	12.0	7.0	21.0	18.5	23.0	20.0	---	---	---	---	15.0	13.5
28	11.5	9.0	20.0	16.0	23.5	20.0	---	---	---	---	15.5	12.0
29	18.5	9.5	19.5	16.0	24.0	19.5	---	---	---	---	15.0	11.0
30	13.0	10.5	20.5	17.5	24.0	19.0	---	---	---	---	16.0	12.0
31	---	---	20.5	18.5	---	---	---	---	---	---	---	---
MONTH	18.5	2.0	22.0	9.0	24.0	12.5	---	---	---	---	---	---
YEAR	28.5	0.0										

RACCOON CREEK BASIN

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03201990 LITTLE RACCOON CREEK NEAR VINTON, OHIO

LOCATION.--Lat 38°57'12", long 82°21'57", Gallia County, at bridge on State Highway 325, 1.2 mi (1.9 km) upstream from mouth, 2 mi (3 km) southwest of Vinton.

DRAINAGE AREA.--154 mi² (399 km²).

PERIOD OF RECORD.--Discharge, 1951 to 1953, 1959, 1965, 1972 to 1975 (discontinued); chemical analyses, 1972 to 1974 (discontinued).

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	INSTANTANEOUS DISCHARGE	
	(ft ³ /s)	(m ³ /s)
Oct. 10	25	0.71

RACCOON CREEK BASIN

03202000 RACCOON CREEK AT ADAMSVILLE, OHIO

LOCATION.--Lat 38°52'25", long 82°21'22", in SE 1/4 sec. 26, T.6 N., R.16 W., Gallia County, 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).

GAGE.--Water-stage and water-quality recorders. Datum of gage is 570.04 ft (173.748 m) above mean sea level. 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.--Discharge records good. Interruptions in the daily water-quality records were due to malfunctions of the instrument.

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.

AVERAGE DISCHARGE.--57 years, 648 ft³/s (18.35 m³/s), 15.04 in/yr (382 mm/yr).

EXTREMES.--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.

Flood in January 1937 reached a stage of 25.2 ft (7.66 m), from floodmark, discharge, 16,000 ft³/s (453 m³/s).

REVISIONS (WATER YEARS).--WSP 873: 1916-18, 1920, 1922, 1924, 1926-27, 1931, 1933, 1935(M). WSP 1908: Drainage area. WSP 2108: 1968-70(M).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	122	99	1530	977	1570	4150	3340	2270	236	148	34	27
2	118	99	2050	1270	1850	1700	2270	2210	221	122	31	27
3	114	101	2410	1400	1780	977	1860	2360	245	106	29	27
4	110	100	2370	1430	1430	828	1510	2340	247	95	27	23
5	106	105	2070	1360	1350	724	1350	1820	178	89	51	21
6	99	114	1450	1180	1840	658	1110	1380	300	83	111	25
7	96	121	1050	966	2020	678	933	1170	900	81	91	29
8	94	137	1150	823	2020	902	813	977	660	74	61	27
9	90	147	1590	780	1730	1080	724	806	520	89	60	27
10	89	133	1790	777	1230	1060	658	694	288	131	73	24
11	85	128	1640	809	1010	946	603	638	193	183	71	25
12	81	483	1210	785	1690	2040	540	612	193	130	73	27
13	80	895	943	749	2020	2640	489	658	238	99	61	95
14	79	1240	845	669	1820	2830	439	474	223	88	58	109
15	77	1070	766	588	1420	3090	407	540	201	77	59	105
16	96	687	865	524	1150	3030	383	658	234	68	130	100
17	128	494	1160	451	1070	2760	364	511	180	62	310	77
18	159	395	1300	562	1050	2120	344	476	335	73	733	76
19	169	321	1090	933	1040	1910	376	491	344	89	466	81
20	157	326	875	1260	961	2300	419	974	558	70	196	100
21	134	335	785	1230	845	2520	470	1100	479	114	134	122
22	124	381	730	1110	742	2410	443	770	274	117	102	124
23	118	425	673	964	2510	2040	381	682	195	102	83	106
24	114	399	627	880	4520	2990	1340	502	160	96	69	1140
25	111	387	689	925	5160	3340	4650	435	140	85	58	1830
26	111	441	751	1200	5730	3360	5930	359	124	80	51	2140
27	110	583	860	1270	5730	3340	5760	288	200	64	44	1730
28	107	647	1030	1170	5210	2640	4950	236	389	55	38	740
29	106	553	1010	987	---	3350	4240	203	310	47	34	429
30	104	481	905	923	---	3810	3020	210	188	38	30	288
31	102	---	797	1080	---	3680	---	212	---	35	27	---
TOTAL	3390	11827	37011	30032	60498	69903	50116	27056	8953	2790	3395	9701
MEAN	109	394	1194	969	2161	2255	1671	873	298	90.0	110	323
MAX	169	1240	2410	1430	5730	4150	5930	2360	900	183	733	2140
MIN	77	99	627	451	742	658	344	203	124	35	27	21
CFSM	.19	.67	2.04	1.66	3.69	3.85	2.86	1.49	.51	.15	.19	.55
IN.	.22	.75	2.35	1.91	3.85	4.45	3.19	1.72	.57	.18	.22	.62

CAL YR 1974 TOTAL 301460 MEAN 826 MAX 5930 MIN 31 CFSM 1.41 IN 19.17
WTR YR 1975 TOTAL 314672 MEAN 862 MAX 5930 MIN 21 CFSM 1.47 IN 20.01

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
02-26	2300	18.04	5,850	03-30	2300	15.09	3,720
03-15	1600	13.93	3,120	04-26	2000	*18.28	*6,050
03-27	0300	14.58	3,440				

Minimum discharge: 20 ft³/s (0.57 m³/s) Sept. 3.

RACCOON CREEK BASIN

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03202000 RACCOON CREEK AT ADAMSVILLE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1951 to 1954, 1964 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATURATION	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)
FEB. 07...	0745	1980	4.0	11.0	84	260	5.5	9.3	23	9.4	8.1	2.0
JULY 31...	1300	35	24.5	6.5	77	579	4.7	12	45	17	35	4.1
DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
FEB. 07...	3	0	15	2	11	97	.2	.15	.01	.35	.04	163
JULY 31...	4	0	128	3	42	200	.3	.15	.00	.46	.12	362
DATE	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (MG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
FEB. 07...	96	94	460	1200	--	--	--	--	--	--	--	--
JULY 31...	180	180	870	4100	0	10	30	15	150	<.5	2.6	.9

RACCOON CREEK BASIN

03202000 RACCOON CREEK AT ADAMSVILLE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C)

PERIOD OF RECORD.--May 1967 to current year.

EXTREMES.--Period of record: Maximum, 2,930 micromhos Nov. 20, 1964; minimum, 100 micromhos Feb. 23, 1975.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
1	380	370	540	530	300	190	280	250	260	220	190	170	
2	410	380	530	520	250	210	290	260	260	220	240	190	
3	420	410	520	510	240	210	270	250	230	220	270	240	
4	440	430	520	510	240	230	260	250	230	230	280	270	
5	440	430	510	500	230	220	260	250	240	200	320	290	
6	440	440	520	500	250	230	260	260	220	200	330	320	
7	440	430	520	520	260	250	270	260	250	220	320	300	
8	450	440	520	510	260	230	270	270	240	230	300	280	
9	470	450	520	510	260	250	270	260	240	230	340	300	
10	470	470	540	520	260	250	280	260	250	240	340	300	
11	490	470	540	510	250	230	270	260	260	250	310	300	
12	490	480	510	340	240	230	290	270	260	180	300	150	
13	490	480	490	340	260	240	300	280	260	190	250	140	
14	480	470	490	320	270	250	300	290	260	230	230	200	
15	490	480	390	320	270	260	310	300	260	240	220	200	
16	490	430	340	310	270	250	310	300	260	250	220	210	
17	460	430	330	320	300	250	310	300	250	240	210	210	
18	480	440	340	330	290	260	320	260	260	240	220	210	
19	480	460	340	340	270	250	270	250	270	260	220	190	
20	520	480	340	310	280	270	290	250	270	260	230	200	
21	540	500	330	310	300	280	310	260	280	270	220	180	
22	500	490	360	330	300	300	300	290	290	270	220	200	
23	510	490	370	350	320	300	300	290	280	100	240	220	
24	520	510	370	360	320	300	290	280	130	110	240	120	
25	530	510	370	360	300	290	290	260	150	130	200	130	
26	540	510	360	350	310	290	270	250	150	140	190	180	
27	550	540	360	360	320	290	290	270	150	140	220	190	
28	550	530	360	340	290	280	290	260	170	150	230	210	
29	530	520	340	340	300	280	270	260	---	---	220	160	
30	530	520	340	300	290	280	260	250	---	---	190	180	
31	530	520	---	---	290	280	260	220	---	---	210	190	
MONTH	550	370	540	300	320	190	320	220	290	100	340	120	
		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
1	210	210	220	190	340	320	420	360	590	560	570	550	
2	220	210	220	190	360	340	370	360	600	570	590	570	
3	230	190	210	190	370	360	370	360	620	570	610	570	
4	260	180	210	190	400	370	370	350	600	570	600	570	
5	260	250	230	210	420	400	350	340	700	540	610	580	
6	260	240	230	220	410	400	360	340	550	450	600	580	
7	260	250	250	230	420	400	360	360	540	490	590	550	
8	270	260	250	250	460	330	400	360	500	480	610	570	
9	280	270	270	250	400	340	430	280	560	500	590	580	
10	280	280	280	270	340	320	400	280	560	340	610	570	
11	290	280	290	280	320	310	500	270	440	340	610	580	
12	310	290	300	200	320	300	480	350	520	430	620	570	
13	320	310	260	200	340	320	520	420	620	520	690	490	
14	330	320	300	260	340	340	540	460	590	550	610	530	
15	330	330	310	280	360	340	490	460	550	480	610	570	
16	350	330	300	280	400	360	490	460	480	430	570	510	
17	350	340	320	300	420	380	460	440	630	450	530	520	
18	360	350	320	300	420	300	450	360	520	440	530	470	
19	350	330	320	320	360	320	410	310	440	360	530	400	
20	370	340	340	290	420	360	440	420	370	350	530	490	
21	400	360	300	220	440	370	460	430	410	350	600	500	
22	390	360	240	220	420	360	460	440	500	410	590	540	
23	400	380	240	200	370	340	490	460	550	500	600	550	
24	390	110	260	240	360	340	480	440	540	520	590	210	
25	150	120	310	260	350	340	480	440	530	510	390	290	
26	170	150	300	290	---	---	520	480	510	490	350	210	
27	180	160	360	290	350	300	550	520	510	490	290	270	
28	200	170	340	330	390	320	550	530	510	490	320	290	
29	200	180	330	320	380	350	560	540	540	500	340	320	
30	200	190	340	300	420	380	560	540	530	510	360	340	
31	---	---	330	300	---	---	560	550	570	530	---	---	
MONTH	400	110	360	190	460	300	560	270	700	340	890	210	
YEAR	890	100											

PH (UNITS)

EXTREMES.--Period of record: Maximum, 8.8 Feb. 16, 1972; minimum, 2.0 May 6, 1972.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY		MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1		4.9	4.7	5.0	4.9	6.6	5.6	6.3	5.9	6.1	5.1	5.5	5.2
2		4.8	4.7	4.9	4.9	6.1	5.1	5.9	5.2	5.6	5.1	5.6	5.0
3		4.7	4.6	4.9	4.9	5.6	5.3	6.2	5.5	5.6	5.3	5.1	5.0
4		4.8	4.7	4.9	4.9	5.4	5.2	6.1	5.6	5.8	5.5	5.1	4.9
5		5.0	4.8	4.9	4.9	5.6	5.4	5.7	5.5	6.2	5.8	5.0	4.9
6		4.9	4.9	4.9	4.9	5.6	5.5	5.8	5.7	6.2	5.7	5.0	4.9
7		4.9	4.9	4.9	4.9	5.7	5.6	5.7	5.5	5.7	5.4	5.1	4.9
8		4.9	4.8	4.9	4.8	6.0	5.7	5.5	5.4	5.6	5.4	5.4	5.0
9		4.9	4.8	4.9	4.8	5.8	5.4	5.7	5.5	5.6	5.4	5.1	4.9
10		4.9	4.8	4.9	4.9	5.5	5.3	6.0	5.4	5.5	5.4	5.2	5.0
11		4.9	4.8	4.9	4.9	5.6	5.4	5.7	5.5	5.6	5.4	5.3	5.0
12		5.0	4.9	6.3	4.9	5.7	5.6	5.5	5.3	6.1	5.5	6.3	5.3
13		5.0	5.0	6.0	4.7	5.6	5.4	5.4	5.3	5.9	5.1	6.0	5.3
14		5.0	5.0	5.4	4.7	5.4	5.4	5.4	5.3	5.6	5.3	5.7	5.3
15		5.0	5.0	5.4	5.3	5.6	5.4	5.4	5.2	5.5	5.3	5.6	5.3
16		5.9	5.0	5.4	5.3	6.0	5.6	5.5	5.4	5.4	5.3	5.4	5.3
17		5.8	5.1	5.5	5.4	5.8	5.6	5.6	5.3	5.5	5.4	5.4	5.3
18		5.1	4.8	5.5	5.3	5.5	5.5	6.3	5.3	5.4	5.3	5.4	5.3
19		4.9	4.7	5.5	5.4	5.9	5.7	6.2	6.0	5.4	5.2	5.8	5.4
20		4.9	4.8	6.0	5.4	5.9	5.8	6.0	5.5	5.4	5.3	5.6	5.0
21		4.9	4.7	5.8	5.4	5.8	5.7	5.6	5.3	5.4	5.3	5.3	5.2
22		5.1	4.9	5.4	5.1	5.8	5.7	5.6	5.5	5.4	5.3	5.3	5.2
23		5.1	5.0	5.2	5.1	5.7	5.6	5.6	5.5	6.6	5.3	5.2	5.1
24		5.0	4.9	5.3	5.2	5.9	5.6	5.6	5.5	6.1	5.7	6.2	5.1
25		5.0	4.9	5.6	5.2	6.3	5.9	6.0	5.5	5.7	5.4	5.9	5.3
26		5.0	4.9	5.6	5.3	6.1	5.5	6.1	5.6	5.5	5.4	5.5	5.4
27		4.9	4.9	5.3	5.0	6.1	5.3	5.6	5.3	5.5	5.3	5.4	5.3
28		4.9	4.9	5.3	5.0	6.1	5.8	5.7	5.5	5.4	5.3	5.9	5.3
29		4.9	4.9	5.3	5.2	5.8	5.4	5.6	5.4	---	---	6.9	5.7
30		4.9	4.9	5.6	5.2	5.8	5.6	5.6	5.5	---	---	5.7	5.3
31		4.9	4.9	---	---	6.0	5.7	6.2	5.4	---	---	5.4	5.1
MONTH		5.9	4.6	6.3	4.7	6.6	5.1	6.3	5.2	6.6	5.1	6.9	4.9
		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY		MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1		5.2	5.1	5.9	5.2	5.5	5.1	4.6	4.0	4.6	4.4	4.3	4.2
2		5.2	5.1	5.6	5.1	5.1	4.8	4.9	4.6	4.5	4.4	4.3	4.2
3		5.9	5.1	5.7	5.4	4.9	4.8	4.9	4.7	4.5	4.4	4.4	4.2
4		5.3	5.0	6.1	5.5	4.8	4.6	4.8	4.7	4.5	4.4	4.4	4.2
5		5.2	5.0	5.5	5.2	4.7	4.6	4.9	4.8	5.8	4.4	4.7	4.3
6		5.2	5.0	5.4	5.3	4.7	4.7	4.9	4.7	5.8	4.4	4.7	4.4
7		5.1	5.0	5.4	5.0	4.7	4.5	4.8	4.7	4.5	4.4	4.8	4.6
8		5.0	5.0	5.0	4.8	4.6	4.3	4.8	4.7	4.6	4.5	4.6	4.5
9		5.0	4.9	5.0	4.9	4.6	4.4	6.2	4.7	4.6	4.2	4.5	4.4
10		4.9	4.8	4.9	4.6	4.6	4.6	6.2	5.1	6.1	4.2	4.5	4.4
11		4.9	4.8	4.9	4.6	5.1	4.8	6.2	4.5	6.0	5.3	4.5	4.4
12		4.8	4.8	6.1	4.8	5.1	5.0	5.4	4.4	5.3	4.4	4.6	4.5
13		4.8	4.8	5.9	5.4	5.0	4.7	4.5	4.0	4.4	4.0	5.3	4.2
14		4.8	4.8	5.5	4.9	4.7	4.6	4.2	3.9	4.1	4.0	4.2	3.9
15		4.8	4.8	5.4	4.9	4.7	4.7	4.3	4.1	4.8	4.0	4.1	3.8
16		4.8	4.8	5.6	4.9	4.7	4.6	4.3	4.1	4.8	4.3	4.3	4.0
17		4.8	4.7	4.9	4.8	4.6	4.4	4.5	4.3	4.7	3.9	4.5	4.3
18		4.8	4.7	4.9	4.7	5.3	4.4	5.8	4.5	3.9	3.7	5.3	4.5
19		4.8	4.7	4.9	4.7	5.2	4.6	6.1	5.3	4.2	3.9	5.8	4.8
20		4.8	4.7	4.8	4.5	4.6	4.3	5.3	4.8	4.4	4.2	4.9	4.6
21		4.7	4.6	5.1	4.6	4.4	4.3	4.8	4.5	4.3	4.3	4.6	4.2
22		4.7	4.6	5.8	5.0	4.6	4.4	4.7	4.5	4.3	4.1	4.3	4.2
23		4.7	4.6	6.1	5.8	4.5	4.5	4.6	4.4	4.1	4.0	4.6	4.3
24		6.1	4.7	5.8	5.2	4.6	4.5	4.9	4.4	4.0	4.0	6.7	4.7
25		6.1	5.4	5.2	5.0	4.5	4.4	4.9	4.7	4.0	4.0	4.9	4.5
26		5.4	5.2	5.2	5.0	---	---	4.7	4.6	4.1	4.0	5.6	4.8
27		5.3	5.2	5.2	5.1	5.9	4.6	4.6	4.5	4.0	4.0	5.6	5.2
28		5.3	4.8	5.1	5.0	4.6	4.3	4.6	4.5	4.1	4.0	5.6	5.4
29		5.6	5.0	5.1	5.0	4.5	4.0	4.6	4.5	4.3	4.0	5.4	5.3
30		5.7	5.3	6.0	5.1	4.2	4.0	4.7	4.5	4.4	4.2	5.4	5.3
31		---	---	6.2	5.5	---	---	4.6	4.6	4.4	4.3	---	---
MONTH		6.1	4.6	6.2	4.5	5.9	4.0	6.2	3.9	6.1	3.7	6.7	3.8
YEAR		6.9	3.7										

TEMPERATURE (°C) OF WATER

PERIOD OF RECORD.--1951 to 1954, 1964 to current year.

EXTREMES.--Period of record: Maximum, 29.0°C June 16, 1952; minimum, freezing point on many days during winter periods.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
1	14.5	13.5	13.0	12.0	4.0	3.5	6.0	5.5	5.5	5.0	6.0	5.5	
2	13.5	12.0	13.5	13.0	4.0	3.5	5.5	4.5	5.5	5.0	6.5	6.0	
3	12.0	11.0	14.0	13.0	4.0	3.5	4.5	4.5	5.0	4.5	6.5	6.0	
4	11.0	10.0	14.5	14.0	5.5	3.5	4.5	4.0	4.5	4.0	3.5	3.0	
5	11.0	9.5	14.5	13.5	3.5	3.0	4.0	3.0	5.0	4.0	3.5	2.0	
6	11.5	10.0	13.5	12.5	3.5	2.0	3.5	2.0	5.0	4.5	4.5	3.0	
7	12.0	11.0	13.0	11.5	3.5	3.0	3.5	3.0	4.5	3.5	5.5	4.5	
8	11.5	10.5	11.5	10.0	4.0	3.5	4.0	3.0	3.5	2.0	5.5	5.0	
9	11.0	10.0	10.5	9.5	4.0	3.5	5.0	4.0	3.0	2.0	5.0	4.0	
10	11.5	10.5	10.0	9.0	3.5	3.0	5.5	4.5	2.0	1.0	4.5	4.0	
11	12.0	11.0	10.0	9.5	3.0	2.0	6.0	5.5	1.5	1.0	4.0	3.5	
12	12.0	11.5	10.0	9.5	3.5	3.0	6.0	5.0	2.0	1.5	6.0	4.0	
13	13.5	12.0	9.5	9.0	4.5	3.5	5.0	3.5	2.0	2.0	6.0	6.0	
14	14.0	13.5	9.0	8.5	4.5	3.5	3.5	2.0	2.0	1.5	6.0	5.0	
15	14.0	13.5	8.5	7.0	4.5	4.0	2.0	1.5	3.0	1.5	5.0	4.5	
16	13.5	13.0	7.0	6.5	4.5	4.5	1.5	1.0	4.0	3.0	5.0	4.5	
17	13.0	11.5	6.5	6.0	4.5	4.5	1.0	0.5	5.5	4.0	6.5	4.5	
18	13.0	11.5	6.5	6.0	4.5	4.0	1.0	0.5	6.5	5.0	7.0	6.0	
19	11.5	10.5	7.0	6.0	4.0	3.5	1.5	1.0	6.5	6.0	8.5	7.0	
20	10.5	9.5	8.5	7.0	3.5	3.0	1.5	1.0	6.0	5.5	9.0	8.0	
21	9.5	8.0	8.0	6.5	3.0	3.0	1.5	0.5	5.5	4.5	9.5	8.5	
22	9.0	7.0	6.5	6.0	3.5	3.0	1.5	0.5	6.0	4.5	10.0	9.5	
23	9.0	7.5	6.5	5.5	4.0	3.0	2.0	1.0	9.0	6.0	10.5	9.5	
24	10.0	9.0	8.0	6.0	5.0	4.0	2.0	1.0	9.0	9.0	11.0	10.0	
25	11.0	10.0	8.0	7.0	5.5	5.0	4.0	2.0	9.0	6.5	11.0	10.0	
26	11.0	10.0	7.0	5.5	5.0	4.5	4.0	3.5	6.5	5.5	10.0	8.5	
27	10.5	9.5	5.5	5.0	4.5	4.0	3.5	3.0	6.5	5.5	8.5	6.5	
28	10.5	9.5	5.0	4.5	4.5	4.5	4.0	3.0	6.5	5.5	6.5	5.5	
29	11.0	10.0	4.5	4.0	5.0	4.5	6.0	4.0	---	---	8.0	5.5	
30	12.0	11.0	4.5	3.5	5.5	5.0	6.0	5.5	---	---	8.0	7.0	
31	13.0	11.5	---	---	6.0	5.5	5.5	5.5	---	---	7.0	6.0	
MONTH	14.5	7.0	14.5	3.5	6.0	2.0	6.0	0.5	9.0	1.0	11.0	2.0	
		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
1	9.0	6.5	14.5	14.0	21.0	20.5	24.5	23.0	25.0	24.5	24.5	23.5	
2	10.0	8.0	15.0	14.0	20.5	19.5	24.5	23.0	25.5	25.0	23.5	22.0	
3	10.5	9.0	15.5	14.5	20.0	19.0	24.5	23.0	25.5	25.5	23.5	22.0	
4	9.0	8.0	15.0	14.5	20.5	19.0	24.5	23.5	25.5	25.0	23.5	22.0	
5	8.5	7.0	15.0	14.0	20.5	20.0	24.5	23.0	25.5	24.0	23.0	22.0	
6	8.0	6.5	15.5	14.0	20.5	19.5	24.5	23.0	24.0	23.5	23.0	21.5	
7	8.5	6.5	16.0	15.0	20.0	19.5	24.0	23.0	23.5	22.0	21.5	20.5	
8	9.0	6.5	16.0	14.5	20.0	18.5	24.5	23.0	23.0	21.0	21.0	20.5	
9	9.0	8.0	16.0	15.0	19.0	18.0	24.5	21.5	23.0	20.5	21.0	20.5	
10	10.0	8.0	17.0	15.5	19.0	18.0	23.0	21.5	23.0	21.5	20.5	19.5	
11	10.5	9.0	17.0	16.0	19.0	18.5	22.0	20.5	23.0	21.0	20.5	20.0	
12	10.0	9.5	17.0	15.0	20.0	18.5	21.5	20.5	23.5	22.0	20.5	19.5	
13	10.5	9.0	16.5	15.0	20.5	19.0	21.5	20.5	24.5	23.0	19.5	18.0	
14	10.5	9.5	17.0	15.5	20.5	19.5	21.0	20.5	24.5	24.0	18.0	16.0	
15	10.0	9.5	17.0	16.0	20.5	19.5	21.0	19.5	24.5	24.0	17.0	16.0	
16	10.0	8.5	16.5	15.5	21.0	20.0	21.5	20.0	24.5	24.0	18.0	16.5	
17	10.5	9.5	17.0	16.0	21.5	20.0	21.5	20.5	24.5	23.5	18.0	17.0	
18	10.5	11.5	18.0	16.5	21.5	21.0	21.5	20.5	24.0	23.5	18.5	18.0	
19	13.5	11.5	18.5	17.0	23.0	21.0	22.0	20.5	24.0	23.5	19.0	18.5	
20	13.5	11.5	18.5	18.0	23.5	22.0	23.0	21.5	24.0	23.0	19.0	18.5	
21	13.0	11.5	19.5	18.0	24.0	23.0	23.5	21.5	24.5	23.0	18.5	17.0	
22	13.0	11.5	20.0	19.0	24.5	23.0	24.5	23.0	25.0	23.5	18.0	16.5	
23	13.5	12.0	20.5	19.5	24.5	23.5	24.5	23.0	25.0	24.0	16.5	16.0	
24	13.0	12.0	21.0	20.0	24.5	23.5	24.5	24.0	25.5	24.0	16.0	14.5	
25	13.0	12.0	21.5	20.5	24.5	23.5	24.5	23.5	25.5	24.5	14.5	14.5	
26	14.0	12.0	22.0	21.0	---	---	24.0	22.0	25.5	24.5	15.0	14.5	
27	14.0	13.0	22.0	21.5	---	---	24.0	22.0	25.5	24.0	15.0	14.5	
28	13.5	13.0	21.5	21.0	24.0	23.0	24.0	22.0	25.0	23.5	15.0	14.5	
29	14.5	13.0	21.5	21.0	24.0	23.0	24.5	23.0	24.5	24.0	15.0	14.0	
30	14.5	14.0	21.5	20.5	24.0	23.0	24.5	23.5	24.5	24.5	15.0	14.0	
31	---	---	21.5	21.0	---	---	25.0	24.0	24.5	24.0	---	---	
MONTH	14.5	6.5	22.0	14.0	24.5	18.0	25.0	19.5	25.5	20.5	24.5	14.0	
YEAR	25.5	0.5											

INDIAN GUYAN CREEK BASIN

03205210 INDIAN GUYAN CREEK NEAR BRADDRICK, OHIO

LOCATION.--Lat 38°28'41", long 82°23'54", Lawrence County, at bridge on Township Road C-69, 200 ft (61 m) upstream from relocated Fourmile Creek, 2.5 mi (4.0 km) north of Bradrick.

DRAINAGE AREA.--67.5 mi² (174.8 km²).

PERIOD OF RECORD.--Discharge, 1972 to current year; chemical analyses, 1972 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	INSTANTANEOUS DISCHARGE	
	(ft ³ /s)	(m ³ /s)
Oct. 11	3.8	0.108

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)
JULY 30...	1410	1.8	24.5	8.0	292	6.8	5.3	36	8.0	10	3.6	98

DATE	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
JULY 30...	0	7.0	59	.0	.03	.01	.01	.01	178	120	30	700

PINE CREEK BASIN

273

03216640 PINE CREEK NEAR WHEELERSBURG, OHIO

LOCATION.--Lat 38°39'12", long 82°48'09", Scioto County, at bridge on Junior Furnace-Powellsville Road, 1.7 mi (2.7 km) upstream from Poplar Fork, 6 mi (10 km) southeast of Wheelersburg.

DRAINAGE AREA.--152 mi² (394 km²).

PERIOD OF RECORD.--Discharge, 1972 to current year, chemical analyses, 1972 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	INSTANTANEOUS DISCHARGE	
	(ft ³ /s)	(m ³ /s)
Oct. 11	7.4	0.210
June 17	23	.65

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	DIS-SOLVED OXYGEN (MG/L)	TEMPERATURE (DEG C)	SPE-CIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TOTAL ACIDITY AS H+ (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	HYDROGEN SULFIDE (MG/L)	HARDNESS (CA+MG) (MG/L)
JUNE 17...	1700	23	6.9	19.0	770	3.8	1.1	10	288	.0	340

	TUR- BID- ITY	PHENOLS	TOTAL ORGANIC CARBON (C)	TOTAL ARSENIC (AS)	TOTAL CHROMI- UM (CR)	TOTAL COPPER (CU)	TOTAL IRON (FE)	TOTAL MAN- GANESE (MN)	TOTAL ZINC (ZN)	TOTAL ALUM- INUM (AL)	TOTAL MERCURY (MG)
DATE	(JTJ)	(UG/L)	(MG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
JUNE 17...	20	0	9.0	0	20	20	3300	3700	230	6600	<.5

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	SPE-CIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)
JULY 30...	1710	3.6	26.0	7.1	640	6.8	9.8	74	27	9.9	5.2	36

DATE	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
JULY 30...	0	6.1	270	.2	.05	.01	.49	.13	422	300	10	1900

SCIOTO RIVER BASIN

03218000 LITTLE SCIOTO RIVER ABOVE MARION, OHIO

LOCATION.--Lat 40°37'43", long 83°10'11", Marion County, at bridge on Chesapeake and Ohio Railway, 1 mi (2 km) downstream from Rock Fork, 3.5 mi (5.6 km) northwest of Marion.

DRAINAGE AREA.--72.4 mi² (187.5 km²).

PERIOD OF RECORD.--Discharge, 1939 to 1971 (operated as a continuous-record station); 1972 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 23	6.76	2.060	1,700	48.1

SCIOTO RIVER BASIN

03219500 SCIOTO RIVER NEAR PROSPECT, OHIO

LOCATION.--Lat 40°25'10"N, long 83°11'50"W, Delaware County, 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).

GAGE.--Water-stage recorder. Datum of gage is 886.9 ft (270.33 m) above mean sea level, adjustment 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.--Discharge records good except those for periods of no gage height record, which are fair.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--July 1925 to October 1932, October 1939 to current year. Published as "at Prospect" 1925-32. Gage-height records collected in this vicinity since 1915 are contained in reports of National Weather Service.

AVERAGE DISCHARGE.--43 years, 457 ft³/s (12.94 m³/s), 10.95 in/yr (278 mm/yr).

EXTREMES.--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. 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.

REVISIONS.--WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	37	161	1430	3690	2600	1800	703	78	51	15	165
2	28	39	169	1760	2420	1330	888	507	73	39	14	203
3	27	41	173	1670	1380	797	585	400	96	33	16	122
4	25	60	178	1130	819	574	483	355	133	31	20	75
5	23	150	180	806	631	466	406	324	232	30	19	52
6	20	190	189	639	619	419	336	289	400	98	18	103
7	19	200	171	517	666	615	295	267	703	123	19	132
8	17	130	416	837	570	1290	270	248	552	93	19	109
9	17	110	931	2280	422	1560	248	205	301	125	19	73
10	18	100	1100	3230	361	1310	232	178	194	135	19	48
11	19	130	801	4550	340	865	217	161	145	82	17	36
12	21	180	563	4240	260	1070	205	156	138	52	17	72
13	23	210	753	3500	210	1740	187	152	137	44	16	80
14	27	240	1270	2110	190	1960	169	143	165	52	16	82
15	31	220	1680	900	180	1580	161	137	165	39	16	66
16	36	200	2150	500	270	1000	158	119	137	34	28	53
17	27	160	2270	370	771	1060	156	105	149	45	21	42
18	23	130	2320	340	1980	1280	154	114	154	40	19	44
19	23	110	1890	360	2680	1540	163	108	119	33	18	85
20	23	150	1090	330	3050	1790	169	102	102	34	18	142
21	24	210	654	310	2130	1640	167	96	88	30	16	112
22	25	250	503	280	1190	1040	154	95	86	31	17	88
23	29	170	431	270	2980	670	149	90	67	29	16	70
24	34	270	907	261	6530	556	301	88	57	26	14	73
25	35	390	1840	400	7640	912	699	85	52	23	31	75
26	34	419	2380	1030	7720	1550	815	80	53	21	37	142
27	34	413	2300	1190	6480	1140	608	69	69	18	28	198
28	35	312	1450	736	4470	604	447	66	117	16	21	132
29	36	227	741	1830	---	682	724	64	96	16	21	92
30	37	176	585	2650	---	1510	922	60	72	16	27	66
31	37	---	662	3810	---	2420	---	66	---	16	70	---
TOTAL	836	5624	30908	44266	60649	37620	12268	5632	4930	1455	662	2832
MEAN	27.0	187	997	1428	2166	1214	409	182	164	46.9	21.4	94.4
MAX	37	419	2380	4550	7720	2600	1800	703	703	135	70	203
MIN	17	37	161	261	180	419	149	60	52	16	14	36
CFSM	.05	.33	1.76	2.52	3.82	2.14	.72	.32	.29	.08	.04	.17
IN.	.05	.37	2.03	2.90	3.98	2.47	.80	.37	.32	.10	.04	.19
CAL YR 1974	TOTAL	181834	MEAN	498	MAX	7340	MIN	16	CFSM	.88	IN	11.93
WTR YR 1975	TOTAL	207682	MEAN	569	MAX	7720	MIN	14	CFSM	1.00	IN	13.63

EXTREMES.--Current year: Peak discharges above base of 3,600 ft³/s (102 m³/s) and maximums(*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-11	1700	9.86	4,560	02-26	1300	*13.83	*8,030
01-31	1900	9.29	4,100				

Minimum discharge: 14 ft³/s (0.39 m³/s) Aug. 24.

Note: No gage height record Oct. 1 to Nov. 25.

SCIOTO RIVER BASIN
03219500 SCIOTO RIVER NEAR PROSPECT, OHIO--Continued
WATER QUALITY RECORDS
CHEMICAL ANALYSES

PERIOD OF RECORD.--1964 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
FEB. 20...	1310	3110	3.0	10.1	75	430	7.5	6.2	51	15	5.7	2.7
SEP. 02...	1045	227	21.5	4.4	49	485	6.9	6.1	42	13	18	4.6

DATE	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
FEB. 20...	115	0	5.8	94	15	69	.3	.80	.04	3.8	.37	222
SEP. 02...	115	0	23	94	22	65	.4	.40	.16	2.6	.47	228

DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
FEB. 20...	190	95	30	10	--	--	--	--	--	--	--	--
SEP. 02...	160	64	60	70	4	10	10	10	30	<.5	12	5.8

03219600 EAGON RUN NEAR WARRENSBURG, OHIO

LOCATION.--Lat 40°19'42", long 83°09'11", Delaware County, at Herbert Eagon farm, 0.9 mi (1.4 km) upstream from mouth, 1.7 mi (2.7 km) northeast of Warrensburg, 5 mi (8 km) northwest of Delaware.

DRAINAGE AREA.--0.123 mi² (0.319 km²).

PERIOD OF RECORD.--Discharge, 1950 to 1962 (operated as a continuous-record station); 1963 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 23	4.73	1.442	16	0.45

SCIOTO RIVER BASIN

03220000 MILL CREEK NEAR BELLEPOINT, OHIO

LOCATION.--Lat 40°14'54", long 83°10'26", Delaware County, on left bank at upstream side of county 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).

GAGE.--Water-stage recorder. Datum of gage is 865.14 ft (263.695 m) above mean sea level, adjustment of 1912 (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.--Discharge records good. Diurnal fluctuation caused by stone quarry upstream from station.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--33 years, 151 ft³/s (4.276 m³/s), 11.52 in/yr (293 mm/yr).

EXTREMES.--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.

A stage of 18.0 ft (5.49 m) occurred in March 1913.

REVISIONS.--WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	11	72	1030	510	176	163	129	27	9.4	3.5	29
2	7.6	11	80	610	460	133	125	176	21	8.7	3.2	23
3	7.6	12	95	267	291	99	135	120	16	8.8	3.9	19
4	7.6	13	110	302	202	79	99	110	16	13	5.8	15
5	7.8	68	90	244	174	73	76	125	19	70	8.7	14
6	6.8	66	68	155	349	70	62	86	86	83	8.5	45
7	5.5	46	75	122	313	173	57	64	264	32	8.8	38
8	5.6	39	603	734	120	605	54	51	105	29	10	25
9	4.8	30	818	2040	96	300	49	44	51	191	6.4	17
10	5.3	25	433	1730	80	204	47	40	33	56	4.7	10
11	6.4	23	233	1950	68	171	46	36	28	26	3.8	14
12	7.0	61	205	1100	58	803	42	35	36	17	3.9	21
13	7.5	75	499	342	50	1140	38	36	29	13	6.2	28
14	7.7	68	677	179	45	466	37	34	39	11	6.4	20
15	11	75	843	100	42	253	37	33	34	35	8.2	16
16	11	68	1190	80	123	309	36	30	24	28	16	12
17	7.7	49	963	60	680	497	35	27	30	19	16	11
18	6.6	36	499	75	1460	768	34	26	42	15	19	16
19	6.6	29	264	130	844	590	40	25	27	17	10	46
20	6.6	46	179	118	373	443	39	23	26	17	7.5	35
21	6.6	87	139	92	229	250	34	21	21	12	6.7	24
22	7.2	75	112	84	171	179	34	21	15	12	6.7	20
23	7.1	49	106	78	3550	142	34	21	19	11	6.8	18
24	8.8	44	784	77	7510	140	219	19	39	8.4	7.1	17
25	12	155	1360	432	2590	162	512	18	20	6.3	7.1	32
26	12	203	584	958	534	132	295	15	39	4.9	5.1	64
27	12	170	247	370	334	94	163	12	27	4.4	3.7	52
28	11	118	164	221	242	84	198	10	20	3.8	4.3	38
29	11	88	141	2290	---	758	307	11	16	3.3	5.5	24
30	12	74	143	2300	---	823	173	13	12	2.9	7.6	16
31	12	---	262	713	---	273	---	17	---	3.7	22	---
TOTAL	256.0	1914	12038	18975	21498	10389	3220	1428	1181	771.6	243.1	759
MEAN	8.26	63.8	388	612	768	335	107	46.1	39.4	24.9	7.84	25.3
MAX	12	203	1360	2300	7510	1140	512	176	264	191	22	64
MIN	4.8	11	68	60	42	70	34	10	12	2.9	3.2	10
CFSM	.05	.36	2.18	3.44	4.31	1.88	.60	.26	.22	.14	.04	.14
IN.	.05	.40	2.52	3.97	4.49	2.17	.67	.30	.25	.16	.05	.16

CAL YR 1974 TOTAL 56749.3 MEAN 155 MAX 2560 MIN 2.6 CFSM .87 IN 11.86
WTR YR 1975 TOTAL 72672.7 MEAN 199 MAX 7510 MIN 2.9 CFSM 1.12 IN 15.19

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

DATE	TIME	G. H.	DISCHARGE
01-30	0030	6.76	2,750
02-24	0030	*10.48	*8,660

Minimum daily discharge: 2.9 ft³/s (0.082 m³/s) July 30.

SCIOTO RIVER BASIN

277

03220000 MILL CREEK NEAR BELLEPOINT, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
FEB. 25...	1510	2180	4.0	9.4	72	240	7.6	4.6	26	8.1	3.6	3.0
SEP. 02...	1310	20	23.5	6.8	79	1190	7.4	8.1	80	36	73	8.8

DATE	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
FEB. 25...	94	0	3.8	77	6.6	25	.2	1.2	.02	3.5	.47	124
SEP. 02...	198	0	13	162	62	250	.7	.68	.20	3.2	1.4	616

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
FEB. 25...	98	21	120	0	--	--	--	--	--	--	--
SEP. 02...	350	190	30	50	14	10	10	5	20	<.5	3.8

03220500 O'SHAUGHNESSY RESERVOIR NEAR DUBLIN, OHIO

LOCATION.--Lat 40 09'14", long 83°07'33", Delaware County, 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 at mean sea level (levels by city of Columbus). Prior to Dec. 2, 1940, nonrecording gage at same site and datum.

EXTREMES.--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).REMARKS.--Reservoir is formed by concrete dam; dam completed and storage began in 1924. Usable capacity, 14,500 acre-ft (5.55 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.

COOPERATION.--Capacity table computed from data furnished by City of Columbus.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	847.77	16,850	-
Oct. 31.....	847.73	16,820	-30
Nov. 30.....	848.42	17,480	+660
Dec. 31.....	848.65	17,710	+230
CAL YR 1974.....	-	-	-370
Jan. 31.....	849.67	18,750	+1,040
Feb. 28.....	849.51	18,590	-160
Mar. 31.....	849.24	18,300	-290
Apr. 30.....	848.81	17,870	-430
May 31.....	848.45	17,510	-360
June 30.....	848.22	17,280	-230
July 31.....	847.21	16,340	-940
Aug. 31.....	847.04	16,180	-160
Sept. 30.....	848.19	17,250	+1,070
WTR YR 1975.....	-	-	+400

EXTREMES.--Current year: Maximum contents, 21,150 acre-ft (26.1 hm³) Feb. 24, elevation 851.84 ft (259.641 m); minimum, 15,960 acre-ft (19.7 hm³) Aug. 26, elevation 846.78 ft (258.099 m).

SCIOTO RIVER BASIN

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

LOCATION.--Lat 40°08'36", long 83°07'14", Delaware County, 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).

GAGE.--Water-stage recorder. Datum of gage is 775.00 ft (236.220 m) above mean sea level, adjustment 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.--Discharge records good. Flow regulated since 1924 by O'Shaughnessy Reservoir 0.8 mi (1.3 km) upstream (see station 03220500).

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--54 years, 788 ft³/s (22.32 m³/s).

EXTREMES.--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. 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.

REVISIONS (WATER YEARS).--WSP 803: 1924-35. WSP 1725: 1924. WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	76	320	2980	5100	3570	2500	1150	265	116	56	48
2	57	76	340	3120	3770	2150	1520	986	152	105	53	72
3	51	76	305	2280	2280	1350	1190	727	133	100	53	76
4	49	78	315	1860	1460	984	821	612	145	97	51	91
5	49	76	291	1360	1110	795	634	565	221	90	51	151
6	49	125	296	1030	1290	701	502	515	532	92	49	150
7	42	277	335	806	1290	990	434	411	922	113	45	143
8	36	250	1220	1850	1010	2470	402	390	919	167	44	187
9	36	193	2200	5980	590	2370	364	346	533	355	44	155
10	36	157	1960	7030	490	2010	355	293	340	325	44	114
11	36	154	1430	8760	500	1500	328	262	281	217	44	106
12	37	221	1010	7280	450	2720	307	269	246	137	45	137
13	36	296	1400	4570	400	4190	288	245	217	119	46	100
14	36	382	2310	2900	330	3250	261	226	221	104	45	95
15	39	361	3090	1440	320	2450	255	217	254	98	46	101
16	36	393	4380	946	410	1930	242	209	229	100	45	106
17	37	315	4110	664	1520	2100	239	162	197	97	45	101
18	41	241	3400	621	4640	2910	241	160	241	95	45	111
19	39	201	2570	764	4710	2860	272	155	229	94	45	128
20	46	225	1710	725	4040	2770	255	144	182	93	44	222
21	41	291	1070	552	2950	2380	253	137	150	89	45	238
22	41	254	781	539	1840	1780	249	149	134	87	43	179
23	41	237	664	482	9780	1220	247	148	125	87	43	142
24	53	263	1740	442	23100	1010	634	129	122	84	42	171
25	69	428	4090	1070	15700	1120	1490	123	125	81	41	110
26	65	546	3570	2700	10800	1750	1510	119	119	77	41	119
27	65	621	2890	2080	8450	1660	1130	114	122	74	38	193
28	65	494	2010	1400	5700	1070	918	95	128	71	37	218
29	69	366	1210	6050	---	1810	1180	96	154	66	42	160
30	74	291	910	7400	---	2970	1320	115	134	62	42	128
31	74	---	1040	5860	---	2920	---	185	---	58	43	---
TOTAL	1500	7964	52967	85541	114030	63760	20341	9454	7772	3550	1397	4052
MEAN	48.4	265	1709	2759	4073	2057	678	305	259	115	45.1	135
MAX	74	621	4380	8760	23100	4190	2500	1150	922	355	56	238
MIN	36	76	291	442	320	701	239	95	119	58	37	48

CAL YR 1974 TOTAL 317460 MEAN 870 MAX 13400 MIN 29
WTR YR 1975 TOTAL 372328 MEAN 1020 MAX 23100 MIN 36

EXTREMES.--Current year: Maximum discharge, 24,100 ft³/s (683 m³/s) Feb. 24, gage height, 14.78 ft (4.505 m); minimum daily, 36 ft³/s (1.02 m³/s) Oct. 9-11, 13, 14, 16.

SCIOTO RIVER BASIN

279

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

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
FEB. 27...	1020	8930	2.5	--	--	250	7.6	4.8	28	8.5	4.6	2.9
SEP. 02...	1550	77	24.0	7.0	82	900	7.5	2.5	76	32	24	4.2

DATE	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
FEB. 27...	90	0	3.6	74	7.4	30	.3	1.0	.03	3.1	.56	131
SEP. 02...	200	0	10	164	32	150	.4	.05	.03	.93	.12	420

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
FEB. 27...	110	31	80	10	--	--	--	--	--	--	--	--
SEP. 02...	320	160	20	30	2	10	10	4	10	<.5	9.0	1.4

03221500 GRIGGS RESERVOIR NEAR COLUMBUS, OHIO

LOCATION.--Lat 40°00'54", long 83°05'38", Franklin County, 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) above mean sea level, adjustment of 1912 (levels by city of Columbus); gage readings have been reduced to elevations above mean sea level. Prior to Oct. 4, 1940 nonrecording gage at same site and datum.

EXTREMES.--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).

REMARKS.--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.

COOPERATION.--Capacity table computed from data furnished by city of Columbus.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	755.45	4,390	-
Oct. 31.....	754.92	4,210	-180
Nov. 30.....	755.78	4,510	+300
Dec. 31.....	756.45	4,740	+230
CAL YR 1974.....	-	-	-90
Jan. 31.....	757.55	5,130	+390
Feb. 28.....	757.27	5,030	-100
Mar. 31.....	756.94	4,910	-120
Apr. 30.....	756.49	4,750	-160
May 31.....	755.54	4,430	-320
June 30.....	755.60	4,450	+20
July 31.....	755.19	4,310	-140
Aug. 31.....	754.63	4,120	-190
Sept. 30.....	755.55	4,430	+310
WTR YR 1975.....	-	-	+40

EXTREMES.--Current year: Maximum contents, 6,360 acre-ft (7.84 hm³) Feb. 24, elevation 760.86 ft (231.910 m); minimum, 4,010 acre-ft (4.94 hm³) Aug. 29, elevation 754.31 ft (229.914 m).

SCIOTO RIVER BASIN

281

03221900 DRY RUN AT COLUMBUS, OHIO

LOCATION.--Lat 39°57'22", long 83°06'19", Franklin County, at culvert in Westinghouse employees parking lot at entrance to plant, 1,000 ft (300 m) north of U.S. Highway 40, near west edge of Columbus.

DRAINAGE AREA.--1.72 mi² (4.45 km²).

PERIOD OF RECORD.--Discharge, 1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Sept. 3	21.88	6.669	520	14.7

SCIOTO RIVER BASIN

03223000 OLENTANGY RIVER AT CLARIDON, OHIO

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

GAGE.--Water-stage recorder. Datum of gage is 961.72 ft (293.132 m) above mean sea level, 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.--Discharge records good. Sediment data collected at this site 1969 to 1974.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--29 years, 150 ft³/s (4.248 m³/s), 12.98 in/yr (330 mm/yr).

EXTREMES.--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.

REVISIONS (WATER YEARS).--WSP 1235: 1947, 1948(P). WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	11	118	764	510	263	136	122	27	20	7.9	380
2	21	17	142	562	315	207	111	120	53	15	7.9	180
3	15	128	166	280	219	163	104	88	52	13	7.9	69
4	13	97	150	277	169	134	90	88	77	13	9.5	65
5	12	301	130	240	149	115	78	91	96	13	14	196
6	11	386	120	172	185	112	69	183	221	17	12	349
7	10	204	110	146	204	292	63	396	130	18	10	415
8	9.3	144	551	539	130	745	60	169	76	17	10	122
9	9.2	104	1030	1410	100	468	56	108	49	11	10	53
10	9.0	76	716	1440	88	245	54	83	37	13	8.8	33
11	9.2	65	292	1300	80	190	53	68	33	12	8.3	26
12	9.5	308	226	649	74	365	51	60	42	11	8.0	61
13	9.0	449	459	325	69	663	47	51	84	11	7.8	211
14	8.4	321	547	190	65	451	43	45	55	16	8.7	110
15	8.3	338	638	140	64	236	44	40	41	27	54	45
16	9.0	167	880	110	120	306	43	37	122	20	80	31
17	14	120	764	96	854	404	44	35	97	14	81	21
18	14	97	406	82	1390	390	45	34	53	13	31	39
19	11	85	252	90	1070	312	50	32	38	13	17	451
20	9.7	117	187	94	453	294	53	30	35	14	13	340
21	9.3	327	152	86	265	222	49	27	45	23	11	214
22	8.9	359	128	80	198	176	43	25	49	17	9.9	147
23	9.0	298	114	72	1360	144	43	25	27	15	9.9	67
24	9.9	246	572	64	3730	136	104	25	26	14	13	63
25	9.5	754	885	120	2750	156	231	24	22	12	14	247
26	9.3	818	585	784	1280	127	147	23	19	12	10	226
27	9.9	388	265	500	498	97	91	28	18	11	9.3	128
28	10	212	185	229	353	91	80	26	22	11	9.3	86
29	10	153	156	1100	---	172	104	21	20	11	9.3	62
30	11	123	157	1730	---	347	96	19	20	11	9.3	45
31	11	---	211	1430	---	196	---	20	---	9.7	72	---
TOTAL	349.4	7343	11298	15101	16742	8219	2282	2143	1686	447.7	583.8	4482
MEAN	11.3	245	364	487	598	265	76.1	69.1	56.2	14.4	18.8	149
MAX	30	818	1030	1730	3730	745	231	396	221	27	81	451
MIN	8.3	11	110	64	64	91	43	19	18	9.7	7.8	21
CFSM	.07	1.56	2.32	3.10	3.81	1.69	.48	.44	.36	.09	.12	.95
14.	.08	1.74	2.68	3.58	3.97	1.95	.54	.51	.40	.11	.14	1.06

CAL YR 1974 TOTAL 62388.8 MEAN 171 MAX 3300 MIN 2.8 CFSM 1.09 IN 14.78

WTR YR 1975 TOTAL 70676.9 MEAN 194 MAX 3730 MIN 7.8 CFSM 1.24 IN 16.75

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-09	2200	8.48	1,550	02-24	1530	*11.89	*4,180
01-30	0430	9.11	1,890				

Minimum discharge: 7.2 ft³/s (0.204 m³/s) Aug. 13, 14.

03223000 OLENTANGY RIVER AT CLARIDON, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATURATION	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)
FEB. 20...	1045	419	2.0	10.6	77	440	7.5	6.1	52	14	8.9	2.3
SEP. 03...	1035	64	19.5	6.5	70	505	7.2	10	56	14	12	4.5

DATE	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKALINITY AS CaCO ₃ (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
FEB. 20...	136	0	6.9	112	19	64	.2	.66	.02	3.2	.20	234
SEP. 03...	141	0	14	116	19	69	.2	.04	.06	2.2	.25	254

DATE	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
FEB. 20...	190	76	280	40	--	--	--	--	--	--	--	--
SEP. 03...	200	82	100	30	4	<10	10	6	70	<.5	12	2.6

03225000 DELAWARE LAKE NEAR DELAWARE, OHIO

LOCATION.--Lat 40°21'31"N, long 83°04'10"W, in T.5 N., R.19 W., Delaware County, 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 at mean sea level, Sandy Hook datum (levels by Corps of Engineers).

EXTREMES.--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).

REMARKS.--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.

COOPERATION.--Water-stage recorder graph and capacity curve furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	915.06	14,080	-
Oct. 31.....	914.64	13,530	-550
Nov. 30.....	910.78	9,180	-4,350
Dec. 31.....	910.62	9,020	-160
CAL YR 1974.....	-	-	+450
Jan. 31.....	911.78	10,180	+1,160
Feb. 28.....	928.03	37,080	+26,900
Mar. 31.....	910.79	9,190	-27,890
Apr. 30.....	915.36	14,470	+5,280
May 31.....	915.15	14,200	-270
June 30.....	915.27	14,350	+150
July 31.....	914.38	13,190	-1,160
Aug. 31.....	912.87	11,440	-1,750
Sept. 30.....	914.99	13,990	+2,550
WTR YR 1975.....	-	-	-90

EXTREMES.--Current year: Maximum contents, 50,590 acre-ft (62.4 hm³) Feb. 26, elevation 932.81 ft (284.320 m); minimum, 7,980 acre-ft (9.84 hm³) Mar. 15, elevation 909.53 ft (277.225 m).

SCIOTO RIVER BASIN

03225500 OLENTANGY RIVER NEAR DELAWARE, OHIO

LOCATION.--Lat 40°21'18", long 83°04'02", NE 1/4 T.5 N., R.19 W., Delaware County, 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 mi² (1,018 km²).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 799.58 ft (243.712 m) above mean sea level (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.--Discharge records good. Temperature data collected at this site 1946 to 1961. Flow completely regulated by Delaware Lake since 1951 (see station 03225000).

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--48 years, 347 ft³/s (9.827 m³/s).

EXTREMES.--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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	22	466	1220	1760	4420	240	339	24	25	40	28
2	20	21	466	1610	1080	4430	138	339	25	24	43	22
3	20	22	391	1010	801	4200	76	332	42	24	43	22
4	20	23	353	523	353	1970	27	268	257	24	43	22
5	20	111	280	557	292	368	25	173	353	24	43	23
6	20	574	251	557	499	286	21	148	353	24	43	24
7	20	565	251	491	639	391	21	148	353	24	42	23
8	20	205	729	846	475	1340	21	257	262	24	49	24
9	20	145	1880	2530	346	1610	21	318	92	24	82	24
10	20	145	1780	3390	240	853	21	230	49	24	82	24
11	20	87	912	2870	193	423	21	173	49	24	54	24
12	20	166	475	2140	240	540	21	129	50	24	41	24
13	20	557	629	1330	262	1480	21	100	49	24	43	24
14	20	515	906	515	173	1870	21	61	92	24	43	24
15	20	924	1210	292	132	869	21	43	116	24	44	90
16	20	391	1710	311	262	515	21	43	116	22	43	148
17	20	246	1850	286	1150	918	21	44	116	29	43	126
18	20	339	1230	251	2540	1150	21	46	138	26	44	119
19	44	383	739	311	2560	1080	21	46	135	26	44	145
20	169	466	431	353	1750	931	21	45	123	26	43	158
21	25	648	299	251	876	574	19	45	72	33	39	346
22	25	892	257	169	574	406	20	45	50	41	37	375
23	25	816	262	169	1380	406	21	87	50	37	37	225
24	25	793	610	235	173	368	205	299	50	34	37	119
25	26	962	1560	305	838	292	515	49	34	33	37	105
26	25	1170	1700	1380	1650	292	629	50	26	34	36	151
27	25	1270	999	1800	3460	262	360	34	25	34	36	169
28	25	1250	398	892	4360	215	240	25	25	34	36	173
29	25	968	262	1840	---	305	311	23	25	34	35	169
30	26	531	332	3550	---	466	339	24	25	34	35	141
31	26	---	466	3320	---	698	---	24	---	34	35	---
TOTAL	851	15207	24084	35304	29058	33928	3480	3987	3176	872	1352	3091
MEAN	27.5	507	777	1139	1038	1094	116	129	106	28.1	43.6	103
MAX	169	1270	1880	3550	4360	4430	629	339	353	41	82	375
MIN	20	21	251	169	132	215	19	23	24	22	35	22

CAL YR 1974 TOTAL 14154 MEAN 388 MAX 4100 MIN 20
WTR YR 1975 TOTAL 154390 MEAN 423 MAX 4430 MIN 19

EXTREMES.--Current year: Maximum discharge, 4,580 ft³/s (130 m³/s) Mar. 3, gage height, 87.09 ft (26.545 m); minimum daily, 19 ft³/s (0.54 m³/s) Apr. 21.

SCIOTO RIVER BASIN

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03225500 OLENTANGY RIVER NEAR DELAWARE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
FEB. 20...	1647	1320	3.0	11.0	81	285	7.4	5.5	39	11	8.8	2.5
SEP. 03...	1245	21	24.0	7.4	87	700	7.4	1.3	54	22	23	3.2

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
FEB. 20...	107	0	6.8	88	19	46	.4	1.0	.03	3.3	.22	185
SEP. 03...	181	0	12	148	42	75	.4	.09	.01	.47	.06	310

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
FEB. 20...	140	55	10	20	--	--	--	--	--	--	--	--
SEP. 03...	230	77	10	110	2	<10	10	7	40	<.5	8.8	1.7

03226200 DELAWARE RUN NEAR DELAWARE, OHIO

LOCATION.--Lat 40°18'28", long 83°06'35", Delaware County, at culvert on county highway, 400 ft (100 m) south of State Highway 37, 1 mi (2 km) west of Delaware Corporation line.

DRAINAGE AREA.--5.84 mi² (15.13 km²).

PERIOD OF RECORD.--Discharge, 1947 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 24	12.40	3.780	575	16.3

SCIOTO RIVER BASIN

03226800 OLENTANGY RIVER NEAR WORTHINGTON, OHIO

LOCATION.--Lat 40°06'37", long 83°01'55", in NW 1/4 T.2 N., R.18 W., Franklin County, 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).

GAGE.--Water-stage recorder. Datum of gage is 743.20 ft (226.527 m) above mean sea level.

REMARKS.--Discharge records fair to March 18, poor thereafter. Water temperature records collected at this site 1955 to 1968. Flow regulated by Delaware Lake 21 mi (34 km) upstream (see station 03225000).

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--20 years, 447 ft³/s (12.66 m³/s).

EXTREMES.--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. 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.

REVISIONS (WATER YEARS).--WSP 1625: 1952(M). WSP 1908: Drainage area. WRD Ohio 1972: 1971(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	41	1650	1200	2500	5300	474	468	565	33	50	92
2	22	41	1200	1790	1240	5100	208	432	148	33	56	82
3	21	38	970	1540	1030	4000	322	399	88	33	63	60
4	18	74	750	727	628	2000	135	406	123	38	70	48
5	18	191	600	665	406	636	93	272	438	35	75	24
6	18	379	380	665	673	372	81	195	643	35	64	40
7	18	817	341	643	800	512	72	186	449	35	54	32
8	18	438	1080	953	540	1130	66	222	379	37	70	22
9	26	195	2050	2650	400	1760	62	372	251	36	105	22
10	26	186	2350	4450	300	1080	60	341	62	34	120	20
11	24	195	1350	4170	240	621	58	213	120	34	60	26
12	27	236	614	3110	242	1250	53	208	88	34	52	72
13	30	499	688	1670	334	1530	48	145	70	39	50	46
14	32	869	904	750	317	2000	48	120	120	41	58	30
15	62	1210	1210	400	162	1410	48	76	150	34	70	26
16	64	1040	1970	360	317	775	48	66	170	38	59	93
17	46	359	2090	330	1090	977	46	62	160	42	54	166
18	43	347	1950	330	2790	1240	43	62	150	45	54	191
19	43	443	1140	380	2960	1310	70	62	210	47	54	217
20	174	538	643	420	2190	1040	55	60	160	38	52	195
21	294	704	474	300	1020	825	45	60	110	44	49	236
22	46	877	372	220	743	525	41	60	70	51	46	468
23	40	953	372	226	4790	499	53	70	64	46	46	240
24	40	851	665	261	4320	538	392	317	64	43	46	265
25	40	1170	1360	913	1180	413	696	72	40	42	46	300
26	41	1350	2120	1560	1580	386	800	57	33	43	45	215
27	40	1470	1400	2510	3360	366	586	55	32	43	45	220
28	40	1320	681	1550	4700	305	426	43	38	43	48	225
29	40	1100	399	3440	---	614	399	29	33	43	54	210
30	40	700	406	4190	---	565	438	46	33	43	65	200
31	41	---	480	4030	---	719	---	231	---	44	78	---
TOTAL	1464	18631	32659	46403	40972	39798	5966	5407	5061	1226	1858	4083
MEAN	47.2	621	1054	1497	1463	1284	199	174	169	39.5	59.9	136
MAX	294	1470	2350	4450	4790	5300	800	468	643	51	120	468
MIN	18	38	341	220	182	305	41	29	32	33	45	20

CAL YR 1974 TOTAL 179359 MEAN 491 MAX 4900 MIN 18
WTR YR 1975 TOTAL 203528 MEAN 558 MAX 5300 MIN 18

EXTREMES.--Current year: Maximum discharge, 10,000 ft³/s (283 m³/s) Feb. 24, gage height, 10.92 ft (3.328 m); minimum daily, 18 ft³/s (0.51 m³/s) Oct. 4-8.

SCIOTO RIVER BASIN

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03226800 OLENTANGY RIVER NEAR WORTHINGTON, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
FEB. 27...	1315	2960	4.0	11.6	88	345	7.6	4.9	37	9.9	2.5
SEP. 04...	1430	48	24.0	10.0	120	646	8.2	4.8	68	25	4.0

DATE	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
FEB. 27...	108	0	4.3	89	17	43	.2	1.3	.05	3.0	.44	177
SEP. 04...	190	0	1.9	156	52	110	.4	.16	.02	.98	.31	393

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
FEB. 27...	130	45	80	10	--	--	--	--	--	--	--	--
SEP. 04...	270	120	20	30	2	<10	0	16	250	<.5	17	2.5

SCIOTO RIVER BASIN

289

03226850 LINWORTH RUN NEAR LINWORTH, OHIO

LOCATION.--Lat 40°06'24", long 83°02'35", Franklin County, at culvert on Linworth Road, 0.4 mi (0.6 km) upstream from mouth, 1.2 mi (1.9 km) north of Linworth.

DRAINAGE AREA.--0.40 mi² (1.04 km²).

PERIOD OF RECORD.--Discharge, 1966 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 23	19.21	5.855	61	1.73

03226890 TURKEY RUN AT UPPER ARLINGTON, OHIO

LOCATION.--Lat 40°02'10", long 83°04'06", Franklin County, at culvert on Lytham Road at Upper Arlington.

DRAINAGE AREA.--0.90 mi² (2.33 km²).

PERIOD OF RECORD.--Discharge, 1972 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
May 31	14.48	4.414	125	3.54

03226900 FISHINGER ROAD CREEK AT UPPER ARLINGTON, OHIO

LOCATION.--Lat 40°01'27", long 83°02'38", Franklin County, at culvert on Kenny Road at Upper Arlington.

DRAINAGE AREA.--0.45 mi² (1.17 km²).

PERIOD OF RECORD.--Discharge, 1964 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Sept. 3	19.48	5.938	280	7.93

SCIOTO RIVER BASIN

03227500 SCIOTO RIVER AT COLUMBUS, OHIO

LOCATION.--Lat 39°54'34", long 83°00'33", Franklin County, on right bank at sewage-treatment works 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).

GAGE.--Water-stage recorder. Datum of gage is 680.00 ft (207.264 m) above mean sea level. Prior to Oct. 1, 1924, nonrecording gage at site 200 ft (61 m) upstream at same datum.

REMARKS.--Discharge records good. 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, Big Walnut Creek downstream from Central College, and from well field in Alum Creek basin. For statement on diversions from Alum Creek basin and Big Walnut Creek, see REMARKS for stations 03229000 and 03229500.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--55 years, 1,383 ft³/s (39.17 m³/s).

EXTREMES.--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.

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.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	255	175	1240	3780	8790	8850	3490	2040	2170	278	198	297
2	212	148	1380	4970	5940	7200	2190	1720	806	241	241	228
3	207	162	1210	4460	3760	6100	1810	1440	646	219	421	297
4	193	530	1030	3170	2820	4530	1280	1270	486	437	399	782
5	179	554	929	2490	2010	1790	997	1080	776	250	481	362
6	175	380	807	2080	2270	1250	860	947	2050	224	388	680
7	184	1110	893	1790	2310	1600	769	818	1520	237	273	383
8	170	900	2280	2600	2180	3060	698	745	1560	246	219	383
9	179	554	4270	8020	1610	4360	663	866	1100	341	202	410
10	179	448	4660	11100	1190	3480	640	818	716	534	219	357
11	166	636	3510	12500	1110	2470	600	657	763	426	367	769
12	166	799	2110	10900	1200	5040	567	646	680	311	278	1030
13	179	757	2170	7080	1060	6160	534	561	507	426	232	465
14	179	1180	3210	4740	929	6130	507	486	578	518	336	357
15	716	1380	4250	2550	807	4670	497	449	583	268	486	352
16	260	1270	6280	1780	929	3300	470	415	640	237	321	388
17	193	843	6540	1410	1940	3170	460	357	600	241	246	491
18	162	662	5720	1390	6510	4090	460	336	680	307	224	1210
19	144	709	4110	1420	8070	4720	600	347	634	283	207	782
20	140	907	3010	1530	6750	4160	513	321	518	311	219	788
21	315	1060	2020	1280	4840	3600	476	321	449	273	219	733
22	198	1200	1490	1090	3290	2820	460	311	388	228	232	879
23	166	1350	1260	987	11400	2060	550	404	321	224	316	830
24	166	1180	1880	929	34200	2290	1420	470	307	224	228	1110
25	166	1780	5020	1650	17400	1740	2260	454	465	232	228	663
26	157	1980	6160	4280	12500	2070	2750	394	617	202	232	561
27	144	2140	4850	5070	11300	2280	2230	302	432	194	224	556
28	153	2070	3390	3290	10700	1840	1790	283	518	237	215	663
29	153	1830	2140	7710	---	2560	1690	460	311	202	241	646
30	157	1250	1600	11200	---	3640	1990	640	316	190	432	583
31	162	---	1730	10800	---	3580	---	824	---	170	561	---
TOTAL	6175	29944	91149	138046	167815	114610	34221	21182	22137	8711	9085	18035
MEAN	199	998	2940	4453	5993	3697	1141	683	738	281	293	601
MAX	716	2140	6540	12500	34200	8850	3490	2040	2170	534	561	1210
MIN	140	148	807	929	807	1250	460	283	307	170	198	228
CAL YR 1974	TOTAL	585392	MEAN	1604	MAX	14800	MIN	140				
WTR YR 1975	TOTAL	661110	MEAN	1811	MAX	34200	MIN	140				

EXTREMES.--Current year: Maximum discharge, 44,600 ft³/s (1,263 m³/s) Feb. 24, gage height, 24.88 ft (7.583 m); minimum daily, 140 ft³/s (3.96 m³/s) Oct. 20.

SCIOTO RIVER BASIN
03227500 SCIOTO RIVER AT COLUMBUS, OHIO--Continued
WATER QUALITY RECORDS
CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
FEB. 25...	1050	17500	7.0	11.4	93	215	7.8	4.0	26	7.4	7.2	3.2
SEP. 23...	1100	802	17.5	7.9	82	640	7.5	4.2	66	26	29	4.0

DATE	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
FEB. 25...	80	0	2.0	66	9.0	29	.3	.64	.03	2.7	.78	126
SEP. 23...	198	0	10	162	45	110	.4	.28	.05	.68	.20	382

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
FEB. 25...	95	30	120	10	--	--	--	--	--	--	--	--
SEP. 23...	270	110	10	20	3	<10	0	31	20	<.5	5.2	1.5

03228000 SCIOTO BIG RUN AT BRIGGSDALE, OHIO

LOCATION.--Lat 39°54'56", long 83°03'55", Franklin County, 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.

DRAINAGE AREA.--11.0 mi² (28.5 km²).

PERIOD OF RECORD.--Discharge, 1947 to 1958 (operated as a continuous-record station); 1959 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 23	7.54	2.298	1,280	36.2

SCIOTO RIVER BASIN

03228200 BIG WALNUT CREEK ABOVE SUNBURY, OHIO

LOCATION.--Lat 40°15'04", long 82°50'46", Delaware County, at bridge on U.S. Highway 36, 0.5 mi (0.8 km) downstream from Perfect Creek, at Sunbury.

DRAINAGE AREA.--77.8 mi² (201.5 km²).

PERIOD OF RECORD.--Discharge, 1972 to current year; chemical analyses, 1972 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	INSTANTANEOUS DISCHARGE	
	(ft ³ /s)	(m ³ /s)
July 10	0.54	0.015

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	
JULY 25...	0945	.56.	21.5	7.5	510	7.8	7.8	60	26	19	2.2	257	
DATE		CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
JULY 25...	0	20	67	.3	.00	.01	.10	.08	331	260	20	30	

SCIOTO RIVER BASIN

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03228400 HOOVER RESERVOIR AT CENTRAL COLLEGE, OHIO

LOCATION.--Lat 40°06'30", long 82°52'59", in T.2 N., R.17 W., Franklin County, 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 at mean sea level. Prior to Sept. 10, 1956, nonrecording gage at same site and datum.

EXTREMES.--Period of record: Maximum contents, 86,810 acre-ft (107 km³) Feb. 24, 1975, elevation, 898.26 ft (273.790 m); minimum, 19,010 acre-ft (23.4 hm³) Mar. 1, 1964, elevation, 868.58 ft (264.743 m).

REMARKS.--Reservoir formed by earthfill dam with concrete spillway; dam completed in 1954 and storage began in March 1955. Usable capacity, 60,130 acre-ft (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.

COOPERATION.--Capacity table computed from data furnished by city of Columbus.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	883.91	44,470	-
Oct. 31.....	880.90	37,920	-6,550
Nov. 30.....	883.85	44,330	+6,410
Dec. 31.....	890.88	62,530	+18,200
CAL YR 1974.....	-	-	-6,350
Jan. 31.....	893.12	69,040	+6,510
Feb. 28.....	893.07	68,880	-160
Mar. 31.....	893.06	68,850	+30
Apr. 30.....	893.06	68,850	0
May 31.....	892.00	65,670	-3,180
June 30.....	891.87	65,300	-370
July 31.....	889.20	57,980	-7,320
Aug. 31.....	886.23	50,210	-7,770
Sept. 30.....	884.20	45,160	-5,050
WTR YR 1975.....	-	-	+690

EXTREMES.--Current year: Maximum contents, 86,810 acre-ft (107 km³) Feb. 24 elevation 898.26 (273.790 m); minimum, 37,350 acre-ft (46.1 hm³) Nov. 4, elevation 880.61 ft (268.410 m).

SCIOTO RIVER BASIN

03228500 BIG WALNUT CREEK AT CENTRAL COLLEGE, OHIO

LOCATION.--Lat 40°06'13", long 82°53'03", T.2 N., R.17 W., Franklin County, 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).

GAGE.--Water-stage recorder. Datum of gage is 815.16 ft (248.461 m) above mean sea level.

REMARKS.--Discharge records good. Flow completely regulated by Hoover Reservoir since September 1954 (see station 03228400).

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--37 years, 184 ft³/s (5.211 m³/s).

EXTREMES.--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.

REVISIONS (WATER YEARS).--WSP 873: 1938. WSP 1435: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	102	80	94	502	211	152	197	199	120	158	164
2	99	104	85	79	459	149	160	162	113	124	143	121
3	107	101	91	110	268	123	268	131	107	118	118	123
4	113	118	97	97	182	105	234	129	112	102	123	120
5	105	107	81	94	195	98	182	131	115	104	126	129
6	102	109	99	101	526	112	124	140	786	97	112	117
7	120	104	99	115	490	287	128	115	363	133	129	105
8	105	107	84	110	208	725	117	115	135	104	131	126
9	115	104	94	2040	206	273	128	121	105	174	128	123
10	102	98	98	1800	142	262	110	104	109	142	126	120
11	113	113	105	143	99	204	110	110	110	102	112	123
12	104	95	85	350	110	1810	110	113	101	123	133	218
13	115	101	94	304	112	1630	105	110	113	101	128	104
14	142	121	92	182	107	637	115	124	107	99	123	98
15	166	112	84	145	98	331	105	123	107	113	120	113
16	140	105	84	120	255	816	117	110	120	109	118	120
17	121	98	113	115	1290	587	104	112	109	112	118	113
18	133	98	87	101	944	360	113	118	109	105	129	162
19	113	112	105	104	455	904	110	131	118	101	128	138
20	115	102	94	152	268	695	102	140	123	101	124	99
21	115	92	97	124	195	310	120	149	118	113	142	101
22	128	98	91	110	151	287	112	123	117	112	131	118
23	117	101	92	110	2480	215	98	118	128	124	126	109
24	107	98	182	112	3610	347	123	110	120	120	118	107
25	110	104	220	1000	2940	316	972	113	121	120	135	104
26	105	109	135	1890	2740	257	1030	101	107	120	131	105
27	104	91	98	436	2490	149	319	112	115	126	138	97
28	104	92	97	260	357	142	290	123	110	128	135	113
29	107	85	89	2140	---	301	249	118	95	136	140	112
30	109	78	95	2020	---	418	197	118	128	143	113	136
31	102	---	101	1820	---	220	---	140	---	160	102	---
TOTAL	3540	3059	3148	16378	21879	13281	6204	3861	4420	3686	3938	3638
MEAN	114	102	102	528	781	428	207	125	147	119	127	121
MAX	166	121	220	2140	3610	1810	1030	197	786	174	158	218
MIN	99	78	80	79	98	98	98	101	95	97	102	97
CAL YR 1974 TOTAL	75240		MEAN 206	MAX 2810	MIN 78							
WTR YR 1975 TOTAL	87032		MEAN 238	MAX 3610	MIN 78							

EXTREMES.--Current year: Maximum discharge, 4,730 ft³/s (134 m³/s) Feb. 24, gage height, 11.18 ft (3.408 m); minimum daily, 78 ft³/s (2.21 m³/s) Nov. 30.

SCIOTO RIVER BASIN

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03228500 BIG WALNUT CREEK AT CENTRAL COLLEGE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
FEB. 26...	1030	2730	3.0	10.8	80	363	7.8	4.6	38	12	10	2.6
SEP. 04...	0945	120	21.5	7.9	89	430	7.4	1.5	42	14	9.5	2.8

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
FEB. 26...	102	0	2.6	84	18	55	.2	.73	.04	2.4	.10	191
SEP. 04...	121	0	7.7	99	17	46	.2	.02	.02	1.3	.03	193

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
FEB. 26...	140	61	170	10	--	--	--	--	--	--	--	--
SEP. 04...	160	63	10	30	0	<10	10	3	20	<.5	4.6	1.7

SCIOTO RIVER BASIN

03228750 ALUM CREEK NEAR KILBOURNE, OHIO

LOCATION.--Lat 40°21'24", long 82°55'18", T.5 N., R.17 W., Delaware County, 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).

GAGE.--Water-stage recorder. Datum of gage is 900.99 ft (274.622 m) above mean sea level.

REMARKS.--Discharge records good.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--November 1973 to current year.

EXTREMES.--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.

REVISIONS.--The figures of peak discharge and maximums (*) for water year 1974 have been revised as shown in the following table. They supercede figures published in WRD Ohio 1974.

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-25	1515	7.03	1,310	01-19	1000	*9.69	*2,840
12-27	0045	8.02	1,740	01-21	0830	6.18	959
01-16	2130	7.06	1,320	04-02	0530	7.50	1,510

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	3.1	37	402	137	73	45	61	90	2.3	.61	4.5
2	3.1	2.8	66	121	110	60	39	50	30	2.3	.92	3.9
3	2.6	3.1	72	88	82	49	59	37	29	2.1	2.3	2.5
4	2.4	10	52	115	66	47	46	60	36	2.1	11	1.7
5	2.1	68	44	71	66	44	35	44	72	2.2	7.3	1.6
6	1.7	25	36	48	142	39	30	34	152	2.1	2.5	4.6
7	1.7	25	32	43	104	144	29	28	62	2.1	1.8	3.3
8	1.4	20	489	508	83	221	26	24	28	2.7	1.4	1.8
9	2.1	13	315	793	70	104	24	22	18	2.2	1.2	1.3
10	2.6	9.7	109	300	60	31	24	22	13	1.8	1.1	1.1
11	2.4	10	61	268	54	77	23	22	15	1.6	1.3	1.3
12	2.4	42	91	119	46	467	21	23	31	1.7	1.2	6.2
13	2.4	52	159	74	45	296	19	22	29	2.3	1.3	4.8
14	2.8	48	143	57	43	127	18	20	15	4.3	2.6	2.1
15	5.1	37	141	50	42	111	18	18	16	3.3	2.1	1.5
16	1.2	18	243	45	210	214	18	16	41	2.2	2.6	1.5
17	4.4	13	128	41	491	208	17	16	20	2.3	2.2	1.6
18	3.7	12	77	40	318	140	16	13	13	2.2	1.4	20
19	3.4	11	49	38	163	212	25	12	9.5	2.0	1.2	27
20	3.1	52	40	36	113	147	22	9.0	9.9	1.3	.99	8.2
21	2.8	101	33	35	87	88	17	8.2	7.3	1.7	.92	4.8
22	2.6	85	26	34	77	75	20	7.3	5.5	1.4	1.2	3.5
23	2.4	46	32	32	1630	61	31	9.9	4.3	1.2	1.3	2.5
24	2.6	90	245	43	2650	55	335	9.5	3.7	1.2	.92	6.2
25	2.8	419	206	523	382	59	180	7.8	3.5	.99	.85	11
26	3.1	163	95	488	178	43	114	8.2	4.1	.92	.76	6.9
27	3.1	68	53	142	125	35	62	6.2	5.1	.85	.71	3.9
28	2.4	43	42	40	93	37	60	5.1	4.1	.78	.65	2.8
29	1.9	32	41	1510	---	94	69	4.8	3.3	.78	.99	2.1
30	2.6	25	46	382	---	90	47	12	2.6	.65	1.8	1.6
31	3.7	---	153	165	---	56	---	17	---	.61	2.6	---
TOTAL	91.8	1586.7	3356	6641	7664	3618	1491	649.0	772.9	56.68	59.74	146.0
MEAN	2.96	52.9	108	216	241	117	49.7	20.4	25.8	1.83	1.93	4.87
MAX	7.2	419	489	1510	2650	477	335	61	152	4.3	11	27
MIN	1.7	2.8	26	32	42	35	17	4.8	2.6	.61	.61	1.1
CFSM	.05	.52	1.66	3.33	4.33	1.80	.77	.32	.40	.03	.03	.08
IN.	.05	.91	1.42	3.84	4.51	2.07	.85	.37	.44	.03	.03	.08

CAL YR 1974 TOTAL 21717.88 MEAN 59.5 MAX 2070 MIN 1.72 CFSM .92 IN 12.45
WTR YR 1975 TOTAL 26387.42 MEAN 72.3 MAX 2650 MIN .61 CFSM 1.11 IN 15.13

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-09	0500	6.82	1,200	01-29	1100	8.69	2,110
01-25	2115	7.04	1,320	02-24	0200	*12.05	*4,850

Minimum discharge: 0.56 ft³/s (0.016 m³/s) Aug. 1, 2.

SCIOTO RIVER BASIN

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03228750 ALUM CREEK NEAR KILBOURNE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1973 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
FEB. 26...	1525	157	4.0	11.0	84	440	7.5	6.2	46	14	17	2.3
SEP. 03...	1445	3.9	22.0	8.4	95	1100	7.7	10	96	40	45	4.6

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
FEB. 26...	126	0	6.4	103	34	60	.2	.59	.02	1.6	.17	242
SEP. 03...	242	0	7.7	199	86	170	.4	.03	.01	.12	.04	571

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
FEB. 26...	170	69	10	10	--	--	--	--	--	--	--	--
SEP. 03...	400	210	20	20	1	<10	10	4	30	<.5	5.5	.5

03228804 ALUM CREEK LAKE NEAR WORTHINGTON, OHIO

LOCATION.--Lat 40°11'03", long 82°57'50", Delaware County, 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, and 4.25 mi (6.84 km) northwest of Westerville.

DRAINAGE AREA.--122 mi² (316 km²).

PERIOD OF RECORD.--January to September 30, 1975.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Period of record: Maximum contents, 51,200 acre-ft (63.1 hm³) June 19-23, 1975, elevation 877.90 ft (267.584 m); minimum, 5,860 acre-ft (7.23 hm³) Jan. 25, 1975, elevation 849.59 ft (258.955 m).

REMARKS.--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 wild life conservation purposes. Outflow is controlled mostly by operation of gates in sluiceway through dam, but above spillway level, taintor gates can be used.

COOPERATION.--Gage-height charts and capacity table furnished by Corps of Engineers.

MONTHEND ELEVATIONS AND CONTENTS AT 2400, JANUARY TO SEPTEMBER 1975

	Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.	30.....			
Oct.	31.....			
Nov.	30.....			
Dec.	31.....			
CAL YR 1974.....				
Jan.	31.....	858.09	14,010	-
Feb.	28.....	868.68	30,580	+16,570
Mar.	31.....	873.07	39,720	+9,140
Apr.	30.....	875.93	46,340	+6,620
May	31.....	876.77	48,380	+2,040
June	30.....	877.71	50,730	+2,350
July	31.....	877.47	50,120	-610
Aug.	31.....	877.18	49,400	-720
Sept.	30.....	877.27	49,620	+220
WTR YR 1975.....				

EXTREMES.--Maximum contents during period, 51,200 acre-ft (63.1 hm³) June 19-23, elevation 877.90 ft (267.584 m); minimum, 5,860 acre-ft (7.23 hm³) Jan. 25, elevation 849.59 ft (258.955 m).

SCIOTO RIVER BASIN

03228805 ALUM CREEK AT AFRICA, OHIO

LOCATION.--Lat 40°11'00", long 82°57'47", in SE 1/4 sec. 1, T.3 N., R.18 W., Delaware County, 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).

GAGE.--Water-stage recorder. Datum of gage is 800.00 ft (243.840 m) above mean sea level (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.--Discharge records fair. Flow regulated by Alum Creek Lake since August 1973. Sediment data collected at this site 1969 to 1974.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water year 1962, June 1963 to current year.

AVERAGE DISCHARGE.--12 years, 120 ft³/s (3.398 m³/s).

EXTREMES.--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 is use; no flow at times 1963-65.
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).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	7.6	181	217	275	238	10	7.2	5.2	6.3	8.8	8.5
2	10	7.6	181	234	270	238	10	7.2	3.9	6.3	8.8	7.2
3	9.8	7.6	173	221	261	238	11	7.2	6.3	6.3	9.2	6.7
4	9.8	11	173	201	256	238	11	7.2	7.2	6.3	9.2	7.8
5	9.8	10	169	201	252	157	11	7.2	8.2	6.3	9.2	7.0
6	10	10	154	198	243	13	11	7.2	8.8	6.3	9.5	7.2
7	10	10	186	198	234	15	11	7.2	7.2	6.5	9.2	7.0
8	10	11	190	201	234	14	11	7.2	6.3	6.7	8.8	7.0
9	10	12	238	226	226	14	9.2	7.2	6.0	7.5	8.8	7.0
10	10	13	270	221	221	13	7.0	7.2	6.0	6.3	8.8	7.0
11	10	14	261	221	217	15	7.0	7.2	6.3	6.0	7.8	7.2
12	9.6	14	252	226	213	17	6.7	7.2	6.3	6.0	6.5	7.5
13	9.6	13	247	226	209	13	5.8	6.7	6.0	7.0	6.5	7.5
14	9.6	14	247	226	209	14	5.4	6.5	6.3	7.2	7.0	7.5
15	10	14	247	226	209	15	5.6	6.5	6.0	7.0	7.8	7.5
16	10	14	256	221	209	15	5.8	6.5	6.0	7.0	7.0	7.5
17	9.6	14	261	217	209	14	6.0	5.8	6.3	7.2	7.0	7.5
18	9.6	14	252	217	209	11	6.3	5.6	6.3	7.0	6.7	11
19	9.6	14	247	213	209	12	7.0	5.6	6.3	6.7	6.7	7.0
20	9.6	15	243	209	209	12	6.5	5.6	6.3	6.7	6.7	5.8
21	9.1	15	234	205	205	13	6.5	5.4	6.3	6.7	6.7	5.2
22	9.1	16	226	205	205	14	6.5	5.0	6.3	7.0	6.7	5.0
23	8.6	16	217	201	238	14	7.0	5.0	6.3	7.0	6.7	5.0
24	8.6	17	217	201	243	15	8.5	4.6	6.3	7.0	6.7	6.5
25	9.1	56	230	205	247	14	8.2	4.6	6.3	7.0	6.7	4.4
26	8.6	96	234	213	243	14	8.2	5.8	6.3	7.0	6.7	4.1
27	8.6	133	230	221	238	14	7.8	7.0	6.3	7.2	7.0	4.1
28	8.6	186	226	226	238	14	8.2	6.0	6.3	9.2	7.0	3.7
29	8.1	181	217	247	---	14	8.2	6.3	6.3	9.2	7.5	7.8
30	7.6	181	209	247	---	11	7.5	6.7	6.3	8.8	8.8	8.5
31	7.6	---	209	201	---	10	---	15	---	8.8	8.5	---
TOTAL	290.2	1136.8	6877	6692	6431	1463	240.9	206.6	190.2	217.5	239.0	202.7
MEAN	9.36	37.9	222	216	230	47.2	8.03	6.66	6.34	7.02	7.71	6.76
MAX	10	186	270	247	275	238	11	15	8.8	9.2	9.5	11
MIN	7.6	7.6	154	198	205	10	5.4	4.6	3.9	6.0	6.5	3.7
CAL YR 1974 TOTAL	46128.07											
WTR YR 1975 TOTAL	24186.90											
MEAN 126												
MAX 589												
MIN .84												
MEAN 66.3												
MAX 275												
MIN 3.7												

EXTREMES.--Current year: Maximum discharge, 315 ft³/s (8.92 m³/s) Jan. 28, gage height, 25.50 ft (7.772 m); minimum daily, 3.7 ft³/s (0.105 m³/s) Sept. 28.

SCIOTO RIVER BASIN
03228805 ALUM CREEK AT AFRICA, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
FEB. 26...	1240	243	4.0	10.2	78	390	7.4	5.2	38	12	14	2.6
SEP. 04...	1140	7.5	18.0	8.4	88	465	7.1	5.7	45	14	13	3.2

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CAO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)
FEB. 26...	97	0	6.2	80	28	62	.1	.60	.02	1.9	.20	210
SEP. 04...	140	0	18	115	24	54	.2	.47	.01	.13	.01	229

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
FEB. 26...	140	65	10	10	--	--	--	--	--	--	--
SEP. 04...	170	55	50	1100	2	0	0	2	30	<.5	1.7

SCIOTO RIVER BASIN

03229000 ALUM CREEK AT COLUMBUS, OHIO

LOCATION.--Lat 39°56'42", long 82°56'28", in NW 1/4 sec. 24, T.5 N., R.22 W., Franklin County, 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).

GAGE.--Water-stage recorder. Datum of gage is 733.69 ft (223.629 m) above mean sea level.

REMARKS.--Discharge records good. Flow regulated by Alum Creek Lake 19 mi (31 km) upstream, since Aug. 1973. There was no pumpage from the Alum Creek well field this year.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--July 1923 to December 1935, January 1938 to current year.

AVERAGE DISCHARGE.--49 years, 168 ft³/s (4.758 m³/s).

EXTREMES.--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.

REVISIONS (WATER YEARS).--WSP 758: 1933. WSP 1305: 1928(M). WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	26	347	417	404	291	62	111	867	16	9.6	9.7
2	19	29	367	309	412	280	52	70	144	14	28	9.7
3	19	29	305	339	351	272	89	50	104	16	90	24
4	18	205	241	316	328	268	52	50	52	108	67	29
5	18	169	215	272	339	260	41	41	85	23	93	118
6	18	62	184	252	456	67	37	37	492	18	62	19
7	17	41	241	241	343	184	35	37	136	16	30	30
8	17	32	514	518	294	148	34	35	57	16	18	16
9	18	29	371	745	250	73	34	35	37	34	15	4.0
10	18	26	335	527	225	65	32	34	29	45	34	9.0
11	18	111	313	487	210	59	29	34	111	33	17	27
12	20	237	316	320	200	942	27	37	101	20	15	22
13	29	95	305	290	190	396	26	34	39	86	27	35
14	26	67	302	270	180	256	24	27	73	52	82	19
15	245	50	339	250	170	215	23	24	79	24	23	16
16	47	37	391	240	313	256	23	23	52	20	16	17
17	29	34	335	230	375	132	24	20	121	19	15	18
18	26	30	309	313	347	92	24	19	85	39	22	324
19	24	30	313	313	302	335	57	18	30	36	17	118
20	24	19	294	265	268	176	41	18	23	28	57	89
21	27	76	280	230	252	101	27	17	20	22	26	41
22	23	59	268	220	248	118	29	18	18	16	16	23
23	23	43	264	200	2080	79	70	89	18	15	13	19
24	23	43	447	190	2170	305	309	22	17	14	12	201
25	27	233	438	554	505	140	347	26	256	13	12	57
26	37	197	332	523	379	76	215	26	108	12	12	35
27	23	144	298	320	328	59	92	16	73	12	11	24
28	23	226	280	298	305	89	169	15	29	21	9.0	19
29	22	215	268	1020	---	332	108	104	18	17	19	17
30	26	208	260	500	---	156	73	197	17	11	11	16
31	27	---	324	391	---	82	---	391	---	10	10	---
TOTAL	954	2862	9796	11360	12224	6308	2205	1675	3291	826	888.6	1410.4
MEAN	30.8	95.4	316	366	437	203	73.5	54.0	110	26.6	28.7	47.0
MAX	245	237	514	1020	2170	942	347	391	867	108	93	324
MIN	17	26	184	190	170	59	23	15	17	10	9.0	9.0
CAL YR 1974 TOTAL	77926.0			MEAN 213	MAX 2000	MIN 10						
WTR YR 1975 TOTAL	53800.0			MEAN 147	MAX 2170	MIN 9.0						

EXTREMES.--Current year: Maximum discharge, 4,140 ft³/s (117 m³/s) Feb. 24, gage height, 8.67 ft (2.643 m); minimum daily, 9.0 ft³/s (0.25 m³/s) Aug. 28, Sept. 9, 10.

SCIOTO RIVER BASIN
03229000 ALUM CREEK AT COLUMBUS, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1960 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
FEB. 27...	1605	324	4.0	12.1	92	490	7.7	5.8	49	15	16	2.7
AUG. 12...	1140	16	24.0	6.2	73	600	7.2	6.3	66	20	31	4.0
DATE	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CaCO ₃ (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
FEB. 27...	141	0	4.5	116	28	72	.2	.77	.03	1.8	.21	258
AUG. 12...	214	0	22	176	48	80	.3	.46	.01	14	.13	361
DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (MG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
FEB. 27...	180	68	80	30	--	--	--	--	--	--	--	--
AUG. 12...	250	72	20	120	5	10	10	31	60	<.5	9.0	6.5

SCIOTO RIVER BASIN

03229500 BIG WALNUT CREEK AT REES, OHIO

LOCATION.--Lat 39°51'24", long 82°57'26", in NE 1/4 sec.26, T.4 N., R.22 W., Franklin County, 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).

GAGE.--Water-stage recorder. Datum of gage is 698.20 ft (212.811 m) above mean sea level. 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.--Discharge records good. Flow regulated by Hoover Reservoir 26 mi (42 km) upstream (see station 03228400) and Alum Creek Lake 30 mi (48 km) 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. For statement on pumpage from Alum Creek basin into municipal supply system of the city of Columbus, see REMARKS for station 03229000.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--51 years, 508 ft³/s (14.39 m³/s) (adjusted for diversion).

EXTREMES.--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.

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.

REVISIONS (WATER YEARS).--WSP 1053: 1929, 1933(M), 1943(M), 1945. WSP 1305: 1923(M), 1925-26(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	49	786	955	1540	688	369	484	2200	73	34	404
2	82	53	930	598	1050	582	314	404	547	66	39	159
3	67	54	741	574	826	515	373	284	422	64	89	100
4	62	220	531	625	653	460	425	245	299	449	218	488
5	57	778	429	511	614	429	311	215	218	147	206	127
6	54	325	383	441	1070	308	269	175	1390	89	212	376
7	51	173	369	411	1100	460	195	167	995	87	157	155
8	49	134	1260	669	680	1000	175	149	401	72	73	86
9	49	107	1000	2370	574	696	165	125	215	68	53	66
10	51	93	606	3260	445	484	155	115	145	102	51	53
11	57	154	511	1660	441	460	149	109	236	131	165	147
12	55	1040	504	804	456	3120	133	109	415	75	123	935
13	65	559	563	772	418	3800	123	117	230	100	68	401
14	79	352	508	614	387	1480	117	108	175	257	73	163
15	586	272	539	496	383	1030	112	99	167	105	165	94
16	442	195	925	460	484	1200	111	96	236	72	178	80
17	193	155	637	408	1430	960	109	96	151	61	83	77
18	132	137	531	468	1650	696	106	89	394	80	61	732
19	101	125	500	649	995	1440	183	94	195	78	49	880
20	98	215	484	555	700	1450	157	97	121	77	45	539
21	77	311	441	468	551	718	117	83	103	78	42	390
22	71	266	433	449	480	566	105	77	93	61	39	178
23	69	215	418	397	3340	563	123	131	86	51	129	121
24	67	167	777	418	10700	1220	925	106	81	46	97	763
25	70	574	1060	965	4800	960	1250	90	257	44	52	504
26	86	586	763	3360	3280	488	2010	115	594	41	41	248
27	65	373	535	1280	2940	418	759	82	233	40	37	161
28	55	376	464	718	1620	341	661	70	129	44	33	121
29	54	362	437	2590	---	1040	582	178	97	62	34	99
30	56	338	422	2860	---	880	422	376	85	38	157	86
31	58	---	500	2650	---	610	---	376	---	35	404	---
TOTAL	3170	8758	18987	33455	43607	29042	11007	5061	10910	2793	3207	8733
MEAN	102	292	612	1079	1557	937	367	163	364	90.1	103	291
MAX	586	1040	1260	3360	10700	3800	2010	484	2200	449	404	935
MIN	49	49	369	397	383	308	105	70	81	35	33	53
(*)	116	104	99.4	108	106	103	104	116	116	121	128	117
CAL YR 1974 TOTAL	181479											
WTR YR 1975 TOTAL	178730											
MEAN 497												
MAX 6360												
MIN 41												
MEAN 490												
MAX 10700												
MIN 33												

(*) Diversion, equivalent in cubic feet per second for city of Columbus.

EXTREMES.--Current year: Maximum discharge, 12,600 ft³/s (357 m³/s) Feb. 24, gage height, 14.96 ft (4.560 m); minimum daily, 33 ft³/s (0.935 m³/s) Aug. 28.

SCIOTO RIVER BASIN
03229500 BIG WALNUT CREEK AT REES, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1964 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
FEB. 28...	1225	1360	3.5	11.9	89	355	7.7	5.4	47	15	13	2.6
AUG. 12...	1350	112	24.5	7.2	86	510	7.5	5.4	57	16	23	3.5

DATE	RICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)
FEB. 28...	142	0	4.5	117	23	62	.2	1.1	.04	2.1	.26	238
AUG. 12...	170	0	8.6	139	35	63	.4	.17	.07	.79	.16	287

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (MG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
FEB. 28...	180	63	30	30	--	--	--	--	--	--	--	--
AUG. 12...	210	69	20	40	7	<10	10	14	30	<.5	7.6	5.0

SCIOTO RIVER BASIN

03229600 SCIOTO RIVER BELOW SHADEVILLE, OHIO

LOCATION.--Lat 39°47'37", long 83°00'40", Pickaway County, 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 Shaderville.

DRAINAGE AREA.--2,266 mi² (5,869 km²).

GAGE.--Water-quality recorder.

REMARKS.--Interruptions in the daily water-quality records were due to malfunctions of the instrument.

WATER QUALITY RECORDS

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

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	
DATE	TIME						(UNITS)						
MAR. 21...	0945	5040	7.0	10.5	86	508	7.7	6.4	64	18	16	2.8	
AUG. 11...	1300	524	27.5	2.4	30	779	6.8	7.3	66	22	46	6.1	
DATE		BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- TENTS) (MG/L)
MAR. 21...	174	0	5.6	143	28	76	.2	.67	.05	3.6	.43	297	
AUG. 11...	178	0	45	146	53	130	1.0	4.8	.71	.79	1.3	419	
DATE		HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 21...	230	91	80	30	--	--	--	--	--	--	--	--	--
AUG. 11...	260	110	40	50	3	<10	10	5	70	<.5	7.8	5.0	

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	686	572	922	907	702	649	605	536	480	422	395	339
2	812	257	914	872	650	615	558	527	488	450	411	347
3	885	749	894	858	664	637	591	560	468	443	375	348
4	920	891	866	736	687	665	645	594	516	471	437	353
5	906	719	730	572	707	682	650	638	558	519	533	429
6	---	---	689	605	721	682	641	600	563	539	546	531
7	---	---	784	645	733	698	627	606	542	500	617	548
8	---	---	715	646	726	522	615	585	548	506	624	497
9	---	---	736	714	561	500	584	377	590	549	494	461
10	---	---	763	720	625	568	450	372	653	596	567	495
11	921	618	727	687	653	629	435	399	656	626	668	573
12	669	509	665	507	673	650	408	384	684	636	681	264
13	782	606	598	499	688	661	444	404	786	689	368	254
14	837	738	643	568	669	605	479	443	806	788	506	369
15	878	653	669	627	606	568	552	483	806	731	584	507
16	690	584	681	652	573	549	558	527	747	675	599	492
17	674	635	675	666	569	547	605	561	698	500	486	456
18	752	692	682	669	561	540	653	590	542	503	491	473
19	765	648	693	678	590	542	798	654	596	543	488	422
20	791	743	717	675	642	597	773	728	579	494	444	386
21	798	684	687	678	681	624	741	710	494	483	500	452
22	---	---	676	660	658	617	717	677	506	492	527	501
23	---	---	670	642	633	611	696	654	506	299	557	530
24	---	---	679	655	625	590	678	641	291	204	546	411
25	---	---	685	631	585	513	665	632	356	266	453	413
26	---	---	624	550	540	512	656	399	371	335	543	456
27	---	---	630	583	591	544	573	432	365	336	575	551
28	---	---	643	618	584	558	597	567	359	335	602	575
29	---	---	669	642	580	569	627	384	---	---	603	483
30	---	---	679	670	577	556	441	377	---	---	519	473
31	---	---	---	---	609	572	455	413	---	---	545	521
MONTH	---	---	922	499	733	500	798	372	806	204	681	254
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	555	542	---	---	---	---	---	---	768	746	573	504
2	576	554	576	567	---	---	---	---	776	749	563	503
3	593	552	575	561	543	489	---	---	773	695	624	563
4	611	576	581	563	558	521	---	---	689	635	761	497
5	600	509	609	569	557	501	---	---	654	600	599	488
6	590	512	647	626	512	335	---	---	722	626	746	522
7	585	500	677	651	398	333	---	---	708	644	579	524
8	638	536	691	666	438	402	668	641	651	629	617	585
9	653	594	701	647	450	440	701	674	692	656	674	623
10	660	594	687	651	456	443	704	641	722	686	681	672
11	675	600	684	651	624	446	675	648	720	632	753	680
12	693	659	683	661	593	530	710	675	639	606	668	456
13	690	660	708	683	558	530	726	692	668	632	564	486
14	684	660	727	696	560	546	711	660	713	665	660	564
15	708	653	752	713	579	546	663	617	723	593	695	665
16	749	698	770	743	590	539	687	642	599	561	734	698
17	734	705	---	---	599	567	719	689	633	599	752	729
18	713	684	746	739	603	588	756	716	662	638	725	503
19	704	678	752	726	609	588	734	677	689	657	533	413
20	683	668	747	732	609	596	701	683	726	660	591	534
21	692	669	769	743	647	567	698	659	759	729	572	540
22	690	545	764	746	657	536	683	660	752	722	642	573
23	---	---	789	762	---	---	719	687	738	689	717	650
24	---	---	---	---	---	---	738	716	714	675	723	497
25	---	---	---	---	707	687	747	729	695	650	596	471
26	---	---	---	---	---	---	774	741	704	680	687	603
27	---	---	---	---	---	---	789	734	743	704	711	666
28	---	---	763	747	---	---	764	723	770	743	713	678
29	---	---	814	763	---	---	752	704	780	758	714	672
30	---	---	768	612	---	---	752	702	797	714	756	716
31	---	---	678	606	---	---	782	750	722	585	---	---
MONTH	---	---	814	561	---	---	---	---	797	561	761	413
YEAR	922	204										

PH (UNITS)

EXTREMES.--Period of record: Maximum, 9.5 June 30, 1972; minimum, 5.1 Mar. 16, 1972.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITRE

EXTREMES.--Period of record: Maximum, 15.0 mg/l or higher Feb. 7-11, 1969; minimum, 0.0 mg/l on many days during 1965-68, 1971, 1973-75.

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1.6	.9	4.2	2.7	10.7	10.1	11.0	10.4	10.6	10.4	11.3	11.0
2	2.6	1.3	4.3	2.7	10.6	10.4	11.6	11.0	10.4	10.3	11.3	11.0
3	---	---	4.4	2.6	10.9	10.5	11.6	11.1	10.4	10.3	11.6	11.3
4	---	---	3.2	0.0	10.8	10.5	11.2	10.8	10.2	10.0	11.6	11.5
5	---	---	5.0	2.7	10.9	10.5	11.0	10.8	9.9	9.5	11.6	10.7
6	---	---	5.7	4.6	10.8	10.3	10.9	10.7	9.6	9.5	10.8	10.3
7	---	---	5.7	3.6	10.4	9.8	10.8	10.4	12.4	9.6	10.3	9.7
8	---	---	6.4	5.8	10.6	10.0	10.7	10.2	12.6	12.3	10.9	9.7
9	---	---	6.9	6.3	10.6	10.1	10.2	9.9	12.8	12.5	11.7	11.0
10	---	---	6.8	6.0	12.1	10.6	11.2	9.8	12.9	12.3	11.6	11.0
11	---	---	6.4	4.6	12.2	11.2	10.3	9.3	12.8	11.9	11.2	10.8
12	---	---	7.0	5.0	11.8	11.1	10.4	9.3	12.3	12.0	10.9	10.5
13	---	---	6.8	6.4	11.4	10.9	10.6	9.6	12.2	11.3	11.3	10.8
14	---	---	7.7	6.4	11.2	10.4	10.8	9.8	11.9	11.5	11.4	11.2
15	---	---	8.4	7.3	11.3	10.8	11.0	9.6	11.6	10.8	11.5	11.2
16	4.7	2.9	8.8	8.3	10.9	10.2	10.7	9.2	10.7	10.4	11.2	11.0
17	4.1	2.2	8.3	7.7	10.7	10.1	13.4	9.2	11.0	10.4	11.2	10.1
18	3.9	2.4	7.6	7.1	10.7	10.5	12.3	9.0	11.5	10.9	10.4	10.1
19	3.3	2.6	7.3	6.6	10.7	10.3	12.6	9.5	11.6	11.4	10.1	9.5
20	3.8	2.9	6.7	6.0	10.5	10.3	12.5	10.7	11.8	11.5	10.2	9.6
21	3.9	2.9	7.1	6.2	10.4	10.1	12.6	10.8	11.7	11.5	9.9	9.2
22	4.3	3.8	7.8	6.9	10.1	9.7	12.3	10.7	11.4	10.8	---	---
23	3.9	3.4	8.3	7.7	9.8	9.4	11.9	10.3	10.8	9.5	---	---
24	3.2	1.9	8.0	7.6	9.4	9.0	11.6	10.4	10.1	9.3	---	---
25	---	---	7.8	7.2	9.3	9.1	11.4	10.4	11.4	10.1	---	---
26	---	---	9.0	8.1	9.6	9.4	11.3	10.4	11.6	11.2	---	---
27	---	---	9.8	9.4	---	---	11.5	11.3	11.7	11.5	---	---
28	---	---	10.2	9.9	---	---	11.4	10.8	11.7	11.2	---	---
29	---	---	12.7	10.5	---	---	10.8	10.3	---	---	10.1	9.6
30	---	---	10.7	10.2	---	---	10.8	10.1	---	---	9.9	9.6
31	---	---	---	---	11.7	10.3	10.8	10.3	---	---	10.1	9.9
MONTH	---	---	12.7	0.0	12.2	9.0	13.4	9.0	12.9	9.3	---	---
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.1	9.2	---	---	---	---	---	---	1.6	0.0	.8	.2
2	9.1	7.7	---	---	---	---	---	---	.4	0.0	.7	.4
3	7.8	7.3	---	---	6.4	4.2	---	---	.4	0.0	.7	0
4	7.9	7.5	---	---	---	---	---	---	1.3	0.0	3.3	0
5	8.0	7.7	12.6	10.5	---	---	---	---	.8			

SCIOTO RIVER BASIN

03230400 BIG DARBY CREEK AT DAREYDALE, OHIO

LOCATION.--Lat 39°50'58", long 83°11'20", Franklin County, at McKinley Bridge at Darbydale.

DRAINAGE AREA.--449 mi² (1,163 km²).

PERIOD OF RECORD.--Discharge, 1964 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 23	17.44	5.316	19,800	561

SCIOTO RIVER BASIN

03230500 BIG DARBY CREEK AT DARBYVILLE, OHIO

LOCATION.--Lat 39°42'03", long 83°06'35", Pickaway County, near right bank on downstream side of pier 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 mi (5 km) downstream from Greenbrier Creek.

DRAINAGE AREA.--534 mi² (1,383 km²).

GAGE.--Water-stage recorder. Datum of gage is 713.69 ft (217.533 m) above mean sea level. Prior to Mar. 17, 1940 nonrecording gage at same site and datum.

REMARKS.--Discharge records good. Sediment data collected at this site 1969 to 1974.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--51 years, 444 ft³/s (12.57 m³/s), 11.29 in/yr (287 mm/yr).

EXTREMES.--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.

REVISIONS (WATER YEARS).--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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	162	73	283	1260	2320	1200	832	699	1230	154	34	42
2	142	77	345	1650	1810	962	667	683	892	129	31	49
3	115	76	360	934	1430	789	643	623	585	111	33	53
4	98	102	300	828	1090	657	736	523	461	124	33	66
5	87	282	275	799	925	578	538	471	381	124	32	54
6	80	434	250	654	1090	534	458	429	852	230	45	81
7	74	342	275	570	1260	552	419	368	1290	211	50	125
8	68	253	815	560	915	844	390	323	781	150	49	90
9	70	204	1750	2390	692	876	365	298	482	120	43	67
10	64	174	1470	3700	535	679	350	273	365	103	42	69
11	63	196	899	3610	537	604	338	252	323	90	38	60
12	60	375	720	4200	541	2320	318	242	353	77	33	83
13	60	490	953	1990	469	3690	295	245	332	81	31	76
14	59	428	1390	1140	397	2470	276	227	298	100	29	65
15	84	335	1620	816	363	1570	271	215	279	81	49	64
16	160	281	2350	672	406	1550	268	211	312	73	81	62
17	140	248	2310	544	744	1460	258	197	255	81	73	65
18	127	215	1630	510	1790	1500	255	188	255	76	74	77
19	108	196	1110	718	2150	1850	281	183	235	73	62	97
20	103	207	854	810	1230	1460	281	175	230	70	60	86
21	100	233	705	599	850	1060	250	166	192	71	50	124
22	91	396	623	517	671	896	227	156	160	73	43	133
23	87	300	576	460	2530	793	225	156	150	67	39	105
24	89	242	724	441	10700	1290	559	170	140	57	31	142
25	85	256	2050	665	15000	950	1700	179	135	54	31	125
26	82	430	1840	1960	5900	703	1780	164	245	50	29	98
27	82	479	1080	1590	2190	545	1170	154	1270	46	31	86
28	79	381	803	877	1540	523	872	142	509	41	31	105
29	74	305	675	1370	---	1300	880	148	281	41	29	95
30	77	247	624	4960	---	2190	749	237	197	37	31	81
31	76	---	637	4630	---	1260	---	268	---	34	34	---
TOTAL	2846	8257	30296	46424	60075	37665	16651	8765	13470	2829	1301	2525
MEAN	91.8	275	977	1498	2146	1215	555	283	449	91.3	42.0	84.2
MAX	162	490	2350	4960	15000	3690	1780	699	1290	230	81	142
MIN	59	73	250	441	363	523	225	142	135	34	29	42
CFSM	.17	.51	1.83	2.81	4.02	2.28	1.04	.53	.84	.17	.08	.16
IN.	.20	.58	2.11	3.23	4.18	2.62	1.16	.61	.94	.20	.09	.18

CAL YR 1974 TOTAL 197847 MEAN 542 MAX 5370 MIN 32 CFSM 1.02 IN 13.78
WTR YR 1975 TOTAL 231104 MEAN 633 MAX 15000 MIN 29 CFSM 1.19 IN 16.10

EXTREMES.--Current year: Peak discharges above base of 4,500 ft³/s (127 m³/s) and maximums (*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-12	0700	9.27	4,610	02-25	0600	*15.07	*17,500
01-31	0300	10.18	5,800				

Minimum discharge: 28 ft³/s (0.79 m³/s) Aug. 26, 29, 30.

SCIOTO RIVER BASIN

03230500 BIG DARBY CREEK AT DAREYVILLE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1964 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
FEB. 24...	1415	11200	7.0	8.1	66	242	7.5	4.6	27	9.2	4.5	3.1
AUG. 14...	1210	38	25.5	8.4	100	670	7.8	5.1	64	36	23	2.8

DATE	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
FEB. 24...	98	0	5.0	80	8.5	22	.3	1.1	.04	2.8	.83	128
AUG. 14...	332	0	8.4	272	32	67	.5	.16	.01	.10	.05	394

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
FEB. 24...	110	25	70	10	--	--	--	--	--	--	--	--
AUG. 14...	310	36	20	30	3	<10	0	3	20	<.5	3.6	5.2

03230600 HOMINY CREEK AT CIRCLEVILLE, OHIO

LOCATION.--Lat 39°35'26", long 82°55'25", Pickaway County, at bridge adjacent to State Highway 56, 0.4 mi (0.6 km) southeast of railroad crossing at east edge of Circleville.

DRAINAGE AREA.--5.66 mi² (14.66 km²).

PERIOD OF RECORD.--Discharge, 1947 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 24	4.96	1.512	390	11.0

SCIOTO RIVER BASIN

03230700 SCIOTO RIVER AT CIRCLEVILLE, OHIO

LOCATION.--Lat 39°36'05", long 82°57'19", in SW 1/4 sec. 19, T.11 N., R.21 W., Pickaway County, 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).

GAGE.--Water-stage recorder. Datum of gage is 643.03 ft (195.996 m) above mean sea level.

REMARKS.--Discharge records good. 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 DISCHARGE RECORDS

PERIOD OF RECORD.--October 1973 to current year. Gage-height records collected in this vicinity since September 1915, are contained in reports of National Weather Service.

EXTREMES.--Period of record: Maximum discharge, 61,500 ft³/s (1,740 m³/s) Feb. 25, 1975, gage height, 21.95 ft (6.690 m); minimum daily, 405 ft³/s (11.5 m³/s) Aug. 29, 1975.
Flood of Mar. 26, 1913 reached a stage of 28.2 ft (8.60 m), from information supplied by National Weather Service, and has not been exceeded since.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	903	524	2720	5530	17900	14400	6040	4320	5870	956	431	3850
2	724	520	3980	7770	12900	10700	4780	4150	4230	834	449	1630
3	611	523	3930	6800	8230	8460	4250	3480	2550	743	588	1070
4	588	569	2990	5870	5770	7350	4070	3010	2150	987	876	1850
5	555	2060	2480	4670	4490	5000	3070	2690	1790	1350	1110	1410
6	524	1650	2200	3870	5160	3370	2610	2430	4120	921	868	1280
7	506	1690	2030	3390	5970	3180	2360	2170	5410	950	1070	1310
8	505	1910	4050	3250	4860	4730	2180	1960	3790	860	695	915
9	492	1440	7940	8610	3790	6610	2040	1900	2810	785	550	785
10	491	1120	7500	14700	2930	5920	1950	1910	2090	926	522	726
11	485	1070	5990	18600	2700	4840	1870	1730	1720	1050	1120	715
12	476	2870	4450	19700	2990	8820	1770	1590	2260	902	1030	3660
13	478	3070	3920	14000	2950	18100	1660	1720	1860	796	696	2520
14	467	2580	4750	7340	2510	16000	1570	1480	1580	1360	567	1360
15	1040	2220	5860	5340	2270	11600	1530	1370	1530	1060	960	948
16	1550	2430	8890	3760	2270	8330	1500	1280	1710	747	1460	807
17	1000	1940	10200	3080	3910	7100	1400	1210	1630	667	1140	808
18	745	1550	8810	2810	7680	6950	1440	1120	3040	707	730	1640
19	651	1430	6850	3750	11200	9350	1550	1070	2020	756	641	3810
20	593	1620	5350	3960	9980	10700	1700	1060	1610	759	578	2720
21	592	1870	4060	3250	7620	7430	1470	1010	1370	765	538	2700
22	684	2140	3320	2880	5430	5880	1380	1000	1320	679	492	1890
23	575	2220	2910	2700	8200	4930	1340	1060	1080	607	479	1730
24	549	2090	3120	2500	35300	7340	4730	1130	954	579	631	3280
25	541	2480	6720	2500	59400	7470	6530	1290	880	564	497	3690
26	540	3740	9270	6500	43700	4700	9720	1050	2030	551	446	2030
27	531	3410	7530	11000	23800	4410	6560	994	2600	505	431	1550
28	511	3230	5700	8000	17900	3960	4740	868	2100	483	415	1420
29	505	2960	4140	6000	---	6180	4350	848	1410	505	405	1370
30	509	2510	3250	15000	---	8110	4080	1710	1080	500	514	1230
31	524	---	2990	18900	---	6970	---	1640	---	459	2350	---
TOTAL	19465	59436	157900	226030	322010	238890	94300	54250	68594	24313	23279	54704
MEAN	628	1981	5094	7291	11500	7706	3143	1750	2286	784	751	1823
MAX	1550	3740	10200	19700	59400	18100	9720	4320	5870	1360	2350	3850
MIN	476	520	2030	2500	2270	3180	1340	848	880	459	405	715
CAL YR 1974	TOTAL	117985	MEAN	3233	MAX	25300	MIN	460				
WTR YR 1975	TOTAL	1343171	MEAN	3680	MAX	59400	MIN	405				

EXTREMES.--Current year: Maximum discharge, 61,500 ft³/s (1,740 m³/s) Feb. 25, gage height, 21.95 ft (6.690 m); minimum daily, 405 ft³/s (11.5 m³/s) Aug. 29.

SCIOTO RIVER BASIN
03230700 SCIOTO RIVER AT CIRCLEVILLE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1973 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
FEB. 28...	1445	17300	5.0	11.2	88	355	7.6	5.2	39	12	8.4	2.7
AUG. 14...	1040	564	25.5	4.3	110	625	7.1	6.1	64	24	30	4.6

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
FEB. 28...	127	0	5.1	104	14	44	.3	1.1	.03	2.8	.48	188
AUG. 14...	232	0	29	190	39	89	.5	1.7	.33	.97	.85	372

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
FEB. 28...	150	43	90	10	--	--	--	--	--	--	--	--
AUG. 14...	260	68	10	80	3	10	10	13	50	<.5	8.6	8.0

SCIOTO RIVER BASIN

03230800 DEER CREEK AT MOUNT STERLING, OHIO

LOCATION.--Lat 39°42'54"N, long 83°15'26"W, Madison County, 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).

GAGE.--Water-stage recorder. Datum of gage is 836.25 ft (254.889 m) above mean sea level.

REMARKS.--Discharge records good. Sediment data collected at this site 1969 to 1974.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1966 to current year.

AVERAGE DISCHARGE.--9 years, 242 ft³/s (6.85 m³/s), 14.42 in/yr (366.3 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 11,600 ft³/s (329 m³/s) (revised) May 24, 1968, gage height, 11.87 ft (3.618 m); minimum, 5.1 ft³/s (0.14 m³/s) Nov. 24, 1970.

REVISIONS.--The maximum discharge for the water year 1968 has been revised to 11,600 ft³/s (329 m³/s) May 24, 1968, gage height, 11.87 ft (3.618 m), superceding figure published in WSP 2108 and WRD Ohio 1968.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	44	136	877	1060	456	440	357	698	62	22	15
2	70	45	151	526	740	372	339	326	482	52	21	13
3	54	105	134	409	521	311	299	261	308	46	22	11
4	45	136	125	413	418	273	236	232	231	132	25	15
5	41	341	112	341	391	249	205	196	181	223	34	21
6	37	243	105	292	582	240	185	170	445	153	36	16
7	35	178	120	263	501	285	174	150	453	125	36	21
8	33	144	664	274	353	348	164	135	254	87	29	15
9	32	130	877	1040	292	276	153	127	173	108	23	12
10	31	114	511	1010	243	266	150	118	138	81	22	12
11	31	116	366	2220	257	245	141	110	130	59	20	12
12	31	223	357	1250	270	2480	133	110	161	50	19	41
13	30	217	641	636	240	2670	124	107	144	51	18	42
14	28	167	658	455	201	1290	116	96	120	51	19	49
15	54	134	722	353	186	1010	117	91	107	48	28	37
16	123	114	1260	295	226	1240	112	89	98	40	38	29
17	95	100	843	247	450	845	110	80	89	36	26	27
18	72	89	566	277	608	672	110	76	115	40	24	36
19	61	86	445	468	492	842	128	75	89	56	22	44
20	61	95	374	357	370	680	121	69	75	42	21	54
21	61	98	325	277	299	497	103	66	68	37	19	52
22	62	89	292	240	263	476	93	66	64	33	18	40
23	62	78	284	217	2130	435	98	75	62	28	17	37
24	61	123	526	220	9080	1110	530	68	58	26	15	50
25	57	139	797	436	2960	737	1240	60	55	28	13	55
26	54	159	561	1030	1060	433	1510	57	95	26	13	47
27	49	149	400	506	723	334	712	57	767	25	15	42
28	46	141	333	370	562	336	524	54	189	22	19	38
29	45	121	299	698	---	1550	440	63	121	22	14	32
30	46	110	281	990	---	1020	335	97	82	22	12	30
31	46	---	310	863	---	578	---	124	---	22	20	---
TOTAL	1648	4028	13575	17850	25478	22556	9142	3762	6052	1833	680	945
MEAN	53.2	134	438	576	910	728	305	121	202	59.1	21.9	31.5
MAX	123	341	1260	2220	9080	2670	1510	357	767	223	38	55
MIN	28	44	105	217	186	240	93	54	55	22	12	11
CFSM	.23	.59	1.92	2.53	3.99	3.19	1.34	.53	.89	.26	.10	.14
IN.	.27	.66	2.21	2.91	4.16	3.68	1.49	.61	.99	.30	.11	.15

CAL YR 1974 TOTAL 94156.2 MEAN 258 MAX 3560 MIN 9.2 CFSM 1.13 IN 15.36
WTR YR 1975 TOTAL 107549.0 MEAN 295 MAX 9080 MIN 11 CFSM 1.29 IN 17.55

EXTREMES.--Current year: Peak discharges above base of 1,900 ft³/s (53.8 m³/s) and maximums (*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-11	1400	7.96	2,600	03-29	1430	7.40	1,910
02-24	1030	*11.42	*10,200	04-26	0030	7.44	1,960
03-12	2100	9.16	4,510	06-27	0800	7.50	2,030

Minimum discharge: 9.9 ft³/s (0.28 m³/s) Sept. 3, 11.

03230800 DEER CREEK AT MOUNT STERLING, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1967 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 07...	1005	253	7.0	7.4	61	600	8.1	5.5	68	30	7.7	1.4
AUG. 13...	1715	17	26.5	7.4	89	555	8.0	2.8	56	31	16	3.3

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 07...	294	0	3.7	241	15	50	.5	.08	.03	2.9	.14	323
AUG. 13...	288	0	4.6	236	21	7.0	.6	.07	.01	.10	.04	280

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (C) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND (5 DAY) (MG/L)
MAR. 07...	290	52	30	10	--	--	--	--	--	--	--	--
AUG. 13...	270	31	10	40	36	<10	10	4	30	<.5	6.6	6.1

03230890 DEER CREEK LAKE NEAR PANCOASTBURG, OHIO

LOCATION.--Lat 39°37'20", long 83°12'58", Pickaway County, 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 at mean sea level (levels by Corps of Engineers).

EXTREMES.--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).

REMARKS.--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.

COOPERATION.--Gage-height chart and capacity table furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	810.32	21,440	-
Oct. 31.....	810.52	21,700	+260
Nov. 30.....	805.40	15,490	-6,210
Dec. 31.....	796.28	6,630	-8,860
CAL YR 1974.....	-	-	+120
Jan. 31.....	796.51	6,800	+170
Feb. 28.....	819.46	35,020	+28,220
Mar. 31.....	800.47	10,270	-24,750
Apr. 30.....	810.26	21,360	+11,090
May 31.....	810.78	22,040	+680
June 30.....	810.74	21,990	-50
July 31.....	810.16	21,230	-760
Aug. 31.....	810.21	21,300	+70
Sept. 30.....	810.45	21,610	+310
WTR YR 1975.....	-	-	+170

EXTREMES.--Current year: Maximum contents, 37,490 acre-ft (46.2 hm³) Feb. 27, elevation 820.86 ft (250.20 m); minimum, 6,210 acre-ft (7.66 hm³) Dec. 18, elevation 795.70 ft (242.53 m).

SCIOTO RIVER BASIN

03230900 DEER CREEK NEAR PANCOASTBURG, OHIO

LOCATION.--Lat 39°37'14", long 83°12'47", Pickaway County, 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).

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft (213.360 m) above mean sea level (Corps of Engineers bench mark). Oct. 23, 1963, to June 30, 1966, crest-stage at site 200 ft (61 m) upstream at datum 59.84 ft (18.239 m) higher.

REMARKS.--Discharge records good. Flow regulated by Deer Creek Lake (see station 03230890).

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--9 years, 278 ft³/s (7.873 m³/s).

EXTREMES.--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.

REVISIONS (WATER YEARS).--WRD Ohio 1972: 1971.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	29	345	770	1060	2550	481	244	633	168	24	6.2
2	53	41	393	686	891	2790	204	287	891	165	24	6.2
3	66	60	414	432	570	2740	96	287	440	115	24	6.2
4	66	77	423	377	505	2560	40	287	165	90	24	6.8
5	66	306	423	377	436	2410	19	287	165	90	24	6.8
6	66	365	445	377	510	2250	9.5	287	270	90	24	6.2
7	66	252	505	348	616	1760	4.1	236	317	90	24	6.8
8	68	173	691	336	440	704	9.5	168	317	90	24	6.8
9	32	173	1380	550	313	381	12	168	317	123	24	6.8
10	28	119	1460	872	277	306	12	139	313	168	24	6.8
11	28	96	1400	1240	228	306	13	92	216	168	24	6.8
12	28	232	863	1640	280	244	13	92	165	168	24	104
13	28	298	608	1340	313	364	13	94	163	134	25	60
14	28	257	748	717	313	1310	13	94	110	106	22	24
15	28	173	886	454	313	1910	13	94	88	51	22	23
16	28	141	1300	377	277	1860	8.7	96	88	36	22	24
17	28	130	1190	324	423	1650	6.2	96	88	29	22	23
18	28	309	565	298	595	1300	6.2	96	88	28	22	24
19	28	347	468	402	633	1280	6.2	98	88	43	22	24
20	28	406	347	515	463	1260	6.2	98	90	48	22	24
21	58	402	309	389	352	779	6.8	100	90	43	22	24
22	70	402	360	328	302	505	6.8	102	90	41	22	24
23	70	347	377	280	839	477	7.4	102	90	39	22	24
24	70	384	356	261	28	570	8.0	102	90	37	21	42
25	70	368	655	261	32	1200	163	50	90	37	21	53
26	70	360	784	796	32	709	1220	32	90	34	21	54
27	70	356	520	920	595	735	839	31	130	30	21	54
28	70	352	377	454	1640	389	616	31	168	24	12	56
29	70	356	348	463	---	981	505	31	168	24	6.2	54
30	41	360	306	938	---	1280	277	113	168	24	6.2	56
31	29	---	295	925	---	1090	---	146	---	24	6.2	---
TOTAL	1508	7796	19631	18449	13276	38650	4634.6	4180	6186	2357	647.6	843.4
MEAN	48.6	260	633	595	474	1247	154	135	206	76.0	20.9	28.1
MAX	70	406	1460	1640	1640	2790	1220	287	891	168	25	104
MIN	28	29	245	261	28	244	4.1	31	88	24	6.2	6.2
CAL YR 1974	TOTAL	103090.0	MEAN	282	MAX	1690	MIN	13				
WTH YR 1975	TOTAL	118154.6	MEAN	324	MAX	2790	MIN	4.1				

EXTREMES.--Current year: Maximum discharge, 2,890 ft³/s (81.8 m³/s) Mar. 2, gage height, 74.93 ft (22.839 m); minimum daily, 6.2 ft³/s (0.18 m³/s) Aug. 29 to Sept. 3, Sept. 6.

SCIOTO RIVER BASIN

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03230900 DEER CREEK NEAR PANCOASTBURG, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 07...	1130	2080	5.0	13.8	108	390	7.8	5.6	44	18	4.8	2.0
AUG. 13...	1245	24	28.0	6.4	81	466	7.3	3.6	49	30	8.1	2.0

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 07...	174	0	4.4	143	12	33	.4	.22	.04	2.6	.20	206
AUG. 13...	244	0	20	200	16	42	.3	.61	.01	.40	.03	272

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 07...	180	41	10	10	--	--	--	--	--	--	--	--
AUG. 13...	250	46	20	470	0	<10	0	2	20	<.5	5.0	3.0

SCIOTO RIVER BASIN

03231000 DEER CREEK AT WILLIAMSPORT, OHIO

LOCATION.--Lat 39°35'09", long 83°07'22", Pickaway County, 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).

GAGE.--Water-stage recorder. Datum of gage is 718.66 ft (219.048 m) above mean sea level. Prior to Feb. 29, 1940, nonrecording gage, and Feb. 29, 1940, to Aug. 24, 1954, water-stage recorder, at 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.--Discharge records good. Flow regulated by Deer Creek Lake 9.0 mi (14.5 km) upstream beginning in 1968.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--40 years (1926-35, 1938-56, 1962-75), 295 ft³/s (8.354 m³/s).

EXTREMES.--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.

REVISIONS (WATER YEARS).--WSP 1083: 1929. WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	41	492	896	1370	2820	765	358	790	195	24	14
2	46	45	558	928	1230	3120	365	410	1130	195	24	13
3	73	83	576	607	819	3110	279	392	757	155	23	14
4	74	110	562	562	686	2950	129	379	255	110	25	16
5	75	380	534	531	638	2790	78	365	243	100	25	14
6	76	499	537	520	781	2600	63	362	528	100	27	15
7	76	355	635	480	856	2190	56	316	491	100	26	14
8	76	225	1080	451	683	988	52	216	440	106	26	14
9	64	220	1710	720	407	545	47	213	421	131	25	14
10	31	174	1730	1200	392	396	46	195	414	193	25	14
11	31	150	1630	1590	295	392	43	117	326	191	23	18
12	31	418	1220	1910	421	1670	40	117	246	191	23	86
13	32	432	808	1770	448	706	38	115	229	213	23	104
14	32	366	944	973	415	1640	35	111	173	182	24	39
15	57	238	1190	658	404	2410	33	111	120	94	27	29
16	76	198	1560	484	383	2290	33	109	115	61	27	29
17	63	164	1610	424	612	2080	30	106	218	40	26	29
18	52	295	820	395	842	1550	27	106	358	45	25	41
19	46	453	583	555	886	1870	31	109	173	60	23	38
20	45	481	562	715	691	1600	26	106	142	71	24	59
21	63	478	387	555	476	1150	24	106	129	64	24	43
22	91	464	432	426	400	742	24	109	122	58	24	36
23	91	457	474	365	2700	675	25	114	115	54	24	33
24	91	453	467	333	2820	1490	189	108	112	50	24	112
25	90	446	776	408	372	1730	323	80	109	47	24	120
26	89	432	984	932	208	892	1470	34	109	45	24	89
27	86	422	723	1200	576	1030	1200	34	149	38	23	84
28	85	411	464	676	1680	605	860	32	208	28	23	80
29	85	397	436	614	---	1460	722	35	203	24	15	78
30	76	408	369	1120	---	1630	440	112	198	24	14	76
31	42	---	362	1340	---	1410	---	195	---	24	16	---
TOTAL	1982	9695	25215	24338	22491	50531	7493	5272	9023	2989	730	1365
MEAN	63.9	323	813	785	803	1630	250	170	301	96.4	23.5	45.5
MAX	91	499	1730	1910	2820	3120	1470	410	1130	213	27	120
MIN	31	41	362	333	208	392	24	32	109	24	14	13

CAL YR 1974 TOTAL 136714 MEAN 375 MAX 2080 MIN 13
WTH YR 1975 TOTAL 161124 MEAN 441 MAX 3120 MIN 13

EXTREMES.--Current year: Maximum discharge, 10,900 ft³/s (309 m³/s) Feb. 24, gage height, 12.96 ft (3.950 m); minimum daily, 13 ft³/s (0.37 m³/s) Sept. 2.

SCIOTO RIVER BASIN
03231000 DEER CREEK AT WILLIAMSPORT, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 06...	1455	2630	6.0	11.0	88	380	7.8	5.3	42	17	4.5	2.1
AUG. 13...	1505	23	27.0	7.4	91	530	7.7	3.9	53	32	8.0	2.1

DATE	RICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 06...	162	0	4.1	133	12	32	.4	.21	.05	2.6	.25	195
AUG. 13...	246	0	7.9	202	15	49	.3	.01	.04	2.5	.08	285

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 06...	170	42	10	0	--	--	--	--	--	--	--	--
AUG. 13...	260	62	0	10	0	<10	20	6	20	<.5	6.2	1.9

SCIOTO RIVER BASIN

03231500 SCIOTO RIVER AT CHILLICOTHE, OHIO

LOCATION.--Lat 39°20'29", long 82°58'16", Ross County, 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).

GAGE.--Water-stage and water-quality recorders. Datum of gage is 594.05 ft (181.066 m) above mean sea level. Prior to Sept. 30, 1914, nonrecording gage at site 1,300 ft (396 m) upstream at 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. October 1950 to September 1951, water quality samples, and May 1965 to June 1971 water-quality recorder at site 1,400 ft upstream.

REMARKS.--Discharge records good. Interruptions in the daily water-quality records were due to malfunctions of the instrument. 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).

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--55 years, 3,379 ft³/s (95.69 m³/s).

EXTREMES.--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.

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).

REVISIONS (WATER YEARS).--WSP 803: 1929 (M). WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1070	664	3470	5750	21600	21100	8740	5320	4520	1350	587	4280
2	913	653	5080	10000	14400	17200	7080	5650	8200	1230	564	2590
3	814	653	5660	9630	13200	13900	5510	4810	4470	1140	598	1320
4	785	647	4600	8260	9110	12200	5460	4120	3020	1110	807	1250
5	774	1310	3610	6740	7030	10200	4230	3690	2460	1630	1030	2120
6	741	2640	3110	5490	7090	7330	3450	3320	3620	1280	1210	1220
7	720	2050	2930	4710	8460	6490	3050	3000	7130	1220	1030	1550
8	709	2140	5140	4170	7560	6520	2780	2630	5610	1160	1010	1120
9	704	1870	10100	6980	5650	8130	2590	2430	4110	1070	763	925
10	686	1460	11000	14400	4380	8260	2470	2450	3110	1090	686	853
11	653	1230	9560	18400	3720	6880	2350	2270	2520	1320	1000	830
12	653	2480	7650	20700	3960	9230	2220	2010	2520	1280	1090	2710
13	631	4220	5610	21100	4390	17200	2090	2140	2610	1130	963	3990
14	631	3220	6230	15200	3700	20600	1970	1960	2130	1420	752	1960
15	664	2850	7890	9070	3260	18400	1840	1780	1930	1590	796	1230
16	1640	2780	11000	5840	3100	13700	1860	1640	1860	1080	1340	1000
17	1340	2450	13400	4580	4240	11400	1810	1580	1990	901	1530	938
18	975	1910	12100	3960	8440	10200	1750	1550	4440	913	1010	1210
19	842	1910	9800	4870	12800	12600	1780	1430	3290	1050	830	4070
20	774	2010	7780	5720	13100	14500	2010	1390	2300	1090	774	3260
21	731	2300	5920	5050	10800	12000	1850	1350	1870	1010	686	3430
22	796	2590	4640	4030	7960	8790	1690	1300	1700	925	653	2360
23	807	2760	4010	3560	10200	7390	1610	1330	1520	842	610	2010
24	741	2750	3810	3280	26300	9740	2810	1400	1310	774	653	4050
25	731	2730	6620	3340	41300	12300	7750	1430	1220	796	709	5470
26	720	4280	11400	7640	53700	7860	11600	1430	1580	752	576	3050
27	720	4300	10800	12800	36900	6770	11000	1310	2610	709	542	2120
28	709	4070	8220	10100	25500	5910	7150	1160	2950	664	521	1770
29	675	3770	6110	7100	---	9000	6170	1070	2160	631	521	1670
30	686	3400	4530	13600	---	11600	5550	1570	1540	653	521	1530
31	675	---	3910	19200	---	10900	---	2200	---	621	1190	---
TOTAL	24720	72257	215740	275270	377070	348340	122320	70760	90300	32431	25552	65886
MEAN	797	2409	6959	8880	13470	11240	4077	2283	3010	1046	824	2196
MAX	1640	4360	13400	21100	53700	21100	11600	5650	8200	1630	1530	5470
MIN	631	653	2930	3280	3100	5910	1610	1070	1220	621	521	830

CAL YR 1974 TOTAL 1536464 MEAN 4204 MAX 25700 MIN 521
WTR YR 1975 TOTAL 1720546 MEAN 4714 MAX 53700 MIN 521

EXTREMES.--Current year: Maximum discharge, 57,100 ft³/s (1,620 m³/s) Feb. 26, gage height, 19.19 ft (5.849 m); minimum daily, 521 ft³/s (14.8 m³/s) Aug. 28-30.

SCIOTO RIVER BASIN
03231500 SCIOTO RIVER AT CHILLICOTHE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1950 to 1951, May 1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
FEB. 11...	1105	3630	2.5	11.7	85	590	7.8	7.1	71	24	16	2.8
AUG. 25...	1230	697	27.0	7.3	90	700	8.0	7.1	76	29	37	5.3

DATE	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
FEB. 11...	257	0	6.5	211	28	73	.4	.53	.04	3.6	.35	349
AUG. 25...	274	0	4.4	225	38	98	.8	.28	.21	2.2	1.2	426

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
FEB. 11...	280	65	40	60	--	--	--	--	--	--	--	--
AUG. 25...	310	84	40	20	4	<10	20	11	50	1.0	12	6.3

SCIOTO RIVER BASIN

03231500 SCIOTO RIVER AT CHILLICOTHE, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/AT 25°C)

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

EXTREMES.--Period of record: Maximum, 1,100 micromhos Feb. 6, 1972; minimum, 150 micromhos June 29, 1972.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY		MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1		800	700	800	770	690	590	600	570	480	410	350	340
2		710	670	800	780	710	600	570	520	450	390	350	340
3		720	680	800	780	620	590	530	510	460	430	350	350
4		710	670	790	740	650	610	---	---	480	450	360	350
5		730	690	790	760	670	640	---	---	520	480	410	350
6		740	700	800	670	680	650	---	---	530	490	460	410
7		780	730	670	610	720	670	---	---	560	480	510	460
8		760	740	690	620	680	590	---	---	550	490	560	490
9		770	750	750	660	600	550	600	560	540	490	570	520
10		780	760	690	650	570	560	560	460	590	520	630	500
11		800	770	790	640	620	580	480	470	610	560	550	510
12		800	780	690	620	640	600	810	720	810	600	600	390
13		790	760	670	570	650	620	1210	620	610	580	400	360
14		800	770	590	550	660	640	690	540	670	610	420	370
15		820	600	640	580	660	580	610	540	680	660	490	420
16		850	680	670	630	580	530	570	540	730	670	500	490
17		840	640	710	670	580	540	550	520	670	630	500	480
18		670	570	690	670	580	540	650	550	630	580	500	480
19		610	640	690	600	580	540	600	570	590	550	500	410
20		660	530	690	620	600	550	660	580	590	560	430	420
21		740	650	700	670	650	600	660	610	570	500	500	430
22		740	710	710	680	640	620	650	580	510	490	540	500
23		760	740	720	680	640	630	640	580	510	370	550	530
24		770	740	700	660	650	620	640	510	370	300	550	390
25		780	750	680	650	640	610	600	520	330	280	420	360
26		770	740	670	640	610	550	630	530	280	260	520	420
27		770	740	640	610	580	540	560	460	320	280	570	520
28		780	750	660	620	610	570	560	480	340	320	570	550
29		800	770	680	650	610	580	580	560	---	---	570	440
30		800	770	690	560	600	590	590	420	---	---	490	460
31		790	780	---	---	610	550	450	390	---	---	520	490
MONTH		850	530	800	550	720	530	1210	390	810	260	630	340
		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY		MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1		540	520	610	590	690	490	630	600	730	700	740	300
2		570	530	600	580	490	410	650	630	710	680	440	390
3		580	540	590	560	450	430	670	650	680	460	490	440
4		580	560	600	590	570	550	660	570	680	660	540	450
5		600	560	610	600	590	380	680	660	780	395	630	460
6		610	590	610	590	610	270	700	680	790	700	670	580
7		620	590	610	590	590	520	690	660	700	630	580	560
8		630	600	630	600	530	500	660	600	630	620	680	580
9		630	620	630	610	570	530	620	600	640	620	680	600
10		650	630	640	620	600	570	650	620	650	580	620	600
11		660	640	640	600	620	570	660	630	620	590	630	560
12		660	650	640	400	650	570	680	650	670	540	630	520
13		660	650	640	600	670	630	690	570	660	470	520	450
14		670	650	620	580	640	630	650	610	710	660	500	470
15		670	650	650	590	670	630	670	610	690	360	540	500
16		670	650	650	630	690	670	670	660	630	220	590	540
17		670	650	660	640	690	480	660	640	630	590	610	600
18		690	660	650	570	650	430	650	370	610	530	640	560
19		690	650	660	630	610	370	630	580	540	480	630	530
20		680	670	710	630	640	600	650	400	590	530	540	450
21		680	670	680	670	670	640	670	620	610	590	500	470
22		680	650	670	650	680	660	670	630	610	600	530	490
23		660	640	670	630	690	670	670	640	650	610	540	270
24		660	460	670	660	680	660	710	660	670	650	530	270
25		570	470	680	670	700	680	680	650	710	670	500	440
26		480	430	700	480	720	700	650	610	760	710	490	440
27		490	430	710	680	740	670	650	620	770	750	550	490
28		550	490	720	710	670	420	670	630	750	740	590	550
29		570	540	720	640	580	440	730	660	760	730	640	590
30		600	570	710	620	620	580	730	700	750	640	660	630
31		---	---	710	360	---	---	720	700	730	540	---	---
MONTH		690	430	720	360	740	270	730	370	790	220	740	270
YEAR		1210	220										

03231500 SCIOTO RIVER AT CHILLICOTHE, OHIO--Continued

PH (UNITS)

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

EXTREMES.--Period of record: Maximum, 9.2 Dec. 24, 26, 1973; minimum, 6.7 Apr. 1, 2, 1975.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	8.0	7.6	7.9	7.7	7.7	7.4	---	---	---	---
2	---	---	7.9	7.8	7.8	7.6	7.9	7.4	---	---	---	---
3	---	---	7.8	7.7	7.9	7.6	7.9	7.8	---	---	---	---
4	---	---	7.9	7.5	8.3	7.9	7.9	7.8	---	---	---	---
5	---	---	7.7	7.5	8.3	8.1	8.1	7.7	---	---	---	---
6	---	---	7.7	7.4	8.4	8.2	---	---	---	---	---	---
7	---	---	7.9	7.7	8.4	8.0	---	---	---	---	---	---
8	---	---	7.9	7.8	8.3	8.0	---	---	---	---	---	---
9	7.7	7.6	7.9	7.7	8.0	7.8	7.9	7.7	---	---	---	---
10	7.8	7.6	7.9	7.7	8.5	8.0	7.9	7.6	---	---	---	---
11	7.8	7.6	7.9	7.7	8.7	8.4	7.9	7.7	---	---	---	---
12	7.7	7.6	7.8	7.6	8.7	8.5	7.8	7.4	---	---	---	---
13	7.7	7.6	7.7	7.5	8.5	8.2	7.6	7.3	---	---	---	---
14	7.7	7.6	7.8	7.7	8.3	8.2	8.2	7.8	---	---	---	---
15	7.6	7.6	7.7	7.5	8.4	8.2	8.1	7.6	---	---	---	---
16	7.7	7.5	7.9	7.6	8.3	8.2	7.9	7.5	---	---	---	---
17	7.6	7.5	8.0	7.6	8.2	8.0	7.9	7.8	---	---	---	---
18	---	---	8.0	7.7	8.2	8.0	8.0	7.8	---	---	---	---
19	---	---	8.0	7.7	8.2	8.1	8.0	7.8	---	---	---	---
20	---	---	7.9	7.7	8.0	7.8	7.9	7.6	---	---	---	---
21	---	---	7.7	7.5	8.0	7.7	7.9	7.8	---	---	---	---
22	8.1	7.5	7.8	7.5	7.9	7.8	---	---	---	---	---	---
23	8.0	7.6	8.2	7.7	8.4	7.8	---	---	---	---	---	---
24	8.0	7.1	8.2	7.8	8.4	7.8	---	---	---	---	7.7	7.2
25	7.4	7.3	7.9	7.6	7.8	7.3	---	---	---	---	7.9	7.3
26	7.6	7.2	7.7	7.5	7.8	7.4	---	---	---	---	7.9	7.7
27	7.7	7.0	7.8	7.5	7.9	7.8	---	---	---	---	7.9	7.6
28	8.0	7.2	7.9	7.7	8.0	7.9	---	---	---	---	7.6	7.5
29	8.0	7.5	7.9	7.7	8.3	7.8	---	---	---	---	7.5	7.1
30	7.7	7.3	7.9	7.7	8.2	7.7	---	---	---	---	7.8	7.3
31	7.9	7.6	---	---	8.1	7.7	---	---	---	---	7.8	7.1
MONTH	---	---	8.2	7.4	8.7	7.3	---	---	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.6	6.7	7.7	7.5	7.8	7.5	8.1	7.7	8.1	7.5	7.6	7.2
2	7.6	6.7	8.0	7.7	7.7	7.5	8.2	7.8	7.9	7.5	7.4	7.1
3	8.1	6.8	7.9	7.7	7.8	7.7	8.1	7.8	8.1	7.6	7.4	7.0
4	8.0	7.8	8.0	7.8	7.7	7.5	8.1	7.8	7.8	7.5	7.6	7.3
5	7.9	7.6	8.0	7.7	7.7	7.5	7.9	7.8	7.7	7.5	7.5	7.0
6	7.9	7.5	8.0	7.7	7.8	7.5	7.9	7.8	7.7	7.5	7.3	7.1
7	7.8	7.5	8.2	7.8	7.7	7.5	7.9	7.7	7.7	7.4	7.6	7.2
8	7.8	7.5	8.2	7.9	7.8	7.6	8.3	7.9	7.6	7.2	7.4	7.2
9	7.9	7.5	8.3	7.9	7.8	7.6	8.4	8.0	7.6	7.2	7.8	7.1
10	7.8	7.5	8.3	7.9	7.9	7.7	8.3	8.1	7.5	7.2	8.1	7.5
11	7.9	7.5	8.4	7.9	7.8	7.7	8.3	7.7	7.5	7.1	7.8	7.6
12	8.0	7.7	8.2	7.9	7.8	7.7	8.1	7.5	7.6	7.2	7.8	7.5
13	8.0	7.7	8.3	7.9	7.8	7.7	8.2	7.4	7.5	7.2	7.6	7.4
14	7.9	7.4	8.0	7.7	8.0	7.7	8.0	7.4	7.5	7.3	7.6	7.5
15	7.9	7.3	8.0	7.7	8.1	7.8	7.7	7.3	7.8	7.4	7.7	7.5
16	7.9	7.6	8.1	7.8	8.3	7.8	7.6	7.1	7.5	7.3	7.7	7.5
17	7.9	7.4	8.1	7.8	8.4	7.7	7.6	7.2	7.5	7.4	7.6	7.5
18	7.6	7.3	8.1	7.8	8.0	7.5	7.9	7.3	7.5	7.4	7.5	7.4
19	8.1	7.3	8.2	7.8	7.7	7.5	8.0	7.4	7.7	7.4	7.5	7.3
20	8.2	7.9	8.3	7.8	8.0	7.6	7.8	7.3	7.8	7.6	7.5	7.3
21	8.2	7.9	8.2	7.8	8.0	7.8	8.1	7.2	8.0	7.6	7.6	7.5
22	8.4	7.9	8.2	7.8	8.0	7.9	8.1	7.4	7.9	7.6	7.6	7.4
23	8.3	7.9	8.1	7.8	8.0	7.8	8.3	7.5	8.0	7.5	7.6	7.4
24	8.1	7.8	7.9	7.7	8.0	7.8	8.3	7.5	8.0	7.6	7.6	7.4
25	8.0	7.8	7.9	7.6	8.1	7.8	8.5	7.6	7.8	7.5	7.8	7.6
26	8.1	7.7	8.1	7.5	8.1	7.9	8.4	7.8	8.0	7.5	7.8	7.7
27	8.0	7.7	8.0	7.7	8.0	7.7	8.5	7.8	8.2	7.6	7.9	7.7
28	8.1	7.8	8.1	7.7	7.9	7.7	8.5	7.8	8.1	7.7	8.0	7.7
29	8.1	7.2	8.1	7.8	7.8	7.7	8.7	7.8	7.9	7.6	8.0	7.7
30	7.6	7.2	8.1	7.7	7.9	7.7	8.5	7.9	7.8	7.6	7.9	7.7
31	---	---	7.8	7.6	---	---	8.2	7.7	7.6	7.3	---	---
MONTH	8.4	6.7	8.4	7.5	8.4	7.5	8.7	7.1	8.2	7.1	8.1	7.0
YEAR	8.7	6.7										

SCIOTO RIVER BASIN

03231500 SCIOTO RIVER AT CHILLICOTHE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITRE

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

EXTREMES.--Period of record: Maximum, 15.0 mg/l or higher on several days during June 1966, June and July 1967, July 1975; minimum, 0.0 mg/l Apr. 27, Aug. 12, Sept. 22, 1966.

REMARKS.--Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or higher, due to instrument limitations.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	4.9	2.6	3.2	2.5	9.6	9.2	---	---	12.9	12.7	11.1	10.8
2	6.9	4.2	3.0	2.3	9.9	9.6	---	---	12.7	12.6	11.0	10.9
3	7.5	4.7	3.1	2.2	10.4	9.9	---	---	12.7	12.6	11.3	11.0
4	8.5	5.7	2.5	1.8	10.6	10.3	---	---	12.7	12.6	11.5	11.2
5	8.6	6.0	2.8	1.8	10.1	9.9	---	---	12.6	12.0	12.0	11.3
6	6.9	4.6	3.9	2.4	10.1	9.8	---	---	12.0	11.6	11.8	10.9
7	7.2	3.9	5.2	3.9	9.9	9.4	---	---	---	---	10.9	10.4
8	---	---	5.2	4.3	9.7	9.4	---	---	---	---	10.4	9.5
9	7.3	5.1	5.0	4.3	10.8	9.4	11.0	10.5	---	---	11.4	9.5
10	7.6	4.4	5.4	5.0	11.6	10.8	11.3	10.9	---	---	11.7	11.4
11	7.6	4.4	5.7	5.2	11.6	11.3	11.4	11.2	11.3	10.5	11.5	11.2
12	6.0	3.6	5.7	5.1	11.6	11.0	10.2	9.7	10.8	10.3	11.2	10.9
13	4.7	3.2	6.1	4.5	11.3	10.9	10.0	9.7	11.0	10.2	11.1	10.5
14	4.7	2.9	7.0	6.1	11.0	11.0	10.4	9.7	10.9	10.5	11.3	10.8
15	3.9	3.0	7.0	6.7	11.2	10.9	11.2	10.1	10.5	9.7	11.6	11.3
16	3.7	2.8	7.8	6.7	11.4	11.2	11.1	10.8	10.2	9.6	11.5	11.3
17	3.5	1.8	7.7	7.0	11.4	11.1	12.1	11.9	9.6	9.1	11.2	10.8
18	5.1	3.0	7.7	7.1	11.4	11.4	12.0	11.6	10.1	9.4	10.8	9.8
19	6.4	3.9	8.0	7.8	11.8	11.4	11.7	11.5	11.4	10.1	10.3	9.8
20	6.7	4.8	7.9	7.7	11.9	11.7	12.2	11.5	11.7	11.4	9.9	9.5
21	6.9	5.1	7.7	7.5	11.7	11.4	12.4	12.2	11.5	11.2	10.2	9.2
22	6.8	5.4	7.1	6.4	11.4	11.2	12.4	11.9	11.2	10.4	9.2	8.7
23	6.1	5.0	7.7	7.1	11.2	11.0	12.1	11.7	10.5	8.9	8.7	8.2
24	5.2	4.2	7.5	7.0	11.0	10.5	11.7	11.2	8.9	8.4	9.2	8.6
25	4.6	3.8	7.5	7.1	11.0	10.5	11.2	10.5	9.9	9.4	9.0	8.5
26	5.1	3.9	7.6	7.2	12.0	11.1	11.4	10.5	10.6	9.9	9.3	8.7
27	5.2	4.1	8.4	7.5	12.2	12.0	12.9	11.4	10.9	10.6	10.3	9.3
28	5.2	4.0	8.9	8.4	12.2	11.8	13.1	12.8	11.0	10.9	10.5	10.2
29	4.9	3.8	9.2	8.9	11.9	11.3	12.8	11.5	---	---	10.7	10.1
30	4.5	3.4	9.6	9.0	11.3	10.9	12.0	11.5	---	---	10.4	9.8
31	4.3	3.0	---	---	10.9	10.5	12.9	12.0	---	---	11.0	10.4
MONTH	8.6	1.8	9.6	1.8	12.2	9.2	---	---	12.9	8.4	12.0	8.2
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.9	10.0	7.4	6.6	2.2	.3	---	---	9.7	4.3	2.4	1.2
2	10.0	9.1	7.1	6.2	4.0	.3	---	---	10.8	4.0	2.3	1.9
3	9.1	8.9	7.1	6.6	4.4	4.0	---	---	10.8	5.2	4.8	1.9

TEMPERATURE (°C) OF WATER

EXTREMES.--Period of record: Maximum, 32.0°C July 14, 1954, Aug. 2, 3, 1955; minimum, freezing point on many days during winter periods.

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	15.0	15.5	14.5	---	---	5.5	4.5	3.5	3.0	4.5	4.0
2	17.0	13.5	16.5	15.0	4.5	4.0	4.5	3.5	4.0	3.5	4.0	3.5
3	13.5	13.0	16.5	15.5	---	---	3.5	3.0	3.5	3.5	3.5	3.5
4	14.0	11.5	16.5	16.0	3.5	4.0	---	---	3.5	3.0	3.5	3.5
5	15.0	12.0	16.0	14.5	3.5	3.0	---	---	3.5	3.0	3.5	3.0
6	14.5	13.0	14.5	13.0	3.5	3.0	---	---	4.0	4.0	5.0	3.5
7	15.0	14.0	13.0	11.5	4.5	3.5	---	---	4.0	2.0	5.5	5.0
8	14.5	13.5	12.0	11.0	4.5	4.5	---	---	2.0	1.5	5.5	5.0
9	14.5	11.0	11.5	10.5	4.5	3.0	5.5	5.0	2.0	1.5	5.0	4.0
10	14.5	11.5	11.5	10.5	3.0	2.0	5.0	4.5	1.5	0.5	4.0	3.5
11	15.5	11.0	11.0	11.0	3.0	2.0	5.5	5.0	2.0	1.0	4.0	3.0
12	13.5	11.5	11.0	10.5	4.0	3.0	2.0	1.5	3.0	2.0	5.0	4.0
13	13.5	11.5	11.0	10.0	4.5	3.5	3.0	1.5	3.0	2.0	5.0	5.0
14	14.5	12.0	10.0	8.5	4.5	4.0	2.0	1.0	3.0	2.0	5.0	3.5
15	13.5	12.0	8.5	7.0	4.5	4.0	1.0	0.5	3.5	2.0	4.0	3.5
16	13.5	11.5	7.0	6.5	4.0	4.0	1.0	0.5	4.5	3.5	4.5	3.5
17	15.5	11.5	6.0	7.0	4.0	3.5	3.0	1.5	6.0	4.5	5.5	4.5
18	15.0	13.0	8.5	7.0	4.0	3.5	3.0	2.0	6.0	5.5	6.5	5.5
19	13.0	11.5	10.0	8.5	3.5	3.0	3.5	3.0	5.5	3.0	6.5	6.5
20	11.5	10.5	10.5	9.5	3.0	2.0	3.5	2.0	3.5	3.0	8.0	6.5
21	10.5	9.0	10.0	8.5	3.5	2.0	2.0	1.0	3.5	3.0	8.5	7.0
22	11.0	9.0	8.5	8.0	3.5	3.0	2.0	1.5	5.0	3.5	9.5	8.5
23	11.5	10.0	6.5	7.0	4.5	3.5	3.0	2.0	8.5	5.0	10.0	8.5
24	12.0	11.0	6.5	9.0	5.5	4.5	3.5	2.0	9.0	8.0	11.0	9.5
25	13.5	12.0	9.0	8.0	6.0	5.0	4.5	3.5	8.0	5.5	11.0	9.5
26	13.5	12.0	7.0	6.5	5.0	3.5	4.5	3.0	5.5	4.5	9.5	8.0
27	13.5	11.5	6.5	5.5	3.5	3.0	3.0	1.5	4.5	4.0	8.0	6.0
28	13.5	12.0	5.5	5.0	3.5	3.0	3.0	1.5	4.5	4.0	6.0	5.5
29	13.5	12.5	5.5	5.0	4.5	3.5	5.5	3.0	---	---	8.0	6.0
30	15.0	13.5	---	---	5.0	4.5	5.0	4.0	---	---	8.0	6.5
31	15.5	14.0	---	---	5.5	5.0	4.5	3.5	---	---	7.0	6.0
MONTH	16.5	9.0	16.5	5.0	6.0	2.0	5.5	0.5	9.0	0.5	11.0	3.5

[illegible]

SCIOTO RIVER BASIN

327

03231600 EAST FORK PAINT CREEK NEAR SEDALIA, OHIO

LOCATION.--Lat 39°42'36", long 83°27'48", Madison County, at culvert on State Highway 38, 1.8 mi (2.9 km) southeast of Sedalia.

DRAINAGE AREA.--382 mi² (9.89 km²).

PERIOD OF RECORD.--Discharge, 1947 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 24	12.92	3.938	230	6.51

SCIOTO RIVER BASIN

03232000 PAINT CREEK NEAR GREENFIELD, OHIO

LOCATION.--Lat 39°22'45", long 83°22'32", Fayette County, 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).

GAGE.--Water-stage and water temperature recorders. Datum of gage is 844.27 ft (257.333 m) above mean sea level. Prior to Feb. 14, 1940 nonrecording gage, Feb. 14, 1940 to June 3, 1955 water-stage recorder, June 4, 1955 to Sept. 30, 1956 nonrecording gage, at same site at datum 1.00 ft (0.305 m) higher.

REMARKS.--Discharge records good. Interruptions in the water temperature records were due to malfunctions of the instrument. Sediment data collected at this site 1969 to 1974.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--August 1926 to November 1935, October 1939 to September 1956; occasional low-flow measurements, water years 1962-66; annual maximums, water years 1963-66. October 1966 to current year.

AVERAGE DISCHARGE.--35 years (1926-35, 1939-56, 1966-75), 231 ft³/s (6.542 m³/s), 12.60 in/yr (320 mm/yr).

EXTREMES.--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.

REVISIONS (WATER YEARS).--WSP 743: 1926 (M). WSP 758: 1926-33. WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	46	122	536	1150	549	635	407	608	97	10	2.9
2	71	46	151	616	871	436	493	395	704	64	9.2	3.1
3	53	53	163	493	640	345	488	354	532	60	8.1	2.9
4	45	79	153	454	497	279	381	301	364	153	7.6	3.2
5	40	279	146	397	472	239	301	248	297	390	17	7.9
6	35	353	142	336	662	224	256	210	500	311	21	4.8
7	31	248	170	295	632	290	231	196	615	215	16	3.4
8	30	178	752	270	461	318	206	180	428	177	12	3.2
9	30	144	1040	390	320	289	187	167	282	159	8.3	3.5
10	29	122	842	813	220	259	176	153	212	144	23	3.2
11	27	124	596	1390	200	241	163	142	191	116	13	7.0
12	26	251	620	1490	250	1530	149	139	203	89	9.2	41
13	26	329	805	884	413	3270	135	160	186	107	6.6	23
14	26	266	871	572	315	2260	127	127	159	88	5.5	6.0
15	50	199	989	437	260	1330	120	115	140	62	7.1	4.8
16	112	160	1310	336	257	1110	120	111	131	52	19	7.0
17	155	137	1150	263	451	953	115	103	156	45	13	6.5
18	131	131	825	368	620	740	113	101	341	61	9.2	16
19	100	118	624	612	545	1010	131	95	218	126	7.7	31
20	86	128	527	561	423	909	113	90	149	107	11	29
21	76	126	451	413	336	662	99	84	117	68	7.0	31
22	66	122	397	322	282	544	95	77	102	49	5.6	22
23	61	105	353	273	2040	492	96	73	92	40	4.3	15
24	62	100	371	270	6090	2510	335	96	82	35	4.2	81
25	64	116	519	403	4930	1570	970	80	73	29	4.0	55
26	62	124	580	756	1790	778	1300	65	68	24	4.1	29
27	55	137	451	644	906	520	962	83	69	20	3.0	22
28	52	131	364	458	686	551	657	73	77	19	2.9	17
29	50	116	305	444	---	1820	571	60	169	19	2.9	16
30	49	103	276	663	---	1740	457	276	132	14	2.9	16
31	49	---	276	1030	---	979	---	287	---	11	2.9	---
TOTAL	1820	4571	16341	17191	26739	28767	10194	5048	7397	2951	277.3	513.4
MEAN	58.7	152	527	555	955	924	340	163	247	95.2	8.95	17.1
MAX	155	353	1310	1490	6090	3270	1300	407	704	390	23	81
MIN	26	46	122	263	200	224	95	60	68	11	2.9	2.9
CFSM	.24	.61	2.12	2.23	3.64	3.73	1.37	.65	.99	.38	.04	.07
IN.	.27	.68	2.44	2.57	3.99	4.30	1.52	.75	1.11	.44	.04	.08

CAL YR 1974 TOTAL 107378.3 MEAN 294 MAX 5190 MIN 7.5 CFSM 1.18 IN 16.04
WTR YR 1975 TOTAL 121809.7 MEAN 334 MAX 6090 MIN 2.9 CFSM 1.34 IN 18.20

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
02-24	0730	*10.05	*6,360	03-24	0630	7.73	3,220
03-13	1530	8.34	3,830	03-29	0700	6.69	2,240

Minimum discharge: 1.4 ft³/s (0.04 m³/s) Sept. 11.

SCIOTO RIVER BASIN
03232000 PAINT CREEK NEAR GREENFIELD, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1966 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 06...	1300	230	5.5	13.2	105	700	8.1	6.3	80	35	9.2	1.1
AUG. 01...	1115	10	25.5	7.5	90	653	8.0	3.0	68	36	24	3.8

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- TENTS) (MG/L)
MAR. 06...	316	0	4.0	259	23	61	.4	.08	.03	3.9	.17	372
AUG. 01...	326	0	5.2	267	37	52	.5	.03	.01	2.1	1.1	385

DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (MG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 06...	340	85	10	10	--	--	--	--	--	--	--	--
AUG. 01...	320	51	90	30	4	<10	0	1	20	<.5	3.4	1.0

PERIOD OF RECORD.--October 1974 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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

SCIOTO RIVER BASIN

03232300 RATTLESNAKE CREEK NEAR CENTERFIELD, OHIO

LOCATION.--Lat 39°19'44", long 83°28'32", Highland County, 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).

GAGE.--Water-stage and water temperature recorders. Datum of gage is 822.32 ft (250.643 m) above mean sea level.

REMARKS.--Discharge records good except those for period of no gage height record, which are fair. Interruptions in the water temperature records were due to malfunctions of the instrument.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1971 to current year.

EXTREMES.--Period of record: Maximum discharge, 7,370 ft³/s (209 m³/s) Feb. 24, 1975, gage height, 12.97 ft (3.953 m); minimum, 1.8 ft³/s (0.051 m³/s) Aug. 22-24, 1972.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	33	82	332	1120	371	442	263	350	60	14	2.1
2	51	33	100	237	724	263	332	227	560	49	10	2.1
3	44	35	103	241	403	206	336	193	300	45	10	2.3
4	37	58	96	237	341	165	263	179	230	468	10	3.8
5	34	249	92	179	328	144	203	150	210	1080	16	3.6
6	34	312	100	189	599	138	172	127	350	1010	11	3.6
7	33	186	150	179	522	206	153	114	400	349	12	3.8
8	30	127	1170	165	332	271	138	105	300	252	12	3.1
9	30	100	1260	213	190	216	127	100	200	165	11	2.5
10	30	86	860	589	160	189	125	95	160	135	11	2.3
11	30	82	522	1210	150	169	114	90	150	119	9.3	4.4
12	29	220	603	794	206	1690	107	84	160	86	8.4	26
13	27	279	892	600	287	2630	96	94	140	94	8.8	14
14	26	193	860	400	223	1460	88	80	120	107	8.4	9.3
15	38	130	1050	300	186	1080	86	76	105	58	7.2	15
16	130	103	1290	200	175	980	84	72	98	45	14	11
17	159	86	980	170	366	809	80	70	110	39	21	8.8
18	110	80	585	250	500	562	76	66	200	153	16	12
19	78	82	422	400	371	1000	96	64	150	371	12	16
20	63	96	380	350	271	969	86	60	100	234	11	58
21	54	100	324	291	213	535	70	56	80	141	8.4	33
22	45	92	267	237	179	417	65	54	70	96	6.9	25
23	43	74	237	200	2560	729	63	52	65	67	5.9	18
24	43	69	241	196	5230	3100	380	64	60	51	5.0	84
25	43	82	267	349	3470	1360	1040	56	56	42	4.7	47
26	43	127	210	729	1430	575	1100	50	53	35	4.1	38
27	40	125	210	478	819	353	745	60	54	28	3.3	33
28	37	110	206	324	708	623	517	54	58	24	2.9	26
29	36	88	182	349	---	2220	432	46	100	21	2.5	20
30	35	74	150	517	---	1500	320	190	80	18	2.5	16
31	34	---	153	924	---	657	---	220	---	15	2.3	---
TOTAL	1521	3561	14044	11829	22123	25587	7936	3211	5069	5457	281.6	543.7
MEAN	49.1	119	453	382	790	825	265	104	169	176	9.08	18.1
MAX	159	312	1290	1210	5230	3100	1100	263	560	1080	21	84
MIN	26	33	82	165	150	138	63	46	53	15	2.3	2.1
CFSM	.23	.57	2.17	1.83	3.78	3.95	1.27	.50	.81	.84	.04	.09
IN.	.27	.63	2.50	2.11	3.94	4.55	1.41	.57	.90	.97	.05	.10

CAL YR 1974 TOTAL 94265.0 MEAN 258 MAX 4890 MIN 2.1 CFSM 1.23 IN 16.78
 WTR YR 1975 TOTAL 101163.3 MEAN 277 MAX 5230 MIN 2.1 CFSM 1.33 IN 18.01

EXTREMES.--Current year: Maximum discharge, 7,370 ft³/s (209 m³/s) Feb. 24, gage height, 12.97 ft (3.953 m); minimum, 2.1 ft³/s (0.059 m³/s) Aug. 31 to Sept. 3.

Note: No gage height record May 7 to July 2.

SCIOTO RIVER BASIN

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03232300 RATTLESNAKE CREEK NEAR CENTERFIELD, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALISES

PERIOD OF RECORD: December 1973 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	
MAR. 06...	1500	138	7.0	11.2	92	640	8.2	6.1	73	30	6.8	.9	
AUG. 26...	1440	4.5	26.5	9.4	110	675	8.0	3.7	61	32	13	2.7	
DATE		BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
MAR. 06...	306	0	3.1	251	19	52	.3	.04	.01	3.1	.09	.09	339
AUG. 26...	306	0	4.9	251	20	40	.3	.06	.01	.20	.04	.04	324
DATE		HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FF) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (MG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 06...	310	55	0	10	--	--	--	--	--	--	--	--	--
AUG. 26...	280	33	20	0	1	<10	10	0	20	<.5	5.7	3.0	3.0

03232300 RATTLESNAKE CREEK NEAR CENTERFIELD, OHIO--Continued

TEMPERATURE (°C) OF WATER

PERIOD OF RECORD.--June 1974 to current year.

EXTREMES.--Period of record: Maximum, 27.0°C Aug. 13, 1974, Aug. 2, 1975; minimum, freezing point Nov. 30, Dec. 1-7; 10, 1974, Jan. 14-18, 1975.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	11.5	15.0	14.0	0.5	0.0	6.0	4.0			---	---
2	12.5	10.5	16.0	14.0	1.0	0.0	3.5	2.0			---	---
3	11.0	9.0	16.0	13.5	1.5	0.0	3.5	2.0			---	---
4	10.5	8.5	15.5	15.0	1.5	0.0	3.5	3.0			---	---
5	12.5	9.0	15.0	11.5	0.5	0.0	3.0	1.0			---	---
6	14.0	11.0	11.5	10.0	0.0	0.0	2.5	1.0			---	---
7	14.0	13.0	10.5	9.0	1.5	0.0	3.5	2.0			---	---
8	12.5	10.5	9.5	8.0	3.5	1.5	6.0	3.5			---	---
9	13.0	10.5	9.5	7.5	3.0	1.0	6.5	5.5			---	---
10	13.5	11.0	9.0	7.5	2.0	0.0	7.5	5.0			---	---
11	14.5	11.5	9.5	9.0	3.5	1.0	6.0	6.0			---	---
12	14.5	13.5	9.5	8.5	4.5	3.5	6.0	2.5			---	---
13	15.0	14.0	8.5	7.5	4.5	4.5	2.5	0.5			---	---
14	16.0	14.5	7.5	5.5	5.0	4.5	0.5	0.0			---	---
15	15.5	13.5	5.0	3.5	4.5	3.5	0.5	0.0			---	---
16	14.0	12.0	4.5	3.0	4.0	3.5	1.5	0.0			---	---
17	13.5	11.0	6.0	4.0	3.5	3.0	0.0	0.0			---	---
18	12.5	10.5	7.0	4.5	3.0	2.5	2.5	0.0			---	---
19	10.0	9.0	9.5	7.0	3.0	2.0	3.0	2.5			---	---
20	9.0	7.5	10.5	8.5	3.0	1.5	2.0	1.0			9.0	6.5
21	8.0	5.5	8.5	5.5	3.5	2.5	---	---			11.0	7.5
22	9.0	5.5	6.0	5.0	4.0	2.5	---	---			11.0	9.0
23	10.5	7.0	7.0	3.5	6.0	3.0	---	---			11.0	7.5
24	11.5	10.0	8.0	7.0	7.0	6.0	---	---			13.5	10.5
25	13.5	11.5	8.0	6.0	7.0	4.0	---	---			11.5	6.5
26	12.5	10.0	5.5	3.0	4.0	2.5	---	---			6.0	4.0
27	11.5	9.0	3.0	2.0	3.5	2.5	---	---			4.0	2.5
28	12.0	9.0	3.5	2.0	4.0	3.5	---	---			3.5	2.5
29	12.5	10.0	3.0	1.0	5.5	4.0	---	---			8.5	3.5
30	14.5	12.5	2.5	0.0	6.0	5.5	---	---			8.0	5.0
31	15.5	13.0	---	---	6.0	5.0	---	---			7.0	3.5
MONTH	16.0	5.5	16.0	0.0	7.0	0.0	---	---			---	---
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	5.5	16.5	14.0	21.0	19.0	25.5	23.0	26.0	24.0	23.5	22.0
2	12.5	7.5	17.0	13.0	18.5	16.5	25.5	23.5	27.0	24.5	24.0	19.5
3	12.5	7.0	16.0	14.5	19.0	16.0	25.5	23.5	26.0	24.5	24.5	21.0
4	7.5	4.0	16.5	14.0	20.5	17.5	24.5	21.0	26.0	24.0	---	---
5	7.5	4.0	17.0	13.5	20.5	20.0	24.0	21.5	25.0	23.5	---	---
6	8.5	5.0	18.0	14.5	20.5	18.5	24.5	23.0	23.5	22.0	---	---
7	9.5	6.0	18.5	15.0	20.0	17.5	23.5	22.5	23.5	20.0	---	---
8	9.5	7.0	18.0	15.0	19.0	16.5	24.0	22.0	23.5	19.5	---	---
9	8.5	7.0	19.0	15.5	19.5	16.5	24.5	23.0	24.0	19.5	---	---
10	11.0	6.5	19.5	16.5	20.0	17.5	24.5	23.0	23.5	21.5	---	---
11	11.5	8.0	19.5	16.5	19.5	19.0	23.5	21.0	24.0	21.0	---	---
12	11.5	7.5	19.0	17.5	22.0	19.0	22.5	20.0	25.0	22.0	---	---
13	12.5	8.0	18.5	16.5	22.5	19.5	22.0	19.5	25.5	23.0	---	---
14	10.5	8.0	19.0	15.5	22.0	20.5	22.0	18.0	25.5	24.0	---	---
15	8.5	8.0	18.5	17.0	22.5	20.5	23.0	19.5	25.0	23.5	---	---
16	10.5	6.5	19.0	15.5	23.0	20.0	23.5	20.5	24.5	23.5	---	---
17	13.5	8.5	19.0	17.0	22.5	20.5	22.5	21.0	24.5	22.5	---	---
18	14.0	12.5	20.0	18.0	22.5	20.0	22.5	20.5	25.0	23.0	---	---
19	15.0	13.5	21.5	18.0	24.0	21.5	23.0	20.5	25.0	22.5	---	---
20	13.5	10.5	22.5	19.5	24.5	23.5	23.0	21.5	25.0	23.0	---	---
21	13.5	8.5	23.0	21.0	25.0	23.5	24.5	22.5	25.5	22.5	---	---
22	15.0	11.0	23.0	21.5	25.5	23.0	25.0	23.0	26.0	23.5	---	---
23	14.5	13.0	22.5	21.5	26.0	24.0	25.0	23.0	26.0	23.5	---	---
24	13.5	12.5	24.0	21.0	26.0	24.0	25.0	24.0	26.0	24.0	---	---
25	13.5	11.5	24.5	22.5	26.5	24.5	25.0	23.5	26.0	24.0	---	---
26	13.0	9.5	24.5	22.5	25.0	24.0	24.5	22.0	25.5	24.0	---	---
27	13.0	11.0	24.0	22.5	25.0	23.0	24.5	21.0	25.0	22.5	---	---
28	12.0	10.0	23.0	21.0	25.5	23.5	25.5	23.0	24.5	21.5	---	---
29	15.5	10.5	22.0	21.0	25.0	23.5	25.0	22.5	25.0	22.5	---	---
30	15.0	13.0	22.5	20.5	25.0	23.5	25.0	23.0	24.5	23.0	---	---
31	---	---	22.0	21.0	---	---	26.0	23.5	24.0	23.0	---	---
MONTH	15.5	4.0	24.5	13.0	26.5	16.0	26.0	18.0	27.0	19.5	---	---
YEAR	27.0	0.0										

SCIOTO RIVER BASIN

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03232460 PAINT CREEK LAKE NEAR BAINBRIDGE, OHIO

LOCATION.--Lat 39°15'09", long 83°20'59", Highland County, 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 at mean sea level (levels by Corps of Engineers).

EXTREMES.--Period of record: Maximum contents, 74,580 acre-ft (92.0 hm³) Feb. 28, 1975, elevation, 826.40 ft (251.887 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).

REMARKS.--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 m) 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.

COOPERATION.--Gage-height chart and capacity table furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	798.15	20,490	-
Oct. 31.....	787.45	9,980	-10,510
Nov. 30.....	787.60	10,100	+120
Dec. 31.....	787.64	10,130	+30
CAL YR 1974.....	-	-	-
Jan. 31.....	790.15	12,200	+2,070
Feb. 28.....	825.65	72,420	+60,220
Mar. 31.....	794.78	16,680	-55,740
Apr. 30.....	798.15	20,490	+3,810
May 31.....	798.61	21,040	+550
June 30.....	798.60	21,030	-10
July 31.....	798.17	20,510	-520
Aug. 31.....	797.93	20,230	-280
Sept. 30.....	798.26	20,620	+390
WTR YR 1975.....	-	-	+130

EXTREMES.--Current year: Maximum contents, 74,580 acre-ft (92.0 hm³) Feb. 28, elevation 826.40 ft (251.887 m); minimum, 8,930 acre-ft (11.0 hm³) Mar. 28, elevation 786.03 ft (239.582 m).

SCIOTO RIVER BASIN

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

LOCATION.--Lat 39°15'08", long 83°20'58", Highland County, on right bank, 400 ft (122 m) downstream from Paint Creek Dam site, 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).

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft (213.360 m) above mean sea level (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.--Discharge records good. Flow regulated by Paint Creek Lake (see station 03232460).

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--8 years, 600 ft³/s (16.99 m³/s).

EXTREMES.--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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	193	153	329	976	2170	5170	2630	616	637	241	17	4.7
2	184	159	418	1270	2470	6640	854	616	909	187	17	15
3	222	131	429	1000	1860	6700	590	648	636	121	12	12
4	222	200	395	983	857	6300	399	600	474	361	10	14
5	186	370	388	789	909	6330	339	461	457	986	15	10
6	169	658	343	656	1430	3810	318	364	848	1460	15	19
7	153	597	395	607	1390	2540	224	312	928	671	15	16
8	130	377	1690	549	929	2170	116	264	632	376	22	16
9	51	350	2710	696	753	1050	96	252	302	276	25	5.1
10	6.4	318	2460	1980	567	659	89	258	305	227	57	9.5
11	19	261	1540	3600	499	595	86	177	340	204	120	81
12	24	445	969	3180	669	1540	84	184	289	204	94	325
13	22	648	1430	1940	765	1220	84	329	302	167	33	407
14	21	622	2000	956	753	141	84	261	295	270	21	227
15	26	508	2190	719	592	2940	105	214	94	276	22	53
16	42	329	3160	702	526	5330	191	214	235	112	120	33
17	276	315	2710	563	632	5120	261	214	199	91	137	33
18	367	276	1730	612	1090	4640	211	214	830	67	94	34
19	244	255	1040	1320	1200	3970	302	238	549	224	73	91
20	215	273	826	1500	814	2280	258	167	276	506	70	261
21	315	329	942	942	617	1430	189	96	216	383	53	241
22	617	295	789	713	544	1090	194	98	171	115	42	120
23	597	261	702	563	1290	940	206	99	125	89	19	120
24	747	264	648	512	70	2820	966	112	171	51	23	357
25	826	279	922	857	15	4520	1450	128	128	92	44	461
26	814	364	1050	1450	40	3960	2670	128	105	47	13	361
27	789	370	845	1360	101	2130	2650	130	199	44	21	171
28	783	360	669	683	2120	1070	1660	130	154	51	20	88
29	612	279	592	876	---	1500	1020	130	137	56	20	37
30	233	247	563	1150	---	2120	753	219	160	15	11	38
31	131	---	521	1410	---	4050	---	350	---	17	7.8	---
TOTAL	9236.4	10273	35395	35316	25672	94825	19079	8223	11309	7987	1262.8	3660.3
MEAN	298	342	1142	1139	917	3059	636	265	377	258	40.7	122
MAX	826	658	3160	3600	2470	6700	2670	648	928	1460	137	461
MIN	6.4	131	329	512	15	141	84	96	94	15	7.8	4.7

CAL YR 1974 TOTAL 237087.4 MEAN 650 MAX 4540 MIN 6.4
WIR YR 1975 TOTAL 262238.5 MEAN 718 MAX 6700 MIN 4.7

EXTREMES.--Current year: Maximum discharge, 7,090 ft³/s (201 m³/s) Mar. 2, gage height, 54.67 ft (16.663 m); minimum daily, 4.7 ft³/s (0.13 m³/s) Sept. 1

SCIOTO RIVER BASIN

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03232470 PAINT CREEK BELOW PAINT CREEK DAM, NEAR BAINBRIDGE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH		DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	
DATE	TIME						(UNITS)		(MG/L)	(MG/L)	(MG/L)	(MG/L)	
MAR. 17...	1230	5290	6.5	11.8	96	311	7.7	5.2	35	15	5.6	1.8	
AUG. 26...	1740	26	23.0	6.5	75	525	7.4	6.2	47	26	7.8	2.8	
		BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- TENTS) (MG/L)
DATE													
MAR. 17...	135	0	4.3	111	13	27	.2	.25	.03	2.9	.34	169	
AUG. 26...	250	0	16	205	15	29	.2	1.2	.02	.32	.13	258	
		HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
DATE													
MAR. 17...	150	38	80	0	--	--	--	--	--	--	--	--	--
AUG. 26...	220	19	50	810	8	<10	10	4	40	<.5	7.0	3.9	

SCIOTO RIVER BASIN

03232500 ROCKY FORK NEAR BARRETT'S MILLS, OHIO

LOCATION.--Lat 39°13'06", long 83°23'08", Highland County, 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).

GAGE.--Water-stage recorder. Datum of gage is 770.8 ft (234.94 m) above mean sea level, levels by Corps of Engineers. Prior to Feb. 15, 1940, nonrecording gage at same site and datum.

REMARKS.--Discharge records good except those for June 3 to July 7 which are 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 DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--36 years, 154 ft³/s (4.361 m³/s).

EXTREMES.--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.

REVISIONS.--WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	38	145	286	384	350	506	373	229	41	39	42
2	35	97	179	262	346	289	402	314	161	38	35	35
3	26	106	167	296	332	249	402	246	133	36	31	32
4	25	40	153	289	332	201	286	220	108	42	37	54
5	23	59	140	279	350	133	229	181	220	60	42	41
6	22	59	150	279	402	133	169	156	343	175	37	51
7	23	62	249	275	343	140	83	130	239	160	28	44
8	23	63	859	275	329	164	89	120	164	155	21	37
9	23	117	816	296	325	145	93	111	125	131	19	30
10	25	174	554	449	318	140	99	99	102	114	126	26
11	26	49	402	596	318	148	99	91	99	94	122	58
12	32	129	392	464	365	621	97	108	123	77	101	448
13	35	117	413	395	343	689	93	138	115	74	74	339
14	39	111	369	339	307	613	91	118	102	109	56	220
15	64	104	453	321	262	542	95	113	95	94	131	149
16	102	93	621	321	269	423	91	108	79	85	403	112
17	97	90	475	314	275	350	91	97	79	92	393	90
18	88	87	361	392	246	286	91	118	282	88	263	155
19	80	85	303	369	169	693	126	113	242	102	168	198
20	76	102	259	346	106	609	111	102	175	115	119	271
21	70	101	229	329	44	483	97	95	169	107	88	268
22	64	87	201	325	36	392	93	89	265	90	69	195
23	62	82	181	329	735	314	93	83	184	80	55	155
24	71	83	184	332	3090	1210	743	79	130	80	48	821
25	144	113	259	350	1730	919	948	68	99	121	41	559
26	146	113	262	336	924	571	739	72	118	104	36	396
27	27	110	275	321	584	406	494	65	106	95	37	290
28	21	104	252	318	431	490	534	53	77	77	26	215
29	20	95	226	346	---	1900	498	57	68	61	30	163
30	23	93	226	329	---	1260	388	72	50	50	37	133
31	28	---	249	438	---	731	---	111	---	43	48	---
TOTAL	1630	2843	10006	10596	13695	15594	7972	3906	4481	2790	2760	5627
MEAN	52.6	94.8	323	342	489	503	266	126	149	90.0	89.0	188
MAX	146	186	859	596	3090	1900	948	373	343	175	403	821
MIN	20	38	140	262	36	133	83	53	50	36	19	26

CAL YR 1974 TOTAL 74632 MEAN 204 MAX 2190 MIN 15
WTR YR 1975 TOTAL 81900 MEAN 224 MAX 3090 MIN 19

EXTREMES.--Current year: Maximum discharge, 3,820 ft³/s (108 m³/s) Feb. 24, gage height, 9.55 ft (2.911 m); minimum daily, 19 ft³/s (0.54 m³/s) Aug. 9.

SCIOTO RIVER BASIN

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03232500 ROCKY FORK NEAR BARRETTS MILLS, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 17...	1445	346	7.0	12.4	101	361	8.0	3.4	43	18	5.1	2.1
AUG. 27...	1230	26	25.0	7.2	86	320	8.0	4.0	35	22	4.4	2.3

DATE	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CaCO ₃ (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 17...	198	0	3.2	162	8.9	26	.2	.14	.01	.72	.09	204
AUG. 27...	190	0	3.0	156	6.5	19	.2	.10	.01	.29	.03	187

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 17...	180	18	130	10	--	--	--	--	--	--	--	--
AUG. 27...	180	22	30	10	1	10	0	1	20	<.5	5.2	1.7

SCIOTO RIVER BASIN

03234000 PAINT CREEK NEAR BOURNEVILLE, OHIO

LOCATION.--Lat 39°15'49", long 83°10'01", Ross County, on upstream side of left abutment of highway bridge, 0.2 mi (0.3 km) downstream from Sulphur 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).

GAGE.--Water-stage recorder. Datum of gage is 665.56 ft (202.863 m) above mean sea level. See WSP 1725 for history of changes prior to May 3, 1939.

REMARKS.--Discharge records good except those for period of no gage height record, 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 DISCHARGE RECORDS

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.

AVERAGE DISCHARGE.--52 years (1921-36, 1938-75), 798 ft³/s (22.60 m³/s).

EXTREMES.--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 (736 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.

REVISIONS (WATER YEARS).--WRD Ohio 1972: 1971.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	359	176	583	1270	2870	4770	4520	1460	1090	298	81	76
2	246	195	815	1880	3180	6650	1900	1390	1350	320	75	67
3	291	385	840	1540	2780	6750	1680	1360	1420	230	62	70
4	290	258	665	1540	1620	6570	1230	1260	964	540	68	85
5	284	389	600	1380	1500	6440	999	1100	829	1360	83	81
6	222	728	520	1180	2130	4910	950	868	1720	1970	75	94
7	230	802	600	1120	2200	3120	629	766	1610	1070	62	85
8	199	586	2440	1040	1620	2880	379	586	1330	690	62	79
9	177	408	4270	1120	1370	1820	332	529	727	530	64	72
10	100	609	3570	2130	1190	1250	318	491	518	445	265	61
11	78	374	2510	5070	1060	1130	305	425	563	390	350	63
12	110	698	1800	4110	1290	2610	292	350	617	365	280	635
13	108	895	2030	3280	1380	3170	279	610	486	315	155	909
14	104	888	2600	1740	1330	1250	269	617	575	490	110	647
15	110	800	2950	1310	1160	2940	266	441	372	480	220	269
16	131	533	4390	1290	1050	6210	318	425	266	255	760	178
17	239	485	4080	1150	1100	5940	470	398	437	240	770	151
18	541	419	2740	1250	1480	5530	425	421	1250	200	520	208
19	445	376	1780	1860	1610	5660	552	421	1340	425	350	285
20	334	388	1330	2290	1290	3900	610	394	683	810	275	425
21	298	464	1460	1680	862	2700	402	257	507	640	205	653
22	776	452	1300	1310	779	2090	398	233	617	265	160	368
23	804	380	1160	1200	4190	1770	368	219	417	220	110	295
24	830	346	1080	1100	5500	4520	2280	208	346	170	82	1570
25	1020	468	1310	1310	3700	6250	2870	225	325	280	100	1380
26	1090	524	1590	2010	1330	5460	4090	222	228	195	75	1090
27	922	578	1430	2080	1010	3360	3640	222	350	180	73	665
28	900	548	1210	1480	2000	2320	2960	211	343	165	73	390
29	857	468	1070	1500	---	4950	2060	205	245	150	70	263
30	414	364	992	1680	---	4090	1720	219	222	84	76	216
31	204	---	985	2280	---	5160	---	486	---	78	90	---
TOTAL	12763	15044	54700	55180	52581	126170	37511	17019	21747	13850	5801	11430
MEAN	412	501	1765	1780	1678	4070	1250	549	725	447	187	381
MAX	1090	895	4390	5070	5500	6750	4520	1460	1720	1970	770	1570
MIN	78	176	520	1040	779	1130	266	205	222	78	62	61

CAL YR 1974 TOTAL 358586 MEAN 982 MAX 5050 MIN 45
WTR YR 1975 TOTAL 423796 MEAN 1161 MAX 6750 MIN 61

EXTREMES.--Current year: Maximum discharge, 8,850 ft³/s (251 m³/s) Feb. 23, gage height, 10.08 ft (3.072 m); minimum daily, 61 ft³/s (1.73 m³/s) Sept. 10.

Note: No gage height record July 1 to August 27.

SCIOTO RIVER BASIN
03234000 PAINT CREEK NEAR BOURNEVILLE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD---1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 17...	1030	5,880	5.0	12.8	100	335	7.7	5.0	34	14	5.3	2.0
AUG. 27...	0930	73	24.5	7.6	90	480	7.8	5.7	49	26	5.6	2.6

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 17...	139	0	4.4	114	12	27	.2	.21	.03	2.6	.33	168
AUG. 27...	240	0	6.1	197	10	27	.2	.09	.01	.50	.06	244

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 17...	140	29	100	0	--	--	--	--	--	--	--	--
AUG. 27...	230	33	20	0	2	<10	10	4	20	<.5	6.3	2.9

SCIOTO RIVER BASIN

343

03234080 NORTH FORK PAINT CREEK NEAR FRANKFORT, OHIO

LOCATION.--Lat 39°26'11", long 83°13'22", Ross County, at bridge on State Highway 138 at Austin, 3.5 mi (5.6 km) northwest of Frankfort.

DRAINAGE AREA.--151 mi² (391 km²).

PERIOD OF RECORD.--Discharge, 1972 to current year; chemical analyses, 1972 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	TIME	INSTANTANEOUS DISCHARGE
		(ft ³ /s) (m ³ /s)
June 25		33 0.93

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)
AUG. 01...	1430	9.8	28.0	8.1	610	7.7	5.6	68	39	8.4	2.3	346

DATE	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
AUG. 01...	0	14	56	.5	.24	.01	2.7	.03	364	330	20	10

03234100 INDIAN CREEK AT MASSIEVILLE, OHIO

LOCATION.--Lat 39°15'42", long 82°58'08", Ross County, at bridge adjacent to U.S. Highway 23, 0.2 mi (0.3 km) south of Massieville.

DRAINAGE AREA.--9.60 mi² (24.86 km²).

PERIOD OF RECORD.--Discharge, 1947 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 24	13.17	4.014	1,600	45.3

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OHIO
(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, 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).

GAGE.--Water-stage and water-quality recorders. Datum of gage is 567.28 ft (172.907 m) above mean sea level. Prior to Nov. 7, 1930, nonrecording gage at same site and datum.

REMARKS.--Discharge records good. Samples were collected each month as part of the National Stream Quality Accounting Network. Interruptions in the daily water-quality records were due to malfunctions of the instrument. Flow slightly regulated by 7 reservoirs 45 mi (74 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).

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1305.

AVERAGE DISCHARGE.--45 years, 4,513 ft³/s (127.8 m³/s).

EXTREMES.--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. A stage of 31.6 ft (9.63 m) occurred Mar. 26, 1913, and has not been exceeded since.

REVISIONS (WATER YEARS).--WSP 893: 1937 (M). WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1660	1140	4870	5850	24100	24700	14400	7510	4710	2000	735	3810
2	1600	1120	6450	11300	22400	23400	10200	7610	9350	1950	702	3170
3	1360	1120	7080	11400	17600	20400	8700	6680	6080	1770	728	1670
4	1320	1280	6010	10200	11900	18300	7770	5860	4460	1690	908	1340
5	1300	1620	4780	8670	9190	16200	6450	5210	3750	2400	1280	2310
6	1240	3390	4170	7080	9970	13400	5520	4640	5720	3110	1490	1770
7	1200	3180	4010	6150	11100	10400	5000	4280	8610	3100	1220	1720
8	1160	3000	8960	5520	9920	9860	4580	3860	7250	2270	1340	1430
9	1120	2680	14400	6910	7680	10300	4270	3560	5240	2060	1050	1120
10	1060	2340	14900	15000	6090	9990	4090	3440	4100	1860	961	959
11	882	2100	12900	22200	5150	8610	3930	3300	3550	1970	1270	917
12	846	3500	10300	23500	5530	12100	3780	2980	3470	1940	1550	2730
13	882	5270	8500	23700	6390	22600	3620	3080	3610	1790	1410	4950
14	864	4470	9050	18700	5540	22500	3460	3160	3200	1900	1100	3070
15	920	4010	10800	11400	4920	22000	3350	2800	2910	2370	1050	1980
16	1680	3520	15600	7720	4500	20100	3300	2620	2630	1890	1600	1410
17	1980	3240	17600	5110	5070	17300	3380	2480	2830	1410	2470	1220
18	1780	2720	15400	5500	6590	15600	3280	2500	5630	1330	1850	1630
19	1640	2560	12300	7130	13300	19800	3370	2460	5730	1600	1370	3810
20	1440	2740	8460	8460	14500	20500	3600	2260	3780	1870	1220	3950
21	1320	2980	7990	7570	12100	16200	3390	2140	3050	2110	1060	4020
22	1440	3180	6490	5900	9260	12000	3140	1960	2750	1760	965	3220
23	1820	3300	5560	5250	14800	16000	3040	1880	2640	1370	838	2560
24	1740	3300	5160	4800	39900	15100	6050	1900	2230	1230	770	7040
25	1960	3400	7100	4890	42200	20400	13200	1900	2070	1150	869	7090
26	1960	4710	12400	8220	54600	14500	16000	2020	2000	1200	727	4660
27	1920	5050	12500	14200	46800	11300	15600	1800	3060	1100	626	3250
28	1800	4710	9810	12400	28900	9490	11500	1680	3610	971	569	2540
29	1740	4400	7570	8770	---	16400	9000	1540	2890	887	552	2240
30	1540	4010	5920	13000	---	17700	7890	1620	2240	874	540	1990
31	1260	---	5160	19900	---	15800	---	2720	---	812	1190	---
TOTAL	44434	93950	263480	328400	452700	496950	194980	101650	123150	53749	34010	83576
MEAN	1433	3132	9145	10590	16170	16030	6499	3279	4105	1734	1097	2786
MAX	1980	5270	17600	23700	54800	24700	16000	7610	9350	3110	2470	7090
MIN	846	1120	4010	4800	4500	8610	3040	1540	2000	812	540	917

CAL YR 1974 TOTAL 2044411 MEAN 5602 MAX 28600 MIN 702
WTR YR 1975 TOTAL 2291029 MEAN 6277 MAX 54800 MIN 540

EXTREMES.--Current year: Maximum discharge, 58,100 ft³/s (1,650 m³/s) Feb. 26, gage height, 19.63 ft (5.983 m); minimum daily, 540 ft³/s (15.3 m³/s) Aug. 30.

SCIOTO RIVER BASIN
03234500 SCIOTO RIVER AT HIGBY, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--March 1967 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	
OCT. 03...	1100	1380	13.0	4.8	71	28	30	4.0	254	0	40	92	
03-31	--	--	--	--	--	--	--	--	--	--	--	--	
NOV. 01-05	--	--	--	--	--	--	--	--	--	--	--	--	
05...	1200	1400	16.0	--	--	--	--	--	--	--	--	--	
DEC. 11...	1030	13000	3.0	--	--	--	--	--	--	--	--	--	
JAN. 21...	1100	7500	1.0	7.1	66	24	22	2.4	229	0	38	63	
FEB. 19...	1130	13500	4.0	--	--	--	--	--	--	--	--	--	
MAR. 10...	1000	--	--	--	--	--	--	--	--	--	--	--	
10...	1330	9910	4.0	--	--	--	--	--	--	--	--	--	
APR. 07...	1200	4980	8.0	6.9	74	25	14	2.3	252	0	23	71	
MAY 16...	1030	3100	--	18.0	--	--	--	--	--	--	--	--	
16-31	--	--	20.0	--	--	--	--	--	--	--	--	--	
JUNE 01-12	--	--	20.0	--	--	--	--	--	--	--	--	--	
12...	0900	3340	20.0	--	--	--	--	--	--	--	--	--	
JULY 16...	1530	1820	24.0	2.9	69	26	25	3.9	238	0	36	84	
AUG. 19...	1430	1340	26.5	--	--	--	--	--	--	--	--	--	
SEP. 11...	1145	846	--	--	--	--	--	--	--	--	--	--	
11...	1200	--	22.0	--	--	--	--	--	--	--	--	--	
DATE		DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	PH (UNITS)
OCT. 03...	.6	438	396	695	2.7	1.2	1.5	.61	12	7.7	73	7.7	
03-31	--	--	--	--	--	--	--	--	--	--	--	--	
NOV. 01-05	--	--	--	--	--	--	--	--	--	--	--	--	
05...	--	--	--	730	2.8	.98	1.8	1.1	12	4.9	49	7.6	
DEC. 11...	--	--	--	560	4.3	1.2	3.1	.42	19	10.8	80	7.8	
JAN. 21...	.3	400	336	595	4.3	.95	3.3	.38	19	11.7	82	7.7	
FEB. 19...	--	--	--	565	4.5	.91	3.6	.42	20	10.7	82	7.7	
MAR. 10...	--	--	--	--	--	--	--	--	--	--	--	--	
10...	--	--	--	505	1.5	.84	.70	.35	6.8	11.2	85	7.6	
APR. 07...	.5	363	341	595	3.6	.86	2.7	.31	16	9.7	82	7.6	
MAY 16...	--	--	--	625	3.6	.74	2.9	.36	16	7.4	78	7.7	
16-31	--	--	--	--	--	--	--	--	--	--	--	--	
JUNE 01-12	--	--	--	--	--	--	--	--	--	--	--	--	
12...	--	--	--	605	5.3	.93	4.4	.41	24	6.7	73	7.7	
JULY 16...	.4	403	365	625	2.8	1.2	1.6	.56	12	11.2	130	8.2	
AUG. 19...	--	--	--	525	2.2	.84	1.4	.67	9.9	7.7	95	7.7	
SEP. 11...	--	--	--	--	--	--	--	--	--	--	--	--	
11...	--	--	--	600	2.4	1.0	1.4	.43	11	7.0	80	7.7	

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGHY, OHIO--Continued

CHEMICAL ANALYSES--Continued

DATE	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B MG/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A MG/SQ M	TOTAL PHYTO- PLANK- TON (CELLS PER ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TUR- BID- ITY (JTU)
OCT. 03... 03-31	8.1 --	208 --	290 --	84 --	-- --	-- 48	-- 1.7	-- 15	40000 --	390 --	75 --	30 --
NOV. 01-05 05...	-- --	-- --	-- --	-- --	-- --	48 --	1.7 --	15 --	-- 12000	-- 1000	-- 7600	-- --
DEC. 11... JAN.	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	12000 3700	3700 10000	10000 --	-- --
21... FEB. 19...	7.3 --	188 --	260 --	76 --	5.0 --	-- --	-- --	-- --	1100 1400	1800 2400	1400 1750	50 --
MAR. 10... 10...	-- --	-- --	-- --	-- --	-- --	100 --	.0 --	70 --	-- 410	-- 1400	-- 1400	-- --
APR. 07... MAY	10 --	207 --	290 --	81 --	5.1 --	-- --	-- --	-- --	1300 24000	1700 3000	240 80	35 --
16... 16-31 JUNE	-- --	-- --	-- --	-- --	-- --	3.1 --	11 --	39 --	-- 5600	3000 2300	80 920	-- --
01-12 12... JULY	-- --	-- --	-- --	-- --	-- --	3.1 --	11 --	39 --	5600 56000	2300 17000	920 77	-- 10
16... AUG. 19...	2.4 --	195 --	280 --	84 --	6.0 --	-- 9.2	-- 8.6	-- 41	56000 84000	17000 1200	77 310	10 --
SEP. 11... 11...	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- 53000	-- 930	-- 120	-- --

ANALYSES OF MINOR ELEMENTS

DATE	TIME	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)
OCT. 03... JAN.	1100	5	5	1	1	0	10	0	0	0	10	810
21... APR. 07...	1100	1	4	1	1	0	10	0	1	10	10	2100
JULY 16...	1200	1	2	0	1	<10	<10	2	2	0	0	1800
	1530	2	2	1	1	0	0	2	2	0	10	420

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY (HG) (UG/L)
OCT. 03... JAN.	80	2	4	270	80	30	70	2	2	<.5	<.5
21... APR. 07...	190	1	12	50	10	20	30	0	0	<.5	<.5
JULY 16...	30	1	3	70	50	10	40	0	2	<.5	<.5
	40	5	5	110	50	0	30	1	1	<.5	<.5

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OHIO--Continued

CHEMICAL ANALYSES--Continued

SUSPENDED SEDIMENT DISCHARGE

PERIOD OF RECORD.--October 1953 to September 1974 (daily mean concentration and discharge), current year (periodic instantaneous concentration and discharge).

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)
OCT.					
03...	1100	1380	13.0	33	123
NOV.					
05...	1200	1400	16.0	54	204
DEC.					
11...	1030	13000	3.0	114	4000
JAN.					
21...	1100	7500	1.0	61	1240
FEB.					
19...	1130	13500	4.0	107	3900
MAR.					
10...	1330	9910	4.0	108	2890
APR.					
07...	1200	4980	8.0	73	982
MAY					
16...	1030	3100	18.0	88	737
16-31	--	--	20.0	--	--
JUNE					
01-12	--	--	20.0	--	--
12...	0900	3340	20.0	63	568
JULY					
16...	1530	1820	24.0	22	108
AUG.					
19...	1430	1340	26.5	58	210
SEP.					
11...	1145	846	--	32	73
11...	1200	--	22.0	--	--

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/AT 25°C)

PERIOD OF RECORD.--March 1967 to current year.

EXTREMES.--Period of record: Maximum, 1,050 micromhos Sept. 24, 1967; minimum, 113 micromhos Sept. 16, 1975.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	742	710	772	759	632	378	579	530	411	381	366	347
2	735	665	797	782	518	482	557	501	417	411	375	351
3	684	670	812	803	557	528	521	501	434	417	410	339
4	687	677	811	714	621	557	543	516	452	435	435	326
5	684	675	718	654	632	609	584	545	482	453	389	323
6	689	674	738	702	642	620	594	570	482	468	435	378
7	715	691	713	605	647	557	602	590	504	464	470	423
8	732	714	645	618	534	435	596	587	515	503	519	456
9	742	730	713	655	521	440	594	587	528	513	552	501
10	752	723	720	670	542	518	578	441	546	528	537	495
11	757	733	692	676	569	542	468	437	567	545	603	512
12	773	756	682	504	582	573	471	410	570	531	647	366
13	776	760	654	591	575	563	408	390	557	543	453	372
14	762	758	619	556	597	569	---	---	600	551	492	401
15	761	751	662	533	608	486	---	---	629	603	506	426
16	786	747	691	670	504	476	---	---	644	624	584	467
17	805	769	737	629	528	506	---	---	639	629	624	464
18	765	642	751	677	533	530	---	---	641	590	665	495
19	642	607	756	639	536	527	---	---	585	525	596	426
20	631	606	641	630	537	527	---	---	579	534	518	414
21	651	631	665	639	575	539	591	585	576	503	546	441
22	676	633	681	665	591	522	600	587	501	492	657	512
23	650	631	678	668	591	573	620	591	501	206	791	606
24	661	647	672	665	611	519	600	593	236	210	858	353
25	665	644	668	606	615	575	599	533	281	234	740	500
26	653	629	641	615	587	533	593	558	272	236	876	749
27	629	619	638	600	543	507	560	483	288	236	914	867
28	650	631	629	602	584	509	542	489	360	291	932	897
29	661	650	647	630	588	572	575	543	---	---	927	473
30	704	661	647	636	585	573	597	432	---	---	672	587
31	747	716	---	---	585	575	428	390	---	---	707	641
MONTH	805	606	812	504	647	378	---	---	644	206	932	323
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	584	549	687	516	635	624	782	764	669	306
2	875	524	609	578	575	447	650	624	800	779	395	285
3	920	834	606	573	509	464	681	642	804	782	458	380
4	947	789	606	576	575	512	675	659	789	761	497	459
5	954	555	606	597	600	483	675	579	779	764	549	495
6	857	662	614	602	512	422	606	491	795	755	611	512
7	758	599	620	605	560	507	558	357	809	732	620	548
8	776	615	629	606	548	518	563	428	726	621	576	549
9	645	629	641	627	581	521	393	659	327	327	660	584
10	657	633	660	639	608	582	609	498	681	594	650	591
11	674	654	665	656	615	606	647	614	612	440	602	588
12	680	668	668	651	638	612	659	629	645	438	590	425
13	695	669	653	629	668	638	672	399	636	503	570	437
14	674	660	651	629	672	626	573	177	620	497	468	444
15	678	671	653	627	650	635	582	210	639	621	480	449
16	680	665	668	651	687	647	635	135	632	588	504	485
17	681	657	683	666	702	543	660	632	588	543	432	203
18	678	668	686	557	506	359	665	641	563	525	494	341
19	683	659	657	611	510	390	662	606	527	446	524	468
20	668	660	680	647	590	522	618	566	536	515	543	521
21	687	666	698	677	638	612	605	558	567	530	584	527
22	692	678	707	696	656	639	600	383	591	564	585	227
23	680	669	714	701	666	636	629	284	603	588	---	---
24	672	194	728	713	672	659	653	351	624	599	408	320
25	470	302	740	719	675	665	663	308	650	623	495	422
26	489	414	737	723	701	675	665	510	681	621	485	455
27	506	444	738	729	708	702	653	581	698	678	527	470
28	570	482	747	729	735	495	720	591	714	695	588	531
29	594	528	740	726	536	453	731	708	713	687	632	590
30	623	548	738	731	629	536	738	716	707	698	668	635
31	---	---	735	666	---	---	761	741	702	525	---	---
MONTH	954	194	747	549	738	359	761	135	809	327	669	113
YEAR	954	113										

PH (UNITS)

EXTREMES.--Period of record: Maximum, 8.8 Oct. 29, 1972; minimum, 6.7 Mar. 5, 1973.

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

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OHIO--Continued

DISSOLVED OXYGEN (DO) IN MILLIGRAMS PER LITRE

PERIOD OF RECORD.--March 1967 to current year.

EXTREMES.--Period of record: Maximum 15.0 mg/l or higher Apr. 24-30, May 1, 1971, Mar. 27, 28, 1972; minimum, 0.0 mg/l Sept. 8-13, 15, Oct. 21, 22, 1968, Sept. 13, 1969.

REMARKS.--Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or higher, due to instrument limitations.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.1	5.4	6.0	5.1	11.1	10.7	12.9	12.0	---	---	---	---
2	6.2	4.8	5.1	4.7	11.1	10.7	13.3	12.0	---	---	---	---
3	8.0	5.7	4.7	4.3	11.1	10.8	13.4	12.5	---	---	---	---
4	8.2	7.3	4.8	4.4	11.3	10.8	13.0	12.2	---	---	---	---
5	8.5	7.7	5.0	4.4	11.4	10.9	12.7	11.9	---	---	---	---
6	8.4	7.5	5.1	4.5	11.4	11.3	12.3	11.5	---	---	---	---
7	7.6	6.7	6.8	4.9	11.4	11.1	12.9	11.3	11.6	11.3	---	---
8	8.0	6.5	7.2	6.9	11.4	11.1	12.8	11.4	11.4	10.9	---	---
9	8.0	7.3	7.2	6.1	11.2	10.2	12.0	11.6	11.2	10.9	---	---
10	7.7	6.9	7.2	6.2	11.1	10.6	12.0	11.5	11.8	10.8	---	---
11	7.2	6.7	7.3	7.1	11.1	10.5	11.9	11.3	11.8	11.4	---	---
12	6.9	5.9	8.4	7.3	11.0	10.2	11.7	11.1	11.7	11.1	---	---
13	5.9	5.1	8.0	7.0	10.5	9.7	---	---	11.6	11.3	---	---
14	5.3	4.7	8.9	7.7	10.6	9.9	---	---	11.6	11.3	---	---
15	4.8	4.5	9.1	8.8	10.4	9.6	---	---	11.3	10.8	---	---
16	5.0	4.4	9.5	8.8	10.3	7.9	---	---	11.1	10.7	---	---
17	4.8	4.2	9.4	8.6	8.8	7.5	---	---	11.0	10.5	---	---
18	6.9	4.4	9.3	9.0	8.6	7.2	---	---	10.8	10.5	---	---
19	7.6	6.6	9.3	8.6	12.5	12.4	---	---	11.9	10.6	---	---
20	7.7	7.3	8.9	8.4	12.5	12.2	---	---	11.9	11.1	---	---
21	8.2	7.6	8.8	8.3	12.2	12.0	13.2	13.0	11.3	11.1	10.8	8.9
22	8.6	7.8	8.9	8.4	13.2	11.9	13.1	12.9	11.3	10.7	11.4	10.0
23	8.7	7.6	9.2	8.7	12.8	12.3	13.5	12.6	11.0	10.3	11.3	9.3
24	8.1	6.9	9.1	8.7	12.8	12.1	13.0	12.3	10.4	8.2	11.1	9.3
25	7.5	6.6	9.4	8.8	12.8	11.6	12.4	11.7	10.4	7.3	10.4	9.5
26	7.6	6.4	9.5	8.9	12.5	11.8	12.9	11.7	10.6	10.4	10.1	9.5
27	8.0	7.0	9.6	9.0	13.4	12.5	13.0	12.4	10.9	10.5	10.0	9.3
28	8.0	7.1	10.0	9.7	13.4	12.4	---	---	10.5	9.2	9.8	9.0
29	8.0	6.9	10.5	10.2	12.5	11.7	---	---	---	---	11.0	9.4
30	7.2	6.3	10.6	10.4	12.1	11.3	---	---	---	---	10.7	10.1
31	6.4	5.7	---	---	12.3	11.8	---	---	---	---	11.0	10.1
MONTH	8.7	4.2	10.6	4.3	13.4	7.2	---	---	11.9	7.3	---	---
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.2	8.9	---	---	4.6	3.5	4.8	3.2	10.2	5.4	6.4	4.1
2	10.4	8.7	---	---	5.2	2.4	8.1	3.6	10.0	4.8	5.6	5.0
3	9.9	8.9	---	---	6.0	5.4	7.6	6.1	8.4	4.6	6.3	5.2
4	9.9	9.2	---	---	6.5	5.8	8.0	6.1	9.1	4.0	7.1	6.1
5	10.5	8.8	---	---	6.2	5.5	7.7	5.8	6.9	4.2	6.9	6.2
6	10.5	9.0	9.8	8.8	7.2	6.0	6.9	5.2	5.1	3.9	6.7	5.7
7	11.2	8.5	9.2	7.1	6.1	5.1	7.5	6.1	7.2	3.8	7.8	5.8
8	11.7	8.7	11.8	7.2	6.7	5.9	9.1	6.0	7.2	4.0	7.8	6.6
9	10.7	8.7	12.8	9.3	6.9	6.6	10.6	7.8	5.5	3.4	8.6	5.5
10	9.9	9.3	12.9	9.5	7.3	6.5	10.9	7.8	5.0	3.9	10.2	6.4
11	9.4	9.2	12.6	9.2	7.2	6.9	14.5	7.3	6.5	3.5	8.7	7.1
12	9.3	9.1	11.2	9.1	7.6	6.7	13.1	9.2	8.4	4.4	7.5	6.4
13	9.4	8.6	10.5	8.5	7.6	6.5	15.0	9.0	6.9	4.9	6.2	5.4
14	9.4	8.9	10.2	8.4	8.2	6.1	14.7	8.7	5.7	4.2	7.6	6.1
15	9.5	8.8	9.2	7.7	9.4	7.1	11.9	7.6	6.7	4.9	7.9	7.0
16	9.8	8.8	10.8	8.2	11.1	7.1	11.1	6.9	6.6	5.7	7.6	6.5
17	9.7	8.6	10.2	8.5	11.2	7.4	10.6	7.2	5.9	4.7	7.4	6.8
18	9.4	8.4	9.6	8.0	8.0	5.5	11.0	8.4	5.2	4.2	7.5	6.9
19	9.2	7.9	10.9	8.0	6.0	5.6	10.5	6.8	7.9	5.0	7.5	6.9
20	9.7	8.4	10.2	8.0	6.0	5.1	8.3	6.2	8.2	6.0	8.0	7.0
21	10.7	8.8	10.4	7.4	7.5	5.7	8.3	6.1	8.7	6.1	8.2	7.5
22	10.3	8.4	9.0	6.9	6.8	5.4	12.3	6.1	9.7	6.2	8.3	7.8
23	10.3	8.9	8.0	6.3	5.8	5.0	13.1	7.0	9.0	6.2	---	---
24	10.1	8.5	7.2	5.5	5.8	4.5	12.9	8.4	10.3	6.1	7.3	7.1
25	---	---	6.2	4.8	7.1	5.1	14.9	6.6	9.8	6.2	7.4	6.5
26	---	---	6.4	4.5	6.8	4.1	14.5	8.1	10.7	6.0	7.8	6.6
27	---	---	7.0	4.6	6.4	4.4	13.3	7.6	11.6	6.1	8.2	7.4
28	---	---	7.8	4.7	4.2	3.2	14.8	7.0	10.9	6.3	8.2	7.5
29	---	---	6.9	5.2	3.9	3.1	9.8	6.1	10.9	6.5	8.2	7.6
30	---	---	6.8	5.0	3.7	2.6	11.4	6.0	9.5	6.6	8.2	7.3
31	---	---	5.8	3.5	---	---	10.5	5.7	7.7	5.9	---	---
MONTH	11.7	7.9	12.9	3.5	11.2	2.4	15.0	3.2	11.6	3.4	10.2	4.1
YEAR	15.0	2.4										

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TEMPERATURE (°C) OF WATER

EXTREMES.--Period of record: Maximum, 34.0°C June 29, 1966; minimum, freezing point on many days during winter periods.

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

SCIOTO RIVER BASIN

03235000 SALT CREEK AT TARLTON, OHIO

LOCATION.--Lat 39°33'20", long 82°46'51", Pickaway County, at bridge on State Highway 159 at Tarlton.

DRAINAGE AREA.--11.5 mi² (29.8 km²).

PERIOD OF RECORD.--Discharge, 1947 to 1961 (operated as a continuous-record station); 1962 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 24	59.65	18.181	590	16.7

03235100 SALT CREEK AT LAURELVILLE, OHIO

LOCATION.--Lat 39°27'46", long 82°44'08", Hocking County, at bridge on Township Road 174, 200 ft (61 m) upstream from Brimstone Creek, 0.5 mi (0.8 km) south of Laurelville.

DRAINAGE AREA.--106 mi² (274 km²).

PERIOD OF RECORD.--Discharge, 1972 to current year; chemical analyses, 1972 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	INSTANTANEOUS DISCHARGE	
	(ft ³ /s)	(m ³ /s)
July 10	15	0.42

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)
AUG. 01...	1745	8.9	31.0	8.9	363	7.9	5.9	48	17	6.3	2.5	212

DATE	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
AUG. 01...	0	5.6	28	.2	.01	.00	.06	.09	218	190	20	40

SCIOTO RIVER BASIN

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03235200 LITTLE BLACKJACK BRANCH NEAR SOUTH BLOOMINGVILLE, OHIO

LOCATION.--Lat 39°27'23", long 82°30'25", Hocking County, at culvert on State Highway 664, 5.5 mi (8.8 km) northeast of South Bloomingville.

DRAINAGE AREA.--0.89 mi² (2.30 km²).

PERIOD OF RECORD.--Discharge, 1966 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
May 18	21.23	6.471	220	6.23

03235400 WEST BRANCH TAR HOLLOW CREEK AT TAR HOLLOW STATE PARK, OHIO

LOCATION.--Lat 39°23'35", long 82°45'12", Ross County, in Tar Hollow State Park, 300 ft (90 m) upstream from Tar Hollow Creek, 5 mi (8 km) south of Adelpia.

DRAINAGE AREA.--0.305 mi² (0.790 km²).

PERIOD OF RECORD.--Discharge, 1950 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 23	5.05	1.539	20	0.57

SCIOTO RIVER BASIN

03235500 TAR HOLLOW CREEK AT TAR HOLLOW STATE PARK, OHIO

LOCATION.--Lat 39°23'22", long 82°45'03", in NE 1/4 sec. 36, T.10 N., R.20 W., Ross County, in Tar Hollow State Park, on left bank 2.0 mi (3.2 km) upstream from mouth and 5.2 mi (8.4 km) south of Adelphi.

DRAINAGE AREA.--1.35 mi² (3.50 km²).

GAGE.--Water-stage recorder and V-notch weir. Datum of gage is 793.63 ft (241.898 m) above mean sea level.

REMARKS.--Discharge records fair.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--29 years, 1.27 ft³/s (0.0360 m³/s), 12.77 in/yr (324 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 957 ft³/s (27.1 m³/s) May 24, 1968, gage height, 5.66 ft (1.725 m) (in gage well), 5.84 ft (1.780 m) (from floodmark), from rating curve extended above 92 ft³/s (2.61 m³/s) on basis of slope-area measurements at gage height 5.21 ft (1.588 m) and at peak flow; no flow many days each year.

REVISIONS.--WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	.11	6.0	2.9	4.6	2.1	3.1	2.5	.60	.04	0	0
2	.11	.11	6.6	2.9	3.1	1.8	2.7	2.3	.30	.03	0	0
3	.11	.11	4.6	2.7	2.5	1.5	3.3	2.1	.13	.03	0	0
4	.11	.15	3.3	2.7	2.1	1.4	2.7	1.8	.16	.06	0	0
5	.11	1.7	2.9	2.5	2.4	1.2	2.5	1.5	1.6	.04	0	.01
6	.07	1.5	2.5	2.1	4.6	1.1	2.3	1.4	7.2	.03	.02	.20
7	.07	1.2	2.9	2.0	3.6	1.5	2.0	1.2	8.2	.03	.03	.07
8	.07	1.1	9.1	1.8	2.9	1.7	1.8	1.1	1.1	.03	.02	.03
9	.05	.96	6.2	2.0	2.3	1.5	1.7	1.1	.71	.02	.02	.02
10	.05	.83	3.6	2.2	2.0	1.7	1.5	.96	.60	.02	.02	0
11	.05	1.0	2.9	2.9	1.8	1.7	1.4	.83	.66	.02	.02	.16
12	.05	6.8	2.9	2.3	2.1	1.7	1.4	.83	.67	.02	.02	1.3
13	.06	3.1	3.3	2.0	2.0	8.3	1.2	.71	.60	.02	0	.60
14	.10	2.3	3.1	1.7	1.8	7.0	1.1	.50	.46	.01	.03	.25
15	.12	1.8	5.4	1.4	1.8	5.4	.96	.40	.50	0	.08	.07
16	.11	1.5	7.4	1.2	1.8	3.9	.96	.40	.30	0	.26	.05
17	.20	1.4	4.2	1.1	1.8	2.9	.83	.40	.99	0	.38	.03
18	.20	1.2	2.9	1.1	1.7	2.5	.83	1.9	2.3	0	.07	.30
19	.11	1.3	2.5	1.7	1.7	18	1.1	1.4	1.1	.01	.05	.50
20	.11	2.1	2.1	2.0	1.7	6.4	1.1	.96	.71	.26	.05	.30
21	.11	2.0	2.0	1.8	1.5	3.6	.96	.66	.50	.20	.03	.30
22	.11	1.7	1.8	1.8	1.5	3.1	.96	.50	.40	.07	.02	.20
23	.11	1.7	1.7	1.7	31	2.5	.96	.40	.30	.04	.02	.16
24	.11	1.7	1.5	1.7	18	13	9.0	.30	.20	.03	.02	3.0
25	.11	4.0	1.7	2.3	5.8	5.6	11	.20	.11	.02	.01	.96
26	.11	4.2	1.7	2.7	3.3	3.1	6.0	.20	.11	.01	0	.50
27	.11	3.1	1.7	2.3	2.7	2.7	4.4	.11	.07	0	0	.30
28	.11	2.3	1.7	2.0	2.3	2.7	3.1	.09	.07	0	0	.20
29	.11	2.0	1.7	2.0	---	15	2.9	.07	.05	0	0	.11
30	.11	1.7	1.5	2.0	---	7.8	2.3	.07	.05	0	0	.07
31	.11	---	1.7	4.3	---	4.2	---	.19	---	0	0	---
TOTAL	3.27	54.67	103.1	65.8	114.4	151.9	76.06	27.08	30.75	1.04	1.17	9.69
MEAN	.11	1.82	3.33	2.12	4.09	4.90	2.54	.87	1.03	.034	.038	.32
MAX	.20	6.8	9.1	4.3	31	18	11	2.5	8.2	.26	.38	3.0
MIN	.05	.11	1.5	1.1	1.5	1.1	.83	.07	.05	0	0	0
CFSM	.08	1.35	2.47	1.57	3.03	3.63	1.88	.64	.76	.03	.03	.24
IN.	.09	1.51	2.84	1.81	3.15	4.18	2.09	.75	.85	.03	.03	.27

CAL YR 1974 TOTAL 736.84 MEAN 2.02 MAX 40 MIN 0 CFSM 1.50 IN 20.29
WTR YR 1975 TOTAL 638.93 MEAN 1.75 MAX 31 MIN 0 CFSM 1.30 IN 17.59

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

DATE TIME G. H. DISCHARGE
02-23 1545 *3.14 *88

Minimum discharge: no flow many days.

SCIOTO RIVER BASIN
03235500 TAR HOLLOW CREEK AT TAR HOLLOW STATE PARK, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)
MAR. 13...	1415	6.2	5.0	11.6	91	84	6.6	9.8	5.5	4.0
DATE		DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
MAR. 13...		2.3	1.4	10	0	4.0	8	1.8	26	.1
DATE		AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
MAR. 13...		.47	.01	.43	.05	56	30	22	60	40

SCIOTO RIVER BASIN

03235995 SALT CREEK ABOVE DAMSITE NEAR LONDONDERRY, OHIO

LOCATION.--Lat 39°17'26", long 82°44'45", Vinton County, 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.

DRAINAGE AREA.--268 mi² (694 km²).

PERIOD OF RECORD.--1963 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 24	18.28	5.572	15,500	439

03236100 SOUTH BRANCH LITTLE SALT CREEK AT JACKSON, OHIO

LOCATION.--Lat 39°02'38", long 82°38'35", Jackson County, at culvert adjacent to State Highway 139, 800 ft (200 m) south of Jackson High School, 1 mi (1.6 km) upstream from mouth.

DRAINAGE AREA.--3.76 mi² (9.74 km²).

PERIOD OF RECORD.--1947 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Apr. 24	15.56	4.743	1,010	28.6

03237130 SCIOTO BRUSH CREEK AT OTWAY, OHIO

LOCATION.--Lat 38°51'43", long 83°11'24", Scioto County, at bridge on State Highway 348, 600 ft (183 m) upstream from South Fork, at Otway.

DRAINAGE AREA.--94.4 mi² (244.5 km²).

PERIOD OF RECORD.--Discharge, 1956, 1972 to current year; chemical analyses, 1972 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	INSTANTANEOUS DISCHARGE	
	(ft ³ /s)	(m ³ /s)
Sept. 24, 1974...	a/ 25	0.71
Aug. 21	.09	.003

a/ Not previously published.

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)		
												DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
SEP. 18...	1015	1.7	16.0	8.6	315	6.8	7.7	21	14	19	3.0	38	
DATE		CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA, MG) (MG/L)	DIS- SOLVED IRON (FE) (MG/L)	DIS- SOLVED MAN- GANESE (MN) (MG/L)
SEP. 18...		0	17	98	.0	.02	.02	.28	.03	198	110	60	10

SCIOTO RIVER BASIN

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03237150 SOUTH FORK SCIOTO BRUSH CREEK AT WANSLEY, OHIO

LOCATION.--Lat 38°49'54", long 83°16'42", Adams County, at bridge on State Highway 348, at Wamsley.

DRAINAGE AREA.--56.1 mi² (145.3 km²).

PERIOD OF RECORD.--Discharge, 1972 to current year; chemical analyses, 1972 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	INSTANTANEOUS DISCHARGE	
	(ft ³ /s)	(m ³ /s)
Aug. 21	5.5	0.156

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)
SEP. 18...	1340	21	17.5	7.7	240	6.6	8.2	25	11	3.4	3.1	72

DATE	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
SEP. 18...	0	3.5	40	.2	.01	.01	.47	.01	130	110	150	100

03237210 ROSE RUN NEAR PORTSMOUTH, OHIO

LOCATION.--Lat 38°48'07", long 82°59'03", Scioto County, at culvert on U.S. Highway 23, 2.9 mi (4.7 km) north of Portsmouth city limits.

DRAINAGE AREA.--1.04 mi² (2.69 km²).

PERIOD OF RECORD.--1966 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Sept. 24	16.80	5.121	165	4.67

UPPER TWIN CREEK BASIN

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

LOCATION.--Lat 38°38'37", long 83°12'57", Scioto County, 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). Area at site used prior to July 21, 1972, 12.8 mi² (33.2 km²).

GAGE.--Water-stage and water temperature recorders. Datum of gage is 543.41 ft (165.631 m) above mean sea level, 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.--Discharge records good except those above 250 cfs, which are fair.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--June 1963 to current year.

AVERAGE DISCHARGE.--12 years, 13.3 ft³/s (0.377 m³/s), 14.80 in/yr (376 mm/yr).

EXTREMES.--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 most years.

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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.64	1.1	177	56	51	17	28	55	16	.36	.29	1.4
2	.56	1.2	85	37	45	14	22	30	10	.36	.29	1.2
3	.40	1.4	35	33	33	12	107	22	7.1	.29	.22	.78
4	.40	1.9	24	27	40	10	41	26	5.1	.29	.22	.65
5	.33	2.6	17	20	69	8.8	27	21	4.7	.29	.26	1.2
6	.33	2.8	14	17	96	8.8	21	18	10	.22	2.0	4.7
7	.27	2.6	25	15	49	10	18	15	5.5	.29	1.4	2.6
8	.27	2.2	90	13	32	10	16	13	3.4	.29	.78	1.7
9	.27	2.0	50	15	23	8.8	13	11	2.6	.29	.26	1.1
10	.27	1.9	30	25	17	10	12	9.3	2.1	.54	.78	.65
11	.27	3.0	24	66	17	10	11	7.4	2.2	.54	.65	1.2
12	.20	40	21	37	146	257	9.8	7.4	2.4	.54	.44	3.4
13	.27	19	18	25	65	86	8.2	7.4	2.1	.44	.36	2.2
14	.33	13	16	18	35	84	7.4	5.8	2.0	.36	2.0	1.6
15	.56	8.8	16	15	24	66	7.4	5.8	2.2	.36	2.0	1.1
16	1.2	6.9	24	13	19	43	6.7	6.4	2.2	.22	18	.92
17	2.3	5.7	21	10	17	28	6.7	17	2.0	.29	9.3	.78
18	2.3	5.1	17	31	15	21	6.7	20	6.1	.29	4.3	13
19	2.0	4.6	16	45	13	54	14	16	4.3	1.6	2.0	11
20	1.9	8.1	13	37	11	44	14	11	2.6	7.1	1.6	5.8
21	1.6	8.5	12	27	9.2	31	12	7.8	2.1	2.9	.92	4.3
22	1.5	7.1	10	21	8.5	72	11	19	3.1	1.7	.65	2.9
23	1.2	6.2	9.2	19	441	61	11	26	2.2	1.1	.54	20
24	1.1	6.0	11	17	273	327	325	13	1.8	1.7	.44	254
25	1.0	7.8	26	22	73	73	245	9.3	1.2	6.7	.36	16
26	1.0	10	27	24	37	35	81	6.1	.92	2.4	.36	11
27	1.0	10	27	19	26	25	35	4.0	.78	1.6	.29	8.5
28	1.0	8.5	30	19	21	61	374	2.9	.65	.92	.29	6.7
29	.91	6.6	24	19	---	357	276	3.4	.54	.65	.29	5.5
30	1.0	21	19	16	---	81	66	51	.44	.44	.36	4.3
31	1.1	---	18	36	---	41	---	17	---	.36	1.1	---
TOTAL	27.48	225.6	946.2	794	1705.7	1966.4	1832.9	484.0	108.33	35.43	55.37	390.18
MEAN	.89	7.52	30.5	25.6	60.9	63.4	61.1	15.6	3.61	1.14	1.79	13.0
MAX	2.3	40	177	66	441	357	374	55	16	7.1	18	254
MIN	.20	1.1	9.2	10	8.5	8.8	6.7	2.9	.44	.22	.22	.65
CFSM	.07	.62	2.50	2.10	4.99	5.20	5.01	1.28	.30	.09	.15	1.07
IN.	.08	.69	2.88	2.42	5.20	6.00	5.59	1.48	.33	.11	.17	1.19

CAL YR 1974 TOTAL 6569.99 MEAN 18.0 MAX 400 MIN .15 CFSM 1.48 IN 20.03
WTR YR 1975 TOTAL 8571.59 MEAN 23.5 MAX 441 MIN .20 CFSM 1.93 IN 26.13

EXTREMES.--Current year: Peak discharges above base of 450 ft³/s (12.7 m³/s) and maximums (*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
02-23	0930	5.08	817	03-29	0545	5.81	1,120	04-29	0045	4.92	760
02-24	0415	4.35	569	04-24	1800	5.67	1,050	05-30	1245	4.08	488
03-12	1000	5.05	806	04-28	0530	*5.95	*1,180	09-24	0100	5.71	1,070
03-24	0130	4.43	595								

Minimum discharge: 0.20 ft³/s (0.006 m³/s) Oct. 13, 14, 15.

UPPER TWIN CREEK BASIN

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03237280 UPPER TWIN CREEK AT MCGAW, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1964 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
OCT. 02...	1400	.45	12.0	9.4	6.4	5.6	3.0	2.0	15	0
NOV. 06...	1300	2.7	12.0	8.7	6.3	4.8	3.5	1.4	16	0
DEC. 10...	1300	31	4.0	9.1	3.4	3.6	1.9	.8	9	0
JAN. 07...	1400	15	5.0	9.3	4.3	3.8	2.5	1.2	10	0
FEB. 04...	1430	32	5.0	9.1	3.9	3.6	2.5	1.7	12	0
MAR. 11...	1400	10	4.0	9.4	5.0	3.8	2.2	1.4	8	0
APR. 09...	1300	13	7.0	9.5	5.0	4.0	2.3	1.4	14	0
MAY 14...	1030	5.9	14.0	10	6.0	4.2	2.2	1.8	12	0
JUNE 11...	1200	2.4	18.0	10	6.0	4.7	3.0	2.3	15	0
JULY 16...	1100	.28	23.0	11	9.0	6.4	3.7	2.6	18	0
AUG. 19...	1100	2.2	21.5	12	8.5	5.9	3.1	2.4	17	0
SEP. 17...	1030	.83	18.0	9.0	10	6.0	3.3	2.4	24	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	HARD- NESS (CA, MG) (MG/L)
OCT. 02...	29	2.0	.1	105	69	65	.14	.01	39
NOV. 06...	29	2.6	.1	105	71	64	.05	.00	36
DEC. 10...	21	1.0	.0	65	48	45	.16	.01	23
JAN. 07...	22	.9	.1	65	66	49	.13	.00	26
FEB. 04...	22	1.6	.1	73	51	50	.16	.01	25
MAR. 11...	24	1.5	.1	70	50	51	3.2	.00	28
APR. 09...	24	1.1	.2	78	47	54	.15	.00	29
MAY 14...	26	1.5	.1	80	54	58	.10	.01	32
JUNE 11...	32	.8	.0	105	63	66	.17	.01	34
JULY 16...	35	2.2	.0	130	86	79	.26	.01	49
AUG. 19...	31	1.1	.1	125	64	72	.40	.01	46
SEP. 17...	30	1.9	.2	125	80	75	.16	.01	50

UPPER TWIN CREEK BASIN
03237280 UPPER TWIN CREEK AT MCGAW, OHIO--Continued
CHEMICAL ANALYSES--Continued
WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975--Continued

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UPPER TWIN CREEK BASIN
03237280 UPPER TWIN CREEK AT MCGAW, OHIO--Continued

CHEMICAL ANALYSES--Continued

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	DDD IN BOTTOM MA- TERIAL (UG/KG)	DDE IN BOTTOM MA- TERIAL (UG/KG)
OCT. 02...	1400	.45	.0	.0	0	.0	.0
NOV. 06...	1300	2.7	--	--	--	--	--
DEC. 10...	1300	31	--	--	--	--	--
FEB. 04...	1430	32	--	--	--	--	--
MAR. 11...	1400	10	--	--	--	--	--
APR. 09...	1300	13	--	--	--	--	--
MAY 14...	1030	5.9	--	--	--	--	--
JUNE 11...	1200	2.4	--	--	--	--	--
JULY 16...	1100	.28	--	--	--	--	--
AUG. 19...	1100	2.2	--	--	--	--	--
SEP. 17...	1030	.83	--	--	--	--	--

DATE	DDT IN BOTTOM MA- TERIAL (UG/KG)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	PCB IN BOTTOM MA- TERIAL (UG/KG)
OCT. 02...	.7	.0	.0	.0	.0	0
NOV. 06...	--	--	--	--	--	--
DEC. 10...	--	--	--	--	--	--
FEB. 04...	--	--	--	--	--	--
MAR. 11...	--	--	--	--	--	--
APR. 09...	--	--	--	--	--	--
MAY 14...	--	--	--	--	--	--
JUNE 11...	--	--	--	--	--	--
JULY 16...	--	--	--	--	--	--
AUG. 19...	--	--	--	--	--	--
SEP. 17...	--	--	--	--	--	--

DATE	TIME	TOTAL ALDRIN (UG/L)	TOTAL LINDANE (UG/L)	TOTAL CHLOR- DANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DI- ELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL HEPTA- CHLOR (UG/L)
OCT. 02...	1400	.00	.00	.0	.00	.00	.00	.00	.00	.00

DATE	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	TOTAL PCB (UG/L)	TOTAL MALA- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL DI- AZINON (UG/L)	TOTAL METHYL PARA- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
OCT. 02...	.00	.0	.00	.00	.00	.00	.00	.00	.00

PERIOD OF RECORD.--1963-66, 1967-70, July 1972 to current year.

EXTREMES.--Period of record: Maximum, 30.0°C July 24, 1972; minimum, freezing point on several days during 1973.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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

UPPER TWIN CREEK BASIN

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03237280 UPPER TWIN CREEK AT MCGAW, OHIO--Continued

SUSPENDED SEDIMENT DISCHARGE

PERIOD OF RECORD.--1964-69 (periodic instantaneous concentration and discharge), 1969-72 (daily mean concentration and discharge), 1973 to current year (periodic instantaneous concentration and discharge).

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)
OCT. 02...	1400	.45	0	.00
NOV. 06...	1300	2.7	4	.03
DEC. 10...	1300	31	0	.00
JAN. 07...	1400	15	0	.00
FEB. 04...	1430	32	2	.17
MAR. 11...	1400	9.1	0	.00
APR. 09...	1300	13	0	.00
MAY 14...	1030	5.9	4	.06
JUNE 11...	1200	2.4	0	.00
JULY 16...	1100	.28	0	.00
AUG. 19...	1100	2.2	0	.00
SEP. 17...	1030	.43	2	.00

OHIO BRUSH CREEK BASIN

03237295 OHIO BRUSH CREEK NEAR PEEBLES, OHIO

LOCATION.--Lat 38°58'06", long 83°25'34", Adams County, at bridge on State Highway 32, 1.6 mi (2.6 km) upstream from Little East Fork, 1.7 mi (2.7 km) northwest of Peebles.

DRAINAGE AREA.--154 mi² (399 km²).

PERIOD OF RECORD.--Discharge, 1959 to 1960, 1972 to current year; chemical analyses, 1972 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	INSTANTANEOUS DISCHARGE	
	(ft ³ /s)	(m ³ /s)
Aug. 21	34	0.96

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)
SEP. 17...	1545	30	17.5	9.2	470	7.6	6.9	58	27	3.7	3.3	280

DATE	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
SEP. 17...	0	5.1	33	.2	.01	.01	.50	.03	275	260	30	20

03237300 WEST BRANCH TURKEY RUN NEAR WINCHESTER, OHIO

LOCATION.--Lat 38°56'56", long 83°40'19", Adams County, at culvert on State Highway 32, 1.3 mi (2.1 km) west of Winchester.

DRAINAGE AREA.--0.89 mi² (2.31 km²).

PERIOD OF RECORD.--1956 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Apr. 24	16.16	4.926	560	15.9

OHIO BRUSH CREEK BASIN

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03237400 WEST FORK OHIO BRUSH CREEK AT LAWSHE, OHIO

LOCATION.--Lat 38°56'22", long 83°28'28", Adams County, at bridge on Township Road C-13 at Lawshe, 0.4 mi (0.6 km) upstream from mouth.

DRAINAGE AREA.--134 mi² (347 km²).

PERIOD OF RECORD.--Discharge, 1959 to 1960, 1972 to current year; chemical analyses, 1972 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	INSTANTANEOUS DISCHARGE	
	(ft ³ /s)	(m ³ /s)
Aug. 21, 1974..	a/ 18	0.51

a/ Not previously published.

WATER QUALITY RECORDS

CHEMICAL ANALYSES

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)
OCT. 02...	1130	14	10.5	8.8	445	7.9	1.7	61	25	8.0	3.5	258
SEP. 17...	1315	11	18.0	8.0	390	7.3	5.4	50	12	5.5	4.8	180

DATE	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 02...	0	11	40	.2	.09	.00	.11	.09	278	260	20	0
SEP. 17...	0	6.3	34	.2	.01	.01	.40	.11	207	170	70	20

OHIO BRUSH CREEK BASIN

03237500 OHIO BRUSH CREEK NEAR WEST UNION, OHIO

LOCATION.--Lat 38°48'13", long 83°25'16", Adams County, 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).

GAGE.--Water-stage recorder. Datum of gage is 510.6 ft (155.63 m) above mean sea level, adjustment of 1912. Prior to Nov. 22, 1940, nonrecording gage at same site and datum.

REMARKS.--Discharge records good. Sediment data collected at this site 1969 to 1974.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--44 years, 445 ft³/s (12.60 m³/s), 15.62 in/yr (397 mm/yr).

EXTREMES.--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.

REVISIONS.--WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	113	78	2310	2350	1590	501	683	1640	995	38	10	194
2	86	85	1850	833	909	413	539	1200	352	32	8.1	68
3	71	93	1200	822	663	352	1930	698	162	28	7.1	45
4	63	132	773	890	638	303	767	1150	130	33	6.2	122
5	57	1040	573	586	1220	275	513	668	106	63	81	101
6	55	408	442	458	2220	254	397	501	805	85	127	57
7	55	221	1180	408	970	387	338	586	347	53	57	43
8	53	164	4670	367	633	624	286	357	145	142	32	33
9	51	133	2070	811	539	367	244	250	97	71	22	27
10	51	114	874	2270	377	324	220	180	76	44	16	22
11	50	141	648	3870	419	362	194	150	68	71	921	31
12	49	1720	745	1090	2000	4320	171	120	66	53	269	1820
13	49	669	745	693	1120	1970	151	120	87	39	115	624
14	49	381	579	526	638	1450	137	160	85	34	57	198
15	55	265	673	424	507	1540	135	200	113	32	772	108
16	152	205	2430	419	470	805	132	170	135	28	3380	78
17	286	172	868	329	586	648	125	140	106	33	2130	65
18	159	154	605	1360	559	526	127	130	382	29	501	653
19	109	154	488	1610	430	3330	1030	270	338	34	198	970
20	91	668	462	976	357	1500	532	160	132	71	132	392
21	79	574	403	629	303	783	234	118	130	115	99	693
22	73	284	372	530	264	698	168	99	519	74	68	264
23	69	207	315	500	12600	609	148	89	142	46	53	229
24	65	179	638	560	11900	8170	13500	79	78	34	44	8180
25	65	537	1850	668	1980	1630	10300	72	58	28	38	1270
26	73	614	939	921	1030	761	2060	65	50	20	33	673
27	78	340	709	572	724	559	933	59	63	31	28	441
28	79	269	833	470	605	1610	7730	54	132	23	24	309
29	76	216	614	501	---	10700	2610	52	68	18	22	211
30	73	366	494	767	---	2310	1120	51	48	13	20	162
31	74	---	539	1700	---	982	---	89	---	12	81	---
TOTAL	2509	10583	31911	28900	46311	49073	47454	9677	6015	1427	9351.4	18083
MEAN	80.9	353	1029	932	1654	1583	1582	312	201	46.0	302	603
MAX	286	1720	4670	3870	12600	10700	13500	1640	995	142	3380	8180
MIN	49	78	315	329	264	264	125	51	48	12	6.2	22
CFSM	.21	.91	2.66	2.41	4.27	4.09	4.09	.81	.52	.12	.78	1.56
IN.	.24	1.02	3.07	2.78	4.45	4.72	4.56	.93	.58	.14	.90	1.74

CAL YR 1974 TOTAL 199214.0 MEAN 546 MAX 6150 MIN 11 CFSM 1.41 IN 19.15
 WIR YR 1975 TOTAL 261294.4 MEAN 716 MAX 13500 MIN 6.2 CFSM 1.85 IN 25.12

EXTREMES.--Current year: Peak discharges above base of 11,000 ft³/s (312 m³/s) and maximums (*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
02-24	0030	20.86	26,900	04-24	2130	*24.65	*42,700
03-24	1100	16.24	14,500	04-28	1415	16.54	15,200
03-29	1400	16.77	15,600	09-24	1115	15.60	13,500

Minimum discharge: 5.8 ft³/s (0.16 m³/s) Aug. 4, 5.

OHIO BRUSH CREEK BASIN
03237500 OHIO BRUSH CREEK NEAR WEST UNION, OHIO--Continued
WATER QUALITY RECORDS
CHEMICAL ANALYSES

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PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
FEB. 24...	1825	4980	7.5	6.6	55	235	7.7	5.0	25	9.3	2.5	2.6
SEP. 17...	1945	61	18.5	8.3	88	400	7.7	6.5	42	20	3.2	3.6

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
FEB. 24...	109	0	3.5	89	3.6	18	.2	.79	.02	1.1	.34	120
SEP. 17...	196	0	6.3	161	4.4	28	.2	.04	.01	.48	.06	205

DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
FEB. 24...	100	11	130	10	--	--	--	--	--	--	--	--
SEP. 17...	190	26	100	20	2	<10	150	18	40	<.5	8.0	1.5

WHITEOAK CREEK BASIN
03238400 HARWOOD CREEK NEAR FAYETTEVILLE, OHIO

LOCATION.--Lat 39°07'51", long 83°51'00", Brown County, at culvert on State Highway 131, 0.2 mi (0.3 km) west of junction of State Highways 131 and 134, 6 mi (10 km) southeast of Fayetteville.

DRAINAGE AREA.--0.88 mi² (2.28 km²).

PERIOD OF RECORD.--1966 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 24	19.23	5.861	135	3.82

WHITEOAK CREEK BASIN

03238500 WHITEOAK CREEK NEAR GEORGETOWN, OHIO

LOCATION.--Lat 38°51'29", long 83°55'43", Brown County, 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).

GAGE.--Water-stage recorder. Datum of gage is 604.20 ft (184.160 m) above mean sea level. Prior to Oct. 12, 1972 nonrecording gage at a site 1.0 mi (1.6 km) downstream at a datum 35.24 ft (10.741 m) lower. See WSP 2108 for history of changes prior to Dec. 8, 1940.

REMARKS.--Discharge records good. Sediment data collected at this site 1969 to 1974.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--48 years, 253 ft³/s (7.615 m³/s), 15.76 in/yr (400 mm/yr).

EXTREMES.--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.

REVISIONS (WATER YEARS).--WSP 728: 1924-31. WSP 758: 1933. WSP 1908: Drainage area. WRD Ohio 1974: 1973(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	23	984	1590	1310	154	206	628	1020	11	3.0	5.2
2	32	32	1400	484	500	121	159	584	212	9.6	4.0	11
3	26	38	878	283	270	100	264	229	81	8.0	3.0	11
4	20	104	533	508	217	85	164	406	53	240	3.0	8.0
5	23	508	315	252	655	77	104	195	47	113	4.0	5.2
6	23	223	195	154	1520	74	81	121	1840	57	18	5.2
7	20	104	748	130	558	113	74	258	258	29	9.6	8.0
8	18	70	4110	135	217	190	67	113	88	20	4.0	6.5
9	16	53	1600	837	169	140	63	77	50	16	1.5	5.2
10	16	47	399	2000	121	108	60	63	35	26	29	6.5
11	16	121	246	4380	126	117	60	53	32	18	429	8.0
12	18	1010	363	701	1070	2830	57	53	38	13	121	1310
13	18	399	476	276	729	1850	53	104	96	11	41	283
14	20	185	258	179	252	910	47	104	60	50	23	88
15	29	108	363	140	169	1260	47	63	174	77	1160	44
16	77	77	1800	126	159	406	47	53	74	38	1640	29
17	206	63	452	100	321	302	50	47	41	20	1300	20
18	100	53	246	566	377	223	50	47	1460	88	234	32
19	60	57	174	1400	195	2230	144	104	384	217	88	149
20	41	174	150	710	140	963	206	60	104	130	53	974
21	32	246	130	270	113	315	100	41	53	174	47	637
22	26	113	120	212	96	212	67	35	38	50	29	154
23	26	77	113	229	7300	190	57	32	47	29	18	81
24	23	63	308	321	12100	4420	6150	29	35	18	13	2720
25	20	252	1520	533	1040	1020	5810	26	23	13	11	719
26	23	421	655	1120	476	258	1350	26	16	9.6	8.0	217
27	23	159	264	308	276	164	356	26	20	6.5	8.0	121
28	23	104	342	201	195	739	7000	20	35	3.0	6.5	85
29	23	81	258	283	---	7100	1500	23	16	2.2	5.2	63
30	23	88	190	584	---	1680	363	295	13	1.5	5.2	46
31	23	---	276	1260	---	363	---	135	---	.89	4.0	---
TOTAL	1082	5053	19866	20272	30671	28714	24756	4050	6443	1499.29	5323.0	7851.8
MEAN	34.9	168	641	654	1095	926	825	131	215	48.4	172	262
MAX	206	1010	4110	4380	12100	7100	7000	628	1840	240	1640	2720
MIN	16	23	113	100	96	74	47	20	13	.89	1.5	5.2
CFSM	.16	.77	2.94	3.00	5.02	4.25	3.78	.60	.99	.22	.79	1.20
I.V.	.18	.86	3.39	3.46	5.23	4.90	4.22	.69	1.10	.26	.91	1.34

CAL YR 1974 TOTAL 120273.80 MEAN 330 MAX 4110 MIN 3.0 CFSM 1.51 IN 20.52
WTP YR 1975 TOTAL 155581.09 MEAN 426 MAX 12100 MIN .89 CFSM 1.95 IN 26.55

EXTREMES.--Current year: Peak discharges above base of 5,500 ft³/s (156 m³/s) and maximums (*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-10	2400	6.52	6,060	03-29	0630	7.23	8,490
02-24	0300	*8.59	*15,200	04-24	1300	8.51	14,800
03-24	1630	6.51	6,030	04-28	1530	7.87	11,300

Minimum discharge: 0.20 ft³/s (0.006 m³/s) Oct. 15.

WHITEOAK CREEK BASIN
03238500 WHITEOAK CREEK NEAR GEORGETOWN, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 11...	1700	121	5.0	12.6	98	455	8.0	4.6	61	16	11	2.4
AUG. 06...	1110	17	23.0	7.0	80	283	7.5	3.3	38	9.6	5.1	4.0

DATE	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 11...	217	0	3.5	178	17	49	.2	.04	.01	.88	.06	268
AUG. 06...	146	0	7.4	120	6.9	21	.3	.15	.03	.12	.05	160

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 11...	220	40	50	20	--	--	--	--	--	--	--	--
AUG. 06...	130	15	30	50	2	<10	10	1	120	<.5	5.8	1.6

03238600 HIGGINS RUN NEAR HIGGINSPOET, OHIO

LOCATION.--Lat 38°49'10", long 83°57'28", Brown County, at culvert on State Highway 221, 150 ft (50 m) upstream from mouth, 2 mi (3 km) north of Higginsport.

DRAINAGE AREA.--0.55 mi² (1.42 km²).

PERIOD OF RECORD.--1966 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Apr. 24	22.65	6.904	640	18.1

RAY RUN BASIN

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03238700 RAY RUN NEAR MOSCOW, OHIO

LOCATION.--Lat 38°51'15", long 84°12'00", Clermont County, at culvert on State Highway 743, 1.5 mi (2.4 km) east of Moscow.

DRAINAGE AREA.--0.86 mi² (2.23 km²).

PERIOD OF RECORD.--1966 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Apr. 25	25.07	7.641	700	19.8

LITTLE MIAMI RIVER BASIN

03239000 LITTLE MIAMI RIVER NEAR SELMA, OHIO

LOCATION.--Lat 39°48'36", long 83°44'21", Clark County, at bridge on Selma Pike, 2.3 mi (3.7 km) northwest of Selma, 3.1 mi (5.0 km) upstream from North Fork.

DRAINAGE AREA.--48.9 mi² (126.7 km²).

PERIOD OF RECORD.--1952 to 1958 (operated as continuous-record station), 1959 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 24	8.86	2.701	3,300	93.5

03239500 NORTH FORK LITTLE MIAMI RIVER NEAR PITCHIN, OHIO

LOCATION.--Lat 39°49'40", long 83°46'38", Clark County, at bridge on county road, 1.1 mi (1.8 km) upstream from Goose Creek, 1.3 mi (2.1 km) southwest of Pitchin.

DRAINAGE AREA.--28.9 mi² (74.9 km²).

PERIOD OF RECORD.--1952 to 1958 (operated as a continuous-record station), 1959 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 24	5.92	1.804	895	25.3

LITTLE MIAMI RIVER BASIN

03240000 LITTLE MIAMI RIVER NEAR OLDTOWN, OHIO

LOCATION.--Lat 39°44'54", long 83°55'53", in sec. 34, R.7, T.4, Greene County, 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, and 1.3 mi (2.1 km) northeast of Oldtown.

DRAINAGE AREA.--129 mi² (334 km²).

GAGE.--Water-stage recorder. Datum of gage is 816.56 ft (248.887 m) above mean sea level.

REMARKS.--Discharge records good.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--July 1952 to current year.

AVERAGE DISCHARGE.--23 years, 111 ft³/s (3.144 m³/s), 11.68 in/yr (297 mm/yr).

EXTREMES.--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 measurement of peak flow; minimum, 5.4 ft³/s (0.15 m³/s) July 29, 1954, result of temporary storage at rock dam upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	44	83	408	474	335	298	323	468	52	54	43
2	70	43	92	285	360	295	263	288	240	49	52	38
3	62	42	81	238	283	265	275	243	183	52	54	36
4	57	64	78	243	240	245	230	220	143	2760	60	47
5	55	180	74	208	230	233	208	195	140	576	72	45
6	52	120	77	185	328	223	193	180	330	273	65	47
7	47	92	93	168	288	258	180	163	238	278	57	47
8	47	80	420	235	228	263	173	150	150	305	54	39
9	47	72	441	627	200	225	163	140	115	185	52	37
10	44	68	290	552	175	223	163	130	101	153	52	34
11	42	73	218	948	173	210	150	125	111	140	56	45
12	43	135	238	501	198	1160	143	128	125	118	54	153
13	42	133	348	340	188	1140	135	120	101	133	50	99
14	43	97	348	273	163	555	128	109	87	153	49	65
15	68	93	363	230	148	459	133	107	81	109	65	55
16	93	83	549	200	170	639	125	103	78	95	64	52
17	70	77	405	178	280	573	120	97	77	92	54	49
18	61	73	300	218	345	444	123	95	77	120	49	55
19	55	68	245	288	275	414	145	92	69	160	45	78
20	55	72	215	235	223	365	125	88	65	109	44	70
21	54	77	193	195	193	308	111	85	61	92	43	58
22	54	73	178	175	178	310	109	83	57	81	43	53
23	53	64	173	165	1510	285	130	83	55	74	40	50
24	52	66	360	160	4140	353	603	78	53	69	39	55
25	51	107	435	203	1150	313	1010	75	54	68	39	63
26	47	128	310	318	591	245	951	73	62	66	38	60
27	47	105	235	225	459	220	483	75	75	62	37	55
28	45	93	200	190	388	293	474	70	75	58	34	51
29	45	83	183	315	---	852	383	72	69	58	34	49
30	47	75	173	444	---	555	303	81	57	56	49	46
31	44	---	198	411	---	360	---	87	---	55	49	---
TOTAL	1680	2580	7596	9361	13578	12618	8030	3958	3597	6651	1547	1684
MEAN	54.2	86.0	245	302	485	407	268	128	120	215	49.9	56.1
MAX	93	180	549	948	4140	1160	1010	323	468	2760	72	153
MIN	42	42	74	160	148	210	109	70	53	49	34	34
CFSM	.42	.67	1.90	2.34	3.76	3.16	2.08	.99	.93	1.67	.39	.43
IN.	.48	.74	2.19	2.70	3.92	3.64	2.32	1.14	1.04	1.92	.45	.49

CAL YR 1974 TOTAL 55107 MEAN 151 MAX 1560 MIN 20 CFSM 1.17 IN 15.89
WTR YR 1975 TOTAL 72880 MEAN 200 MAX 4140 MIN 34 CFSM 1.55 IN 21.02

EXTREMES.--Current year: Peak discharges above base of 800 ft³/s (22.7 m³/s) and maximums (*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-11	0515	5.25	1,080	03-19	1100	4.82	938	04-25	1545	7.03	1,820
02-24	0800	10.30	5,220	04-24	1900	4.54	851	07-04	0845	*10.75	*6,480
03-12	2345	7.06	1,830								

Minimum discharge: 28 ft³/s (0.79 m³/s) Sept. 10.

LITTLE MIAMI RIVER BASIN

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03240000 LITTLE MIAMI RIVER NEAR OLDTOWN, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE	TEMPER- ATURE	DIS- SOLVED OXYGEN	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE	PH	DIS- SOLVED SILICA	DIS- SOLVED CAL- CIUM	DIS- SOLVED MAG- NE- SIUM	DIS- SOLVED SODIUM	DIS- SOLVED PO- TAS- SIUM	
		(CFS)	(DEG C)	(MG/L)		(MICRO- MHOS)		(UNITS)	(SI02) (MG/L)	(CA) (MG/L)	(MG) (MG/L)	(NA) (MG/L)	(K) (MG/L)
MAR. 12...	1430	1400	5.0	12.0	94	302	7.6	4.0	35	13	4.3	3.1	
AUG. 20...	0945	45	21.0	7.4	82	659	7.9	8.2	84	39	11	2.3	
DATE		BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- TENTS) (MG/L)
MAR. 12...	132		0	5.3	108	14	26	.2	.02	.04	2.3	.60	165
AUG. 20...	360		0	7.3	295	22	54	.2	.01	.01	2.5	.13	398
DATE		HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 12...	140		33	20	10	--	--	--	--	--	--	--	--
AUG. 20...	370		75	20	10	1	<10	0	2	20	<.5	4.4	1.6

LITTLE MIAMI RIVER BASIN

03241500 MASSIES CREEK AT WILBERFORCE, OHIO

LOCATION.--Lat 39°43'22", long 83°52'58", Greene County, on right bank 200 ft (61 m) downstream from bridge on Wilberforce-Clinton 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).

GAGE.--Water-stage recorder. Datum of gage is 865.15 ft (263.696 m) above mean sea level. Prior to Aug. 4, 1972 at site 150 ft (46 m) upstream at same datum.

REMARKS.--Discharge records good except those for period of no gage height record which are fair.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--September 1952 to current year. Prior to October 1962, published as Massie Creek at Wilberforce.

AVERAGE DISCHARGE.--23 years, 60.8 ft³/s (1.722 m³/s), 13.06 in/yr (332 mm/yr).

EXTREMES.--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.

REVISIONS.--WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	22	40	258	259	128	140	130	292	25	14	11
2	55	22	44	158	176	105	116	118	154	24	14	9.3
3	44	21	38	126	128	88	121	96	123	27	15	8.7
4	38	53	35	123	107	77	95	88	89	1500	19	12
5	34	126	32	102	101	71	81	74	81	380	44	11
6	32	80	35	91	162	69	73	68	251	130	28	9.3
7	30	59	66	82	139	86	70	61	149	150	23	8.1
8	28	47	345	111	102	93	66	56	86	93	18	7.5
9	27	40	338	286	83	76	62	54	66	98	16	7.0
10	25	35	208	311	82	73	61	51	56	83	15	6.5
11	23	45	148	550	71	68	57	48	60	86	19	19
12	23	103	188	280	96	695	54	50	63	61	17	50
13	23	87	278	167	87	790	52	47	53	76	14	31
14	25	66	263	121	72	343	51	44	45	71	15	21
15	87	53	293	97	66	282	51	43	43	50	19	16
16	103	45	415	82	82	419	49	41	40	44	17	15
17	71	40	278	69	173	332	48	40	38	41	14	14
18	54	37	182	107	201	225	48	40	37	54	13	21
19	45	36	142	143	142	219	57	37	32	54	12	25
20	39	37	121	106	110	193	47	36	30	43	23	22
21	35	34	108	84	91	149	45	34	30	38	11	18
22	33	30	96	73	84	154	44	33	29	34	10	16
23	32	27	97	67	812	138	51	32	26	30	9.3	15
24	31	30	164	66	1790	253	234	30	25	30	8.7	23
25	29	61	213	89	745	193	553	29	24	27	8.1	24
26	28	65	154	162	280	124	517	28	31	25	8.1	23
27	26	53	115	102	197	101	239	30	46	21	7.5	20
28	25	45	100	84	158	147	243	27	46	21	7.5	17
29	24	37	91	141	---	520	193	30	40	19	7.5	17
30	23	35	85	168	---	324	140	44	30	17	12	17
31	22	---	109	226	---	185	---	71	---	16	14	---
TOTAL	1187	1471	4821	4632	6596	6720	3658	1610	2115	3368	472.7	514.4
MEAN	38.3	49.0	156	149	236	217	122	51.9	70.5	109	15.2	17.1
MAX	103	126	415	550	1790	790	553	130	292	1500	44	50
MIN	22	21	32	66	66	68	44	27	24	16	7.5	6.5
CFSM	.61	.78	2.47	2.36	3.73	3.43	1.93	.82	1.12	1.72	.24	.27
IN.	.70	.87	2.84	2.73	3.88	3.96	2.15	.95	1.24	1.98	.28	.30

CAL YR 1974 TOTAL 31304.1 MEAN 85.8 MAX 1250 MIN 4.6 CFSM 1.36 IN 18.43
WTR YR 1975 TOTAL 37165.1 MEAN 102 MAX 1790 MIN 6.5 CFSM 1.61 IN 21.88

EXTREMES.--Current year: Peak discharges above base of 600 ft³/s (17.0 m³/s) and maximums (*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-10	2400	5.01	643	04-25	1500	6.74	1,320
02-23	2200	7.86	1,960	07-04	unknown	*9.16	*3,200
03-13	0200	6.15	1,060				

Minimum discharge: 5.5 ft³/s (0.16 m³/s) Sept. 11.

Note: No gage height record July 2-7. Peak gage height determined from outside high water marks.

LITTLE MIAMI RIVER BASIN

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03241500 MASSIES CREEK AT WILBERFORCE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	3PE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 13...	1045	839	4.0	11.8	90	297	7.6	5.6	34	14	3.9	2.5
AUG. 20...	1245	15	22.5	10.0	110	697	8.0	8.3	80	40	18	2.8

DATE	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 13...	122	0	4.9	100	11	27	.3	.21	.04	5.0	.43	159
AUG. 20...	350	0	5.6	287	30	61	.2	.17	.13	2.0	.32	413

DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 13...	140	42	130	10	--	--	--	--	--	--	--	--
AUG. 20...	360	77	10	10	0	<10	10	1	10	<.5	3.0	2.5

03241600 SHAWNEE CREEK AT XENIA, OHIO

LOCATION.--Lat 39°40'32", long 83°55'32", Greene County, at Bridge on U.S. Highway 68, 0.7 mi (1.1 km) southeast of intersection with U.S. Highway 42 in Xenia.

DRAINAGE AREA.--4.21 mi² (10.90 km²).

PERIOD OF RECORD.--1948 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
July 4	15.38	4.688	800	22.7

LITTLE MIAMI RIVER BASIN

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OHIO

LOCATION.--Lat 39°35'00", long 84°01'49", Greene County, 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, and 2.8 mi (4.5 km) downstream from Gladly Run.

DRAINAGE AREA.--366 mi² (948 km²).

GAGE.--Water-stage and water-quality recorders. Datum of gage is 729.29 ft (222.288 m) above mean sea level. 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.--Discharge records good, except those for periods of no gage height record, which are fair. Interruptions in the daily water-quality records were due to malfunctions of the instrument.

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.

AVERAGE DISCHARGE.--29 years (1925-35, 1939-51, 1969-75), 389 ft³/s (11.02 m³/s), 14.43 in./yr (367 mm/yr).

EXTREMES.--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. 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).

REVISIONS (WATER YEARS).--WSP 893: 1932 (M). WSP 1053: 1929. WSP 2108: 1969.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	501	174	379	982	1120	820	942	778	1300	170	153	145
2	394	185	456	782	890	740	823	733	850	160	149	134
3	329	186	448	672	726	660	862	644	600	150	166	130
4	278	505	413	658	648	620	726	603	500	2860	257	155
5	251	711	368	587	627	600	641	555	440	4830	205	142
6	225	551	350	533	801	570	607	519	900	874	195	135
7	206	436	551	509	700	676	593	478	800	562	167	133
8	198	368	1790	590	600	683	569	452	650	631	152	127
9	190	325	1360	1330	520	600	555	426	500	530	143	122
10	183	288	886	1370	460	590	540	400	400	413	149	119
11	176	401	687	2420	502	573	519	382	340	458	211	230
12	167	589	831	1450	690	3080	492	416	380	347	179	657
13	179	555	990	902	583	3480	468	426	360	387	147	323
14	169	430	914	690	502	1750	445	379	330	523	141	210
15	493	380	938	617	485	1290	435	350	300	342	228	176
16	501	340	1300	569	569	1710	416	330	280	283	195	166
17	405	310	1030	512	744	1780	400	320	260	285	156	152
18	325	290	763	676	847	1300	400	310	250	316	259	208
19	272	270	655	767	719	1150	533	300	230	400	151	216
20	257	350	600	644	610	1070	429	290	220	345	145	206
21	237	300	540	555	544	906	384	280	200	259	134	177
22	225	281	505	509	512	930	382	270	190	235	133	152
23	214	251	481	478	2950	886	465	260	180	216	130	157
24	228	281	687	461	6700	1200	1580	250	180	205	130	193
25	211	514	986	516	5270	1000	1970	240	170	195	130	177
26	203	489	808	708	1690	801	2470	230	200	186	135	174
27	186	421	644	590	1130	770	1190	240	250	176	128	155
28	181	375	580	509	946	1030	1160	230	200	172	124	154
29	179	325	537	617	---	2580	990	220	180	166	122	149
30	188	301	509	874	---	1790	797	240	180	161	195	146
31	183	---	562	1060	---	1130	---	280	---	156	172	---
TOTAL	7934	11182	22548	24137	33085	36765	22783	11831	11820	16993	5081	5590
MEAN	256	373	727	779	1182	1186	759	382	394	548	164	156
MAX	501	711	1790	2420	6700	3480	2470	778	1300	4830	259	687
MIN	167	174	350	461	460	570	382	220	170	150	122	119
CFSM	.70	1.02	1.99	2.13	3.23	3.24	2.07	1.04	1.08	1.50	.45	.51
IN.	.81	1.14	2.29	2.45	3.36	3.74	2.32	1.20	1.20	1.73	.52	.57

CAL YR 1974 TOTAL 192617 MEAN 528 MAX 3860 MIN 101 CFSM 1.44 IN 19.58
WTR YR 1975 TOTAL 209749 MEAN 575 MAX 6700 MIN 119 CFSM 1.57 IN 21.32

EXTREMES.--Current year: Peak discharges above base of 3,600 ft³/s (102 m³/s) and maximums (*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
02-24	1530	*13.21	*7,130	07-05	0500	12.74	6,300
03-12	1800	11.29	4,480				

Minimum discharge: 115 ft³/s (3.26 m³/s) Sept. 11.

LITTLE MIAMI RIVER BASIN

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

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

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
FEB. 05...	1400	589	4.0	11.4	87	755	7.7	7.5	88	29	22	2.2
AUG. 19...	1330	180	22.0	6.6	75	725	7.6	9.6	88	30	25	3.4

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
FEB. 05...	360	0	11	295	41	54	.2	.31	.09	3.6	.27	421
AUG. 19...	336	0	14	276	41	44	.0	.04	.09	2.7	.66	725

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
FEB. 05...	340	44	20	30	--	--	--	--	--	--	--	--
AUG. 19...	340	68	20	50	0	<10	10	7	60	<.5	12	.5

LITTLE MIAMI RIVER BASIN

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C)

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

EXTREMES.--Period of record: Maximum, 1,570 micromhos Feb. 1, 1971; minimum, 161 micromhos July 4, 1975.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	824	800	751	716	609	570	609	579	---	---
2	---	---	813	800	1030	727	687	582	657	602	---	---
3	---	---	823	793	1090	877	723	686	702	659	720	707
4	792	741	790	500	876	804	725	600	719	690	779	705
5	834	773	670	511	821	776	744	719	765	720	767	756
6	810	767	700	669	821	779	756	723	764	690	765	734
7	797	771	759	706	817	601	777	600	704	677	824	735
8	822	780	771	735	635	482	761	591	735	705	752	732
9	809	776	776	740	618	498	597	527	743	720	761	741
10	810	780	772	643	670	628	567	410	869	744	761	735
11	807	780	742	640	709	670	386	227	851	762	1140	750
12	809	750	694	577	719	625	447	341	810	683	851	251
13	840	782	725	660	616	575	671	435	743	708	---	---
14	794	758	698	680	602	583	707	669	744	720	629	489
15	773	563	723	706	602	542	726	701	750	728	783	632
16	679	601	761	723	553	506	746	732	764	708	822	522
17	737	698	769	728	605	517	753	741	753	684	566	515
18	773	722	778	745	628	610	1090	729	693	656	632	558
19	785	635	793	757	---	---	804	645	680	656	644	605
20	788	757	771	726	---	---	770	689	705	681	669	632
21	803	755	753	696	---	---	804	768	728	705	684	657
22	826	776	760	733	---	---	783	750	743	725	687	636
23	808	788	779	747	---	---	770	729	734	222	662	642
24	809	779	771	736	732	684	738	689	234	210	654	564
25	787	635	750	639	694	577	705	600	434	225	617	584
26	802	755	729	661	610	549	710	542	501	443	671	626
27	785	749	751	727	675	622	720	512	518	492	687	671
28	778	748	771	740	685	663	750	725	519	510	842	506
29	835	755	782	741	696	684	762	711	---	---	477	420
30	823	805	787	656	700	682	701	585	---	---	564	441
31	811	803	---	---	718	666	624	546	---	---	654	567
MONTH	840	563	824	500	1090	482	1090	227	869	210	1140	251
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	678	644	710	632	711	438	743	682	770	750	716	623
2	686	660	669	638	664	444	733	705	767	746	771	711
3	690	623	689	668	698	662	743	695	800	735	801	773
4	665	602	720	667	721	680	678	161	725	464	836	723
5	668	656	725	680	742	625	356	164	710	591	755	648
6	674	668	710	680	673	539	539	368	717	651	785	737
7	678	671	729	678	625	584	639	545	756	668	792	728
8	725	677	732	677	701	632	642	494	785	728	789	749
9	725	702	704	681	737	692	650	573	795	758	818	750
10	732	690	705	678	743	703	660	606	819	779	852	810
11	719	696	714	680	733	604	684	582	776	486	848	485
12	731	705	708	650	677	566	677	620	789	656	578	332
13	737	705	681	632	734	635	752	566	797	683	666	557
14	728	675	707	663	761	728	591	504	783	741	734	660
15	728	680	690	671	740	715	665	594	782	633	792	713
16	743	600	692	672	746	703	728	668	687	567	806	776
17	746	717	693	666	763	722	743	705	759	686	807	782
18	746	693	687	656	749	709	743	597	755	471	807	780
19	696	594	722	654	763	710	690	600	758	536	791	650
20	707	641	753	707	767	740	720	626	857	708	777	717
21	737	696	750	723	770	742	708	642	861	810	782	753
22	749	720	747	722	778	749	755	693	861	824	797	750
23	743	638	747	723	776	743	768	734	855	801	821	780
24	684	393	758	732	788	749	758	728	858	819	840	780
25	486	350	753	728	790	736	758	726	843	815	827	704
26	458	327	738	689	776	695	765	726	849	815	797	764
27	587	450	770	647	778	662	758	731	860	782	792	753
28	605	537	761	663	719	662	752	725	821	761	791	749
29	665	590	782	741	713	667	746	710	801	761	816	758
30	695	638	779	648	707	689	749	701	810	558	830	810
31	---	---	680	612	---	---	771	731	734	585	---	---
MONTH	749	327	782	612	790	438	771	161	861	464	852	332
YEAR	1140	161										

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OHIO--Continued

PH (UNITS)

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

EXTREMES.--Period of record: Maximum, 9.2 Dec. 30, 1971; minimum, 4.3 Nov. 11, 1973.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	8.0	7.8	7.8	7.6	7.9	7.8	7.6	7.5	---	---
2	---	---	8.1	7.8	7.8	7.7	8.1	7.7	7.6	7.5	---	---
3	---	---	8.1	7.9	7.9	7.6	7.9	7.9	7.6	7.6	7.8	7.7
4	7.9	7.8	8.0	7.6	7.9	7.7	7.9	7.9	7.6	7.6	7.8	7.7
5	8.0	7.7	7.9	7.6	7.9	7.7	7.9	7.8	7.7	7.6	7.7	7.6
6	8.0	7.9	7.9	7.8	7.9	7.8	7.9	7.8	7.6	7.6	7.7	7.5
7	8.0	7.9	8.0	7.8	7.9	7.6	7.9	7.8	7.6	7.5	7.7	7.6
8	8.0	7.9	8.0	7.8	7.7	7.5	7.8	7.8	7.6	7.5	7.7	7.6
9	8.0	7.9	8.0	7.9	8.2	7.6	7.8	7.7	7.7	7.6	7.7	7.6
10	8.0	7.8	8.0	7.8	7.9	7.9	7.7	7.5	7.7	7.6	7.7	7.6
11	8.0	7.9	7.9	7.8	7.9	7.8	7.5	7.4	7.7	7.6	7.9	7.6
12	7.9	7.7	7.9	7.7	7.9	7.7	7.6	7.4	7.6	7.5	7.7	7.2
13	7.8	7.6	8.1	7.7	7.7	7.7	7.9	7.6	7.7	7.6	---	---
14	7.8	7.7	7.9	7.8	7.7	7.7	8.2	7.8	7.6	7.6	7.9	7.8
15	7.8	7.6	8.0	7.7	7.7	7.6	8.0	7.9	7.6	7.5	8.0	7.9
16	7.8	7.7	8.0	7.9	7.6	7.6	8.0	7.8	7.6	7.5	8.0	7.8
17	7.8	7.8	8.0	7.9	7.6	7.5	8.0	7.8	7.7	7.5	7.9	7.7
18	8.0	7.6	8.0	7.9	7.7	7.6	8.0	7.9	7.6	7.5	7.8	7.8
19	8.1	7.6	8.0	7.9	---	---	7.9	7.8	8.0	7.4	7.9	7.8
20	8.1	7.6	8.0	7.9	---	---	7.9	7.7	7.8	7.7	7.8	7.7
21	8.1	7.6	8.1	8.0	---	---	7.9	7.8	7.8	7.7	7.8	7.7
22	8.1	7.7	8.1	8.1	---	---	7.9	7.7	7.8	7.7	7.8	7.7
23	8.2	7.6	8.2	8.1	---	---	7.8	7.7	7.7	7.1	7.8	7.7
24	8.1	7.8	8.1	8.1	8.1	8.0	7.8	7.7	7.3	6.8	7.8	7.6
25	7.9	7.7	8.2	8.1	8.2	7.8	7.8	7.7	7.4	6.9	7.8	7.7
26	8.1	7.7	8.4	7.8	7.9	7.6	7.8	7.8	7.6	7.3	7.8	7.8
27	8.3	7.8	7.9	7.6	7.8	7.7	7.8	7.7	7.6	7.5	7.9	7.8
28	8.1	7.8	7.9	7.7	7.8	7.7	7.8	7.7	7.6	7.6	8.0	7.7
29	8.1	7.9	7.9	7.8	7.9	7.7	7.8	7.6	---	---	7.7	7.5
30	8.0	7.8	7.8	7.6	7.9	7.8	7.7	7.6	---	---	7.6	7.5
31	8.0	7.8	---	---	8.0	7.7	7.6	7.5	---	---	7.7	7.6
MONTH	8.3	7.6	8.4	7.6	8.2	7.5	8.2	7.4	8.0	6.8	8.0	7.2
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.7	7.7	7.7	7.5	8.0	7.8	8.0	7.6	8.0	7.6	7.4	7.2
2	7.7	7.5	7.7	7.5	8.0	7.5	8.2	7.6	7.8	7.6	7.7	7.2
3	7.7	7.5	7.8	7.3	7.5	7.4	8.2	7.7	7.8	7.5	7.5	7.2
4	7.7	7.6	7.6	7.5	7.8	7.5	8.0	7.2	7.8	7.2	8.1	7.3
5	7.7	7.6	7.7	7.5	7.8	7.6	7.3	6.9	7.7	7.4	7.9	7.4
6	7.6	7.6	8.0	7.6	7.7	7.4	7.6	7.2	7.6	7.4	7.9	7.7
7	7.6	7.5	7.9	7.7	7.5	7.3	7.6	7.4	8.1	7.4	7.8	7.6
8	7.9	7.5	7.8	7.6	7.5	7.4	7.5	7.2	8.1	7.6	7.7	7.4
9	7.8	7.7	7.8	7.5	7.6	7.5	7.5	7.3	8.1	7.6	7.5	7.4
10	7.8	7.7	7.8	7.5	7.8	7.5	7.5	7.4	7.7	7.4	7.7	7.3
11	7.7	7.7	7.6	7.4	7.8	7.6	7.4	7.3	7.7	7.1	7.8	7.4
12	7.7	7.6	7.6	7.4	7.7	7.6	7.4	7.2	7.6	7.4	7.4	6.9
13	7.6	7.5	7.8	7.4	7.7	7.7	7.4	7.3	7.7	7.4	7.3	7.1
14	7.5	7.4	7.8	7.5	7.7	7.6	7.4	7.1	7.8	7.5	7.4	7.2
15	7.6	7.3	7.8	7.5	7.7	7.5	8.1	7.3	7.8	7.4	7.6	7.3
16	7.7	7.5	7.8	7.5	7.7	7.5	7.9	7.6	7.8	7.3	7.7	7.3
17	7.6	7.5	7.8	7.6	7.7	7.6	7.7	7.5	7.7	7.4	7.5	7.2
18	7.6	7.4	7.7	7.5	7.8	7.6	7.6	7.2	7.5	7.0	7.5	7.3
19	7.5	7.3	7.7	7.3	7.8	7.7	7.5	7.3	7.7	7.1	7.5	7.1
20	7.5	7.4	7.9	7.6	7.8	7.6	7.4	7.3	8.2	7.4	7.4	7.1
21	7.6	7.4	7.8	7.7	7.7	7.5	7.7	7.3	7.8	7.4	7.4	7.1
22	7.7	7.3	7.8	7.7	7.8	7.5	7.6	7.4	7.7	7.4	7.4	7.1
23	7.5	7.4	7.7	7.5	7.8	7.6	7.7	7.5	7.6	7.3	7.4	7.1
24	7.6	7.2	7.8	7.5	7.8	7.6	7.5	7.4	7.8	7.3	7.5	7.3
25	7.3	7.1	7.7	7.6	7.8	7.5	7.5	7.4	8.1	7.2	7.5	7.2
26	7.2	7.1	7.8	7.7	7.9	7.5	7.7	7.4	7.6	7.3	7.4	7.2
27	7.3	7.2	7.9	7.6	8.0	7.7	7.7	7.5	7.9	7.3	7.7	7.2
28	7.4	7.3	7.9	7.7	8.0	7.5	7.6	7.5	7.8	7.4	7.7	7.1
29	7.7	7.3	8.1	7.8	8.0	7.7	7.7	7.4	7.8	7.4	7.6	7.3
30	7.7	7.6	8.2	7.9	8.1	7.6	7.7	7.4	7.7	7.2	7.5	7.1
31	---	---	7.9	7.9	---	---	8.0	7.4	7.3	7.2	---	---
MONTH	7.9	7.1	8.2	7.3	8.1	7.3	8.2	6.9	8.2	7.0	8.1	6.9
YEAR	8.4	6.8										

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITRE

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

EXTREMES.--Period of record: Maximum, 15.0 mg/l or higher Jan. 8, 9, Feb. 11, 12, 1973, Mar. 24-27, 1974;
minimum, 1.1 mg/l Apr. 14, 1971.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	10.1	6.7	12.4	11.4	11.8	10.9	11.4	11.3	---	---
2	---	---	10.4	6.4	12.4	11.0	12.6	11.9	11.3	11.2	---	---
3	---	---	10.5	6.7	12.7	11.0	12.4	11.7	11.5	11.2	12.3	12.2
4	9.3	8.9	7.6	5.8	12.9	11.2	12.0	11.5	11.4	11.2	12.3	11.6
5	9.0	8.3	8.0	6.5	13.4	11.8	12.3	12.0	11.3	10.8	11.7	10.5
6	8.6	7.9	9.0	7.5	13.4	12.1	12.1	11.7	11.2	10.6	11.2	10.4
7	8.6	7.6	10	8.7	12.4	11.2	11.7	11.4	12.2	11.3	10.3	9.7
8	9.3	7.7	10.4	9.0	11.3	10.7	11.4	10.4	12.3	12.0	11.4	10.2
9	9.8	8.0	10.7	9.1	11.8	11.3	10.9	10.1	12.5	12.0	12.1	11.4
10	10.0	7.8	10.4	8.9	12.4	12.2	10.9	10.0	12.7	12.2	12.0	11.7
11	10.3	7.7	8.8	7.8	12.6	11.9	10.7	9.7	12.1	11.3	12.0	11.4
12	8.6	7.3	8.8	7.8	12.1	11.3	11.7	10.7	11.4	10.5	12.6	11.2
13	8.3	6.8	10.1	8.8	12.0	11.6	12.6	11.7	11.6	11.2	---	---
14	8.7	6.5	10.5	9.0	11.6	11.0	12.9	12.6	11.7	11.5	11.8	11.5
15	6.8	6.0	11.3	10.0	11.1	10.5	12.9	11.4	11.5	10.5	11.8	11.1
16	8.2	6.9	11.7	10.5	11.5	11.0	11.9	11.6	10.6	10.0	11.5	11.0
17	8.9	7.9	11.1	10	11.6	11.4	12.0	11.7	10.2	10.0	11.5	11.3
18	9.2	7.5	10.9	9.5	11.8	11.6	11.8	11.1	10.2	10.0	11.3	10.5
19	10.2	8.5	9.5	8.0	---	---	11.2	11.1	11.1	10.1	10.9	10.5
20	10.5	8.7	9.4	7.7	---	---	11.9	11.2	11.4	11.1	10.7	9.9
21	11.3	9.2	9.5	8.3	---	---	12.1	11.9	11.4	11.1	10.1	9.3
22	11.3	9.2	11.3	7.8	---	---	11.9	11.4	11.2	10.3	9.4	9.0
23	11.3	8.6	11.2	9.6	---	---	11.4	11.1	10.2	8.9	10.0	9.5
24	10.1	7.6	9.7	8.2	10.5	10.1	11.3	10.9	8.6	7.7	9.5	8.7
25	9.1	7.1	9.8	8.1	11.6	10.5	10.9	10.2	10.2	8.7	10.5	8.9
26	11.0	6.9	11.9	9.8	12.4	11.7	11.6	10.3	9.6	8.2	11.3	10.5
27	11.7	7.8	11.7	10.9	12.4	12.0	12.0	11.7	8.8	6.9	12.1	11.5
28	12.3	7.8	12.3	10.9	11.9	11.6	11.7	10.5	7.7	6.6	12.1	11.6
29	11.8	7.5	12.7	11.3	11.7	11.3	10.7	9.5	---	---	11.6	10.4
30	10.7	7.2	12.0	11.1	11.2	10.5	10.8	9.6	---	---	11.1	10.3
31	11.5	6.7	---	---	11.3	10.8	11.4	10.8	---	---	11.7	10.6
MONTH	12.3	6.0	12.7	5.8	13.4	10.1	12.9	9.5	12.7	6.6	12.6	8.7

[illegible]

03242050 LITTLE MIAMI RIVER NEAR SPRING VALLEY, OHIO--Continued

TEMPERATURE (°C) OF WATER

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

EXTREMES.--Period of record: Maximum, 34.5°C June 26, 1971; minimum, freezing point on many days during winter periods.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	16.0	14.5	2.5	1.5	6.0	4.0	4.5	4.0	---	---
2	---	---	16.5	15.0	3.5	2.5	4.0	2.5	4.5	4.0	---	---
3	---	---	16.0	14.5	3.5	2.5	4.0	3.0	4.0	3.0	3.0	2.5
4	11.0	9.0	15.5	14.0	3.5	2.5	4.0	3.5	4.0	3.0	4.0	2.5
5	12.5	10.0	14.0	11.5	2.5	1.5	3.5	2.5	5.0	3.5	5.0	3.0
6	14.0	12.0	11.5	10.0	2.5	0.5	3.5	2.0	5.0	3.5	7.0	4.5
7	14.0	13.0	10.5	9.5	3.5	2.0	5.0	3.5	3.5	1.5	8.0	6.0
8	13.0	11.0	10.0	8.5	4.0	3.0	7.0	5.0	1.5	1.0	7.0	5.0
9	13.0	11.0	9.5	7.5	3.5	2.0	7.0	6.0	2.0	0.5	4.5	3.0
10	14.0	11.5	9.5	8.0	2.0	1.0	8.0	5.5	1.0	0.0	4.5	3.5
11	14.0	12.0	10.0	9.0	3.5	2.0	8.5	6.5	3.0	1.0	5.0	3.5
12	14.0	13.0	10.0	8.5	5.0	3.5	6.0	3.5	3.5	2.0	5.0	3.0
13	14.5	13.5	8.5	7.5	5.5	5.0	3.5	1.5	3.0	2.0	---	---
14	15.5	14.0	7.5	6.0	5.5	5.0	1.5	1.0	2.5	2.0	3.0	2.0
15	15.5	13.5	5.5	4.5	5.5	5.0	1.5	1.0	4.5	2.5	5.0	2.0
16	13.5	12.0	5.0	3.5	5.0	4.5	3.0	1.0	6.0	5.0	5.0	4.0
17	13.0	11.5	7.0	5.0	4.5	4.0	2.0	1.5	7.0	5.5	7.5	4.5
18	12.0	10.5	8.0	5.5	4.0	3.5	3.5	2.0	7.0	6.0	8.0	6.5
19	10.5	9.5	10.0	8.0	---	---	3.5	3.0	6.5	4.5	8.5	7.5
20	9.5	8.0	11.0	9.5	---	---	3.0	2.0	4.5	3.0	9.5	7.5
21	8.5	6.5	9.0	6.0	---	---	2.0	1.0	5.0	3.5	10.5	8.5
22	9.0	6.5	6.5	5.5	---	---	3.5	2.0	7.0	5.0	11.0	10.0
23	11.5	8.0	8.0	5.0	---	---	4.0	3.0	9.5	7.0	10.5	8.5
24	13.0	11.5	9.0	8.0	5.0	7.0	4.0	3.0	9.5	7.5	12.5	10.5
25	14.0	12.5	9.0	6.5	7.0	4.5	5.5	4.5	7.5	3.0	12.0	7.0
26	13.0	11.5	6.5	4.5	4.0	2.0	5.0	2.5	4.5	3.0	7.0	5.0
27	12.0	10.0	4.0	3.5	4.0	2.0	2.5	1.5	5.0	3.5	5.5	3.0
28	12.0	10.0	4.0	3.0	5.0	4.0	5.0	3.0	5.0	4.5	4.0	3.0
29	13.0	11.0	4.0	3.0	6.0	5.0	9.0	5.0	---	---	7.5	4.0
30	15.0	13.0	4.0	2.0	6.5	6.0	8.0	5.0	---	---	7.5	5.5
31	16.0	13.5	---	---	6.0	5.5	5.0	4.0	---	---	7.0	4.0
MONTH	16.0	6.5	16.5	2.0	8.0	0.5	9.0	1.0	9.5	0.0	12.5	2.0

[illegible]

LITTLE MIAMI RIVER BASIN

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03242100 WAYNE CREEK AT WAYNESVILLE, OHIO

LOCATION.--Lat 39°31'08", long 84°04'47", Warren County, 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.

DRAINAGE AREA.--1.01 mi² (2.62 km²).

PERIOD OF RECORD.--1966 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
July 4	22.70	6.919	330	9.35

LITTLE MIAMI RIVER BASIN

03242150 CAESAR CREEK NEAR XENIA, OHIO

LOCATION.--Lat 39°37'25", long 83°54'09", Greene County, 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, and 7.4 mi (11.9 km) upstream from Anderson Fork.

DRAINAGE AREA.--71.4 mi² (185 km²).

GAGE.--Water-stage recorder. Datum of gage is 894.18 ft (272.546 m) above mean sea level.

REMARKS.--Discharge records good. 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 DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--7 years, 84.4 ft³/s (2.390 m³/s), 16.05 in./yr (408 mm/yr).

EXTREMES.--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, 0.44 ft³/s (0.012 m³/s) Oct. 9, 1970.

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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	11	53	255	225	151	124	107	431	10	6.8	4.3
2	24	14	55	122	138	130	95	111	155	9.2	6.5	4.3
3	17	17	50	105	94	110	92	79	107	17	7.1	4.3
4	14	133	44	111	72	100	67	72	72	3030	34	5.3
5	14	258	38	83	76	90	58	61	64	600	18	5.3
6	12	98	48	72	164	80	52	53	293	130	13	4.6
7	12	66	162	64	95	90	49	48	102	150	11	4.3
8	10	37	718	80	58	120	47	42	53	180	9.2	4.3
9	9.7	30	445	244	48	110	44	37	42	120	8.1	4.1
10	9.2	24	233	445	40	95	44	33	39	95	7.1	3.9
11	8.7	59	151	703	36	85	42	38	54	78	7.1	12
12	8.7	180	350	218	159	2020	39	36	46	62	7.5	132
13	9.2	116	413	126	98	652	37	34	34	70	7.1	17
14	9.2	90	344	85	69	470	34	29	31	100	6.5	9.2
15	78	75	473	67	58	546	34	27	30	80	6.8	7.1
16	114	135	497	55	130	613	34	26	25	60	8.5	6.5
17	49	122	261	44	248	511	33	25	24	46	8.5	6.5
18	32	107	169	120	199	334	33	24	22	110	11	9.2
19	24	93	136	118	129	350	44	24	18	52	6.8	13
20	22	100	114	74	93	215	48	24	17	36	6.2	11
21	18	93	97	58	76	157	38	23	14	28	5.6	9.5
22	15	70	83	43	66	244	25	23	12	21	5.3	8.1
23	14	57	79	36	1510	199	39	23	11	17	5.1	7.5
24	14	55	116	36	2140	636	449	18	10	14	4.6	24
25	14	103	179	83	477	293	691	17	11	12	4.6	12
26	12	87	116	148	306	140	487	16	12	11	4.6	11
27	12	69	89	74	228	89	239	15	14	9.9	4.3	9.2
28	11	58	76	61	199	215	169	48	17	9.2	4.3	8.1
29	9.7	45	68	142	---	899	151	144	15	8.8	4.3	7.5
30	13	41	64	126	---	434	114	107	12	8.1	4.3	7.1
31	12	---	95	328	---	244	---	303	---	7.1	4.3	---
TOTAL	661.4	2443	5816	4326	7231	10422	3452	1667	1787	5181.3	248.1	372.2
MEAN	21.3	81.4	188	140	258	336	115	53.8	59.6	167	8.00	12.4
MAX	114	258	718	703	2140	2020	691	303	431	3030	34	132
MIN	8.7	11	38	36	36	80	25	15	10	7.1	4.3	3.9
CFSM	.30	1.14	2.63	1.96	3.61	4.71	1.61	.75	.83	2.34	.11	.17
IN.	.34	1.27	3.03	2.25	3.77	5.43	1.80	.87	.93	2.70	.13	.19

CAL YR 1974 TOTAL 35539.6 MEAN 97.4 MAX 1500 MIN 2.2 CFSM 1.36 IN 18.52
WTR YR 1975 TOTAL 43607.0 MEAN 119 MAX 3030 MIN 3.9 CFSM 1.67 IN 22.72

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-10	2330	7.94	1,290	03-12	1000	11.55	3,600	04-25	1600	7.75	1,190
02-24	0130	12.84	4,610	03-29	0030	7.59	1,110	07-04	0930	*13.47	*5,170

Minimum discharge: 3.9 ft³/s (0.11 m³/s) Sept. 9, 10, 11.

LITTLE MIAMI RIVER BASIN
03242150 CAESAR CREEK NEAR XENIA, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1968 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED TAS- SIUM (K) (MG/L)
MAR. 13...	1315	556	4.0	11.6	88	361	7.7	6.1	40	16	5.1	1.9
AUG. 21...	0945	5.8	24.5	7.9	94	531	7.8	5.5	64	32	9.7	2.7

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 13...	164	0	5.2	135	14	29	.2	.19	.03	3.4	.28	193
AUG. 21...	302	0	7.7	248	16	32	.3	.08	.02	.71	.06	311

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (MG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 13...	170	31	120	10	--	--	--	--	--	--	--	--
AUG. 21...	290	44	0	30	1	10	0	1	10	<.5	4.0	1.5

LITTLE MIAMI RIVER BASIN

03242200 ANDERSON FORK NEAR NEW BURLINGTON, OHIO

LOCATION.--Lat 39°33'59", long 83°54'10", Greene County, 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, and 5.0 mi (8.0 km) upstream from mouth.

DRAINAGE AREA.--77.8 mi² (202 km²).

GAGE.--Water-stage recorder. Datum of gage is 883.67 ft (269.343 m) above mean sea level.

REMARKS.--Discharge records good except those below 10 cfs which are fair.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--7 years, 90.5 ft³/s (2.563 m³/s), 15.80 in/yr (401 mm/yr).

EXTREMES.--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.

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).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	21	60	237	358	84	145	69	321	8.3	8.8	5.5
2	27	37	67	152	229	64	106	59	132	7.3	8.1	5.2
3	22	60	60	135	160	48	104	50	88	5.6	104	5.1
4	21	162	54	143	125	39	79	48	66	3110	41	5.2
5	19	248	52	106	131	36	64	39	58	720	16	5.1
6	18	139	60	93	273	33	57	36	182	168	11	5.3
7	17	94	147	81	170	54	54	31	135	150	11	5.1
8	17	76	661	97	120	78	50	27	73	187	9.1	4.9
9	17	63	477	225	94	48	45	25	50	118	8.3	4.7
10	17	54	288	386	85	45	45	24	46	74	8.1	4.6
11	14	93	201	791	80	37	41	23	48	50	9.1	13
12	13	210	309	325	158	2020	37	31	69	36	8.3	18
13	13	141	373	194	131	828	36	48	52	30	7.6	11
14	13	102	313	135	94	485	33	30	41	25	7.2	7.9
15	102	79	386	100	82	522	33	26	37	18	22	7.2
16	103	64	461	80	156	505	33	25	35	15	15	6.6
17	76	60	275	68	254	321	29	22	28	394	10	6.6
18	57	54	190	150	201	220	29	22	71	357	10	8.6
19	45	53	152	210	139	344	35	21	40	228	9.5	11
20	37	63	145	154	106	290	28	19	27	102	8.6	9.1
21	29	66	123	108	88	182	24	18	23	66	7.6	8.3
22	25	52	113	87	81	195	23	17	21	43	6.8	8.1
23	23	45	105	78	2090	152	26	17	20	32	6.4	7.6
24	23	47	111	78	2970	734	312	17	18	23	6.1	11
25	24	94	149	186	676	569	410	16	17	18	6.0	13
26	24	91	127	279	267	180	350	28	16	15	6.1	12
27	22	76	103	154	180	108	173	62	28	13	6.1	9.8
28	21	64	93	116	125	211	132	25	12	13	6.1	8.6
29	20	49	85	256	---	846	104	178	10	12	5.6	7.9
30	21	43	78	216	---	455	76	175	7.3	11	5.5	7.0
31	21	---	100	486	---	215	---	362	---	10	5.5	---
TOTAL	938	2500	5918	5906	9623	9948	2713	1590	1771.3	6059.2	400.5	243.0
MEAN	30.3	83.3	191	191	344	321	90.4	51.3	59.0	195	12.9	8.10
MAX	103	248	661	791	2970	2020	410	362	321	3110	104	18
MIN	13	21	52	68	80	33	23	16	7.3	5.6	5.5	4.6
CFSM	.39	1.07	2.46	2.46	4.42	4.13	1.16	.66	.76	2.51	.17	.10
IN.	.45	1.20	2.83	2.82	4.60	4.76	1.30	.76	.85	2.90	.19	.12

CAL YR 1974 TOTAL 38953.8 MEAN 107 MAX 1920 MIN 1.2 CFSM 1.38 IN 18.63
WTR YR 1975 TOTAL 47610.0 MEAN 130 MAX 3110 MIN 4.6 CFSM 1.67 IN 22.76

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-11	0030	8.62	1,060	03-12	1000	11.97	4,160	05-31	2030	8.47	1,260
02-24	0230	*12.76	*5,510	03-29	1030	7.94	1,040	07-04	1100	12.62	5,250
								07-17	1700	8.05	1,090

Minimum discharge: 1.6 ft³/s (0.045 m³/s) July 3.

LITTLE MIAMI RIVER BASIN

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03242200 ANDERSON FORK NEAR NEW BURLINGTON, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1968 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 13...	1530	741	4.0	10.5	80	316	7.6	5.5	33	14	5.5	2.0
AUG. 06...	1730	12	22.0	7.8	89	556	7.7	6.3	68	30	9.0	2.7

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 13...	132	0	5.3	108	15	26	.2	.25	.04	3.4	.38	166
AUG. 06...	310	0	9.9	254	18	39	.3	.03	.02	.98	.05	326

DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (MG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 13...	140	32	100	10	--	--	--	--	--	--	--	--
AUG. 06...	290	39	40	40	2	<10	10	2	120	<.5	5.4	.8

LITTLE MIAMI RIVER BASIN

03242300 CAESAR CREEK AT HARVEYSBURG, OHIO

LOCATION.--Lat 39°30'27", long 84°00'42", Warren County, on right bank at downstream side of bridge on State Highway 73, 0.2 mi (0.3 km) north of Harveysburg, 2.3 mi (3.7 km) downstream from Turkey Run, and 3.1 mi (5.0 km) upstream from Jonahs Run.

DRAINAGE AREA.--209 mi² (541 km²).

GAGE.--Water-stage and water-quality recorders. Datum of gage is 781.83 ft (238.302 m) above mean sea level. June 19 to Oct. 10, 1962, nonrecording gage at same site and datum.

REMARKS.--Discharge records fair. Interruptions in the daily water-quality records were due to malfunctions of the instrument. Since 1964, some regulation by seasonal changes in storage in Lake Shawnee 20.5 mi (33.0 km) upstream, drainage area 10.9 mi² (28.2 km²). Summer storage is about 1,100 acre-ft (1.36 hm³) more than winter. Intermittent pumpage, upstream from gage, for local irrigation.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1960 to June 1975 (discontinued).

AVERAGE DISCHARGE.--14 years, (1961-74), 210 ft³/s (5.947 m³/s), 13.64 in/yr (346 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 24,000 ft³/s (680 m³/s) May 24, 1968, gage height, 18.70 ft (5.700 m), from rating curve extended above 5,200 ft³/s (147 m³/s) on basis of drainage area ratio comparisons with three nearby stations; no flow all or part of each day Sept. 9-18, Oct. 17, 18, 1964. Flood of Jan. 21, 1959 reached a stage of 20.5 ft (6.25 m), from floodmark, discharge, 26,000 ft³/s (736 m³/s), from rating curve extended above 12,000 ft³/s (340 m³/s).

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1974 TO JUNE 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161	60	184	584	1110	350	365	293	800			
2	123	83	210	388	628	280	291	280	380			
3	94	120	211	356	453	250	274	237	311			
4	84	340	211	376	367	220	225	218	234			
5	78	632	200	315	328	211	190	186	198			
6	68	361	192	282	459	177	171	165	541			
7	62	272	375	257	557	223	157	147	397			
8	58	209	2040	261	375	298	146	133	236			
9	56	174	1300	607	300	228	137	125	160			
10	53	155	674	958	260	220	135	114	159			
11	49	221	468	2250	210	192	125	107	203			
12	42	498	747	782	240	5420	119	112	288			
13	41	373	929	465	428	4130	110	169	184			
14	42	294	735	360	300	1320	101	123	138			
15	224	237	936	267	244	1260	100	107	121			
16	305	241	1240	241	222	1550	99	101	111			
17	215	241	651	194	467	989	93	89	89			
18	155	223	460	331	643	595	91	87	116			
19	126	204	393	473	463	715	121	84	109			
20	112	211	370	350	345	578	109	76	84			
21	94	224	334	275	278	393	97	68	68			
22	82	183	310	241	230	483	79	63	68			
23	78	158	293	208	226	411	89	58	62			
24	75	150	312	196	4500	1720	858	58	55			
25	77	276	409	234	8000	1020	1120	54	51			
26	76	280	359	591	4000	404	996	69	46			
27	68	225	301	369	1200	296	507	272	65			
28	65	196	272	284	450	494	468	111	75			
29	63	162	249	352	---	2260	386	273	71			
30	60	147	233	596	---	1080	309	452	51			
31	60	---	255	805	---	545	---	850	---			
TOTAL	2946	7150	15853	14248	27283	28312	8068	5281	5471			
MEAN	95.0	238	511	460	974	913	269	170	182			
MAX	305	632	2040	2250	8000	5420	1120	850	800			
MIN	41	60	184	194	210	177	79	54	46			
CFSM	.45	1.14	2.44	2.20	4.66	4.37	1.29	.81	.87			
IN.	.52	1.27	2.82	2.54	4.86	5.04	1.44	.94	.97			

CAL YR 1974 TOTAL 106146.5 MEAN 291 MAX 4860 MIN 9.5 CFSM 1.39 IN 18.89

EXTREMES.--October 1974 to June 1975: Peak discharges above base of 3,000 ft³/s (85.0 m³/s) and maximums (*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-11	0400	8.12	3,250	03-12	1700	12.39	7,830
02-25	unknown	*17.52	unknown				

Minimum daily discharge: 41 ft³/s (1.16 m³/s) Oct. 13.

Note: Peak flow affected by temporary storage behind Caesar Creek Lake (under construction).

LITTLE MIAMI RIVER BASIN

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03242300 CAESAR CREEK AT HARVEYSBURG, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--Water years 1966-67, 1969, July to September 1970, November 1970 to August 1975 (discontinued)

OCTOBER 1974 TO AUGUST 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
OCT. 29...	1410	87	13.0	11.6	110	610	8.0	1.0	71	30	8.5	1.6
DEC. 11...	1630	434	3.5	11.0	83	600	8.1	7.6	71	33	6.5	.8
JAN. 15...	1500	275	.5	13.7	95	610	8.0	7.7	75	30	7.1	1.2
MAR. 04...	1430	237	3.0	14.2	105	615	7.7	6.5	64	28	7.4	1.4
APR. 15...	1200	100	7.5	11.8	98	560	8.0	1.9	70	31	7.4	1.1
JUNE 02...	1245	578	17.0	8.4	87	550	8.1	7.9	62	23	6.0	1.9
AUG. 06...	1630	63	22.5	7.6	86	456	7.9	5.2	55	23	7.2	3.3

DATE	RICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)
OCT. 29...	334	0	5.3	274	19	45	--	--	.00	.53	.02	341
DEC. 11...	307	0	3.9	252	19	44	--	--	.00	3.3	.06	333
JAN. 15...	310	0	5.0	254	17	46	--	--	.02	3.4	.08	337
MAR. 04...	283	0	9.0	232	19	44	--	--	.02	3.0	.08	310
APR. 15...	290	0	4.6	238	18	46	--	--	.01	2.1	.05	318
JUNE 02...	228	0	2.9	187	17	32	--	--	.11	9.5	.27	263
AUG. 06...	250	0	5.0	205	14	30	.4	.03	.03	1.1	.08	261

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	RIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT. 29...	300	27	30	30	--	--	--	--	--	--	--	--
DEC. 11...	310	61	30	30	--	--	--	--	--	--	--	--
JAN. 15...	310	57	20	20	--	--	--	--	--	--	--	--
MAR. 04...	280	43	20	20	--	--	--	--	--	--	--	--
APR. 15...	300	65	20	20	--	--	--	--	--	--	--	--
JUNE 02...	250	63	700	90	--	--	--	--	--	--	--	--
AUG. 06...	230	27	20	10	60	<10	10	2	140	<.5	4.6	1.4

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C)

EXTREMES.--Period of record: Maximum, 801 micromhos Jan. 17, 1972; minimum, 171 micromhos June 26, 1971.

OCTOBER 1974 TO JUNE 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	616	595	---	---	601	573	558	522	492	416	531	520
2	623	616	---	---	594	575	589	550	537	496	576	530
3	627	619	---	---	614	594	598	591	558	539	589	575
4	630	618	---	---	625	616	598	592	572	556	589	539
5	630	619	---	---	628	625	605	598	586	567	555	544
6	632	619	---	---	627	619	616	603	576	518	583	553
7	628	616	---	---	628	573	619	612	530	522	597	575
8	625	608	---	---	---	---	621	566	---	---	581	559
9	623	603	---	---	---	---	548	490	---	---	573	555
10	619	600	---	---	---	---	561	353	---	---	586	566
11	621	600	---	---	597	581	373	313	---	---	598	567
12	627	616	---	---	597	476	484	377	---	---	598	176
13	639	628	---	---	521	475	539	488	---	---	383	235
14	647	636	---	---	550	522	---	---	---	---	435	388
15	638	580	614	612	558	419	---	---	---	---	539	348
16	601	581	614	569	484	409	598	575	---	---	428	348
17	610	575	573	569	547	488	607	572	---	---	473	418
18	630	616	573	569	573	548	632	484	---	---	509	475
19	638	628	586	575	586	575	552	479	583	580	510	473
20	634	621	589	580	601	586	569	537	592	583	510	462
21	627	614	597	586	605	600	591	561	598	591	550	510
22	627	610	600	594	603	598	601	586	603	581	552	488
23	630	614	598	591	612	603	603	598	594	188	539	498
24	628	614	607	598	614	595	610	600	253	179	520	323
25	634	618	603	581	592	576	614	537	420	259	484	456
26	636	614	605	584	597	578	534	503	483	424	456	404
27	625	610	614	605	614	598	561	510	505	484	495	420
28	619	605	618	607	618	614	583	562	520	502	520	498
29	614	603	616	610	621	618	586	475	---	---	498	438
30	---	---	621	591	621	619	531	483	---	---	440	419
31	---	---	---	---	623	567	534	398	---	---	453	416
MONTH	647	575	---	---	628	409	632	313	---	---	598	176
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	491	455	559	537	503	255						
2	527	494	562	556	562	505						
3	539	524	558	550	553	541						
4	544	539	553	542	661	553						
5	552	544	548	542	692	583						
6	556	552	550	537	605	416						
7	564	555	548	536	562	510						
8	594	559	550	536	589	561						
9	575	572	556	542	619	592						
10	584	566	562	547	636	558						
11	587	578	569	550	553	490						
12	589	578	573	548	547	464						
13	595	580	548	511	550	456						
14	587	583	553	522	566	537						
15	586	578	580	552	581	559						
16	589	580	581	567	578	491						
17	600	567	580	566	550	503						
18	605	595	584	564	619	547						
19	605	576	581	562	608	570						
20	584	575	594	564	610	594						
21	591	572	597	575	618	595						
22	607	575	600	567	625	610						
23	610	584	601	573	621	603						
24	589	422	605	591	610	586						
25	573	494	601	591	598	573						
26	517	495	600	522	586	556						
27	498	455	479	258	580	510						
28	496	473	547	491	592	569						
29	509	498	566	223	576	552						
30	537	507	425	273	584	564						
31	---	---	525	245	---	---						
MONTH	610	422	605	223	692	255						
YEAR	692	176										

03242300 CAESAR CREEK AT HARVEYSBURG, OHIO--Continued

TEMPERATURE (°C) OF WATER

PERIOD OF RECORD.--December 1970 to June 1975 (discontinued).

EXTREMES.--Period of record: Maximum, 30.5°C June 6, 1971; minimum, freezing point on many days during winter periods.

OCTOBER 1974 TO JUNE 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	11.5	---	---	2.0	1.0	6.0	4.0	4.5	4.0	5.0	3.0
2	12.0	10.5	---	---	3.0	2.0	4.0	2.0	4.5	3.5	4.0	2.0
3	10.5	8.5	---	---	2.5	1.5	4.0	2.5	4.0	3.0	2.5	1.0
4	10.5	8.5	---	---	3.0	1.5	4.0	3.0	4.0	2.5	4.5	1.0
5	13.0	10.0	---	---	1.5	0.0	3.0	1.5	5.0	3.0	4.5	1.5
6	14.5	12.0	---	---	1.5	0.0	5.5	2.0	5.0	2.5	7.0	4.0
7	14.5	13.0	---	---	3.0	1.5	4.5	2.5	2.5	0.5	8.0	6.5
8	13.0	11.0	---	---	---	---	7.0	4.5	---	---	6.5	4.0
9	13.5	11.0	---	---	---	---	7.0	6.0	---	---	4.5	1.5
10	14.0	11.5	---	---	---	---	8.5	6.0	---	---	4.0	2.5
11	14.5	12.0	---	---	4.5	3.5	8.5	6.0	---	---	4.5	2.5
12	14.5	13.5	---	---	5.0	4.5	6.0	3.0	---	---	6.0	2.0
13	14.5	13.5	---	---	5.5	5.0	3.0	0.5	---	---	6.0	4.5
14	16.5	14.5	---	---	5.5	5.0	---	---	---	---	4.0	2.0
15	16.0	13.5	5.5	4.5	5.5	4.5	---	---	---	---	5.5	2.0
16	13.5	12.5	5.5	3.5	5.0	4.0	2.5	1.0	---	---	5.5	4.0
17	13.5	11.5	7.0	5.5	5.0	3.5	5.0	0.0	---	---	7.5	4.5
18	12.5	10.5	8.0	6.5	3.5	2.5	2.5	1.0	---	---	8.0	6.5
19	10.0	9.0	10.0	8.0	3.5	2.5	3.5	2.5	5.0	4.5	8.0	7.0
20	9.0	8.0	11.0	9.0	3.0	2.0	3.0	0.5	4.5	2.5	10.0	7.0
21	8.0	6.0	9.0	6.0	4.0	3.0	1.5	0.0	5.0	2.5	10.5	8.0
22	9.0	6.0	6.0	5.5	4.5	3.5	2.5	1.0	7.5	4.5	11.0	9.5
23	11.5	8.0	7.5	5.0	6.5	4.0	3.0	2.0	10.5	7.5	11.0	7.5
24	12.5	11.5	9.0	7.5	7.5	6.5	3.5	1.5	10.5	7.0	11.5	11.0
25	13.5	12.5	8.5	6.5	7.5	4.0	5.0	4.0	6.5	3.5	11.0	7.5
26	13.0	11.0	6.0	4.0	4.0	2.5	4.5	1.5	5.0	2.5	7.0	6.0
27	12.0	10.0	4.0	3.0	4.0	2.5	2.5	0.5	5.0	3.5	6.5	5.0
28	12.0	10.0	4.0	2.5	4.5	4.0	5.5	2.5	6.0	4.0	5.0	4.5
29	12.5	11.0	4.0	2.5	6.0	4.5	9.5	5.5	---	---	6.5	4.5
30	---	---	3.5	1.0	6.5	6.0	8.0	5.0	---	---	7.0	6.5
31	---	---	---	---	6.0	5.5	5.0	3.5	---	---	6.5	6.0
MONTH	16.5	6.0	---	---	7.5	0.0	9.5	0.0	---	---	11.5	1.0

APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	6.5	14.5	14.0	19.0	18.0						
2	8.5	7.5	15.0	13.5	18.5	17.0						
3	9.5	8.0	15.0	14.5	18.0	16.0						
4	8.0	7.0	16.0	14.0	20.5	17.0						
5	7.5	6.5	16.0	14.0	20.5	19.5						
6	8.0	6.5	17.5	15.0	20.5	18.0						
7	9.0	7.0	19.5	16.0	20.0	18.0						
8	9.5	7.5	18.5	16.0	19.0	17.0						
9	9.0	8.0	20.0	15.5	19.5	17.5						
10	10.0	7.0	20.5	16.0	20.0	18.0						
11	10.5	8.5	20.0	16.5	19.5	19.5						
12	10.5	8.0	20.0	18.0	22.0	19.0						
13	11.5	8.5	18.5	16.5	22.5	20.0						
14	10.5	8.5	20.0	15.5	22.5	20.5						
15	9.0	8.0	18.5	17.0	22.5	21.0						
16	10.0	7.0	19.5	16.0	23.0	20.0						
17	13.0	9.0	19.5	17.0	23.0	21.0						
18	14.0	12.5	21.5	18.0	25.0	21.5						
19	14.0	13.0	22.5	19.5	26.5	23.5						
20	13.0	11.0	24.5	21.0	27.5	24.5						
21	12.5	9.0	25.0	22.5	28.0	25.0						
22	14.5	11.0	25.0	23.0	28.0	25.0						
23	14.5	13.0	24.5	22.5	28.0	25.5						
24	13.5	12.5	26.0	22.0	28.0	25.0						
25	13.5	12.0	26.0	23.0	28.0	25.0						
26	13.0	10.5	26.0	23.0	27.0	24.5						
27	13.0	11.5	23.5	20.0	26.5	24.0						
28	12.0	10.5	23.5	20.0	27.0	24.5						
29	14.5	11.0	22.5	20.0	27.5	24.5						
30	14.5	14.0	21.5	19.5	26.0	24.5						
31	---	---	21.5	19.0	---	---						
MONTH	14.5	6.5	26.0	13.5	28.0	16.0						

YEAR	28.0	0.0
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LITTLE MIAMI RIVER BASIN

03245300 LITTLE MIAMI RIVER AT MIAMIVILLE, OHIO

LOCATION.--Lat 39°12'38", long 84°17'33", Hamilton County, on right bank at upstream side of bridge on State Highway 120, 0.4 mi (0.6 km) southeast of Miamiville, 4.2 mi (6.8 km) upstream from gaging station at Milford, 5.6 mi (9.0 km) upstream from East Fork Little Miami River, and 1.0 mi (1.6 km) north of Camp Dennison.

Drainage Area.--1,189 mi² (3,080 km²).

GAGE.--Water-quality recorder.

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

WATER QUALITY RECORDS

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C)

PERIOD OF RECORD.--November 1970 to May 1975 (discontinued).

EXTREMES.--Period of record: Maximum, 974 micromhos Feb. 13, 1974; minimum, 150 micromhos June 23, 1974.

OCTOBER 1974 TO MAY 1975

	OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN		MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	533	458		698	687	659	540	607	496	479	389	---	---
2	606	539		699	635	567	501	543	499	546	480	---	---
3	645	608		686	677	551	521	585	542	591	548	654	642
4	666	647		687	561	612	558	599	585	612	593	671	650
5	678	669		558	477	633	608	630	600	618	608	684	659
6	693	678		539	492	614	606	654	630	602	543	689	678
7	702	690		597	543	618	348	655	650	581	548	696	680
8	705	695		614	599	345	300	666	626	609	582	686	653
9	711	699		---	---	407	314	629	510	644	612	680	654
10	707	698		---	---	501	410	510	335	669	644	695	651
11	705	696		---	---	546	504	356	315	671	660	723	674
12	708	702		---	---	560	537	437	359	732	612	720	224
13	707	693		---	---	563	522	552	446	606	567	309	246
14	708	702		---	---	562	529	603	557	636	578	384	311
15	708	603		---	---	572	497	617	605	656	636	429	359
16	651	596		---	---	503	446	626	606	662	653	494	390
17	605	569		---	---	518	461	630	617	660	570	476	449
18	614	578		---	---	562	519	722	572	587	572	516	477
19	638	617		---	---	633	561	573	524	609	590	525	464
20	657	636		---	---	596	580	605	548	632	609	527	474
21	669	660		---	---	758	593	618	573	656	633	561	528
22	678	671		---	---	672	649	666	621	663	653	581	398
23	683	677		---	---	662	648	690	666	663	185	552	537
24	687	683		---	---	661	653	695	669	278	185	503	263
25	693	686		---	---	651	613	687	594	276	261	447	297
26	707	693		---	---	609	579	606	516	390	275	503	426
27	698	689		582	557	606	579	600	554	413	392	603	509
28	699	683		612	584	640	605	603	590	---	---	399	387
29	692	681		629	612	657	639	618	594	---	---	586	288
30	696	689		638	630	664	652	593	572	---	---	408	329
31	695	689		---	---	666	621	591	389	---	---	506	411
MONTH	711	458		---	---	758	300	722	315	732	185	723	224

[illegible]

03245300 LITTLE MIAMI RIVER AT MIAMIVILLE, OHIO--Continued

PH (UNITS)

PERIOD OF RECORD.--November 1970 to May 1975 (discontinued).

EXTREMES.--Period of record: Maximum, 9.3 June 26, 1971; minimum, 3.8 Dec. 18, 1972.

OCTOBER 1974 TO MAY 1975

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

[illegible]

LITTLE MIAMI RIVER BASIN

03245300 LITTLE MIAMI RIVER AT MIAMIVILLE, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITRE

PERIOD OF RECORD.--November 1970 to May 1975 (discontinued).

EXTREMES.--Period of record: Maximum, 15.0 mg/l or higher on many days during 1971 to 1974; minimum, 0.8 mg/l May 17, 1971.

OCTOBER 1974 TO MAY 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.4	8.0	9.6	8.7	11.5	11.2	11.4	11.1	12.0	11.9	---	---
2	9.3	8.5	9.0	8.3	11.3	11.0	11.8	11.4	11.9	11.8	---	---
3	9.5	9.2	9.2	8.4	11.5	11.1	12.3	11.7	11.9	11.8	12.6	12.3
4	10.5	9.3	9.0	7.8	11.7	11.3	12.2	12.1	12.0	11.9	12.7	12.5
5	9.9	9.7	8.5	7.7	11.9	11.4	12.4	12.1	11.9	11.7	12.5	12.1
6	9.6	9.3	9.0	8.7	12.0	11.6	12.4	12.2	11.9	11.7	12.1	11.5
7	9.5	9.0	9.9	9.2	11.6	11.1	12.3	12.0	12.4	11.9	11.5	11.0
8	9.4	9.1	10.2	9.7	11.2	11.0	12.0	11.2	12.6	12.4	11.3	10.9
9	9.3	9.0	---	---	11.3	11.1	11.3	11.1	12.9	12.6	11.8	11.3
10	9.4	9.1	---	---	11.5	11.3	11.1	10.8	13.8	9.3	12.0	11.6
11	9.5	9.1	---	---	11.4	11.1	10.9	10.6	13.0	12.6	12.5	11.9
12	9.5	9.0	---	---	11.5	11.2	11.6	10.9	12.6	12.4	12.7	11.9
13	9.0	8.6	---	---	11.8	11.3	12.4	11.7	12.6	12.4	12.5	12.0
14	9.0	8.4	---	---	11.4	11.2	12.8	12.4	12.8	12.5	12.6	11.7
15	8.5	7.9	---	---	11.4	11.2	12.8	12.7	12.7	12.2	---	---
16	8.6	7.5	---	---	11.4	11.3	12.8	12.0	12.2	11.7	---	---
17	8.9	8.3	---	---	11.5	11.4	12.9	12.6	11.7	11.1	12.9	12.0
18	9.3	8.8	---	---	11.7	11.5	12.7	12.4	11.2	11.0	12.3	11.5
19	9.8	9.0	---	---	11.7	11.6	12.5	12.3	11.5	11.1	11.7	11.0
20	10.2	9.3	---	---	12.1	11.8	12.5	12.3	12.4	11.5	11.6	11.3
21	10.8	10.0	---	---	11.8	11.6	12.7	12.5	12.7	12.2	11.3	10.7
22	10.8	10.4	---	---	11.8	11.6	12.7	12.5	12.5	11.8	10.8	10.0
23	10.8	10.2	---	---	11.6	11.3	12.6	12.4	11.8	10.5	10.7	10.4
24	10.5	9.7	---	---	11.3	10.8	12.4	12.0	10.9	10.0	10.9	10.4
25	9.8	9.3	---	---	11.0	10.7	11.9	11.5	11.3	7.8	10.8	10.0
26	10.1	9.1	---	---	11.5	11.1	11.8	11.6	12.3	8.0	11.9	10.3
27	10.3	9.6	11.6	11.4	11.6	11.5	12.2	11.9	10.3	9.3	12.3	11.8
28	10.5	9.6	12.0	11.3	11.7	11.6	12.2	11.9	---	---	12.6	12.3
29	10.5	9.6	12.1	11.5	11.6	11.3	11.8	11.0	---	---	12.3	11.6
30	9.8	9.2	11.8	11.5	11.3	11.1	11.0	10.8	---	---	---	---
31	10.2	9.3	---	---	11.1	11.0	12.0	10.9	---	---	12.9	12.2
MONTH	10.8	7.5	---	---	12.1	10.7	12.9	10.6	13.8	7.8	12.9	10.0
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.2	11.6	9.5	9.0								
2	11.6	10.8	9.6	8.6								
3	10.7	9.3	9.3	9.0								
4	10.2	9.6	9.6	8.6								
5	---	---	9.7	9.1								
6	---	---	9.3	9.0								
7	11.9	11.2	---	---								
8	11.3	11.0	---	---								
9	11.2	10.6	---	---								
10	10.8	10.6	---	---								
11	10.8	10.4	---	---								
12	11.0	10.5	---	---								
13	11.3	10.5	---	---								
14	11.2	10.5	---	---								
15	11.8	10.6	---	---								
16	12.2	11.1	---	---								
17	12.0	10.9	---	---								
18	11.7	10.2	---	---								
19	11.3	9.3	---	---								
20	11.5	9.9	---	---								
21	11.9	10.3	---	---								
22	11.4	10.0	---	---								
23	10.9	9.5	---	---								
24	9.5	6.1	---	---								
25	9.3	8.0	---	---								
26	9.7	9.3	---	---								
27	9.7	9.6	---	---								
28	10.0	9.0	---	---								
29	10.0	7.1	---	---								
30	9.5	7.3	---	---								
31	---	---	---	---								
MONTH	12.2	6.1	---	---								
YEAR	13.8	6.1										

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TEMPERATURE (°C) OF WATER

EXTREMES.--Period of record: Maximum, 32.5°C July 23, 1972; minimum, freezing point on many days during winter periods.

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	13.5	15.5	15.0	2.5	2.0	6.0	4.5	4.0	3.5	---	---
2	13.5	12.0	16.5	15.5	2.5	2.0	4.5	3.5	4.5	3.5	---	---
3	12.5	10.5	16.5	15.5	2.5	2.0	3.5	3.0	4.0	3.5	3.0	2.5
4	12.5	10.5	16.5	15.5	3.0	2.5	3.5	3.0	3.5	3.0	4.0	2.0
5	13.0	10.5	15.0	12.5	2.5	1.5	3.0	2.5	4.0	3.0	4.5	2.5
6	14.0	11.5	12.5	11.5	2.0	1.0	2.5	2.0	4.5	3.5	6.0	3.5
7	14.5	13.0	11.0	10.0	3.0	2.0	3.5	2.0	4.0	2.5	7.0	6.0
8	14.0	12.0	10.5	9.0	3.0	2.5	5.5	3.5	2.5	2.0	6.5	5.5
9	14.5	12.5	---	---	3.0	2.0	6.5	5.5	2.0	1.0	5.5	4.0
10	15.0	13.0	---	---	2.0	1.0	8.0	6.0	5.5	0.5	5.0	4.0
11	15.5	13.5	---	---	2.0	1.0	8.0	7.0	2.5	1.5	4.5	3.5
12	15.0	14.5	---	---	3.5	2.0	7.0	4.5	3.5	2.5	4.5	3.5
13	15.5	14.5	---	---	4.5	3.5	4.0	1.5	3.0	2.5	4.5	4.5
14	16.0	15.0	---	---	5.0	4.5	1.5	0.5	3.0	2.5	4.5	3.0
15	16.0	14.5	---	---	4.5	4.5	1.0	0.0	4.5	3.0	5.0	3.0
16	15.0	13.5	---	---	4.5	4.0	2.0	1.0	6.0	4.5	5.5	4.5
17	14.0	12.5	---	---	4.0	3.5	1.5	0.5	7.5	6.0	6.5	5.0
18	13.5	12.0	---	---	3.5	3.0	2.5	1.0	8.0	7.0	8.5	6.0
19	11.5	10.5	---	---	3.0	2.5	2.0	1.5	7.5	6.0	8.5	8.0
20	11.0	9.5	---	---	2.5	2.0	2.0	1.5	6.0	5.0	9.5	7.5
21	9.5	8.0	---	---	3.0	2.5	2.0	1.0	5.5	4.0	10.5	8.5
22	9.5	7.5	---	---	3.5	2.5	1.5	1.0	6.0	4.5	11.5	10.5
23	10.5	8.5	---	---	5.0	3.0	2.5	1.5	10.0	6.0	11.5	9.5
24	11.0	10.0	---	---	6.0	5.0	3.0	1.5	10.0	8.0	12.5	12.0
25	12.0	11.0	---	---	6.0	5.0	4.0	3.0	8.0	6.0	12.0	9.0
26	13.0	11.0	---	---	5.0	4.0	3.5	2.5	6.5	5.0	8.5	6.5
27	12.5	11.0	4.5	4.0	4.0	3.5	2.5	2.0	6.0	5.5	6.5	4.5
28	13.0	11.0	4.0	3.0	3.5	3.5	4.0	2.5	---	---	5.0	4.0
29	13.0	12.0	4.0	3.0	5.0	3.5	7.0	4.0	---	---	6.5	5.0
30	14.5	13.0	3.5	2.5	5.5	5.0	7.0	6.5	---	---	---	---
31	16.0	13.5	---	---	6.0	5.0	6.5	4.0	---	---	7.5	6.0
MONTH	16.0	7.5	---	---	6.0	1.0	8.0	0.0	10.0	0.5	12.5	2.0

[illegible]

LITTLE MIAMI RIVER BASIN

03245500 LITTLE MIAMI RIVER AT MILFORD, OHIO
NATIONAL STREAM-QUALITY ACCOUNTING NETWORK STATION

LOCATION.--Lat 39°10'17", long 84°17'53", Clermont County, 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, and 6.4 mi (10.3 km) downstream from North Branch Creek.

DRAINAGE AREA.--1,203 mi² (3,116 km²).

GAGE.--Water-stage and water-quality recorders. Datum of gage is 499.35 ft (152.202 m) above mean sea level, 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 0.72 ft (0.219 m) higher. Prior to May 1975, water-quality sampling site and water-quality recorder was at station 03245300, 4.2 mi (6.76 km) upstream.

REMARKS.--Discharge records good. Interruptions in the daily water-quality records were due to malfunctions of the instrument. 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 Reservoir capacity 242,200 acre-ft (298.6 hm³) 41.3 mi (66.4 km) upstream on Caesar Creek. Annual figures of runoff are considered to be within 10 percent of natural yield. Included in National Stream-Quality Accounting Network starting in January.

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.

AVERAGE DISCHARGE.--50 years, (1915-17, 1925-36, 1938-75), 1,238 ft³/s (35.06 m³/s), 13.98 in/yr (355 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 84,100 ft³/s (2,380 m³/s) Jan. 22, 1959, gage height, 22.30 ft (6.797 m), 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.

Flood in March 1913 reached a stage of 25.5 ft (7.77 m), present datum, from information by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 728: 1931. WSP 743: 1932. WSP 873: 1925-36. WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1130	403	1480	3500	5460	2510	2860	2730	2610	350	246	224
2	804	456	2280	2570	3590	2080	2340	2380	2190	311	241	190
3	640	540	2050	2080	2590	1750	2280	1910	1260	278	237	139
4	540	1160	1680	2360	2120	1570	2050	1680	980	7770	301	127
5	497	3020	1410	1830	2120	1500	1710	1500	1650	7540	657	154
6	456	1850	1200	1520	3170	1410	1540	1220	2100	7250	455	142
7	426	1250	2900	1400	2790	1510	1440	972	1900	3530	345	125
8	398	990	9500	1400	1950	2030	1260	887	1180	1800	306	116
9	389	819	7070	3700	1660	1720	1060	819	805	1490	273	109
10	380	719	4220	5030	1340	1540	1010	765	651	1370	445	99
11	367	1140	2760	10600	1350	1560	974	714	701	965	461	229
12	355	2980	2760	5870	2080	11800	910	701	995	922	608	791
13	352	2030	3880	3120	2380	10800	879	943	972	880	360	849
14	348	1460	3410	2310	1610	9270	804	859	701	950	271	412
15	789	1160	3400	2050	1350	7680	789	714	584	839	294	279
16	1380	966	5760	1850	1410	7500	774	657	538	614	471	213
17	1130	895	4100	1620	2620	5930	767	626	573	538	403	190
18	841	826	2940	2080	2750	4500	746	626	2010	1090	310	249
19	673	811	2420	3460	2110	5100	887	608	1020	1350	393	251
20	577	1160	2490	2570	1670	4350	1000	550	779	1040	297	283
21	522	1030	1830	1830	1410	3130	789	510	1390	785	270	252
22	480	834	1600	1470	1250	3230	733	488	550	620	254	217
23	451	726	1430	1280	13600	3260	804	472	440	516	239	186
24	440	692	1400	1200	21100	10900	4350	450	394	455	237	239
25	445	1450	2240	1750	12600	6140	6060	440	369	414	230	251
26	445	1610	2270	3270	9200	3410	5560	424	839	374	215	278
27	435	1210	1670	2270	5670	2310	4010	455	922	335	206	238
28	412	1030	1450	1780	4080	3950	11200	567	632	306	176	206
29	398	879	1310	2080	---	11600	4110	440	429	292	152	181
30	398	774	1220	2840	---	7070	2730	799	419	273	147	159
31	398	---	1220	5190	---	4210	---	1170	---	264	212	---
TOTAL	17296	34870	85350	85880	115030	145320	66426	28076	30583	45511	9712	7378
MEAN	558	1162	2753	2770	4108	4688	2214	906	1019	1468	313	246
MAX	1380	3020	9500	10600	21100	11800	11200	2730	2610	7770	657	849
MIN	348	403	1200	1200	1250	1410	733	424	369	264	147	99
CFSM	.46	.97	2.29	2.30	3.41	3.90	1.84	.75	.85	1.22	.26	.20
IN.	.53	1.08	2.64	2.66	3.56	4.49	2.05	.87	.95	1.41	.30	.23

CAL YR 1974 TOTAL 646292 MEAN 1771 MAX 31300 MIN 201 CFSM 1.47 IN 19.99
WTR YR 1975 TOTAL 671432 MEAN 1840 MAX 21100 MIN 99 CFSM 1.53 IN 20.76

EXTREMES.--Current year: Peak discharges above base of 15,000 ft³/s (425 m³/s) and maximums (*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
02-23	2200	*14.75	*37,300	04-28	0400	11.16	22,600
03-12	1500	10.41	20,100				

Minimum discharge: 96 ft³/s (2.72 m³/s) Sept. 10.

LITTLE MIAMI RIVER BASIN

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03245500 LITTLE MIAMI RIVER AT MILFORD, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year. Prior to May 1975, sampling site was 4.2 mi (6.76 km) upstream.

REMARKS.--Chemical samples were collected each month beginning in January when station was included as part of the National Stream-Quality Accounting Network.

JANUARY TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
JAN. 08...	1430	1290	5.0	6.7	85	29	14	2.0	313	0	26	53
FEB. 05...	1000	2060	4.0	--	--	--	--	--	--	--	--	--
MAR. 12...	0830	6240	4.5	--	--	--	--	--	--	--	--	--
APR. 08...	1600	1060	10.5	5.6	84	28	14	1.8	308	0	29	50
MAY 13...	1800	936	20.0	--	--	--	--	--	--	--	--	--
13-31	--	--	--	--	--	--	--	--	--	--	--	--
JUNE 01-10	--	--	--	--	--	--	--	--	--	--	--	--
10...	1500	632	21.5	--	--	--	--	--	--	--	--	--
JULY 15...	1530	779	23.0	8.4	81	31	18	2.6	314	0	36	45
AUG. 18...	1530	292	27.0	--	--	--	--	--	--	--	--	--
SEP. 10...	0900	96	22.0	--	--	--	--	--	--	--	--	--

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	PH (UNITS)
JAN. 08...	.2	413	370	640	3.2	.40	2.8	.21	14	12.4	97	8.1
FEB. 05...	--	--	--	590	3.2	.24	3.0	.15	14	11.8	90	7.9
MAR. 12...	--	--	--	530	3.3	1.4	1.9	.95	15	12.2	94	7.8
APR. 08...	.4	416	365	640	2.8	.25	2.5	.22	12	10.4	93	7.9
MAY 13...	--	--	--	595	2.3	.51	1.8	.30	10	8.6	93	8.0
13-31	--	--	--	--	--	--	--	--	--	--	--	--
JUNE 01-10	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	610	8.1	.65	7.4	.41	36	7.9	89	7.9
JULY 15...	.2	400	377	655	3.2	.50	2.7	.38	14	8.3	95	8.0
AUG. 18...	--	--	--	680	2.7	.63	2.1	.58	12	8.2	100	8.1
SEP. 10...	--	--	--	830	3.0	.50	2.5	.70	13	7.3	83	8.2

DATE	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	PERI- PHYTON BIOMASS ASH WEIGHT G/50 M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B MG/50 M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A MG/50 M	TOTAL PHYTO- PLANK- TON (CELLS PER ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TUR- BIDU- ITY (JTU)
JAN. 08...	4.0	257	330	75	1.8	--	--	--	880	44	24	5
FEB. 05...	--	--	--	--	--	1.1	.0	.1	1200	180	130	--
MAR. 12...	--	--	--	--	--	--	--	--	2400	3000	3100	--
APR. 08...	6.2	253	330	72	1.9	--	--	--	320	3	8	7
MAY 13...	--	--	--	--	--	--	--	--	4700	10000	1500	--
13-31	--	--	--	--	--	18	21	74	--	--	--	--
JUNE 01-10	--	--	--	--	--	18	21	74	--	--	--	--
10...	--	--	--	--	--	--	--	--	2300	540	200	--
JULY 15...	5.0	258	330	72	7.0	--	--	--	6500	900	250	30
AUG. 18...	--	--	--	--	--	16	10	37	8900	580	380	--
SEP. 10...	--	--	--	--	--	--	--	--	160	160	110	--

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

ANALYSES OF MINOR ELEMENTS

JANUARY TO SEPTEMBER 1975

DATE	TIME	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)
JAN. 08...	1430	2	2	0	1	0	0	0	0	10	10	330
APR. 08...	1600	0	1	0	0	<10	<10	1	1	10	10	430
JULY 15...	1530	2	2	0	1	0	10	0	1	0	10	1100

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY (HG) (UG/L)
JAN. 08...	130	1	2	40	40	10	60	1	1	<.5	<.5
APR. 08...	40	2	2	30	20	10	10	0	1	<.5	<.5
JULY 15...	30	1	6	70	10	0	30	0	0	<.5	<.5

SUSPENDED SEDIMENT DISCHARGE

PERIOD OF RECORD.--January to September 1975 (periodic instantaneous concentration and discharge).

JANUARY TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)
JAN. 08...	1430	1290	5.0	8	28
FEB. 05...	1000	2060	4.0	28	156
MAR. 12...	0830	6240	4.5	694	5150
APR. 08...	1600	1060	10.5	57	163
MAY 13...	1800	936	20.0	74	187
13-31	--	--	21.5	--	--
JUNE 01-10	--	--	21.5	--	--
10...	1500	632	21.5	128	218
JULY 15...	1530	779	23.0	108	227
AUG. 18...	1530	292	27.0	78	61
SEP. 10...	0900	96	22.0	45	12

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C)

PERIOD OF RECORD.--May to September 1975.

MAY TO SEPTEMBER 1975

[illegible]

PH (UNITS)

PERIOD OF RECORD.--May to September 1975.

MAY TO SEPTEMBER 1975

[illegible]

MAY TO SEPTEMBER 1975

[illegible]

TEMPERATURE (°C) OF WATER

PERIOD OF RECORD.--May to September 1975.

MAY TO SEPTEMBER 1975

[illegible]

LITTLE MIAMI RIVER BASIN

03246200 EAST FORK LITTLE MIAMI RIVER NEAR MARATHON, OHIO

LOCATION.--Lat. 39°06'52", long 84°01'29", Clermont County, 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, and 2.3 mi (3.7 km) southwest of Marathon.

DRAINAGE AREA.--195 mi² (505 km²).

GAGE.--Water-stage recorder. Datum of gage is 842.32 ft (256.739 m) above mean sea level.

REMARKS.--Discharge records good.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--7 years, 253 ft³/s (7.165 m³/s), 17.62 in/yr (448 mm/yr).

EXTREMES.--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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	22	328	1140	1050	169	194	306	826	17	4.2	3.0
2	29	40	480	383	458	141	149	293	226	13	4.4	2.6
3	22	57	450	283	252	124	141	158	105	10	9.4	2.3
4	19	113	340	432	197	110	139	133	73	444	5.8	2.2
5	16	328	240	235	432	101	103	115	579	417	5.6	2.3
6	15	194	160	160	1130	100	97	93	1760	96	5.4	7.6
7	14	111	817	143	465	110	78	81	261	44	5.1	8.4
8	14	87	3780	184	194	205	71	68	116	28	4.3	30
9	14	75	1780	887	153	149	65	58	73	22	4.1	13
10	13	68	469	1580	113	126	59	51	51	18	3.9	7.0
11	12	191	277	4180	120	135	57	46	43	16	3.5	78
12	14	887	432	509	306	2740	51	55	169	13	3.6	504
13	15	387	722	283	355	1760	46	169	162	12	3.1	231
14	15	213	394	205	172	817	41	100	95	19	3.1	86
15	31	145	542	150	129	956	40	63	85	12	6.0	36
16	126	113	1500	130	143	550	38	51	48	16	467	20
17	153	98	476	120	316	328	40	46	39	18	476	14
18	98	85	322	507	338	240	38	87	1300	65	98	15
19	57	63	258	1220	181	1550	79	111	332	243	36	24
20	36	249	373	627	137	734	93	59	122	122	20	78
21	29	223	243	258	111	300	62	41	89	41	17	231
22	24	111	240	205	96	243	42	32	49	25	11	95
23	21	79	181	172	3840	264	39	28	42	17	8.5	43
24	19	66	297	189	9800	5690	1630	25	36	13	7.1	456
25	19	255	758	563	874	1820	2060	22	25	9.8	5.8	405
26	19	345	424	915	421	261	989	20	21	16	5.3	131
27	20	156	202	280	274	167	297	18	19	28	4.7	73
28	22	115	194	226	207	766	3610	15	17	13	4.1	46
29	22	95	176	348	---	4690	808	28	16	8.4	3.8	32
30	20	84	153	526	---	919	316	942	16	6.1	3.4	24
31	18	---	202	1150	---	312	---	169	---	4.9	3.3	---
TOTAL	976	5055	17210	18290	22264	26577	11462	3483	6795	1827.2	1242.5	2700.4
MEAN	31.5	169	555	590	795	857	382	112	227	58.9	40.1	90.0
MAX	153	887	3780	4180	9800	5690	3610	942	1760	444	476	504
MIN	12	22	153	120	96	100	38	15	16	4.9	3.1	2.2
CFSM	.16	.87	2.85	3.03	4.08	4.39	1.96	.57	1.16	.30	.21	.45
IN.	.19	.96	3.28	3.49	4.25	5.07	2.19	.66	1.30	.35	.24	.52

CAL YR 1974 TOTAL 107313.3 MEAN 294 MAX 5070 MIN 2.0 CFSM 1.51 IN 20.47
WTR YR 1975 TOTAL 117882.1 MEAN 323 MAX 9800 MIN 2.2 CFSM 1.66 IN 22.49

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-08	1300	12.53	4,190	03-12	2200	12.83	4,460	04-24	2300	11.88	3,630
01-11	0400	13.63	5,220	03-24	2130	15.64	7,410	04-28	0630	14.07	5,670
02-24	1200	*18.40	*11,400	03-29	0830	13.90	5,490	06-06	0200	11.26	3,150

Minimum discharge: 1.7 ft³/s (0.048 m³/s) Sept. 5.

LITTLE MIAMI RIVER BASIN

03246200 EAST FORK LITTLE MIAMI RIVER NEAR MARATHON, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1969 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 14...	1230	718	3.5	10.9	82	285	7.4	4.7	32	9.6	5.8	2.3
AUG. 06...	1330	5.5	23.0	7.0	82	369	7.5	2.6	47	15	6.6	3.7

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 14...	105	0	6.7	86	13	29	.5	.14	.08	1.4	.25	149
AUG. 06...	194	0	9.8	159	11	27	.3	.11	.03	.27	.06	209

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 14...	120	33	60	10	--	--	--	--	--	--	--	--
AUG. 06...	180	20	40	120	3	10	0	2	110	<.5	5.4	1.6

LITTLE MIAMI RIVER BASIN

03246400 EAST FORK LITTLE MIAMI RIVER NEAR WILLIAMSBURG, OHIO

LOCATION.--Lat 39°03'32", long 84°03'05", Clermont County, at downstream end of center pier of bridge on McKeever Road near Williamsburg, 0.5 mi (0.8 km) upstream from sewage disposal plant, 1.0 mi (1.6 km) upstream from gaging station, and 2.1 mi (3.4 km) upstream from Todd Run.

DRAINAGE AREA.--234 mi² (606 km²).

GAGE.--Water-quality recorder.

REMARKS.-- Interruptions in the record were due to malfunctions of the instrument. Water-quality data collected at this site 1965 to 1974.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C)

PERIOD OF RECORD.--December 1970 to June 1975 (discontinued).

EXTREMES.--Period of record: Maximum, 901 micromhos May 14, 1971; minimum, 100 micromhos Aug. 30, 1974, Mar. 24, 25, Apr. 28, 1975.

OCTOBER 1974 TO JUNE 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	499	492	537	521	385	278	380	281	252	210	---	---
2	496	484	544	525	292	277	287	277	288	222	---	---
3	486	476	545	537	335	296	307	286	328	290	394	392
4	479	472	555	522	341	331	359	307	362	329	399	392
5	480	473	517	484	351	331	378	362	365	328	409	397
6	494	481	483	418	353	343	374	369	324	264	415	398
7	496	481	445	423	357	171	392	373	272	255	411	409
8	495	486	423	396	207	161	411	377	312	273	419	409
9	498	488	396	385	205	163	372	284	346	313	452	422
10	502	492	386	378	267	207	309	192	383	348	438	419
11	511	498	378	313	324	270	183	137	409	383	418	388
12	517	509	340	274	353	326	233	158	416	305	386	150
13	521	514	346	321	391	291	301	237	360	322	192	132
14	528	520	334	320	306	285	348	304	367	355	221	156
15	531	524	350	335	338	267	382	350	352	339	253	199
16	531	484	366	351	288	216	410	383	369	344	264	237
17	490	451	378	367	273	216	426	411	390	359	312	267
18	491	483	386	378	333	276	433	254	395	380	337	313
19	492	480	394	387	369	333	324	209	378	358	334	196
20	506	492	412	388	375	357	266	207	365	355	224	188
21	509	506	443	418	393	378	306	269	391	365	280	222
22	507	502	440	423	391	369	337	307	407	392	331	284
23	518	499	440	432	390	369	368	338	---	---	365	332
24	518	505	432	422	394	306	386	369	---	---	326	100
25	515	507	420	368	343	298	392	289	---	---	198	100
26	517	502	402	367	337	322	327	265	---	---	277	202
27	518	505	411	399	333	322	282	260	---	---	339	278
28	520	502	398	382	359	334	325	282	---	---	337	184
29	520	510	385	378	395	361	364	327	---	---	188	112
30	522	511	390	384	424	397	358	321	---	---	197	121
31	524	510	---	---	432	386	358	200	---	---	268	200
MONTH	531	451	555	274	432	161	433	137	416	210	452	100
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	337	262	335	296	---	---	---	---	---	---	---	---
2	380	337	373	337	---	---	---	---	---	---	---	---
3	409	380	390	366	---	---	---	---	---	---	---	---
4	431	410	380	367	---	---	---	---	---	---	---	---
5	444	429	403	377	302	153	---	---	---	---	---	---
6	455	444	415	404	216	169	---	---	---	---	---	---
7	462	453	430	413	237	190	---	---	---	---	---	---
8	465	461	---	---	271	239	---	---	---	---	---	---
9	472	465	446	442	305	272	---	---	---	---	---	---
10	473	471	464	440	332	306	---	---	---	---	---	---
11	472	468	468	435	343	332	---	---	---	---	---	---
12	471	437	464	451	345	316	---	---	---	---	---	---
13	469	331	462	329	382	315	---	---	---	---	---	---
14	464	319	391	328	367	296	---	---	---	---	---	---
15	461	250	369	322	396	330	---	---	---	---	---	---
16	457	444	384	327	409	356	---	---	---	---	---	---
17	449	440	400	385	360	168	---	---	---	---	---	---
18	448	438	423	402	286	150	---	---	---	---	---	---
19	448	429	457	423	318	224	---	---	---	---	---	---
20	436	419	484	443	255	228	---	---	---	---	---	---
21	425	410	462	416	259	244	---	---	---	---	---	---
22	426	409	---	---	286	250	---	---	---	---	---	---
23	425	420	---	---	300	286	---	---	---	---	---	---
24	428	130	---	---	324	301	---	---	---	---	---	---
25	214	155	---	---	355	325	---	---	---	---	---	---
26	252	201	---	---	376	356	---	---	---	---	---	---
27	295	253	---	---	392	377	---	---	---	---	---	---
28	295	100	---	---	404	391	---	---	---	---	---	---
29	239	168	---	---	409	387	---	---	---	---	---	---
30	293	240	---	---	397	387	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	473	100	---	---	409	150	---	---	---	---	---	---
YEAR	555	100	---	---	---	---	---	---	---	---	---	---

TEMPERATURE (°C) OF WATER

EXTREMES.--Maximum, 31.5°C July 22, 24, 1972; minimum, freezing point on many days during winter periods.

OCTOBER 1974 TO JUNE 1975

[illegible]

LITTLE MIAMI RIVER BASIN

407

03246500 EAST FORK LITTLE MIAMI RIVER AT WILLIAMSBURG, OHIO

LOCATION.--Lat 39°03'09", long 84°03'02", Clermont County, on right bank at downstream side of Main Street Bridge in Williamsburg, 1.1 mi (1.8 km) upstream from Todd Run, and 2.4 mi (3.9 km) downstream from Crane Run.

DRAINAGE AREA.--237 mi² (614 km²).

REMARKS.--Discharge data collected at this site March 1949 to September 1953, July 1960 to September 1974. Continuous gage-height and occasional flow data collected October 1974 to June 1975.

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1966-69, 1975 (discontinued).

OCTOBER 1974 TO JUNE 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL IRON (FE) (UG/L)
OCT. 31...	1020	22	14.5	540	7.8	9.0	87	2.2	70	230
DEC. 10...	1500	473	1.0	300	7.5	10.2	72	5.3	140	1400
JAN. 17...	1000	200	.0	475	7.9	14.2	97	7.3	20	700
MAR. 03...	1700	131	3.0	450	7.8	13.8	102	5.9	30	740
APR. 15...	1830	35	10.5	480	8.3	12.9	120	.7	30	260
JUNE 06...	1145	2290	20.5	343	8.8	7.1	78	5.7	1100	3100

DATE	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CaCO ₃ (MG/L)
OCT. 31...	30	60	63	20	10	5.5	253	0	6.4	208
DEC. 10...	30	100	34	10	4.0	2.4	106	0	5.4	87
JAN. 17...	40	40	--	--	8.0	2.1	219	0	4.4	180
MAR. 03...	20	40	52	14	8.6	2.2	204	0	5.2	167
APR. 15...	20	20	70	20	9.0	1.6	235	0	1.9	193
JUNE 06...	20	120	39	11	5.0	4.0	114	0	.3	94

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	TOTAL FLUO- RIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	TOTAL RESI- DUE (MG/L)	HARD- NESS (CA+MG) (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)
OCT. 31...	49	21	.3	.00	.17	.17	338	342	240	30
DEC. 10...	29	11	.3	.01	2.0	.20	180	216	130	40
JAN. 17...	44	14	.0	.04	1.7	.21	296	307	--	40
MAR. 03...	46	16	.4	.02	1.5	.23	282	285	190	20
APR. 15...	47	17	.2	.01	.65	.12	302	303	260	5
JUNE 06...	24	13	.2	.16	4.2	.33	226	354	140	50

LITTLE MIAMI RIVER BASIN

03247050 EAST FORK LITTLE MIAMI RIVER NEAR BATAVIA, OHIO

LOCATION.--Lat 39°03'36", long 84°10'32", Clermont County, 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, and 1.3 mi (2.1 km) south of Batavia.

DRAINAGE AREA.--352 mi² (912 km²), includes that of unnamed tributary.

GAGE.--Water-stage recorder. Datum of gage is 571.68 ft (174.248 m) above mean sea level. Prior to July 17, 1968, nonrecording gage 1,100 ft (335 m) downstream at same datum.

REMARKS.--Discharge records good. Flow partially regulated by unfinished East Fork Lake dam since 1974.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--10 years, 437 ft³/s (12.38 m³/s), 16.86 in./yr (428 mm/yr).

EXTREMES.--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) gage well, 21.8 ft (6.645 m) from floodmarks, result of failure of cofferdam.
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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	31	1270	1500	2220	1960	1110	616	608	30	16	10
2	42	31	2000	1180	1210	274	279	722	840	27	12	9.7
3	42	37	1200	513	591	216	260	389	264	29	11	8.4
4	40	66	582	713	376	189	228	389	154	2970	18	7.9
5	36	451	400	513	686	151	192	196	174	2390	16	8.4
6	30	444	280	284	1580	157	154	321	1960	459	21	14
7	27	204	370	220	1290	185	131	787	1130	204	19	11
8	25	131	3340	216	497	299	120	216	299	131	12	9.2
9	22	106	3940	1250	294	299	110	154	171	95	9.2	11
10	21	90	2710	1770	224	220	103	128	120	75	10	26
11	21	134	600	4190	208	220	99	110	110	75	154	178
12	20	1280	369	4130	695	2070	95	108	339	61	161	1590
13	20	1050	787	2510	832	3670	88	164	395	69	69	910
14	18	395	686	489	430	2880	82	220	333	73	31	339
15	25	216	538	264	255	2310	80	181	351	75	840	171
16	75	151	2080	250	233	1290	78	123	174	57	2030	99
17	246	120	1380	204	382	780	77	103	148	220	1920	66
18	192	103	513	633	668	513	81	113	2030	264	1030	18
19	125	95	351	1860	395	1730	167	151	1420	157	269	7.5
20	86	192	402	1480	255	2250	196	151	382	402	174	7.2
21	64	430	376	686	196	824	136	108	241	228	125	910
22	53	233	279	402	167	444	103	86	196	115	75	1580
23	44	131	255	369	2970	444	84	75	110	73	57	164
24	39	97	409	357	5780	3310	2330	64	84	54	42	71
25	36	260	1430	625	6040	4430	4620	57	81	40	32	14
26	34	591	1110	1620	5510	3550	4170	50	64	30	26	120
27	31	333	430	817	4870	1470	3100	44	56	24	21	2210
28	31	174	409	409	3870	992	2900	39	47	23	18	1520
29	30	131	327	437	---	3890	3410	37	40	44	16	110
30	30	108	255	926	---	4270	1780	538	35	29	14	12
31	30	---	241	1190	---	3240	---	650	---	21	12	---
TOTAL	1579	7815	29319	32007	42724	48527	26363	7090	12356	8544	7260.2	10212.3
MEAN	50.9	261	946	1032	1526	1565	879	229	412	276	234	340
MAX	246	1280	3940	4190	6040	4430	4620	787	2030	2970	2030	2210
MIN	18	31	241	204	167	151	77	37	35	21	9.2	7.2
CFSM	.14	.74	2.69	2.93	4.34	4.45	2.50	.65	1.17	.78	.66	.97
IN.	.17	.83	3.10	3.38	4.52	5.13	2.79	.75	1.31	.90	.77	1.08

CAL YR 1974 TOTAL 200811.7 MEAN 550 MAX 10000 MIN 2.0 CFSM 1.56 IN 21.22
WTR YR 1975 TOTAL 233796.5 MEAN 641 MAX 6040 MIN 7.2 CFSM 1.82 IN 24.71

EXTREMES.--Current year: Maximum discharge, 6,720 ft³/s (190 m³/s) Feb. 23, gage height, 12.96 ft (3.950 m); minimum, 4.4 ft³/s (0.12 m) Sept. 20.

LITTLE MIAMI RIVER BASIN

409

03247050 EAST FORK LITTLE MIAMI RIVER NEAR EATAVIA, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 14...	1100	2870	4.5	12.1	93	195	7.3	3.4	21	5.8	4.5	2.4
AUG. 05...	1630	15	27.5	8.1	100	397	7.7	2.7	53	13	9.3	3.2

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
MAR. 14...	64	0	5.1	52	9.4	21	.3	.30	.04	.85	.49	99
AUG. 05...	208	0	6.6	171	14	28	.2	.05	.01	.21	.04	226

DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 14...	76	24	40	0	--	--	--	--	--	--	--	--
AUG. 05...	190	15	10	60	2	<10	0	1	100	<.5	7.4	1.4

03247100 PATTERSON RUN NEAR OWENSVILLE, OHIO

LOCATION.--Lat 39°07'38", long 84°06'44", Clermont County, at bridge on private road, 200 ft (60 m) north of U.S. Highway 50, 0.5 mi (0.8 km) upstream from Brushy Fork, 1.2 mi (1.9 km) east of Owensville.

DRAINAGE AREA.--3.34 mi² (8.65 km²).

PERIOD OF RECORD.--1947 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Apr. 28	5.10	1.555	835	23.6

LITTLE MIAMI RIVER BASIN

03247500 EAST FORK LITTLE MIAMI RIVER AT PERINTOWN, OHIO

LOCATION.--Lat 39°08'13"N, long 84°14'17"W, Clermont County, on left bank at downstream side of highway bridge at Perintown, 0.2 mi (0.3 km) downstream from Sugarcamp Run, and 5 mi (8 km) upstream from mouth.

DRAINAGE AREA.--476 mi² (1,233 km²).

GAGE.--Water-stage recorder. Datum of gage is 507.03 ft (154.543 m) above mean sea level. Prior to Feb. 6, 1940, nonrecording gage, at same site and datum.

REMARKS.--Discharge records good. Occasional regulation by Stonelick Creek 14 mi (23 km) upstream. Surface area at spillway level, 171 acres (69 km²). Flow partially regulated by unfinished East Fork Lake dam since 1974.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--52 years (1915-17, 1925-75), 548 ft³/s (15.52 m³/s), 15.63 in/yr (397 mm/yr).

EXTREMES.--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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	49	1830	1910	2640	2170	1500	734	454	40	21	12
2	59	66	2550	1470	1510	427	417	749	786	35	19	10
3	56	63	1560	744	719	318	369	433	267	35	17	10
4	55	156	900	911	479	261	362	427	160	4490	15	9.8
5	51	633	750	685	823	264	309	309	675	2380	21	12
6	46	570	520	413	2020	237	256	253	1980	507	18	39
7	42	318	1730	335	1550	256	226	839	1250	242	22	18
8	40	206	4740	362	633	372	204	284	309	162	18	11
9	37	162	3950	1570	400	381	189	266	182	110	14	9.7
10	36	138	2860	2850	290	315	180	171	132	81	13	9.3
11	35	375	1040	5420	296	306	167	150	119	72	59	290
12	36	1710	734	3940	639	3760	156	144	264	63	140	1480
13	35	1230	1020	2660	1000	3950	146	309	344	90	78	681
14	34	548	896	695	553	3620	136	296	270	231	37	276
15	114	341	969	375	354	2930	130	208	315	86	435	149
16	185	245	2550	320	329	1820	125	162	175	69	1630	90
17	309	204	1760	270	491	491	126	134	365	237	1690	59
18	250	175	775	839	739	661	128	178	2750	259	919	60
19	173	167	579	2300	495	2550	264	154	1540	156	244	43
20	121	440	610	1820	335	2600	312	182	417	259	130	42
21	91	605	579	845	270	1110	218	128	384	206	120	417
22	73	359	440	507	229	596	175	102	256	119	66	1430
23	62	229	400	457	7830	566	152	91	144	70	46	211
24	56	162	690	440	7720	7240	3640	78	105	50	37	346
25	52	507	1870	823	5700	4290	5380	70	84	41	30	115
26	50	807	1440	1910	5150	3490	4120	65	73	33	25	56
27	46	487	647	1000	4470	1880	3110	56	114	28	22	1470
28	44	303	566	515	3660	1820	5620	56	70	24	19	1450
29	44	231	475	592	---	5870	3450	51	52	29	16	151
30	48	201	397	1050	---	4200	1980	261	43	30	15	46
31	48	---	407	1830	---	3300	---	666	---	24	13	---
TOTAL	2393	11727	40234	39858	51529	62551	33747	7946	14079	10258	5949	9002.8
MEAN	77.2	391	1298	1286	1840	2018	1125	256	469	331	192	300
MAX	309	1710	4740	5420	7830	7240	5620	839	2750	4490	1690	1480
MIN	34	49	397	270	229	237	125	51	43	24	13	9.3
CFSM	.16	.62	2.73	2.70	3.87	4.24	2.36	.54	.99	.70	.40	.63
IN.	.19	.92	3.14	3.11	4.03	4.39	2.64	.62	1.10	.30	.46	.70

CAL YR 1974 TOTAL 251787.0 MEAN 690 MAX 10700 MIN 15 CFSM 1.45 IN 19.68
WTR YR 1975 TOTAL 289273.8 MEAN 793 MAX 7830 MIN 9.3 CFSM 1.67 IN 22.61

EXTREMES.--Current year: Maximum discharge, 20,600 ft³/s (583 m³/s) Feb. 23, gage height, 18.63 ft (5.678 m); minimum daily, 9.3 ft³/s (0.26 m³/s) Sept. 5, 10.

LITTLE MIAMI RIVER BASIN

411

03247500 EAST FORK LITTLE MIAMI RIVER AT PERINTOWN, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1964 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2)	DIS- SOLVED CAL- CIUM	DIS- SOLVED MAG- NE- SIUM	DIS- SOLVED SODIUM	DIS- SOLVED PO- TAS- SIUM	
		(CFS)						(MG/L)	(MG/L)	(MG/L)	(MG/L)	(K)	
MAR. 14...	0930	3380	4.5	12.0	92	195	7.4	3.4	21	5.9	5.5	2.7	
AUG. 05...	1440	22	28.0	10.3	130	478	8.2	2.2	67	15	16	3.5	
DATE		BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 14...	69	0	4.4	57	12	22	.3	.32	.04	.83	.51	107	
AUG. 05...	244	0	2.5	200	20	44	.2	.23	.03	.62	.24	288	
DATE		HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 14...	77	20	30	0	--	--	--	--	--	--	--	--	--
AUG. 05...	230	29	20	10	3	10	0	2	110	<.5	5.2	4.8	

MILL CREEK BASIN

03255500 MILL CREEK AT READING, OHIO

LOCATION.--Lat 39°13'14", long 84°26'49", in sec. 32, R.1, T.4, Hamilton County, 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).

GAGE.--Water-stage recorder. Datum of gage is 527.00 ft (160.630 m) above mean sea level, 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.--Discharge records good except those for period of no gage height record, which are fair. Some diversion and ground water pumpage from Mill Creek and Great Miami River basin by industrial plants of the greater Cincinnati area upstream from station.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to April 1939, June 1939 to current year.

EXTREMES.--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.

REVISIONS.--WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	17	252	146	110	69	105	330	132	28	5.0	2.4
2	30	43	248	64	92	54	87	157	32	25	36	4.0
3	24	20	152	110	82	51	94	105	29	25	14	6.2
4	22	296	106	100	74	48	64	83	19	498	112	9.2
5	21	102	79	58	90	35	51	66	430	43	28	5.8
6	17	43	68	56	110	44	44	66	157	25	8.1	4.7
7	17	32	476	55	72	91	44	64	34	253	4.3	2.2
8	18	26	484	100	58	51	44	49	18	85	4.3	3.4
9	18	22	152	200	50	40	42	43	18	38	2.6	4.0
10	17	20	87	440	48	66	43	37	18	50	22	5.4
11	16	205	71	700	90	67	40	31	120	32	100	385
12	17	118	83	300	130	1060	34	41	118	49	96	150
13	17	56	66	100	70	565	31	45	53	157	13	13
14	21	46	51	70	52	506	29	32	24	85	8.7	5.8
15	240	32	179	54	50	506	33	28	25	32	153	6.2
16	59	25	158	48	76	435	31	25	21	25	64	7.1
17	33	23	87	46	90	239	73	22	188	22	11	6.7
18	25	25	63	210	58	141	38	48	239	21	9.8	110
19	20	64	91	130	50	322	118	22	54	14	8.1	22
20	18	68	71	60	44	141	37	20	56	15	7.6	34
21	18	33	51	56	41	98	32	18	425	15	7.6	8.1
22	19	25	39	54	57	239	29	16	53	13	6.7	7.1
23	17	21	36	52	1760	115	112	15	41	12	4.0	9.8
24	18	41	56	50	1440	1090	621	12	35	11	2.9	56
25	18	100	74	86	450	253	482	16	32	8.1	5.4	15
26	16	43	46	58	184	115	292	18	655	4.7	5.8	16
27	14	34	41	56	118	126	110	11	211	3.7	5.8	8.7
28	16	27	37	62	91	629	1480	11	50	4.3	5.8	5.8
29	19	22	33	100	---	848	535	85	33	5.8	6.7	7.1
30	25	29	33	90	---	292	297	47	29	7.6	4.3	8.1
31	20	---	100	420	---	144	---	330	---	6.2	2.4	---
TOTAL	892	1658	3570	4131	5637	8480	5072	1893	3349	1613.4	764.9	928.8
MEAN	28.8	55.3	115	133	201	274	169	61.1	112	52.0	24.7	31.0
MAX	240	296	484	700	1760	1090	1480	330	655	498	153	385
MIN	14	17	33	46	41	35	29	11	18	3.7	2.4	2.2

CAL YR 1974 TOTAL 30815.8 MEAN 84.4 MAX 1020 MIN 8.9
WTR YR 1975 TOTAL 37989.1 MEAN 104 MAX 1760 MIN 2.2

EXTREMES.--Current year: Peak discharges above base of 1,700 ft³/s (48.1 m³/s) and maximums (*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
02-23	1830	13.28	3,310	04-28	0530	11.91	2,710
03-12	0900	11.34	2,450	06-26	1830	*15.51	*4,200
03-24	0500	11.25	2,410				

Minimum daily discharge: 2.2 ft³/s (0.062 m³/s) Sept. 7.

Note: No gage-height record Jan. 2 to Feb. 19.

03255500 MILL CREEK AT READING, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS-CHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)	PER-CENT SATURATION	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED SILICA (SIO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)
MAR. 13...	1430	498	6.0	10.7	86	475	7.7	6.1	55	14	21	1.9
AUG. 05...	0923	40	23.5	6.9	80	380	7.4	6.3	47	10	16	3.1

DATE	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKALINITY AS CaCO ₃ (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 13...	180	0	5.7	148	38	50	.5	.96	.12	1.1	.93	275
AUG. 05...	146	0	9.3	120	23	43	.4	.30	.13	.83	.31	221

DATE	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 13...	200	47	70	30	--	--	--	--	--	--	--	--
AUG. 05...	160	39	50	70	8	<10	10	18	150	<.5	8.6	2.4

03256500 WEST FORK MILL CREEK LAKE NEAR GREENHILLS, OHIO

LOCATION.--Lat 39°15'34", long 84°29'41", in SE 1/4 sec.17, T.3, R.1, Hamilton County, 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.

GAGE.--Water-stage recorder. Datum of gage is 600.00 ft (182.880 m) above mean sea level, adjustment of 1912 (levels by Corps of Engineers); gage readings have been adjusted to elevations above mean sea level.

EXTREMES.--Period of record: Maximum contents, 9,680 acre-ft (11.9 hm³) Jan. 22, 1959, elevation, 698.95 ft (213.040 m); minimum, 729 acre-ft (899,000 m³) Feb. 26, 1964, elevation, 670.00 ft (204.216 m).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.--Water-stage recorder graph and capacity table furnished by Corps of Engineers.

REVISIONS.--WSP 1908: Drainage area.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	675.25	1,510	-
Oct. 31.....	675.20	1,500	-10
Nov. 30.....	675.32	1,530	+30
Dec. 31.....	675.64	1,590	+60
CAL YR 1974.....	-	-	+580
Jan. 31.....	675.93	1,640	+50
Feb. 28.....	675.20	1,500	-140
Mar. 31.....	675.30	1,520	+20
Apr. 30.....	675.54	1,570	+50
May 31.....	675.95	1,650	+80
June 30.....	675.17	1,500	-150
July 31.....	674.96	1,460	-40
Aug. 31.....	674.96	1,460	0
Sept. 30.....	675.10	1,490	+30
WTR YR 1975.....	-	-	-20

EXTREMES.--Current year: Maximum contents, 4,980 acre-ft (6.14 hm³) Feb. 24, elevation, 687.94 ft (209.684 m); minimum, 1,450 acre-ft (1.79 hm³) Sept. 11, elevation, 674.91 ft (205.713 m).

MILL CREEK BASIN

03257500 WEST FORK MILL CREEK AT WOODLAWN, OHIO

LOCATION.--Lat 39°15'14", long 84°28'13", in NE 1/4 sec.10, R.1, T.3, Hamilton County, 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).

GAGE.--Water-stage recorder. Datum of gage is 570.00 ft (173.736 m) above mean sea level, adjustment of 1912 (Corps of Engineers bench mark).

REMARKS.--Discharge records good. Flow regulated by West Fork Mill Creek Reservoir 1.9 mi (3.1 km) upstream beginning 1953 (see station 03256500).

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--December 1952 to current year.

AVERAGE DISCHARGE.--22 years (1953-75), 31.6 ft³/s (0.895 m³/s).

EXTREMES.--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.

REVISIONS.--WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	7.2	56	76	119	20	36	91	86	.88	.48	.25
2	3.2	15	103	17	42	17	26	28	15	.88	.79	.21
3	2.8	14	62	33	38	9.1	18	18	8.7	.88	.70	.25
4	.70	70	13	56	31	6.6	14	18	2.8	99	6.0	.35
5	.62	138	20	20	31	9.1	8.7	12	51	8.4	15	.35
6	.70	18	22	20	38	9.8	7.8	8.4	261	2.2	9.1	.35
7	.79	17	94	19	26	30	8.7	8.4	44	11	.55	.35
8	.55	11	326	20	18	31	9.1	8.4	13	17	.62	.35
9	.55	3.9	96	58	17	11	9.4	7.2	.98	8.1	.41	.30
10	.48	4.1	33	103	24	7.8	10	6.3	.98	1.8	.48	.30
11	.41	25	14	292	17	25	9.8	6.6	20	.88	14	11
12	.55	103	18	287	55	232	9.1	7.5	76	.70	138	270
13	1.5	27	20	42	17	438	8.4	20	15	3.4	12	81
14	4.1	14	20	25	17	154	7.8	17	9.4	80	4.1	7.8
15	129	9.4	29	16	16	236	7.8	14	6.9	.88	18	2.0
16	13	6.9	103	14	22	217	7.8	8.7	5.2	.70	101	.41
17	3.4	6.9	29	11	30	99	13	8.7	6.9	.62	8.7	.41
18	3.4	6.9	22	56	31	41	13	13	171	.62	.55	25
19	2.4	11	21	146	15	131	67	15	41	.62	.41	29
20	2.8	65	24	11	7.8	58	12	13	14	.62	.35	16
21	3.2	14	19	17	11	38	7.2	8.7	27	.55	.35	7.5
22	3.2	8.4	15	18	13	43	6.3	8.1	23	.48	.35	2.8
23	.62	6.6	14	17	104	96	18	6.0	9.8	.48	.35	2.0
24	.41	12	17	14	457	398	326	3.4	3.6	.48	.35	20
25	.41	29	26	18	761	334	175	3.0	3.2	.48	.35	10
26	.70	34	20	50	560	23	161	2.8	14	.41	.35	3.4
27	.79	20	15	19	132	20	18	2.0	187	.48	.35	2.8
28	.88	10	15	19	24	268	17	1.6	13	.41	.30	2.0
29	1.3	6.6	14	28	---	470	27	8.4	1.3	.48	2.0	2.0
30	3.6	7.5	12	36	---	181	22	12	1.1	.41	.35	1.8
31	4.9	---	21	179	---	63	---	12	---	.41	.25	---
TOTAL	201.96	721.4	1313	1737	2673.8	3716.4	1085.9	397.2	1131.86	244.25	336.59	499.98
MEAN	6.51	24.0	42.4	56.0	95.5	120	36.2	12.8	37.7	7.88	10.9	16.7
MAX	129	138	326	292	761	470	326	91	261	99	138	270
MIN	.41	3.9	12	11	7.8	6.6	6.3	1.6	.98	.41	.25	.21
CAL YR 1974	TOTAL	13804.11	MEAN	37.8	MAX	441	MIN	.34				
WTR YR 1975	TOTAL	14059.34	MEAN	38.5	MAX	761	MIN	.21				

EXTREMES.--Current year: Maximum discharge, 1,310 ft³/s (37.1 m³/s) Feb. 25, gage height, 5.50 ft (1.676 m); minimum daily, 0.21 ft³/s (0.006 m³/s) Sept. 2.

MILL CREEK BASIN
03257500 WEST FORK MILL CREEK AT WOODLAWN, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 13...	0930	887	4.0	12.6	96	620	7.6	4.3	42	8.2	67	2.1
AUG. 04...	1315	0.6	24.5	6.6	78	416	7.4	1.9	52	11	19	4.1

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 13...	125	0	5.0	103	120	34	.3	.28	.03	.70	.47	340
AUG. 04...	176	0	11	144	28	34	.3	.09	.08	.34	.20	237

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 13...	140	36	10	130	--	--	--	--	--	--	--	--
AUG. 04...	180	31	10	60	2	0	10	10	120	<.5	6.6	2.4

MILL CREEK BASIN

03259000 MILL CREEK AT CARTHAGE, OHIO

LOCATION.--Lat 39°12'07", long 84°28'16", in SW 1/4 sec.1, R.1, T.3, Hamilton County, 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).

GAGE.--Water-stage recorder. Datum of gage is 512.00 ft (156.058 m) above mean sea level, Ohio River datum. Prior to Oct. 1, 1954 at site 100 ft (30 m) upstream at same datum.

REMARKS.--Discharge records good. 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 DISCHARGE RECORDS

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

EXTREMES.--Period of record: Maximum discharge, 8,900 ft³/s (252 m³/s) Jan. 21, 1959, gage height, 16.17 ft (4.929 m), 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.

REVISIONS.--WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	27	335	234	333	80	117	388	198	25	6.4	6.0
2	40	86	367	92	148	57	98	153	45	23	64	7.2
3	32	54	230	166	120	56	93	97	40	23	28	16
4	28	385	128	153	115	44	71	80	26	570	139	19
5	23	260	109	86	134	50	57	64	508	57	75	9.8
6	16	76	103	86	165	49	47	62	390	31	35	8.9
7	20	65	537	83	107	106	51	57	79	220	7.2	6.4
8	21	53	774	132	80	82	50	46	33	95	6.8	6.8
9	22	31	262	224	74	48	48	42	21	48	5.3	7.6
10	21	27	132	661	71	67	50	36	21	56	26	11
11	18	260	95	1010	75	86	45	34	132	34	139	375
12	16	232	109	440	198	1310	40	46	191	55	243	382
13	22	98	97	141	97	969	37	58	66	134	53	144
14	23	76	86	100	81	624	38	41	31	158	22	22
15	400	57	218	80	74	631	40	39	31	29	168	11
16	94	42	271	75	101	570	37	35	26	24	198	11
17	54	38	127	68	134	290	88	31	196	23	40	9.8
18	40	40	97	323	101	165	55	59	390	22	18	158
19	32	88	123	287	82	388	178	35	92	19	15	88
20	27	144	106	107	65	180	48	32	76	16	15	77
21	25	66	84	92	64	123	38	28	382	16	15	24
22	27	46	71	87	82	236	36	26	72	14	13	11
23	26	35	67	86	2090	187	125	24	36	12	8.5	15
24	23	63	86	80	1860	1560	893	21	24	9.8	6.0	103
25	22	139	109	120	1090	531	651	26	22	8.9	8.5	40
26	20	93	83	146	634	110	347	24	688	5.6	11	24
27	15	74	73	87	228	122	107	20	357	5.3	11	14
28	14	53	69	92	101	863	1430	19	59	5.6	11	8.9
29	22	37	65	166	---	1330	516	104	29	6.4	14	9.8
30	40	50	63	134	---	403	254	62	26	8.5	13	11
31	29	---	127	634	---	165	---	362	---	7.2	6.4	---
TOTAL	1286	2795	5203	6272	8504	11497	5685	2151	4287	1761.3	1421.1	1637.2
MEAN	41.5	93.2	168	202	304	371	190	69.4	143	56.8	45.8	54.6
MAX	400	385	774	1010	2090	1560	1430	388	688	570	243	382
MIN	14	27	63	68	64	48	36	19	21	5.3	5.3	6.0
CAL YR 1974 TOTAL	47139.5		MEAN 129	MAX 1550	MIN 9.5							
WTR YR 1975 TOTAL	52499.6		MEAN 144	MAX 2090	MIN 5.3							

EXTREMES.--Current year: Maximum discharge, 4,710 ft³/s (133 m³/s) Feb. 23, gage height, 11.45 ft (3.490 m); minimum daily, 5.3 ft³/s (0.15 m³/s) July 27 and Aug. 9.

MILL CREEK BASIN
03259000 MILL CREEK AT CARTHAGE, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 13...	1530	810	4.5	11.1	85	565	7.6	4.9	45	9.4	52	2.2
AUG. 05...	1115	39	24.0	6.8	80	360	7.1	5.8	46	10	16	3.1

DATE	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
MAR. 13...	140	0	5.6	115	85	38	.3	.38	.02	.84	.75	306
AUG. 05...	134	0	17	110	23	44	.4	.24	.24	.96	.26	215

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 13...	150	36	20	80	--	--	--	--	--	--	--	--
AUG. 05...	160	46	80	50	9	10	10	14	130	<.5	8.2	4.0

GREAT MIAMI RIVER BASIN

03260620 MUCHINIPPI CREEK NEAR RUSSELLS POINT, OHIO

LOCATION.--Lat 40°26'21", long 83°56'28", Logan County, at bridge on State Highway 274, 2.3 mi (3.7 km) upstream from mouth, 3.5 mi (5.6 km) southwest of Russells Point.

DRAINAGE AREA.--86.2 mi² (223.3 km²).

PERIOD OF RECORD.--Discharge, 1959, 1972 to 1975 (discontinued).

REMARKS.--Water-quality data collected at this site 1972 to 1974.

COOPERATION.--Record furnished by Miami Conservancy District.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	TIME	INSTANTANEOUS DISCHARGE
		(ft ³ /s) (m ³ /s)
Oct. 8	--	3.0 0.085

GREAT MIAMI RIVER BASIN

03260700 BOKENGEHALAS CREEK NEAR DE GRAFF, OHIO

LOCATION.--Lat 40°20'50", long 83°53'28", in E. 1/2 sec. 3, R. 14, T.2, Logan County, 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).

GAGE.--Water-stage recorder. Datum of gage is 1,008.76 ft (307.470 m) above mean sea level.

REMARKS.--Discharge records good. 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.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1957 to current year. Prior to October 1962, published as Buckongahelas Creek near Degraff.

AVERAGE DISCHARGE.--18 years, 33.5 ft³/s (0.949 m³/s), 12.53 in/yr (318 mm/yr).

EXTREMES.--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.

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

REVISIONS.--WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	12	18	122	85	94	67	41	28	20	14	12
2	12	11	24	63	71	81	61	37	21	18	14	12
3	12	11	22	60	60	73	58	33	26	29	15	12
4	12	19	21	56	53	67	52	40	22	238	20	21
5	11	33	21	45	56	64	47	33	66	87	15	14
6	10	22	20	43	52	62	45	31	270	50	17	17
7	10	19	24	42	47	112	44	28	88	38	15	12
8	11	16	104	121	43	91	43	28	47	30	14	11
9	11	15	80	203	38	67	41	26	36	26	13	11
10	11	14	50	140	34	66	40	24	29	23	14	10
11	10	17	41	158	36	62	38	22	38	21	18	15
12	10	26	54	85	39	120	36	23	37	19	14	19
13	9.9	20	70	63	36	111	33	26	28	20	14	14
14	11	24	80	52	32	79	33	23	26	23	55	12
15	16	22	97	45	32	69	33	21	36	19	37	11
16	14	18	133	40	80	73	32	20	31	18	24	11
17	12	17	85	36	174	99	31	20	37	17	17	11
18	12	16	61	42	137	158	31	19	34	114	15	15
19	11	16	52	48	85	132	46	18	27	102	15	15
20	11	18	45	39	65	95	34	17	24	47	15	14
21	11	16	41	34	56	76	31	16	22	35	13	12
22	11	15	37	32	61	70	31	16	20	28	12	11
23	11	14	54	30	622	62	36	19	18	24	13	11
24	12	17	178	34	715	91	110	16	17	21	11	17
25	13	35	107	81	234	74	67	15	31	19	11	15
26	12	27	64	81	164	61	51	43	89	17	11	14
27	11	22	52	51	138	56	42	23	45	16	11	12
28	11	19	47	47	117	63	58	19	31	18	10	11
29	11	17	45	308	---	178	48	16	25	16	11	11
30	13	17	44	154	---	104	40	23	22	15	18	11
31	12	---	79	104	---	76	---	22	---	15	15	---
TOTAL	357.9	565	1850	2459	3362	2686	1359	758	1271	1183	511	394
MEAN	11.5	18.8	59.7	79.3	120	86.6	45.3	24.5	42.4	38.2	16.5	13.1
MAX	16	35	178	308	715	178	110	43	270	238	55	21
MIN	9.9	11	18	30	32	56	31	15	17	15	10	10
CFSM	.32	.52	1.64	2.18	3.31	2.39	1.25	.67	1.17	1.05	.45	.36
IN.	.37	.58	1.90	2.52	3.45	2.75	1.39	.78	1.30	1.21	.52	.40
CAL YR 1974 TOTAL	14003.7											
WTR YR 1975 TOTAL	16755.9											
MEAN 38.4												
MAX 717												
MIN 6.6												
CFSM 1.06												
IN 14.35												
MEAN 45.9												
MAX 715												
MIN 9.9												
CFSM 1.26												
IN 17.17												

EXTREMES.--Current year: Peak discharges above base of 300 ft³/s (8.50 m³/s) and maximums (*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-29	0800	4.38	382	7-04	0845	4.52	412
2-24	0345	4.94	1,060	7-18	1930	3.98	313
6-06	0700	4.45	397				

Minimum daily discharge: 9.9 ft³/s (0.28 m³/s) Oct. 13.

GREAT MIAMI RIVER BASIN

419

03260800 STONY CREEK NEAR DE GRAFF, OHIO

LOCATION.--Lat 40°17'27", long 83°54'36", in NW 1/4 sec. 5, R.13, T.3, Logan County, on right bank at downstream side of county road bridge, 0.6 mi (1.0 km) downstream from Lee Creek, 1.5 mi (2.4 km) south of De Graff, and 1.5 mi (2.4 km) upstream from mouth.

DRAINAGE AREA.--59.1 mi² (153 km²).

GAGE.--Water-stage recorder. Datum of gage is 967.54 ft (294.906 m) above mean sea level.

REMARKS.--Discharge records good through June 1, fair thereafter. Water-quality data collected at this site 1965 to 1973.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1957 to September 1975 (discontinued).

AVERAGE DISCHARGE.--18 years, 53.2 ft³/s (1.507 m³/s), 12.22 in/yr (310 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 2,770 ft³/s (78.4 m³/s) Jan. 22, 1959, gage height, 9.39 ft (2.862 m); maximum gage height, 11.48 ft (3.499 m) Jan. 22, 1959, backwater from Great Miami River; minimum, 4.0 ft³/s (0.11 m³/s) Sept. 27, 1963.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	21	31	182	154	146	105	69	37	23	28	26
2	21	20	33	109	130	126	93	62	35	22	27	24
3	20	20	33	85	109	115	87	60	36	68	32	23
4	20	41	29	78	93	106	77	65	33	939	33	30
5	20	63	32	62	87	100	72	57	69	441	29	26
6	20	44	28	56	118	99	69	55	162	195	33	51
7	19	36	32	53	99	132	67	51	80	196	31	30
8	19	30	131	156	77	132	64	48	55	277	27	25
9	19	27	122	250	72	108	62	46	45	108	25	23
10	19	25	74	217	90	104	62	43	39	62	27	21
11	18	29	57	256	68	97	59	42	44	48	35	27
12	20	42	72	154	59	189	57	43	47	44	45	40
13	22	35	93	100	54	202	56	41	39	53	49	31
14	23	43	94	74	54	148	55	39	39	84	141	26
15	33	40	100	62	50	120	55	39	59	47	156	24
16	29	34	151	54	101	125	54	37	47	38	105	23
17	25	30	110	54	242	168	53	37	53	34	56	23
18	23	27	76	58	243	213	53	36	51	454	39	30
19	23	26	63	66	160	178	61	34	41	594	42	34
20	27	26	52	55	114	141	54	33	36	273	39	33
21	27	25	49	62	90	115	51	32	35	160	32	30
22	25	23	45	48	101	106	51	39	31	100	29	28
23	25	22	51	47	958	95	60	47	29	72	29	26
24	25	28	153	50	1350	101	146	36	29	55	26	36
25	24	50	146	117	485	95	127	37	34	45	24	38
26	23	45	91	144	298	83	112	45	58	39	24	32
27	23	37	67	86	218	76	85	35	39	36	23	29
28	22	33	57	72	177	95	97	32	32	38	22	27
29	21	28	54	435	---	259	84	31	28	34	22	25
30	23	26	52	312	---	190	71	36	25	31	30	24
31	22	---	96	196	---	130	---	35	---	29	29	---
TOTAL	702	976	2272	3750	5851	4094	2199	1342	1387	4639	1289	865
MEAN	22.6	32.5	73.3	121	209	132	73.3	43.3	46.2	150	41.6	28.8
MAX	33	63	153	435	1350	259	146	69	162	939	156	51
MIN	18	20	28	47	50	76	51	31	25	22	22	21
CFSM	.38	.55	1.24	2.05	3.54	2.23	1.24	.73	.78	2.54	.70	.49
IN.	.44	.61	1.43	2.36	3.68	2.58	1.38	.84	.87	2.92	.81	.54

CAL YR 1974 TOTAL 22119 MEAN 60.6 MAX 715 MIN 15 CFSM 1.03 IN 13.92
WTR YR 1975 TOTAL 29366 MEAN 80.5 MAX 1350 MIN 18 CFSM 1.36 IN 18.48

EXTREMES.--Current year: Peak discharges above base of 350 ft³/s (9.91 m³/s) and maximums (*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-29	1545	7.10	532	7-08	0030	7.09	528
2-24	0500	*8.87	*1,900	7-18	2030	8.05	1,060
7-04	1230	8.31	1,280				

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

GREAT MIAMI RIVER BASIN

03261500 GREAT MIAMI RIVER AT SIDNEY, OHIO

LOCATION.--Lat 40°17'13", long 84°09'00", Shelby County, 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).

GAGE.--Water-stage recorder. Datum of gage is 924.70 ft (281.848 m) above mean sea level, adjustment 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.--Discharge records good. 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 3.6 ft³/s (0.10 m³/s) in 1975 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. Chemical quality data collected at this site 1967 to November 1973.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--February 1914 to current year. Prior to October 1962, published as Miami River at Sidney.

AVERAGE DISCHARGE.--50 years (1925-75) 479 ft³/s (13.57 m³/s).

EXTREMES.--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. 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.

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

REVISIONS (WATER YEARS).--WSP 1305: 1914(M), 1922(M). WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	88	396	1880	1460	1810	1240	585	180	158	104	121
2	94	87	405	1390	1090	1360	951	554	182	127	163	108
3	91	86	398	954	872	982	828	450	186	121	143	110
4	82	109	403	895	733	759	809	452	215	5150	149	143
5	77	325	373	754	670	594	631	469	416	3250	143	139
6	77	352	449	646	1000	556	513	343	1850	1450	135	174
7	68	239	435	598	931	903	439	341	1490	768	163	161
8	71	184	1230	1360	662	1530	369	274	857	692	134	126
9	74	155	1610	2640	500	1190	332	251	490	557	104	108
10	72	137	1110	2340	360	871	315	248	324	354	105	102
11	71	143	752	2600	500	677	305	220	293	275	137	126
12	69	233	791	1780	450	1210	298	220	381	233	145	191
13	69	269	1230	1140	400	1690	292	236	550	207	130	211
14	71	258	1350	785	370	1290	266	213	428	294	454	165
15	85	316	1430	673	340	978	252	180	533	262	353	134
16	103	249	1890	589	529	775	261	191	486	200	340	114
17	98	197	1600	519	1810	1000	235	201	363	168	218	99
18	85	174	1120	409	2470	1870	237	174	350	1130	163	105
19	84	163	836	429	1960	1940	342	166	275	2180	137	145
20	90	180	674	349	1430	1690	387	154	239	1040	139	165
21	87	212	601	291	1050	1290	323	146	207	609	118	159
22	90	228	561	284	989	989	287	157	189	388	110	135
23	85	229	626	259	6090	804	323	226	171	280	111	118
24	86	333	1700	265	8840	1810	1300	194	142	225	99	119
25	87	582	1880	743	6310	2110	1420	185	199	191	93	178
26	90	687	1370	1350	4670	1620	1030	288	615	175	87	180
27	89	538	913	820	3470	1220	674	222	496	164	89	135
28	87	460	711	585	2460	1000	705	174	348	172	86	116
29	83	407	629	2750	---	2390	812	141	243	140	93	107
30	86	382	626	2920	---	2390	686	150	197	114	169	98
31	89	---	851	2040	---	1770	---	179	---	110	139	---
TOTAL	2596	8002	28950	35037	52416	41068	16862	7984	12895	21184	4753	4092
MEAN	83.7	267	934	1130	1872	1325	562	258	430	683	153	136
MAX	106	687	1890	2920	8840	2390	1420	585	1850	5150	454	211
MIN	68	86	373	259	340	556	235	141	142	110	86	98

CAL YR 1974 TOTAL 194021 MEAN 532 MAX 6060 MIN 44
WTR YR 1975 TOTAL 235839 MEAN 646 MAX 8840 MIN 68

EXTREMES.--Current year: Peak discharges above base of 4,000 ft³/s (113 m³/s) and maximums (*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
02-24	0600	*11.69	*9,550	07-04	1630	8.79	5,750

Minimum daily discharge, 68 ft³/s (1.93 m³/s) Oct. 7.

GREAT MIAMI RIVER BASIN

421

03261500 GREAT MIAMI RIVER AT SIDNEY, OHIO--Continued

WATER QUALITY RECORDS

TEMPERATURE (°C) OF WATER
(ONCE-DAILY MEASUREMENT BETWEEN 1300 AND 1800)

PERIOD OF RECORD.--October 1967 to September 1971, October 1972 to September 1975 (discontinued).

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.0	16.0	1.0	3.0	3.0	3.0	9.0	15.0	20.5	27.5	25.5	21.0
2	13.5	18.0	5.0	---	2.0	1.0	10.0	13.0	19.0	27.0	25.5	21.0
3	11.0	15.0	0.0	3.0	3.0	5.0	8.0	15.0	19.0	25.0	23.5	21.0
4	12.0	13.0	1.0	3.0	4.0	3.0	5.0	14.0	20.5	25.0	25.0	22.0
5	14.0	11.5	1.0	2.0	3.0	4.0	4.0	15.0	20.0	22.0	25.0	21.0
6	13.0	9.0	2.0	5.0	4.0	4.0	6.0	15.0	21.0	22.0	24.0	21.0
7	14.0	9.0	1.0	4.0	3.0	6.0	7.0	16.0	17.0	23.0	21.0	20.0
8	11.0	10.0	3.0	5.0	0.0	4.0	9.0	15.5	11.0	21.5	22.0	20.0
9	11.5	9.5	0.0	6.0	1.0	3.0	7.0	16.0	20.0	22.0	21.0	19.0
10	15.0	8.0	2.0	6.0	0.0	4.0	10.0	18.0	21.0	24.0	23.0	19.0
11	11.5	12.0	3.0	6.0	1.0	4.0	9.0	18.0	20.0	21.0	22.0	20.0
12	13.5	9.5	4.0	4.0	3.0	---	10.0	18.0	21.0	21.0	23.0	17.0
13	13.0	5.0	5.0	3.0	1.0	3.0	8.0	18.0	20.0	20.0	25.0	16.0
14	13.0	5.0	4.0	1.0	1.0	3.0	9.0	19.0	20.0	19.0	25.0	15.0
15	14.0	4.0	5.0	2.0	1.0	1.0	7.0	19.0	20.0	20.0	22.0	16.0
16	11.0	3.0	5.0	7.0	2.0	4.0	9.0	16.5	20.0	21.0	22.5	16.5
17	14.5	5.0	8.0	1.0	4.0	4.0	10.0	16.0	22.0	21.5	23.0	16.0
18	10.0	6.0	6.0	1.0	3.5	4.0	12.0	19.0	21.0	22.0	24.5	17.0
19	10.0	8.0	2.5	3.0	3.0	5.0	12.0	21.0	23.0	21.0	24.0	17.0
20	11.0	9.0	1.0	2.0	2.0	6.0	11.0	22.5	26.0	22.0	23.0	17.0
21	9.0	7.5	2.0	2.0	4.0	---	11.0	25.0	26.0	23.0	24.0	16.0
22	9.0	7.0	2.0	1.0	5.0	---	10.0	25.0	26.0	23.0	25.5	16.0
23	11.0	6.0	4.0	1.0	7.0	8.0	12.0	22.0	26.0	24.0	26.0	15.0
24	12.5	8.0	4.0	1.0	9.0	---	12.0	23.0	27.0	23.5	25.0	---
25	13.0	6.0	3.0	4.0	7.0	10.0	12.0	---	26.0	23.0	26.0	14.0
26	13.0	5.0	2.0	3.0	4.0	5.0	11.0	24.0	23.0	22.0	25.0	14.0
27	10.0	3.0	3.0	1.0	4.0	4.0	11.0	24.0	21.0	23.0	25.0	14.0
28	13.0	3.0	2.0	4.0	3.0	3.0	11.0	23.0	22.0	22.0	24.0	15.0
29	11.0	1.0	3.0	4.5	---	6.0	11.0	21.0	24.0	25.0	24.0	14.5
30	14.0	2.0	4.0	6.0	---	6.0	14.0	23.0	26.0	25.0	22.0	14.0
31	15.0	---	5.0	4.0	---	5.0	---	21.0	---	25.5	22.0	---
MONTH	12.5	8.0	3.0	3.5	3.0	4.5	9.5	19.0	21.5	23.0	24.0	17.5
YEAR	MAX	27.5	MIN	0.0	MEAN	12.5						

SEDIMENT ANALYSES

PERIOD OF RECORD.--October 1967 to September 1975 (discontinued).

EXTREMES.--Period of record:

Sediment concentrations: Maximum daily, 1,710 mg/l July 3, 1973; minimum daily, 0 mg/l Mar. 23-25, 1970.
Sediment discharges: Maximum daily, 18,100 tons (16,400 tonnes) Feb. 24, 1975; minimum daily, 0 ton (0.00 tonne) Mar. 23-25, 1970.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT CHARGE (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	PARTICLE SIZE								
						PERCENT FINER THAN THE SIZE (IN MILLIMETRES) INDICATED								
						.002	.004	.008	.016	.031	.062	.125	.250	.500
FEB. 23..	1020	7.0	6,230	860	14,500	67	76	87	93	97	99	99	100	
MAR. 08..	1025	4.0	1,590	276	1,190	90	95	96	97	98	98	100		
MAR. 25..	0830	10.0	1,860	1,010	5,070	89	95	98	98	99	100			
JUNE 06..	1100	18.0	1,890	726	3,710	58	75	87	94	98	99	100		
JUNE 06..	1610	21.0	2,100	1,150	6,520	57	71	81	87	91	93	93	95	100

GREAT MIAMI RIVER BASIN

03261500 GREAT MIAMI RIVER AT SIDNEY, OHIO--Continued

SEDIMENT ANALYSES--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	106	54	15	88	50	12	396	40	43
2	94	41	10	87	30	7.0	405	38	42
3	91	42	10	86	30	7.0	398	47	51
4	82	43	9.5	109	38	11	403	28	30
5	77	25	5.2	325	105	96	373	30	30
6	77	26	5.4	352	47	45	449	21	25
7	68	56	10	239	26	17	435	5	5.9
8	71	58	11	184	16	7.9	1230	120	473
9	74	42	8.4	155	19	8.0	1610	133	578
10	72	38	7.4	137	18	6.7	1110	52	156
11	71	33	6.3	143	30	12	752	24	49
12	69	27	5.0	233	40	25	791	16	34
13	69	42	7.8	269	26	19	1230	37	123
14	71	28	5.4	258	18	13	1350	43	157
15	85	25	5.7	316	19	16	1430	42	162
16	103	23	6.4	249	14	9.4	1890	65	332
17	98	26	6.9	197	13	6.9	1600	77	333
18	85	27	6.2	174	38	18	1120	40	121
19	84	20	4.5	163	20	8.8	836	22	50
20	90	11	2.7	180	19	9.2	674	20	36
21	87	8	1.9	212	20	11	601	35	57
22	90	33	8.0	228	17	10	561	14	21
23	85	20	4.6	229	20	12	626	20	34
24	86	17	3.9	333	20	18	1700	101	464
25	87	17	4.0	582	56	88	1880	117	594
26	90	20	4.9	687	42	78	1370	114	422
27	89	23	5.5	538	16	23	913	30	74
28	87	23	5.4	460	12	15	711	23	44
29	83	30	6.7	407	17	19	629	17	29
30	86	41	9.5	382	37	38	626	15	25
31	89	37	8.9	---	---	---	851	39	120
MONTH	2596	---	212.1	8002	---	666.9	28950	---	4714.9

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1880	148	751	1460	79	311	1810	181	885
2	1390	84	315	1090	50	147	1360	173	635
3	954	44	113	872	35	82	982	153	406
4	895	27	65	733	36	71	759	104	213
5	754	23	47	670	53	96	594	67	107
6	646	25	44	1000	55	148	556	44	66
7	598	34	55	931	35	88	903	85	240
8	1360	148	614	662	23	41	1530	242	1000
9	2640	278	1980	500	24	32	1190	139	447
10	2340	184	1160	360	25	24	871	78	183
11	2600	163	1140	500	20	27	677	44	80
12	1780	142	682	450	16	19	1210	158	616
13	1140	88	271	400	19	21	1690	143	653
14	785	65	138	370	35	35	1290	58	202
15	673	48	87	340	28	26	978	103	272
16	589	31	49	529	23	33	775	41	86
17	519	27	38	1810	89	435	1000	50	135
18	409	26	29	2470	149	994	1870	105	530
19	429	16	19	1960	119	630	1940	99	519
20	349	17	16	1430	53	205	1690	83	379
21	291	10	7.9	1050	48	136	1290	44	153
22	284	10	7.7	989	91	284	989	35	91
23	259	11	7.7	6090	752	12800	804	29	63
24	265	15	11	8840	757	18100	1810	926	4200
25	743	58	156	6310	410	6990	2110	905	5160
26	1350	75	273	4670	300	3780	1620	290	1270
27	820	40	89	3470	275	2580	1220	145	478
28	585	21	33	2460	242	1610	1000	108	292
29	2750	313	2650	---	---	---	2390	243	1420
30	2920	246	2060	---	---	---	2390	267	1720
31	2040	110	606	---	---	---	1770	165	789
MONTH	35037	---	13514.3	52416	---	49745	41068	---	23292

GREAT MIAMI RIVER BASIN

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03261500 GREAT MIAMI RIVER AT SIDNEY, OHIO--Continued

SEDIMENT ANALYSES--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975--Continued

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1240	98	328	585	53	84	180	90	44
2	951	79	203	554	51	76	182	90	44
3	828	37	83	450	31	38	186	92	46
4	809	31	68	452	24	29	215	94	55
5	631	25	43	469	39	49	416	156	201
6	513	25	35	343	38	35	1850	709	3680
7	439	20	24	341	50	46	1490	485	1950
8	369	20	20	274	59	44	857	203	470
9	332	25	22	251	68	46	490	126	167
10	315	24	20	248	56	37	324	97	85
11	305	23	19	220	44	26	293	84	66
12	298	24	19	220	44	26	381	47	48
13	292	22	17	236	51	32	550	115	171
14	266	14	10	213	63	36	428	107	124
15	252	18	12	180	73	35	533	139	200
16	261	32	23	191	64	33	486	177	232
17	235	41	26	201	79	43	363	138	135
18	237	35	22	174	58	27	350	133	126
19	342	64	59	166	52	23	275	125	93
20	387	48	50	154	46	19	239	125	81
21	323	47	41	146	39	15	207	119	67
22	287	42	33	157	45	19	189	87	44
23	323	59	51	226	60	37	171	76	35
24	1300	225	837	194	44	23	142	68	26
25	1420	152	583	185	23	11	199	104	66
26	1030	63	175	288	75	58	615	324	590
27	674	32	58	222	75	45	496	249	333
28	705	36	69	174	74	35	348	104	98
29	812	35	77	141	84	32	243	90	59
30	686	30	56	150	77	31	197	97	52
31	---	---	---	179	85	41	---	---	---
MONTH	16862	---	3083	7984	---	1131	12895	---	9388
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	158	105	45	104	67	19	121	93	30
2	127	103	35	163	95	56	108	84	24
3	121	116	39	143	127	49	110	80	24
4	5150	860	12000	149	118	47	143	82	32
5	3250	350	3070	143	105	41	139	78	29
6	1450	210	822	135	108	39	174	84	39
7	768	152	315	163	120	53	161	80	35
8	692	176	329	134	77	28	126	97	33
9	557	157	236	104	84	24	108	94	27
10	354	89	85	105	56	16	102	70	19
11	275	107	79	137	40	15	126	59	20
12	233	124	78	145	50	20	191	46	24
13	207	104	58	130	73	26	211	67	38
14	294	127	101	454	158	194	165	60	27
15	262	104	74	353	105	100	134	77	28
16	200	86	46	340	115	106	114	65	20
17	168	78	35	218	94	55	99	46	12
18	1130	411	2330	163	95	42	105	67	19
19	2180	408	2620	137	100	37	145	57	22
20	1040	169	475	139	102	38	165	39	17
21	609	116	191	118	65	21	159	51	22
22	388	82	86	110	67	20	135	69	25
23	280	102	77	111	92	28	118	79	25
24	225	93	56	99	79	21	119	57	18
25	191	82	42	93	74	19	178	37	18
26	175	83	39	87	87	20	180	56	27
27	164	104	46	89	116	28	135	32	12
28	172	146	68	86	127	29	116	34	11
29	140	89	34	93	108	27	107	26	7.5
30	114	77	24	169	111	51	98	12	3.2
31	110	64	19	139	74	28	---	---	---
MONTH	21184	---	23554	4753	---	1297	4092	---	687.7

YEAR 235839.0

131285.9

EXTREMES.--Current year:

Sediment concentrations: Maximum daily, 926 mg/l Mar. 24; minimum, 8 mg/l Oct. 21.

Sediment discharges: Maximum daily, 18,100 tons (16,400 tonnes) Feb. 24; minimum daily, 1.9 tons (1.7 tonnes) Oct. 21.

GREAT MIAMI RIVER BASIN

03261950 LORAMIE CREEK NEAR NEWPORT, OHIO

LOCATION.--Lat 40°18'25", long 84°23'02", in SE 1/4 sec. 24, T.11N., R.4E., Shelby County, on 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, and 3 mi (km) downstream from Mile Creek.

DRAINAGE AREA.--152 mi² (394 km²).

GAGE.--Water-stage recorder. Datum of gage is 927.00 ft (282.550 m) above mean sea level, adjustment of 1912.

REMARKS.--Discharge records good. Some regulation by Lake Loramie 5 mi (8 km) upstream; capacity, 13,000 acre-ft (16.0 hm³). Chemical quality data collected at this site 1966-67, 1969-73.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to current year.

AVERAGE DISCHARGE.--11 years, 134 ft³/s (3.795 m³/s).

EXTREMES.--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.
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.

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

REVISIONS (WATER YEARS).--WRD Ohio 1971: 1966(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	28	57	913	421	156	224	205	31	4.5	3.0	10
2	5.9	31	45	571	283	117	149	228	28	3.4	3.2	15
3	4.8	34	32	286	286	89	124	130	49	2.8	11	13
4	4.1	58	28	270	366	69	73	105	48	47	54	76
5	3.0	222	26	195	355	61	31	77	41	174	36	123
6	2.5	209	30	236	523	57	32	63	209	95	21	103
7	3.0	119	48	334	302	357	35	50	183	43	11	52
8	6.9	74	582	662	65	605	35	37	83	24	6.0	39
9	7.3	50	924	1350	36	302	35	32	46	14	3.8	5.5
10	8.0	37	534	1180	27	191	34	25	28	8.1	2.9	2.2
11	7.3	35	257	1180	23	135	31	22	41	5.1	4.0	4.1
12	5.9	74	322	755	19	423	26	29	293	3.7	6.7	12
13	6.6	76	596	340	16	554	24	28	372	3.1	7.0	11
14	9.4	128	637	220	14	302	22	20	382	8.7	22	6.1
15	27	143	655	110	17	161	23	19	419	6.9	28	3.1
16	27	104	998	30	75	126	20	18	264	5.2	25	2.2
17	22	65	703	19	436	196	21	15	120	4.3	16	1.8
18	19	50	351	31	1060	720	23	13	89	89	9.7	2.8
19	13	41	207	50	830	1230	38	12	59	228	7.9	4.5
20	15	43	144	22	441	872	40	10	39	144	10	7.1
21	24	46	111	17	364	358	34	9.8	28	75	5.9	5.9
22	22	42	91	16	254	164	28	21	21	36	4.1	3.8
23	24	31	136	15	2030	118	31	33	15	20	152	2.3
24	32	36	824	23	3240	403	419	27	11	13	162	2.0
25	40	99	1040	180	2820	547	486	21	9.0	9.7	81	1.9
26	34	121	548	395	1710	280	228	28	14	6.1	54	1.7
27	29	84	244	198	801	155	124	38	12	3.7	37	1.4
28	27	62	152	127	363	158	290	26	9.4	12	20	1.1
29	25	47	113	752	---	1020	218	17	7.1	10	13	1.4
30	25	38	115	1240	---	1050	124	18	4.9	6.1	21	1.2
31	26	---	267	710	---	437	---	23	---	4.1	17	---
TOTAL	513.7	2227	10817	12427	17177	11413	3022	1399.8	2955.4	1109.5	855.2	516.1
MEAN	16.6	74.2	349	401	613	368	101	45.2	98.5	35.8	27.6	17.2
MAX	40	222	1040	1350	3240	1230	486	228	419	228	162	123
MIN	2.5	28	26	15	14	57	20	9.8	4.9	2.8	2.9	1.1

CAL YR 1974 TOTAL 58941.53 MEAN 161 MAX 2590 MIN .60
WTR YR 1975 TOTAL 64432.70 MEAN 177 MAX 3240 MIN 1.1

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

DATE TIME G. H. DISCHARGE
02-24 1200 *14.08 *3,370

Minimum daily discharge, 1.1 ft³/s (0.031 m³/s) Sept. 28.

GREAT MIAMI RIVER BASIN
03261950 LORAMIE CREEK NEAR NEWPORT, OHIO--Continued

WATER QUALITY RECORDS

TEMPERATURE (°C) OF WATER
(ONCE-DAILY MEASUREMENT BETWEEN 0800 AND 0900)

PERIOD OF RECORD.--Water years 1968-70, 1973-75 (discontinued).

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	1.0	4.0	4.0	3.0	7.0	15.0	---	---	25.0	22.0
2	---	---	---	3.0	4.0	2.0	9.0	14.0	---	24.0	---	21.0
3	---	18.0	---	3.0	3.0	1.0	6.0	16.0	---	---	25.0	23.0
4	---	---	---	3.0	3.0	2.0	6.0	14.0	---	---	25.0	23.0
5	---	---	---	---	4.0	3.0	6.0	15.0	---	27.0	26.0	25.0
6	16.0	---	---	---	4.0	4.0	6.0	22.0	21.0	25.0	24.0	22.0
7	---	---	3.0	---	2.0	7.0	---	17.0	20.0	28.0	21.0	20.0
8	---	---	4.0	5.0	2.0	4.0	---	19.0	19.0	25.0	21.0	21.0
9	---	---	2.0	6.0	---	3.0	---	17.0	19.0	26.0	21.0	---
10	---	9.0	2.0	6.0	---	4.0	---	---	21.0	24.0	23.0	---
11	---	---	3.0	7.0	---	4.0	---	---	21.0	21.0	---	---
12	---	---	4.0	3.0	---	6.0	---	---	20.0	21.0	---	19.0
13	14.0	---	5.0	1.0	---	5.0	10.0	16.5	22.0	20.0	---	---
14	---	---	5.0	0.0	---	3.0	---	---	20.0	17.0	25.0	---
15	---	---	5.0	2.0	6.0	4.0	---	---	21.0	20.0	25.0	---
16	---	---	4.0	1.0	---	4.0	---	17.0	20.0	22.0	---	---
17	---	8.0	4.0	---	3.5	6.0	---	---	21.0	22.0	---	---
18	---	---	2.0	---	5.0	6.0	---	---	23.0	23.0	---	---
19	---	---	3.0	---	5.0	9.0	---	---	24.0	23.0	---	19.0
20	8.0	---	---	---	4.0	8.0	11.0	---	26.0	25.0	---	---
21	---	---	---	---	5.0	10.0	---	---	27.0	25.0	---	---
22	---	---	---	---	6.0	12.0	---	---	28.0	25.0	24.0	---
23	---	---	---	---	10.0	10.0	---	23.0	27.0	26.0	26.0	---
24	---	9.0	4.0	3.0	8.0	14.0	14.0	---	27.0	26.0	27.0	---
25	---	---	3.0	---	5.0	10.0	14.0	---	26.0	25.0	28.0	---
26	---	---	2.0	---	5.0	7.0	11.0	---	---	23.0	27.0	14.0
27	10.0	---	3.0	---	3.0	6.0	12.0	---	---	23.0	25.0	---
28	---	---	4.0	---	4.0	5.0	10.0	---	---	23.0	25.0	---
29	---	---	4.0	8.0	---	7.0	12.0	---	---	24.0	25.0	---
30	---	---	5.0	3.0	---	6.0	15.0	24.0	---	24.0	24.0	---
31	---	---	---	4.0	---	5.0	---	---	---	25.0	24.0	---
MONTH	---	---	---	---	---	6.0	---	---	---	23.5	---	---
YEAR	MAX	28.0	MIN	0.0	MEAN	13.5						

SEDIMENT RECORDS

PERIOD OF RECORD.--October 1967 to September 1975 (discontinued).

EXTREMES.--Period of record:

Sediment concentrations: Maximum daily, 1,350 mg/l Apr. 4, 1974; minimum daily, 3 mg/l Jan. 12, 1971.
Sediment discharges: Maximum daily, 5,440 tons (4,930 tonnes) Apr. 4, 1974; minimum daily, 0.02 ton (0.018 tonne) Feb. 1-3, 1971.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CPS)	SUS- PENDED SEDI- MENT (MG/L)	SUS- PENDED SEDI- MENT DIS- CHARGE (T/DAY)	PARTICLE SIZE								
						PERCENT FINER THAN THE SIZE (IN MILLIMETRES) INDICATED								
						.002	.004	.008	.016	.031	.062	.125	.250	.500
JAN.														
09	1330	5.5	1,480	265	1,060	84	95	97	98	99	100			
FEB.														
23..	1730	9.0	2,730	708	5,220	88	92	96	97	98	99	100		
MAR.														
07..	1745	7.0	635	701	1,200	73	84	87	94	97	99	99	100	
JUNE														
15..	1830	22.0	448	367	444	76	86	91	95	97	99	100		
JUNE														
16..	0800	20.0	300	291	236	73	81	88	96	98	99	100		

GREAT MIAMI RIVER BASIN
03261950 LORAMIE CREEK NEAR NEWPORT, OHIO--Continued
SEDIMENT ANALYSES--Continued
SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	8.0	36	.78	28	39	2.9	57	11	1.7
2	5.9	36	.57	31	50	4.2	45	13	1.6
3	4.8	39	.51	34	52	4.8	32	11	.95
4	4.1	45	.50	58	60	10	28	12	.91
5	3.0	50	.41	222	146	88	26	20	1.4
6	2.5	56	.38	209	90	51	30	34	2.8
7	3.0	54	.44	119	61	20	48	47	6.1
8	6.9	53	.99	74	52	10	582	160	264
9	7.3	53	1.0	50	48	6.5	924	54	135
10	8.0	54	1.2	37	46	4.6	534	22	32
11	7.3	52	1.0	35	44	4.2	257	20	14
12	5.9	52	.83	74	51	10	322	24	21
13	6.6	53	.94	76	50	10	596	33	53
14	9.4	49	1.2	128	78	27	637	30	52
15	27	45	3.3	143	107	41	655	47	89
16	27	41	3.0	104	94	26	998	94	253
17	22	37	2.2	65	86	15	703	39	74
18	19	34	1.7	50	67	9.0	351	31	29
19	13	30	1.1	41	41	4.5	207	33	18
20	15	27	1.1	43	25	2.9	144	38	15
21	24	27	1.8	46	27	3.4	111	31	9.3
22	22	26	1.5	42	33	3.7	91	29	7.1
23	24	26	1.7	31	45	3.8	136	46	20
24	32	26	2.2	36	61	5.9	824	125	246
25	40	26	2.8	99	79	21	1040	123	341
26	34	26	2.4	121	74	24	548	58	86
27	29	26	2.0	84	40	9.1	244	41	27
28	27	26	1.9	62	23	3.9	152	44	18
29	25	27	1.8	47	20	2.5	113	45	14
30	25	27	1.8	38	15	1.5	115	58	18
31	26	30	2.1	---	---	---	267	187	214
MONTH	513.7	---	45.15	2227	---	430.4	10817	---	2064.86
DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	913	197	486	421	93	106	156	240	101
2	571	65	100	283	94	72	117	236	75
3	286	52	40	286	88	68	89	207	50
4	270	55	40	366	104	103	69	195	36
5	195	40	21	355	98	94	61	177	29
6	236	50	32	523	104	147	57	168	26
7	334	40	36	302	69	56	357	382	468
8	662	263	522	65	24	4.2	605	232	379
9	1350	296	1080	36	23	2.2	302	163	133
10	1180	149	475	27	22	1.6	191	124	64
11	1180	220	701	23	21	1.3	135	140	51
12	755	173	353	19	23	1.2	423	206	252
13	340	149	137	16	24	1.0	554	140	209
14	220	171	102	14	25	.95	302	109	89
15	110	153	109	17	26	1.2	161	124	54
16	30	26	2.1	75	36	7.3	126	56	19
17	19	20	1.0	436	128	183	196	89	57
18	31	24	2.0	1060	108	309	720	146	274
19	50	16	2.2	830	50	112	1230	129	428
20	22	17	1.0	441	42	50	872	84	198
21	17	10	.46	364	46	45	358	89	86
22	16	10	.43	254	91	93	104	82	36
23	15	10	.41	2030	719	4200	118	87	28
24	23	14	.87	3240	500	4370	403	340	396
25	180	79	61	2820	420	3200	547	184	272
26	395	106	120	1710	358	1650	280	127	96
27	198	42	22	801	288	623	155	100	42
28	127	19	6.5	363	223	219	158	95	47
29	752	318	701	---	---	---	1020	312	836
30	1240	127	425	---	---	---	1050	135	383
31	710	63	121	---	---	---	437	115	136
MONTH	12427	---	5700.97	17177	---	15720.95	11413	---	5350

GREAT MIAMI RIVER BASIN

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03261950 LORAHIE CREEK NEAR NEWPORT, OHIO--Continued

SEDIMENT ANALYSES--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975--Continued

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	224	125	76	205	88	49	31	55	4.6
2	149	127	51	228	106	65	28	57	4.3
3	124	109	36	130	59	21	49	96	13
4	73	90	18	105	60	17	48	95	12
5	31	37	3.1	77	56	12	41	80	8.9
6	32	37	3.2	63	60	10	209	229	152
7	35	39	3.7	50	50	6.8	183	186	98
8	35	40	3.8	37	60	6.0	83	141	32
9	35	42	4.0	32	69	6.0	46	113	14
10	34	45	4.1	25	61	4.1	28	100	7.6
11	31	48	4.0	22	60	3.6	41	125	14
12	26	50	3.5	29	63	4.9	293	159	126
13	24	52	3.4	28	69	5.2	372	166	173
14	22	51	3.0	20	78	4.2	382	442	464
15	23	49	3.0	19	89	4.6	419	358	405
16	20	46	2.5	18	97	4.7	264	266	190
17	21	45	2.6	15	92	3.7	120	195	63
18	23	43	2.7	13	83	2.9	89	173	42
19	38	73	7.5	12	71	2.3	59	143	23
20	40	76	8.2	10	58	1.6	39	130	14
21	34	79	7.3	9.8	51	1.4	28	112	8.5
22	28	84	6.4	21	50	2.8	21	119	6.7
23	31	87	7.3	33	52	4.6	15	112	4.5
24	419	301	388	27	55	4.0	11	107	3.2
25	486	148	194	21	56	3.2	9.0	98	2.4
26	228	91	56	28	58	4.4	14	96	3.6
27	124	73	24	38	59	6.1	12	95	3.1
28	290	172	136	26	60	4.2	9.4	93	2.4
29	218	89	52	17	62	2.8	7.1	91	1.7
30	124	76	25	18	62	3.0	4.9	90	1.2
31	---	---	---	23	59	3.7	---	---	---
MONTH	3022	---	1139.3	1399.8	---	274.8	2955.4	---	1897.7
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	4.5	88	1.1	3.0	125	1.0	10	174	4.7
2	3.4	87	.80	3.2	108	.93	15	212	8.6
3	2.8	91	.69	11	84	2.5	13	149	5.2
4	47	127	21	54	109	16	76	180	37
5	174	164	77	36	112	11	123	163	54
6	95	151	39	21	155	8.8	103	183	51
7	43	136	16	11	149	4.4	52	188	26
8	24	146	9.5	6.0	127	2.1	39	178	19
9	14	159	6.0	3.8	116	1.2	5.5	161	2.4
10	8.1	158	3.5	2.9	107	.84	2.2	143	.85
11	5.1	149	2.1	4.0	107	1.2	4.1	129	1.4
12	3.7	126	1.3	6.7	107	1.9	12	119	3.9
13	3.1	92	.77	7.0	109	2.1	11	114	3.4
14	8.7	100	2.3	22	123	7.3	6.1	110	1.8
15	6.9	80	1.5	28	176	13	3.1	106	.89
16	5.2	90	1.3	25	167	11	2.2	103	.61
17	4.3	109	1.3	16	142	6.1	1.8	101	.49
18	89	217	77	9.7	118	3.1	2.8	99	.75
19	228	283	174	7.9	102	2.2	4.5	95	1.2
20	144	237	92	10	91	2.5	7.1	83	1.6
21	75	234	47	5.9	85	1.4	5.9	71	1.1
22	36	169	16	4.1	85	.94	3.8	64	.66
23	20	184	9.9	152	154	65	2.3	57	.35
24	13	143	5.0	162	176	77	2.0	50	.27
25	9.7	130	3.4	81	193	42	1.9	43	.22
26	6.1	127	2.1	54	202	29	1.7	37	.17
27	3.7	130	1.3	37	161	16	1.4	36	.14
28	12	129	4.2	20	155	8.4	1.1	35	.10
29	10	100	2.7	13	154	5.4	1.4	35	.13
30	6.1	136	2.2	21	270	15	1.2	35	.11
31	4.1	121	1.3	17	157	7.2	---	---	---
MONTH	1109.5	---	623.26	855.2	---	366.51	516.1	---	228.04
YEAR	64432.7	---	33841.94	---	---	---	---	---	---

EXTREMES--Current year:

Sediment concentrations: Maximum daily, 719 mg/l Feb. 23; minimum daily, 10 mg/l Jan. 21-23.

Sediment discharges: Maximum daily, 4,370 tons (3,960 tonnes) Feb. 24; minimum daily, 0.10 ton (0.091 tonne) Sept. 28.

GREAT MIAMI RIVER BASIN

03262000 LORAMIE CREEK AT LOCKINGTON, OHIO

LOCATION.--Lat 40°12'35", long 84°14'32", in NE 1/4 sec. 30, T.7N., R.6E., Shelby County, 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 1.5 mi (2.4 km) upstream from mouth.

DRAINAGE AREA.--257 mi² (666 km²).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 800.03 ft (243.849 m) above mean sea level, adjustment 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.--Discharge records good. 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. Water-quality data collected at this site 1965 to 1973.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--60 years, 208 ft³/s (5.891 m³/s).

EXTREMES.--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, 2.4 ft³/s (0.068 m³/s) Aug. 18, 1931, Sept. 19-21, 1936, Sept. 13, 14, 30, Oct. 4, 5, 1963.

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.

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

REVISIONS (WATER YEARS).--WSP 923: 1916. WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	12	68	1270	626	313	349	280	59	24	20	61
2	19	12	78	822	438	230	259	361	57	21	21	40
3	16	13	68	416	355	178	274	235	60	21	23	35
4	12	17	59	402	445	154	200	210	76	126	44	109
5	11	166	50	296	438	130	117	158	235	154	73	134
6	10	220	53	240	884	120	96	126	1000	140	51	153
7	9.6	147	59	355	534	313	90	105	374	78	38	94
8	9.4	98	687	1080	178	787	88	88	178	55	28	67
9	9.2	73	1040	1890	103	430	84	75	103	39	23	46
10	9.0	57	656	1520	90	290	82	68	75	30	20	22
11	8.9	49	324	1590	86	235	76	59	69	24	20	20
12	8.8	94	361	1000	80	646	69	60	361	20	18	148
13	8.8	105	719	453	68	810	63	68	430	22	19	97
14	8.9	133	798	381	57	445	59	56	872	33	60	49
15	8.0	174	872	361	57	285	57	48	1080	30	71	32
16	8.5	130	1290	126	200	235	56	46	509	23	52	24
17	12	96	955	73	1000	416	53	44	249	20	41	20
18	12	73	484	75	1400	1160	54	39	170	864	30	20
19	11	63	296	130	1110	1360	108	36	123	739	25	49
20	11	66	215	84	597	1130	96	33	88	265	65	54
21	11	69	174	65	460	543	78	31	69	145	30	67
22	10	65	151	60	355	301	68	31	57	89	22	39
23	12	56	196	54	3820	220	86	43	82	60	215	29
24	13	63	1080	60	5010	1280	1000	48	47	43	214	25
25	13	162	1190	324	4740	822	897	108	63	35	125	37
26	19	166	764	552	3310	430	500	100	147	28	73	36
27	18	123	349	301	1270	269	274	66	54	23	63	31
28	15	96	235	205	579	330	543	56	41	26	45	25
29	13	76	178	1510	---	1740	416	42	33	29	33	21
30	13	63	170	1440	---	1340	259	38	28	29	432	18
31	13	---	402	1020	---	677	---	42	---	24	120	---
TOTAL	371.1	2737	14021	18155	28290	17619	6451	2800	6789	3259	2114	1602
MEAN	12.0	91.2	452	586	1010	568	215	90.3	226	105	68.2	53.4
MAX	19	220	1290	1890	5010	1740	1000	361	1080	864	432	153
MIN	8.0	12	50	54	57	120	53	31	28	20	18	18

CAL YR 1974 TOTAL 88053.3 MEAN 241 MAX 4020 MIN 8.0
WTR YR 1975 TOTAL 104208.1 MEAN 286 MAX 5010 MIN 8.0

EXTREMES.--Current year: Maximum discharge, 5,130 ft³/s (145 m³/s) Feb. 24, gage height, 84.14 ft (25.646 m); minimum daily, 8.0 ft³/s (0.23 m³/s) Oct. 15.

GREAT MIAMI RIVER BASIN

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03262650 SPRING CREEK NEAR TROY, OHIO

LOCATION.--Lat 40°05'18", long 84°10'27", Miami County, adjacent to DeWeese Road, 600 ft (183 m) south of Rusk Road, 2.5 mi (4.0 km) upstream from mouth, 3 mi (5 km) north of Troy.

DRAINAGE AREA.--21.0 mi² (54.4 km²).

PERIOD OF RECORD.--Discharge, 1968 to 1975 (discontinued); chemical analyses, 1972 to 1974 (discontinued).

REMARKS.--Water-quality data collected at this site 1972 to 1974.

COOPERATION.--Records furnished by Miami Conservancy District

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WATER DISCHARGE RECORDS

DATE	INSTANTANEOUS DISCHARGE	
	(ft ³ /s)	(m ³ /s)
Oct. 14	0.33	0.009
Nov. 27	5.1	.144
Jan. 8	111	3.14
Mar. 3	20	.57
Apr. 16	8.8	.249
July 17	2.1	.059
Aug. 29	.20	.006

GREAT MIAMI RIVER BASIN

03262700 GREAT MIAMI RIVER AT TROY, OHIO

LOCATION.--Lat 40°02'25", long 84°11'52", Miami County, 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, and 2.3 mi (3.7 km) downstream from Spring Creek.

DRAINAGE AREA.--926 mi² (2,398 km²).

GAGE.--Water-stage recorder. Datum of gage is 810.67 ft (247.092 m) above mean sea level.

REMARKS.--Discharge records good. 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 3.6 ft³/s (0.10 m³/s) in 1975 and is returned as sewage 1 mi (2 km) downstream from the station. Water-quality data collected at this site 1965 to 1974.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1961, 1962 (published as Miami River at Troy). October 1962 to current year.

AVERAGE DISCHARGE.--13 years, 810 ft³/s (22.94 m³/s).

EXTREMES.--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, 16 ft³/s (0.45 m³/s) July 13, Oct. 7, 1963. Flood of June 11, 1958 reached a stage of 16.4 ft (5.00 m), discharge, 21,000 ft³/s (595 m³/s).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	162	125	536	3640	2840	2680	2070	1010	259	244	213	198
2	153	126	563	2860	2100	2040	1600	1100	254	214	209	162
3	142	122	561	1810	1690	1540	1370	869	243	200	327	159
4	131	150	531	1610	1550	1190	1240	799	267	3760	274	211
5	128	305	474	1340	1410	972	971	763	446	4620	312	250
6	122	624	520	1060	2180	859	778	609	3310	2250	295	274
7	121	461	595	1110	2000	1150	675	524	2370	1180	261	267
8	114	318	1520	2310	1160	2570	595	480	1300	888	273	195
9	118	265	3090	5220	750	2080	527	418	772	793	226	171
10	121	228	2330	4540	500	1480	505	400	504	537	213	134
11	118	225	1460	5170	700	1190	485	376	462	400	234	174
12	115	281	1170	3610	680	1860	449	383	646	334	253	276
13	113	394	2110	2180	600	3090	440	370	1010	320	247	328
14	112	382	2460	1470	520	2280	406	367	1520	389	374	242
15	138	477	2500	1190	500	1670	376	303	1790	409	527	181
16	127	446	3600	947	657	1310	383	278	1330	314	426	157
17	135	342	3140	662	2740	1500	369	304	763	273	319	135
18	131	273	2130	694	4800	3480	353	278	617	1090	245	147
19	120	256	1480	679	3750	3850	475	255	485	4020	217	168
20	124	258	1080	602	2620	3470	492	241	391	1780	235	216
21	125	275	924	431	1920	2400	417	226	330	1040	199	252
22	123	302	838	420	1550	1700	375	229	294	686	181	212
23	123	289	801	390	10300	1300	381	241	286	500	325	169
24	123	372	2580	370	15500	2940	2020	252	254	407	340	182
25	124	642	3620	850	13200	3550	2740	225	250	254	254	175
26	124	936	2700	2350	9670	2530	2130	365	820	232	201	245
27	128	804	1670	1580	5570	1870	1320	344	724	214	174	194
28	128	656	1160	1020	3830	1550	1510	273	445	294	162	156
29	125	566	946	4930	---	4560	1570	238	334	264	164	128
30	126	516	893	5850	---	4510	1200	226	268	235	559	128
31	126	---	1080	4090	---	3150	---	240	---	224	327	---
TOTAL	3920	11416	49062	64985	95287	70321	28222	12986	22744	28365	8566	5886
MEAN	126	381	1583	2096	3403	2268	941	419	758	915	276	196
MAX	162	936	3620	5850	15500	4560	2740	1100	3310	4620	559	328
MIN	112	122	474	370	500	859	353	225	243	200	162	128

CAL YR 1974 TOTAL 339504 MEAN 930 MAX 11400 MIN 55
WTR YR 1975 TOTAL 401760 MEAN 1101 MAX 15500 MIN 112

EXTREMES.--Current year: Maximum discharge, 15,700 ft³/s (445 m³/s) Feb. 24, gage height, 13.92 ft (4.243 m); minimum daily, 112 ft³/s (3.17 m³/s) Oct. 14.

GREAT MIAMI RIVER BASIN

03262750 MILLERS DITCH AT TIPP CITY, OHIO

LOCATION.--Lat 39°57'59", long 84°10'22", Miami County, at culvert on 4th Street in Tipp City.

DRAINAGE AREA.--0.83 mi² (2.15 km²).

PERIOD OF RECORD.--1966 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 23	14.07	4.289	152	4.30

GREAT MIAMI RIVER BASIN

03263000 GREAT MIAMI RIVER AT TAYLORSVILLE, OHIO

LOCATION.--Lat 39°52'22", long 84°09'51", in SW 1/4 sec. 36, R.8, T.2, Montgomery County, on left bank 600 ft (183 m) downstream from Taylorsville Dam, 0.8 mi (1.3 km) north of Taylorsville, and 9.5 mi (15.3 km) upstream from Stillwater River.

DRAINAGE AREA.--1,149 mi² (2,976 km²).

GAGE.--Water-stage recorder. Datum of gage is 700.08 ft (213.384 m) above mean sea level, adjustment of 1912. Prior to October 1921, nonrecording gage at site 1.8 mi (2.9 km) upstream at different datum. Jan. 1, 1922, to Nov. 11, 1925, nonrecording gage at site 600 ft (183 m) upstream at outlet works of Taylorsville Dam at present datum.

REMARKS.--Discharge records good. Flood flow regulated by retarding basins on Great Miami River, just upstream 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 km³).

WATER DISCHARGE RECORDS

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.

AVERAGE DISCHARGE.--57 years, 997 ft³/s (28.24 m³/s), 11.78 in./yr (299 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 31,400 ft³/s (889 m³/s) Jan. 22, 1959, gage height, 75.44 ft (22.994 m); minimum daily, 36 ft³/s (1.02 m³/s) Sept. 29, 1941. 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.

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

REVISIONS (WATER YEARS).--WSP 743: 1924(M). WSP 853: 1930, 1937. WSP 923: 1922-24. WSP 1385: 1916. WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	183	152	574	3460	3730	4500	2420	1440	389	307	209	351
2	175	151	611	3290	2760	3400	1850	1430	365	265	206	274
3	165	147	614	2140	2190	2500	1600	1220	359	245	413	237
4	146	204	574	1780	1920	1900	1460	1140	359	3350	441	355
5	146	311	529	1570	1780	1500	1230	1040	441	5610	342	363
6	134	652	527	1290	2460	1400	1020	915	2880	2600	327	385
7	129	568	646	1260	2470	1600	901	770	2650	1640	293	388
8	124	417	1350	2200	1600	2200	822	719	1570	1370	285	300
9	122	317	3220	5870	1100	1800	734	632	1000	1010	247	256
10	126	280	2600	5580	800	1600	708	590	689	680	224	219
11	125	287	1690	6700	900	1500	670	557	609	509	252	247
12	123	315	1260	4570	1050	3000	637	558	679	414	285	459
13	119	437	2010	2690	888	4600	613	529	1120	390	255	491
14	119	457	2580	1810	789	3200	586	519	1460	492	264	384
15	155	503	2700	1400	803	2400	558	465	1740	490	738	295
16	167	527	3800	1200	1000	2000	539	420	1560	397	552	258
17	154	426	3570	900	2850	1800	532	434	968	349	455	230
18	160	352	2520	975	5680	3850	515	425	751	850	328	248
19	148	306	1760	981	4410	4300	594	394	609	4800	276	278
20	147	349	1340	882	3060	3830	647	374	495	2200	299	346
21	152	365	1140	672	2220	2770	574	352	426	1310	283	355
22	151	369	1030	640	1800	2030	523	356	378	841	229	331
23	151	366	959	590	9320	1600	551	367	354	596	463	282
24	152	400	2190	610	20300	2510	2020	379	339	478	443	293
25	151	641	4020	985	17000	3740	4250	345	287	427	366	284
26	148	987	3180	2600	11000	2710	3520	442	745	345	283	330
27	147	916	2030	1980	8000	2030	1970	490	890	308	237	312
28	152	731	1430	1320	6000	1770	2010	401	540	314	216	253
29	152	624	1180	5960	---	5020	2020	349	440	289	197	218
30	155	558	1080	8530	---	5640	1610	341	339	249	630	192
31	154	---	1140	5430	---	3650	---	346	---	224	583	---
TOTAL	4532	13115	53854	79865	117880	86350	37684	18739	25431	33349	10621	9214
MEAN	146	437	1737	2576	4210	2785	1256	604	848	1076	343	307
MAX	183	987	4020	8530	20300	5640	4250	1440	2880	5610	738	491
MIN	119	147	527	590	789	1400	515	353	287	224	197	192
CFSM	.13	.38	1.51	2.24	3.66	2.42	1.09	.53	.74	.94	.30	.27
IN.	.15	.42	1.74	2.59	3.82	2.80	1.22	.61	.82	1.08	.34	.30

CAL YR 1974 TOTAL 403331 MEAN 1105 MAX 14000 MIN 96 CFSM .96 IN 13.06
WTR YR 1975 TOTAL 490634 MEAN 1344 MAX 20300 MIN 119 CFSM 1.17 IN 15.88

EXTREMES.--Current year: Maximum discharge, 22,600 ft³/s (640 m³/s) Feb. 24, gage height, 73.87 ft (22.516 m); minimum daily, 119 ft³/s (3.37 m³/s) Oct. 13, 14.

GREAT MIAMI RIVER BASIN

433

03263100 POPLAR CREEK NEAR VANDALIA, OHIO

LOCATION.--Lat 39°52'10", long 84°11'21", Montgomery County, at culvert on Interstate Highway 75, 1.2 mi (1.9 km) upstream from mouth, 1.5 mi (2.4 km) southeast of Vandalia.

DRAINAGE AREA.--3.11 mi² (8.05 km²).

PERIOD OF RECORD.--1947 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 23	3.58	1.091	258	7.31

03263700 BRIDGE CREEK NEAR GREENVILLE, OHIO

LOCATION.--Lat 40°04'13", long 84°37'45", Darke County, at culvert on State Highway 49, 2.2 mi (3.5 km) south of Greenville.

DRAINAGE AREA.--4.83 mi² (12.51 km²).

PERIOD OF RECORD.--1947 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 23	13.53	4.124	372	10.5

GREAT MIAMI RIVER BASIN

435

03264000 GREENVILLE CREEK NEAR BRADFORD, OHIO

LOCATION.--Lat 40°06'08", long 84°25'48", between secs. 33 and 34, T.9N., R.4E., on boundary line of Darke and Miami Counties, 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).

GAGE.--Water-stage recorder. Datum of gage is 948.9 ft (289.22 m) above mean sea level, adjustment 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.--Discharge records good. Some diurnal fluctuation caused by mill 8 mi (13 km) upstream from station; daily flows are not affected appreciably. Water-quality data collected at this site 1965 to 1974.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--45 years, 171 ft³/s (4.843 m³/s), 12.03 in/yr (306 mm/yr).

EXTREMES.--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.

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.

COOPERATION.--Gage-height charts, tapes, and 10 discharge measurements furnished by Miami Conservancy District.

REVISIONS (WATER YEARS).--WSP 803: 1933(M). WSP 1235: 1936, 1937(M). WRD 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	41	52	668	710	374	420	491	111	79	31	34
2	29	39	56	364	530	298	333	420	105	68	28	29
3	30	36	43	252	428	249	343	323	107	62	39	28
4	31	48	39	249	353	216	258	304	99	152	56	29
5	33	97	36	203	337	203	221	249	172	79	40	29
6	27	81	38	175	595	192	205	224	526	64	40	38
7	25	60	49	160	416	213	195	195	255	232	36	30
8	25	49	187	357	282	221	180	180	162	203	31	27
9	28	43	307	1020	227	190	177	167	128	91	28	28
10	30	35	185	769	192	195	172	153	113	67	24	23
11	29	36	137	1250	219	187	155	143	153	59	29	30
12	33	36	123	754	182	389	150	175	229	50	35	53
13	36	35	246	371	160	604	143	155	175	55	36	35
14	31	43	294	264	146	360	139	148	139	80	38	28
15	49	48	301	220	143	273	141	141	132	54	55	22
16	45	43	562	160	200	246	132	141	141	47	41	45
17	41	41	347	140	535	310	132	126	119	39	34	29
18	36	37	232	160	1080	663	130	126	109	135	30	26
19	36	42	185	180	701	1180	205	119	101	118	34	36
20	45	52	150	150	424	920	175	113	92	68	29	35
21	48	53	130	140	320	504	143	109	103	57	27	37
22	36	45	119	130	337	367	141	113	92	49	29	27
23	34	41	119	120	2590	285	158	107	78	44	51	25
24	41	47	320	130	4250	764	809	109	83	44	28	35
25	45	71	389	291	3100	910	1250	126	94	36	29	36
26	41	74	246	530	1170	404	2030	107	444	34	27	28
27	36	60	182	273	668	294	1030	103	238	33	23	29
28	39	55	158	224	499	347	1030	97	146	42	23	27
29	36	49	137	1650	---	1500	875	85	107	41	26	28
30	48	47	130	2080	---	1510	521	99	88	29	70	26
31	44	---	208	987	---	636	---	123	---	26	41	---
TOTAL	1121	1484	5707	14421	20794	15004	11993	5271	4641	2237	1088	932
MEAN	36.2	49.5	184	465	743	484	400	170	155	72.2	35.1	31.1
MAX	49	97	562	2080	4250	1510	2030	491	526	232	70	53
MIN	25	35	36	120	143	187	130	85	78	26	23	22
CFSM	.19	.26	.95	2.41	3.85	2.51	2.07	.88	.80	.37	.18	.16
IN.	.22	.29	1.01	2.78	4.01	2.89	2.31	1.02	.89	.43	.21	.18

CAL YR 1974 TOTAL 61935 MEAN 170 MAX 1760 MIN 13 CFSM .88 IN 11.94
WTR YR 1975 TOTAL 64693 MEAN 232 MAX 4250 MIN 22 CFSM 1.20 IN 16.32

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-30	0400	6.27	2,250	03-30	0330	5.80	1,920
02-24	0230	*8.95	*4,550	04-26	1600	6.20	2,200

Minimum discharge: 18 ft³/s (0.51 m³/s) Sept. 15.

GREAT MIAMI RIVER BASIN

03265000 STILLWATER RIVER AT PLEASANT HILL, OHIO

LOCATION.--Lat 40°03'28", long 84°21'22", in SW 1/4 sec. 18, T.7N., R.5E., Miami County, 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, and 2 mi (3 km) upstream from Canyon Run.

DRAINAGE AREA.--503 mi² (1,303 km²).

GAGE.--Water-stage recorder. Datum of gage is 846.73 ft (258.083 m) above mean sea level, adjustment of 1912. Prior to Dec. 23, 1934, nonrecording gage at same site and datum.

REMARKS.--Discharge records good. Chemical quality data collected 1965-68, 1970-73, water temperatures collected 1964 to September 1966, at this site.

WATER DISCHARGE RECORDS

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.

AVERAGE DISCHARGE.--53 years, 441 ft³/s (12.49 m³/s), 11.91 in/yr (303 mm/yr).

EXTREMES.--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.
Flood of January 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.

COOPERATION.--Gage-height charts, tapes and 10 discharge measurements furnished by Miami Conservancy District.

REVISIONS (WATER YEARS).--WSP 523: 1917. WSP 1305: 1920 (N), WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	63	81	2140	1600	827	873	985	156	111	48	124
2	45	61	82	1010	1190	635	676	1040	144	103	54	92
3	44	60	78	607	960	508	677	706	142	92	96	70
4	43	72	68	611	782	431	507	631	134	160	154	129
5	43	104	60	481	709	391	412	501	292	148	153	141
6	40	122	52	383	1510	370	369	429	2180	119	94	103
7	37	99	68	338	1050	437	343	366	863	213	78	95
8	38	80	271	1090	570	807	316	320	366	336	65	66
9	41	70	711	3260	340	476	295	292	246	188	56	55
10	41	64	381	2030	300	410	285	267	202	134	53	49
11	43	64	256	3330	395	375	266	251	205	107	58	63
12	44	66	211	1740	329	1090	251	272	611	90	64	186
13	46	64	477	800	274	1750	233	258	409	98	71	228
14	48	66	662	480	247	906	220	227	310	171	88	126
15	53	71	711	410	249	613	220	214	907	119	216	80
16	68	75	1460	310	356	532	214	204	768	93	156	74
17	65	70	859	280	1480	800	207	191	325	82	102	75
18	59	64	515	260	3430	2210	210	184	250	216	70	70
19	55	63	369	320	1950	3230	304	173	205	540	69	107
20	56	71	287	250	1060	2160	322	164	164	224	147	134
21	60	76	242	220	755	1100	239	155	150	140	95	147
22	58	73	221	210	740	811	218	153	176	107	66	104
23	55	67	209	202	8520	604	229	156	158	90	111	78
24	54	70	900	209	13200	2040	1930	152	140	83	116	79
25	59	82	1230	569	7680	2060	3070	150	132	72	77	95
26	72	102	649	1250	3160	861	4320	147	438	61	62	93
27	63	95	401	604	1500	593	2180	137	376	56	47	85
28	62	85	316	426	1090	690	2230	128	222	61	40	73
29	57	79	266	4380	---	4440	1850	119	158	60	55	69
30	59	74	248	4600	---	3410	1070	125	127	55	319	60
31	64	---	428	2230	---	1350	---	144	---	48	217	---
TOTAL	1622	2272	12769	35030	55426	36917	24536	9241	10956	4177	3097	2950
MEAN	52.3	75.7	412	1130	1980	1191	818	298	365	135	99.9	98.3
MAX	72	122	1460	4600	13200	4440	4320	1040	2180	540	319	228
MIN	37	60	52	202	247	370	207	119	127	48	40	49
CFSM	.10	.15	.82	2.25	3.94	2.37	1.63	.59	.73	.27	.20	.20
IN.	.12	.17	.94	2.59	4.10	2.73	1.81	.68	.81	.31	.23	.22

CAL YR 1974 TOTAL 150344 MEAN 412 MAX 6870 MIN 24 CFSM .82 IN 11.12
WTR YR 1975 TOTAL 198993 MEAN 545 MAX 13200 MIN 37 CFSM 1.08 IN 14.72

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-29	2030	9.54	5,840	03-29	1600	9.00	5,300
02-24	0530	*15.57	*14,500				

Minimum discharge: 35 ft³/s (0.99 m³/s) Oct. 7.

GREAT MIAMI RIVER BASIN

437

03265000 STILLWATER RIVER AT PLEASANT HILL, OHIO--Continued

WATER QUALITY RECORDS

SEDIMENT ANALYSES

PERIOD OF RECORD.--October 1963 to September 1975 (discontinued).

EXTREMES.--Period of record:

Sediment concentrations: Maximum daily, 1,970 mg/l June 26, 1971; minimum daily, 1 mg/l on several days during January 1966.

Sediment discharges: Maximum daily, 29,600 tons (26,900 tonnes) Feb. 24, 1975; minimum daily, 0.07 ton (0.064 tonne) Aug. 21, 1965.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT DIS- CHARGE (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	PARTICLE SIZE								
						PERCENT FINER THAN THE SIZE (IN MILLIMETRES) INDICATED								
						.002	.004	.008	.016	.031	.062	.125	.250	.500
JAN. 29..	0740	7.0	3,580	1,180	11,400	64	76	86	93	97	98	99	100	
FEB. 24..	0615	7.0	14,500	950	37,200	75	86	92	95	97	98	98	98	100
MAR. 25..	0945	7.0	2,270	627	3,840	84	88	92	96	98	100			
APR. 24..	1015	12.5	1,650	225	1,000	47	60	76	88	95	97	98	99	100
JUNE 06..	1300	19.0	2,570	1,250	8,670	61	71	93	97	99	100			
JUNE 15..	1150	21.0	1,310	1,190	4,210	63	80	90	98	99	100			

GREAT MIAMI RIVER BASIN

03265000 STILLWATER RIVER AT PLEASANT HILL, OHIO--Continued

SEDIMENT ANALYSES--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	50	10	1.4	63	10	1.7	81	5	1.1
2	45	10	1.2	61	10	1.6	82	5	1.1
3	44	10	1.2	60	10	1.6	78	5	1.1
4	43	10	1.2	72	13	2.5	68	5	.92
5	43	10	1.2	104	16	4.5	60	5	.81
6	40	10	1.1	122	16	5.3	52	5	.70
7	37	10	1.0	99	16	4.3	68	5	.92
8	38	10	1.0	80	15	3.2	271	30	39
9	41	10	1.1	70	13	2.5	711	79	152
10	41	10	1.1	64	11	1.9	381	38	39
11	43	10	1.2	64	9	1.6	256	17	12
12	44	10	1.2	66	7	1.2	211	15	8.5
13	46	10	1.2	64	5	.86	477	49	68
14	48	10	1.3	66	4	.71	662	30	54
15	53	10	1.4	71	5	.96	711	24	46
16	68	10	1.8	75	5	1.0	1460	206	827
17	65	10	1.8	70	5	.95	859	78	181
18	59	10	1.6	64	5	.86	515	32	44
19	55	10	1.5	63	5	.85	369	17	17
20	56	10	1.5	71	5	.96	287	14	11
21	60	10	1.6	76	5	1.0	242	15	9.8
22	58	10	1.6	73	5	.99	221	15	9.0
23	55	10	1.5	67	5	.90	209	15	8.5
24	54	10	1.5	70	5	.95	900	80	241
25	59	10	1.6	82	5	1.1	1230	122	405
26	72	10	1.9	102	5	1.4	649	43	75
27	63	10	1.7	95	5	1.3	401	30	32
28	62	10	1.7	85	5	1.1	316	27	23
29	57	10	1.5	79	5	1.1	266	24	17
30	59	10	1.6	74	5	1.0	248	24	16
31	64	10	1.7	---	---	---	428	42	80
MONTH	1622	---	43.9	2272	---	49.89	12769	---	2421.45

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2140	322	1930	1600	69	298	827	43	96
2	1010	100	273	1190	37	119	635	31	53
3	607	41	67	960	22	57	508	26	36
4	611	14	23	782	19	40	431	21	24
5	481	13	17	709	16	31	391	20	21
6	383	11	11	1510	121	511	370	18	18
7	338	10	9.1	1050	56	159	437	33	52
8	1090	118	506	570	34	52	807	206	449
9	3260	414	3640	340	24	22	476	60	77
10	2030	206	1130	300	20	16	410	39	43
11	3330	343	3130	395	18	19	375	34	34
12	1740	189	1010	329	17	15	1090	113	480
13	800	60	130	274	16	12	1750	182	860
14	480	30	39	247	15	10	906	69	169
15	410	20	22	249	15	10	613	39	65
16	310	19	16	356	17	16	532	32	46
17	280	17	13	1480	77	374	800	36	86
18	260	15	11	3430	174	1610	2210	180	1070
19	320	15	13	1950	83	437	3230	215	1880
20	250	15	10	1060	42	120	2160	135	848
21	220	15	8.9	755	24	49	1100	66	196
22	210	15	8.5	740	35	109	811	38	83
23	202	13	7.1	8520	1130	26500	604	20	33
24	209	11	6.2	13200	830	29600	2040	468	3730
25	569	46	88	7680	470	9750	2060	553	3420
26	1250	103	348	3160	365	3110	861	175	407
27	604	41	67	1500	203	822	593	132	211
28	426	52	60	1090	83	244	690	95	184
29	4380	795	9510	---	---	---	4440	296	3660
30	4600	398	5130	---	---	---	3410	172	1580
31	2230	144	867	---	---	---	1350	66	241
MONTH	35030	---	28100.8	55426	---	74112	36917	---	20152

GREAT MIAMI RIVER BASIN

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03265000 STILLWATER RIVER AT PLEASANT HILL, OHIO--Continued

SEDIMENT ANALYSES--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975--Continued

APRIL					MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	
1	873	31	73	985	71	189	156	10	4.2	
2	676	25	46	1040	148	416	144	10	3.9	
3	677	23	42	706	64	122	142	10	3.8	
4	507	20	27	631	36	61	134	10	3.6	
5	412	19	21	501	34	46	292	47	59	
6	369	19	19	429	33	38	2180	1150	7000	
7	343	18	17	366	32	32	863	517	1310	
8	316	17	15	320	30	26	366	151	149	
9	295	16	13	292	30	24	246	73	48	
10	285	16	12	267	30	22	202	53	29	
11	266	15	11	251	30	20	205	35	19	
12	251	15	10	272	28	21	611	142	250	
13	233	15	9.4	258	28	20	409	87	105	
14	220	15	8.9	227	27	17	310	51	43	
15	220	15	8.9	214	26	15	907	904	3100	
16	214	15	8.7	204	24	13	768	255	529	
17	207	15	8.4	191	21	11	325	205	180	
18	210	15	8.5	184	18	8.9	250	143	97	
19	304	25	21	173	15	7.0	205	75	42	
20	322	23	20	164	13	5.8	164	39	17	
21	239	20	13	155	12	5.0	150	28	11	
22	218	20	12	153	12	5.0	176	23	11	
23	229	20	12	156	10	4.2	158	20	8.5	
24	1930	275	2000	152	10	4.1	140	20	7.6	
25	3070	371	3330	150	10	4.1	132	20	7.1	
26	4320	434	5060	147	10	4.0	438	121	164	
27	2180	134	789	137	10	3.7	376	61	62	
28	2230	131	789	128	10	3.5	222	40	24	
29	1850	125	624	119	10	3.2	158	32	14	
30	1070	60	173	125	10	3.4	127	28	9.6	
31	---	---	---	144	10	3.9	---	---	---	
MONTH	24536	---	13201.8	9241	---	1158.8	10956	---	13311.3	
JULY					AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	
1	111	23	6.9	48	20	2.6	124	33	11	
2	103	20	5.6	54	22	3.2	92	25	6.2	
3	92	20	5.0	46	52	13	70	24	4.5	
4	160	37	16	154	40	17	129	70	24	
5	148	27	11	153	33	14	141	44	17	
6	119	20	6.4	94	24	6.1	103	30	8.3	
7	213	44	25	78	21	4.4	95	31	8.0	
8	336	52	47	65	21	3.7	66	29	5.2	
9	188	27	14	56	20	3.0	55	28	4.2	
10	134	25	9.0	53	20	2.9	49	26	3.4	
11	107	25	7.2	58	20	3.1	63	32	5.4	
12	90	25	6.1	64	20	3.5	186	60	30	
13	98	35	9.3	71	20	3.8	228	71	44	
14	171	117	54	88	24	5.7	126	56	19	
15	119	50	16	216	58	34	80	58	13	
16	93	27	6.8	156	37	16	74	55	11	
17	82	24	5.3	102	26	7.2	75	46	9.3	
18	216	126	151	70	21	4.0	70	41	7.7	
19	540	354	516	69	19	3.5	107	70	20	
20	224	259	157	147	62	25	134	84	30	
21	140	117	44	95	50	13	147	49	19	
22	107	47	14	66	41	7.3	104	38	11	
23	90	33	8.0	111	70	21	78	37	7.8	
24	83	30	6.7	116	66	21	79	36	7.7	
25	72	27	5.2	77	38	7.9	95	36	9.2	
26	61	24	4.0	62	29	4.9	93	34	8.5	
27	56	23	3.5	47	23	2.9	85	32	7.3	
28	61	21	3.5	40	21	2.3	73	30	5.9	
29	60	20	3.2	55	46	6.8	69	28	5.2	
30	55	20	3.0	319	181	223	60	25	4.1	
31	48	20	2.6	217	56	33	---	---	---	
MONTH	4177	---	1172.3	3097	---	518.8	2950	---	366.9	
YEAR 198993.0			154609.9							

EXTREMES.--Current year:

Sediment concentrations: Maximum daily, 1,150 mg/l June 6; minimum daily, 4 mg/l Nov. 14.

Sediment discharges: Maximum daily, 29,600 tons (26,900 tonnes) Feb. 24; minimum daily, 0.70 ton (0.64 tonne) Dec. 6.

GREAT MIAMI RIVER BASIN

03265100 HOG RUN TRIBUTARY AT LAURA, OHIO

LOCATION.--Lat 40°00'30", long 84°25'26", Miami County, at culvert on State Highway 571, 0.3 mi (0.5 km) upstream from mouth, 1 mi (2 km) northwest of Laura.

DRAINAGE AREA.--0.463 mi² (1.199 km²).

PERIOD OF RECORD.--1950 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 23	5.57	1.698	30	0.85

GREAT MIAMI RIVER BASIN

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03266000 STILLWATER RIVER AT ENGLEWOOD, OHIO

LOCATION.--Lat 39°52'10", long 84°16'57", in NW 1/4 sec. 23, T.5N., R.5E., Montgomery County, on right bank 1,000 ft (305 m) downstream from Englewood Dam, 1 mi (2 km) southeast of Englewood, and 8.5 mi (13.7 km) upstream from mouth.

DRAINAGE AREA.--650 mi² (1,684 km²).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 699.97 ft (213.351 m) above mean sea level, adjustment of 1912.

REMARKS.--Discharge records good except those for periods of no gage height record, which are fair. Flood flow regulated by Englewood retarding basin. Water-quality data collected at this site 1961 to 1963, 1966 to 1973.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1925 to current year (monthly discharge only, October 1925, published in WSP 1305).

AVERAGE DISCHARGE.--50 years, 574 ft³/s (16.26 m³/s), 11.99 in/yr (305 mm/yr).

EXTREMES.--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). 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.

COOPERATION.--Gage-height tapes and 11 discharge measurements furnished by Miami Conservancy District.

REVISIONS.--WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	67	140	2060	3210	4330	2600	2400	229	151	68	204
2	73	69	140	1790	2010	1270	1900	1500	226	130	91	141
3	63	68	130	1010	1560	863	1200	1300	220	130	186	118
4	59	82	120	879	1270	721	780	1100	210	188	219	99
5	59	140	100	785	1090	638	622	900	212	213	204	147
6	56	170	100	615	1680	594	544	720	1690	177	172	148
7	57	140	127	533	1730	602	503	580	1590	177	125	119
8	51	120	450	975	1000	956	466	500	615	451	106	106
9	49	100	1180	3060	720	775	432	440	383	318	92	84
10	50	110	830	3200	560	624	417	380	302	200	98	75
11	50	120	512	3370	579	579	396	350	293	151	109	90
12	53	110	412	3220	474	1080	368	370	452	130	116	144
13	53	116	594	1440	401	2700	349	350	692	129	98	221
14	54	121	1050	898	370	1900	330	330	377	214	103	199
15	65	116	1120	660	391	1200	320	310	518	193	176	137
16	62	118	1950	560	536	780	310	290	1260	146	247	107
17	71	118	1620	380	1420	920	300	270	575	156	174	100
18	69	110	956	450	3360	2200	300	260	349	249	132	117
19	65	102	675	530	3080	3400	350	250	303	729	102	114
20	65	127	519	460	1700	4000	450	248	248	447	100	142
21	62	124	418	340	1150	3200	400	245	209	251	150	147
22	62	118	367	350	947	1500	330	239	200	180	115	151
23	65	110	342	335	4440	1100	350	238	215	146	106	126
24	67	118	814	332	7360	1900	1500	234	187	128	124	118
25	65	134	1900	621	8160	3000	3200	223	166	114	119	107
26	63	144	1230	1800	7980	1800	4500	223	205	99	98	112
27	71	159	736	1130	7230	1000	5500	215	473	89	81	111
28	71	151	548	707	6080	1100	4800	202	320	236	68	102
29	65	134	444	3220	---	2300	3800	192	223	86	65	94
30	69	124	400	5050	---	5000	3000	192	179	76	132	87
31	65	---	412	4700	---	3800	---	207	---	73	354	---
TOTAL	1932	3540	20336	45460	70488	55832	40317	15258	13121	6157	4130	3767
MEAN	62.3	118	656	1466	2517	1801	1344	492	437	199	133	126
MAX	83	170	1950	5050	8160	5000	5500	2400	1690	729	354	221
MIN	49	67	100	332	370	579	300	192	166	73	65	75
CFSM	.10	.18	1.01	2.26	3.87	2.77	2.07	.76	.67	.31	.20	.19
IN.	.11	.20	1.16	2.60	4.03	3.20	2.31	.87	.75	.35	.24	.22

CAL YR 1974 TOTAL 205242 MEAN 562 MAX 5930 MIN 39 CFSM .86 IN 11.75
WTR YR 1975 TOTAL 280338 MEAN 768 MAX 8160 MIN 49 CFSM 1.18 IN 16.04

EXTREMES.--Current year: Maximum discharge, 8,250 ft³/s (234 m³/s) Feb. 25, gage height, 79.74 ft (24.305 m); minimum, 47 ft³/s (1.33 m³/s) Oct. 9, gage height 71.98 ft (21.940 m).

Note: No gage height record Nov. 2-13, Mar. 13 to Apr. 4, Apr. 14 to May 20.

GREAT MIAMI RIVER BASIN

03266500 MAD RIVER AT ZANESFIELD, OHIO

LOCATION.--Lat 40°21'01"N, long 83°40'28"W, Logan County, 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, and 1 mi (2 km) north of Zanesfield.

DRAINAGE AREA.--7.31 mi² (18.9 km²).

GAGE.--Water-stage recorder. Datum of gage is 1,208.28 ft (368.284 m) above mean sea level.

REMARKS.--Discharge records fair.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--29 years, 7.88 ft³/s (0.223 m³/s), 14.64 in/yr (372 mm/yr).

EXTREMES.--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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	2.1	3.6	24	15	16	13	9.5	4.2	2.6	1.9	2.1
2	1.9	2.2	3.9	12	13	14	12	8.1	3.6	2.6	1.9	2.1
3	1.9	2.1	3.3	10	11	13	11	8.5	3.9	4.2	2.2	2.6
4	1.9	4.5	3.1	9.0	11	12	10	9.5	3.4	12	2.6	2.8
5	1.9	4.8	2.9	8.5	12	12	9.5	8.1	17	4.2	2.2	3.4
6	1.9	3.2	3.2	8.0	14	12	9.5	7.3	4.6	3.4	2.8	3.4
7	1.9	3.0	5.4	8.5	11	23	9.0	6.9	11	3.4	2.2	2.2
8	1.9	2.6	24	45	9.5	17	8.5	6.9	7.3	3.0	1.9	2.1
9	1.9	2.6	14	48	9.0	13	8.5	6.1	5.4	2.8	1.9	1.9
10	1.9	2.4	9.5	34	8.5	13	8.1	5.8	4.8	2.6	1.9	1.9
11	1.9	3.6	7.3	26	8.0	12	7.7	5.8	7.3	2.6	1.9	4.5
12	1.9	4.8	11	16	7.5	33	7.3	6.5	6.5	2.6	1.9	3.9
13	1.9	3.4	14	12	7.0	23	7.3	6.1	4.8	2.8	3.4	2.6
14	1.9	4.8	19	10	6.8	15	6.9	5.4	5.1	2.8	4.2	2.2
15	2.8	3.2	20	9.0	6.8	14	6.9	5.4	8.5	2.6	7.3	2.1
16	2.4	3.2	22	8.5	14	15	6.9	5.1	6.5	2.4	3.2	2.1
17	2.2	3.2	15	8.1	45	25	6.5	4.8	7.3	2.4	2.4	2.1
18	2.2	3.0	12	10	28	25	6.9	4.8	6.1	6.5	2.2	3.2
19	2.2	3.0	10	10	17	23	9.0	4.2	4.8	3.9	2.1	2.8
20	2.2	3.2	8.1	9.0	14	17	6.9	4.2	4.2	3.2	2.1	2.6
21	2.1	3.0	7.4	8.1	12	14	6.5	3.9	3.6	2.8	1.9	2.2
22	2.1	2.8	6.9	8.1	22	14	6.5	4.2	3.4	2.4	1.9	2.1
23	2.1	2.8	26	7.7	212	12	9.5	4.2	3.2	2.2	2.1	2.1
24	2.1	3.9	57	8.1	96	17	28	3.9	3.2	2.2	1.9	3.9
25	2.2	7.3	25	21	38	13	14	3.9	3.4	2.2	1.9	3.0
26	2.2	5.1	14	17	25	11	11	4.2	3.6	2.1	1.9	2.6
27	2.1	4.2	11	11	21	10	10	3.4	3.2	2.1	1.9	2.4
28	2.1	3.6	10	11	18	16	14	3.2	3.0	2.2	1.8	2.2
29	2.1	3.4	9.5	94	---	42	10	3.2	2.8	2.1	1.9	2.2
30	2.2	3.4	10	25	---	19	10	3.9	2.6	2.1	2.2	2.1
31	2.2	---	29	18	---	14	---	3.9	---	1.9	2.2	---
TOTAL	64.3	104.4	417.1	554.6	712.1	529	290.9	170.9	199.7	96.9	73.8	77.4
MEAN	2.07	3.48	13.5	17.9	25.4	17.1	9.70	5.51	6.66	3.13	2.38	2.58
MAX	2.8	7.3	57	94	212	42	28	9.5	46	12	7.3	4.5
MIN	1.9	2.1	2.9	7.7	6.8	10	6.5	3.2	2.6	1.9	1.8	1.9
CFSM	.28	.48	1.85	2.45	3.47	2.34	1.33	.75	.91	.43	.33	.35
IN.	.33	.53	2.12	2.82	3.62	2.69	1.48	.87	1.02	.49	.38	.39

CAL YR 1974 TOTAL 3001.4 MEAN 8.22 MAX 110 MIN 1.4 CFSM 1.12 IN 15.27
WTR YR 1975 TOTAL 3291.1 MEAN 9.02 MAX 212 MIN 1.8 CFSM 1.23 IN 16.75

EXTREMES.--Current year: Peak discharges above base of 200 ft³/s (5.66 m³/s) and maximums (*):

DATE	TIME	G. H.	Discharge	DATE	TIME	G. H.	DISCHARGE
02-23	0445	*3.24	*422	06-06	0015	2.49	258

Minimum discharge: 1.8 ft³/s (0.051 m³/s) Aug. 27, 28, Sept. 3, 9, 10.

GREAT MIAMI RIVER BASIN

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03266500 MAD RIVER AT ZANESFIELD, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1965 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 03...	1030	12	2.0	12.6	91	530	8.0	6.3	75	30	5.2	1.5
AUG. 18...	0925	2.4	17.0	8.0	82	616	7.5	9.4	84	35	5.4	2.2

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LITY AS CAC03 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 03...	332	0	5.3	272	8.7	40	.3	.03	.01	1.2	.03	331
AUG. 18...	394	0	20	323	10	37	.2	.02	.01	.56	.03	378

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (MG) (UG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 03...	310	38	20	30	--	--	--	--	--	--	--
AUG. 18...	350	31	10	50	0	<10	10	3	100	<.5	.9

GREAT MIAMI RIVER BASIN

445

03267000 MAD RIVER NEAR URBANA, OHIO

LOCATION.--Lat 40°06'27", long 83°47'57", on west line of sec. 35, T.5E., R.11N., Champaign County, 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, and 2.5 mi (4.0 km) west of Urbana.

DRAINAGE AREA.--162 mi² (420 km²).

GAGE.--Water-stage recorder. Datum of gage is 985.22 ft (300.295 m) above mean sea level. Prior to May 18, 1930, nonrecording gage at same site and datum. May 18, 1930, to Sept. 30, 1931, nonrecording gage at site 600 ft (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.--Discharge records good. Water-quality data collected at this site 1965 to 1974.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--42 years, 142 ft³/s (4.021 m³/s), 11.91 in/yr (303 mm/yr).

EXTREMES.--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.

COOPERATION.--Gage height graph, tapes and 10 discharge measurements furnished by Miami Conservancy District.

REVISIONS (WATER YEARS).--WSP 1305: 1930(M). WSP 1505: 1956. WSP 1625: 1929. WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	78	94	356	356	380	307	211	137	116	111	92
2	86	76	94	206	328	340	289	202	135	115	109	91
3	85	77	86	185	301	320	283	200	136	119	113	91
4	85	88	80	184	279	300	259	217	134	589	113	92
5	85	120	80	162	268	290	249	200	140	376	108	88
6	83	98	83	156	315	303	243	192	297	225	108	95
7	82	91	88	152	260	370	236	186	181	217	106	88
8	82	86	161	357	230	365	228	180	152	261	102	87
9	83	84	167	638	220	309	219	174	143	187	100	85
10	81	82	110	468	200	307	216	168	140	163	99	85
11	81	85	110	612	210	288	210	166	146	152	101	92
12	81	97	117	340	210	487	203	170	149	143	98	108
13	81	95	150	263	199	480	197	166	139	143	97	95
14	81	97	156	228	191	372	193	162	143	147	118	90
15	84	97	183	207	191	328	190	159	146	137	161	87
16	83	92	228	197	287	330	188	155	150	131	139	89
17	82	90	205	183	577	389	185	154	145	129	117	85
18	79	88	169	194	494	512	184	153	156	216	109	92
19	79	87	157	209	335	437	189	150	138	333	105	96
20	82	92	143	186	281	384	177	146	132	192	105	93
21	80	91	138	176	252	342	172	144	131	162	102	89
22	80	88	132	171	245	329	173	150	128	146	100	87
23	79	86	135	167	1860	307	181	157	125	138	100	85
24	81	88	390	167	2130	310	332	147	123	134	96	93
25	79	107	301	264	792	289	278	142	123	129	93	93
26	78	106	213	317	560	263	266	145	135	126	92	90
27	77	99	187	206	480	253	225	139	126	124	91	88
28	77	95	174	193	430	267	251	133	123	124	89	85
29	77	90	166	1100	---	613	231	131	120	117	89	81
30	77	90	165	579	---	422	208	135	118	114	95	82
31	79	---	188	405	---	338	---	134	---	112	92	---
TOTAL	2516	2740	4850	9228	12481	11024	6762	5068	4291	5517	3258	2694
MEAN	81.2	91.3	156	298	446	356	225	163	143	178	105	89.8
MAX	87	120	390	1100	2130	613	332	217	297	589	161	108
MIN	77	76	80	152	191	253	172	131	118	112	89	81
CFSM	.50	.56	.96	1.84	2.75	2.20	1.39	1.01	.88	1.10	.65	.55
IN.	.58	.63	1.11	2.12	2.87	2.53	1.55	1.16	.99	1.27	.75	.62

CAL YR 1974 TOTAL 66412 MEAN 182 MAX 1280 MIN 76 CFSM 1.12 IN 15.25
WTR YR 1975 TOTAL 70429 MEAN 193 MAX 2130 MIN 76 CFSM 1.19 IN 16.17

EXTREMES.--Current year: Peak discharges above base of 1,400 ft³/s (39.6 m³/s) and maximums (*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-29	0730	5.64	1,560	02-24	0330	*7.98	*3,430

Minimum discharge: 76 ft³/s (2.15 m³/s) Nov. 2.

GREAT MIAMI RIVER BASIN

03267900 MAD RIVER AT ST. PARIS PIKE AT EAGLE CITY, OHIO

LOCATION.--Lat 39°57'51", long 83°49'54", in W 1/2 sec. 1, R. 10, T.4, Clark County, 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, and 3.3 mi (5.3 km) south of Tremont City.

DRAINAGE AREA.--310 mi² (803 km²).

GAGE.--Water-stage recorder. Datum of gage is 904.66 ft (275.740 m) above mean sea level.

REMARKS.--Discharge 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. The pumpage averaged 24.7 ft³/s (0.70 m³/s) in 1975 and is returned as sewage 1.4 mi (2.3 km) upstream from the station near Springfield.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--10 years, 310 ft³/s (8.779 m³/s).

EXTREMES.--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, 94 ft³/s (2.66 m³/s) Oct. 4, 1965, Sept. 12, 18, 1966.

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).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	168	135	183	776	802	739	576	455	244	194	181	158
2	163	131	181	455	731	671	535	419	230	193	178	152
3	161	129	168	411	663	625	519	399	227	238	197	150
4	161	168	161	399	606	593	473	422	222	3580	219	169
5	155	227	155	330	585	572	451	383	238	915	187	152
6	153	188	155	309	772	556	436	363	466	571	193	167
7	153	168	186	292	618	675	426	341	323	463	183	148
8	151	157	585	900	500	687	415	326	266	474	174	143
9	151	146	496	1370	440	580	403	319	244	382	170	140
10	148	142	305	1120	400	576	395	305	233	325	169	138
11	146	159	262	1410	420	535	379	298	259	296	174	162
12	146	181	278	751	400	1080	363	309	259	276	172	192
13	144	170	395	551	370	972	352	292	233	297	164	165
14	148	168	419	455	360	743	345	282	244	360	184	152
15	170	165	473	399	370	640	341	275	244	270	277	146
16	159	157	679	348	621	640	334	266	244	246	241	145
17	153	148	527	305	1220	818	326	262	241	242	196	143
18	148	146	399	371	1060	1180	323	266	256	823	182	161
19	146	146	345	411	715	887	334	259	227	706	173	162
20	153	210	292	323	580	731	312	250	217	418	169	159
21	146	188	275	285	511	640	298	244	217	333	162	150
22	148	168	256	275	484	614	298	250	210	284	158	146
23	153	159	259	266	4460	564	337	262	207	258	165	145
24	148	181	760	266	4400	564	723	244	188	242	155	164
25	140	253	667	519	1540	527	793	238	204	229	151	164
26	135	227	444	675	1090	488	703	244	223	217	150	156
27	133	202	356	395	929	466	523	235	222	209	147	149
28	131	188	312	348	830	523	564	227	207	210	144	144
29	136	174	288	3060	---	1300	500	225	200	199	156	140
30	140	168	282	1280	---	830	447	233	196	191	184	139
31	136	---	375	904	---	644	---	233	---	186	168	---
TOTAL	4623	5149	10918	19959	26477	21660	13224	9126	7191	13827	5523	4601
MEAN	149	172	352	644	946	699	441	294	240	446	178	153
MAX	170	253	760	3060	4460	1300	793	455	466	3580	277	192
MIN	131	129	155	266	360	466	298	225	188	186	144	138

CAL YR 1974 TOTAL 127036 MEAN 348 MAX 2990 MIN 129
WTR YR 1975 TOTAL 142278 MEAN 390 MAX 4460 MIN 129

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-29	0330	11.78	4,230	07-04	0530	14.09	6,530
02-23	2330	*15.63	*8,400				

Minimum daily discharge: 129 ft³/s (3.65 m³/s) Nov. 3.

GREAT MIAMI RIVER BASIN

447

03267900 MAD RIVER AT ST. PARIS PIKE AT EAGLE CITY, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1966 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 12...	1045	1420	5.5	11.2	89	501	7.8	5.9	64	21	6.2	2.2
AUG. 18...	1230	183	18.5	9.5	100	696	7.9	8.4	92	36	7.4	2.1

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 12...	246	0	6.2	202	16	47	.4	.19	.04	2.9	.46	284
AUG. 18...	382	0	7.7	313	15	67	.2	.01	.06	2.8	.04	416

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 12...	250	45	40	10	--	--	--	--	--	--	--
AUG. 18...	380	65	10	10	0	<10	0	1	30	<.5	.3

GREAT MIAMI RIVER BASIN

03267950 BUCK CREEK NEAR NEW MOOREFIELD, OHIO

LOCATION.--Lat 40°00'38", long 83°41'56", in SE 1/4 sec. 5, R.10, T.5, Clark County, on right bank at downstream side of bridge on State Highway 4, 2,000 ft (610 m) upstream from East Fork Buck Creek, 1.7 mi (2.7 km) northeast of New Moorefield, and 2.6 mi (4.2 km) downstream from Dugan Ditch.

DRAINAGE AREA.--30.5 mi² (79.0 km²).

GAGE.--Water-stage recorder. Datum of gage 1,025.10 ft (312.450 m) above mean sea level. Prior to May 23, 1967 nonrecording gage at same site and datum.

REMARKS.--Discharge records fair.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--April 1967 to current year.

AVERAGE DISCHARGE.--8 years, 29.0 ft³/s (0.821 m³/s), 12.91 in/yr (328 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 1,190 ft³/s (33.7 m³/s) May 25, 1970, gage height, 9.09 ft (2.771 m); minimum, 6.2 ft³/s (0.18 m³/s) Feb. 17, 1968, result of freezeup.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	13	11	31	48	75	52	39	34	24	23	19
2	20	13	12	21	47	71	52	37	33	24	24	18
3	19	13	12	21	44	69	50	36	33	24	24	18
4	19	15	12	22	42	67	49	36	33	59	26	21
5	18	16	11	20	43	68	49	36	33	33	25	18
6	18	14	11	20	52	66	49	36	37	31	25	19
7	18	13	12	20	42	73	47	35	33	35	24	18
8	18	13	27	55	38	69	48	35	33	31	23	18
9	17	12	21	102	36	63	47	34	32	28	23	17
10	17	12	14	65	34	62	47	34	31	28	23	17
11	17	13	13	99	35	61	46	34	33	28	23	20
12	17	14	15	54	33	124	46	34	32	26	22	20
13	16	13	20	46	32	80	44	33	31	30	21	19
14	17	12	20	38	31	66	43	33	33	31	22	18
15	17	12	22	32	30	63	42	33	31	27	24	18
16	17	12	36	28	44	64	42	33	31	26	23	18
17	17	12	21	26	97	85	41	33	33	26	21	18
18	16	11	16	31	60	81	41	33	33	31	21	20
19	16	11	16	35	45	72	42	33	29	31	21	20
20	16	15	15	29	41	66	40	33	29	28	20	20
21	16	14	15	27	40	62	40	33	28	26	19	19
22	15	12	15	27	40	61	39	32	28	26	19	18
23	15	11	16	27	538	59	41	33	28	26	19	18
24	15	11	40	35	350	59	51	32	27	26	18	19
25	14	16	28	45	128	57	42	32	27	25	18	19
26	14	13	21	40	95	55	41	33	27	24	18	18
27	14	12	18	31	87	55	38	32	26	24	17	18
28	13	12	18	32	81	57	39	32	26	24	17	18
29	13	11	18	383	---	87	37	33	26	24	20	18
30	14	11	18	69	---	60	36	35	25	23	24	18
31	13	---	21	52	---	54	---	35	---	23	20	---
TOTAL	506	382	565	1563	2233	2111	1321	1052	915	872	667	557
MEAN	16.3	12.7	18.2	50.4	79.8	68.1	44.0	33.9	30.5	28.1	21.5	18.6
MAX	20	16	40	383	538	124	52	39	37	59	26	21
MIN	13	11	11	20	30	54	36	32	25	23	17	17
CFSM	.53	.42	.60	1.65	2.62	2.23	1.44	1.11	1.00	.92	.70	.61
IN.	.62	.47	.69	1.91	2.72	2.57	1.61	1.28	1.12	1.06	.81	.68

CAL YR 1974 TOTAL 10933 MEAN 30.0 MAX 207 MIN 11 CFSM .98 IN 13.33
WTR YR 1975 TOTAL 12744 MEAN 34.9 MAX 538 MIN 11 CFSM 1.14 IN 15.54

EXTREMES.--Current year: Peak discharges above base of 150 ft³/s (4.25 m³/s) and maximums (*):

DATE	TIME	G. H.	DISCHARGES	DATE	TIME	G. H.	DISCHARGES	DATE	TIME	G. H.	DISCHARGES
01-09	0230	5.83	315	02-17	1845	5.30	165	03-12	1130	5.45	208
01-29	0445	8.27	988	02-23	2345	*871	*1,150	03-17	2130	5.14	159

Minimum discharge: 6.6 ft³/s (0.19 m³/s) Dec. 1 result of freezeup.

GREAT MIAMI RIVER BASIN
03267950 BUCK CREEK NEAR NEW MOOREFIELD, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD, --1967 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 11...	--	67	6.0	11.8	94	750	8.0	7.8	94	35	6.0	1.4
AUG. 19...	1150	21	18.5	9.0	96	718	7.6	9.7	92	40	4.2	1.7

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 11...	382	0	6.1	313	14	63	.2	.01	.01	4.6	.06	410
AUG. 19...	396	0	16	325	13	55	.4	.00	.01	4.2	.06	411

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 11...	380	66	30	20	--	--	--	--	--	--	--	--
AUG. 19...	390	70	10	10	0	<10	0	2	10	<.5	3.6	.3

GREAT MIAMI RIVER BASIN

03267960 EAST FORK BUCK CREEK NEAR NEW MOOREFIELD, OHIO

LOCATION.--Lat 40°00'22", long 83°41'37", in SE 1/4 sec. 5, R.10, T.5, Clark County, on right bank at downstream side of bridge on Baldwin Lane, 1,500 ft (457 m) upstream from mouth, 0.6 mi (1.0 km) downstream from unnamed left bank tributary, and 1.6 mi (2.6 km) northeast of New Moorefield.

DRAINAGE AREA.--28.7 mi² (74.3 km²).

GAGE.--Water-stage recorder. Datum of gage 1,022.71 ft (311.722 m) above mean sea level. Prior to May 23, 1967, nonrecording gage at same site and datum.

REMARKS.--Discharge records good, except those above 400 ft³/s (11.3 m³/s), which are fair.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--April 1967 to current year.

AVERAGE DISCHARGE.--8 years, 36.9 ft³/s (1.045 m³/s), 17.46 in/yr (434 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 1,180 ft³/s (33.4 m³/s) Aug. 9, 1969, gage height, 9.98 ft (3.042 m), from rating curve extended above 290 ft³/s (8.21 m³/s); maximum gage height 10.18 ft (3.103 m) Jan. 24, 1975; minimum discharge, 6.2 ft³/s (0.18 m³/s) part of each day June 13-15, 21, July 19-22, 24, Aug. 1-3, 5-7, 11, 1971.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	15	26	63	126	54	53	49	29	20	15	16
2	15	14	26	45	118	49	52	45	27	20	15	16
3	15	15	25	43	108	48	75	43	27	21	16	16
4	15	22	24	41	102	50	53	42	26	79	19	23
5	14	32	24	40	107	57	48	41	27	32	19	18
6	14	26	24	38	129	56	47	39	37	28	20	18
7	14	23	34	36	102	86	44	38	29	26	18	16
8	14	22	107	122	95	71	44	37	27	25	16	16
9	13	21	60	146	91	62	43	37	27	24	16	15
10	13	20	44	125	83	61	42	36	26	23	16	15
11	13	23	38	130	89	59	41	36	29	23	16	22
12	14	32	54	68	91	284	39	36	28	22	15	27
13	14	26	58	57	87	108	39	35	26	23	15	21
14	14	24	57	50	85	78	38	33	26	22	17	19
15	18	23	64	47	83	71	38	33	25	21	21	18
16	16	22	95	44	115	79	37	32	25	20	18	17
17	15	22	63	41	130	110	37	31	27	22	17	17
18	15	21	50	61	120	90	37	31	27	26	16	21
19	14	21	45	56	100	85	42	30	25	24	17	21
20	17	28	40	47	94	69	37	30	24	23	15	21
21	17	28	38	43	92	62	36	29	24	21	15	19
22	17	25	36	40	91	61	36	29	23	20	15	18
23	17	24	41	40	800	56	43	28	22	19	15	17
24	17	27	107	44	550	60	118	28	22	19	15	21
25	17	43	72	84	155	53	97	28	23	19	14	19
26	16	33	52	62	90	49	70	27	23	18	14	19
27	15	28	45	47	75	48	56	26	22	18	14	18
28	15	26	41	47	62	61	60	26	21	17	13	17
29	15	24	40	366	---	127	50	26	21	17	15	16
30	15	24	38	138	---	69	47	28	20	16	23	16
31	15	---	57	127	---	57	---	29	---	16	18	---
TOTAL	469	734	1525	2338	3970	2330	1499	1038	765	724	508	553
MEAN	15.1	24.5	49.2	75.4	142	75.2	50.0	33.5	25.5	23.4	16.4	18.4
MAX	18	43	107	366	800	284	118	49	37	79	23	27
MIN	13	14	24	36	62	48	36	26	20	16	13	15
CFSM	.53	.85	1.71	2.63	4.95	2.62	1.74	1.17	.89	.82	.57	.64
IN.	.61	.95	1.98	3.03	5.15	3.02	1.94	1.35	.99	.94	.66	.72

CAL YR 1974 TOTAL 13834 MEAN 37.9 MAX 332 MIN 13 CFSM 1.32 IN 17.93
WTR YR 1975 TOTAL 16453 MEAN 45.1 MAX 800 MIN 13 CFSM 1.57 IN 21.33

EXTREMES.--Current year: Peak discharges above base of 350 ft³/s (9.91 m³/s) and maximums(*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-08	2130	7.70	450	03-12	0730	8.24	675
01-24	0215	*10.18	*1,170				

Minimum discharge, 12 ft³/s (0.34 m³/s) Aug. 28.

GREAT MIAMI RIVER BASIN

451

03267960 EAST FORK BUCK CREEK NEAR NEW MOOREFIELD, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1967 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 11...	--	59	7.0	11.0	90	800	7.9	8.7	100	40	7.1	1.5
AUG. 19...	1335	16	19.0	9.0	110	645	8.0	10	100	40	5.3	1.6

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
MAR. 11...	384	0	7.7	315	16	90	.4	.03	.01	2.1	.06	453
AUG. 19...	392	0	6.3	322	12	84	.1	.01	.01	.84	.03	446

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 11...	410	99	50	70	--	--	--	--	--	--	--	--
AUG. 19...	410	93	30	50	1	<10	10	2	30	<.5	3.6	.9

GREAT MIAMI RIVER BASIN

03268000 BUCK CREEK AT NEW MOOREFIELD, OHIO

LOCATION.--Lat 39°59'31", long 83°42'53", in NE 1/4 sec. 9, R.10, T.5, Clark County, on downstream side of bridge on Moorefield-Catawba Road, at New Moorefield, 1.7 mi (2.7 km) downstream from gaging station on Buck Creek near New Moorefield, and 1.3 mi (2.1 km) downstream from East Fork Buck Creek.

DRAINAGE AREA.--65.3 mi² (169 km²).

GAGE.--Water-quality recorder.

REMARKS.--Interruptions in the daily water-quality records were due to malfunctions of the instrument. Discharges are computed from the combined discharges of Buck Creek near New Moorefield, Ohio, station 03267950, drainage area 30.5 mi² (79.0 km²), and East Fork Buck Creek near New Moorefield, Ohio, station 03267960, drainage area 28.7 mi² (74 km²).

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--July to September 1970, November 1970 to September 1975.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL IRON (FE) (UG/L)
OCT. 29...	1140	28	12.5	700	7.9	11.4	110	7.2	20	120
DEC. 11...	1110	72	4.5	725	7.7	12.0	92	9.4	20	580
JAN. 14...	1035	63	1.0	725	7.8	13.0	92	9.6	40	520
MAR. 04...	1030	124	4.0	710	7.6	14.0	107	9.0	10	530
APR. 14...	1350	72	7.0	700	7.9	12.5	100	7.1	130	280
MAY 30...	1120	67	17.0	710	8.0	6.7	69	9.3	30	530

DATE	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKALINITY AS CaCO ₃ (MG/L)
OCT. 29...	30	60	91	32	5.1	1.6	332	0	6.7	272
DEC. 11...	60	100	100	40	5.0	1.2	370	0	12	303
JAN. 14...	70	70	100	36	5.5	1.8	370	0	9.4	303
MAR. 04...	50	50	92	38	5.8	1.8	368	0	15	302
APR. 14...	40	40	100	39	5.1	1.3	348	0	7.0	285
MAY 30...	40	50	99	35	5.3	1.5	363	0	5.8	298

DATE	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	TOTAL FLUORIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	TOTAL RESIDUE (MG/L)	HARDNESS (CA+MG) (MG/L)	COLOR (PLATINUM-COBALT UNITS)
OCT. 29...	77	14	.3	.00	2.7	.01	410	411	360	2
DEC. 11...	84	15	.3	.00	3.0	.05	477	483	410	4
JAN. 14...	85	14	.2	.03	3.4	.08	472	499	400	3
MAR. 04...	78	17	.4	.02	3.5	.06	463	467	390	4
APR. 14...	70	16	.4	.01	3.4	.06	442	--	410	3
MAY 30...	69	15	.2	.03	2.9	.05	476	508	390	4

SPECIFIC CONDUCTANCE (MICRONHOS/CM AT 25°C)

EXTREMES.--Period of record: Maximum, 805 micromhos Mar. 17, 1975; minimum, 206 micromhos Feb. 17, 1971.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---					---	---	---	---	701	686
2	722	712					694	678	---	---	703	694
3	725	702					695	673	---	---	701	694
4	723	697					684	672	---	---	712	697
5	722	686					695	684	468	440	712	700
6	719	680					694	692	628	413	710	700
7	713	671					695	692	667	630	703	624
8	700	673					694	389	676	664	681	647
9	699	673					620	378	675	662	701	683
10	---	---					641	440	678	669	692	684
11	---	---					617	434	676	666	700	691
12	---	---					670	621	669	650	694	373
13	---	---					683	672	670	659	659	571
14	---	---					692	680	672	662	673	653
15	---	---					---	---	670	647	695	661
16	---	---					---	---	641	524	681	648
17	---	---					---	---	577	461	805	511
18	---	---					---	---	620	506	652	517
19	---	---					---	---	689	620	653	641
20	---	---					---	---	705	689	680	656
21	---	---					---	---	710	701	691	680
22	---	---					---	---	712	675	687	681
23	---	---					---	---	624	258	691	683
24	---	---					---	---	442	269	686	676
25	---	---					---	---	627	551	681	678
26	---	---					---	---	670	628	684	678
27	---	---					---	---	687	661	683	680
28	---	---					---	---	691	681	680	595
29	---	---					---	---	---	---	613	496
30	---	---					---	---	---	---	662	618
31	---	---					---	---	---	---	686	664
MONTH	---	---					---	---	712	258	805	373
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	687	680	694	652	752	669	746	658	707	669	696	689
2	689	681	696	663	752	690	742	647	707	669	703	681
3	661	558	703	669	752	690	726	667	707	678	700	638
4	681	661	700	658	761	690	683	377	707	584	687	619
5	684	673	700	661	761	678	709	636	705	619	707	667
6	687	676	694	659	726	652	724	711	711	672	698	676
7	687	680	729	672	763	689	733	676	709	679	707	678
8	722	681	731	678	759	689	707	694	711	672	707	672
9	719	715	744	672	767	689	724	689	711	670	705	665
10	715	708	763	681	763	692	729	694	709	670	703	665
11	712	705	763	689	748	672	733	694	705	663	700	643
12	711	705	763	692	757	687	733	690	703	665	692	649
13	707	693	765	687	761	690	731	612	703	663	705	689
14	713	692	763	689	746	643	687	618	690	667	707	683
15	720	709	763	694	759	683	718	678	696	650	707	674
16	720	694	763	683	761	683	722	678	700	676	703	690
17	718	690	763	679	757	661	726	681	707	669	707	672
18	720	696	763	692	742	618	724	610	705	667	694	672
19	713	674	761	690	757	681	689	643	703	670	703	681
20	705	683	767	687	759	685	716	692	700	658	703	672
21	713	679	765	689	763	670	726	669	711	663	705	676
22	703	670	761	692	761	672	726	667	709	665	705	676
23	696	612	759	689	761	670	722	665	705	665	703	676
24	632	418	765	689	757	670	720	667	705	663	692	675
25	663	477	765	689	750	665	713	663	703	665	703	690
26	685	601	757	687	759	659	718	670	700	665	707	689
27	698	683	765	687	750	656	716	663	698	658	703	676
28	689	672	763	696	750	652	711	665	696	658	703	665
29	703	679	757	685	735	647	709	663	696	580	700	667
30	700	683	754	685	746	650	707	663	667	550	698	666
31	---	---	759	676	---	---	707	665	689	670	---	---
MONTH	722	418	767	652	767	618	746	377	711	550	707	619
YEAR	805	258										

PERIOD OF RECORD.--December 1970 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	17.0	13.5	---	---	---	---	---	---	7.0	4.0
2	11.5	8.5	17.5	13.5	---	---	6.0	3.0	---	---	7.0	3.5
3	13.0	7.5	16.5	12.0	---	---	6.0	5.0	---	---	7.5	3.5
4	13.0	8.0	---	---	---	---	6.5	4.5	---	---	9.5	4.0
5	15.5	9.5	---	---	---	---	7.0	3.5	7.5	6.5	9.5	5.0
6	16.5	11.5	---	---	---	---	6.0	4.0	6.5	3.5	11.0	6.5
7	15.0	11.5	---	---	---	---	8.0	5.0	5.5	1.5	9.0	6.5
8	13.5	8.5	---	---	---	---	7.5	6.0	5.5	2.0	7.5	5.0
9	14.5	9.5	---	---	---	---	7.5	6.0	6.0	2.0	9.5	3.5
10	---	---	---	---	---	---	9.0	6.0	5.5	0.5	7.5	5.5
11	---	---	---	---	---	---	9.0	5.5	8.0	4.5	9.0	6.0
12	---	---	---	---	---	---	5.5	4.5	7.5	4.0	7.5	3.5
13	---	---	---	---	---	---	4.5	2.5	6.5	2.5	7.5	5.5
14	---	---	---	---	---	---	4.5	1.5	7.5	3.0	6.0	3.0
15	---	---	---	---	---	---	---	---	8.0	5.5	11.0	4.5
16	---	---	---	---	---	---	---	---	7.0	4.5	9.0	6.0
17	---	---	---	---	---	---	---	---	7.0	4.5	12.5	6.0
18	---	---	---	---	---	---	---	---	7.5	5.5	10.5	6.5
19	---	---	---	---	---	---	---	---	7.0	5.0	10.0	8.5
20	---	---	---	---	---	---	---	---	9.5	5.0	14.5	7.5
21	---	---	---	---	---	---	---	---	10.0	5.0	14.5	8.0
22	12.5	8.0	---	---	---	---	---	---	11.0	6.5	12.0	9.0
23	14.0	9.0	---	---	---	---	---	---	10.5	7.5	14.5	7.0
24	14.5	11.5	---	---	---	---	---	---	11.0	6.0	15.5	10.0
25	14.5	11.5	---	---	---	---	---	---	6.0	4.5	9.5	6.0
26	---	---	---	---	---	---	---	---	8.0	4.0	8.0	5.0
27	---	---	---	---	---	---	---	---	8.0	4.0	6.5	4.0
28	---	---	---	---	---	---	---	---	8.0	5.5	7.0	5.5
29	---	---	---	---	---	---	---	---	---	---	11.5	5.5
30	17.0	13.5	---	---	---	---	---	---	---	---	7.5	4.5
31	18.0	13.0	---	---	---	---	---	---	---	---	12.5	4.0
MONTH	---	---	---	---	---	---	---	---	11.0	0.5	15.5	3.0
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	6.5	16.5	12.5	21.0	14.0	24.5	12.5	25.5	19.0	20.5	18.0
2	16.0	8.0	20.0	9.5	16.5	12.5	26.0	17.0	25.0	19.0	23.5	16.0
3	12.5	5.0	14.5	11.0	19.0	12.0	24.0	17.5	23.5	19.5	23.0	17.5
4	11.0	4.0	16.5	10.5	22.0	13.0	25.5	19.0	23.0	19.0	23.5	17.5
5	12.0	4.0	18.0	10.0	20.5	15.5	24.5	17.5	24.0	18.5	23.0	17.0
6	12.5	5.0	19.0	11.0	22.0	14.0	24.5	17.0	21.0	18.0	21.5	17.0
7	13.5	5.5	20.0	10.5	19.5	13.5	22.0	18.0	23.0	15.5	22.0	14.5
8	13.5	6.5	18.0	11.0	22.0	11.5	25.0	17.5	24.0	15.5	21.5	15.5
9	9.0	6.0	20.5	11.0	21.0	12.5	25.5	18.0	24.0	16.0	21.5	16.0
10	15.5	7.0	21.5	10.5	22.5	13.5	23.0	17.0	22.0	18.0	21.5	14.0
11	13.5	6.5	20.5	10.5	19.0	15.0	22.5	15.5	25.0	18.0	19.0	17.0
12	14.0	6.5	18.5	12.0	23.0	15.0	22.5	15.0	24.5	18.0	18.5	15.5
13	15.5	6.5	19.0	11.0	24.0	14.0	21.0	15.5	26.0	19.0	17.0	12.0
14	9.5	6.5	20.0	10.5	24.0	14.5	22.5	15.0	23.0	19.5	18.0	11.0
15	10.0	7.5	18.5	12.0	22.0	16.0	23.5	15.5	23.5	19.0	18.0	13.0
16	12.5	6.0	19.5	11.0	24.0	13.0	22.0	17.0	23.5	19.0	16.5	15.0
17	15.5	7.5	19.5	11.5	23.0	15.0	21.5	16.5	23.5	18.0	18.0	15.0
18	14.5	11.0	22.5	13.5	25.0	17.0	20.0	16.5	24.5	17.5	17.0	16.0
19	13.5	10.0	24.0	12.5	28.0	12.5	25.5	17.5	22.5	17.5	19.0	15.5
20	11.0	7.5	25.0	14.0	26.0	17.5	22.5	19.0	24.5	17.5	19.5	15.5
21	16.0	7.0	24.0	15.0	27.0	17.0	26.0	17.5	25.0	18.5	17.0	14.0
22	17.5	9.0	22.5	15.0	27.5	17.0	25.5	17.5	25.0	19.5	15.5	13.0
23	---	---	22.0	14.5	26.0	17.5	24.5	18.0	25.5	19.5	15.0	13.0
24	14.5	11.5	24.5	14.0	25.5	11.0	25.0	19.0	26.0	20.0	14.0	13.0
25	13.5	10.5	24.5	15.5	24.5	17.0	25.0	18.0	25.5	20.5	14.0	13.5
26	17.0	8.5	24.0	15.0	24.5	16.5	24.0	16.5	24.5	20.0	14.5	13.5
27	12.5	8.5	24.5	16.0	25.0	16.5	25.0	17.0	24.5	18.0	17.0	13.0
28	11.5	9.5	24.0	13.0	25.5	16.5	25.5	18.5	24.0	17.5	18.0	11.5
29	19.5	9.0	21.5	14.0	26.0	16.5	25.5	17.5	23.0	19.0	17.0	12.0
30	16.5	13.5	23.0	15.0	26.5	17.0	25.5	18.0	22.0	19.0	18.0	13.5
31	---	---	20.0	16.0	---	---	26.0	18.5	21.0	18.5	---	---
MONTH	19.5	4.0	25.0	9.5	28.0	11.0	26.0	12.5	26.0	15.5	23.5	11.0
YEAR	28.0	0.5										

GREAT MIAMI RIVER BASIN

455

03268090 CLARENCE J. BROWN RESERVOIR NEAR SPRINGFIELD, OHIO

LOCATION.--Lat 39°57'01", long 83°44'51", in SE 1/4 sec. 13, R.10, T.5, Clark County, in gatehouse of dam on Buck Creek, 1.3 mi (2.1 km) upstream from Beaver Creek, 4.0 mi (6.4 km) northeast of city hall in Springfield, and 7.3 mi (11.7 km) upstream from confluence with Mad River.

DRAINAGE AREA.--82.0 mi² (212 km²).

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 42,630 acre-ft (52.6 hm³) Feb. 28, elevation, 1,014.60 ft (309.250 m); minimum, 16,580 acre-ft (20.4 hm³) Oct. 1, elevation, 1,000.48 ft (304.943 m).
Period of record: Maximum contents, 42,630 acre-ft (52.6 hm³) Feb. 28, 1975, elevation, 1,014.60 ft (309.250 m); minimum, 12,990 acre-ft (16.0 hm³) May 7, 1974, elevation, 997.73 ft (304.108 m).

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.--Water-stage recorder graph and capacity table furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	1,000.48	16,580	-
Oct. 31.....	1,001.55	18,120	+1,540
Nov. 30.....	1,003.50	21,110	+2,990
Dec. 31.....	1,007.19	27,440	+6,330
CAL YR 1974.....	-	-	-
Jan. 31.....	1,010.26	33,340	+5,900
Feb. 28.....	1,014.33	42,020	+8,680
Mar. 31.....	1,011.97	36,860	-5,160
Apr. 30.....	1,012.19	37,330	+ 470
May 31.....	1,012.07	37,070	- 260
June 30.....	1,011.95	36,820	- 250
July 31.....	1,012.00	36,920	+ 100
Aug. 31.....	1,012.01	36,950	+ 30
Sept. 30.....	1,011.84	36,590	- 360
WTR YR 1975.....	-	-	+20,010

03268300 BEAVER CREEK AT BRIGHTON, OHIO

LOCATION.--Lat 39°55'46", long 83°34'04", Clark County, at culvert on U.S. Highway 40, 0.2 mi (0.3 km) west of Brighton.

DRAINAGE AREA.--3.33 mi² (8.62 km²).

PERIOD OF RECORD.--1959 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 24	11.08	3.377	380	10.8

GREAT MIAMI RIVER BASIN

03268500 BEAVER CREEK NEAR SPRINGFIELD, OHIO

LOCATION.--Lat 39°56'26", long 83°44'56", in sec. 18, R.9, T.5, Clark County, on right bank at upstream side of Croft Road Bridge, 0.8 mi (1.3 km) upstream from mouth, 2.1 mi (3.4 km) downstream from Sinking Creek, and 3.5 mi (5.6 km) east of Springfield.

DRAINAGE AREA.--39.2 mi² (102 km²).

GAGE.--Water-stage recorder. Datum of gage is 954.64 ft (290.974 m) above mean sea level (levels by Corps of Engineers). October 1942 to September 1958 at same site at datum 960.98 ft (292.907 m) above mean sea level, unadjusted.

REMARKS.--Discharge records fair except those for the winter period, which are poor.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1942 to September 1958, December 1972 to current year.

AVERAGE DISCHARGE.--18 years (1943-58, 1974-75), 40.0 ft³/s (1.133 m³/s), 13.86 in/yr (352 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 4,980 ft³/s (141 m³/s) Feb. 13, 1948, gage height, 7.95 ft (2.423 m), in gage well, datum then in use, from rating curve extended above 2,200 ft³/s (59.5 m³/s); minimum, 3.3 ft³/s (0.093 m³/s) Jan. 25, 1945. Flood of Jan. 21, 1959, reached a stage of 9.0 ft (2.74 m), datum then in use, from floodmark, discharge 4,950 ft³/s (140 m³/s), on basis of slope-area measurement of peak flow.

REVISIONS (WATER YEARS).--WSP 1335: 1943-45, 1948(M), 1952(M), WRD Ohio 1973: Drainage area. WRD Ohio 1974: 1973(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	11	30	98	100	61	62	60	47	19	11	11
2	16	11	26	58	74	56	57	56	35	14	11	11
3	15	11	25	50	64	55	83	50	32	17	11	9.7
4	14	24	23	51	60	51	59	47	29	202	16	15
5	14	39	22	43	60	50	48	44	31	59	30	12
6	12	27	22	39	72	50	45	41	91	37	18	16
7	12	22	30	36	60	73	44	39	53	29	19	13
8	11	18	142	94	50	78	41	37	40	26	15	12
9	11	17	115	286	45	59	39	33	34	23	13	12
10	11	16	65	266	40	56	37	33	31	20	13	11
11	11	19	49	348	44	53	37	30	33	20	13	17
12	10	34	56	120	43	245	37	31	39	18	14	44
13	10	30	83	86	42	292	36	32	33	19	12	25
14	12	26	86	62	40	134	35	31	29	20	14	18
15	21	23	91	52	40	93	35	31	28	18	28	16
16	22	21	164	46	49	126	35	30	26	17	23	16
17	18	20	100	41	71	143	35	29	26	17	17	16
18	16	20	67	44	118	140	35	29	28	21	15	20
19	15	20	55	48	79	97	47	26	24	26	15	27
20	16	25	46	42	61	88	39	25	22	20	13	22
21	17	29	41	39	53	69	35	24	20	18	12	19
22	16	25	38	37	50	64	35	23	18	16	12	18
23	17	23	38	45	878	61	41	23	17	14	11	17
24	17	25	111	86	831	58	204	23	15	13	10	21
25	16	44	103	70	176	54	216	23	18	14	10	23
26	15	41	66	62	106	49	165	22	20	13	9.8	19
27	13	34	53	54	82	48	94	22	20	13	9.5	18
28	11	30	46	430	70	56	87	20	19	12	8.9	17
29	11	25	42	250	---	262	71	20	19	12	9.2	16
30	11	23	41	170	---	139	59	24	19	11	16	15
31	11	---	51	145	---	82	---	25	---	11	12	---
TOTAL	443	733	1927	3298	3458	2942	1893	983	896	789	441.4	526.7
MEAN	14.3	24.4	62.2	106	124	94.9	63.1	31.7	29.9	25.5	14.2	17.6
MAX	22	44	164	430	878	292	216	60	91	202	30	44
MIN	10	11	22	36	40	48	35	20	15	11	8.9	9.7
CFSM	.36	.62	1.59	2.70	3.16	2.42	1.61	.81	.76	.65	.36	.45
IN.	.42	.70	1.83	3.13	3.28	2.79	1.80	.93	.85	.75	.42	.50

CAL YR 1974 TOTAL 15568.8 MEAN 42.7 MAX 543 MIN 9.1 CFSM 1.09 IN 14.77
WTR YR 1975 TOTAL 18330.1 MEAN 50.2 MAX 878 MIN 8.9 CFSM 1.28 IN 17.39

EXTREMES.--Current year: Peak discharges above base of 400 ft³/s (11.3 m³/s) and maximums (*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-09	0215	6.85	510	02-23	2345	*10.26	*2,200
01-11	0415	6.83	504	03-12	1300	7.84	854

Minimum discharge: 8.6 ft³/s (0.24 m³/s) Aug. 28, 29.

GREAT MIAMI RIVER BASIN
03268500 BEAVER CREEK NEAR SPRINGFIELD, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1972 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
MAR. 11...	--	53	3.0	11.4	84	660	8.1	6.5	75	30	13	1.6
AUG. 19...	0910	15	19.0	8.0	85	671	7.4	10	84	37	13	2.1

DATE	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
MAR. 11...	322	0	4.1	264	28	51	.2	.05	.02	3.5	.08	364
AUG. 19...	366	0	23	300	26	43	.0	.00	.01	3.1	.03	395

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
MAR. 11...	310	47	70	10	--	--	--	--	--	--	--	--
AUG. 19...	360	62	20	20	1	<10	10	3	10	<.5	7.7	.2

GREAT MIAMI RIVER BASIN

459

03269500 MAD RIVER NEAR SPRINGFIELD, OHIO

LOCATION.--Lat 39°55'23", long 83°52'13", in NW 1/4 sec. 16, R.9, T.4, Clark County, 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, and 3 mi (5 km) west of Springfield.

DRAINAGE AREA.--490 mi² (1,269 km²).

GAGE.--Water-stage recorder. Datum of gage is 881.42 ft (268.657 m) above mean sea level, adjustment 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.--Discharge 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.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--62 years, (1904-05, 1914-75), 485 ft³/s (13.74 m³/s), 13.44 in/yr (341 mm/yr).

EXTREMES.--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. 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.

COOPERATION.--Gage-height charts, tapes and 10 discharge measurements furnished by Miami Conservancy District.

REVISIONS (WATER YEARS).--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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	266	220	297	939	1220	1100	936	1010	452	280	285	302
2	254	212	311	610	1090	1000	885	871	449	276	285	270
3	249	207	285	594	991	900	977	667	433	394	324	303
4	239	338	272	530	911	850	831	691	394	5170	369	294
5	239	356	260	480	888	841	762	666	438	1470	397	324
6	235	300	261	448	1110	970	720	637	769	998	371	338
7	234	271	354	430	871	1120	684	561	569	753	365	294
8	221	257	860	834	728	1120	665	562	474	667	317	256
9	224	245	751	2380	672	970	650	552	422	550	255	237
10	222	236	501	2660	613	970	661	531	402	495	258	233
11	221	296	425	2480	621	916	660	500	500	439	282	422
12	220	314	477	1600	667	2340	625	531	469	415	287	474
13	217	293	633	802	595	1950	601	503	394	519	284	350
14	244	285	632	750	554	1390	580	495	388	571	326	288
15	303	273	700	730	550	1190	583	495	389	495	578	276
16	244	260	925	690	816	1140	570	485	387	410	469	258
17	233	250	725	620	1500	1330	562	469	432	403	368	252
18	234	247	559	782	1430	1600	562	460	418	1130	302	332
19	231	255	504	803	992	1530	665	456	392	1060	272	341
20	252	367	439	691	813	1260	573	450	349	636	266	344
21	234	307	411	632	719	1010	556	440	321	492	258	307
22	239	282	387	609	701	1040	560	442	307	429	253	264
23	241	268	389	592	5770	1020	726	441	298	407	257	254
24	236	327	941	596	7980	1000	1620	420	268	390	245	332
25	234	411	883	848	2300	837	1710	420	291	349	243	330
26	226	362	615	1060	1630	770	1260	408	321	330	241	289
27	222	323	500	744	1410	747	976	404	325	320	236	278
28	222	296	452	691	1300	946	1010	390	320	321	233	269
29	226	276	425	3470	---	2090	897	384	314	305	299	280
30	244	269	413	1740	---	1470	809	432	304	296	347	327
31	227	---	544	1350	---	1080	---	428	---	290	328	---
TOTAL	7333	8603	16131	32185	39442	36497	23876	16201	11989	21060	9600	9118
MEAN	237	287	520	1038	1409	1177	796	523	400	679	310	304
MAX	303	411	941	3470	7980	2340	1710	1010	769	5170	578	474
MIN	217	207	260	430	550	747	556	384	268	276	233	233
CFSM	.48	.59	1.06	2.12	2.88	2.40	1.62	1.07	.82	1.39	.63	.62
IN.	.56	.65	1.22	2.44	2.99	2.77	1.81	1.23	.91	1.60	.73	.69

CAL YR 1974 TOTAL 202692 MEAN 555 MAX 3490 MIN 207 CFSM 1.13 IN 15.39
WTR YR 1975 TOTAL 232035 MEAN 636 MAX 7980 MIN 207 CFSM 1.30 IN 17.62

EXTREMES.--Current year: Peak discharges above base of 4,000 ft³/s (113 m³/s) and maximums(*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
01-29	1030	6.75	4,120	07-04	0900	9.94	7,790
02-24	0300	*11.56	*11,400				

Minimum daily discharge, 207 ft³/s (5.86 m³/s) Nov. 3.

GREAT MIAMI RIVER BASIN

03270000 MAD RIVER NEAR DAYTON, OHIO

LOCATION.--Lat 39°47'50", long 84°05'19", in SW 1/4 sec. 7, R. 8, T.2, Greene County, on left bank in retarding basin 300 ft (91 m) upstream from Huffman Dam, 2.3 mi (3.7 km) downstream from Mud Run, and 6.2 mi (10.0 km) northeast of Dayton.

DRAINAGE AREA.--635 mi² (1,645 km²).

GAGE.--Water-stage and water-quality recorders. Datum of gage is 777.06 ft (236.848 m) above mean sea level. 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.--Discharge records good. Water-quality recorder located 900 ft (274 m) downstream from gaging station. Interruptions in the daily water-quality records were due to malfunctions of the instrument. 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.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1914 to current year. Monthly discharge only for some periods, published in WSP 1305.

AVERAGE DISCHARGE.--61 years, 622 ft³/s (17.62 m³/s), 13.30 in/yr (338 mm/yr).

EXTREMES.--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. Flood of Mar. 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.

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

REVISIONS(WATER YEARS).--WSP 453: 1915. WSP 743: 1929-32. WSP 1305: 1916(M), 1925(M), 1930-32(M). WSP 1908: 1922(M), drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	392	283	408	1310	1740	1500	1250	1450	642	405	383	412
2	356	284	441	952	1490	1300	1160	1350	610	398	376	369
3	341	273	416	839	1280	1200	1250	983	619	422	441	356
4	328	393	381	838	1160	1100	1080	959	556	5210	655	452
5	318	549	354	732	1100	1050	966	921	578	3820	607	388
6	315	434	351	672	1440	1110	916	881	916	1610	523	524
7	309	376	441	643	1130	1370	861	825	808	1090	548	426
8	306	343	1250	1090	900	1420	836	759	651	1050	466	378
9	300	325	1280	2450	780	1200	808	751	569	866	392	354
10	304	312	844	1910	730	1180	807	723	533	753	400	340
11	301	354	695	3040	770	1120	811	696	642	688	407	550
12	297	453	721	1690	840	2820	771	720	678	604	442	840
13	295	417	948	1160	800	2940	746	698	551	627	394	592
14	294	384	974	1000	742	1930	721	675	502	892	476	446
15	432	364	986	930	720	1650	724	679	489	719	798	405
16	352	345	1370	850	877	1600	710	667	511	596	735	384
17	315	326	1110	800	1720	1780	696	648	502	664	572	371
18	306	317	873	900	1970	2200	691	638	592	1180	450	455
19	302	307	767	1110	1330	1980	827	633	520	1920	405	491
20	317	450	692	900	1060	1770	733	633	475	1010	379	499
21	300	473	634	820	924	1340	698	619	423	759	363	448
22	297	389	593	790	883	1320	690	619	411	647	352	388
23	302	357	570	779	5000	1270	850	610	394	584	347	369
24	300	397	1160	772	10300	1290	2380	592	374	547	338	436
25	297	594	1350	976	5760	1100	2760	574	386	518	329	448
26	293	548	983	1440	2380	983	2380	592	484	452	324	420
27	286	465	781	1000	1960	932	1490	565	511	437	320	392
28	283	425	702	895	1700	1140	1590	551	432	427	312	375
29	283	380	651	3020	---	2760	1340	542	402	417	325	365
30	299	364	627	2700	---	2130	1150	610	410	402	507	401
31	293	---	701	1880	---	1500	---	587	---	392	474	---
TOTAL	9713	11681	24054	38888	51486	47985	32692	22750	16171	30106	13840	13074
MEAN	313	389	776	1254	1839	1548	1090	734	539	971	446	436
MAX	432	594	1370	3040	10300	2940	2760	1450	916	5210	798	840
MIN	283	273	351	643	720	932	690	542	374	392	312	340
CFSM	.49	.61	1.22	1.97	2.90	2.44	1.72	1.16	.85	1.53	.70	.69
IN.	.57	.68	1.41	2.28	3.02	2.81	1.92	1.33	.95	1.76	.81	.77

CAL YR 1974 TOTAL 265598 MEAN 728 MAX 4220 MIN 268 CFSM 1.15 IN 15.56
WTR YR 1975 TOTAL 312440 MEAN 856 MAX 10300 MIN 273 CFSM 1.35 IN 18.30

EXTREMES.--Current year: Maximum discharge, 11,400 ft³/s (323 m³/s) Feb. 24, gage height, 19.01 ft (5.794 m); minimum daily, 273 ft³/s (7.73 m³/s) Nov. 3.

GREAT MIAMI RIVER BASIN

461

03270000 MAD RIVER NEAR DAYTON, OHIO--Continued

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1947-48, 1962-63, July 1966 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
FEB. 05...	1115	1080	5.5	11.0	87	720	7.7	7.2	90	30	15	2.8
AUG. 05...	1630	601	25.0	9.8	120	640	8.4	6.5	76	36	16	3.0

DATE	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)
FEB. 05...	354	0	11	290	29	67	.3	.35	.08	3.1	.23	416
AUG. 05...	306	5	2.0	259	26	59	.3	.10	.23	2.0	.41	379

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
FEB. 05...	350	58	10	30	--	--	--	--	--	--	--	--
AUG. 05...	340	79	10	50	1	10	10	3	50	<.5	3.8	2.1

GREAT MIAMI RIVER BASIN

03270000 MAD RIVER NEAR DAYTON, OHIO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C)

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

EXTREMES.--Period of record: Maximum, 3,000 micromhos Sept. 13, 14, 1974; minimum, 165 micromhos June 26, 1971.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	701	687	732	699	795	672	666	567	---	---	666	651
2	708	696	735	702	960	705	690	567	---	---	651	645
3	729	693	732	699	834	750	738	693	---	---	654	642
4	711	699	738	510	780	723	735	720	---	---	717	654
5	720	705	654	543	726	702	741	726	753	717	738	717
6	717	696	702	621	726	690	762	738	729	630	735	723
7	714	696	717	690	807	609	765	750	696	642	774	696
8	711	696	735	699	642	522	---	---	720	684	708	660
9	714	702	732	708	594	519	---	---	735	684	693	666
10	720	708	786	705	645	591	---	---	804	729	981	690
11	720	708	798	678	684	645	---	---	780	732	828	729
12	738	708	714	645	750	687	---	---	909	723	816	447
13	732	708	714	678	717	678	723	603	915	777	567	453
14	753	708	720	702	675	660	723	663	771	720	714	543
15	717	630	726	696	678	636	744	723	771	723	822	696
16	678	597	723	705	645	594	753	738	780	711	729	591
17	726	678	744	699	669	615	762	741	699	540	690	549
18	729	708	771	702	702	669	933	729	585	510	621	480
19	735	705	783	732	894	681	816	696	657	591	651	516
20	723	690	---	---	837	720	759	711	687	663	672	630
21	711	669	---	---	783	720	783	741	711	687	705	669
22	720	684	---	---	735	717	792	744	735	645	708	672
23	729	708	---	---	768	726	771	750	603	249	693	678
24	738	711	---	---	783	585	756	735	318	240	702	669
25	735	711	---	---	597	579	792	708	603	330	705	666
26	732	702	684	660	660	597	708	603	651	603	714	696
27	726	696	693	672	708	660	702	621	672	651	741	699
28	723	696	699	681	720	702	717	708	687	672	732	579
29	729	705	699	681	720	708	---	---	---	---	594	474
30	726	702	702	669	729	711	---	---	---	---	615	501
31	723	690	---	---	720	618	---	---	---	---	672	618
MONTH	753	597	798	510	960	519	---	---	915	240	981	447
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	720	612	690	594	702	675	717	684	699	588	666	609
2	723	639	681	621	720	642	711	699	696	588	693	609
3	690	594	711	687	705	696	708	702	696	549	708	636
4	708	642	720	642	732	705	339	171	600	507	669	570
5	705	657	726	684	744	681	519	219	579	564	684	576
6	729	660	732	690	657	579	609	525	666	633	624	561
7	735	666	738	630	672	603	717	612	672	636	657	597
8	732	675	729	678	711	675	627	522	675	651	690	621
9	723	696	717	660	723	705	663	618	690	675	717	651
10	723	690	720	702	744	717	705	669	699	552	711	651
11	720	663	720	702	729	609	687	675	714	663	708	525
12	720	675	729	699	699	618	711	687	693	645	582	459
13	711	681	720	699	729	702	699	561	699	654	645	582
14	714	681	735	708	732	720	666	513	705	588	684	609
15	720	684	726	708	732	705	666	594	849	465	714	630
16	729	636	729	714	720	699	693	639	894	582	708	615
17	729	657	726	705	723	696	696	543	654	618	714	627
18	735	696	732	729	708	609	651	324	693	648	708	600
19	729	621	---	---	699	654	---	---	708	687	624	597
20	705	663	741	720	702	687	---	---	714	699	678	606
21	720	639	750	732	708	693	675	591	708	696	684	609
22	735	651	741	720	720	693	711	681	714	696	696	609
23	720	510	750	717	708	693	720	693	714	690	714	660
24	645	372	735	717	714	702	702	690	708	672	705	603
25	582	384	738	720	735	651	699	693	711	663	669	600
26	612	420	744	693	687	645	708	693	714	654	693	603
27	672	618	732	711	666	636	705	693	720	660	720	603
28	696	600	741	723	822	654	702	690	717	636	717	618
29	702	678	741	723	702	681	708	693	741	585	714	660
30	708	687	732	645	696	681	---	---	639	399	717	654
31	---	---	726	657	---	---	705	684	624	486	---	---
MONTH	735	372	750	594	822	579	720	171	894	399	720	459
YEAR	981	171										

PH (UNITS)

EXTREMES.--Period of record: Maximum, 10.1 July 21, 1973; minimum, 4.4 Apr. 8, 1971.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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

GREAT MIAMI RIVER BASIN

03270000 MAD RIVER NEAR DAYTON, OHIO--Continued

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITRE

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

EXTREMES.--Period of record: Maximum, 15.0 mg/l or higher on many days during 1970-75; minimum, 3.5 mg/l July 20, 30, 1974.

REMARKS.--Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or higher due to instrument limitations.

WATER YEAR OCTOBER 1974 TO SEPTEMBER

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.4	8.8	8.5	4.7	12.7	11.0	11.3	10.2	---	---	11.0	10.3
2	13.2	8.2	9.8	5.2	13.9	10.8	12.9	11.4	---	---	11.4	10.9
3	12.4	8.6	10.0	5.4	13.9	10.8	11.6	10.8	---	---	11.5	11.1
4	13.9	8.7	7.1	5.5	14.6	10.5	12.6	10.5	---	---	11.1	9.7
5	14.0	8.1	7.1	5.6	14.9	11.0	13.2	11.1	9.8	9.0	9.8	9.2
6	14.4	7.6	9.3	7.3	15.0	11.1	11.7	10.8	9.9	9.0	9.9	9.2
7	14.7	6.8	10.4	7.8	12.1	10.5	12.9	10.3	11.0	9.8	9.5	9.1
8	15.0	7.3	10.8	7.6	11.8	10.1	---	---	10.8	10.2	10.4	9.2
9	13.6	6.8	10.9	7.7	12.7	11.8	---	---	11.0	10.1	10.9	10.1
10	14.4	6.8	10.5	7.5	13.6	12.4	---	---	11.1	10.0	10.4	9.5
11	14.3	6.4	8.4	7.4	13.1	11.5	---	---	10.3	9.4	9.9	8.9
12	10.1	6.3	8.0	7.2	11.4	10.6	---	---	10.3	9.1	9.6	7.1
13	11.2	6.1	10.1	8.1	11.4	10.7	12.5	11.2	10.8	9.3	10.5	6.9
14	9.3	5.6	10.7	8.8	11.8	10.9	13.3	10.8	10.8	9.8	10.6	9.2
15	6.9	5.0	11.7	9.2	11.6	11.1	11.0	10.4	10.5	8.9	10.0	9.1
16	9.4	4.7	12.4	9.8	11.8	11.1	10.7	10.1	9.2	8.6	10.0	8.6
17	9.5	6.0	12.6	9.6	12.3	11.5	10.9	10.3	9.9	9.0	10.0	8.2
18	10.6	5.8	12.5	9.1	13.1	11.7	10.5	9.8	10.0	9.7	9.9	8.0
19	11.2	7.3	9.1	8.6	13.0	11.8	10.5	9.8	10.8	9.6	11.4	9.3
20	11.8	8.1	---	---	13.4	11.5	11.3	10.4	11.4	10.1	11.9	10.8
21	13.1	8.6	---	---	12.2	11.3	11.4	10.6	11.4	9.9	11.6	10.1
22	13.3	9.3	---	---	13.3	11.3	11.1	10.3	10.9	9.2	10.9	9.5
23	13.2	8.5	---	---	12.0	10.3	10.9	9.9	9.6	9.1	12.1	10.3
24	11.8	8.0	---	---	10.8	9.9	11.0	9.9	10.5	9.2	10.9	9.6
25	10.3	7.0	---	---	11.9	10.9	10.0	9.2	10.7	10.1	11.5	9.6
26	12.4	7.5	12.4	11.0	13.3	12.0	10.8	9.7	10.7	10.3	13.5	11.3
27	12.9	7.1	12.5	10.8	12.2	11.2	11.5	10.5	10.7	10.2	12.9	11.7
28	13.0	7.2	13.6	10.8	11.6	10.8	10.5	10.1	10.4	10.0	12.2	11.8
29	11.3	6.8	14.4	11.1	12.3	10.7	---	---	---	---	11.9	9.8
30	8.9	5.6	13.4	11.1	11.8	10.3	---	---	---	---	10.8	9.6
31	10.3	5.4	---	---	11.0	10.4	---	---	---	---	11.3	10.0
MONTH	15.0	4.7	14.4	4.7	15.0	9.9	---	---	11.4	8.6	13.5	6.9
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	9.4	8.4	7.0	5.6	8.4	5.1	10.4	5.3	7.4	5.8
2	---	---	11.9	8.8	6.9	6.0	8.5	5.0	9.9	5.1	7.5	5.9
3	---	---	9.9	8.1	7.3	6.2	6.0	4.9	8.5	5.0	7.5	5.7
4	13.3	11.7	11.7	8.6	7.2	5.8	7.5	7.0	6.9	3.8	8.6	5.5
5	13.3	11.0	11.9	8.6	6.5	5.5	7.4	7.2	8.9	5.1	8.7	5.9
6	13.5	11.0	11.8	8.0	6.0	5.4	7.7	7.0	9.0	6.0	8.6	6.0
7	13.8	10.7	10.7	7.7	6.1	5.8	7.3	7.0	9.7	6.3	9.4	6.6
8	13.8	10.0	10.9	7.3	6.9	5.9	7.3	6.7	9.8	6.8	9.3	6.9
9	13.6	10.0	11.4	7.7	7.0	5.8	7.3	6.8	9.8	6.5	9.5	7.0
10	15.0	10.2	11.2	7.9	6.8	5.5	7.4	7.1	9.1	6.1	9.5	7.5
11	15.0	9.6	11.1	8.1	5.8	5.3	7.9	7.1	9.3	6.2	8.1	6.9
12	15.0	9.9	10.2	7.8	6.5	5.2	8.3	7.2	9.1	5.8	8.5	6.8
13	15.0	10.0	10.5	7.7	6.5	5.2	8.5	7.2	9.2	5.5	8.8	7.7
14	14.7	9.9	10.5	8.0	6.2	5.1	8.1	7.6	8.2	5.4	8.9	7.9
15	15.0	9.7	9.9	7.8	6.1	5.0	8.2	7.2	6.5	5.6	9.0	7.9
16	15.0	9.9	10.2	7.9	6.4	5.2	8.1	7.0	7.6	6.0	8.4	7.5
17	15.0	9.3	10.0	7.9	6.2	5.1	8.0	7.1	7.9	6.4	8.7	7.7
18	12.7	8.0	8.0	7.7	8.0	4.8	8.0	7.0	8.4	6.4	8.1	7.4
19	13.1	7.5	---	---	8.5	5.2	7.7	7.2	8.2	6.2	8.6	7.0
20	15.0	8.7	8.9	6.9	8.6	5.4	7.3	6.9	8.6	6.0	8.7	7.6
21	15.0	9.6	8.3	5.7	9.1	5.1	7.7	7.0	8.9	6.0	8.9	7.5
22	15.0	8.7	8.0	5.6	9.0	5.0	7.7	6.8	8.9	5.6	9.5	7.9
23	10.6	7.9	7.9	5.5	9.3	4.9	7.7	6.8	8.7	5.5	9.3	8.1
24	9.5	9.0	8.0	5.6	9.1	4.9	8.0	6.7	8.7	5.3	8.8	8.0
25	10.1	9.0	7.7	5.5	9.1	4.7	8.4	6.6	8.7	5.3	8.8	7.8
26	10.3	9.5	7.5	5.5	7.8	4.8	8.9	6.7	8.7	5.3	9.2	8.3
27	10.9	9.3	7.6	5.3	7.5	5.2	9.5	6.8	8.6	5.3	9.4	8.3
28	10.5	9.6	7.6	5.5	8.8	5.3	9.7	6.6	8.6	5.3	9.7	8.3
29	11.5	9.0	7.6	5.5	9.1	5.3	9.7	5.9	7.6	5.0	9.9	8.4
30	10.2	8.2	6.9	5.3	9.0	5.3	9.6	5.9	6.5	5.4	9.7	8.3
31	---	---	6.9	5.3	---	---	10.6	5.3	6.7	5.2	---	---
MONTH	15.0	7.5	11.9	5.3	9.3	4.7	10.6	4.9	10.4	3.8	9.9	5.5
YEAR	15.0	3.8										

TEMPERATURE (°C) OF WATER

EXTREMES.--Period of record: Maximum, 29.5°C Aug. 18, 1972; minimum, freezing point on several days during winter periods.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.0	12.5	18.0	16.5	4.5	2.5	6.0	4.0	---	---	5.5	3.5
2	14.5	11.0	19.0	17.0	5.0	3.0	4.5	3.0	---	---	3.5	2.5
3	14.5	10.0	17.5	15.5	5.5	3.0	5.5	4.0	---	---	3.5	2.0
4	15.0	10.5	17.0	14.5	6.0	4.0	6.5	4.5	---	---	6.0	3.5
5	16.0	12.0	14.5	11.5	5.0	3.0	5.5	4.5	6.5	5.0	7.5	5.0
6	17.5	13.5	12.0	11.0	5.5	3.0	5.5	4.5	6.5	4.0	8.5	5.5
7	16.0	14.0	12.5	9.5	5.5	4.5	7.0	5.0	4.0	2.0	8.5	7.0
8	16.5	12.0	12.5	9.0	6.0	4.5	---	---	3.5	1.5	7.5	4.5
9	16.0	13.0	12.0	9.0	4.0	2.0	---	---	4.0	1.5	6.0	3.5
10	17.0	13.0	12.0	9.5	3.5	1.5	---	---	3.0	0.0	5.5	4.5
11	17.5	13.5	12.0	11.0	5.0	2.5	---	---	5.0	3.0	6.5	5.5
12	16.5	15.5	11.5	10.5	6.5	4.5	---	---	5.5	4.0	6.0	4.5
13	17.0	15.5	10.0	9.0	6.5	6.0	4.0	3.0	5.5	3.5	6.0	5.0
14	17.5	16.0	9.5	7.5	7.0	6.0	3.0	2.0	5.0	3.0	5.0	3.0
15	16.0	14.5	7.0	5.5	6.0	5.5	3.5	2.0	6.5	4.0	6.5	3.5
16	16.0	13.0	8.0	5.0	5.5	5.0	5.0	3.5	7.0	6.0	7.5	6.0
17	15.5	12.0	9.0	6.0	5.5	4.5	4.5	3.0	6.5	5.0	8.0	6.0
18	13.5	11.5	10.0	7.0	4.5	3.5	5.0	3.5	6.0	5.5	9.0	7.0
19	12.0	10.5	10.5	10.0	5.0	3.5	4.5	3.5	5.5	4.5	9.5	8.0
20	10.5	9.0	---	---	5.0	3.5	4.0	2.5	6.0	4.5	10.0	7.0
21	10.5	7.0	---	---	5.0	4.0	4.0	2.0	7.0	4.5	11.5	9.5
22	11.5	7.5	---	---	6.5	4.5	5.0	3.0	8.5	6.0	11.5	10.5
23	14.0	10.0	---	---	8.0	5.5	5.5	5.0	9.5	8.0	11.0	8.5
24	16.0	13.0	---	---	8.5	7.0	6.0	4.5	9.5	7.0	13.0	10.0
25	16.5	15.0	---	---	7.0	4.0	7.0	5.5	7.0	4.0	11.5	7.0
26	15.5	12.5	7.5	5.0	4.0	3.0	5.5	2.5	5.5	3.5	7.0	5.5
27	14.0	11.0	5.5	4.5	5.0	3.5	4.0	2.5	6.5	4.5	5.5	4.5
28	14.0	11.0	6.5	4.0	6.5	5.0	5.5	4.0	6.5	5.5	5.5	4.5
29	15.0	12.5	5.5	3.5	7.0	5.5	---	---	---	---	7.5	5.0
30	16.5	15.0	4.5	2.5	7.5	7.0	---	---	---	---	7.5	5.0
31	18.5	15.0	---	---	6.5	6.0	---	---	---	---	8.0	4.5
MONTH	18.5	7.0	19.0	2.5	8.5	1.5	---	---	9.5	0.0	13.0	2.0
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	7.5	16.0	14.0	21.0	18.0	26.5	21.5	26.5	22.5	23.0	20.5
2	17.0	11.0	16.0	12.5	18.5	16.5	26.0	22.0	26.0	23.0	24.0	19.5
3	19.0	9.5	15.5	14.0	18.5	15.0	24.0	22.0	24.5	23.0	25.0	21.0
4	10.5	6.5	15.5	12.5	20.5	16.5	22.5	20.0	23.5	22.5	25.5	21.5
5	9.5	6.0	16.5	12.5	20.0	18.5	22.5	21.0	25.5	21.5	24.5	21.0
6	10.5	6.0	18.5	14.0	20.5	18.0	21.5	20.0	23.5	21.0	23.5	21.0
7	11.5	6.5	18.5	15.0	20.0	17.5	22.0	20.0	23.0	19.5	23.0	18.5
8	12.0	8.5	18.0	14.0	20.5	16.0	23.0	20.5	24.0	19.0	22.5	18.5
9	10.0	8.5	19.0	14.0	20.5	16.5	23.5	21.5	24.0	19.5	22.5	19.0
10	12.0	8.0	20.0	15.5	21.0	17.0	22.5	20.0	23.0	21.5	23.0	18.0
11	11.5	9.0	19.0	15.0	20.0	18.5	22.0	18.0	24.5	20.5	21.0	19.5
12	11.5	8.0	18.0	15.5	21.5	18.5	20.5	17.5	25.5	21.0	20.5	18.0
13	13.0	8.0	19.5	15.5	23.0	18.5	20.0	17.0	26.5	22.5	18.0	16.0
14	10.0	8.5	19.5	15.0	19.5	19.5	19.5	17.0	26.5	23.0	18.0	14.0
15	10.0	8.5	18.5	16.0	22.5	20.0	21.5	16.0	24.5	23.0	17.5	15.0
16	11.0	8.0	19.5	15.0	23.0	18.5	22.5	19.0	25.0	22.5	17.5	16.5
17	14.5	9.0	19.5	15.5	23.0	19.0	21.5	19.5	24.5	21.5	19.5	17.0
18	15.0	12.0	18.0	18.0	24.0	20.5	21.0	19.5	25.5	21.0	18.5	17.5
19	14.0	12.0	---	---	26.5	21.5	22.0	19.0	25.0	21.5	19.5	17.5
20	12.0	9.5	24.0	21.0	28.0	22.5	22.5	21.0	25.5	21.5	20.0	17.0
21	13.0	8.5	24.5	20.5	28.0	23.0	24.0	20.0	26.0	22.0	18.0	16.0
22	16.0	10.5	24.0	21.0	27.0	23.0	25.0	21.0	27.0	22.5	16.5	15.0
23	14.0	12.5	24.5	20.0	26.0	22.5	24.5	21.5	27.5	23.0	16.5	14.5
24	13.0	11.5	25.0	20.0	26.5	22.5	25.0	21.5	27.0	23.5	16.0	14.5
25	13.0	11.0	25.0	20.0	26.5	22.5	25.5	21.5	26.5	24.0	15.5	14.0
26	13.5	10.0	24.5	20.5	25.0	22.5	25.0	21.0	27.0	23.5	16.0	14.5
27	12.0	10.5	24.0	20.0	25.5	21.5	24.5	20.0	27.0	22.5	18.5	14.5
28	11.5	10.0	23.5	19.0	27.0	22.0	25.5	20.5	26.5	22.0	17.5	13.5
29	15.0	10.0	22.5	19.0	26.0	21.5	26.0	21.0	25.5	22.0	17.0	14.0
30	15.5	14.0	22.0	19.5	26.0	21.5	26.0	21.0	24.5	22.5	18.5	15.0
31	---	---	21.5	20.0	---	---	26.5	21.5	23.0	21.5	---	---
MONTH	19.0	6.0	25.0	12.5	28.0	15.0	26.5	17.0	27.5	19.0	25.5	13.5
YEAR	28.0	0.0										

GREAT MIAMI RIVER BASIN

03270500 GREAT MIAMI RIVER AT DAYTON, OHIO

LOCATION.--Lat 39°45'55", long 84°11'51", in sec. 10, R.7, T.1, Montgomery County, 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, and 0.8 mi (1.3 km) downstream from Mad River.

DRAINAGE AREA.--2,511 mi² (6,503 km²).

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft (213.360 m) above mean sea level, adjustment 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.--Discharge records good. 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 Lorain Creek 40 mi (64 km) upstream. Also see REMARKS for station No. 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. Water-quality data collected at this site 1965 to 1973.

WATER DISCHARGE RECORDS

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.

AVERAGE DISCHARGE.--46 years (1929-75), 2,120 ft³/s (60.04 m³/s).

EXTREMES.--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.

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.

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

REVISIONS.--WSP 1385: 1917. WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	588	429	1130	6240	9670	10700	5640	4990	1220	690	609	968
2	556	429	1230	6760	6880	6780	4460	4810	1160	611	589	741
3	548	409	1180	4500	5370	5430	4170	3640	1170	711	1010	670
4	540	716	1070	3700	4540	4190	3680	3330	1040	7980	1350	853
5	517	906	987	3330	4170	3330	3060	3020	1200	10600	1120	842
6	494	1140	946	2740	5390	3080	2680	2680	4830	4940	988	1010
7	479	1120	1270	2530	5900	3450	2450	2340	5710	3000	863	881
8	472	896	2950	3930	3800	5160	2280	2090	3160	2990	765	728
9	450	743	5600	10800	2800	4830	2090	1920	2060	2310	681	637
10	450	664	4540	11200	2150	3930	2020	1760	1560	1730	797	577
11	450	771	3100	13200	2350	3450	1960	1660	1630	1360	805	997
12	429	818	2550	10300	2780	6800	1830	1710	1710	1100	813	1580
13	415	886	3420	5990	2310	10000	1750	1630	2320	1090	666	1250
14	415	926	4590	4130	1980	7070	1670	1550	2280	1520	821	1040
15	629	906	4950	3330	1920	5350	1630	1460	2620	1370	1740	854
16	494	956	6930	2980	2390	4650	1580	1380	3500	1120	1570	759
17	443	846	6730	2290	5410	5080	1560	1330	2250	1340	1230	691
18	450	761	4730	2590	10700	8560	1520	1310	1760	1740	892	865
19	429	698	3470	2810	9640	9730	1820	1260	1450	7520	727	870
20	450	906	2710	2510	6570	9610	1810	1200	1230	4140	693	971
21	443	916	2260	1990	4590	6640	1660	1160	1060	2480	726	908
22	436	837	2020	1850	3910	5060	1530	1160	956	1700	648	850
23	458	799	1880	1710	18800	4130	1990	1160	936	1280	754	750
24	465	896	3700	1680	35000	4790	6350	1140	896	1070	842	861
25	450	1260	7370	2320	33400	8380	12100	1110	789	993	770	793
26	429	1560	5840	5750	25100	5730	11800	1190	1230	848	654	784
27	415	1500	3880	4540	18900	4270	8860	1250	1760	791	583	776
28	436	1270	2850	3110	13500	4280	7550	1120	1320	760	531	678
29	436	1110	2370	10400	---	10800	6950	1050	1030	758	556	638
30	472	1030	2140	16200	---	13100	5030	1130	851	682	1090	640
31	436	---	2390	12700	---	9410	---	1140	---	639	1440	---
TOTAL	14574	27104	100783	168110	249920	197770	113480	57680	54688	69863	27323	25462
MEAN	470	903	3251	5423	8926	6380	3783	1861	1823	2254	881	849
MAX	629	1560	7370	16200	35000	13100	12100	4990	5710	10600	1740	1580
MIN	415	409	946	1680	1920	3080	1520	1050	789	611	531	577

CAL YR 1974 TOTAL 903915 MEAN 2476 MAX 22700 MIN 392
WTR YR 1975 TOTAL 1106757 MEAN 3032 MAX 35000 MIN 409

EXTREMES.--Current year: Maximum discharge, 38,800 ft³/s (1,099 m³/s) Feb. 24, gage height, 32.47 ft (9.897 m); minimum daily, 409 ft³/s (11.6 m³/s) Nov. 3.

GREAT MIAMI RIVER BASIN

467

03270800 WOLF CREEK AT TROTWOOD, OHIO

LOCATION.--Lat 39°47'39", long 84°18'36", Montgomery County, 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 confluence with North Branch.

DRAINAGE AREA.--22.7 mi² (58.8 km²).

GAGE.--Water-stage recorder. Datum of gage is 826.28 ft (251.850 m) above mean sea level.

REMARKS.--Discharge records good. Water-quality data collected at this site 1965 to 1973.

WATER DISCHARGE RECORDS

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

AVERAGE DISCHARGE.--13 years, 21.1 ft³/s (0.598 m³/s), 12.62 in/yr (321 mm/yr).

EXTREMES.--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.

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.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	4.0	25	80	87	23	27	152	12	1.4	.67	.96
2	2.3	4.5	13	37	50	19	23	54	6.6	1.3	.67	.67
3	2.0	4.5	12	39	33	16	20	34	13	3.0	3.3	.96
4	2.0	28	11	35	28	14	16	31	6.6	22	5.5	3.3
5	2.0	32	10	26	33	13	14	23	12	4.5	1.4	1.4
6	1.7	16	15	23	49	13	13	19	21	3.0	1.2	2.3
7	2.0	12	42	20	29	19	13	15	9.3	3.0	.76	.96
8	1.7	10	189	93	25	16	13	13	6.0	3.0	.76	.67
9	1.7	8.6	89	110	21	13	12	12	5.0	2.7	.76	.57
10	1.7	7.9	42	169	20	16	12	10	5.0	3.0	1.3	.57
11	2.0	22	28	152	19	14	11	9.3	15	2.3	1.4	7.2
12	2.0	25	62	50	33	320	10	13	13	2.0	2.3	14
13	2.3	14	87	27	28	114	9.3	8.6	7.9	4.0	1.3	3.0
14	2.7	14	78	24	20	51	9.3	7.2	6.6	11	1.3	1.4
15	9.3	12	123	18	19	38	10	7.2	7.9	3.3	5.5	1.2
16	5.0	8.6	106	15	57	67	10	6.6	7.2	2.3	2.0	1.2
17	3.6	7.9	54	14	95	123	10	6.0	7.2	7.2	1.4	1.2
18	3.3	6.6	35	38	61	87	11	5.5	6.0	3.6	5.5	5.0
19	3.3	6.6	31	33	37	54	13	5.0	5.0	2.7	2.0	3.3
20	3.3	31	25	22	27	35	8.6	4.5	3.6	1.7	1.2	3.6
21	3.3	21	24	20	22	27	7.9	4.0	3.3	1.4	.76	2.3
22	3.3	13	21	15	31	26	8.6	4.5	3.0	1.2	.76	1.3
23	3.6	9.3	24	17	960	20	49	4.0	2.7	.96	.67	1.3
24	6.0	16	114	22	414	25	376	5.5	2.7	.96	.57	4.0
25	4.5	28	74	69	110	19	453	8.6	2.7	.96	.49	2.7
26	4.0	17	38	49	62	15	159	4.5	11	.76	.57	2.0
27	3.6	15	28	25	41	14	65	5.5	5.0	.76	.96	1.7
28	3.6	12	23	24	31	116	110	3.3	2.3	.67	.49	1.4
29	3.3	8.6	22	150	---	283	57	3.0	1.7	.67	.57	1.3
30	5.5	11	20	62	---	74	37	7.9	1.4	.67	5.5	1.3
31	4.5	---	70	140	---	37	---	6.6	---	.67	1.7	---
TOTAL	102.1	426.1	1535	1618	2442	1721	1587.7	493.3	211.7	96.68	53.26	72.76
MEAN	3.29	14.2	49.5	52.2	87.2	55.5	52.9	15.9	7.06	3.12	1.72	2.43
MAX	9.3	32	189	169	960	320	453	152	21	22	5.5	14
MIN	1.7	4.0	10	14	19	13	7.9	3.0	1.4	.67	.49	.57
CFSM	.14	.63	2.18	2.30	3.84	2.44	2.33	.70	.31	.14	.08	.11
IN.	.17	.70	2.52	2.65	4.00	2.82	2.60	.81	.35	.16	.09	.12

CAL YR 1974 TOTAL 10968.30 MEAN 30.1 MAX 954 MIN 1.4 CFSM 1.33 IN 17.97
WTR YR 1975 TOTAL 10359.60 MEAN 28.4 MAX 960 MIN .49 CFSM 1.25 IN 16.98

EXTREMES.--Current year: Peak discharges above base of 200 ft³/s (5.66 m³/s) and maximums (*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
02-23	2030	5.25	*2,020	04-25	1400	4.43	1,450
03-12	0900	3.45	860				

Minimum discharge: 0.32 ft³/s (0.009 m³/s) Aug. 25.

GREAT MIAMI RIVER BASIN

469

03271500 GREAT MIAMI RIVER AT MIAMISBURG, OHIO

LOCATION.--Lat 39°38'40", long 84°17'23", in sec. 31, R.6, T.1, Montgomery County, 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, and 3.2 mi (5.1 km) upstream from Crains Run.

DRAINAGE AREA.--2,711 mi² (7,021 km²).

GAGE.--Water-stage recorder. Datum of gage is 678.60 ft (206.837 m) above mean sea level, adjustment 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) above mean sea level.

REMARKS.--Discharge 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 Loraine Creek 52 mi (84 km) upstream. Also see REMARKS for station No. 03261500 and 03269500. Water-quality data collected at this site 1959 to 1973.

WATER DISCHARGE RECORDS

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.

AVERAGE DISCHARGE.--38 years, 2,383 ft³/s (67.49 m³/s), 11.94 in/yr (303 mm/yr).

EXTREMES.--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.

Flood of March 26, 1913 reached a discharge of 257,000 ft³/s (7,280 m³/s), computed by Miami Conservancy District.

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

REVISIONS (WATER YEARS).--WSP 743: 1929(M). WSP 1385: 1926. WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	741	670	1440	5900	10400	11200	6020	5390	1550	988	814	1170
2	720	650	1630	7020	7230	7210	4660	5090	1420	929	779	910
3	700	623	1560	4820	5670	5590	4350	3910	1480	888	1200	858
4	720	1090	1420	3850	4750	4490	3830	3470	1310	5150	1710	1050
5	691	1360	1280	3490	4370	3540	3240	3180	1580	14000	1280	952
6	681	1310	1200	2980	5310	3230	2850	2890	4300	5560	1190	1170
7	671	1420	1750	2720	6190	3550	2660	2570	5760	4710	1020	1020
8	681	1160	3910	3680	4280	4820	2520	2330	3310	3310	932	914
9	670	959	5730	10500	3240	5000	2360	2200	2330	2570	888	820
10	660	871	4840	12400	2590	4090	2290	2030	1840	2080	1290	777
11	680	1100	3460	14300	2610	3630	2230	1940	2020	1620	1070	1330
12	670	1250	2990	11100	3290	8730	2130	2030	2020	1270	1120	2270
13	650	1130	3580	6550	2720	10800	2030	1970	2420	1190	886	1490
14	650	1190	4730	4400	2370	7800	1970	1840	2360	1720	977	1240
15	959	1130	5240	3540	2230	5880	1940	1770	2570	1550	1820	1040
16	784	1170	6960	3200	2660	5280	1900	1670	3520	1340	1870	944
17	700	1080	6960	2630	5200	5650	1880	1590	2550	1080	1420	863
18	681	991	4980	2860	10600	8300	1850	1580	2100	1480	1290	1070
19	670	937	3710	3120	9980	9860	2160	1530	1720	7420	939	1110
20	671	1160	3000	2850	6860	9930	2040	1490	1460	4870	867	1110
21	681	1210	2530	2410	4840	7130	1970	1450	1250	2780	882	1080
22	671	1080	2290	2180	4080	5350	1840	1440	1130	2060	852	1010
23	670	1000	2160	2100	19600	4320	2400	1410	1120	1510	867	941
24	720	1120	3610	2040	35500	4370	7460	1410	1110	1220	969	1120
25	700	1650	7330	2410	34500	8320	12900	1360	991	1100	949	969
26	670	1850	6080	5430	26200	6080	13100	1420	1380	937	856	943
27	641	1830	4120	4930	20200	4420	9210	1550	2000	915	804	939
28	670	1580	3080	3400	14300	4670	8170	1360	1630	871	747	818
29	670	1350	2590	8730	---	11000	7250	1340	1220	926	731	785
30	700	1240	2370	16600	---	13700	5460	1420	1080	816	1180	787
31	670	---	2740	13900	---	10100	---	1470	---	822	1630	---
TOTAL	21513	35161	109270	176040	261770	208040	124670	66100	60531	77682	33829	31500
MEAN	694	1172	3525	5679	9349	6711	4156	2132	2018	2506	1091	1050
MAX	959	1850	7330	16600	35500	13700	13100	5390	5760	14000	1870	2270
MIN	641	623	1200	2040	2230	3230	1840	1340	991	816	731	777
CFSM	.26	.43	1.30	2.09	3.45	2.48	1.53	.79	.74	.92	.40	.39
IN.	.30	.48	1.50	2.42	3.59	2.85	1.71	.91	.83	1.07	.46	.43
CAL YR 1974 TOTAL	1002995	MEAN	2748	MAX	22600	MIN	623	CFSM	1.01	IN	13.76	
WTR YR 1975 TOTAL	1206106	MEAN	3304	MAX	35500	MIN	623	CFSM	1.22	IN	16.55	

EXTREMES.--Current year: Maximum discharge, 38,600 ft³/s (1,093 m³/s) Feb. 24, gage height, 16.81 ft (5.124 m); minimum daily, 623 ft³/s (17.6 m³/s) Nov. 3.

GREAT MIAMI RIVER BASIN

03271600 GREAT MIAMI RIVER NEAR MIAMISBURG, OHIO

LOCATION.--Lat 39°36'39", long 84°17'28", Montgomery County, on Chautauqua Road bridge, about 2.0 mi (3.2 km) south of Miamisburg and 2.5 mi (4.0 km) downstream from gaging station at Miamisburg.

DRAINAGE AREA.--2,715 mi² (7,032 km²).

GAGE.--Water-quality recorder. Prior to November 1971, water-quality recorder operated at site 400 ft (122 m) downstream, in G. H. Hutchings powerplant.

REMARKS.-- Interruptions in the record were due to malfunctions of the instrument. Records of discharge are given for Great Miami River at Miamisburg, Ohio, station 03271500, drainage area 2,711 mi² (7,021 km²).

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1962 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
FEB. 06...	0940	4740	5.0	11.5	90	675	7.7	6.8	78	26	18	2.7
AUG. 06...	1315	1200	24.0	4.8	56	620	8.0	6.0	76	34	25	4.0

DATE	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)
FEB. 06...	289	0	9.2	237	36	65	.3	.46	.06	4.1	.35	375
AUG. 06...	278	0	4.4	228	36	61	.4	.06	.67	1.8	.64	380

DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
FEB. 06...	300	65	30	20	--	--	--	--	--	--	--	--
AUG. 06...	330	100	30	30	2	<10	10	7	60	<.5	5.2	5.3

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C)

EXTREMES.--Period of record: Maximum, 1,170 micromhos Feb. 9, 1972; minimum, 219 micromhos June 22, 1974.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
1	765	738	879	852	753	708	627	546	543	477	510	420	
2	807	771	882	864	957	780	561	507	585	546	558	516	
3	831	807	867	840	957	834	573	435	624	585	600	558	
4	849	813	840	711	873	822	624	570	669	624	633	600	
5	858	837	702	603	825	801	654	618	681	666	672	627	
6	858	825	744	684	798	774	672	624	675	648	696	672	
7	843	813	759	726	780	705	---	---	645	597	753	693	
8	852	822	786	756	708	573	681	642	636	603	702	633	
9	846	807	810	789	612	567	630	450	717	630	621	564	
10	849	825	807	795	606	585	468	426	738	696	948	561	
11	867	849	798	759	639	603	459	390	750	729	921	684	
12	876	852	789	696	702	639	477	387	798	732	708	447	
13	891	864	774	711	687	672	531	477	804	768	537	504	
14	882	849	765	741	672	636	579	531	792	759	702	528	
15	912	786	783	765	639	573	654	621	771	753	723	642	
16	783	720	798	780	591	567	681	621	765	744	702	639	
17	825	759	795	777	582	558	699	648	741	741	642	624	
18	837	807	789	777	594	567	936	675	---	---	627	552	
19	831	810	810	783	882	594	810	678	---	---	543	513	
20	846	822	816	783	759	681	777	696	540	507	522	495	
21	834	819	774	750	723	699	792	738	585	543	570	501	
22	858	825	774	753	705	693	819	774	621	585	612	567	
23	867	840	822	759	717	666	792	777	609	288	645	615	
24	891	840	795	771	720	648	786	777	---	---	663	639	
25	867	837	777	705	648	540	798	762	---	---	654	459	
26	873	858	738	720	534	498	795	660	---	---	513	468	
27	888	864	735	717	579	493	660	597	357	306	624	516	
28	879	861	717	705	630	513	648	609	417	360	720	549	
29	876	858	726	714	666	549	681	399	---	---	537	492	
30	882	864	732	705	696	525	402	390	---	---	483	444	
31	873	852	---	---	687	570	474	405	---	---	519	453	
MONTH	912	720	882	603	957	483	936	387	804	288	948	420	
		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
1	600	519	597	522	678	594	695	668	720	585	627	585	
2	648	600	612	561	699	660	720	677	735	702	630	609	
3	645	603	624	609	702	668	732	681	717	549	684	621	
4	681	636	627	610	731	704	687	300	606	483	681	630	
5	675	660	645	612	737	692	321	252	618	585	672	639	
6	678	666	663	645	689	581	453	324	666	603	681	588	
7	699	666	657	648	560	482	522	453	687	666	675	621	
8	711	681	651	636	548	515	549	522	702	675	696	648	
9	690	675	654	639	617	551	582	528	720	690	696	678	
10	705	690	654	642	659	623	621	582	729	534	723	687	
11	711	696	654	642	662	608	642	597	591	465	768	564	
12	702	693	651	621	677	587	645	633	654	465	543	411	
13	696	681	666	639	683	656	651	633	657	591	615	534	
14	708	672	678	660	683	671	654	676	687	612	657	618	
15	714	699	681	663	665	593	642	594	678	513	708	657	
16	723	705	687	669	590	533	669	639	579	522	729	696	
17	723	702	693	669	560	518	678	594	615	573	744	711	
18	723	699	693	672	620	551	609	525	618	549	738	702	
19	723	624	708	675	656	620	621	348	702	624	699	651	
20	675	660	714	678	695	656	438	378	706	690	741	678	
21	699	666	711	684	701	692	525	441	741	708	693	666	
22	711	681	714	699	---	---	588	525	732	714	717	690	
23	705	579	729	705	---	---	633	591	759	684	750	711	
24	543	405	729	684	755	707	657	633	705	615	729	657	
25	534	354	717	693	734	707	672	660	711	630	717	648	
26	444	390	705	669	734	704	684	669	702	675	735	717	
27	468	441	687	615	698	533	693	666	723	681	768	735	
28	537	471	723	684	671	602	702	648	729	684	756	741	
29	564	540	723	687	674	629	723	669	756	717	768	744	
30	591	558	711	672	701	614	726	684	741	558	786	750	
31	---	---	693	666	---	---	726	675	621	423	---	---	
MONTH	723	354	729	522	755	482	732	252	759	423	786	411	
YEAR	957	252											

03271600 GREAT MIAMI RIVER NEAR MIAMISBURG, OHIO--Continued

PH (UNITS)

PERIOD OF RECORD.--March 1964 to current year.

EXTREMES.--Period of record: Maximum, 9.3 May 19, 20, 1971; minimum, 5.7 Feb. 9, 1972.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITRE

EXTREMES.--Period of record: Maximum, 15.0 mg/l or higher on several days during 1964, 1966, 1968, 1972, 1973 and 1975; minimum, 0.0 mg/l on many days during 1964-66, 1970-71, 1974-75.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.9	5.6	0.8	0.0	11.0	9.9	12.8	11.4	14.2	13.8	---	---
2	7.4	6.0	0.8	0.0	10.7	10.2	12.8	10.8	14.0	13.6	---	---
3	7.8	6.3	2.1	0.1	10.6	10.1	11.8	10.7	14.1	13.7	---	---
4	7.8	6.0	4.8	1.4	10.9	10.2	11.9	10.3	14.2	13.5	---	---
5	7.8	6.3	5.6	4.3	10.4	10.0	11.5	10.2	13.7	13.2	---	---
6	7.8	6.3	7.3	6.1	11.4	10.9	11.4	10.1	13.6	12.1	---	---
7	8.5	7.0	7.9	7.2	12.5	10.5	---	---	13.1	12.2	---	---
8	9.3	7.2	8.2	6.5	11.3	10.6	11.9	10.6	13.6	12.2	---	---
9	9.5	7.7	7.8	5.4	11.4	10.7	11.2	10.2	13.4	12.5	---	---
10	7.8	4.4	6.7	4.8	12.4	11.5	11.0	10.5	13.2	12.2	---	---
11	7.8	4.5	6.6	5.8	12.4	11.5	11.2	10.0	12.8	11.9	---	---
12	7.6	3.9	8.3	6.5	12.3	11.5	11.4	10.4	12.6	11.7	---	---
13	4.2	2.9	6.9	5.1	11.8	11.5	11.7	11.0	12.2	11.0	---	---
14	4.4	2.6	8.5	6.9	11.8	11.7	11.5	10.8	11.5	11.0	---	---
15	4.7	3.8	8.1	6.5	12.1	11.2	---	---	11.6	10.6	---	---
16	5.8	4.2	9.0	8.2	12.2	10.7	---	---	11.3	10.2	---	---
17	6.3	4.0	9.6	7.9	11.8	9.9	---	---	10.7	10.2	---	---
18	8.0	4.3	9.3	7.7	11.9	10.6	---	---	---	---	---	---
19	8.7	5.3	8.9	6.5	11.8	10.2	---	---	---	---	11.3	10.7
20	9.0	5.3	7.2	4.7	12.9	9.6	---	---	---	---	11.1	8.8
21	9.6	6.0	6.8	6.2	12.2	9.8	15.0	13.4	---	---	11.1	10.5
22	9.0	7.3	7.2	6.6	12.0	10.1	14.7	14.3	---	---	10.5	10.0
23	6.9	5.3	7.4	6.2	11.6	10.1	14.3	13.8	---	---	10.7	10.3
24	5.2	2.6	7.8	7.3	12.7	10.6	14.2	13.4	---	---	10.5	9.9
25	2.8	1.3	8.6	7.9	12.4	10.6	14.0	13.5	---	---	9.9	8.7
26	2.1	1.4	9.4	8.4	11.8	10.2	14.5	13.5	---	---	10.4	9.4
27	3.2	1.3	10.2	9.1	12.2	10.9	14.8	14.4	---	---	11.5	10.4
28	3.6	2.9	10.4	9.9	12.8	12.2	14.4	13.8	---	---	11.2	10.9
29	3.8	2.4	10.7	10.2	13.7	12.5	13.8	13.4	---	---	10.8	8.6
30	2.8	1.9	10.5	10.0	12.6	12.0	14.1	13.5	---	---	11.6	9.9
31	2.0	0.7	---	---	12.1	11.1	14.2	13.8	---	---	11.7	11.4
MONTH	9.6	0.7	10.7	0.0	13.7	9.6	---	---	---	---	---	---
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.6	9.9	8.2	7.8	6.2	3.6	5.1	2.8	7.1	2.9	5.6	4.5
2	11.1	9.8	8.7	7.9	5.8	5.1	5.2	2.5	6.0	2.4	4.9	4.2
3	10.3	9.0	8.3	7.8	7.2	4.8	7.6	2.7	5.0	2.6	4.6	2.7
4	10.4	9.4	8.5	7.6	8.1	5.7	5.7	3.9	5.3	4.3	4.6	2.9
5	10.8	9.7	8.7	7.9	5.7	4.4	6.5	5.7	5.2	4.1	4.4	2.9
6	9.7	9.5	9.6	7.3	6.3	4.3	6.5	6.3	5.5	3.9	4.6	3.1
7	9.4	9.1	9.4	8.8	7.0	6.2	6.6	5.5	7.5	4.1	5.8	4.0
8	10.3	8.8	9.7	7.7	7.1	6.8	6.3	5.5	9.8	4.9	5.9	4.6
9	9.3	8.8	10.4	7.9	6.9	6.4	6.3	5.7	9.4	4.7	5.7	4.0
10	9.4	8.9	10.5	7.8	6.5	5.9	6.2	5.3	7.5	4.0	6.2	3.8
11	9.4	8.6	10.1	8.0	6.0	5.5	5.9	4.7	6.8	4.2	6.0	3.6
12	10.1	8.9	8.9	7.3	6.2	5.5	5.7	4.4	8.0	4.8	5.9	4.8
13	10.3	9.3	9.7	6.7	6.8	5.1	6.1	4.8	10.4	4.0	6.9	5.6
14	10.3	9.2	9.8	7.1	7.3	6.0	7.0	5.8	8.5	3.0	7.1	6.5
15	10.5	8.8	9.8	7.0	6.7	6.1	7.6	5.9	5.9	3.8	7.2	6.6
16	11.1	9.3	9.5	7.3	6.7	6.3	7.1	5.7	7.6	4.4	6.7	5.9
17	11.4	7.1	9.4	7.2	6.4	5.8	6.3	5.4	6.7	5.1	6.2	5.0
18	10.4	7.9	8.8	6.8	6.2	5.4	6.5	5.2	6.5	5.3	6.3	5.2
19	9.4	7.0	9.6	6.5	5.8	4.9	6.7	5.5	6.4	4.2	6.4	5.7
20	11.4	8.2	10.8	5.8	5.8	4.6	6.7	6.0	6.2	3.3	6.8	5.5
21	12.9	9.2	9.9	4.9	7.4	4.3	6.6	5.7	6.4	2.8	7.3	6.2
22	12.9	8.6	7.4	4.0	---	---	6.0	5.3	7.0	2.3	7.7	6.8
23	10.2	7.5	6.1	2.8	---	---	5.6	4.7	8.2	2.3	7.4	6.3
24	8.1	7.1	5.1	3.1	9.7	4.4	5.3	4.1	9.6	3.6	7.4	6.7
25	8.5	8.0	5.4	2.9	11.0	4.8	5.5	4.0	8.0	4.0	7.3	6.4
26	9.0	8.1	5.9	3.6	9.2	4.8	6.3	4.4	6.8	2.7	7.2	6.0
27	9.0	8.9	6.3	4.2	8.4	4.4	6.4	4.5	5.0	1.9	7.9	6.2
28	9.0	8.6	8.4	4.0	6.4	4.3	7.4	5.2	5.1	2.0	7.8	6.5
29	9.0	8.4	7.2	4.2	5.3	3.4	9.4	4.2	4.7	1.8	7.8	6.5
30	8.4	8.0	6.1	3.3	5.8	3.9	9.7	4.7	4.6	2.1	7.8	6.1
31	---	---	5.8	3.4	---	---	8.2	4.1	5.0	3.9	---	---
MONTH	12.9	7.0	10.8	2.8	11.0	3.4	9.7	2.5	10.4	1.8	7.9	2.7
YEAR	15.0	0.0										

03271600 GREAT MIAMI RIVER NEAR MIAMISBURG, OHIO--Continued

TEMPERATURE (°C) OF WATER

PERIOD OF RECORD.--March 1964 to current year.

EXTREMES.--Maximum, 37.0°C Aug. 16-18, 1965; minimum, freezing point on Dec. 16, 17, 1972, Feb. 10, 1975.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	14.0	22.0	21.0	4.0	3.0	7.0	4.5	5.0	4.0	3.5	2.5
2	16.0	13.5	22.5	21.5	4.5	3.5	5.0	3.5	6.0	4.0	2.5	1.0
3	16.5	13.0	22.0	20.5	6.5	4.5	4.5	3.5	6.0	4.0	2.5	1.0
4	16.5	14.0	21.0	18.0	7.5	5.0	5.5	4.0	5.0	4.0	5.0	1.5
5	17.5	14.5	18.0	14.5	8.0	4.5	5.5	3.5	6.0	5.0	7.5	3.5
6	18.0	15.5	16.0	13.5	8.0	4.5	4.5	4.0	6.0	3.5	10.0	7.0
7	17.5	15.5	15.5	12.5	7.0	5.5	---	---	3.5	2.0	10.0	9.0
8	17.5	14.0	16.0	12.0	5.5	4.0	8.0	7.0	3.0	1.5	9.0	6.0
9	18.5	16.0	16.0	12.5	4.0	1.5	7.5	6.5	2.0	1.0	7.0	5.0
10	20.0	16.5	14.5	12.0	3.5	0.5	9.0	7.0	3.5	0.0	6.5	5.5
11	21.5	18.0	14.0	12.5	4.0	2.5	8.5	7.0	4.0	3.0	7.5	5.5
12	21.0	19.5	13.5	11.5	5.5	4.5	6.5	4.5	4.5	3.0	7.5	6.0
13	20.0	19.0	12.0	11.0	6.0	5.5	6.0	3.5	4.5	3.0	7.5	6.0
14	20.0	19.0	11.0	8.5	6.0	5.0	6.0	3.5	4.5	3.5	6.0	4.5
15	19.0	17.0	9.0	7.0	5.5	5.0	2.5	1.5	6.5	4.5	7.0	4.5
16	18.5	15.5	9.5	6.5	5.5	5.0	3.5	2.5	7.0	6.5	7.5	6.5
17	18.5	15.5	11.0	8.0	5.0	4.0	4.0	2.0	6.5	6.5	10.5	7.0
18	17.5	15.0	11.5	8.0	4.0	3.5	4.5	3.5	---	---	10.5	9.0
19	15.0	14.0	14.0	10.5	5.0	3.5	4.5	3.5	---	---	9.5	9.0
20	14.0	11.5	14.5	11.5	5.0	3.5	4.5	2.5	5.5	4.5	11.5	8.0
21	12.0	10.0	11.5	9.0	5.0	4.0	4.0	1.5	6.5	3.0	13.0	9.0
22	14.0	10.0	10.5	8.5	5.5	4.5	5.0	4.0	7.5	4.5	12.5	11.5
23	17.0	13.5	13.5	8.5	8.0	5.0	5.5	4.5	10.0	7.5	13.5	10.0
24	18.5	16.5	12.0	11.0	8.5	7.5	6.5	4.5	---	---	15.0	13.0
25	19.0	17.5	11.0	9.0	7.0	4.0	7.0	6.0	---	---	13.0	9.0
26	19.0	16.5	10.0	7.5	5.0	3.5	5.5	3.0	---	---	9.5	7.5
27	18.0	16.0	7.5	6.0	4.5	4.0	4.0	2.0	5.0	3.0	7.5	5.0
28	17.5	15.0	6.5	4.5	5.0	4.5	6.5	4.0	4.5	3.5	6.0	5.0
29	19.0	16.0	7.0	4.0	6.5	5.0	8.5	6.5	---	---	8.0	6.0
30	20.0	18.5	5.5	3.5	7.0	6.5	6.5	5.5	---	---	6.5	5.0
31	22.0	19.5	---	---	7.0	7.0	5.5	4.5	---	---	8.0	4.0
MONTH	22.0	10.0	22.5	3.5	8.5	0.5	9.0	1.5	10.0	0.0	15.0	1.0
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	6.5	17.0	15.5	26.0	23.0	32.0	27.5	33.0	29.0	25.5	23.0
2	14.0	9.5	18.5	14.5	24.5	22.5	32.0	28.0	31.5	29.5	27.5	23.0
3	14.0	8.5	17.5	16.5	22.5	19.5	31.0	28.0	30.0	27.0	29.5	25.0
4	9.5	6.5	17.5	15.5	23.5	19.0	28.5	24.0	27.5	26.0	28.5	25.5
5	9.5	6.5	19.5	15.5	22.5	21.5	25.0	22.0	29.0	26.0	27.5	24.5
6	10.5	7.5	21.0	17.5	23.0	20.5	25.5	22.5	26.5	24.0	25.5	23.5
7	12.5	7.5	21.0	18.5	21.0	18.0	25.5	23.5	25.5	22.5	24.5	21.0
8	12.5	10.0	21.0	19.0	21.0	17.0	27.5	24.0	26.5	22.0	25.0	21.5
9	11.5	9.5	22.5	18.0	21.0	18.0	27.5	25.0	27.0	23.0	24.5	20.5
10	13.0	9.5	22.5	19.0	22.0	19.5	26.5	24.5	26.5	24.5	25.5	21.0
11	13.0	10.5	22.5	18.5	21.5	21.0	26.0	22.5	27.0	23.0	24.5	22.0
12	12.0	9.5	21.5	20.0	23.5	20.5	25.5	22.5	28.0	24.5	22.0	19.5
13	13.5	10.0	22.5	18.5	24.0	21.0	24.5	21.5	30.0	26.0	19.0	17.0
14	12.0	10.5	23.0	19.5	24.5	22.0	23.5	19.5	31.0	28.0	18.5	15.0
15	11.5	10.5	22.5	20.5	23.5	22.5	25.5	21.5	29.0	27.0	18.5	16.0
16	13.0	9.0	22.5	18.5	24.0	20.5	26.0	23.0	28.0	26.0	18.5	17.0
17	15.5	11.5	23.5	19.5	23.0	21.0	25.0	24.0	27.5	25.0	19.5	18.0
18	17.0	15.0	25.5	21.5	26.0	22.0	24.5	23.0	28.5	24.5	20.0	19.0
19	17.0	14.0	26.5	22.0	29.5	25.0	24.0	21.0	29.0	26.0	20.5	18.5
20	14.0	12.5	28.0	24.5	31.5	27.5	24.5	22.0	29.5	26.5	21.0	18.5
21	15.5	10.5	29.5	26.5	32.0	29.0	27.5	23.0	30.5	27.0	19.0	17.5
22	18.0	13.0	29.0	27.0	---	---	29.0	25.5	31.5	27.5	17.5	16.0
23	16.5	15.0	29.5	26.5	---	---	29.5	26.5	32.0	28.5	17.0	15.5
24	15.5	14.0	31.0	26.0	---	---	29.0	27.5	30.5	28.0	15.5	14.0
25	15.0	12.5	30.5	27.5	32.5	29.0	29.5	26.5	30.0	28.0	15.5	14.0
26	14.5	11.5	30.5	27.0	31.5	28.5	29.5	26.0	30.5	27.5	16.0	15.0
27	13.5	11.5	29.0	26.5	29.0	26.0	28.5	25.0	30.5	27.5	18.0	15.0
28	13.0	11.5	29.5	25.5	30.0	26.5	30.5	26.0	30.0	27.5	18.5	14.5
29	16.5	11.0	29.0	26.5	30.0	26.5	31.0	27.0	29.5	27.5	18.0	14.5
30	16.5	14.0	28.0	26.0	30.5	26.5	31.5	27.5	28.5	26.5	19.0	16.0
31	---	---	27.0	25.0	---	---	32.0	28.0	26.0	23.5	---	---
MONTH	18.0	6.5	31.0	14.5	32.5	17.0	32.0	19.5	33.0	22.0	29.5	14.0
YEAR	33.0	0.0										

GREAT MIAMI RIVER BASIN

475

03271800 TWIN CREEK NEAR INGOMAR, OHIO

LOCATION.--Lat 39°42'28", long 84°31'30", in sec. 15, T.5N., R.3E., Preble County, 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).

GAGE.--Water-stage recorder. Datum of gage is 815.42 ft (248.540 m) above mean sea level.

REMARKS.--Discharge records good. Water-quality records collected at this site 1963 to 1974.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1959, 1961-62. October 1962 to current year.

AVERAGE DISCHARGE.--13 years, 190 ft³/s (5.381 m³/s), 13.10 in/yr (323 mm/yr).

EXTREMES.--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 (113 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. 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).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	23	78	963	1130	251	299	760	94	22	9.9	10
2	50	23	82	377	620	208	243	553	75	20	9.7	9.5
3	41	23	72	299	389	176	224	326	112	21	12	9.1
4	34	85	69	335	292	156	172	297	84	56	17	11
5	32	517	66	244	272	146	152	234	76	47	15	9.8
6	30	200	68	210	471	141	141	198	228	30	13	13
7	27	121	96	188	309	156	135	167	131	28	12	9.7
8	25	89	1390	805	200	159	128	147	81	51	11	8.7
9	25	72	1020	1390	160	135	122	133	64	40	10	7.8
10	25	63	411	1290	130	142	118	119	57	28	10	7.2
11	24	66	261	1990	150	134	112	110	68	23	11	15
12	23	112	342	690	190	1610	103	121	82	21	12	63
13	22	100	772	344	174	762	96	109	68	20	12	27
14	21	94	727	236	144	486	91	93	55	24	13	18
15	26	104	893	189	138	295	92	89	52	26	13	14
16	32	83	1190	161	395	289	88	84	51	21	17	13
17	32	72	532	135	997	834	85	76	49	20	13	12
18	29	65	315	202	1050	1410	87	74	46	20	16	14
19	26	62	257	280	557	1260	97	71	44	21	16	14
20	25	82	214	186	328	608	84	66	38	21	12	16
21	23	82	195	140	246	361	73	63	41	20	11	15
22	23	68	176	130	239	293	71	60	37	18	10	12
23	22	56	181	131	7950	225	142	58	34	16	9.5	12
24	23	60	1080	153	5530	305	1860	96	31	15	8.7	13
25	24	163	773	565	1300	299	2990	99	28	14	8.2	12
26	26	132	360	682	691	193	2210	71	29	13	7.8	13
27	24	102	247	269	431	165	860	81	34	13	7.5	12
28	23	90	204	210	319	448	1180	65	29	12	7.5	12
29	23	72	182	1970	---	2480	775	64	26	11	7.6	11
30	25	63	179	1230	---	975	433	115	24	11	9.4	10
31	24	---	424	1280	---	449	---	92	---	10	9.8	---
TOTAL	878	2944	12856	17274	24802	15551	13263	4691	1868	713	351.6	423.8
MEAN	28.3	98.1	415	557	886	502	442	151	62.3	23.0	11.3	14.1
MAX	69	517	1390	1990	7950	2480	2990	760	228	56	17	63
MIN	21	23	66	130	130	134	71	58	24	10	7.5	7.2
CFSM	.14	.50	2.11	2.83	4.50	2.55	2.24	.77	.32	.12	.06	.07
IN.	.17	.56	2.43	3.26	4.68	2.94	2.50	.89	.35	.13	.07	.08
CAL YR 1974	TOTAL	78293.0	MEAN	215	MAX	3440	MIN	16	CFSM	1.09	IN	14.78
WTR YR 1975	TOTAL	95615.4	MEAN	262	MAX	7950	MIN	7.2	CFSM	1.33	IN	18.06

EXTREMES.--Current year: Peak discharges above base of 4,700 ft³/s (133 m³/s) and maximums (*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
02-23	2245	*12.32	*13,000	04-25	1630	8.03	5,730

Minimum discharge: 7.0 ft³/s (0.20 m³/s) Oct. 10, 11, Aug. 29.

GREAT MIAMI RIVER BASIN

477

03272000 TWIN CREEK NEAR GERMANTOWN, OHIO

LOCATION.--Lat 39°38'10", long 84°23'48", in NW 1/4 sec. 11, T.3N., R.4E., Montgomery County, 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).

GAGE.--Water-stage recorder. Datum of gage is 700.24 ft (213.433 m) above mean sea level, adjustment of 1912. Prior to Dec. 16, 1926 nonrecording gage at site 1 mi (2 km) downstream at datum 12.49 ft (3.807 m) higher.

REMARKS.--Discharge records good. Flood flow regulated by Germantown retarding basin, 0.3 mi (0.5 km) upstream beginning in 1920.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--April 1914 to December 1923, December 1926 to current year.

AVERAGE DISCHARGE.--57 years (1914-23, 1927-75), 262 ft³/s (7.420 m³/s), 12.94 in/yr (329 mm/yr).

EXTREMES.--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. 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.

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

REVISIONS (WATER YEARS).--WSP 403: 1914(M). WSP 1385: 1915(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	38	112	1290	1450	411	469	823	128	32	11	11
2	62	38	133	586	839	339	377	758	105	29	11	11
3	50	37	120	439	552	285	343	470	121	28	12	12
4	44	55	115	483	431	250	268	413	115	85	20	14
5	40	493	109	372	401	230	230	339	100	74	23	16
6	38	303	112	310	571	219	211	285	228	51	20	13
7	36	175	176	279	462	244	199	242	183	40	17	16
8	34	126	1500	716	300	252	187	210	115	43	15	12
9	34	102	1350	1800	250	211	176	189	90	61	14	11
10	34	88	577	1560	200	213	170	171	78	43	13	10
11	34	97	375	2740	220	206	161	156	89	36	13	17
12	32	159	391	996	365	2630	149	175	109	31	14	81
13	32	155	840	527	303	1680	141	186	94	31	14	53
14	32	129	886	361	234	788	133	144	78	37	18	32
15	39	139	894	292	212	527	132	133	73	37	25	22
16	43	122	1580	246	404	556	128	126	70	35	21	17
17	46	104	746	198	1050	1250	123	116	66	30	21	15
18	44	94	483	299	1290	1920	123	110	66	28	24	17
19	41	88	381	426	726	1690	139	104	61	28	20	19
20	40	108	326	289	469	894	124	98	56	30	19	20
21	38	127	290	190	360	573	108	92	50	28	15	20
22	36	105	263	180	319	498	104	89	54	26	13	18
23	36	89	253	180	4500	389	161	85	47	23	11	16
24	35	88	1050	197	7220	427	2340	98	44	21	11	18
25	36	177	1040	461	6070	476	2750	134	41	20	9.8	18
26	38	199	552	873	1510	317	3860	99	39	19	9.1	17
27	39	152	374	393	665	263	1190	105	44	17	8.2	16
28	38	135	307	296	507	556	1770	95	43	16	7.8	15
29	37	111	267	1680	---	3320	1140	79	38	14	7.9	14
30	38	97	256	1610	---	1450	655	117	35	13	11	12
31	39	---	458	1550	---	685	---	130	---	12	12	---
TOTAL	1248	3930	16316	21819	31880	23749	18061	6371	2460	1018	460.8	583
MEAN	40.3	131	526	704	1139	766	602	206	82.0	32.8	14.9	19.4
MAX	83	493	1580	2740	7220	3320	3860	823	228	85	25	81
MIN	32	37	109	180	200	206	104	79	35	12	7.8	10
CFSM	.15	.48	1.91	2.56	4.14	2.79	2.19	.75	.30	.12	.05	.07
IN.	.17	.53	2.21	2.95	4.31	3.21	2.44	.86	.33	.14	.06	.08

CAL YR 1974 TOTAL 110177.0 MEAN 302 MAX 5280 MIN 19 CFSM 1.10 IN 14.90
WTR YR 1975 TOTAL 127895.8 MEAN 350 MAX 7220 MIN 7.8 CFSM 1.27 IN 17.30

EXTREMES.--Current year: Maximum discharge, 7,460 ft³/s (211 m³/s) Feb. 24, gage height, 27.69 ft (8.440 m); minimum, 7.5 ft³/s (0.21 m³/s) Aug. 28, 29.

GREAT MIAMI RIVER BASIN

03272700 SEVENMILE CREEK AT CAMDEN, OHIO

LOCATION.--Lat 39°37'45", long 84°38'40", Preble County, 0.3 mi (0.5 km) downstream from Beasley Run on right bank at downstream side of bridge on State Highway 725 in Camden.

DRAINAGE AREA.--69.0 mi² (179 km²).

GAGE.--Water-stage recorder. Datum of gage is 821.59 ft (250.421 m) above mean sea level.

REMARKS.--Records good 1971, 1974 and 1975, poor 1972 and 1973. Water-quality data collected at this site 1972 to 1974.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--December 1970 to current year.

EXTREMES.--Period of record: Maximum discharge, 6,210 ft³/s (176 m³/s) June 22, 1974, gage height 10.23 ft (3.118 m), from rating curve extended above 2,200 ft³/s (62.3 m³/s); minimum daily, 1.7 ft³/s (0.048 m³/s) Sept. 13-14, 1973, Aug. 26-29, 1975.

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

DISCHARGE, IN CUBIC FEET PER SECOND, DECEMBER 1970 TO SEPTEMBER 1971

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			17	25	12	102	35	17	23	7.6	6.5	3.4
2			17	24	12	81	59	16	26	7.1	11	5.9
3			20	24	11	72	46	17	22	6.7	12	6.1
4			24	288	58	54	38	16	20	6.3	8.7	4.9
5			20	107	783	48	34	16	18	6.1	6.9	3.3
6			19	56	106	111	33	595	16	6.1	6.3	2.9
7			18	43	40	189	30	509	17	5.9	5.7	2.9
8			17	37	30	108	28	613	17	5.9	5.7	3.0
9			16	33	27	68	27	220	14	5.7	5.9	3.0
10			16	30	25	74	25	128	13	10	5.4	3.0
11			21	29	27	83	24	85	11	11	5.0	5.7
12			28	28	269	155	23	72	12	7.6	4.8	5.9
13			25	32	139	249	25	59	14	6.3	4.7	3.5
14			24	67	56	170	26	44	53	5.9	4.3	3.2
15			23	42	39	220	23	35	26	5.7	5.0	3.1
16			76	30	31	155	23	56	16	5.5	6.5	2.8
17			73	25	839	102	23	127	13	5.4	6.5	2.7
18			50	22	334	79	22	49	11	5.4	5.0	2.7
19			41	20	368	106	20	376	10	5.4	5.0	2.7
20			33	19	479	91	20	199	10	5.5	6.3	4.9
21			35	18	141	72	20	70	17	5.4	6.1	5.1
22			196	17	1800	65	20	46	12	5.4	4.7	3.3
23			107	16	329	54	19	39	9.0	5.4	3.0	2.9
24			66	15	137	47	19	47	9.0	33	2.8	2.7
25			50	15	89	43	17	115	8.5	9.7	2.8	2.8
26			47	14	225	42	16	48	8.5	7.8	2.6	5.5
27			42	14	305	39	17	37	8.0	7.1	2.4	4.0
28			36	16	143	39	26	33	7.3	28	2.4	3.3
29			33	15	---	36	20	30	7.3	12	2.4	2.9
30			30	14	---	32	18	27	7.1	8.5	2.4	2.6
31			26	13	---	30	---	24	---	7.1	2.4	---
TOTAL			1246	1148	6854	2816	776	3765	455.7	260.5	161.2	110.7
MEAN			40.2	37.0	245	90.8	25.9	121	15.2	8.40	5.20	3.69
MAX			196	288	1800	249	59	613	53	33	12	6.1
MIN			16	13	11	30	16	16	7.1	5.4	2.4	2.6
CFSM			.58	.54	3.55	1.32	.38	1.75	.22	.12	.08	.05
IN.			.67	.62	3.70	1.52	.42	2.03	.25	.14	.09	.06

EXTREMES.--Period December to September: Peak discharges above base of 1,500 ft³/s (42.5 m³/s) and maximums (*):

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
02-05	0245	5.37	1,660	02-22	0800	*7.82	*3,630
02-17	1630	6.26	2,290	05-19	2000	6.59	2,550

Minimum daily discharge: 2.4 ft³/s (0.068 m³/s) Aug. 27-31.

GREAT MIAMI RIVER BASIN

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03272700 SEVENMILE CREEK AT CAMDEN, OHIO--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1972												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	3.4	5.4	124	23	237	41	70	70	18	4.3	7.2
2	2.4	4.0	4.8	116	21	697	38	66	53	16	4.3	6.9
3	2.4	3.6	4.8	98	19	325	35	55	43	16	7.9	27
4	2.4	3.4	4.8	112	18	205	43	50	38	16	9.7	13
5	2.4	3.4	4.7	126	20	140	36	43	32	15	5.8	8.9
6	2.4	3.5	10	75	19	94	35	40	35	14	4.3	8.2
7	2.4	3.6	24	58	17	86	623	39	31	12	4.8	6.8
8	2.4	3.5	19	56	16	88	370	207	26	12	4.8	6.6
9	3.4	3.5	13	91	15	70	295	669	25	11	4.3	6.3
10	4.5	3.8	11	140	15	60	229	240	23	11	4.1	6.6
11	3.0	3.9	11	108	15	55	170	151	19	10	3.7	6.6
12	2.7	3.7	9.7	74	16	54	264	110	17	9.3	4.1	6.8
13	2.8	3.7	9.0	50	29	62	1010	170	156	8.2	5.3	5.2
14	3.3	3.6	95	36	85	101	331	279	197	7.9	3.7	5.0
15	3.1	3.6	173	32	168	83	273	473	126	8.6	3.6	5.3
16	5.0	3.5	110	35	94	108	785	255	185	12	3.6	5.3
17	5.0	3.4	50	42	60	158	418	177	86	9.7	3.6	5.5
18	3.4	3.4	31	46	48	116	235	128	60	8.6	3.4	5.5
19	3.1	4.1	25	40	38	86	175	105	47	8.2	3.6	3.9
20	3.0	4.9	27	36	34	73	197	86	39	6.9	3.7	3.6
21	3.1	4.0	26	36	35	70	273	74	36	6.3	3.6	3.2
22	3.3	3.8	21	36	33	128	477	64	29	6.0	4.8	2.9
23	3.4	3.6	19	54	30	96	252	54	27	5.5	5.0	2.9
24	4.5	3.6	19	74	35	75	168	50	25	5.3	3.7	11
25	5.4	3.7	16	58	30	68	124	44	23	5.8	3.4	16
26	4.1	3.7	16	42	33	62	101	38	22	5.5	6.3	18
27	3.7	4.7	16	36	27	59	85	34	21	5.0	6.9	19
28	3.6	5.2	16	32	29	53	73	32	18	5.0	6.9	18
29	3.4	5.0	14	28	38	51	67	33	27	4.8	6.9	17
30	3.3	6.3	549	25	---	46	68	74	23	4.3	6.6	18
31	3.4	---	229	25	---	41	---	118	---	4.1	6.6	---
TOTAL	102.7	117.1	1583.2	1943	1060	3647	7291	4028	1559	288.0	153.3	276.2
MEAN	3.31	3.90	51.1	62.7	36.6	118	243	130	52.0	9.29	4.95	9.21
MAX	5.4	6.3	549	140	168	697	1010	669	197	18	9.7	27
MIN	2.4	3.4	4.7	25	15	41	35	32	17	4.1	3.4	2.9
CFSM	.05	.06	.74	.91	.53	1.71	3.52	1.88	.75	.13	.07	.13
IN.	.06	.06	.85	1.05	.57	1.97	3.93	2.17	.84	.16	.08	.15
CAL YR 1971	TOTAL	18150.1	MEAN	49.7	MAX	1800	MIN	2.4	CFSM	.72	IN	9.79
WTR YR 1972	TOTAL	22046.5	MEAN	60.2	MAX	1010	MIN	2.4	CFSM	.87	IN	11.89

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-30	1100	5.48	1,750	05-08	2400	5.24	1,600
04-13	0300	*5.80	*1,960				

Minimum daily discharge: 2.4 ft³/s (0.068 m³/s) Oct. 1-8.

GREAT MIAMI RIVER BASIN
03272700 SEVENMILE CREEK AT CAMDEN, OHIO--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	124	86	158	106	30	231	37	20	28	20	3.3
2	11	411	71	110	211	35	171	41	17	23	17	2.8
3	10	191	66	123	170	40	139	47	16	19	14	2.5
4	11	105	62	285	123	47	215	34	279	17	12	2.3
5	16	70	60	173	95	129	200	28	695	17	9.8	2.3
6	17	53	418	118	75	117	149	25	941	13	8.9	2.1
7	14	178	271	80	65	154	129	25	353	12	8.2	2.1
8	10	389	397	58	56	156	140	153	141	10	7.0	1.9
9	8.5	168	394	50	50	122	140	64	62	9.0	7.8	1.9
10	7.4	124	279	44	46	367	180	40	54	8.4	8.0	2.0
11	7.0	140	168	40	43	1000	120	32	40	8.3	6.6	1.9
12	8.0	110	140	38	40	403	120	25	34	6.6	6.8	1.9
13	7.6	299	344	36	44	223	113	22	32	5.8	6.4	1.7
14	7.4	1470	200	36	58	435	77	20	24	27	12	1.7
15	7.0	347	100	36	152	633	61	20	20	17	14	1.8
16	6.9	215	78	38	111	425	56	18	21	7.2	8.1	1.8
17	6.9	156	60	38	85	1070	139	17	121	5.6	5.9	2.3
18	7.2	114	50	39	68	448	276	15	33	4.5	4.9	2.5
19	7.8	152	110	43	56	319	234	23	307	4.0	4.3	3.8
20	7.8	315	344	38	50	226	175	29	329	37	25	9.8
21	5.2	180	292	34	44	162	108	19	81	1130	13	15
22	8.6	138	261	101	40	128	80	16	42	182	6.6	14
23	11	108	200	156	38	107	110	16	29	72	5.1	15
24	14	93	168	93	36	96	109	15	74	344	5.8	14
25	13	68	147	73	34	184	77	28	87	472	5.9	13
26	13	101	132	68	33	685	59	45	30	206	4.7	13
27	14	108	110	148	32	351	62	39	324	108	3.9	9.0
28	17	124	99	177	31	204	62	42	110	58	3.6	4.2
29	16	103	86	205	---	295	47	41	65	36	3.3	6.4
30	14	94	59	120	---	285	42	37	39	27	3.4	15
31	14	---	218	83	---	240	---	26	---	22	5.6	---
TOTAL	334.3	6208	5530	2839	1992	9117	3833	1039	4646	2936.5	267.6	171.0
MEAN	10.8	209	178	91.6	71.1	294	128	33.5	155	94.7	8.63	5.70
MAX	17	1470	418	285	211	1070	276	153	941	1130	25	15
MIN	6.9	53	60	34	31	30	42	15	10	4.0	3.3	1.7
CFSM	.16	3.03	2.58	1.33	1.03	4.26	1.86	.49	2.25	1.37	.13	.08
IN.	.16	3.38	2.98	1.53	1.07	4.92	2.07	.56	2.50	1.58	.14	.09
CAL YR 1972 TOTAL	32377.8											
WTR YR 1973 TOTAL	38973.4											
MEAN	88.5											
MAX	1470											
MIN	2.9											
CFSM	1.28											
IN	17.46											
MEAN	107											
MAX	1470											
MIN	1.7											
CFSM	1.55											
IN	21.01											

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-14	0330	6.37	2,380	03-17	0300	5.32	1,640	06-19	2045	6.86	2,770
03-11	1030	5.09	1,500	06-05	1930	6.90	2,800	07-21	0600	*9.27	*5,100

Minimum daily discharge: 1.7 ft³/s (0.048 m³/s) Sept. 13-14.

GREAT MIAMI RIVER BASIN

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03272700 SEVENMILE CREEK AT CAMDEN, OHIO--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	16	64	70	82	100	221	39	31	82	7.9	16
2	22	10	54	62	74	94	376	34	27	53	8.2	16
3	12	8.6	48	56	71	86	218	37	24	41	17	71
4	11	7.8	55	50	62	82	282	31	22	35	15	46
5	10	8.2	55	46	56	140	156	29	22	34	12	24
6	8.6	8.6	40	42	99	113	120	28	27	30	9.8	18
7	8.2	7.5	35	40	182	94	103	25	22	31	8.8	15
8	5.0	7.5	34	37	99	77	650	42	22	33	8.2	13
9	7.2	7.5	33	36	76	71	545	50	24	25	8.3	12
10	7.2	6.8	32	40	60	63	496	35	21	23	9.1	12
11	6.8	6.8	29	38	54	59	350	32	19	22	9.0	11
12	6.6	6.6	29	36	52	60	218	38	18	20	11	47
13	6.8	6.8	33	35	56	62	154	38	16	18	9.6	27
14	9.7	7.2	33	40	58	44	124	31	16	21	25	18
15	6.8	22	31	183	50	45	96	31	21	32	13	15
16	6.8	20	29	265	50	66	82	29	19	21	11	13
17	6.3	12	24	469	47	57	71	261	10	10	39	13
18	6.0	11	26	403	45	51	64	243	15	13	22	12
19	6.0	10	25	731	98	50	59	172	14	13	14	11
20	6.0	10	60	466	131	42	54	124	15	12	12	10
21	6.0	10	45	625	91	66	51	80	21	11	9.7	10
22	6.0	11	36	296	342	54	62	67	292	11	8.9	9.7
23	6.3	9.7	35	412	187	50	58	66	1120	11	8.6	9.3
24	6.3	64	56	268	124	46	47	64	237	11	10	9.3
25	6.3	285	340	180	80	40	42	45	147	10	8.2	9.3
26	6.3	246	537	169	70	46	41	40	210	10	7.8	8.9
27	6.3	357	471	434	72	47	39	36	116	9.7	7.5	8.9
28	6.3	350	228	222	108	47	38	33	83	9.2	17	10
29	6.6	140	192	159	---	66	35	37	68	8.0	23	13
30	7.2	91	158	129	---	447	37	42	53	8.2	20	15
31	8.9	---	115	110	---	341	---	40	---	7.9	13	---
TOTAL	246.5	1764.6	2982	6151	2576	2711	4889	1899	2758	676.0	403.6	523.4
MEAN	7.95	58.8	96.2	198	92.0	87.5	163	61.3	91.9	21.8	13.0	17.4
MAX	22	357	537	731	342	447	650	261	1120	82	39	71
MIN	5.0	6.6	24	35	45	40	35	25	14	7.9	7.5	8.9
CFSM	.12	.85	1.39	2.87	1.33	1.27	2.36	.89	1.33	.32	.19	.25
IN.	.13	.95	1.61	3.32	1.39	1.46	2.64	1.02	1.49	.36	.22	.26
CAL YR 1973 TOTAL	31834.2	MEAN 87.2	MAX 1130	MIN 1.7	CFSM 1.26	IN 17.16						
WTR YR 1974 TOTAL	27580.1	MEAN 75.6	MAX 1120	MIN 5.0	CFSM 1.10	IN 14.87						

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
05-17	1930	5.67	1,870	06-22	2200	*10.23	*6,210

Minimum daily discharge: 5.0 ft³/s (0.142 m³/s) Oct. 8, 1973.

GREAT MIAMI RIVER BASIN
03272700 SEVENMILE CREEK AT CAMDEN, OHIO--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	10	28	309	290	86	107	147	19	5.5	2.1	2.7
2	12	9.7	30	147	183	69	85	119	15	5.4	2.1	2.6
3	11	8.2	25	131	126	56	73	93	25	5.1	4.1	2.7
4	11	24	25	129	105	48	52	82	19	6.5	4.7	4.0
5	11	76	23	100	101	43	46	64	19	5.7	4.1	3.4
6	9.7	42	25	88	145	42	42	56	30	5.1	3.2	3.0
7	9.3	29	70	75	108	53	39	45	26	6.5	2.7	2.6
8	9.3	23	372	244	82	46	37	40	18	5.7	2.5	2.4
9	9.6	21	243	377	67	38	34	36	15	4.7	2.4	3.8
10	9.5	19	131	479	56	43	34	31	14	4.3	2.2	2.0
11	9.2	23	94	629	61	38	31	30	18	4.9	3.5	1.3
12	8.4	30	118	237	126	829	29	38	19	4.3	4.0	9.0
13	8.3	27	199	115	91	352	26	31	14	4.0	3.3	5.4
14	8.6	27	206	93	70	185	25	27	13	5.5	3.6	4.2
15	13	25	298	74	64	118	26	26	12	4.7	6.7	3.5
16	13	23	320	61	116	120	24	23	12	4.1	5.2	3.8
17	11	21	181	51	252	374	23	20	12	5.3	3.2	4.2
18	11	20	123	110	223	481	24	20	12	5.5	3.0	4.6
19	11	20	105	110	144	438	28	19	10	4.6	2.8	4.8
20	10	35	87	69	105	214	20	18	9.8	4.3	2.6	4.4
21	10	34	80	57	85	143	18	17	36	3.7	2.4	4.0
22	10	25	71	50	93	119	18	17	22	3.5	2.2	3.7
23	9.7	22	73	48	2690	84	66	16	14	3.2	2.1	4.0
24	9.7	24	281	51	1510	125	585	15	11	3.1	2.0	3.8
25	9.9	42	222	116	366	91	1040	14	9.7	2.8	1.9	3.6
26	10	38	126	135	214	63	497	13	8.9	2.7	1.7	3.4
27	9.7	32	96	75	150	55	235	16	8.6	2.6	1.7	3.2
28	9.5	29	78	66	115	208	654	13	7.8	2.4	1.7	3.0
29	9.8	24	70	286	---	806	265	12	6.7	2.4	1.7	2.8
30	11	22	66	219	---	284	161	17	5.9	2.2	3.0	2.6
31	11	---	213	398	---	154	---	17	---	2.1	3.1	---
TOTAL	323.2	804.9	4079	5129	7738	5805	4344	1132	462.4	132.4	91.5	138.2
MEAN	10.4	26.8	132	165	276	187	145	36.5	15.4	4.27	2.95	4.61
MAX	17	76	372	629	2690	829	1040	147	36	6.5	6.7	20
MIN	8.3	8.2	23	48	56	38	18	12	5.9	2.1	1.7	2.4
CFSM	.15	.39	1.91	2.39	4.00	2.71	2.10	.53	.22	.06	.04	.07
IN.	.17	.43	2.20	2.77	4.17	3.13	2.34	.61	.25	.07	.05	.07
CAL YR 1974	TOTAL	27794.1	MEAN	76.1	MAX	1120	MIN	7.5	CFSM	1.10	IN	14.98
WTR YR 1975	TOTAL	30179.6	MEAN	82.7	MAX	2690	MIN	1.7	CFSM	1.20	IN	16.27

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
02-23	2015	*9.76	*5,660	04-25	1400	6.25	2,280
03-12	0845	5.63	1,840				

Minimum daily discharge: 1.7 ft³/s (0.048 m³/s) Aug. 26-29.

GREAT MIAMI RIVER BASIN

483

03272800 SEVENMILE CREEK AT COLLINSVILLE, OHIO

LOCATION.--Lat 39°31'23", long 84°36'39", Butler County, at bridge 0.3 mi (0.5 km) north of Collinsville and 5.5 mi (8.8 km) upstream from mouth.

DRAINAGE AREA.--120 mi² (311 km²).

PERIOD OF RECORD.--1960 to 1972 (operated as a continuous-record station), 1973 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Feb. 23	5.58	1.701	3,500	99.1

03272900 COLLINS CREEK AT COLLINSVILLE, OHIO

LOCATION.--Lat 39°31'05", long 84°36'53", Butler County, 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.

DRAINAGE AREA.--0.94 mi² (2.43 km²).

PERIOD OF RECORD.--1966 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Apr. 24	23.16	7.059	400	11.3

GREAT MIAMI RIVER BASIN

03274000 GREAT MIAMI RIVER AT HAMILTON, OHIO

LOCATION.--Lat 39°23'28", long 84°34'20", in NE 1/4 sec. 6, T.1 N., R.3 E., Butler County, on right bank 1,000 ft (305 m) downstream from Columbia Bridge at Hamilton, 3 mi (5 km) downstream from Four Mile Creek, and 4.3 mi (6.9 km) upstream from Pleasant Run.

DRAINAGE AREA.--3,630 mi² (9,402 km²).

GAGE.--Water-stage and continuous ethyl alcohol-actuated thermograph recorders. Datum of gage is 499.98 ft (152.394 m) above mean sea level, adjustment 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.--Discharge records good. Interruptions in the temperature records were due to malfunctions of the instrument. 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 0.75 ft³/s (0.021 m³/s) in 1975 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 canal was abandoned; amount of diversion not known. Water-quality data collected at this site 1950 to 1951, 1973.

WATER DISCHARGE RECORDS

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.

AVERAGE DISCHARGE.--44 years (1931-75), 3,237 ft³/s (91.67 m³/s), 12.11 in/yr (308 mm/yr).

EXTREMES.--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; minimum daily discharge, 155 ft³/s (4.39 m³/s) Sept. 27, 1941.

COOPERATION.--Gage-height charts, tapes and 12 discharge measurements furnished by Miami Conservancy District.

REVISIONS (WATER YEARS).--WSP 803: 1936. WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1290	818	2210	7460	14200	13200	8330	7520	2260	1250	964	1590
2	1130	894	2590	8810	9820	9590	6340	7260	1910	1160	920	1200
3	1050	838	2620	6640	7480	7130	6040	5840	1930	1070	1010	1070
4	1000	1850	2350	5570	6310	6080	5150	4930	1830	4660	2190	1180
5	968	2760	2130	4890	5870	4810	4470	4520	1970	11600	1790	1220
6	909	2110	1970	4280	6220	4290	3940	4100	2920	6570	1510	1250
7	864	2010	3170	3810	7430	4520	3650	3680	6930	4200	1300	1280
8	873	1740	8430	4310	5710	5170	3470	3320	4510	3420	1170	1140
9	852	1470	8400	12000	4390	5960	3270	3100	3120	3110	1090	1020
10	856	1270	6740	16100	3600	5080	3120	2890	2430	2550	1020	931
11	833	1610	4990	21200	3440	4640	3020	2680	2400	2130	1740	1390
12	822	2400	4380	14500	4940	20900	2880	2770	2930	1730	1390	3160
13	808	1810	5080	9040	4260	16100	2720	3050	2670	1580	1190	2020
14	784	1740	6220	6150	3530	11400	2620	2620	2760	1900	1070	1600
15	1320	1650	6880	4960	3200	8850	2580	2470	2900	1970	1700	1350
16	1320	1630	9770	4450	3590	8780	2520	2340	3620	1780	2380	1210
17	997	1550	9170	3880	6020	9420	2480	2200	3370	1520	1820	1120
18	934	1420	6920	4230	11000	11900	2420	2160	2700	2170	1670	1180
19	871	1390	5380	4850	11700	13900	2820	2090	2230	4870	1250	1450
20	811	1510	4630	4150	8770	12400	2650	2030	1980	5900	1110	1280
21	799	1740	3920	3500	6230	9620	2540	1940	1890	3490	1070	1370
22	815	1650	3550	3110	5200	7590	2390	1890	1550	2570	1090	1220
23	808	1520	3190	2960	26700	6220	2510	1890	1440	2000	995	1170
24	849	1530	4180	2840	55100	6990	11200	1840	1440	1640	1130	1290
25	845	2310	8620	3140	45800	8850	17400	1800	1340	1480	1140	1240
26	826	2450	7860	5910	33700	7890	21700	1780	1250	1330	1100	1150
27	775	2440	5710	6290	23400	5870	12400	2060	2100	1170	987	1140
28	753	2240	4340	4580	16800	6820	24400	1900	2160	1120	905	1070
29	788	1950	3610	7260	---	17300	11500	1750	1590	1120	846	962
30	821	1810	3150	18300	---	17600	8310	1840	1380	1080	1120	954
31	854	---	3470	18300	---	12800	---	1910	---	1000	1650	---
TOTAL	28225	52110	155630	227470	344410	291670	188840	92170	73510	83140	40317	39207
MEAN	910	1737	5020	7338	12300	9409	6295	2973	2450	2682	1301	1307
MAX	1320	2760	9770	21200	55100	20900	24400	7520	6930	11600	2380	3160
MIN	753	818	1970	2840	3200	4290	2390	1750	1250	1000	846	931
CFSM	.25	.48	1.38	2.02	3.39	2.59	1.73	.82	.67	.74	.36	.36
IN.	.29	.53	1.59	2.33	3.53	2.99	1.94	.94	.75	.85	.41	.40
CAL YR 1974 TOTAL	1386668	MEAN	3799	MAX	33400	MIN	655	CFSM	1.05	IN	14.21	
WTR YR 1975 TOTAL	1616699	MEAN	4429	MAX	55100	MIN	753	CFSM	1.22	IN	16.57	

EXTREMES.--Current year: Maximum discharge, 62,100 ft³/s (1,759 m³/s) Feb. 24, gage height, 74.21 ft (22.619 m); minimum daily, 753 ft³/s (21.3 m³/s) Oct. 28.

TEMPERATURE (°C) OF WATER

EXTREMES.--Period of record: Maximum, 34.0°C Aug. 16, 1965; minimum, freezing point on several days during 1950 and 1951.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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

GREAT MIAMI RIVER BASIN

03274100 BLAKE RUN NEAR RELLY, OHIO

LOCATION.--Lat 39°27'59", long 84°45'22", Butler County, 600 ft (200 m) upstream from culvert on Stevenson Road,
2.2 mi (3.5 km) north of Relly, 3 mi (5 km) upstream from mouth.

DRAINAGE AREA.--0.29 mi² (0.75 km²).

PERIOD OF RECORD.--1939 to 1940, 1942 to 1943, 1947 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAXIMUM GAGE HEIGHT AND DISCHARGE

DATE	GAGE HEIGHT		DISCHARGE	
	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Apr. 28	2.99	0.911	45	1.27

GREAT MIAMI RIVER BASIN

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OHIO
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, 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 gaging station at Hamilton.

DRAINAGE AREA.--3,814 mi² (9,878 km²).

GAGE.--Water-quality recorder.

REMARKS.--Interruptions in the water-quality records were due to malfunctions of the instrument. Samples were collected each month as part of the National Stream Quality Accounting Network. Records of discharge are given for Great Miami River at Hamilton, Ohio, station 03274000, drainage area 3,630 mi² (9,402 km²).

REVISIONS.--Revised figures of water temperature for water year 1974 are published herein (see p.490). The maximum water temperature for water year 1974 has been revised to 30.5°C July 8, 1974.

WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--July 1966 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)
OCT. 01...	1430	1240	16.5	6.5	70	28	29	4.2	264	0	44	73
01-30	--	--	--	--	--	--	--	--	--	--	--	--
NOV. 06...	1800	1980	14.0	--	--	--	--	--	--	--	--	--
DEC. 09...	1300	8330	3.5	--	--	--	--	--	--	--	--	--
JAN. 09...	1400	13100	8.0	6.4	70	26	16	2.8	249	0	28	60
FEB. 05...	1600	5750	6.0	--	--	--	--	--	--	--	--	--
MAR. 03...	1300	--	5.0	--	--	--	--	--	--	--	--	--
20...	1000	12700	7.5	--	--	--	--	--	--	--	--	--
APR. 08...	1100	3450	10.0	5.7	80	29	16	2.7	300	0	30	65
MAY 13...	1415	3020	20.5	--	--	--	--	--	--	--	--	--
13-31	--	--	--	--	--	--	--	--	--	--	--	--
JUNE 01-10	--	--	--	--	--	--	--	--	--	--	--	--
10...	1130	2410	20.0	--	--	--	--	--	--	--	--	--
JULY 15...	1100	1940	23.5	8.0	79	30	24	3.9	283	0	39	66
AUG. 18...	1230	2030	27.0	--	--	--	--	--	--	--	--	--
SEP. 09...	1300	1020	24.5	--	--	--	--	--	--	--	--	--

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	TOTAL NITROGEN (N) (MG/L)	TOTAL KjELDAHL NITROGEN (N) (MG/L)	TOTAL NITRITE PLUS NITRATE (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL NITROGEN (NO ₃) (MG/L)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	PH (UNITS)
OCT. 01...	.5	423	385	690	3.4	1.1	2.3	.59	15	7.4	76	7.7
01-30	--	--	--	--	--	--	--	--	--	--	--	--
NOV. 06...	--	--	--	700	4.4	1.3	3.1	.72	19	7.4	71	7.7
DEC. 09...	--	--	--	530	3.6	.84	2.8	.69	16	9.3	70	7.7
JAN. 09...	.3	383	333	590	4.8	1.3	3.5	1.0	21	11.6	97	7.9
FEB. 05...	--	--	--	640	5.2	.76	4.4	.32	23	11.3	90	7.9
MAR. 03...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	520	4.4	.95	3.4	.32	19	10.8	90	7.9
APR. 08...	.4	423	377	665	4.3	1.1	3.2	.35	19	9.4	83	7.8
MAY 13...	--	--	--	660	3.5	.75	2.7	.36	15	9.8	110	8.2
13-31	--	--	--	--	--	--	--	--	--	--	--	--
JUNE 01-10	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	581	11	1.2	9.5	.55	47	6.4	70	7.6
JULY 15...	.4	451	390	700	6.3	1.2	5.1	.59	28	6.9	80	7.7
AUG. 18...	--	--	--	630	3.5	1.3	2.2	.45	16	5.6	69	7.6
SEP. 09...	--	--	--	700	5.4	1.7	3.7	.50	24	8.4	100	7.9

GREAT MIAMI RIVER BASIN

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03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OHIO--Continued

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	TOTAL ORGANIC CARRON (C) (MG/L)	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B MG/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A MG/SQ M	TOTAL PHYTO- PLANK- TON (CELLS PER ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TUR- BID- ITY (JTU)
OCT. 01... 01-30	8.4 --	217 --	290 --	74 --	-- --	-- 10	-- 2.0	-- 5.5	23000 --	7700 --	620 --	40 --
NOV. 06... 09...	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	11000 21000	4600 4000	5100 56000	-- -- --
DEC. 09... JAN. 09...	-- -- 5.0	-- -- 204	-- -- 280	-- -- 78	-- -- 9.8	-- -- --	-- -- --	-- -- --	9500	6500	80000	200
FEB. 05... MAR. 03... 20...	-- -- -- --	-- -- -- --	-- -- -- --	-- -- -- --	-- -- -- --	-- -- -- --	-- -- -- --	-- -- -- --	3400 -- 2500	1600 -- 860	1100 -- 860	-- -- -- --
APR. 08... MAY 13... 13-31	7.6 -- -- --	246 -- -- --	320 -- -- --	73 -- -- --	4.5 -- -- --	-- -- -- 2.3	-- -- -- .7	-- -- -- 2.9	5200 59000 --	1200 580 --	360 110 --	15 -- -- --
JUNE 01-10 10...	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	2.3 --	.7 --	2.9 --	-- 5000	-- 14000	-- 400	-- -- --
JULY 15... AUG. 18... SEP. 09...	9.0 -- -- --	232 -- -- --	320 -- -- --	89 -- -- --	7.2 -- -- --	-- 30 --	-- 1.8 --	-- 11 --	31000 210000 100000	19000 18000 22000	300 1100 200	20 -- -- --

ANALYSES OF MINOR ELEMENTS

DATE	TIME	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)
OCT. 01... JAN. 09... APR. 08... JULY 15...	1430 1400 1100 1100	2 2 1 2	2 3 1 3	1 1 0 1	1 3 0 2	0 0 <10 <10	<10 20 <10 10	0 0 1 0	0 2 1 2	0 20 10 0	0 30 10 10	1300 7900 930 2500

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY (HG) (UG/L)
OCT. 01... JAN. 09... APR. 08... JULY 15...	30 170 60 50	1 3 3 1	9 49 5 7	250 220 70 110	60 40 40 10	40 20 10 10	150 230 20 20	2 1 0 1	3 3 0 2	<.5 <.5 <.5 <.5	<.5 <.5 <.5 <.5

GREAT MIAMI RIVER BASIN
03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OHIO--Continued

TEMPERATURE (°C) OF WATER

REVISED FIGURES FOR JUNE AND JULY 1974

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

SUSPENDED SEDIMENT DISCHARGE

PERIOD OF RECORD.--October 1974 to current year (periodic instantaneous concentration and discharge).

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PEN- DED SEDI- MENT (MG/L)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY)
OCT.					
01...	1430	1240	16.5	47	157
NOV.					
06...	1800	1980	14.0	59	315
DEC.					
09...	1300	8330	3.5	260	5850
JAN.					
09...	1400	13100	8.0	469	16600
FEB.					
05...	1600	5750	6.0	46	714
MAR.					
03...	1300	--	5.0	--	--
20...	1000	12700	7.5	108	3700
APR.					
08...	1100	3450	10.0	57	531
MAY					
13...	1415	3020	20.5	53	432
13-31	--	--	20.0	--	--
JUNE					
01-10	--	--	20.0	--	--
10...	1130	2410	20.0	170	1110
JULY					
15...	1100	1940	23.5	58	304
AUG.					
18...	1230	2030	27.0	78	428
SEP.					
09...	1300	1020	24.5	54	149

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C)

EXTREMES.--Period of record: Maximum, 1,160 micromhos Mar. 18, 1970; minimum, 230 micromhos May 24, 1968.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	690	650	850	835	730	685	670	545	520	460	480	410
2	695	670	860	780	705	675	560	500	580	520	560	480
3	740	685	840	780	790	675	530	470	620	580	588	560
4	780	740	830	500	790	760	575	530	660	620	620	581
5	810	780	710	655	800	770	620	575	690	660	654	618
6	830	810	720	685	770	750	645	620	700	680	663	653
7	840	830	685	645	755	585	680	645	680	640	695	642
8	---	---	730	680	600	530	690	670	640	620	726	686
9	850	830	750	725	560	520	670	550	660	620	702	615
10	850	830	775	750	600	560	550	420	720	650	636	600
11	860	840	775	705	615	590	440	400	760	720	836	603
12	850	840	765	720	640	615	480	440	760	670	786	---
13	860	850	740	725	665	640	490	470	740	690	510	375
14	870	700	745	715	665	650	540	490	800	740	549	513
15	840	750	750	715	650	610	570	540	820	780	657	551
16	825	785	755	735	610	570	670	570	---	---	617	554
17	---	---	780	755	600	570	690	660	---	---	576	524
18	815	780	795	770	600	580	720	680	720	600	546	507
19	785	745	805	790	630	595	810	670	600	480	551	492
20	780	745	810	780	780	630	810	720	530	520	500	486
21	800	770	795	770	775	685	790	720	610	520	507	477
22	810	790	805	790	700	680	800	760	650	610	549	507
23	830	800	790	765	690	680	810	780	---	---	578	528
24	845	830	780	760	690	680	820	800	---	---	564	513
25	860	845	770	740	680	610	820	790	---	---	599	534
26	870	855	750	720	610	580	790	740	300	300	543	461
27	875	860	720	705	575	550	740	660	340	300	524	473
28	870	860	730	705	605	575	660	620	410	340	542	522
29	865	855	720	700	640	605	660	640	---	---	524	413
30	875	825	705	700	670	640	680	380	---	---	443	410
31	845	825	---	---	680	670	---	---	---	---	422	411
MONTH	875	650	860	500	800	520	820	380	820	300	836	375
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	470	423	527	492	701	638	677	648	801	741	747	640
2	521	471	525	497	695	656	686	677	807	771	658	628
3	524	476	530	506	683	624	692	654	824	758	663	604
4	572	519	552	530	705	678	698	567	803	744	664	606
5	576	552	558	536	713	548	546	297	752	641	678	632
6	587	569	566	548	681	579	374	299	666	597	707	644
7	606	564	578	554	677	527	456	377	704	653	711	657
8	561	548	693	567	516	483	524	461	747	681	699	671
9	689	546	693	666	563	510	570	539	758	708	690	642
10	690	657	696	660	612	554	579	563	782	576	683	645
11	687	657	696	651	617	584	617	573	746	671	699	549
12	869	660	699	659	617	560	648	611	683	410	615	396
13	683	657	683	651	632	600	648	602	641	549	632	495
14	666	648	761	642	669	624	624	602	654	578	543	474
15	683	653	708	674	684	657	639	612	708	576	579	543
16	681	651	707	683	690	641	645	600	693	576	642	578
17	672	653	717	689	632	563	707	605	692	582	663	630
18	687	665	747	702	599	548	747	684	632	593	677	651
19	683	614	750	698	608	552	750	629	669	611	695	662
20	653	629	747	696	648	584	639	419	678	632	708	672
21	629	602	774	704	660	587	470	434	654	603	708	665
22	648	623	807	704	686	614	551	482	707	645	704	659
23	636	602	788	710	713	677	611	564	756	700	702	660
24	611	381	731	711	722	660	635	582	758	694	701	650
25	440	360	753	692	707	669	717	614	753	722	726	689
26	408	317	725	681	728	557	731	690	774	724	726	701
27	432	381	723	686	758	725	725	689	754	702	726	669
28	434	237	701	674	752	678	747	701	754	710	713	671
29	494	399	698	638	702	612	755	710	772	726	723	701
30	503	488	708	660	690	642	756	717	774	729	747	713
31	---	---	716	677	---	---	786	735	758	704	---	---
MONTH	869	237	807	492	758	483	786	297	824	410	747	396
YEAR	875	237										

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OHIO--Continued

PH (UNITS)

PERIOD OF RECORD.--March to September 1975.

EXTREMES.--Period of record: Maximum, 8.9 Aug. 14, 1975; minimum, 7.0 June 19, 1975.

MARCH TO SEPTEMBER 1975

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1											---	---
2											---	---
3											7.9	7.2
4											7.8	7.4
5											7.8	7.5
6											7.9	7.7
7											7.9	7.8
8											8.0	7.8
9											7.9	7.7
10											7.9	7.8
11											7.9	7.5
12											7.9	7.8
13											8.0	7.9
14											8.0	7.9
15											8.0	7.7
16											8.6	7.8
17											8.0	7.8
18											8.0	7.6
19											8.0	7.9
20											8.1	7.7
21											8.0	7.6
22											8.0	7.8
23											8.0	7.8
24											8.0	7.9
25											8.1	7.9
26											8.0	7.8
27											7.9	7.8
28											7.9	7.7
29											7.8	7.4
30											8.0	7.8
31											8.0	7.4
MONTH											8.6	7.2
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.8	7.4	8.0	7.9	8.3	7.9	8.1	7.6	8.2	7.8	8.1	7.9
2	7.9	7.5	8.0	7.9	8.3	7.9	8.1	7.7	8.2	7.8	8.1	7.9
3	8.0	7.8	8.0	7.9	8.1	7.9	8.6	7.9	8.1	7.6	8.3	7.8
4	7.9	7.8	8.0	7.9	---	---	8.4	7.4	7.7	7.3	8.4	7.9
5	8.0	7.9	8.0	7.9	---	---	7.5	7.1	7.5	7.4	8.4	7.9
6	7.9	7.8	8.0	7.9	---	---	7.6	7.3	7.5	7.3	8.3	7.9
7	---	---	8.2	7.9	---	---	7.6	7.5	7.7	7.3	8.4	7.8
8	8.0	7.9	8.3	7.9	---	---	7.7	7.4	7.9	7.3	8.4	8.0
9	8.0	7.9	8.3	7.6	---	---	7.8	7.6	7.9	7.4	8.5	7.9
10	8.0	7.9	8.6	7.7	7.7	7.6	7.8	7.5	8.1	7.6	8.5	8.0
11	8.0	7.9	8.8	8.0	7.7	7.5	7.8	7.5	8.1	7.6	8.5	7.8
12	8.7	7.9	8.6	7.9	7.7	7.6	7.9	7.6	8.0	7.6	7.8	7.7
13	8.1	8.0	8.3	7.6	7.8	7.5	7.9	7.5	---	---	7.9	7.7
14	8.1	7.9	8.5	7.8	7.9	7.6	7.9	7.4	8.9	7.8	7.9	7.2
15	8.1	7.9	8.4	7.7	8.0	7.7	7.8	7.3	8.1	7.8	7.9	7.8
16	8.1	7.9	8.7	7.7	7.9	7.7	7.8	7.4	---	---	7.9	7.7
17	8.2	7.9	8.6	7.6	7.7	7.5	8.0	7.5	---	---	7.8	7.7
18	8.2	7.9	8.5	7.8	7.6	7.3	7.7	7.3	---	---	7.9	7.7
19	8.4	8.0	8.5	7.9	7.5	7.0	7.7	7.3	---	---	7.8	7.3
20	8.4	8.0	8.5	7.9	7.7	7.5	7.3	7.1	---	---	7.9	7.5
21	8.4	8.0	8.5	7.8	7.8	7.5	7.4	7.2	---	---	7.9	7.7
22	8.3	8.0	8.3	7.8	8.1	7.5	7.4	7.2	8.5	8.0	7.9	7.7
23	8.3	7.9	8.0	7.8	8.4	7.8	7.5	7.3	8.6	8.0	7.8	7.7
24	8.0	7.6	8.0	7.8	8.5	8.0	7.5	7.3	8.5	8.0	7.8	7.6
25	7.9	7.8	8.1	7.8	8.4	8.0	7.8	7.3	8.4	8.0	7.8	7.6
26	7.9	7.7	8.4	7.8	8.5	8.0	8.1	7.4	8.6	8.4	7.8	7.6
27	7.9	7.8	8.2	7.9	8.3	7.8	8.1	7.8	8.6	8.3	7.7	7.6
28	7.9	7.6	8.2	7.9	8.1	7.6	8.4	7.8	8.6	8.1	8.1	7.5
29	7.9	7.5	8.3	7.9	8.1	7.7	8.4	8.0	8.3	7.9	7.8	7.5
30	8.0	7.9	8.4	7.9	8.1	7.7	8.3	7.9	8.4	8.0	7.8	7.7
31	---	---	8.3	8.0	---	---	8.2	7.9	8.3	7.9	---	---
MONTH	8.7	7.4	8.8	7.6	8.5	7.0	8.6	7.1	---	---	8.5	7.2
YEAR	8.9	7.0										

DISSOLVED OXYGEN (DO), IN MILLIGRAMS PER LITRE

EXTREMES.--Period of record: Maximum, 15.0 mg/l or higher Feb. 26, Mar. 8, June 9, 10, 1971, Feb. 6, 1972, Nov. 15, 1972, May 10, 11, 16, 1975; minimum, 0.0 mg/l June 27, 1971.

REMARKS.--Dissolved oxygen concentrations listed as 15.0 mg/l represent concentrations of 15.0 mg/l or higher due to instrument limitations.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.3	6.3	4.6	3.7	12.2	11.4	10.5	9.6	11.8	11.6	12.2	12.0
2	8.0	6.3	4.6	3.5	12.0	11.3	11.2	10.5	11.6	11.4	12.0	11.5
3	8.2	6.7	4.5	3.2	11.7	11.0	12.9	12.2	11.4	11.3	13.7	11.4
4	8.3	6.5	6.3	3.8	11.3	10.8	12.8	12.5	11.4	11.0	13.5	12.8
5	8.4	5.8	6.9	5.4	11.1	10.3	12.8	12.6	11.0	10.7	12.9	12.1
6	8.7	5.8	7.7	6.8	11.3	10.4	12.7	12.3	11.7	10.6	12.0	11.9
7	9.2	5.5	7.7	7.3	10.9	9.5	12.3	11.7	12.4	11.7	11.3	10.6
8	---	---	7.6	7.2	11.2	10.5	11.7	11.0	12.5	12.3	12.0	11.2
9	9.1	6.2	8.0	7.1	11.9	11.2	11.6	11.0	12.5	12.2	12.7	12.0
10	9.2	5.5	7.5	6.8	12.0	11.5	11.6	10.9	12.5	12.3	12.5	11.9
11	9.6	5.7	7.4	6.5	11.8	11.3	11.7	7.7	12.3	11.7	12.0	11.6
12	---	---	7.6	6.7	11.8	11.2	12.0	11.6	11.9	11.5	12.6	11.6
13	---	---	8.1	7.4	11.4	10.8	12.2	11.6	11.8	11.6	12.0	11.5
14	---	---	8.5	7.9	11.5	10.9	12.3	11.8	11.6	11.4	11.5	9.4
15	---	---	9.0	8.1	11.6	10.8	---	---	11.4	10.7	11.9	9.2
16	---	---	9.0	8.4	11.3	10.7	12.2	12.1	---	---	11.8	10.9
17	---	---	8.4	7.8	12.5	11.0	12.2	11.9	---	---	11.4	10.9
18	7.8	5.4	9.0	8.6	12.8	12.2	11.9	11.5	11.9	11.3	11.1	10.8
19	8.1	5.7	8.2	7.4	12.3	11.4	11.8	11.6	12.1	11.8	10.9	10.5
20	8.8	6.4	8.1	7.0	12.3	11.8	12.0	11.7	12.3	12.2	10.8	10.2
21	10.5	7.5	8.8	7.5	12.0	10.6	11.9	11.7	12.2	11.2	10.3	9.3
22	10.6	7.0	9.1	8.4	11.1	10.6	11.7	11.4	11.3	10.8	9.2	8.4
23	9.2	6.6	9.7	8.9	11.2	10.4	11.4	10.8	---	---	8.5	7.7
24	7.6	5.6	8.9	7.7	10.6	10.0	10.8	10.3	---	---	8.2	7.3
25	7.0	4.6	9.0	7.6	11.7	10.0	10.3	10.0	---	---	9.8	7.2
26	7.3	4.9	10.0	9.0	12.6	11.7	11.1	10.1	12.8	12.7	10.2	9.6
27	7.0	4.8	10.5	9.4	12.6	12.0	11.6	11.1	12.8	12.6	10.5	10.2
28	7.4	5.0	10.4	10.0	12.3	12.2	11.5	10.9	12.6	12.0	10.8	9.8
29	6.5	4.6	11.2	10.0	12.3	12.1	11.0	10.1	---	---	---	---
30	5.7	4.5	11.4	11.1	12.3	12.0	11.3	10.4	---	---	11.8	9.8
31	5.7	3.8	---	---	12.2	9.6	---	---	---	---	10.3	9.0
MONTH	---	---	11.4	3.2	12.8	9.5	12.9	7.7	12.8	10.6	13.7	7.2
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.6	9.3	8.6	7.8	9.7	4.4	8.8	3.7	8.7	2.2	8.3	4.3
2	---	---	9.2	8.6	9.3	5.3	8.9	4.1	7.4	1.6	7.8	4.2
3	---	---	8.9	8.3	10.1	5.8	14.2	5.3	7.0	2.3	10.2	3.8
4	---	---	9.2	8.0	7.9	5.4	9.0	3.1	5.1	2.4	10.3	4.1
5	---	---	8.9	8.1	7.0	4.1	5.8	3.8	5.3	3.4	8.8	3.9
6	---	---	8.5	7.7	8.8	4.8	5.9	5.1	8.2	3.8	9.9	3.9
7	---	---	9.8	7.6	7.0	3.3	5.8	4.9	9.2	5.1	10.7	4.3
8	---	---	10.4	7.1	6.9	5.8	6.1	4.7	11.9	6.3	11.0	5.1
9	10.1	9.6	13.3	7.1	6.9	6.2	5.6	4.4	14.9	8.0	12.8	5.2
10	9.7	9.3	15.0	7.6	6.4	5.7	5.9	4.1	14.1	8.4	13.6	5.7
11	9.7	8.9	15.0	7.6	6.2	5.5	7.8	4.4	12.6	6.8	10.4	4.6
12	9.8	8.7	12.0	6.6	6.0	5.4	8.8	4.6	11.7	4.9	6.0	4.4
13	10.3	9.0	10.2	6.5	6.7	5.4	8.3	4.8	9.8	4.9	7.2	5.2
14	10.2	9.2	13.6	6.5	6.4	5.1	9.1	4.7	12.7	3.8	8.2	5.9
15	10.3	9.2	11.9	6.6	8.1	4.6	8.7	5.3	9.2	4.5	8.4	6.1
16	11.4	8.8	15.0	6.9	7.3	5.9	9.8	4.8	7.2	3.5	7.8	5.7
17	10.9	8.7	13.2	6.8	6.2	5.3	9.8	5.1	7.4	3.8	7.2	5.3
18	10.0	7.8	12.2	6.0	5.8	5.4	8.8	4.8	11.0	4.3	6.3	4.8
19	11.5	7.4	12.2	5.4	5.8	5.1	6.5	4.2	10.1	4.8	6.4	4.5
20	12.8	8.1	12.3	4.6	6.9	4.5	6.0	5.1	13.4	5.0	7.1	4.7
21	13.2	8.7	10.9	4.1	6.3	4.1	5.9	5.2	13.6	4.4	7.1	4.8
22	12.9	8.6	7.3	3.9	9.2	3.9	5.1	4.6	12.8	2.9	7.1	5.5
23	10.1	7.6	4.8	3.1	13.2	4.1	5.1	4.0	12.0	4.0	7.0	5.2
24	8.6	7.4	5.1	2.5	14.1	5.2	5.5	3.8	10.1	4.8	6.7	5.7
25	9.3	8.6	7.6	2.4	12.9	5.2	7.6	2.7	8.7	3.2	6.8	5.8
26	10.1	9.2	9.5	4.5	10.5	4.5	11.8	3.5	10.8	2.5	6.7	5.6
27	9.6	9.1	9.7	4.3	6.0	2.6	12.4	4.8	13.2	4.5	7.3	5.2
28	10.2	8.8	9.9	4.5	7.0	2.2	14.0	4.8	9.5	3.3	7.4	5.5
29	9.2	8.4	9.5	5.0	8.8	3.9	12.4	4.3	8.6	2.3	7.3	5.3
30	8.7	8.1	10.4	4.5	8.7	3.8	9.8	3.4	7.8	3.3	7.3	4.7
31	---	---	8.7	5.5	---	---	10.1	2.2	6.7	2.5	---	---
MONTH	---	---	15.0	2.4	14.1	2.2	14.2	2.2	14.9	1.6	13.6	3.8
YEAR	15.0	1.6										

PERIOD OF RECORD.--July 1966 to current year.

EXTREMES.--Period of record: Maximum, 33.5°C July 8, 1974, Aug. 14, 1975; minimum, freezing point on several days during winter months of 1970 to 1971.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	16.0	20.0	19.5	5.0	4.5	8.5	6.0	4.5	6.0	5.0	4.5
2	17.5	15.0	21.0	19.5	6.0	5.0	6.0	5.0	5.0	6.0	4.5	3.5
3	16.5	14.5	20.5	19.5	5.5	4.5	5.5	4.5	5.0	4.0	3.5	3.0
4	16.5	14.5	20.0	17.0	6.5	5.5	5.5	4.5	5.0	4.5	4.5	3.0
5	17.5	15.5	18.0	16.0	6.5	5.5	5.5	4.5	5.5	5.0	5.5	4.5
6	18.5	16.5	16.0	14.5	7.0	5.5	5.0	4.0	5.5	4.5	6.0	5.5
7	19.0	17.0	15.0	13.5	7.0	6.5	6.0	4.0	4.5	3.0	8.0	7.5
8	---	---	15.0	13.5	6.5	5.5	8.0	6.0	3.5	2.0	8.0	6.0
9	18.5	16.5	15.0	13.5	5.5	4.0	8.0	6.5	3.5	2.0	6.0	5.0
10	19.0	16.5	15.0	13.5	4.0	3.5	8.5	6.5	2.0	1.0	5.0	4.5
11	19.5	17.0	14.5	14.0	5.0	3.5	12.0	8.0	4.0	2.0	6.5	4.5
12	19.5	18.5	14.0	12.0	6.5	5.0	8.0	5.0	4.5	4.0	6.0	4.0
13	19.5	19.0	12.0	11.5	7.0	6.5	5.5	3.5	4.5	3.5	5.5	5.5
14	20.0	19.5	11.5	10.0	7.5	7.0	3.5	2.0	4.5	3.5	5.5	4.0
15	20.0	18.5	10.0	9.0	7.0	6.5	3.0	2.0	6.0	4.5	5.0	3.5
16	18.5	17.0	10.0	8.5	6.5	6.0	4.0	3.0	---	---	5.5	5.0
17	---	---	11.5	9.5	6.5	6.0	3.5	2.0	---	---	7.5	5.5
18	18.0	16.5	12.0	10.0	6.0	5.5	4.5	3.0	7.0	6.0	8.0	7.0
19	16.5	15.5	13.5	12.0	6.0	5.5	4.0	3.5	6.0	4.5	8.0	7.5
20	16.0	14.5	13.5	13.0	6.0	4.5	3.5	2.0	5.0	4.5	9.0	7.5
21	14.5	13.0	13.0	10.5	6.0	5.5	3.5	2.0	6.0	4.5	10.0	8.5
22	14.5	13.5	10.5	10.5	6.0	5.0	4.5	3.0	7.0	5.0	11.0	10.0
23	15.5	14.0	12.0	9.5	7.5	5.5	5.0	4.0	---	---	11.5	10.0
24	17.0	15.5	12.0	11.5	9.0	7.5	6.0	4.5	---	---	12.5	11.5
25	17.0	16.5	12.0	10.5	8.5	6.5	6.5	6.0	---	---	12.0	9.0
26	18.5	16.0	10.5	9.0	6.5	5.0	6.0	4.0	5.5	5.0	9.0	8.0
27	18.0	16.0	9.5	8.5	5.5	5.0	4.0	3.0	5.5	4.5	8.0	6.0
28	18.0	16.0	8.5	8.0	5.5	5.5	5.5	3.5	5.5	4.5	6.0	5.0
29	18.0	16.5	8.0	6.5	7.0	5.5	8.5	5.5	---	---	6.0	4.5
30	19.0	17.0	6.5	4.5	8.0	7.0	8.0	6.0	---	---	6.0	5.5
31	20.0	18.5	---	---	8.5	7.0	---	---	---	---	6.0	5.0
MONTH	20.0	13.0	21.0	4.5	9.0	3.5	12.0	2.0	7.0	1.0	12.5	3.0
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.0	6.0	16.0	13.5	24.0	21.5	29.0	25.5	31.0	27.0	27.0	25.5
2	10.5	8.0	16.0	14.5	22.5	20.5	28.5	26.5	32.5	27.5	26.5	24.5
3	11.0	10.0	16.0	15.5	21.0	20.0	28.5	26.5	32.0	28.0	27.0	25.5
4	9.5	8.0	16.5	15.0	22.5	20.0	28.5	26.0	31.0	27.5	28.5	25.5
5	9.0	7.0	17.5	15.0	22.5	20.5	26.0	22.5	33.0	26.0	28.5	26.0
6	9.0	7.5	17.5	16.0	23.0	20.5	25.5	22.0	26.0	24.0	27.5	25.5
7	10.0	8.0	18.5	17.0	22.5	20.0	25.0	22.5	24.5	22.5	26.0	24.0
8	10.5	9.5	18.5	17.5	20.0	19.0	26.5	23.5	25.0	22.5	26.0	24.0
9	10.5	9.5	19.5	17.5	20.0	19.0	26.5	23.5	25.0	23.0	25.5	23.5
10	11.5	9.0	20.0	18.0	21.0	19.5	29.0	24.5	25.5	23.0	25.0	23.0
11	12.0	10.5	20.0	18.0	21.0	20.0	24.5	23.0	26.5	23.0	25.5	23.5
12	12.0	10.0	20.5	19.0	22.5	20.5	24.0	22.5	30.0	21.5	23.5	22.5
13	12.5	11.0	19.5	18.5	23.0	20.5	23.5	21.5	30.5	16.0	23.0	21.0
14	13.0	11.0	20.0	18.5	23.0	21.5	23.0	20.5	33.5	27.0	21.0	19.5
15	11.0	10.5	20.0	18.5	22.5	21.5	23.5	21.5	27.5	26.0	20.5	19.5
16	11.5	10.0	20.5	18.5	23.0	21.0	24.5	22.0	30.5	27.0	20.5	19.5
17	13.5	11.5	20.5	19.0	23.0	21.5	25.0	23.0	27.0	26.0	21.0	20.5
18	14.5	13.5	22.5	19.5	23.0	21.5	24.5	23.0	27.0	25.0	21.5	20.5
19	15.0	14.0	23.0	20.0	26.0	22.5	25.0	23.0	27.0	25.0	22.0	20.5
20	14.0	12.5	24.5	21.5	28.0	25.0	23.0	20.5	28.0	25.5	22.0	20.5
21	13.5	11.5	25.0	23.0	28.0	26.0	26.5	21.5	28.5	26.5	21.5	20.0
22	15.5	13.0	25.0	23.5	29.5	26.5	25.5	23.0	28.5	27.5	20.5	19.5
23	15.5	13.5	27.0	24.0	28.5	26.5	27.0	24.0	29.0	27.5	20.0	18.5
24	14.0	12.5	27.0	24.5	29.0	27.0	27.0	25.0	29.0	27.5	18.5	17.0
25	13.0	12.5	27.0	24.5	30.5	26.5	27.0	25.0	29.0	27.5	17.5	17.0
26	12.5	11.0	26.5	24.0	29.5	25.0	27.0	25.0	29.0	28.0	18.0	17.0
27	13.0	11.0	26.0	24.0	28.5	26.5	27.0	24.5	28.5	27.0	18.5	17.0
28	12.0	9.5	25.5	23.5	28.5	27.5	28.0	25.0	29.0	27.5	18.5	18.0
29	13.0	11.5	25.0	23.5	29.0	26.0	27.5	25.5	29.0	27.5	19.5	18.5
30	15.0	13.0	24.5	23.0	28.5	25.5	28.5	26.0	28.5	26.5	19.5	19.0
31	---	---	24.0	23.0	---	---	28.0	25.5	28.0	26.5	---	---
MONTH	15.5	6.0	27.0	13.5	30.5	19.0	29.0	20.5	33.5	16.0	28.5	17.0
YEAR	33.5	1.0										

GREAT MIAMI RIVER BASIN

495

03276500 WHITEWATER RIVER AT BROOKVILLE, IND

LOCATION.--Lat 39°24'24", long 85°00'46", in NE 1/4 NW 1/4 sec. 32, T.9 N., R.2 W., Franklin County, on right bank at downstream side of highway bridge, 0.3 mi (0.5 km) downstream from East Fork Whitewater River, and 1.1 mi (1.8 km) south of Brookville, and at mile 29.3 (47.1 km).

DRAINAGE AREA.--1,224 mi² (3,170 km²).

GAGE.--Water-stage recorder. Datum of gage is 595.71 ft (181.572 m) above mean sea level. Prior to July 1923, nonrecording gage at same site at datum 1.5 ft (0.46 m) higher. July 1923 to Sept. 27, 1928, nonrecording gage at same site and datum.

REMARKS.--Discharge records good. Flow regulated by Brookville Lake since January 1974.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--June 1915 to September 1917, October 1917 to May 1920 (gage heights only), and July 1923 to current year. Monthly discharge only for some periods, published in WSP 1305.

AVERAGE DISCHARGE.--54 years (1915-17, 1923-75), 1,267 ft³/s (35.88 m³/s), 14.06 in/yr (357 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 81,800 ft³/s (2,320 m³/s) Jan. 21, 1959, gage height, 27.78 ft (8.467 m), from rating curve extended above 45,000 ft³/s (1,270 m³/s) on basis of contracted-opening measurement of peak flow; minimum daily, 60 ft³/s (1.70 m³/s) July 27, 1934. Flood of Mar. 25, 1913, reached a stage of 39.0 ft (11.89 m), present datum, from floodmarks (discharge not determined).

REVISIONS (WATER YEARS).--WSP 1335: 1915-17, 1929, 1930(M), 1934, 1935(M), 1936. WSP 1505: 1916(M). WSP 1908: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	800	680	881	3050	5780	4060	2550	5280	825	348	238	188
2	618	672	966	2440	4150	3790	2230	4970	767	338	241	177
3	570	679	891	2390	2530	3690	2100	3630	774	333	265	166
4	554	2370	801	2460	2240	4950	1880	3060	741	321	283	160
5	547	2110	669	2060	2190	6100	1730	2270	715	326	264	158
6	619	1730	619	1910	2410	5630	1630	1720	945	319	253	153
7	507	1740	1820	1600	2320	5600	1570	1590	943	577	243	150
8	498	1690	3200	1640	1970	4150	1410	1230	698	729	238	145
9	518	1150	2730	3490	1680	2040	1170	982	552	360	239	144
10	561	1150	2180	4720	1220	1760	1020	918	512	315	247	152
11	545	1120	1950	8100	1350	1820	999	848	524	297	262	325
12	661	1170	2000	3200	2900	11200	918	950	1290	289	293	745
13	620	1070	2080	2530	2080	4250	871	1080	678	302	268	431
14	548	968	2100	2420	1790	3230	833	848	555	333	252	389
15	618	865	2560	2490	1490	2830	926	759	509	293	270	371
16	672	817	3230	2930	1850	2930	781	682	503	279	258	286
17	607	788	2640	2800	2710	5130	803	655	532	270	242	268
18	576	770	2290	2840	4000	5140	781	629	603	270	233	286
19	557	825	2070	2270	3350	6550	1090	603	579	292	224	278
20	544	937	1780	1750	2330	4740	1090	572	561	281	218	366
21	613	1010	1480	1180	1850	3370	950	547	1620	272	212	358
22	654	981	1240	1080	1870	3220	2270	547	530	265	206	278
23	647	1020	1080	1030	17700	2790	3130	560	452	258	200	275
24	669	1090	1510	1030	26300	4000	6170	518	424	254	194	345
25	686	1320	2290	1330	7720	4120	5490	500	405	250	188	345
26	686	1260	2070	2360	3880	2780	5910	500	392	258	182	340
27	676	1180	1850	2020	3450	2220	4000	547	380	248	177	340
28	668	1140	1480	1680	3870	4500	7870	500	367	248	174	332
29	669	961	1230	4040	---	7890	7820	475	360	244	177	312
30	681	731	1170	7400	---	5620	5710	529	352	241	327	410
31	697	---	1400	6500	---	3150	---	668	---	238	218	---
TOTAL	19086	33994	54257	86740	116980	133250	75702	39167	19088	9648	7286	8673
MEAN	616	1133	1750	2798	4178	4298	2523	1263	636	311	235	289
MAX	800	2370	3230	8100	26300	11200	7870	5280	1620	729	327	745
MIN	498	672	619	1030	1220	1760	781	475	352	238	174	144
CFSM	.50	.93	1.43	2.29	3.41	3.51	2.06	1.03	.52	.25	.19	.24
IN.	.58	1.03	1.65	2.64	3.56	4.05	2.30	1.19	.58	.29	.22	.26
CAL YR 1974 TOTAL	471343			MEAN 1291	MAX 12800	MIN 250	CFSM 1.05	IN 14.33				
WTR YR 1975 TOTAL	603871			MEAN 1654	MAX 26300	MIN 144	CFSM 1.35	IN 18.35				

EXTREMES.--Current year: Maximum discharge, 36,200 ft³/s (1,030 m³/s) Feb. 24, gage height, 18.61 ft (5.672 m); minimum daily, 144 ft³/s (4.08 m³/s) Sept. 9.

WABASH RIVER BASIN

497

03322500 WABASH RIVER NEAR NEW CORYDON, IND.

LOCATION.--Lat 40°33'50", long 84°48'10", in NE 1/4 SE 1/4 sec. 3, T.24 N., R. 15 E., Jay County, on left bank, 10 ft (3 m) downstream from county bridge on Indiana-Ohio State line road, 2 mi (3 km) east of New Corydon, 2.8 mi (4.5 km) downstream from Beaver Creek, and at mile 465.6 (749.2 km).

DRAINAGE AREA.--262 mi² (678 km²).

GAGE.--Water-stage recorder. Datum of gage is 830.10 ft (253.014 m) above mean sea level. Prior to June 24, 1953, nonrecording gage at same site and datum.

REMARKS.--Discharge records fair. Occasional regulation by Grand Lake, diversion from or into St. Marys River basin, and into Miami and Erie Canal. Water-quality data collected at this site 1969 to 1973.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--April 1951 to current year.

AVERAGE DISCHARGE.--24 years, 198 ft³/s (5.607 m³/s), 10.26 in/yr (261 mm/yr).

EXTREMES.--Period of record: Maximum discharge, 8,720 ft³/s (247 m³/s) Jan. 22, 1959, gage height, 20.47 ft (6.239 m), from floodmarks; minimum daily, 0.8 ft³/s (0.023 m³/s) Dec. 22, 23, 1963.

REVISIONS (WATER YEARS).--WSP 1555: 1957(P). WSP 1909: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	13	16	1100	531	325	433	378	33	19	11	49
2	10	15	24	525	407	221	371	378	30	17	11	31
3	9.5	39	79	354	349	196	351	175	72	16	53	23
4	9.5	36	65	406	319	215	311	132	49	16	99	65
5	9.5	177	74	303	329	217	294	101	46	16	47	47
6	8.6	129	100	259	701	208	286	91	175	16	62	49
7	8.4	69	114	248	444	466	278	81	138	17	29	26
8	8.2	45	861	852	342	544	255	72	62	51	18	18
9	8.2	32	853	1880	275	320	151	64	41	24	14	15
10	8.8	25	370	1340	250	265	136	59	34	16	13	14
11	8.5	23	283	1560	230	244	125	54	38	15	42	16
12	9.0	23	804	726	220	616	67	59	81	14	85	58
13	9.2	23	979	368	210	638	53	60	58	14	34	40
14	10	115	846	254	200	358	50	50	45	16	66	25
15	9.5	98	918	230	240	273	49	47	240	15	93	17
16	9.8	51	1270	205	350	258	46	41	356	13	71	15
17	10	36	647	190	600	277	44	40	126	13	33	14
18	9.0	29	377	180	900	906	49	37	81	21	21	14
19	8.5	25	287	170	1200	2450	72	30	57	111	17	17
20	8.2	80	245	160	1100	1430	60	30	55	47	15	24
21	8.3	106	237	155	760	724	44	28	133	25	13	30
22	8.2	60	224	150	900	526	45	68	70	18	13	18
23	8.0	41	297	145	2200	411	50	77	166	15	203	15
24	8.7	35	1630	185	4300	414	468	48	51	17	92	13
25	10	42	1460	459	2320	387	408	37	52	15	44	13
26	9.6	52	637	606	1220	312	181	34	93	13	36	13
27	9.3	39	353	302	690	294	117	29	44	13	34	12
28	10	33	272	245	471	309	585	26	32	12	18	10
29	9.0	26	248	1430	---	2050	354	26	27	11	20	9.2
30	9.0	22	270	1450	---	1340	168	27	22	11	70	8.2
31	11	---	432	728	---	620	---	29	---	11	53	---
TOTAL	284.5	1539	15272	17165	22058	17816	5901	2408	2507	648	1430	718.4
MEAN	9.18	51.3	493	554	788	575	197	77.7	83.6	20.9	46.1	23.9
MAX	11	177	1630	1880	4300	2450	585	378	356	111	203	65
MIN	8.0	13	16	145	200	196	44	26	22	11	11	8.2
CFSM	.04	.20	1.88	2.11	3.01	2.19	.75	.30	.32	.08	.18	.09
IN.	.04	.22	2.17	2.44	3.13	2.53	.84	.34	.36	.09	.20	.10

CAL YR 1974 TOTAL 88889.7 MEAN 244 MAX 4490 MIN 7.0 CFSM .93 IN 12.62
WTR YR 1975 TOTAL 87746.9 MEAN 240 MAX 4300 MIN 8.0 CFSM .92 IN 12.46

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

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
02-24	0300	*18.85	*5,540	03-29	1300	16.51	2,550
03-19	1100	16.62	2,650				

Minimum daily discharge: 8.0 ft³/s (0.23 m³/s) Oct. 23.

DISCHARGE AT MISCELLANEOUS SITES

Discharge measurements made at miscellaneous sites during water year 1975

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Date	Discharge (cfs)
Beaver River basin						
Mahoning River	Beaver River	Lat 41°14'02", long 80°49'23", Trumbull County, at bridge on South Street in Warren, Ohio.	595	-	7-24-75	*464
Mahoning River	Beaver River	Lat 41°10'39", long 80°45'56", Trumbull County, at bridge on North Main Street in Niles, Ohio.	630	-	7-24-75	*414
Mahoning River	Beaver River	Lat 41°09'14", long 80°42'21", Trumbull County, at bridge on Liberty Street in Girard, Ohio.	880	-	7-24-75	*535
Mahoning River	Beaver River	Lat 41°04'47", long 80°37'18", Mahoning County, at bridge on Center Street in Youngstown, Ohio	1,015	-	7-21-75	*1,020
Mahoning River	Beaver River	Lat 41°01'06", long 80°26'26", Lawrence County, at bridge on U.S. Highway 224 at North Edinburg, Ohio	1,099	-	7-21-75	*1,050
Mahoning River	Beaver River	Lat 40°58'14", long 80°23'04", Lawrence County, at bridge on State Highway 108, at New Castle, Ohio.	1,112	-	7-21-75	*1,260
Muskingum River basin						
Salt Creek	Tributary to Muskingum River	Lat 39°54'31", long 81°51'38", Muskingum County, at bridge on State Highway 146, 1 mi (1.6 km) upstream from Buffalo Fork, 2 mi (3.2 km) north-west of Chandlersville, Ohio.	75.7	1935-47, 1962-74	7-10-75 7-21-75	19 13
Scioto River basin						
Scioto River	Ohio River	Lat 39°49'03", long 83°00'55", Franklin County, at Columbus Southerly Sewage Disposal plant, 1.3 mi (2.1 km) southwest of Shadeville, Ohio, 1.4 mi (2.3 km) upstream from Big Walnut Creek.	1,697	1974	3-21-75 8-11-75	5,030 *516
Scioto River	Ohio River	Lat 39°04'15", long 83°01'00", Pike County, at bridge on U.S. Highway 23 in Piketon, Ohio.	5,836	1949, 1953-54, 1962-69, 1971, 1973-74	2-27-75	+59,800
Mill Creek basin						
Sharon Creek tributary	Mill Creek	Lat 39°16'05", long 84°24'18", Hamilton County, at culvert on Thornview Drive at Sharonville, Ohio, 1,000 ft (305 m) upstream from mouth.	0.56	-	6-26-75	937
Mill Creek tributary	Mill Creek	Lat 39°15'06", long 84°25'27", Hamilton County, at culvert on U.S. Highway 42, at Evendale, Ohio, 600 ft (183 m) upstream from mouth.	1.27	-	6-26-75	2,800
Great Miami River basin						
Great Miami River	Ohio River	Lat 40°09'03", long 84°13'44", Miami County at Ash Street (U.S. Highway 36) Bridge in Piqua, Ohio. a/	866	1914, 1915-17, 1948, 1962-72, 1974	7-21-75	843
Lost Creek	Great Miami River	Lat 40°01'05", long 84°09'28", Miami County, at bridge on Knoop Road, 0.2 mi (0.3 km) south of State Highway 41, 2.8 mi (4.5 km) southeast of Troy, Ohio, 2.6 mi (4.5 km) southwest of Casstown, and 4.3 mi (6.9 km) upstream from mouth. a/	58.3	1959, 1961-72	7-22-75	14
Bear Creek	Great Miami River	Lat 39°40'23", long 84°18'38", Montgomery County, at bridge on Farmersville-West Carrollton Road, 0.2 mi (0.3 km) south of Ellerton, Ohio, 1.2 mi (1.9 km) upstream from mouth. a/	37.8	1959, 1962-74	8-6-75	*3.8
Great Miami River	Ohio River	Lat 39°36'39", long 84°17'28", Montgomery County, at Chautauqua Road Bridge, 2 mi (3.2 km) south of Miamisburg, Ohio, 2.5 mi (4.0 km) downstream from gaging station at Miamisburg.	2,715	1924, 1974	8-6-75	*1,200
Clear Creek	Great Miami River	Lat 39°33'06", long 84°18'18", Warren County, at bridge on Shaker Road at south edge of Franklin, Ohio, 1.6 mi (2.6 km) upstream from mouth. a/	51.5	1959, 1961-74	10-10-74 11-27-74 01-09-75 03-05-75 04-17-75 07-17-75	*18 59 161 43 *27 *32
Great Miami River	Ohio River	Lat 39°31'10", long 84°24'30", Butler County, at Central Avenue Bridge in Middletown, Ohio. a/	3,134	1957-59, 1961, 1964, 1967-71, 1974	10-28-74 05-07-75	664 3,300
Dicks Creek	Great Miami River	Lat 39°28'25", long 84°23'51", Butler County, at bridge on Yankee Road, 1.3 mi (2.1 km) south-east of Exello, Ohio, 2.5 mi (4.0 km) upstream from mouth. a/	44.7	1959, 1961-72, 1974	03-12-75	1,780

DISCHARGE AT MISCELLANEOUS SITES

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Discharge measurements made at miscellaneous sites during water year 1975--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements Date Discharge (cfs)
Fourmile Creek	Great Miami River	Lat 39°30'28", long 84°43'02", Butler County, at bridge on State Highway 73 at Oxford, Ohio. <u>a/</u>	116	1971	04-28-75 4,400
Indian Creek	Great Miami River	Lat 39°21'45", long 84°38'35", Butler County, at bridge on Hamilton-New London Road, 1.9 mi (3.1 km) south of Millville, Ohio, 4.3 mi (6.9 km) upstream from mouth. <u>a/</u>	102	1959, 1961-72	10-16-74 41
Great Miami River	Ohio River	Lat 39°15'47", long 84°40'04", Hamilton County, at bridge on Little Rock Road at New Baltimore, Ohio. <u>a/</u>	3,814	1961-72, 1974	10-29-74 *916 04-25-75 15,600 05-05-75 5,000 07-15-75 2,070 08-05-75 1,940

* Base Flow.

+ Peak flow.

a/ Data furnished by Miami Conservancy District.# Operated as a continuous-record gaging station.

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE

The following table contains analyses of selected chemical parameters of water samples taken from drainage courses downstream from strip and underground coal mines.

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TOTAL ACIDITY AS H+ (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	HYDRO- GEN SULFIDE (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
ATHENS COUNTY												
03158200 - MONDAY C AT DOANVILLE OH (LAT 39 26 07 LONG 082 11 30)												
MAY , 1975												
21...	1615	E80	8.9	23.0	966	4.1	.2	0	38	340	.1	.0
SEP.												
17...	1115	E40	7.9	17.0	1200	3.5	2.0	0	140	340	2.0	.0
392359081522800 - FEDERAL C AT AMESVILLE OH (LAT 39 23 59 LONG 081 52 28)												
AUG., 1975												
06...	1045	E10	7.1	21.0	425	6.7	--	110	20	75	.0	35
392409081554800 - SHARPS F NR AMESVILLE OH (LAT 39 24 09 LONG 081 55 48)												
AUG., 1975												
06...	1145	E9.0	7.2	20.5	428	7.0	--	106	14	100	.0	17
392548082071000 - CARR BAILEY RN NR MORRISTOWN OH (LAT 39 25 48 LONG 082 07 10)												
MAY , 1975												
22...	1415	E1.0	9.1	19.0	402	6.5	--	58	6.0	120	.9	29
SEP.												
17...	1240	E.30	6.9	18.5	750	5.2	--	14	10	280	.0	141
392555082053200 - SUNDAY C AT MILLFIELD OH (LAT 39 25 55 LONG 082 05 32)												
MAY , 1975												
22...	1000	E80	7.8	18.0	736	5.2	--	8	20	260	.0	81
SEP.												
17...	1415	E40	7.1	17.0	1330	4.8	--	4	25	530	.0	101
392653082064400 - K KOTTYAN PRIVATE WELL NR MILLFIELD OH (LAT 39 26 53 LONG 082 06 44)												
MAY , 1975												
22...	1015	E1.0	--	15.5	3500	4.7	--	10	4.0	1700	.1	319
SEP.												
17...	1550	E.60	1.4	15.0	3500	3.9	17	0	3.0	1500	.0	.0
393006082052700 - MUD FK AT GLOUSTER OH (LAT 39 30 06 LONG 082 05 27)												
MAY , 1975												
15...	1440	E5.0	8.1	14.5	3070	5.8	--	30	6.0	990	.0	76
SEP.												
16...	1350	E4.0	7.7	16.5	5000	4.7	--	4	20	4700	.0	128
BELMONT COUNTY												
395124080521000 - CAT RN AB MINE NR STEINERSVILLE OH (LAT 39 51 24 LONG 080 52 10)												
JULY, 1975												
21...	1730	E1.0	7.6	28.5	400	7.9	--	176	6.0	51	.0	3.5
395138080520300 - CAT RN BL MINE NR STEINERSVILLE OH (LAT 39 51 38 LONG 080 52 03)												
JULY, 1975												
21...	1855	E2.0	5.8	27.0	1000	4.7	--	2	25	370	.0	64
395249080503500 - CAPTINA C NR CAPTINA OH (LAT 39 52 49 LONG 080 50 35)												
JULY, 1975												
21...	1605	E10	8.2	30.5	625	7.5	--	180	24	120	.0	9.1
395429080592200 - HUNTER RN NR ALLEDONIA OH (LAT 39 54 29 LONG 080 59 22)												
JULY, 1975												
21...	1435	E.30	7.1	29.5	2800	7.8	--	168	165	820	.0	4.3

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

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CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE

The process of removing coal exposes the coal seam and adjoining rocks to increased oxidation that ultimately results in increased dissolved solids and acid content in the water.

DATE	HARD- NESS (CA, MG) (MG/L)	TUR- BID- ITY (JTU)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL MERCURY (HG) (UG/L)
ATHENS COUNTY												
03158200 - MONDAY C AT DOANVILLE OH (LAT 39 26 07 LONG 082 11 30)												
MAY , 1975												
21...	410	20	0	2.8	8	20	1000	6700	4000	1100	10000	<.5
SEP.												
17...	560	20	0	1.1	0	<10	20	5900	4500	190	7900	<.5
392359081522800 - FEDERAL C AT AMESVILLE OH (LAT 39 23 59 LONG 081 52 28)												
AUG.. 1975												
06...	200	180	7	5.8	3	20	10	6300	250	30	3900	<.5
392409081554800 - SHARPS F NR AMESVILLE OH (LAT 39 24 09 LONG 081 55 48)												
AUG.. 1975												
06...	210	150	9	16	3	20	10	6000	420	30	4400	<.5
392548082071000 - CARR BAILEY RN NR MORRISTOWN OH (LAT 39 25 48 LONG 082 07 10)												
MAY , 1975												
22...	180	4	0	2.3	0	<10	10	310	1100	30	1700	<.5
SEP.												
17...	370	20	2	1.5	0	0	0	480	3100	50	2000	<.5
392555082053200 - SUNDAY C AT MILLFIELD OH (LAT 39 25 55 LONG 082 05 32)												
MAY , 1975												
22...	260	85	0	7.8	1	40	200	34000	1800	270	560	<.5
SEP.												
17...	800	20	6	2.2	3	0	30	87000	4200	170	2000	<.5
392653082064400 - K KOTTYAN PRIVATE WELL NR MILLFIELD OH (LAT 39 26 53 LONG 082 06 44)												
MAY , 1975												
22...	1600	1	0	8.6	79	600	20	460000	1000	690	17000	<.5
SEP.												
17...	3400	1	0	5.2	60	20	10	460000	10000	940	40000	<.5
393006082052700 - MUD FK AT GLOUSTER OH (LAT 39 30 06 LONG 082 05 27)												
MAY , 1975												
15...	2400	150	0	1.7	20	440	20	430000	10000	520	13000	<.5
SEP.												
16...	3500	150	0	6.7	29	10	10	700000	15000	810	23000	<.5
BELMONT COUNTY												
395124080521000 - CAT RN AB MINE NR STEINERSVILLE OH (LAT 39 51 24 LONG 080 52 10)												
JULY. 1975												
21...	180	2	0	1.0	5	10	50	36000	910	250	8300	.5
395138080520300 - CAT RN BL MINE NR STEINERSVILLE OH (LAT 39 51 38 LONG 080 52 03)												
JULY. 1975												
21...	290	20	0	1.4	0	<10	0	110	10	10	80	<.5
395249080503500 - CAPTINA C NR CAPTINA OH (LAT 39 52 49 LONG 080 50 35)												
JULY. 1975												
21...	280	10	0	1.6	0	0	0	880	100	10	330	<.5
395429080592200 - HUNTER RV NR ALLEDONIA OH (LAT 39 54 29 LONG 080 59 22)												
JULY. 1975												
21...	1100	30	5	1.8	3	10	10	2300	470	40	830	<.5

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TOTAL ACIDITY AS H+ (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	HYDRO- GEN SULFIDE (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
395435081013500 - CAPTINA C AB ALLEDONIA OH (LAT 39 54 35 LONG 081 01 35)												
JULY, 1975 21...	1215	E6.0	10.1	29.5	440	8.1	--	208	18	40	.0	2.6
395710081135500 - LEATHERWOOD C AT BAILEYS MILLS OH (LAT 39 57 10 LONG 081 13 55)												
JULY, 1975 22...	1535	E1.0	8.0	27.0	960	7.2	--	112	8.0	320	.0	11
400052080535400 - MCMAHON C NR WARNOCK OH (LAT 40 00 52 LONG 080 53 54)												
JUNE, 1975 25...	1320	E9.0	8.8	27.0	459	8.1	--	182	22	57	.5	2.3
SEP. 23...	1410	E20	10.8	14.5	430	7.6	--	168	16	48	.2	6.8
400223080502100 - KINGS RN AT WILLOW GROVE OH (LAT 40 02 23 LONG 080 50 21)												
JUNE, 1975 25...	1615	E.10	6.6	24.5	3300	3.0	23	0	45	1800	.3	.0
SEP. 24...	1400	E2.0	8.0	14.5	800	6.0	--	30	10	320	.0	48
400248080512700 - L MCMAHON C BL AULTS RN NR ST CLAIRSVILLE OH (LAT 40 02 48 LONG 080 51 27)												
JUNE, 1975 25...	1525	E3.0	7.5	26.5	1120	8.4	--	176	60	1500	.3	1.1
SEP. 23...	1100	E8.0	9.9	13.5	960	7.4	--	188	38	230	.0	12
400318081070800 - STILLWATER C NR MORRISTOWN OH (LAT 40 03 18 LONG 081 07 08)												
JULY, 1975 02...	1430	E3.0	7.8	27.0	1500	7.5	--	215	11	560	.1	11
SEP. 23...	1550	E7.0	9.6	17.5	1350	7.4	--	192	15	490	.2	12
400322080535400 - L MCMAHON C NR ST CLAIRSVILLE OH (LAT 40 03 22 LONG 080 53 54)												
JUNE, 1975 24...	1320	E.30	6.4	27.5	3210	2.7	21	0	40	340	.0	.0
SEP. 23...	1230	E1.0	9.2	15.5	1150	4.3	5.6	0	40	330	.0	.0
400341080582500 - BRUSH RN NR ST CLAIRSVILLE OH (LAT 40 03 41 LONG 080 58 25)												
JULY, 1975 02...	1315	E.10	8.4	23.5	1140	7.2	--	320	80	270	.1	32
SEP. 24...	1600	E2.0	8.2	13.5	290	7.1	--	48	9.0	52	.3	6.1
400400080483000 - WHEELING C AT BLAINE OH (LAT 40 04 00 LONG 080 48 30)												
SEP., 1975 23...	1300	E30	9.4	15.0	2000	7.5	--	228	25	300	.0	12
400549080583800 - WHEELING C AT RANNOCK OH (LAT 40 05 49 LONG 080 58 38)												
JUNE, 1975 25...	1130	E10	9.3	24.5	1690	8.2	--	356	38	510	.2	3.6
SEP. 23...	1130	E20	10.4	14.5	1300	7.7	--	248	20	430	.2	7.9

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE--Continued

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DATE	HARD- NESS (CA, MG) (MG/L)	TUR- BID- ITY (JTU)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL MERCURY (HG) (UG/L)
395435081013500 - CAPTINA C AB ALLEDONIA OH (LAT 39 54 35 LONG 081 01 35)												
JULY, 1975 21...	220	4	0	1.8	1	<10	0	290	50	10	190	<.5
395710081135500 - LEATHERWOOD C AT BAILEYS MILLS OH (LAT 39 57 10 LONG 081 13 55)												
JULY, 1975 22...	530	4	0	1.4	1	<10	10	430	1200	20	220	<.5
400052080535400 - MCMAHON C NR WARNOCK OH (LAT 40 00 52 LONG 080 53 54)												
JUNE, 1975 25...	260	15	4	4.4	0	<10	10	470	50	50	320	<.5
SEP. 23...	230	4	1	2.5	0	<10	0	230	20	20	120	<.5
400223080502100 - KINGS RN AT WILLOW GROVE OH (LAT 40 02 23 LONG 080 50 21)												
JUNE, 1975 25...	1400	20	3	12	4	210	20	310000	4000	1400	95000	1.2
SEP. 24...	440	300	0	2.1	43	180	80	85000	1900	420	25000	<.5
400248080512700 - L MCMAHON C BL AULTS RN NR ST CLAIRSVILLE OH (LAT 40 02 48 LONG 080 51 27)												
JUNE, 1975 25...	1500	170	7	2.6	1	10	10	2100	870	70	1100	.7
SEP. 23...	430	80	0	4.0	4	0	10	20000	880	50	3200	<.5
400318081070800 - STILLWATER C NR MORRISTOWN OH (LAT 40 03 18 LONG 081 07 08)												
JULY, 1975 02...	890	4	0	3.6	3	20	10	670	550	20	230	<.5
SEP. 23...	1100	7	3	6.8	1	20	10	290	630	20	200	<.5
400322080535400 - L MCMAHON C NR ST CLAIRSVILLE OH (LAT 40 03 22 LONG 080 53 54)												
JUNE, 1975 24...	510	20	2	4.6	15	230	40	290000	10000	580	55000	1.9
SEP. 23...	440	90	1	3.6	24	10	20	130000	3100	180	21000	<.5
400341080582500 - BRUSH RN NR ST CLAIRSVILLE OH (LAT 40 03 41 LONG 080 58 25)												
JULY, 1975 02...	620	2	0	7.6	1	0	0	450	4200	10	180	<.5
SEP. 24...	150	50	0	5.7	1	<10	10	1300	710	40	970	<.5
400400080483000 - WHEELING C AT BLAINE OH (LAT 40 04 00 LONG 080 48 30)												
SEP., 1975 23...	1300	85	0	3.2	2	40	10	13000	670	80	4400	<.5
400549080583800 - WHEELING C AT BANNOCK OH (LAT 40 05 49 LONG 080 58 38)												
JUNE, 1975 25...	740	5	1	6.2	0	10	0	260	380	40	220	<.5
SEP. 23...	1100	5	0	7.1	0	<10	10	930	1100	30	360	<.5

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
 CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TOTAL ACIDITY AS H+ (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	HYDRO- GEN SULFIDE (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
400700090572100 - CRABAPPLE C NR FAIRPOINT OH (LAT 40 07 00 LONG 080 57 21)												
JUNE, 1975												
26...	1430	E6.0	6.5	23.5	3520	7.2	--	288	14	1500	.2	29
SEP.												
24...	1145	E20	8.8	14.0	2000	7.5	--	234	15	710	.0	12
400727080561600 - MCCracken RN AT FAIRPOINT OH (LAT 40 07 27 LONG 080 56 16)												
JUNE, 1975												
26...	0945	E1.0	6.5	21.0	2910	6.8	--	178	12	1300	.2	45
SEP.												
24...	0930	E6.0	8.6	14.0	1900	7.2	--	240	15	470	.2	24
400834080541000 - COX RN NR MIDWAY OH (LAT 40 08 34 LONG 080 54 10)												
JUNE, 1975												
26...	1130	E.50	8.4	20.5	1560	8.1	--	278	8.0	520	.2	3.5
SEP.												
26...	1100	E5.0	8.9	15.0	1400	7.8	--	252	15	570	.0	6.4
400918080571600 - MCCracken RN AB FAIRPOINT OH (LAT 40 09 18 LONG 080 57 16)												
JUNE, 1975												
26...	1230	E.20	6.2	23.0	2200	7.5	--	256	4.0	930	.1	13
SEP.												
23...	1530	E1.0	7.8	16.0	1900	7.3	--	226	6.0	930	.5	18
401023081075600 - BOGGS F NR HOLLOWAY OH (LAT 40 10 23 LONG 081 07 56)												
JULY, 1975												
28...	1400	E3.0	8.5	25.0	2100	8.2	--	240	25	880	.0	2.4
CARROLL COUNTY												
403017081134000 - THOMPSON RN AT SHERRODSVILLE OH (LAT 40 30 17 LONG 081 13 40)												
JULY, 1975												
16...	1405	E1.0	8.1	21.5	732	6.6	--	96	70	140	.1	39
COLUMBIANA COUNTY												
404322080380500 - M F L BEAVER C AT WILLIAMSPORT OH (LAT 40 43 22 LONG 080 38 05)												
JULY, 1975												
08...	1445	42	8.8	26.5	683	7.6	--	144	32	150	.0	5.8
404635080323500 - N F L BEAVER C NR NEGLEY OH (LAT 40 46 35 LONG 080 32 35)												
JULY, 1975												
09...	1045	E60	6.7	21.0	761	7.2	--	134	40	190	.1	14
405124080474400 - M F L BEAVER C AT FRANKLIN SQUARE OH (LAT 40 51 24 LONG 080 47 44)												
JULY, 1975												
08...	1640	E6.0	7.3	25.0	878	6.7	--	138	54	190	.0	44
COSHOCTON COUNTY												
400908081461700 - DUMP RN NR WILLS CREEK OH (LAT 40 09 08 LONG 081 46 17)												
JULY, 1975												
10...	1555	E.10	--	19.0	1480	2.9	7.4	0	5.0	560	.0	.0
SEP.												
29...	1420	E.10	9.2	16.0	1000	3.8	4.9	0	3.0	490	.0	.0
400942081444100 - ELUSIVE RN NR PLAINFIELD OH (LAT 40 09 42 LONG 081 44 41)												
SEP., 1975												
30...	1100	E.70	9.0	15.5	200	7.2	--	68	3.0	31	.0	6.9

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE--Continued

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DATE	HARD- NESS (CA+MG) (MG/L)	TUR- BID- ITY (JTU)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL MERCURY (HG) (UG/L)
400700080572100 - CRABAPPLE C NR FAIRPOINT OH (LAT 40 07 00 LONG 080 57 21)												
JUNE, 1975												
26...	1100	150	0	3.2	1	60	20	33000	810	130	5700	.7
SEP.												
24...	1500	180	0	7.6	8	80	10	28000	1400	80	5800	<.5
400727080561600 - MCCracken RN AT FAIRPOINT OH (LAT 40 07 27 LONG 080 56 16)												
JUNE, 1975												
26...	1300	200	0	6.7	3	110	20	66000	530	220	9500	.6
SEP.												
24...	1300	100	0	12	4	60	10	20000	300	60	2000	<.5
400934080541000 - COX RN NR MIDWAY OH (LAT 40 08 34 LONG 080 54 10)												
JUNE, 1975												
26...	850	3	4	4.0	0	10	10	380	280	60	260	<.5
SEP.												
26...	1300	10	0	--	0	20	0	650	170	10	330	<.5
400918080571600 - MCCracken RN AB FAIRPOINT OH (LAT 40 09 18 LONG 080 57 16)												
JUNE, 1975												
26...	1400	2	3	2.4	0	<10	10	440	290	60	70	.5
SEP.												
23...	1800	5	0	4.1	1	20	10	1200	750	40	190	<.5
401023081075600 - BOGGS F NR HOLLOWAY OH (LAT 40 10 23 LONG 081 07 56)												
JULY, 1975												
28...	1370	3	7	1.8	0	10	10	250	350	20	120	<.5
CARROLL COUNTY												
403017081134000 - THOMPSON RN AT SHERRODSVILLE OH (LAT 40 30 17 LONG 081 13 40)												
JULY, 1975												
16...	320	8	0	8.0	3	0	10	810	1800	20	140	<.5
COLUMBIANA COUNTY												
404322080390500 - M F L BEAVER C AT WILLIAMSPORT OH (LAT 40 43 22 LONG 080 38 05)												
JULY, 1975												
08...	350	4	2	4.8	0	<10	10	400	140	110	170	<.5
404635080323500 - N F L BEAVER C NR NEGLEY OH (LAT 40 45 35 LONG 080 32 35)												
JULY, 1975												
09...	390	55	0	10	5	<10	10	3900	490	100	1200	.8
40512408047400 - M F L BEAVER C AT FRANKLIN SQUARE OH (LAT 40 51 24 LONG 080 47 44)												
JULY, 1975												
08...	390	10	2	4.8	1	20	10	1100	1500	100	270	.6
COSHOCTON COUNTY												
400908081461700 - DUMP RN NR WILLS CREEK OH (LAT 40 09 08 LONG 081 46 17)												
JULY, 1975												
10...	570	160	0	5.4	2	30	10	20000	4000	310	1300	2.5
SEP.												
29...	1100	140	0	14	0	20	20	63000	3000	210	28000	<.5
400942081444100 - ELUSIVE RN NR PLAINFIELD OH (LAT 40 09 42 LONG 081 44 41)												
SEP., 1975												
30...	100	55	2	2.0	2	10	20	2800	900	30	1200	<.5

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TOTAL ACIDITY AS H+ (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	HYDRO- GEN SULFIDE (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
401021091454400 - RECLAIM RN NR PLAINFIELD OH (LAT 40 10 21 LONG 081 45 44)												
JULY, 1975												
10...	1710	E.30	7.4	24.5	1770	6.7	--	68	6.0	800	.0	22
SEP.												
29...	1530	E1.0	8.4	17.5	1300	6.8	--	76	8.0	620	.0	19
401049081500900 - Z RN NR WILLS CREEK OH (LAT 40 10 49 LONG 081 50 09)												
JULY, 1975												
10...	1430	E2.0	7.7	22.0	1370	6.1	--	38	8.0	610	.0	48
SEP.												
29...	1310	E5.0	9.5	14.5	1200	6.3	--	38	15	580	.0	30
401058081504500 - Y RN NR WILLS CREEK OH (LAT 40 10 58 LONG 081 50 45)												
JULY, 1975												
10...	1305	E.30	7.5	21.0	1470	3.3	2.2	0	16	630	.0	.0
SEP.												
29...	1215	E.60	9.4	14.0	1450	3.4	1.9	0	20	710	.0	.0
401248081512900 - ROBINSON RN NR COSHOCTON OH (LAT 40 12 48 LONG 081 51 29)												
JULY, 1975												
10...	1130	E3.0	8.3	18.0	1200	3.7	1.7	0	12	500	.0	.0
SEP.												
29...	1045	E6.0	10.4	12.0	1050	4.4	1.7	0	25	490	.0	.0
403044080445800 - YELLOW C NR NEW SOMERSET OH (LAT 40 30 44 LONG 080 44 58)												
JULY, 1975												
07...	1445	E20	7.0	22.5	689	6.6	--	28	26	220	.0	11
FAIRFIELD COUNTY												
03156700 - RUSH C NR SUGAR GROVE OH (LAT 39 38 18 LONG 082 30 42)												
JULY, 1975												
29...	1100	E50	5.8	23.0	885	6.5	--	74	52	230	.0	37
394306082240700 - RUSH C NR BREMEN OH (LAT 39 43 06 LONG 082 24 07)												
JULY, 1975												
29...	1315	E10	6.6	21.5	1600	3.3	5.0	0	52	710	.0	.0
GEAUGA COUNTY												
385548082092100 - L KYGER C NR CHESHIRE OH (LAT 38 55 48 LONG 082 09 21)												
JULY, 1975												
24...	1415	E.10	7.1	30.5	2770	3.3	1.6	0	10	1600	.0	.0
385708082073300 - KYGER C NR CHESHIRE OH (LAT 38 57 08 LONG 082 07 33)												
JULY, 1975												
24...	1230	E7.0	6.7	29.0	1070	8.9	--	68	44	420	.0	.1
GUERNSEY COUNTY												
03140700 - BUFFALO F AT PLEASANT CITY OH (LAT 39 54 15 LONG 081 33 14)												
AUG., 1975												
06...	1400	E20	6.7	21.0	1430	7.3	--	130	16	550	.0	10
395052081401600 - MILLER C NR CUMBERLAND OH (LAT 39 50 52 LONG 081 40 16)												
MAY, 1975												
21...	1700	E10	8.6	24.0	2010	7.8	--	142	12	920	.0	3.5
SEP.												
23...	1130	E10	7.4	14.5	1920	7.5	--	182	25	860	.3	35

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE--Continued

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DATE	HARD- NESS (CA, MG) (MG/L)	TUR- BID- ITY (JTU)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL MERCURY (HG) (UG/L)
401021081454400 - RECLAIM RN NR PLAINFIELD OH (LAT 40 10 21 LONG 081 45 44)												
JULY, 1975 10...	1200	4	0	9.4	0	10	10	600	2600	40	50	.7
SEP. 29...	1200	75	0	2.6	0	10	20	1800	2800	30	490	<.5
401049081500900 - Z RN NR WILLS CREEK OH (LAT 40 10 49 LONG 081 50 09)												
JULY, 1975 10...	770	60	0	4.8	0	10	10	19000	4100	120	580	1.6
SEP. 29...	980	75	0	4.0	0	10	20	14000	3700	90	580	<.5
401058081504500 - Y RN NR WILLS CREEK OH (LAT 40 10 58 LONG 081 50 45)												
JULY, 1975 10...	760	65	5	7.0	0	10	0	20000	6900	80	2300	1.7
SEP. 29...	1800	70	0	19	0	10	20	23000	8400	100	2400	<.5
401248081512900 - ROBINSON RN NR COSHOCTON OH (LAT 40 12 48 LONG 081 51 29)												
JULY, 1975 10...	620	70	0	9.4	0	20	10	21000	5900	170	4200	2.1
SEP. 29...	980	75	1	2.2	0	10	20	26000	6700	100	4800	<.5
403044080445800 - YELLOW C NR NEW SOMERSET OH (LAT 40 30 44 LONG 080 44 58)												
JULY, 1975 07...	290	30	7	1.4	0	0	10	3900	360	50	350	1.3
FAIRFIELD COUNTY												
03156700 - RUSH C NR SUGAR GROVE OH (LAT 39 38 18 LONG 082 30 42)												
JULY, 1975 29...	450	30	5	2.8	0	10	70	960	6600	170	500	<.5
394306082240700 - RUSH C NR BREMEN OH (LAT 39 43 06 LONG 082 24 07)												
JULY, 1975 29...	840	50	6	1.6	0	20	10	13000	23000	440	15000	.5
GEAUGA COUNTY												
385549082092100 - L KYGER C NR CHESHIRE OH (LAT 38 55 48 LONG 082 09 21)												
JULY, 1975 24...	2200	2	0	1.4	0	20	30	2500	52000	1100	37000	.6
385708082073300 - KYGER C NR CHESHIRE OH (LAT 38 57 08 LONG 082 07 33)												
JULY, 1975 24...	720	5	0	2.6	95	90	10	320	110	20	2000	<.5
GUERNSEY COUNTY												
03140700 - BUFFALO F AT PLEASANT CITY OH (LAT 39 54 15 LONG 081 33 14)												
AUG., 1975 06...	860	50	7	3.8	2	0	10	2800	1300	30	1900	<.5
395052081401600 - MILLER C NR CUMBERLAND OH (LAT 39 50 52 LONG 081 40 16)												
MAY, 1975 21...	1600	100	0	9.0	0	10	10	580	2700	40	1600	<.5
SEP. 23...	2100	30	0	3.9	1	20	10	1300	3200	40	2100	<.5

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
 CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TOTAL ACIDITY AS H+ (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	HYDRO- GEN SULFIDE (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
395319081401400 - YOKER C NR CUMBERLAND OH (LAT 39 53 19 LONG 081 40 14)												
JULY, 1975 17...	1050	E2.0	7.3	22.0	1770	7.4	--	150	12	810	.2	9.6
395807081180000 - LEATHERWOOD C AT QUAKER CITY OH (LAT 39 58 07 LONG 081 18 00)												
JULY, 1975 17...	1345	E6.0	7.3	23.0	1030	7.1	--	108	8.0	360	.0	14
400527081163600 - SKULL F NR LONDONDERRY OH (LAT 40 05 27 LONG 081 16 36)												
JULY, 1975 28...	1510	E1.0	7.9	25.5	2230	7.6	--	88	18	1020	.0	3.5
400832081252600 - SUGARTREE F NR WINTERSET OH (LAT 40 08 32 LONG 081 25 26)												
AUG., 1975 07...	1055	E3.0	7.6	19.0	390	7.5	--	152	34	22	.0	7.7
400932081265200 - CLEAR F NR BIRMINGHAM OH (LAT 40 09 32 LONG 081 26 52)												
AUG., 1975 07...	1210	E2.0	8.2	20.0	740	7.4	--	138	130	41	.0	8.8
HARRISON COUNTY 400842081081000 - TRAIL RN AT HOLLOWAY OH (LAT 40 08 42 LONG 081 08 10)												
JULY, 1975 28...	1130	E.90	7.8	24.0	2100	8.1	--	266	16	870	.0	3.4
401142080583200 - S F SHORT C NR NEW ATHENS OH (LAT 40 11 42 LONG 080 58 32)												
JUNE, 1975 30...	1230	E1.0	8.6	27.0	4290	8.1	--	490	16	2500	.0	6.2
401224080545800 - S F SHORT C AT GEORGETOWN OH (LAT 40 12 24 LONG 080 54 58)												
JUNE, 1975 30...	1420	E6.0	8.3	24.5	3670	8.1	--	420	12	1800	.0	5.3
401341081043900 - SOUTH F NR FLUSHING OH (LAT 40 13 41 LONG 081 04 39)												
JULY, 1975 28...	1245	E3.0	7.3	23.0	2700	8.0	--	268	8.0	1250	.0	4.3
401534080551000 - N F SHORT C NR UNIONVALE OH (LAT 40 15 34 LONG 080 55 10)												
JULY, 1975 01...	1620	E10	7.4	26.5	2880	7.0	--	160	300	930	.2	26
402038080540700 - CROSS C NR HOPEDALE OH (LAT 40 20 38 LONG 080 54 07)												
JULY, 1975 02...	0945	E4.0	7.6	21.0	833	7.2	--	154	16	250	.2	16
402043080573600 - CONOTTON C NR CADIZ JUNCTION OH (LAT 40 20 43 LONG 080 57 36)												
JULY, 1975 02...	1100	E.40	8.8	19.0	938	7.7	--	180	18	290	.0	5.7
402253081134000 - PLUM RN NR BOWERSTON OH (LAT 40 22 53 LONG 081 13 40)												
JULY, 1975 16...	1130	E.40	7.8	25.0	1150	5.2	--	4	12	410	.0	40

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE--Continued

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DATE	HARD- NESS (CA, MG) (MG/L)	TUR- BID- ITY (JTU)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL MERCURY (HG) (UG/L)
395319081401400 - YOKER C NR CUMBERLAND OH (LAT 39 53 19 LONG 081 40 14)												
JULY, 1975 17...	1200	6	0	11	0	10	10	250	3100	20	270	<.5
395807081180000 - LEATHERWOOD C AT QUAKER CITY OH (LAT 39 58 07 LONG 081 18 00)												
JULY, 1975 17...	600	3	0	8.8	0	<10	10	280	1800	30	290	<.5
400527081163600 - SKULL F NR LONDONDERRY OH (LAT 40 05 27 LONG 081 16 36)												
JULY, 1975 28...	1400	5	4	1.8	0	10	290	290	9300	230	760	<.5
400932081252600 - SUGARTREE F NR WINTERSET OH (LAT 40 08 32 LONG 081 25 26)												
AUG., 1975 07...	170	15	0	4.2	0	<10	10	800	180	10	250	<.5
400932081265200 - CLEAR F NR BIRMINGHAM OH (LAT 40 09 32 LONG 081 26 52)												
AUG., 1975 07...	200	15	5	5.8	0	<10	10	1100	340	10	290	<.5
HARRISON COUNTY												
400842081081000 - TRAIL RN AT HOLLOWAY OH (LAT 40 08 42 LONG 081 08 10)												
JULY, 1975 28...	131	4	4	2.2	1	10	10	360	620	20	140	<.5
401142080583200 - S F SHORT C NR NEW ATHENS OH (LAT 40 11 42 LONG 080 58 32)												
JUNE, 1975 30...	2500	3	1	4.8	0	30	20	300	110	10	30	<.5
401224080545800 - S F SHORT C AT GEORGETOWN OH (LAT 40 12 24 LONG 080 54 58)												
JUNE, 1975 30...	2300	20	0	4.2	0	20	20	150	260	10	310	<.5
401341081043900 - SOUTH F NR FLUSHING OH (LAT 40 13 41 LONG 081 04 39)												
JULY, 1975 28...	1800	20	5	11	0	10	10	210	500	30	100	<.5
401534080551000 - N F SHORT C NR UNIONVALE OH (LAT 40 15 34 LONG 080 55 10)												
JULY, 1975 01...	1400	45	7	3.8	0	30	20	5300	1400	70	2000	.8
402038080540700 - CROSS C NR HOPEDALE OH (LAT 40 20 38 LONG 080 54 07)												
JULY, 1975 02...	450	6	4	10	0	10	0	650	470	10	200	<.5
402043080573600 - CONOTTON C NR CADIZ JUNCTION OH (LAT 40 20 43 LONG 080 57 36)												
JULY, 1975 02...	540	2	8	8.8	0	<10	10	410	130	10	100	<.5
402253081134000 - PLUM RN NR BOWERSTON OH (LAT 40 22 53 LONG 081 13 40)												
JULY, 1975 16...	580	4	0	5.0	0	10	10	640	9000	100	840	<.5

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TOTAL ACIDITY AS H+ (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	HYDRO- GEN SULFIDE (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
HOCKING COUNTY												
392917082095700 - SNOW F NR MURRAY CITY OH (LAT 39 29 17 LONG 082 09 57)												
MAY , 1975												
21...	1210	E30	9.1	20.0	1190	3.9	.8	0	11	410	.0	.0
SEP.												
16...	1220	E10	8.4	16.0	1850	2.9	6.6	0	30	710	.0	.0
393109082162900 - MONDAY C NR GREENDALE OH (LAT 39 31 09 LONG 082 16 29)												
MAY , 1975												
06...	1615	E60	10.6	19.0	910	3.8	1.0	0	68	270	.0	.0
SEP.												
16...	1045	E50	8.1	15.5	1125	5.4	--	7	270	220	.0	.45
HOLMES COUNTY												
393826081430700 - DYES C NR UNIONVILLE OH (LAT 39 38 26 LONG 081 43 07)												
JUNE, 1975												
06...	1115	E70	7.0	20.0	1150	7.5	--	172	13	430	.0	8.7
393948081575600 - W B WOLF C NR MALTA OH (LAT 39 39 48 LONG 081 57 56)												
MAY , 1975												
30...	1230	E3.0	8.0	20.0	490	7.0	--	84	98	27	.0	13
394109081414500 - HORSE RN REINERSVILLE OH (LAT 39 41 09 LONG 081 41 45)												
JUNE, 1975												
06...	1230	E20	7.2	20.5	1370	7.7	--	188	10	460	.0	6.0
394303081405800 - BRANNONS F NR REINERSVILLE OH (LAT 39 43 03 LONG 081 40 58)												
JUNE, 1975												
06...	1330	E20	7.4	22.0	1510	7.8	--	166	10	640	.0	4.2
394340081541400 - ISLAND RN AT EAGLEPORT OH (LAT 39 43 40 LONG 081 54 14)												
MAY , 1975												
30...	1045	E10	8.8	19.5	380	6.9	--	117	30	49	.0	24
JEFFERSON COUNTY												
401107080475800 - OLD FARM RN NR DILLONVALE OH (LAT 40 11 07 LONG 080 47 58)												
AUG., 1975												
11...	1200	E.20	7.5	21.0	2000	8.0	--	272	14	610	.0	4.4
SEP.												
26...	1630	E4.0	9.2	14.5	2400	7.9	--	394	50	850	.0	7.9
401113080474500 - OLD FARM SPRING NR DILLONVALE OH (LAT 40 11 13 LONG 080 47 45)												
AUG., 1975												
11...	1230	E.01	--	19.0	2320	7.6	--	380	24	830	.0	15
SEP.												
26...	1645	E.02	--	12.0	2300	7.1	--	388	15	850	.0	49
401242080470000 - PINEY F AT DILLONVALE OH (LAT 40 12 42 LONG 080 47 00)												
JULY, 1975												
01...	1315	E7.0	7.7	25.5	2020	7.2	--	200	14	790	.0	20
SEP.												
26...	1330	E20	8.6	15.5	1300	7.4	--	184	15	540	.0	12
401310080522300 - SHORT C AT ADENA OH (LAT 40 13 10 LONG 080 52 23)												
JUNE, 1975												
30...	1545	E20	8.8	27.0	2890	8.3	--	325	24	1400	.0	2.6

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE--Continued

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DATE	HARD- NESS (CA, MG) (MG/L)	TUR- RID- ITY (JTU)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL MERCURY (HG) (UG/L)
HOCKING COUNTY												
392917082095700 - SNOW F NR MURRAY CITY OH (LAT 39 29 17 LONG 082 09 57)												
MAY , 1975 21...	600	40	0	1.6	0	30	30	19000	530	340	17000	<.5
SEP. 16...	1100	10	2	1.9	0	10	20	25000	8300	550	42000	<.5
393109082162900 - MONDAY C NR GREENDALE OH (LAT 39 31 09 LONG 082 16 29)												
MAY , 1975 06...	380	6	0	1.7	1	20	10	1900	3400	170	8000	<.5
SEP. 16...	520	20	6	6.2	0	<10	0	2000	4000	100	3700	<.5
HOLMES COUNTY												
393826081430700 - DYES C NR UNIONVILLE OH (LAT 39 38 26 LONG 081 43 07)												
JUNE, 1975 06...	690	10	0	4.8	2	20	50	4500	500	30	1800	<.5
393948081575600 - W B WOLF C NR MALTA OH (LAT 39 39 48 LONG 081 57 56)												
MAY , 1975 30...	170	9	0	7.0	1	<10	0	560	40	20	340	<.5
394109081414500 - HORSE RN REINERSVILLE OH (LAT 39 41 09 LONG 081 41 45)												
JUNE, 1975 06...	900	5	0	2.4	0	10	10	220	210	20	180	<.5
394303081405800 - BRANNONS F NR REINERSVILLE OH (LAT 39 43 03 LONG 081 40 58)												
JUNE, 1975 06...	990	2	2	2.8	1	10	10	110	130	30	100	<.5
394340081541400 - ISLAND RN AT EAGLEPORT OH (LAT 39 43 40 LONG 081 54 14)												
MAY , 1975 30...	180	50	13	4.5	2	20	10	3000	70	20	1800	.5
JEFFERSON COUNTY												
401107080475800 - OLD FARM RN NR DILLONVALE OH (LAT 40 11 07 LONG 080 47 58)												
AUG., 1975 11...	630	7	0	13	0	10	10	520	150	10	150	<.5
SEP. 26...	900	75	0	14	1	30	0	9900	200	20	160	<.5
401113080474500 - OLD FARM SPRING NR DILLONVALE OH (LAT 40 11 13 LONG 080 47 45)												
AUG., 1975 11...	1100	15	5	6.8	16	<10	20	23000	780	50	5800	<.5
SEP. 26...	1200	1	0	3.2	0	10	10	100	20	10	50	<.5
401242080470000 - PINEY F AT DILLONVALE OH (LAT 40 12 42 LONG 080 47 00)												
JULY, 1975 01...	1160	110	6	3.4	1	40	20	25000	870	120	7300	<.5
SEP. 26...	920	120	1	--	5	30	10	8800	640	40	2800	<.5
401310080522300 - SHORT C AT ADENA OH (LAT 40 13 10 LONG 080 52 23)												
JUNE, 1975 30...	2100	2	1	4.4	0	30	20	220	110	10	140	<.5

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TOTAL ACIDITY AS H+ (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	HYDRO- GEN SULFIDE (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
401508080492200 - PINEY F AT PINEY FORK OH (LAT 40 15 08 LONG 080 49 22)												
JULY, 1975 01...	1145	E2.0	8.7	23.5	1800	7.6	--	300	12	670	.0	12
SEP. 26...	1445	E10	8.8	15.5	1200	7.4	--	184	25	490	.0	12
402636080400700 - ISLAND C NR PEKIN OH (LAT 40 26 36 LONG 080 40 07)												
JULY, 1975 07...	1310	E2.0	8.6	24.0	1280	6.8	--	172	35	500	.0	44
403107080453900 - MINE SHAFT NR NEW SOMERSET OH (LAT 40 31 07 LONG 080 45 39)												
JULY, 1975 08...	0930	E.10	--	16.0	13700	1.9	292	0	200	3600	17	.0
403112080461100 - ROACH RN NR BERGHOLZ OH (LAT 40 31 12 LONG 080 46 11)												
JULY, 1975 08...	1030	E.20	6.2	19.0	2210	2.7	20	0	20	1200	.0	.0
403135080530200 - YELLOW C AT BERGHOLZ OH (LAT 40 31 35 LONG 080 53 02)												
JULY, 1975 08...	1145	E6.0	7.9	23.5	585	6.5	--	54	30	160	.0	27
LAWRENCE COUNTY 382914082370900 - L ICE C NR COAL GROVE OH (LAT 38 29 14 LONG 082 37 09)												
JUNE, 1975 19...	0830	E.80	6.4	19.0	410	7.2	--	118	16	66	.5	12
383154082231800 - INDIAN GUYAN C NR SCOTTOWN OH (LAT 38 31 54 LONG 082 23 18)												
JUNE, 1975 19...	1600	E5.0	7.4	27.0	400	7.3	--	76	10	100	.0	6.1
383555082232900 - L INDIAN GUYAN C NR RAPPSBURG OH (LAT 38 35 55 LONG 082 23 29)												
JUNE, 1975 19...	1400	E.10	7.5	27.0	800	3.8	1.7	--	8.0	350	.0	--
383638082440900 - UNION B SPERRY C NR Ironton OH (LAT 38 36 38 LONG 082 44 09)												
JUNE, 1975 18...	1000	E1.0	7.5	20.0	900	7.1	--	64	3.0	390	.0	8.1
383646082290900 - SYMES C AT AID OH (LAT 38 36 46 LONG 082 29 09)												
JUNE, 1975 19...	1130	E40	6.1	23.0	295	6.8	--	66	10	66	.0	17
383729082391400 - ELLISONVILLE C NR ETNA OH (LAT 38 37 29 LONG 082 39 14)												
JUNE, 1975 18...	1400	E1.0	7.2	23.0	900	3.4	1.8	--	14	340	.0	--
384028082404400 - BEAR RN AT SUPERIOR OH (LAT 38 40 28 LONG 082 40 44)												
JUNE, 1975 18...	1200	E2.0	8.1	23.0	1270	7.9	--	193	8.0	366	.0	3.9
384452082381000 - PINE C NR BUCKHORN OH (LAT 38 44 52 LONG 082 38 10)												
JUNE, 1975 18...	1700	E2.0	7.1	26.0	435	6.5	--	36	13	130	.1	18

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE--Continued

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DATE	HARD- NESS (CA, MG) (MG/L)	TUR- BID- ITY (JTU)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL MERCURY (HG) (UG/L)
401508080492200 - PINEY F AT PINEY FORK OH (LAT 40 15 08 LONG 080 49 22)												
JULY, 1975 01...	1200	7	0	1.0	1	10	20	600	450	10	490	<.5
SEP. 26...	1500	25	0	--	5	20	0	3200	270	20	530	<.5
402636080400700 - ISLAND C NR PEKIN OH (LAT 40 26 36 LONG 080 40 07)												
JULY, 1975 07...	840	1	10	6.0	0	10	10	90	10	20	50	<.5
403107080453900 - MINE SHAFT NR NEW SOMERSET OH (LAT 40 31 07 LONG 080 45 39)												
JULY, 1975 08...	7200	2	5	35	2100	330	1200	4400000	20000	11000	62000	20
403112080461100 - ROAD RQ NR BERGHOLZ OH (LAT 40 31 12 LONG 080 46 11)												
JULY, 1975 08...	680	10	6	7.5	3	50	30	260000	5000	550	46000	4.5
403135080530200 - YELLOW C AT BERGHOLZ OH (LAT 40 31 35 LONG 080 53 02)												
JULY, 1975 08...	220	5	6	2.6	0	10	10	600	840	100	800	<.5
LAWRENCE COUNTY												
382914082370900 - L ICE C NR COAL GROVE OH (LAT 38 29 14 LONG 082 37 09)												
JUNE, 1975 19...	200	3	1	15	1	10	0	370	210	10	130	<.5
383154082231800 - INDIAN GUYAN C NR SCOTTOWN OH (LAT 38 31 54 LONG 082 23 18)												
JUNE, 1975 19...	200	4	2	7.9	0	10	0	400	360	10	170	<.5
383555082232900 - L INDIAN GUYAN C NR RAPPSBURG OH (LAT 38 35 55 LONG 082 23 29)												
JUNE, 1975 19...	370	1	0	9.9	1	20	10	320	7700	290	11000	<.5
383638082440900 - UNION B SPERRY C NR IRONTON OH (LAT 38 36 38 LONG 082 44 09)												
JUNE, 1975 18...	520	3	0	5.2	1	20	0	700	1100	20	170	<.5
383646082290900 - SYMES C AT AID OH (LAT 38 36 46 LONG 082 29 09)												
JUNE, 1975 19...	150	20	2	11	0	20	0	1200	780	10	400	<.5
383729082391400 - ELLISONVILLE C NR ETNA OH (LAT 38 37 29 LONG 082 39 14)												
JUNE, 1975 18...	340	4	2	18	0	20	20	2000	5000	300	9100	<.5
384028082404400 - BEAR RN AT SUPERIOR OH (LAT 38 40 28 LONG 082 40 44)												
JUNE, 1975 18...	750	10	0	12	2	30	0	8700	3400	30	80	<.5
384452082381000 - PINE C NR BUCKHORN OH (LAT 38 44 52 LONG 082 38 10)												
JUNE, 1975 18...	220	20	2	5.2	0	20	10	2500	990	30	820	<.5

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
 CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TOTAL ACIDITY AS H+ (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	HYDRO- GEN SULFIDE (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
384709082473800 - TURNER MINE DRAIN AT GEPHART OH (LAT 38 47 09 LONG 082 47 38)												
JUNE, 1975 17...	1430	E.02	3.4	13.0	1220 MEIGS COUNTY	6.2	--	255	8.0	350	.1	257
03160050 - LEADING C NR MIDDLEPORT OH (LAT 39 00 31 LONG 082 05 07)												
JULY, 1975 02...	1545	E3.0	8.2	32.0	645	7.0	--	142	62	110	.0	23
390017082042700 - THOMAS F NR MIDDLEPORT OH (LAT 39 00 17 LONG 082 04 27)												
JULY, 1975 02...	1430	E3.0	7.3	31.5	1380	3.5	.8	0	35	590	.0	.0
390046082081800 - LEADING C NR RUTLAND OH (LAT 39 00 46 LONG 082 08 18)												
JULY, 1975 03...	1200	E4.0	8.1	24.0	682	7.1	--	144	72	97	.1	18
390222081594900 - KERR RN AT POMEROY OH (LAT 39 02 22 LONG 081 59 49)												
JULY, 1975 03...	1000	E.10	8.6	19.5	721	4.7	--	4	10	270	.1	128
391016082025100 - W B SHADE R NR BURLINGHAM OH (LAT 39 10 16 LONG 082 02 51)												
JULY, 1975 02...	1115	E.30	8.0	22.5	760 MONROE COUNTY	3.7	.6	0	8.0	250	.0	.0
03114250 - SUNFISH C AT CAMERON OH (LAT 39 46 00 LONG 080 56 09)												
JULY, 1975 22...	1330	E30	6.3	27.0	420	7.7	--	176	32	27	.0	5.5
394548080533100 - NIGGER RN NR CLARINGTON OH (LAT 39 45 48 LONG 080 53 31)												
JULY, 1975 22...	1045	E2.0	7.1	23.5	356	7.4	--	152	6.0	45	.0	9.7
394624080560200 - FLAT ROCK C NR CAMERON OH (LAT 39 46 24 LONG 080 56 02)												
JULY, 1975 21...	1245	E.10	6.4	22.5	410 MORGAN COUNTY	7.3	--	158	6.0	69	.0	13
03150250 - MEIGS C NR BEVERLY OH (LAT 39 36 00 LONG 081 42 42)												
JUNE, 1975 05...	1530	E200	7.7	20.5	965	7.7	--	214	15	290	.0	6.9
393412082015700 - E B SUNDAY C AB BURR OAK LK OH (LAT 39 34 12 LONG 082 01 57)												
MAY, 1975 21...	1400	E10	8.5	21.0	238	6.7	--	88	3.0	37	.0	28
SEP. 16...	1340	E7.0	7.9	17.0	280	6.9	--	98	12	22	.0	20
394158081083600 - RICH F NR WOODSFIELD OH (LAT 39 41 58 LONG 081 08 36)												
JUNE, 1975 13...	1445	E20	7.7	20.5	340	7.7	--	142	12	28	.0	4.5
394412081062900 - CRANENEST F NR WOODSFIELD OH (LAT 39 44 12 LONG 081 06 29)												
JUNE, 1975 13...	1315	E10	7.4	19.5	370	7.4	--	102	32	31	.2	6.5

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE--Continued

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DATE	HARD- NESS (CA, MG) (MG/L)	TUR- BID- ITY (JTU)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL MERCURY (MG) (UG/L)
384709082473800 - TURNER MINE DRAIN AT GEPHART OH (LAT 38 47 09 LONG 082 47 38)												
JUNE, 1975 17...	560	40	0	21	6	10	10	500	460	10	160	<.5
MEIGS COUNTY												
03160050 - LEADING C NR MIDDLEPORT OH (LAT 39 00 31 LONG 082 05 07)												
JULY, 1975 02...	220	10	0	3.6	0	10	0	610	550	10	300	<.5
390017082042700 - THOMAS F NR MIDDLEPORT OH (LAT 39 00 17 LONG 082 04 27)												
JULY, 1975 02...	710	1	0	4.0	0	20	30	1600	6800	430	15000	<.5
390046082081800 - LEADING C NR RUTLAND OH (LAT 39 00 46 LONG 082 08 18)												
JULY, 1975 03...	220	20	0	3.6	2	10	20	1300	620	20	520	<.5
390222081594900 - KERR RN AT POMEROY OH (LAT 39 02 22 LONG 081 59 49)												
JULY, 1975 03...	314	17	0	1.6	0	10	10	2100	1600	110	3600	.5
391016082025100 - W B SHADE R NR BURLINGHAM OH (LAT 39 10 16 LONG 082 02 51)												
JULY, 1975 02...	430	10	0	2.6	0	10	10	1800	6600	100	1200	.5
MONROE COUNTY												
03114250 - SUNFISH C AT CAMERON OH (LAT 39 46 00 LONG 080 56 09)												
JULY, 1975 22...	170	4	0	2.0	1	0	0	200	40	10	120	.5
394548080533100 - NIGGER RN NR CLARINGTON OH (LAT 39 45 48 LONG 080 53 31)												
JULY, 1975 22...	200	5	0	1.0	0	<10	0	1200	50	10	800	<.5
394624080560200 - FLAT ROCK C NR CAMERON OH (LAT 39 46 24 LONG 080 56 02)												
JULY, 1975 21...	230	15	0	2.0	0	<10	0	680	20	10	440	<.5
MORGAN COUNTY												
03150250 - MEIGS C NR BEVERLY OH (LAT 39 36 00 LONG 081 42 42)												
JUNE, 1975 05...	590	30	0	5.5	0	10	10	2300	210	20	1300	<.5
393412082015700 - E B SUNDAY C AB BURR OAK LK OH (LAT 39 34 12 LONG 082 01 57)												
MAY, 1975 21...	110	15	4	2.0	1	<10	10	710	110	20	370	<.5
SEP. 16...	120	10	2	2.2	0	<10	0	490	110	10	110	<.5
394158081083600 - RICH F NR WOODSFIELD OH (LAT 39 41 58 LONG 081 08 36)												
JUNE, 1975 13...	170	3	1	2.1	1	30	20	350	30	20	100	<.5
394412081062900 - CRANENEST F NR WOODSFIELD OH (LAT 39 44 12 LONG 081 06 29)												
JUNE, 1975 13...	150	9	1	7.0	1	20	10	270	40	10	140	<.5

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
 CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE--Continued

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TOTAL ACIDITY AS H+ (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	HYDRO- GEN SULFIDE (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
MUSKINGUM COUNTY												
03148300 - MOXAHALA C AT ROSEVILLE OH (LAT 39 48 38 LONG 082 04 13)												
MAY , 1975												
14...	1350	E70	8.4	18.0	1790	3.7	4.6	0	20	770	.0	.0
SEP.												
09...	1445	E50	7.8	23.0	2600	2.6	7.7	0	30	1100	.0	.0
03148600 - MOXAHALA C NR ZANESVILLE OH (LAT 39 53 48 LONG 082 00 20)												
MAY , 1975												
14...	1615	E200	9.3	19.0	1060	4.1	3.5	0	28	410	.0	.0
SEP.												
15...	1530	E140	9.2	16.0	1100	4.7	--	1	32	330	.0	32
395117082073400 - JONATHAN C AT E FULTONHAM OH (LAT 39 51 17 LONG 082 07 34)												
MAY , 1975												
13...	1530	E100	9.0	17.0	690	6.9	--	120	24	240	.0	24
395118081413800 - MAYS F NR CUMBERLAND OH (LAT 39 51 18 LONG 081 41 38)												
MAY , 1975												
21...	1500	E3.0	8.4	25.5	2420	7.2	--	101	20	1200	.0	10
395256081462200 - FREELAND F NR CHANDLERSVILLE OH (LAT 39 52 56 LONG 081 46 22)												
MAY , 1975												
29...	1130	E.30	8.2	21.0	950	7.8	--	208	19	310	.0	5.3
SEP.												
30...	1430	E.70	10.2	18.5	850	7.7	--	214	20	239	.0	6.8
395312081522900 - SALT C NR DUNCAN FALLS OH (LAT 39 53 12 LONG 081 52 29)												
MAY , 1975												
29...	1430	E20	7.8	21.0	430	7.2	--	150	24	55	.0	15
395553081541000 - BOGGS C NR GRIFFIN OH (LAT 39 55 53 LONG 081 54 10)												
MAY , 1975												
29...	1000	E.60	6.8	18.0	580	7.1	--	108	26	150	.0	14
SEP.												
18...	1220	E7.0	7.6	18.0	240	7.3	--	64	7.0	38	.0	5.1
395806081530800 - L SALT C NR ZANESVILLE OH (LAT 39 58 06 LONG 081 53 08)												
MAY , 1975												
28...	1200	E2.0	8.5	21.0	442	7.0	--	108	30	79	.0	17
SEP.												
18...	1045	E20	7.0	17.5	290	7.2	--	66	24	26	.0	6.7
395825081505000 - SALT C NR BRIDGEVILLE OH (LAT 39 58 25 LONG 081 50 50)												
MAY , 1975												
28...	1345	E10	8.6	22.0	320	7.1	--	114	28	28	.0	14
395851081552600 - L SALT C NR SONORA OH (LAT 39 58 51 LONG 081 55 26)												
MAY , 1975												
28...	1000	E1.0	8.8	18.5	462	6.9	--	88	19	110	.0	18
400752081443400 - L WHITE EYES RN NR OTSEGO OH (LAT 40 07 52 LONG 081 44 34)												
AUG., 1975												
07...	1430	E.10	7.1	26.0	3100	2.4	18	0	15	1400	.0	.0
SEP.												
30...	1230	E.30	8.4	19.0	1800	2.7	10	0	6.0	870	.0	.0
NOBLE COUNTY												
03115700 - W F DUCK C AT DEXTER CITY OH (LAT 39 39 45 LONG 081 28 25)												
JUNE, 1975												
13...	1000	E70	7.7	19.5	580	7.4	--	179	18	110	.0	11

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE--Continued

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DATE	HARD- NESS (CA, MG) (MG/L)	TUR- BID- ITY (JTU)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL MERCURY (HG) (UG/L)
MUSKINGUM COUNTY												
03148300 - MOXAHALA C AT ROSEVILLE OH (LAT 39 48 38 LONG 082 04 13)												
MAY , 1975												
14...	1100	65	9	6.6	2	80	30	36000	16000	400	22000	<.5
SEP.												
09...	2100	4	0	1.6	0	10	20	32000	18000	560	30000	<.5
03148600 - MOXAHALA C NR ZANESVILLE OH (LAT 39 53 48 LONG 082 00 20)												
MAY , 1975												
14...	730	40	12	1.6	1	20	800	10000	8200	2500	6700	<.5
SEP.												
15...	680	45	0	11	0	<10	10	7500	8900	170	5000	<.5
395117082073400 - JONATHAN C AT E FULTONHAM OH (LAT 39 51 17 LONG 082 07 34)												
MAY , 1975												
13...	270	4	8	1.8	0	<10	10	450	1100	20	450	<.5
395118081413800 - MAYS F NR CUMBERLAND OH (LAT 39 51 18 LONG 081 41 38)												
MAY , 1975												
21...	1900	25	8	4.3	0	20	20	760	8600	160	6800	<.5
395256081462200 - FREELAND F NR CHANDLERSVILLE OH (LAT 39 52 56 LONG 081 46 22)												
MAY , 1975												
29...	560	1	16	4.0	0	<10	0	80	20	10	70	<.5
SEP.												
30...	470	0	0	4.2	0	10	20	90	10	20	30	<.5
395312081522900 - SALT C NR DUNCAN FALLS OH (LAT 39 53 12 LONG 081 52 29)												
MAY , 1975												
29...	210	5	0	3.0	2	0	10	940	300	20	260	.5
395553081541000 - BOGGS C NR GRIFFIN OH (LAT 39 55 53 LONG 081 54 10)												
MAY , 1975												
29...	270	7	29	3.7	1	20	0	1500	1400	20	670	.5
SEP.												
18...	120	200	2	8.0	8	10	10	10000	860	60	4800	<.5
395806081530800 - L SALT C NR ZANESVILLE OH (LAT 39 58 06 LONG 081 53 08)												
MAY , 1975												
28...	210	8	0	4.5	1	20	10	1300	470	20	470	.9
SEP.												
18...	120	200	4	18	12	10	10	12000	1700	70	6100	<.5
395825081505000 - SALT C NR BRIDGEVILLE OH (LAT 39 58 25 LONG 081 50 50)												
MAY , 1975												
28...	140	4	0	3.4	0	<10	10	950	270	10	240	.5
395851081552600 - L SALT C NR SONORA OH (LAT 39 58 51 LONG 081 55 26)												
MAY , 1975												
28...	240	9	0	4.0	1	10	0	900	1100	10	330	.5
400752081443400 - L WHITE EYES RN NR OTSEGO OH (LAT 40 07 52 LONG 081 44 34)												
AUG., 1975												
07...	1500	2	0	1.0	0	30	50	220000	10000	1000	37000	<.5
SEP.												
30...	1100	10	0	1.2	0	20	40	120000	7700	660	22000	<.5
NOBLE COUNTY												
03115700 - W F DUCK C AT DEXTER CITY OH (LAT 39 39 45 LONG 081 28 25)												
JUNE, 1975												
13...	320	55	0	4.5	1	30	20	3200	430	40	2600	<.5

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
 CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE--Continued

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TOTAL ACIDITY AS H+ (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	HYDRO- GEN SULFIDE (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
393800081270700 - GOOSE HOLLOW RN NR MACKSBURG OH (LAT 39 38 00 LONG 081 27 07)												
MAY , 1975 28...	1630	E.70	7.6	25.0	1640	3.1	4.3	0	38	700	.1	.0
393935081272600 - BUFFALO RN NR DEXTER CITY OH (LAT 39 39 35 LONG 081 27 26)												
MAY , 1975 28...	1400	E2.0	7.3	26.0	1600	3.2	3.0	0	6.0	800	.0	.0
394032081181600 - ROAD F AT ROAD FOMK OH (LAT 39 40 32 LONG 081 18 16)												
MAY , 1975 29...	1730	E3.0	7.7	24.0	590	7.5	--	121	12	140	.0	6.1
394117081183800 - FLAG RN NR FLAG OH (LAT 39 41 17 LONG 081 18 38)												
MAY , 1975 29...	1630	E.80	8.1	24.0	495	7.6	--	110	3.0	120	.0	4.4
394121081250800 - M F DUCK C NR MIDDLEBURG OH (LAT 39 41 21 LONG 081 25 08)												
MAY , 1975 28...	1300	E6.0	7.1	27.5	900	6.1	--	47	9.0	350	.5	60
394426081342000 - SHARON F NR SHARON OH (LAT 39 44 26 LONG 081 34 20)												
MAY , 1975 28...	1100	E1.0	8.4	16.0	850	7.8	--	258	12	210	.2	5.5
SEP. 24...	0930	E20	9.1	14.0	520	7.3	--	125	6.0	120	.0	10
394708081331900 - W F DUCK C AT BELLE VALLEY OH (LAT 39 47 08 LONG 081 33 19)												
MAY , 1975 22...	1400	E20	7.6	22.0	800	7.6	--	199	16	220	.0	8.0
394837081361400 - COAL R AT HIRAMSBURG OH (LAT 39 48 37 LONG 081 36 14)												
MAY , 1975 22...	1700	E4.0	7.8	22.0	1580	7.8	--	163	10	660	.0	4.1
395003081394500 - RANNELLS C NR CUMBERLAND OH (LAT 39 50 03 LONG 081 39 45)												
MAY , 1975 22...	1000	E6.0	7.9	19.0	1580	7.7	--	208	8.0	490	.5	6.6
SEP. 23...	1400	E5.0	9.2	14.5	1440	7.6	--	229	15	410	.0	9.2
395015081412300 - COLLINS C NR CUMBERLAND OH (LAT 39 50 15 LONG 081 41 23)												
MAY , 1975 22...	0800	E8.0	7.7	19.0	1220	7.6	--	174	10	440	.0	7.0
395039081343000 - W F DUCK C NR AVA OH (LAT 39 50 39 LONG 081 34 30)												
MAY , 1975 22...	1200	E.50	8.3	21.0	455	7.6	--	155	22	52	.0	6.2
SEP. 23...	1530	E2.0	9.4	14.0	390	7.5	--	140	17	44	.5	7.1
PERRY COUNTY												
393151081391800 - WOLF C AT WATERFORD OH (LAT 39 31 51 LONG 081 39 18)												
JUNE, 1975 05...	1430	E50	7.5	20.5	321	7.7	--	132	14	36	.0	4.2

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE--Continued

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DATE	HARD- NESS (CA, MG) (MG/L)	TUR- BID- ITY (JTU)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL MERCURY (HG) (UG/L)
393800081270700 - GOOSE HOLLOW RN NR MACKSBURG OH (LAT 39 38 00 LONG 081 27 07)												
MAY , 1975 28...	920	6	0	11	0	30	50	6000	9000	440	20000	.8
393935081272600 - BUFFALO RN NR DEXTER CITY OH (LAT 39 39 35 LONG 081 27 26)												
MAY , 1975 28...	950	7	0	.9	0	30	30	2500	9000	420	17000	.5
394032081181600 - ROAD F AT ROAD FORK OH (LAT 39 40 32 LONG 081 18 16)												
MAY , 1975 29...	320	1	3	16	0	<10	10	250	280	10	250	<.5
394117081183800 - FLAG RN NR FLAG OH (LAT 39 41 17 LONG 081 18 38)												
MAY , 1975 29...	270	1	0	9.3	0	10	10	160	290	0	190	<.5
394121081250800 - M F DUCK C NR MIDDLEBURG OH (LAT 39 41 21 LONG 081 25 08)												
MAY , 1975 28...	520	50	8	14	1	40	20	5600	5000	180	7200	1.6
394426081342000 - SHARON F NR SHARON OH (LAT 39 44 26 LONG 081 34 20)												
MAY , 1975 28...	500	20	0	13	2	<10	10	900	200	0	600	<.5
SEP. 24...	340	45	0	7.1	2	<10	10	1700	250	30	900	<.5
394708081331900 - W F DUCK C AT BELLE VALLEY OH (LAT 39 47 08 LONG 081 33 19)												
MAY , 1975 22...	470	20	0	12	1	<10	10	750	240	20	640	<.5
394837081361400 - COAL R AT HIRAMSBURG OH (LAT 39 48 37 LONG 081 36 14)												
MAY , 1975 22...	1000	5	4	8.0	0	10	10	430	1500	20	940	<.5
395003081394500 - RANNELLS C NR CUMBERLAND OH (LAT 39 50 03 LONG 081 39 45)												
MAY , 1975 22...	1000	80	0	18	6	10	20	8400	1200	40	2900	<.5
SEP. 23...	1500	4	0	14	1	20	0	330	1000	10	290	<.5
395015081412300 - COLLINS C NR CUMBERLAND OH (LAT 39 50 15 LONG 081 41 23)												
MAY , 1975 22...	750	35	0	12	1	10	10	2100	960	20	1300	<.5
395039081343000 - W F DUCK C NR AVA OH (LAT 39 50 39 LONG 081 34 30)												
MAY , 1975 22...	200	6	0	9.7	1	0	10	490	90	20	360	<.5
SEP. 23...	190	5	1	--	0	<10	0	200	70	20	30	<.5
PERRY COUNTY												
393151081391800 - WOLF C AT WATERFORD OH (LAT 39 31 51 LONG 081 39 18)												
JUNE, 1975 05...	170	25	0	2.8	1	<10	10	1200	110	20	820	<.5

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TOTAL ACIDITY AS H+ (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	HYDRO- GEN SULFIDE (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
393511081390800 - OLIVE GREEN C NR BEVERLY OH (LAT 39 35 11 LONG 081 39 08)												
JUNE, 1975 05...	1245	130	6.7	19.0	428	7.9	--	190	10	59	.0	3.8
393529082071500 - W B SUNDAY C AT DRAKES OH (LAT 39 35 29 LONG 082 07 15)												
MAY, 1975 15...	1135	E8.0	8.9	13.5	828	4.6	--	14	22	310	.1	563
SEP. 15...	1145	E5.0	8.6	15.5	900	4.3	.9	0	26	330	.0	.0
393621082102300 - PINE F NR HEMLOCK OH (LAT 39 36 21 LONG 082 10 23)												
MAY, 1975 15...	1000	E.90	5.2	12.5	1270	4.2	2.6	0	6.0	480	.0	.0
SEP. 15...	1030	E.70	7.9	13.5	1500	3.8	3.8	0	5.0	580	.0	.0
393743082135800 - MONDAY C AT MC CUNEVILLE OH (LAT 39 37 43 LONG 082 13 58)												
MAY, 1975 07...	1225	E4.0	11.2	15.0	1200	3.3	2.8	0	36	380	.0	.0
SEP. 08...	1230	E2.0	8.8	21.0	2100	2.6	5.3	0	200	600	.0	.0
393745082183300 - L MONDAY C NR MAXVILLE OH (LAT 39 37 45 LONG 082 18 33)												
MAY, 1975 06...	1330	E6.0	10.4	19.0	1330	4.1	1.0	0	160	360	.2	.0
393922082124100 - MOXAHALA C NR BRISTOL OH (LAT 39 39 22 LONG 082 12 41)												
MAY, 1975 07...	1435	E1.0	9.8	19.0	1560	3.0	7.0	0	74	470	.0	.0
SEP. 08...	1415	E.50	6.9	23.0	2900	2.5	14	0	200	930	.0	.0
393949082080700 - MOXAHALA C AT MOXAHALA OH (LAT 39 39 49 LONG 082 08 07)												
MAY, 1975 08...	1130	E10	9.8	17.5	1120	3.8	1.3	0	22	430	.0	.0
SEP. 08...	1505	E5.0	8.4	23.5	2500	2.7	5.0	0	200	1000	.0	.0
394024082091700 - UNNAMED TR TO MOXAHALA C NR MOXAHALA OH (LAT 39 40 24 LONG 082 09 17)												
MAY, 1975 08...	1330	E6.0	7.7	24.0	3700	3.0	16	0	48	1900	.0	.0
SEP. 15...	1310	E7.0	7.6	21.0	3800	2.9	15	0	35	1800	.0	.0
394307082121400 - RUSH C AT NEW LEXINGTON OH (LAT 39 43 07 LONG 082 12 14)												
JULY, 1975 29...	1420	E1.0	6.6	24.0	3850	2.8	13	0	46	2300	.0	.0
394552082054700 - MOXAHALA C AT CROOKSVILLE OH (LAT 39 45 52 LONG 082 05 47)												
MAY, 1975 13...	1200	E60	8.2	15.0	1850	3.3	4.8	0	22	770	.1	.0
SEP. 09...	1205	E50	7.4	20.0	2900	2.6	9.6	0	35	1200	.0	.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE--Continued

521

DATE	HARD- NESS (CA+MG) (MG/L)	TUR- BID- ITY (JTU)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL MERCURY (HG) (UG/L)
393511081390800 - OLIVE GREEN C NR BEVERLY OH (LAT 39 35 11 LONG 081 39 08)												
JUNE, 1975 05...	240	30	0	3.1	0	10	10	1500	100	30	1100	<.5
393529082071500 - W B SUNDAY C AT DRAKES OH (LAT 39 35 29 LONG 082 07 15)												
MAY, 1975 15...	370	20	0	1.4	0	20	10	5000	2300	140	5900	<.5
SEP. 15...	440	25	1	.8	0	0	0	4400	4200	130	4100	<.5
393621082102300 - PINE F NR HEMLOCK OH (LAT 39 36 21 LONG 082 10 23)												
MAY, 1975 15...	1600	50	0	.6	0	50	10	31000	2200	290	10000	<.5
SEP. 15...	510	25	0	4.1	0	<10	0	30000	2600	300	8600	<.5
393743082135800 - MONDAY C AT MC CUNEVILLE OH (LAT 39 37 43 LONG 082 13 58)												
MAY, 1975 07...	450	25	8	.8	0	20	20	13000	5000	260	11000	<.5
SEP. 08...	1600	7	1	1.6	0	10	20	11000	10000	420	21000	<.5
393745082183300 - L MONDAY C NR MAXVILLE OH (LAT 39 37 45 LONG 082 18 33)												
MAY, 1975 06...	600	5	0	1.8	0	<10	0	1000	9000	280	8700	<.5
393922082124100 - MOXAHALA C NR BRISTOL OH (LAT 39 39 22 LONG 082 12 41)												
MAY, 1975 07...	430	85	0	2.1	9	140	120	82000	3200	280	20000	<.5
SEP. 08...	1700	20	0	2.8	0	30	60	140000	14000	700	42000	<.5
393949082080700 - MOXAHALA C AT MOXAHALA OH (LAT 39 39 49 LONG 082 08 07)												
MAY, 1975 08...	550	110	4	.6	0	10	20	4100	10000	240	8000	<.5
SEP. 08...	2000	2	0	3.0	0	10	10	11000	19000	550	22000	<.5
394024082091700 - UNNAMED TR TO MOXAHALA C NR MOXAHALA OH (LAT 39 40 24 LONG 082 09 17)												
MAY, 1975 08...	4500	1	0	1.9	2	290	30	25000	61000	1700	55000	<.5
SEP. 15...	2400	75	1	3.7	5	10	30	240000	55000	1400	49000	<.5
394307082121400 - RUSH C AT NEW LEXINGTON OH (LAT 39 43 07 LONG 082 12 14)												
JULY, 1975 29...	2500	25	6	.8	2	40	30	210000	79000	1200	49000	<.5
394552082054700 - MOXAHALA C AT CROOKSVILLE OH (LAT 39 45 52 LONG 082 05 47)												
MAY, 1975 13...	1100	25	4	1.3	0	80	30	37000	19000	420	21000	<.5
SEP. 09...	1800	230	0	6.2	10	20	30	81000	20000	780	38000	<.5

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE--Continued

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TOTAL ACIDITY AS H+ (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	HYDRO- GEN SULFIDE (MG/L)	CARBON DIOXIDE (CO2) (MG/L)
394735082085600 - BUCKEYE F AT SALTILLO OH (LAT 39 47 35 LONG 082 08 56)												
MAY, 1975												
14...	1135	E8.0	8.9	14.0	2280	3.9	5.0	0	32	840	.0	.0
SEP.												
09...	1030	E7.0	8.6	18.0	3000	2.7	7.8	0	20	1400	.0	.0
SCIOTO COUNTY												
03216640 - PINE C NR WHEELERSBURG OH (LAT 38 39 12 LONG 082 48 09)												
JUNE, 1975												
17...	1700	23	6.9	19.0	770	3.8	1.1	--	10	288	.0	--
364700082505800 - L SCIOTO R NR FAIR OAKS OH (LAT 38 47 00 LONG 082 50 58)												
JUNE, 1975												
17...	1300	E40	8.5	21.0	195	7.1	--	38	12	29	.1	4.8
TUSCARAWAS COUNTY												
402357081260700 - MUD RN NR TUSCARAWAS OH (LAT 40 23 57 LONG 081 26 07)												
JULY, 1975												
16...	0945	E.60	5.5	20.5	2920	2.8	15	0	14	1400	.0	.0
402517081324000 - STONE C NR STONE CREEK OH (LAT 40 25 17 LONG 081 32 40)												
JULY, 1975												
15...	1150	E2.0	7.6	23.0	380	7.5	--	96	24	54	.1	4.9
402737081270600 - OLDTOWN C NR NEW PHILADELPHIA OH (LAT 40 27 37 LONG 081 27 05)												
JULY, 1975												
15...	1545	E3.0	6.7	19.5	1370	6.6	--	18	16	430	.0	7.2
402857081330700 - CROOKED RN NR NEW PHILADELPHIA OH (LAT 40 28 57 LONG 081 33 07)												
JULY, 1975												
15...	1400	E.40	6.9	25.5	1850	3.0	4.9	0	86	630	.0	.0
403446081194900 - X RN NR MINERAL CITY OH (LAT 40 34 46 LONG 081 19 49)												
JULY, 1975												
09...	1315	E.40	7.1	25.5	3500	3.8	1.2	0	40	2000	.0	.0
403551081213300 - HUFF RN AT MINERAL CITY OH (LAT 40 35 51 LONG 081 21 33)												
JULY, 1975												
09...	1530	E5.0	7.0	23.0	1640	3.4	2.1	0	75	650	.1	.0
VINTON COUNTY												
03201600 - SANDY RN AB BIG FOUR HOLLOW C NR LAKE HOPE OH (LAT 39 21 45 LONG 082 18 47)												
JULY, 1975												
23...	1420	E.05	6.3	28.0	616	5.3	--	3	22	200	.1	24
391630082245100 - RACCOON C NR ZALESKI OH (LAT 39 16 30 LONG 082 24 51)												
JULY, 1975												
23...	1635	E40	7.2	25.5	700	4.0	1.6	0	34	220	.0	.0
392152082185400 - MINE BIG FOUR HOLLOW AB LK HOPE OH (LAT 39 21 52 LONG 082 18 54)												
JULY, 1975												
23...	1530	E.01	5.2	22.5	3540	2.7	27	0	5.0	2400	1.7	.0
392241082275200 - BRUSHY F NR MT PLEASANT OH (LAT 39 22 41 LONG 082 27 52)												
JULY, 1975												
23...	1050	E.20	7.1	27.5	401	4.7	--	1	16	120	.0	32

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE--Continued

523

DATE	HARD- NESS (CA, MG) (MG/L)	TUR- BID- ITY (JTU)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL MERCURY (HG) (UG/L)
394735082085600 - BUCKEYE F AT SALTILLO OH (LAT 39 47 35 LONG 082 08 56)												
MAY, 1975												
14...	1500	25	8	1.0	0	50	30	18000	3200	900	31000	<.5
SEP.												
09...	2200	25	0	2.1	1	10	30	21000	45000	1100	45000	<.5
SCIOTO COUNTY												
03216640 - PINE C NR WHEELERSBURG OH (LAT 38 39 12 LONG 082 48 09)												
JUNE, 1975												
17...	340	20	0	9.0	0	20	20	3300	3700	230	6600	<.5
384700082505800 - L SCIOTO R NR FAIR OAKS OH (LAT 38 47 00 LONG 082 50 58)												
JUNE, 1975												
17...	74	20	0	3.1	0	10	0	810	220	10	320	<.5
TUSCARAWAS COUNTY												
402357081260700 - MUD RN NR TUSCARAWAS OH (LAT 40 23 57 LONG 081 26 07)												
JULY, 1975												
16...	1300	25	0	15	4	20	30	300000	15000	660	32000	1.1
402517081324000 - STONE C NR STONE CREEK OH (LAT 40 25 17 LONG 081 32 40)												
JULY, 1975												
15...	150	8	0	5.0	0	0	0	660	200	10	200	<.5
402737081270600 - OLDTOWN C NR NEW PHILADELPHIA OH (LAT 40 27 37 LONG 081 27 06)												
JULY, 1975												
15...	870	10	3	7.8	0	<10	10	1100	5200	100	1800	<.5
402857081330700 - CROOKED RN NR NEW PHILADELPHIA OH (LAT 40 28 57 LONG 081 33 07)												
JULY, 1975												
15...	820	35	0	11	2	10	30	22000	5600	320	20000	<.5
403446081194900 - X RN NR MINERAL CITY OH (LAT 40 34 46 LONG 081 19 49)												
JULY, 1975												
09...	2800	5	13	3.6	0	30	20	4800	46000	300	3600	1.5
403551081213300 - HUFF RN AT MINERAL CITY OH (LAT 40 35 51 LONG 081 21 33)												
JULY, 1975												
09...	860	55	3	4.6	0	10	10	25000	23000	370	5200	3.2
VINTON COUNTY												
03201600 - SANDY RN AB BIG FOUR HOLLOW C NR LAKE HOPE OH (LAT 39 21 45 LONG 082 18 47)												
JULY, 1975												
23...	280	4	0	.8	0	<10	10	32000	2600	130	3000	<.5
391630082245100 - RACCOON C NR ZALESKI OH (LAT 39 16 30 LONG 082 24 51)												
JULY, 1975												
23...	250	10	0	.4	0	<10	10	1300	7600	250	5900	.5
392152082185400 - MINE BIG FOUR HOLLOW AB LK HOPE OH (LAT 39 21 52 LONG 082 18 54)												
JULY, 1975												
23...	8000	30	0	10	5	50	150	500000	160000	2200	78000	<.5
392241082275200 - BRUSHY F NR MT PLEASANT OH (LAT 39 22 41 LONG 082 27 52)												
JULY, 1975												
23...	63	30	0	2.0	0	<10	30	3100	4800	150	1500	<.5

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
 CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED OXYGEN (MG/L)	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TOTAL ACIDITY AS H+ (MG/L)	BICAR- BONATE (MCO ₃) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	HYDRO- GEN SULFIDE (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)
392248082235200 - RACCOON C NR NEW PLYMOUTH OH (LAT 39 22 48 LONG 082 23 52)												
JULY, 1975 23...	1335	E20	7.1	23.5	803	3.5	.5	0	22	270	.0	.0
392257082253800 - RED RN NR ORLAND OH (LAT 39 22 57 LONG 082 25 38)												
JULY, 1975 23...	1215	E.05	5.8	27.5	1650	2.8	10	0	20	530	.0	.0
WASHINGTON COUNTY												
03115650 - E F DUCK C AT LOWER SALEM OH (LAT 39 34 26 LONG 081 23 25)												
MAY, 1975 29...	1330	52	7.7	20.0	780	7.2	--	89	7.0	270	.0	9.0
03115800 - DUCK C AT STANLEYVILLE OH (LAT 39 28 14 LONG 081 24 41)												
JUNE, 1975 12...	1600	E340	7.1	20.5	750	7.1	--	98	14	230	.0	12
392826081185300 - MOSS RN TR AT MOSS RUN OH (LAT 39 28 26 LONG 081 18 53)												
JUNE, 1975 12...	1445	E.20	6.9	21.0	330	7.2	--	86	10	65	.0	8.7
392845081191000 - MOSS RN NR MOSS RUN OH (LAT 39 28 45 LONG 081 19 10)												
JUNE, 1975 12...	1330	E.30	7.8	22.0	460	7.0	--	100	6.0	120	.0	16
393122081242400 - WHIPPLE RN NR WHIPPLE OH (LAT 39 31 22 LONG 081 24 24)												
MAY, 1975 29...	0900	E1.0	7.3	18.0	495	7.7	--	218	11	60	.0	7.0
393423081254000 - W F DUCK C NR WARNER OH (LAT 39 34 23 LONG 081 25 40)												
MAY, 1975 29...	1130	E60	7.4	21.0	690	7.1	--	143	16	180	.0	18

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
 CHEMICAL CHARACTERISTICS OF ACID-MINE DRAINAGE---Continued

525

DATE	HARD- NESS (CA, MG) (MG/L)	TUR- BID- ITY (JTU)	PHENOLS (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ALUM- INUM (AL) (UG/L)	TOTAL MERCURY (HG) (UG/L)
392248082235200 - RACCOON C NR NEW PLYMOUTH OH (LAT 39 22 48 LONG 082 23 52)												
JULY, 1975 23...	300	15	0	.4	0	<10	10	2300	9700	300	10000	<.5
392257082253800 - RED RN NR ORLAND OH (LAT 39 22 57 LONG 082 25 38)												
JULY, 1975 23...	720	5	0	1.8	0	10	30	58000	7300	310	35000	<.5
WASHINGTON COUNTY												
03115650 - E F DUCK C AT LOWER SALEM OH (LAT 39 34 26 LONG 081 23 25)												
MAY, 1975 29...	490	15	0	2.3	0	20	10	900	3200	40	1000	<.5
03115800 - DUCK C AT STANLEYVILLE OH (LAT 39 28 14 LONG 081 24 41)												
JUNE, 1975 12...	440	50	0	6.0	2	20	20	490	220	40	800	<.5
392826081185300 - MOSS RN TR AT MOSS RUN OH (LAT 39 28 26 LONG 081 18 53)												
JUNE, 1975 12...	210	15	1	4.1	0	10	10	520	270	20	950	<.5
392845081191000 - MOSS RN NR MOSS RUN OH (LAT 39 28 45 LONG 081 19 10)												
JUNE, 1975 12...	240	4	0	6.5	1	30	20	4500	2400	90	3800	<.5
393122081242400 - WHIPPLE RN NR WHIPPLE OH (LAT 39 31 22 LONG 081 24 24)												
MAY, 1975 29...	280	2	0	4.1	32	10	20	160	70	10	90	<.5
393423081254000 - W F DUCK C NR WARNER OH (LAT 39 34 23 LONG 081 25 40)												
MAY, 1975 29...	340	5	32	9.4	1	10	10	460	1100	20	1200	<.5

GROUND WATER RECORDS

392004082071600 AT-2A AT ATHENS, OHIO

LOCATION.--Lat 39°20'04", long 82°07'16", Athens County, 1.1 mi (1.8 km) west of city hall in Athens.

AQUIFER TYPE.--Water table, sand and gravel.

GAGE.--Water level recorder. Land-surface datum is 641.81 ft (195.624 m) above mean sea level.

REMARKS.--Record prior to Jan. 16, 1975 furnished by Ohio Department of Natural Resources, Division of Water.

GROUND WATER LEVEL RECORDS

PERIOD OF RECORD.--March 1954 to current year.

EXTREMES.--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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.95	14.24	14.01	13.20	12.97	8.21	10.06	11.62	14.52	15.52	16.67	16.92
2	13.01	14.27	13.87	13.18	12.85	8.65	10.09	11.65	14.51	15.58	16.71	16.91
3	13.06	14.28	13.69	13.07	12.81	9.02	10.36	11.64	14.54	15.62	16.76	16.90
4	13.13	14.33	13.60	13.04	12.76	9.37	10.46	11.83	14.58	15.67	16.80	16.91
5	13.19	14.34	13.52	13.02	12.73	9.63	10.56	11.96	14.64	15.70	16.83	16.93
6	13.23	14.35	13.43	12.98	12.68	9.95	10.66	12.14	14.66	15.74	16.83	16.94
7	13.31	14.35	13.39	13.01	12.64	10.25	10.77	12.27	14.58	15.78	16.83	16.94
8	13.36	14.36	13.40	12.99	12.57	10.44	10.87	12.40	14.57	15.82	16.84	16.95
9	13.40	14.37	13.35	13.10	12.60	10.53	10.95	12.56	14.65	15.86	16.87	17.01
10	13.51	14.36	13.27	13.02	12.58	10.74	11.08	12.70	14.72	15.90	16.89	17.05
11	13.56	14.37	13.22	13.08	12.62	10.86	11.20	12.82	14.76	15.90	16.90	17.05
12	13.61	14.36	13.25	13.10	12.68	10.91	11.32	12.98	14.81	15.92	16.87	17.07
13	13.64	14.18	13.26	13.03	12.64	10.70	11.44	13.09	14.83	15.97	16.80	17.00
14	13.70	14.12	13.30	13.08	12.61	10.46	11.48	13.19	14.87	16.01	16.82	16.82
15	13.73	14.06	13.24	13.14	12.62	10.23	11.61	13.30	14.92	16.05	16.83	16.71
16	13.77	14.08	13.23	13.20	12.66	10.07	11.69	13.42	14.96	16.09	16.79	16.67
17	13.82	14.09	13.13	13.22	12.68	10.23	11.73	13.52	15.01	16.13	16.53	16.72
18	13.84	14.10	13.15	13.18	12.68	10.29	11.80	13.59	14.98	16.17	16.39	16.73
19	13.87	14.12	13.15	13.19	12.69	10.28	11.98	13.60	14.93	16.20	16.32	16.72
20	13.94	14.16	13.16	13.21	12.73	10.16	12.04	13.69	14.90	16.23	16.34	16.63
21	13.97	14.18	13.17	13.22	12.77	10.01	12.10	13.78	14.99	16.25	16.38	16.60
22	13.98	14.19	13.22	13.23	12.76	10.23	12.15	13.87	15.05	16.28	16.44	16.62
23	14.00	14.17	13.22	13.22	12.74	10.25	12.19	13.93	15.11	16.31	16.50	16.62
24	14.03	14.16	13.23	13.17	12.01	9.73	12.20	13.99	15.16	16.35	16.55	16.55
25	14.08	14.20	13.26	13.10	7.04	9.77	11.99	14.06	15.21	16.39	16.61	16.09
26	14.09	14.18	13.24	13.19	6.57	9.87	11.74	14.14	15.28	16.43	16.67	15.88
27	14.12	14.08	13.17	13.18	7.09	9.91	11.57	14.21	15.31	16.46	16.73	15.80
28	14.15	14.09	13.16	13.11	7.70	9.98	11.46	14.28	15.36	16.51	16.77	15.76
29	14.18	14.10	13.14	13.18	---	10.02	11.48	14.34	15.42	16.55	16.81	15.82
30	14.20	14.08	13.23	13.18	---	9.93	11.58	14.39	15.46	16.59	16.86	15.90
31	14.21	---	13.23	13.11	---	9.94	---	14.47	---	16.63	16.90	---
MONTH	14.21	14.37	14.01	13.23	12.97	10.91	12.20	14.47	15.46	16.63	16.90	17.07
YEAR	MAX	17.07	MIN	6.57	MEAN	13.77						

GROUND WATER RECORDS

527

391934082065000 AT-10 IN ATHENS, OHIO

LOCATION.--Lat 39°19'34", long 82°06'50", Athens County, 0.3 mi (0.5 km) south of fairgrounds in Athens.

AQUIFER TYPE.--Water table, sand and gravel.

REMARKS.--Public water supply.

GROUND WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--June 1967 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	CAR- BONATE (CO3) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LITY AS CACO3 (MG/L)
NOV. 19...	804	7.3	100	29	0	412	33	53	48	33	338
APR. 22...	854	7.3	110	32	0	446	29	53	49	36	366
DATE	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	HARD- NESS (CA+MG) (MG/L)	TOTAL RESI- DUE (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL LEAD (PB) (UG/L)
NOV. 19...	.60	.01	.00	.04	370	510	0	7600	550	<10	2
APR. 22...	.19	.01	.00	.01	410	500	3	6600	560	20	2

GROUND WATER RECORDS

400619080423200 (Revised) B-1 AT MARTINS FERRY, OHIO

LOCATION.--Lat 40°06'19", long 80°42'32", Belmont County, in the northeast part of Martins Ferry.

AQUIFER TYPE.--Water table, sand and gravel.

GAGE.--Water level recorder. Land-surface datum is 1,160 ft (354 m) above mean sea level.

REMARKS.--Record prior to May 19, 1975 furnished by Ohio Department of Natural Resources, Division of Water.

GROUND WATER LEVEL RECORDS

PERIOD OF RECORD.--June 1948 to current year.

EXTREMES.--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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM. WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36.77	37.10	33.27	30.50	27.95	27.60	29.92	31.20	34.40	35.34	32.99	27.15
2	37.32	36.80	33.09	28.40	27.51	28.29	31.10	31.80	33.84	35.84	32.80	29.11
3	36.70	36.72	32.84	29.97	28.70	29.58	30.99	31.79	33.08	36.10	32.60	29.92
4	36.55	36.80	32.71	30.42	28.85	31.12	30.14	30.33	33.82	35.78	32.48	30.72
5	36.37	36.20	33.82	30.68	28.99	31.74	30.20	29.00	34.08	35.47	---	31.26
6	36.41	---	34.30	32.12	28.88	32.80	31.60	28.75	33.16	35.51	---	30.84
7	36.50	---	34.55	32.68	28.61	32.85	32.40	30.08	29.55	35.44	---	30.73
8	36.65	---	34.20	33.15	29.45	31.81	33.01	30.21	28.64	34.21	---	31.63
9	36.70	---	29.37	32.60	30.90	31.18	33.65	30.65	31.01	33.56	---	31.94
10	37.15	---	29.93	31.80	32.14	32.22	34.30	31.18	32.09	33.42	---	32.26
11	36.85	---	30.64	32.45	32.70	32.55	34.38	31.82	32.58	33.04	---	32.44
12	37.04	36.05	30.91	32.60	33.28	32.72	34.18	32.47	32.39	32.84	---	32.19
13	37.15	36.15	31.55	32.68	33.65	30.85	34.68	32.60	31.26	32.80	---	31.34
14	37.45	35.81	31.72	32.80	33.57	30.27	35.19	32.63	30.75	---	---	31.14
15	37.44	35.72	31.58	33.10	33.97	30.04	35.42	32.92	31.68	---	32.24	32.03
16	36.95	35.52	31.59	33.71	33.89	30.05	35.94	32.98	32.33	---	32.05	32.09
17	37.00	35.40	30.85	34.08	33.95	30.88	35.97	33.15	32.33	---	30.31	32.25
18	36.49	35.74	30.85	34.55	33.60	30.50	36.10	33.53	32.89	---	32.05	32.06
19	36.81	35.95	31.81	34.80	30.82	30.28	35.75	33.59	33.62	32.83	32.67	31.38
20	36.70	35.85	32.50	34.70	31.10	27.50	35.40	33.92	34.28	32.67	32.74	29.50
21	37.19	35.44	32.95	33.45	31.69	20.70	35.61	34.42	34.33	33.00	32.87	30.95
22	37.11	34.78	33.65	33.96	32.19	23.96	35.70	34.71	34.75	33.16	32.75	31.42
23	37.05	33.36	33.95	34.26	32.25	24.90	35.83	34.61	35.33	33.21	32.75	31.55
24	37.09	33.35	33.88	34.31	21.50	25.83	35.90	34.71	34.89	33.16	32.35	31.57
25	37.11	33.55	31.61	34.39	16.62	25.50	35.25	34.43	35.30	33.31	---	27.60
26	36.79	31.79	30.62	34.20	20.75	26.25	28.10	34.49	35.41	33.19	32.20	29.29
27	36.48	31.69	29.90	31.03	23.85	27.15	27.00	34.26	34.78	---	32.41	28.77
28	36.73	32.05	30.34	31.57	25.68	28.24	30.30	34.45	34.20	32.68	---	29.21
29	37.00	32.43	30.46	30.68	---	29.39	30.69	34.98	34.39	32.81	---	30.41
30	37.25	32.70	30.92	26.70	---	29.28	30.65	35.26	35.04	32.74	31.80	31.32
31	37.50	---	31.05	25.80	---	29.62	---	35.27	---	32.99	29.85	---
MONTH	37.50	37.10	34.55	34.80	33.97	32.85	36.10	35.27	35.41	36.10	---	32.44
YEAR	MAX	37.50	MIN	16.62	MEAN	32.53						

GROUND WATER RECORDS

529

391805084261800 (Revised) BU-9 NEAR SHARONVILLE, OHIO

LOCATION.--Lat 39°18'05", long 84°26'18", Butler County, 2.5 mi (4.0 km) northwest of Sharonville.

AQUIFER TYPE.--Artesian, sand and gravel.

GAGE.--Water level recorder. Land-surface datum is 586.89 ft (178.884 m) above mean sea level.

REMARKS.--Record prior to Sept. 3, 1975 furnished by Ohio Department of Natural Resources, Division of Water.

GROUND WATER LEVEL RECORDS

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

EXTREMES.--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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.81	---	11.70	11.39	10.38	7.94	7.81	7.44	11.57	10.32	12.07	13.20
2	11.97	---	10.96	11.54	10.36	8.29	7.83	7.52	11.63	10.47	12.05	13.49
3	12.02	---	11.22	11.32	10.39	8.57	8.40	7.48	11.55	10.53	12.09	13.50
4	11.87	---	11.34	11.17	10.29	8.72	8.68	7.77	11.45	10.51	12.21	13.63
5	11.90	---	11.28	11.35	9.99	8.86	8.83	7.99	11.40	10.45	12.23	13.62
6	11.89	---	11.11	11.34	10.16	9.00	8.89	8.27	11.34	10.42	12.30	13.77
7	11.96	---	10.92	11.22	10.35	9.02	8.99	8.52	11.04	10.46	12.47	13.84
8	11.93	---	10.46	11.24	10.33	9.54	9.13	8.72	11.17	9.50	12.53	14.01
9	11.97	---	10.57	11.09	10.62	9.72	9.25	8.93	11.20	9.67	12.50	14.15
10	12.14	---	10.58	11.23	10.63	9.64	9.29	9.13	11.18	9.88	12.48	14.08
11	12.20	---	10.43	10.99	10.44	9.84	9.70	9.20	11.19	10.06	12.43	13.93
12	12.26	---	10.58	10.19	10.67	9.84	9.67	9.34	11.10	10.20	12.45	14.03
13	12.28	---	10.67	10.30	10.82	8.84	9.97	9.50	11.20	10.36	12.43	14.07
14	12.19	12.00	10.82	---	10.81	8.76	10.01	9.80	11.20	10.56	12.44	14.11
15	12.32	11.97	10.72	---	10.76	8.36	10.07	9.80	11.13	10.67	12.44	13.96
16	12.03	12.12	10.35	---	10.79	8.38	10.22	10.14	11.41	10.74	12.36	13.76
17	12.08	12.20	10.44	---	10.78	7.95	10.17	10.22	11.40	10.75	12.24	13.67
18	12.17	11.98	10.75	---	10.85	7.89	10.03	10.27	11.34	10.76	12.25	13.54
19	12.17	12.02	10.75	---	10.97	7.86	10.30	10.37	11.19	10.76	12.28	13.57
20	12.43	12.20	10.80	---	11.07	8.02	10.61	10.52	11.19	10.83	12.40	13.56
21	12.51	---	10.75	---	11.27	8.21	10.79	10.67	11.11	10.95	12.39	13.62
22	12.39	---	10.98	---	11.20	8.22	10.70	10.78	10.40	11.14	12.41	13.64
23	12.25	---	11.02	---	11.05	8.33	10.56	10.88	9.85	11.21	12.44	13.53
24	12.14	---	11.00	---	9.85	8.39	10.32	10.97	9.86	11.24	12.44	13.46
25	12.23	---	11.28	---	8.15	7.79	9.52	11.10	9.90	11.47	12.49	13.48
26	12.31	---	11.37	---	7.81	8.05	9.52	11.12	10.00	11.58	12.69	13.51
27	12.26	---	11.18	---	7.77	8.28	9.52	11.25	10.00	11.58	12.96	13.55
28	12.24	---	11.21	---	7.93	8.29	9.42	11.33	9.73	11.62	12.98	13.55
29	12.37	12.21	11.18	---	---	8.13	7.90	11.33	10.00	11.81	12.92	13.47
30	12.47	12.12	11.37	11.00	---	7.40	7.40	11.30	10.17	11.92	12.91	13.47
31	12.44	---	11.37	10.90	---	7.56	---	11.33	---	12.01	13.04	---
MONTH	12.51	---	11.70	---	11.27	9.84	10.79	11.33	11.63	12.01	13.04	14.15
YEAR	MAX	14.15	MIN	7.40	MEAN	10.93						

GROUND WATER RECORDS

392528084323000 BU-10 NEAR HAMILTON, OHIO

LOCATION.--Lat 39°25'28", long 84°32'30", Butler County, 2.0 mi (3.2 km) north of courthouse in Hamilton.

AQUIFER TYPE.--Water table, sand and gravel.

GAGE.--Water level recorder. Land-surface datum is 580 ft (177 m) above mean sea level.

GROUND WATER LEVEL RECORDS

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

EXTREMES.--Period of record: Maximum daily low, 20.95 ft (6.386 m) July 9, 1971; minimum daily low, 5.11 ft (1.558 m) Feb. 25, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	16.31	14.64	12.57	---	10.46	---	---	---	16.83	14.93
2		---	16.21	14.19	12.83	---	11.89	---	---	---	16.88	16.13
3		---	16.14	15.23	13.07	---	11.11	---	---	---	15.73	15.27
4		---	16.13	14.34	13.22	---	11.29	---	---	---	15.25	16.05
5		---	17.05	14.35	13.33	10.91	11.51	---	---	---	14.75	15.34
6		---	16.41	14.40	14.85	12.27	11.63	---	---	12.71	14.84	15.10
7		16.06	16.21	14.46	14.99	11.40	11.74	---	---	12.87	14.71	15.03
8		16.11	15.76	14.48	13.79	11.44	11.85	---	---	12.99	14.65	15.01
9		16.12	15.04	14.35	13.83	11.40	13.11	---	---	---	14.66	15.06
10		16.14	14.82	13.35	13.90	11.56	12.18	---	---	---	14.62	15.08
11		16.13	14.98	12.28	13.99	11.69	12.25	12.19	---	---	14.59	15.02
12		16.09	16.55	12.32	13.95	11.64	12.32	12.25	---	---	14.52	14.80
13		16.08	15.53	12.80	13.98	9.70	12.39	12.30	13.06	---	14.59	14.85
14		17.07	15.17	13.18	14.04	11.05	12.44	12.37	12.98	13.32	14.65	14.90
15		16.33	14.88	13.46	14.12	10.45	12.54	13.05	12.88	13.46	14.65	14.94
16		16.24	14.58	15.04	14.20	10.45	12.62	12.67	12.83	13.54	14.54	14.98
17		16.29	14.19	14.01	14.17	10.44	13.05	12.67	12.72	14.39	14.46	15.01
18		16.27	14.35	13.93	13.84	10.32	12.92	12.72	12.77	13.74	14.47	15.70
19		16.29	14.56	13.83	14.34	10.01	12.90	---	12.86	13.61	14.57	15.19
20		16.28	14.64	13.91	13.25	9.89	12.94	---	12.96	13.05	15.76	15.03
21		17.47	14.73	14.02	13.39	10.21	13.00	---	13.02	13.21	15.09	15.03
22		16.66	14.74	14.10	13.48	10.55	13.05	---	13.02	13.35	15.15	15.03
23		16.46	14.74	14.18	13.47	10.81	14.59	---	13.03	13.77	16.39	15.06
24		16.46	14.80	14.20	5.18	10.86	14.14	---	13.05	15.27	15.92	16.87
25		16.43	14.64	14.17	5.11	10.88	12.41	---	---	15.16	15.10	16.82
26		16.33	15.22	14.15	6.40	10.89	11.15	---	---	14.24	16.03	16.77
27		17.28	14.41	13.85	---	11.93	11.15	---	---	14.07	15.32	15.87
28		16.54	14.52	13.87	---	11.22	11.15	---	---	16.31	16.09	15.46
29		16.39	14.67	13.91	---	10.89	---	---	---	16.97	15.91	15.33
30		16.36	14.77	14.03	---	9.90	---	---	---	17.18	15.34	15.28
31		---	14.74	12.78	---	10.00	---	---	---	17.30	15.08	---
MONTH		17.47	17.05	15.23	14.99	12.27	14.59	---	---	---	16.88	16.87
PERIOD	MAX	17.47	MIN	5.11	MEAN	13.95						

GROUND WATER RECORDS

531

393202084241500 BU-15 AT MIDDLETOWN, OHIO

LOCATION.--Lat 39°32'02", long 84°24'15", Butler County, at Hook Field (municipal airport) at Middletown.

AQUIFER TYPE.--Water table, sand and gravel.

GAGE.--Water level recorder. Land-surface datum is 641 ft (195 m) above mean sea level.

REMARKS.--Record prior to Oct. 23, 1974 furnished by Ohio Department of Natural Resources, Division of Water.

GROUND WATER LEVEL RECORDS

PERIOD OF RECORD.--June 1972 to current year.

EXTREMES.--Period of record: Maximum daily low, 13.16 ft (4.011 m) Aug. 23, 1972; minimum daily low, 0.06 ft (0.018 m) Feb. 25, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.65	11.61	11.74	9.89	8.06	3.86	6.63	7.43	9.85	10.69	11.57	11.71
2	11.72	11.62	11.75	9.47	7.65	4.68	6.86	7.48	9.81	10.70	11.75	11.80
3	11.77	11.74	11.74	9.16	7.83	5.39	7.14	7.70	9.82	10.81	11.85	11.87
4	11.82	11.74	11.76	9.06	7.99	6.03	7.38	7.94	9.90	10.81	11.65	12.03
5	11.83	11.50	11.82	9.06	8.21	6.56	7.66	8.14	9.94	9.83	11.29	12.04
6	11.88	11.19	11.88	9.13	8.39	7.00	7.74	8.22	9.88	8.86	11.51	11.84
7	11.94	11.09	11.89	9.80	8.44	7.39	7.88	8.56	9.52	8.96	11.92	11.73
8	12.00	11.17	11.75	9.88	8.65	7.44	8.45	8.92	9.00	9.17	12.03	11.70
9	12.03	11.27	11.01	9.40	8.92	7.60	8.34	9.00	9.16	9.47	12.16	12.14
10	12.08	11.26	10.49	8.46	9.17	7.84	8.27	8.88	9.36	9.75	12.25	12.31
11	12.18	11.24	10.27	7.60	9.36	8.06	8.35	9.04	9.93	10.01	12.17	12.37
12	12.20	11.15	10.42	6.89	9.38	8.08	8.45	9.15	10.06	10.14	11.43	12.24
13	12.20	11.02	10.43	6.89	9.25	7.24	8.56	9.23	9.82	10.20	11.25	11.81
14	12.20	11.00	10.39	7.21	9.32	7.10	8.68	9.17	9.88	10.18	11.27	11.79
15	12.22	10.98	10.24	7.52	9.40	7.20	8.78	9.17	9.88	10.28	11.38	11.74
16	12.13	10.95	9.92	8.31	9.43	7.24	8.87	9.68	9.85	10.49	11.23	11.87
17	12.06	10.91	9.68	8.77	9.46	6.87	8.94	9.83	9.53	10.71	10.97	11.67
18	11.88	10.91	9.69	8.85	9.47	6.86	9.00	9.56	9.54	10.68	11.43	11.72
19	11.98	11.61	9.92	8.93	9.13	6.86	9.02	9.47	9.67	10.60	11.59	11.70
20	12.05	11.58	10.13	9.22	9.04	6.86	9.05	9.49	9.77	9.86	11.70	11.67
21	12.08	11.09	10.36	9.52	9.24	6.47	9.24	9.61	9.90	9.60	11.84	11.68
22	12.06	10.98	10.55	9.75	9.31	6.66	9.40	9.78	10.01	9.69	11.84	11.62
23	11.93	11.42	10.88	9.98	9.02	6.89	9.47	10.20	10.09	9.88	11.85	11.66
24	11.93	11.48	10.87	10.11	2.92	7.09	9.40	10.30	10.63	10.06	11.86	11.65
25	11.84	11.67	10.62	10.18	.06	7.09	8.66	10.08	10.88	10.22	11.89	11.53
26	11.69	11.68	10.13	10.18	.91	7.03	7.53	10.15	10.95	10.37	11.82	11.70
27	11.61	11.68	10.01	9.86	2.20	7.23	6.93	10.15	10.54	10.50	11.74	11.77
28	11.58	11.73	10.18	9.87	3.10	7.32	6.93	9.97	10.38	10.69	11.77	11.77
29	11.59	11.75	10.34	9.92	---	7.18	6.97	9.92	10.49	10.88	12.07	11.76
30	11.68	11.58	10.42	9.34	---	6.40	7.26	9.91	10.53	11.03	12.07	11.77
31	11.68	---	9.99	8.45	---	6.21	---	9.86	---	11.19	11.87	---
MEAN	11.91	11.35	10.68	9.05	7.61	6.83	8.19	9.22	9.95	10.20	11.71	11.82
YEAR	MAX	12.37	MIN	.06	MEAN	9.89						

GROUND WATER RECORDS

392445084333000 BU-36 IN HAMILTON, OHIO

LOCATION.--Lat 39°24'45", long 84°33'30", Butler County, on right bank of Great Miami River 300 ft (90 m) downstream from Twosile Creek in Hamilton.

AQUIFER TYPE.--Water table, sand and gravel.

REMARKS.--Industrial use, Champion Paper Co.

GROUND WATER QUALITY RECORDS

CHEMICAL ANALYSES

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

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	CAR- BONATE (CO3) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
NOV. 07...	0900	15.0	800	7.1	89	26	0	365	39	97
FEB. 06...	1230	15.5	800	7.1	99	34	0	370	39	96
MAY 01...	1400	16.0	800	6.8	120	34	0	366	42	96
AUG. 21...	1500	17.0	805	7.0	110	35	0	367	37	93

DATE	TOTAL FLUO- RIDE (F) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	HARD- NESS (CA+MG) (MG/L)	TOTAL RESI- DUE (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)
NOV. 07...	.3	46	299	.00	1.5	330	510	30	40	--
FEB. 06...	.2	47	303	.00	1.4	390	497	40	10	--
MAY 01...	.1	93	300	.01	1.2	440	534	40	0	--
AUG. 21...	.1	59	301	.00	1.8	420	560	50	0	0

DATE	TOTAL ARSENIC (AS) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC (ZN) (UG/L)
NOV. 07...	--	--	--	--	--	--	--	--	--
FEB. 06...	--	--	--	--	--	--	--	--	--
MAY 01...	--	--	--	--	--	--	--	--	--
AUG. 21...	0	20	20	10	10	0	2	10	70

GROUND WATER RECORDS

533

392021084340300 BU-56 AT FAIRFIELD, OHIO

LOCATION.--Lat 39°20'21"N, long 84°34'03"W, Butler County, 1.3 mi (2.1 km) east of the Great Miami River in Fairfield.

AQUIFER TYPE.--Water table, sand and gravel.

GAGE.--Water level recorder. Land-surface datum is 583.60 ft (177.881 m) above mean sea level.

REMARKS.--Record prior to Nov. 13, 1974 furnished by Miami Conservancy District.

GROUND WATER LEVEL RECORDS

PERIOD OF RECORD.--November 1969 to current year.

EXTREMES.--Period of record: Maximum daily low, 37.99 ft (11.579 m) Oct. 27, 1971; minimum daily low, 26.81 ft (8.172 m) Apr. 10, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33.58	34.16	34.79	34.19	33.10	30.87	27.69	28.51	30.53	32.58	34.42	35.36
2	33.64	34.16	34.84	34.13	33.04	30.64	27.47	28.52	30.57	32.69	34.49	35.36
3	33.64	34.15	34.90	34.04	32.98	30.47	27.21	28.51	30.63	32.81	34.53	35.41
4	33.65	34.15	34.90	34.02	32.96	30.33	27.14	28.54	30.69	32.86	34.58	35.46
5	33.65	34.16	34.90	33.96	32.95	30.11	27.07	28.56	30.75	32.86	34.59	35.47
6	33.67	34.20	34.89	33.88	32.93	30.08	26.99	28.60	30.78	32.92	34.57	35.51
7	33.70	34.22	34.85	33.88	32.89	29.99	26.89	28.64	30.85	32.99	34.54	35.51
8	33.74	34.21	34.84	33.87	32.75	29.94	26.87	28.67	30.92	33.06	34.52	35.54
9	33.75	34.23	34.85	33.89	32.76	29.90	26.88	28.71	30.96	33.14	34.57	35.60
10	33.75	34.25	34.85	33.84	32.76	29.84	26.81	28.75	31.03	33.21	34.60	35.69
11	33.77	34.27	34.86	33.81	32.69	29.82	26.82	28.78	31.05	33.26	34.47	35.73
12	33.79	34.31	34.85	33.75	32.76	29.78	26.83	28.84	31.12	33.33	34.49	35.73
13	33.81	34.39	34.81	33.65	32.78	29.73	26.83	28.88	31.16	33.36	34.49	35.66
14	33.83	34.44	34.74	33.60	32.80	29.59	27.17	28.92	31.17	33.36	34.56	35.62
15	33.85	34.43	34.74	33.55	32.80	29.52	27.48	28.99	31.26	33.39	34.57	35.59
16	33.86	34.41	34.67	33.52	32.80	29.39	27.64	29.07	31.35	33.42	34.57	35.57
17	33.86	34.45	34.70	33.43	32.73	29.26	27.72	29.12	31.43	33.49	34.53	35.57
18	33.85	34.43	34.71	33.30	32.76	29.14	27.78	29.19	31.50	33.54	34.51	35.55
19	33.81	34.48	34.67	33.25	32.78	28.93	27.93	29.26	31.58	33.58	34.50	35.56
20	33.82	34.54	34.67	33.22	32.66	28.80	28.02	29.34	31.68	33.64	34.57	35.56
21	33.84	34.55	34.66	33.15	32.63	28.65	28.09	29.42	31.70	33.68	34.61	35.54
22	33.85	34.55	34.58	33.17	32.56	28.48	28.14	29.49	31.76	33.74	34.72	35.54
23	33.77	34.61	34.51	33.17	32.46	28.43	28.21	29.58	31.82	33.80	34.83	35.58
24	33.76	34.64	34.47	33.13	32.32	28.30	28.30	29.66	31.90	33.87	34.89	35.57
25	33.88	34.69	34.45	33.12	32.02	28.29	28.38	29.75	32.00	33.95	34.97	35.51
26	33.91	34.75	34.42	33.07	31.76	28.31	28.45	29.86	32.10	34.01	35.09	35.50
27	33.90	34.80	34.31	33.12	31.45	28.30	28.49	29.97	32.19	34.07	35.18	35.48
28	33.98	34.81	34.27	33.15	31.15	28.25	28.49	30.10	32.28	34.15	35.28	35.56
29	34.05	34.82	34.24	33.22	---	28.12	28.43	30.22	32.38	34.22	35.34	35.59
30	34.13	34.82	34.22	33.22	---	28.03	28.47	30.31	32.48	34.29	35.35	35.61
31	34.15	---	34.21	33.13	---	27.98	---	30.43	---	34.36	35.36	---
MEAN	33.81	34.43	34.65	33.53	32.60	29.26	27.62	29.19	31.38	33.47	34.71	35.55
YEAR	MAX	35.73	MIN	26.81	MEAN	32.52						

534

GROUND WATER RECORDS

395835083491700 CL-20 NEAR SPRINGFIELD, OHIO

LOCATION.--Lat 39°58'35", long 83°49'17", Clark County, on left bank of Mad River 100 ft (30 m) upstream from Eagle City Road.

AQUIFER TYPE.--Water table, sand and gravel.

REMARKS.--Public water supply.

GROUND WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--June 1967 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	CAR- BONATE (CO3) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LITY AS CAC03 (MG/L)
OCT. 16...	740	7.3	88	37	0	370	10	25	85	30	303

DATE	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	HARD- NESS (CA+MG) (MG/L)	TOTAL RESI- DUE (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL LEAD (PB) (UG/L)
OCT. 16...	.07	.02	1.1	.01	370	489	0	630	250	<10	1

GROUND WATER RECORDS

535

401735081523800 (Revised) CS-2 NEAR COSHOCTON, OHIO

LOCATION.--Lat 40°17'35", long 81°52'38", Coshocton County, 1.7 mi (2.7 km) northwest of courthouse in Coshocton.

AQUIFER TYPE.--Water table, sand and gravel.

GAGE.--Water level recorder. Land-surface datum is 740 ft (226 m) above mean sea level.

GROUND WATER LEVEL RECORDS

PERIOD OF RECORD.--May 1949 to current year.

EXTREMES.--Period of record: Maximum daily low, 17.75 ft (5.410 m) Nov. 15, 1973; minimum daily low, 0.43 ft (0.131 m) Feb. 21, 1951.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							---	13.13	12.82	14.25	16.41	14.18
2							---	13.12	11.36	14.25	16.48	13.75
3							---	12.88	11.53	14.34	15.88	14.51
4							---	12.43	11.20	14.64	15.84	14.99
5							---	12.53	11.47	14.62	16.19	15.25
6							---	12.90	11.47	14.50	16.31	15.31
7							---	12.89	11.25	14.69	16.11	15.13
8							---	12.92	10.39	14.64	16.20	14.39
9							---	12.70	11.29	14.60	16.35	14.98
10							---	12.93	12.09	14.75	15.62	15.16
11							---	12.27	12.25	14.67	15.45	15.14
12							---	12.94	12.33	14.43	15.89	14.90
13							---	13.01	12.60	14.56	16.07	14.97
14							---	13.36	12.81	14.73	16.16	14.63
15							---	13.21	12.90	15.10	16.16	14.45
16							13.71	13.38	12.87	15.06	16.07	15.03
17							14.09	13.09	13.27	15.38	15.26	15.34
18							14.20	13.64	13.48	15.47	15.11	15.07
19							14.29	13.93	13.62	15.50	15.66	15.05
20							14.29	14.09	13.85	15.22	15.92	14.16
21							14.02	14.21	13.91	15.05	16.08	13.13
22							14.33	14.22	13.85	15.24	16.20	13.31
23							14.73	14.14	13.66	15.40	16.21	13.81
24							14.73	14.27	13.93	15.50	15.49	13.90
25							14.09	13.80	14.26	15.49	15.89	13.83
26							13.15	13.09	14.39	15.29	16.26	13.46
27							11.99	13.26	14.13	15.25	16.39	13.23
28							12.35	13.26	13.70	15.37	16.43	13.28
29							12.68	13.32	13.73	15.87	16.44	13.19
30							12.93	13.59	13.93	16.12	15.70	13.44
31							---	13.74	---	16.29	15.22	---
MONTH							---	14.27	14.39	16.29	16.48	15.34
PERIOD	MAX	16.48	MIN	10.39	MEAN	14.25						

GROUND WATER RECORDS

394544082271000 (Revised) F-1 NEAR WEST RUSHVILLE, OHIO

LOCATION.--Lat 39°45'44", long 82°27'10", Fairfield County, near the west edge of West Rushville.

AQUIFER TYPE.--Artesian, sandstone.

GAGE.--Water level recorder. Land-surface datum is 980 ft (299 m) above mean sea level.

REMARKS.--Additional data available: Geophysical log. Record prior to Dec. 30, 1974 furnished by Ohio Department of Natural Resources, Division of Water.

GROUND WATER LEVEL RECORDS

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

EXTREMES.--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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.20	16.72	17.27	14.22	13.31	11.87	11.80	13.61	14.97	16.23	17.30	17.77
2	15.25	16.74	17.23	14.17	13.32	11.77	11.79	13.61	15.03	16.28	17.32	17.78
3	15.29	16.77	17.16	14.12	13.33	11.75	11.79	13.61	15.09	16.31	17.37	17.79
4	15.33	16.80	17.11	14.05	13.34	11.73	11.77	13.61	15.15	16.34	17.40	17.81
5	15.39	16.83	17.08	14.00	13.33	11.74	11.79	13.61	15.20	16.38	17.44	17.82
6	15.44	16.86	17.04	13.93	13.32	11.76	11.81	13.60	15.24	16.42	17.45	17.82
7	15.49	16.89	16.98	13.86	13.28	11.78	11.84	13.60	15.29	16.46	17.48	17.84
8	15.52	16.91	16.89	13.81	13.26	11.80	11.88	13.60	15.34	16.49	17.52	17.86
9	15.57	16.92	16.73	13.73	13.22	11.86	11.93	13.61	15.38	16.52	17.53	17.88
10	15.62	16.95	16.62	13.65	13.19	11.89	11.98	13.62	15.44	16.57	17.56	17.90
11	15.67	16.99	16.49	13.59	13.13	11.95	12.04	13.65	15.49	16.60	17.57	17.93
12	15.72	17.02	16.36	13.54	13.10	12.00	12.09	13.69	15.53	16.64	17.59	17.93
13	15.77	17.05	16.17	13.51	13.06	12.05	12.19	13.72	15.57	16.69	17.61	17.93
14	15.81	17.08	16.02	13.46	13.04	12.08	12.28	13.75	15.59	16.72	17.62	17.94
15	15.84	17.11	15.90	13.42	13.04	12.10	12.38	13.79	15.65	16.76	17.63	17.95
16	15.88	17.14	15.75	13.38	13.02	12.15	12.47	13.84	15.70	16.82	17.63	17.95
17	15.92	17.16	15.58	13.34	13.01	12.17	12.57	13.89	15.74	16.86	17.63	17.96
18	15.94	17.18	15.44	13.34	13.00	12.19	12.66	13.95	15.76	16.88	17.64	17.96
19	16.01	17.20	15.32	13.33	13.00	12.19	12.75	14.00	15.82	16.91	17.65	17.96
20	16.06	17.23	15.14	13.31	12.97	12.19	12.83	14.08	15.87	16.94	17.66	17.96
21	16.12	17.25	15.02	13.30	12.97	12.18	12.95	14.16	15.91	16.97	17.68	17.96
22	16.17	17.25	14.96	13.30	12.97	12.14	13.06	14.22	15.96	16.99	17.68	17.96
23	16.22	17.26	14.87	13.30	12.96	12.01	13.15	14.30	15.99	17.03	17.68	17.96
24	16.27	17.26	14.78	13.30	12.94	11.98	13.23	14.36	16.04	17.05	17.68	17.96
25	16.31	17.27	14.72	13.29	12.57	11.95	13.33	14.44	16.08	17.07	17.69	17.96
26	16.35	17.27	14.65	13.26	12.25	11.89	13.41	14.51	16.12	17.09	17.69	17.95
27	16.41	17.27	14.60	13.25	12.06	11.88	13.50	14.59	16.12	17.11	17.71	17.93
28	16.43	17.27	14.55	13.26	11.93	11.87	13.56	14.67	16.14	17.14	17.74	17.90
29	16.48	17.27	14.49	13.26	---	11.87	13.59	14.76	16.17	17.20	17.75	17.80
30	16.63	17.27	14.35	13.29	---	11.83	13.60	14.84	16.19	17.23	17.76	17.80
31	16.67	---	14.29	13.30	---	11.81	---	14.90	---	17.27	17.77	---
MONTH	16.67	17.27	17.27	14.22	13.34	12.19	13.60	14.90	16.19	17.27	17.77	17.96
YEAR	MAX	17.96	MIN	11.73	MEAN	15.15						

GROUND WATER RECORDS

537

395118082573300 (Revised) PR-3 NEAR REESE, OHIO

LOCATION.--Lat 39°51'14", long 82°57'32", Franklin County, 0.7 mi (1.1 km) southwest of Reese.

AQUIFER TYPE.--Water table, sand and gravel.

GAGE.--Water level recorder. Land-surface datum is 712.94 ft (217.304 m) above mean sea level.

GROUND WATER LEVEL RECORDS

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

EXTREMES.--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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.22	12.48	11.59	11.09	9.25	8.73	10.26	10.74	11.23	12.08	12.61	12.19
2	12.31	12.49	11.26	10.96	9.56	9.27	10.33	10.82	10.69	12.13	12.62	12.23
3	12.35	12.48	11.14	10.95	9.86	9.63	10.49	10.92	10.82	12.16	12.58	12.32
4	12.37	12.45	11.23	10.98	10.06	9.89	10.53	11.07	11.02	12.16	12.48	12.32
5	12.40	12.19	11.31	11.05	10.19	10.06	10.66	11.16	11.17	11.93	12.33	12.22
6	12.41	11.91	11.35	11.12	10.17	10.34	10.74	11.29	11.16	12.04	12.31	12.23
7	12.45	12.00	11.38	11.18	10.05	10.39	10.88	11.36	10.52	12.10	12.28	12.19
8	12.45	12.07	11.34	11.19	10.29	10.26	10.97	11.44	10.83	12.17	12.38	12.34
9	12.47	12.11	10.92	10.90	10.47	10.17	11.05	11.52	11.09	12.21	12.46	12.44
10	12.49	---	11.02	10.03	10.57	10.36	11.12	11.58	11.31	12.21	12.49	12.49
11	12.49	---	11.10	9.74	10.72	10.44	11.17	11.61	11.36	12.17	12.46	12.51
12	12.50	---	11.20	10.02	10.81	10.44	11.28	11.67	11.23	12.25	12.36	12.30
13	12.50	---	11.21	10.21	10.91	8.18	11.35	11.71	11.38	12.25	12.46	11.95
14	12.42	---	11.24	10.43	10.97	8.51	11.36	11.72	11.45	12.18	12.50	12.12
15	12.42	---	11.23	10.63	11.01	8.95	11.44	11.76	11.54	12.16	12.41	12.25
16	12.01	---	11.11	10.82	11.02	8.95	11.47	11.81	11.55	12.24	12.28	12.33
17	12.03	---	11.03	10.90	10.89	9.21	11.49	11.82	11.64	12.29	12.38	12.39
18	12.12	---	11.10	10.92	10.29	9.47	11.50	11.85	11.60	12.29	12.47	12.39
19	12.20	---	11.18	10.88	10.21	9.50	11.53	11.88	11.62	12.30	12.53	11.68
20	12.28	---	11.20	10.94	10.39	9.12	11.54	11.90	11.73	12.31	12.58	11.68
21	12.32	---	11.26	11.02	10.58	9.42	11.58	11.94	11.81	12.32	12.60	11.77
22	12.34	---	11.31	11.10	10.68	9.76	11.60	11.98	11.89	12.37	12.64	11.94
23	12.34	---	11.34	11.13	10.68	9.39	11.61	11.99	11.96	12.40	12.64	12.07
24	12.37	---	11.33	11.13	6.73	9.91	11.53	11.94	12.01	12.44	12.48	12.07
25	12.39	---	11.00	11.07	5.29	9.58	10.80	11.99	12.04	12.49	12.58	11.67
26	12.39	11.63	10.88	10.56	6.05	9.93	10.45	11.99	11.75	12.51	12.66	11.84
27	12.40	11.62	11.01	10.03	6.53	10.13	10.29	12.04	11.68	12.53	12.69	11.99
28	12.42	11.67	11.11	10.27	7.94	10.21	10.31	12.08	11.82	12.55	12.70	12.11
29	12.46	11.69	11.16	10.26	---	10.12	10.50	12.09	11.93	12.55	12.72	12.19
30	12.47	11.67	11.27	9.22	---	9.85	10.67	11.89	12.01	12.58	12.69	12.28
31	12.46	---	11.27	9.01	---	10.00	---	11.73	---	12.61	12.46	---
MONTH	12.50	---	11.59	11.19	11.02	10.44	11.61	12.09	12.64	12.61	12.72	12.51
YEAR	MAX	12.72	MIN	5.29	MEAN	11.37						

GROUND WATER RECORDS

391817084393300 H-4 NEAR ROSS, OHIO

LOCATION.--Lat 39°18'17", long 84°39'33", Hamilton County, 0.7 mi (1.1 km) southwest of Ross.

AQUIFER TYPE.--Water table, sand and gravel.

GAGE.--Water level recorder. Land-surface datum is 540 ft (165 m) above mean sea level.

REMARKS.--Record prior to Nov. 8, 1974 furnished by Ohio Department of Natural Resources, Division of Water.

GROUND WATER LEVEL RECORDS

PERIOD OF RECORD.--December 1954 to current year.

EXTREMES.--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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.73	27.02	26.69	24.25	22.41	14.37	15.31	15.55	19.47	21.09	22.38	23.56
2	26.82	27.05	26.58	24.13	22.27	14.74	15.56	15.68	19.27	21.16	22.34	23.33
3	26.91	27.55	26.47	24.00	22.14	15.12	15.59	15.78	19.14	21.20	22.14	23.50
4	26.99	27.51	26.37	23.91	21.99	15.46	15.56	15.99	19.09	20.96	22.17	23.66
5	27.05	27.60	26.29	23.68	21.86	15.83	15.65	16.15	19.10	20.63	22.38	23.78
6	27.04	27.68	26.22	23.84	21.79	16.14	15.76	16.33	19.08	20.40	22.54	23.83
7	26.77	27.73	26.17	23.78	21.77	16.42	15.89	16.52	19.03	20.47	22.70	23.72
8	26.83	27.73	26.13	23.75	21.76	16.65	16.04	16.68	18.98	20.73	22.76	23.73
9	26.95	27.73	25.95	23.72	21.76	16.71	16.19	16.84	18.89	20.90	22.66	23.88
10	27.07	27.46	25.85	23.72	21.76	16.78	16.33	16.98	18.91	21.03	22.44	24.03
11	27.15	27.32	25.76	23.62	21.69	16.89	16.48	17.11	18.98	21.09	22.44	24.11
12	27.19	27.45	25.69	23.50	21.74	16.90	16.64	17.22	19.00	21.01	22.60	24.13
13	27.05	27.53	25.65	23.23	21.78	16.43	16.77	17.32	19.17	20.83	22.70	24.13
14	27.03	27.60	25.62	22.99	21.82	15.88	16.83	17.41	19.21	20.87	22.83	23.93
15	27.15	27.60	25.58	22.80	21.88	15.78	16.95	17.52	19.17	21.19	22.95	23.72
16	27.21	27.39	25.53	22.77	21.88	15.78	17.05	17.57	19.54	21.35	22.95	23.89
17	27.24	27.21	25.44	22.76	21.87	15.63	17.10	17.59	19.74	21.51	22.75	24.04
18	27.25	27.08	25.33	22.80	21.80	15.52	17.15	17.72	19.90	21.67	22.78	24.14
19	27.12	26.98	25.23	22.82	21.72	15.31	17.27	18.05	20.04	21.71	22.94	24.23
20	26.90	26.89	25.17	22.81	21.67	15.16	17.31	18.43	20.17	21.56	23.07	24.26
21	26.91	26.81	25.11	22.75	21.66	15.04	17.35	18.73	20.24	21.34	23.16	24.13
22	27.08	27.06	25.09	22.72	21.69	15.12	17.40	18.92	20.15	21.54	23.27	23.96
23	27.21	27.07	25.08	22.72	21.69	15.18	17.46	19.10	20.23	21.70	23.31	24.18
24	27.28	27.01	25.05	22.70	21.48	15.18	17.46	19.11	20.41	21.81	23.19	24.34
25	27.26	27.06	24.84	22.69	16.82	15.30	17.31	18.92	20.56	21.95	23.15	24.45
26	27.10	27.17	24.63	22.73	14.82	15.33	16.91	18.76	20.67	21.95	23.32	24.54
27	26.95	27.20	24.56	22.73	13.86	15.41	16.31	18.97	20.78	21.70	23.45	24.55
28	27.13	27.20	24.49	22.66	14.06	15.47	15.96	19.26	20.89	21.70	23.57	24.32
29	27.33	27.19	24.42	22.60	---	15.44	15.39	19.45	20.93	21.98	23.68	24.27
30	27.44	26.92	24.36	22.60	---	15.14	15.36	19.60	21.01	22.17	23.69	24.42
31	27.52	---	24.31	22.53	---	14.96	---	19.63	---	22.31	23.62	---
MONTH	27.52	27.73	26.69	24.25	22.41	16.90	17.46	19.63	21.01	22.31	23.69	24.55
YEAR	MAX	27.73	MIN	13.86	MEAN	21.81						

GROUND WATER RECORDS

539

390653084485700 (Revised) H-5 NEAR ELIZABETHTOWN, OHIO

LOCATION.--Lat 39°06'53", long 84°48'57", Hamilton County, 3.1 mi (5.0 km) south of Elizabethtown.

AQUIFER TYPE.--Water table, sand and gravel.

GAGE.--Water level recorder. Land-surface datum is 500 ft (152 m) above mean sea level.

REMARKS.--Additional data available: Geophysical log.

GROUND WATER LEVEL RECORDS

PERIOD OF RECORD.--April 1956 to current year.

EXTREMES.--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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	49.86	47.46	45.11	38.67	37.44	41.03	50.32	50.86	52.27	53.00
2		---	49.33	47.40	43.94	40.67	38.78	42.25	50.36	50.97	52.40	52.84
3		---	48.56	46.71	43.09	43.47	41.04	43.22	50.28	50.96	52.51	52.49
4		---	48.44	45.92	42.73	45.28	43.42	44.38	49.91	50.82	52.52	52.64
5		---	48.70	46.21	43.14	46.21	44.77	44.87	49.73	50.80	52.48	52.80
6		---	49.25	47.36	43.54	47.02	45.59	44.90	50.27	50.95	52.53	52.92
7		---	49.51	48.04	43.53	47.86	46.42	45.10	50.20	51.11	52.58	52.93
8		51.94	49.33	48.86	43.03	48.13	47.39	46.33	49.76	51.17	52.56	52.90
9		51.99	48.93	48.92	43.13	48.14	48.22	47.45	49.35	51.30	52.60	53.07
10		52.02	48.29	48.83	44.43	47.90	48.69	48.17	49.58	51.26	52.61	53.08
11		51.74	47.19	48.03	45.97	47.45	49.25	48.49	50.03	51.40	52.55	53.06
12		51.63	46.84	47.23	46.78	47.19	49.51	48.98	50.14	51.42	52.62	53.19
13		51.54	47.61	47.63	46.73	44.33	49.68	49.44	50.25	51.51	52.67	53.15
14		51.63	48.18	48.07	46.12	42.36	50.00	49.91	50.09	51.55	52.71	53.01
15		51.48	48.30	48.26	45.10	40.72	50.27	49.89	49.92	51.55	52.67	52.95
16		51.38	48.25	48.53	46.25	39.25	50.28	50.05	50.05	51.51	52.74	53.09
17		51.48	48.24	48.36	47.33	38.24	50.23	49.89	50.29	51.54	52.56	53.14
18		51.36	48.19	48.43	47.87	38.42	50.39	49.65	50.25	51.60	52.35	53.05
19		51.39	47.82	48.44	48.02	39.30	50.51	49.45	50.46	51.56	52.55	53.06
20		51.38	48.52	48.02	47.91	40.82	50.61	49.37	50.52	51.48	52.77	52.97
21		51.36	49.12	47.26	47.68	41.10	50.54	49.52	50.74	51.76	52.90	52.80
22		51.12	49.50	46.32	47.49	40.76	50.57	49.94	50.81	51.46	52.93	52.73
23		50.65	49.91	45.96	47.25	40.03	50.53	50.40	50.91	51.35	52.94	52.67
24		50.37	50.02	47.06	42.51	39.09	50.37	50.41	50.97	51.61	52.94	53.19
25		50.40	50.12	47.82	38.83	37.05	48.37	50.17	50.85	51.58	52.95	51.56
26		50.37	50.02	47.90	38.67	37.23	44.92	50.00	50.86	51.69	53.00	49.81
27		50.32	49.72	47.46	38.43	38.44	41.94	50.34	50.84	51.70	53.11	47.99
28		50.21	48.86	46.19	38.21	38.67	40.29	50.39	50.82	51.72	53.16	49.47
29		49.97	47.96	45.00	---	38.55	38.89	50.45	50.51	51.87	53.35	50.00
30		49.96	47.44	45.57	---	37.91	40.11	50.69	50.59	52.00	53.18	50.30
31		---	47.38	45.81	---	37.47	---	50.66	---	52.18	53.14	---
MONTH		---	50.12	48.92	48.02	48.14	50.61	50.69	50.97	52.18	53.35	53.19
YEAR	MAX	53.35	MIN	37.05	MEAN	48.61						

GROUND WATER RECORDS

391324084272500 (Revised) H-9 AT LOCKLAND (CINCINNATI), OHIO

LOCATION.--Lat 39°13'24", long 84°27'25", Hamilton County, 9.1 mi (14.6 km) north of Riverfront Stadium in Cincinnati.

AQUIFER TYPE.--Artesian, sand and gravel.

GAGE.--Water level recorder. Land-surface datum is 555.30 ft (169.255 m) above mean sea level.

REMARKS.--Record prior to Nov. 12, 1974 furnished by Ohio Department of Natural Resources, Division of Water.

GROUND WATER LEVEL RECORDS

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

EXTREMES.--Period of record: Maximum daily low, 136.80 ft (41.697 m) Nov. 9, 1947, Feb. 15, 1948; minimum daily low, 84.36 ft (25.713 m) Sept. 18, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89.21	88.56	87.58	87.83	87.66	86.93	86.08	86.44	85.73	85.32	84.86	84.57
2	89.41	88.59	87.99	87.42	87.59	87.08	86.58	86.52	85.74	85.31	84.76	84.58
3	89.43	88.52	88.36	87.36	87.64	87.20	86.83	86.28	85.63	85.21	84.67	84.69
4	89.21	88.30	88.52	87.51	87.48	87.21	86.98	86.02	85.51	85.03	84.76	84.78
5	89.12	88.68	88.43	87.65	87.03	87.13	87.03	86.13	85.34	84.94	84.78	84.70
6	88.99	88.74	88.24	87.40	87.18	86.95	86.93	86.15	85.37	84.84	84.92	84.64
7	88.94	88.80	87.91	87.52	87.37	87.08	86.69	86.21	85.55	84.84	85.04	84.57
8	88.85	88.73	87.93	87.27	87.28	87.31	86.68	86.20	85.63	84.99	85.07	84.67
9	88.82	88.62	88.13	87.56	87.46	87.32	86.59	86.20	85.63	85.01	84.97	84.79
10	88.95	88.44	88.12	87.34	87.41	86.90	86.42	86.16	85.55	85.03	84.86	84.72
11	89.02	88.13	87.96	87.85	87.03	86.98	86.48	85.97	85.54	85.04	84.76	84.47
12	89.01	88.17	88.11	87.96	87.26	86.71	86.59	85.90	85.36	85.03	84.81	84.70
13	89.01	88.24	88.15	87.76	87.39	87.02	86.67	86.08	85.43	85.05	84.80	84.81
14	88.69	88.56	88.23	87.70	87.35	87.05	86.61	86.02	85.39	85.23	84.81	84.91
15	89.01	88.61	88.00	87.73	87.20	87.30	86.49	85.75	85.26	85.28	84.76	84.77
16	88.86	88.68	87.78	87.46	87.04	87.19	86.50	85.92	85.48	85.21	84.75	84.58
17	89.02	88.47	87.46	87.99	87.05	86.96	86.36	85.91	85.45	85.14	84.76	84.49
18	89.10	88.39	88.13	87.46	87.08	86.83	86.40	85.69	85.55	85.04	84.80	84.36
19	89.12	88.16	88.08	87.38	87.19	86.64	86.49	85.68	85.61	84.86	84.84	84.45
20	89.21	88.06	88.10	87.59	87.20	86.72	86.76	85.71	85.53	84.80	84.93	84.52
21	89.30	88.39	87.40	87.73	87.34	86.72	86.89	85.75	85.49	84.39	84.89	84.60
22	89.14	88.52	88.04	87.66	87.21	86.72	86.72	85.72	85.44	84.96	84.75	84.60
23	88.88	88.46	87.96	87.42	86.73	86.73	86.45	85.69	85.48	84.93	84.70	84.49
24	88.68	88.29	87.85	87.45	86.59	86.50	86.19	85.68	85.48	84.83	84.63	84.44
25	88.69	88.51	88.06	86.85	87.15	87.13	86.47	85.69	85.39	84.99	84.61	84.49
26	88.78	88.62	88.15	87.66	87.32	87.41	86.62	85.59	85.29	84.99	84.81	84.57
27	88.65	88.29	87.88	87.69	87.32	87.36	86.57	85.66	85.24	84.82	84.96	84.57
28	88.57	88.29	87.75	87.56	87.06	86.95	86.21	85.69	85.33	84.84	84.87	84.50
29	88.65	88.38	87.63	87.67	---	86.40	86.08	85.64	85.33	84.94	84.69	84.45
30	88.71	88.23	87.74	87.72	---	86.52	86.23	85.50	85.31	84.96	84.52	84.44
31	88.61	---	87.70	87.65	---	86.60	---	85.51	---	84.89	84.52	---
MONTH	89.43	88.80	88.52	87.99	87.66	87.41	87.03	86.52	85.74	85.32	85.07	84.91
YEAR	MAX	89.43	MIN	84.36	MEAN	86.62						

GROUND WATER RECORDS

541

391039084291500 H-11 AT IVORYDALE (CINCINNATI), OHIO

LOCATION.--Lat 39°10'39", long 84°29'15", Hamilton County, 5.6 mi (9.0 km) north of Riverfront Stadium in Cincinnati.

AQUIFER TYPE.--Artesian, sand and gravel.

GAGE.--Water level recorder. Land-surface datum is 539 ft (164 m) above mean sea level.

GROUND WATER LEVEL RECORDS

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

EXTREMES.--Period of record: Maximum daily low, 129.72 ft (39.539 m) Oct. 25, 1948; minimum daily low, 85.14 ft (25.951 m) Sept. 12, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	86.09	86.07	86.06	85.80	85.67	85.43	85.33	85.53	85.54	85.26
2		---	85.87	86.14	86.11	85.83	85.67	85.51	85.40	85.54	85.54	85.29
3		---	86.01	86.13	86.16	85.90	85.33	85.51	85.42	85.54	85.47	85.31
4		---	86.15	85.94	86.16	85.95	85.52	85.34	85.42	85.48	85.43	85.33
5		---	86.23	86.01	85.92	85.96	85.67	85.35	85.33	85.40	85.43	85.34
6		---	86.26	86.01	85.66	85.91	85.75	85.37	85.28	85.36	85.43	85.30
7		---	86.25	85.94	85.75	85.86	85.78	85.43	85.31	85.27	85.47	85.32
8		---	85.98	85.93	85.61	85.76	85.79	85.47	85.37	85.25	85.51	85.35
9		---	86.07	85.72	85.90	85.85	85.79	85.50	85.44	85.27	85.52	85.41
10		---	86.11	85.73	85.93	85.85	85.71	85.52	85.47	85.29	85.52	85.43
11		---	86.12	85.60	85.78	85.94	85.65	85.52	85.47	85.31	85.50	85.35
12		---	86.08	85.80	85.78	85.82	85.68	85.44	85.39	85.33	85.44	85.14
13		---	86.12	85.90	85.87	85.69	85.73	85.45	85.38	85.36	85.44	85.24
14		---	86.18	85.97	85.91	85.69	85.75	85.47	85.38	85.44	85.44	85.33
15		---	86.18	86.01	85.92	85.77	85.72	85.43	85.34	85.50	85.44	85.36
16		---	85.96	86.07	85.88	85.83	85.70	85.45	85.29	85.53	85.42	85.36
17		---	85.97	86.14	85.86	85.86	85.67	85.47	85.32	85.54	85.42	85.35
18		86.33	86.02	86.11	85.76	85.86	85.36	85.48	85.38	85.54	85.44	85.27
19		86.31	86.02	85.77	85.79	85.48	85.23	85.48	85.45	85.52	85.45	85.16
20		86.06	86.03	85.84	85.84	85.55	85.41	85.46	85.48	85.44	85.48	85.19
21		86.05	86.04	85.92	85.91	85.59	85.56	85.47	85.50	85.40	85.50	85.23
22		86.16	86.09	86.02	85.93	85.50	85.62	85.49	85.52	85.42	85.50	85.28
23		86.22	86.13	86.06	85.81	85.49	85.64	85.49	85.54	85.43	85.50	85.28
24		86.24	86.13	86.06	85.47	85.49	85.57	85.50	85.56	85.43	85.49	85.24
25		86.31	86.14	85.62	85.55	85.55	85.46	85.51	85.56	85.44	85.41	85.25
26		86.38	86.22	85.39	85.70	85.76	85.58	85.51	85.53	85.47	85.37	85.29
27		86.38	86.23	85.60	85.60	85.88	85.62	85.47	85.49	85.48	85.44	85.33
28		86.25	86.21	85.72	85.81	85.89	85.62	85.48	85.48	85.47	85.46	85.37
29		86.32	86.21	85.77	---	85.67	85.30	85.48	85.50	85.48	85.46	85.37
30		86.33	86.13	85.90	---	85.58	85.34	85.42	85.52	85.51	85.34	85.36
31		---	86.14	85.99	---	85.62	---	85.27	---	85.53	85.27	---
MONTH		---	86.26	86.14	86.16	85.96	85.79	85.52	85.56	85.54	85.54	85.43
YEAR	MAX	86.38	MIN	85.14	MEAN	85.65						

GROUND WATER RECORDS

391748064393800 H-19 NEAR VENICE, OHIO

LOCATION.--Lat 39°17'48", long 84°39'38", Hamilton County, on left bank of Great Miami River 1.3 mi (2.1 km) southwest of Venice.

AQUIFER TYPE.--Water table, sand and gravel.

REMARKS.--Industrial use, Southwest Ohio Water Co.

GROUND WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--1964 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	CAR- BONATE (CO3) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
NOV. 07...	1100	14.5	750	7.3	87	23	0	343	35	78
FEB. 06...	1100	15.0	750	7.1	100	31	0	358	34	78
MAY 01...	1530	14.0	720	7.1	100	29	0	336	32	72
AUG. 21...	1630	15.0	705	7.1	99	27	0	319	29	66

DATE	TOTAL FLUO- RIDE (F) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LITY AS CACO3 (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	HARD- NESS (CA,MG) (MG/L)	TOTAL RESI- DUE (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)
NOV. 07...	.3	28	281	.01	1.2	310	453	60	370	--
FEB. 06...	.4	46	294	.02	1.8	380	428	90	310	--
MAY 01...	.3	43	276	.02	2.0	370	481	80	290	--
AUG. 21...	.3	41	262	.01	1.3	360	485	60	350	1

DATE	TOTAL ARSENIC (AS) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC (ZN) (UG/L)
NOV. 07...	--	--	--	--	--	--	--	--	--
FEB. 06...	--	--	--	--	--	--	--	--	--
MAY 01...	--	--	--	--	--	--	--	--	--
AUG. 21...	1	<10	<10	10	10	0	1	10	20

GROUND WATER RECORDS

543

390645084480500 H-21 NEAR NORTH BEND, OHIO

LOCATION.--Lat 39°06'45", long 84°48'05", Hamilton County, on right bank of Ohio River, 0.7 mi (1.1 km) upstream from Great Miami River.

AQUIFER TYPE.--Water table, sand and gravel.

REMARKS.--Industrial use, Dupont Corporation.

GROUND WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--November 1964 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	CARBONATE (CO3) (MG/L)	BICARBONATE (HCO3) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CaCO3 (MG/L)
OCT. 15...	1000	7.4	140	44	0	472	18	32	150	30	387

DATE	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	HARDNESS (CA+MG) (MG/L)	TOTAL RESIDUE (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL LEAD (PB) (UG/L)
OCT. 15...	.03	.00	.92	.02	530	624	0	80	230	20	2

GROUND WATER RECORDS

401853080361100 JE-10 IN MINGU JUNCTION, OHIO

LOCATION.--Lat 40°18'53", long 80°36'11", Jefferson County, on right bank of Ohio River 0.4 mi (0.6 km) upstream from Cross Creek.

AQUIFER TYPE.--Water table, sand and gravel.

REMARKS.--Public water supply.

GROUND WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--June 1967 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	CAR- BONATE (CO3) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LITY AS CACO3 (MG/L)
NOV. 05...	--	645	7.0	72	12	0	104	33	39	180	17	85
MAY 15...	1000	624	6.6	77	11	0	98	31	36	180	39	80

DATE	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	HARD- NESS (CA+MG) (MG/L)	TOTAL RESI- DUE (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL LEAD (PB) (UG/L)
NOV. 05...	1.4	.00	.07	.14	230	438	4	370	1800	0	1
MAY 15...	1.0	.01	.08	.05	240	414	8	190	1500	0	2

GROUND WATER RECORDS

545

400302082250800 LI-1 AT NEWARK, OHIO

LOCATION.--Lat 40°03'02", long 82°25'08", Licking County, at Roper Corporation in Newark.

AQUIFER TYPE.--Water table, sand and gravel.

GAGE.--Water level recorder. Land-surface datum is 850 ft (259 m) above mean sea level.

REMARKS.--Record prior to Jan. 17, 1975 furnished by Ohio Department of Natural Resources, Division of Water.

GROUND WATER LEVEL RECORDS

PERIOD OF RECORD.--August 1951 to current year.

EXTREMES.--Period of record: Maximum daily low, 26.24 ft (7.996 m) Mar. 5, 1964; minimum daily low, 21.80 ft (6.645 m) Feb. 10, 16, 1952.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MAXIMUM VALUES

JAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23.99	24.07	23.90	23.68	23.35	22.75	22.42		---	23.28	23.55	23.74
2	24.01	24.08	24.02	23.69	23.33	22.75	22.38		---	23.29	23.51	23.74
3	24.01	24.07	24.07	23.53	23.32	22.76	22.51		---	23.27	23.56	23.74
4	23.96	24.05	24.07	23.58	23.23	22.73	22.53		23.04	23.29	23.56	23.75
5	23.97	24.13	24.00	23.60	23.14	22.69	22.52		23.03	23.30	23.55	23.73
6	23.96	24.14	23.96	23.55	23.27	22.70	22.47		23.07	23.29	23.60	23.75
7	23.99	24.12	23.90	23.56	23.34	22.80	22.47		23.11	23.31	23.61	23.75
8	23.97	24.10	23.98	23.51	23.24	22.83	22.48		23.13	23.35	23.61	23.78
9	23.98	24.08	23.97	23.63	23.31	22.80	22.50		23.12	23.36	23.59	23.79
10	24.01	24.05	23.93	23.55	23.24	22.69	22.46		23.11	23.35	23.55	23.73
11	24.01	23.99	23.90	23.56	23.21	22.75	---		23.09	23.36	23.57	23.66
12	24.00	24.01	23.92	23.64	23.26	22.67	---		23.09	23.38	23.61	23.78
13	24.02	24.03	23.90	23.46	23.28	22.78	---		23.12	23.42	23.61	23.78
14	24.00	24.09	23.89	23.44	23.25	22.75	---		23.10	23.44	23.62	23.79
15	24.04	24.06	23.80	23.47	23.22	22.80	---		23.16	23.43	23.60	23.67
16	24.00	24.06	23.77	23.51	23.21	22.67	---		23.19	23.43	23.63	23.67
17	24.04	24.02	23.80	23.51	23.21	22.60	---		23.15	23.43	23.65	23.66
18	24.05	23.98	23.85	23.38	23.20	22.55	---		23.21	23.40	23.65	23.69
19	24.04	23.95	23.83	23.41	23.22	22.55	---		23.19	23.41	23.66	23.70
20	24.08	24.03	23.83	23.45	23.22	22.57	---		23.19	23.43	23.69	23.69
21	24.10	24.11	23.75	23.45	23.27	22.55	---		23.19	23.46	23.66	23.70
22	24.04	24.13	23.82	23.46	23.19	22.59	---		23.22	23.46	23.67	23.68
23	24.00	24.10	23.77	23.41	23.09	22.59	---		23.23	23.45	23.67	23.64
24	24.02	24.05	23.75	23.30	23.08	22.47	---		23.24	23.46	23.66	23.65
25	24.05	24.09	23.77	23.26	23.14	22.63	---		23.23	23.51	23.67	23.62
26	24.08	24.11	23.79	23.52	23.13	22.68	---		23.22	23.51	23.75	23.62
27	24.04	24.01	23.68	23.51	22.96	22.59	---		23.24	23.47	23.76	23.62
28	24.05	24.06	23.67	23.38	22.80	22.34	---		23.27	23.52	23.73	23.62
29	24.07	24.07	23.62	23.49	---	22.36	---		23.27	23.55	23.71	23.59
30	24.08	24.03	23.70	23.47	---	22.45	---		23.27	23.55	23.72	23.60
31	24.05	---	23.65	23.37	---	22.46	---		---	23.55	23.73	---
MONTH	24.10	24.14	24.07	23.69	23.35	22.83	---		23.27	23.55	23.76	23.79
YEAR	MAX	24.14	MIN	22.34	MEAN	23.48						

GROUND WATER RECORDS

395740083255700 M-3 NEAR LONDON, OHIO

LOCATION.--Lat 39°57'40", long 83°25'57", Madison County, 5.2 mi (8.4 km) north of London, Ohio.

AQUIFER TYPE.--Artesian, limestone.

GAGE.--Water level recorder. Land-surface datum is 1,020 ft (311 m) above mean sea level.

REMARKS.--Additional data available: Geophysical log, chemical analyses, well test.

GROUND WATER LEVEL RECORDS

PERIOD OF RECORD.--November 1974 to current year.

EXTREMES.--Period of record: Maximum daily low, 7.64 ft (2.329 m) Sept. 9, 1975; minimum daily low, 3.93 ft (1.198 m) Feb. 25, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	5.45	---	4.35	4.04	4.35	4.75	5.61	6.02	6.99	7.51
2		---	5.37	---	4.29	4.20	4.37	4.78	5.51	6.09	7.07	7.56
3		---	5.52	---	4.30	4.37	4.44	4.76	5.36	6.24	7.00	7.61
4		---	5.58	---	4.29	4.47	4.57	4.72	5.30	6.02	6.97	7.60
5		---	5.61	---	4.18	4.50	4.67	4.84	5.24	5.91	6.96	7.57
6		---	5.60	---	4.19	4.57	4.68	4.88	5.17	5.86	6.96	7.56
7		---	5.49	---	4.25	4.60	4.71	5.00	5.14	5.84	7.06	7.56
8		---	5.37	---	4.32	4.71	4.75	5.11	5.17	5.89	7.10	7.57
9		---	5.33	---	4.46	4.74	4.74	5.10	5.22	5.94	7.12	7.64
10		---	5.21	---	4.49	4.67	4.76	5.23	5.26	5.99	7.13	7.63
11		---	5.08	---	4.43	4.69	4.81	5.16	5.26	6.02	7.11	7.35
12		---	5.04	---	4.54	4.68	4.92	5.18	5.20	6.13	7.15	7.44
13		---	5.07	---	4.67	4.45	5.02	5.26	5.25	6.12	7.17	7.51
14		---	5.00	4.24	4.74	4.24	5.00	5.39	5.27	6.18	7.21	7.54
15		---	4.87	4.31	4.75	4.26	5.02	5.33	5.26	6.24	7.18	7.48
16		---	4.61	4.49	4.73	4.24	5.04	5.45	5.38	6.33	7.20	7.38
17		---	4.47	4.57	4.73	4.11	5.04	5.41	5.41	6.35	7.24	7.34
18		---	4.48	4.49	4.64	4.05	4.97	5.37	5.50	6.34	7.33	7.26
19		---	4.49	4.46	4.56	3.93	5.11	5.41	5.58	6.29	7.32	7.22
20		---	4.56	4.54	4.57	4.05	5.27	5.50	5.62	6.31	7.40	7.17
21		---	4.58	4.62	4.63	4.08	5.42	5.51	5.66	6.36	7.40	7.18
22		---	4.69	4.72	4.63	4.15	5.37	5.57	5.69	6.46	7.41	7.18
23		---	4.70	4.73	4.48	4.20	5.33	5.62	5.76	6.56	7.41	7.14
24		---	---	4.68	4.07	4.16	5.21	5.59	5.80	6.51	7.40	7.06
25		---	---	4.55	3.93	4.39	5.10	5.63	5.83	6.60	7.39	7.05
26		---	---	4.56	3.98	4.57	4.99	5.75	5.79	6.63	7.48	7.04
27		---	---	4.61	4.04	4.66	4.90	5.72	5.81	6.64	7.55	7.04
28		---	---	4.61	4.01	4.64	4.71	5.74	5.97	6.72	7.59	7.06
29	5.59	---	---	4.50	---	4.41	4.61	5.80	6.09	6.78	7.55	7.02
30	5.63	---	---	4.54	---	4.29	4.64	5.79	6.02	6.92	7.45	7.13
31	---	---	---	4.41	---	4.31	---	5.70	---	6.91	7.45	---
MONTH		---	---	---	4.75	4.74	5.42	5.80	6.09	6.92	7.59	7.64
YEAR	MAX	7.64	MIN	3.93	MEAN	5.56						

GROUND WATER RECORDS

547

410042080453800 (Revised) MA-1 NEAR CANFIELD, OHIO

LOCATION.--Lat 41°00'42", long 80°45'38", Mahoning County, in County Fairgrounds at south edge of Canfield.

AQUIFER TYPE.--Artesian, sandstone.

GAGE.--Water level recorder. Land-surface datum is 1,160 ft (354 m) above mean sea level.

REMARKS.--Record prior to Jan. 7, 1975 furnished by Ohio Department of Natural Resources, Division of Water.

GROUND WATER LEVEL RECORDS

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

EXTREMES.--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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	37.05	36.71	34.61	34.18	33.67	34.01	33.85	35.17	35.68	36.30	---
2	---	37.89	36.47	34.65	34.19	33.63	34.01	36.76	35.24	35.63	36.39	---
3	37.95	37.86	36.19	34.64	34.21	33.65	33.88	38.04	35.27	35.59	43.17	45.75
4	37.96	---	36.07	34.58	34.21	33.72	33.79	38.71	35.29	35.55	39.64	43.35
5	37.98	---	35.95	34.60	34.14	33.73	33.80	39.08	35.09	35.49	37.87	42.09
6	37.97	---	35.81	34.59	34.04	33.74	33.80	36.83	35.06	35.49	37.62	41.15
7	37.89	---	35.72	34.60	34.02	33.74	33.80	35.90	35.13	35.47	37.59	40.55
8	37.88	---	35.45	34.59	34.02	33.64	33.83	35.56	35.14	35.49	37.58	40.06
9	37.83	---	34.98	34.29	34.01	33.71	33.83	35.40	35.14	35.50	37.52	40.26
10	37.85	---	35.14	34.37	34.00	33.76	33.90	35.24	35.17	35.50	37.43	39.79
11	37.90	---	35.22	34.52	33.99	33.80	33.90	35.12	35.15	35.49	37.33	39.53
12	37.93	---	35.22	34.53	33.99	33.81	33.88	35.01	35.03	35.54	37.30	39.10
13	37.96	37.81	34.88	34.49	34.00	33.65	33.86	34.97	35.10	35.51	37.46	39.04
14	37.92	37.86	34.83	34.47	34.01	33.70	33.85	34.97	35.10	35.47	37.32	38.89
15	37.90	37.87	34.80	34.45	34.01	33.79	33.83	34.93	35.08	35.51	37.31	38.72
16	37.87	37.96	34.80	34.44	33.97	33.79	33.86	34.91	35.15	35.51	37.24	38.51
17	37.90	37.96	34.73	34.43	33.55	33.76	33.90	37.49	35.20	35.54	37.15	38.47
18	37.93	37.85	34.78	34.38	33.60	33.42	33.89	39.09	35.26	35.54	37.08	38.39
19	37.88	37.75	34.78	34.28	33.78	33.42	33.95	39.45	35.29	35.51	37.08	38.14
20	37.82	37.70	34.78	34.29	33.87	33.56	33.95	36.91	35.32	35.42	37.12	38.10
21	37.75	37.66	34.77	34.29	33.94	33.75	33.96	36.09	35.34	35.33	37.27	37.94
22	37.75	37.46	34.74	34.33	33.94	33.88	34.02	35.68	40.84	35.41	37.12	37.85
23	37.75	37.39	34.72	34.33	33.93	33.97	34.01	35.46	37.84	35.42	37.55	37.80
24	37.74	37.28	34.42	34.32	33.12	33.90	33.89	35.37	36.37	35.43	41.27	37.77
25	37.74	37.10	34.43	34.23	33.40	34.04	33.88	35.25	35.63	35.36	44.15	37.62
26	37.76	36.94	34.60	34.02	33.60	34.16	33.91	35.14	41.15	35.37	---	37.63
27	37.73	36.88	34.64	34.19	33.67	34.18	33.90	35.05	37.51	35.35	---	39.75
28	37.68	36.85	34.69	34.20	33.68	34.15	33.84	35.08	36.18	35.60	---	38.51
29	37.75	36.83	34.70	34.04	---	34.06	33.84	35.07	35.94	35.80	---	37.84
30	37.79	36.83	34.70	34.06	---	33.93	33.88	35.23	35.73	35.97	---	37.68
31	37.80	---	34.74	34.15	---	33.98	---	35.31	---	36.14	---	---
MONTH	37.98	---	36.71	34.65	34.21	34.18	34.02	39.45	41.15	36.14	44.15	45.75
YEAR	MAX	45.75	MIN	33.12	MEAN	35.83						

GROUND WATER RECORDS

395848084085500 MI-3 NEAR TIPP CITY, OHIO

LOCATION.--Lat 39°58'48", long 84°08'55", Miami County, 2.0 mi (3.2 km) northeast of Tipp City.

AQUIFER TYPE.--Water table, sand and gravel.

GAGE.--Water level recorder. Land-surface datum is 804.78 ft (445.297 m) above mean sea level.

REMARKS.--Record prior to Oct. 24, 1974 furnished by Miami Conservancy District.

GROUND WATER LEVEL RECORDS

PERIOD OF RECORD.--October 1966 to current year.

EXTREMES.--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.

WATER LEVEL. IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.88	12.08	11.85	10.89	9.08	8.01	9.32	9.07	10.44	11.04	11.16	11.52
2	11.90	12.08	11.85	10.86	9.06	8.15	9.33	9.12	10.46	11.07	11.22	11.54
3	11.90	12.08	11.84	10.81	9.05	8.27	9.42	9.14	10.49	11.07	11.17	11.55
4	11.91	12.08	11.83	10.80	9.04	8.30	9.41	9.22	10.52	11.06	11.14	11.44
5	11.92	12.04	11.81	10.79	9.10	8.44	9.52	9.26	10.54	10.73	11.13	11.35
6	11.92	12.03	11.80	10.75	9.15	8.54	9.57	9.35	10.54	10.75	11.16	11.36
7	11.93	12.02	11.78	10.75	9.21	8.61	9.61	9.40	10.52	10.77	11.20	11.38
8	11.93	12.03	11.74	10.74	9.27	8.70	9.66	9.45	10.55	10.76	11.22	11.42
9	11.94	12.03	11.63	10.65	9.35	8.75	9.69	9.51	10.58	10.80	11.24	11.44
10	11.94	12.03	11.54	10.53	9.37	8.87	9.75	9.54	10.60	10.83	11.26	11.46
11	11.95	12.03	11.49	10.38	9.44	8.94	9.79	9.61	10.60	10.85	11.29	11.47
12	11.96	12.03	11.43	10.18	9.50	8.94	9.83	9.67	10.62	10.88	11.30	11.46
13	11.96	12.01	11.42	10.05	9.56	8.81	9.88	9.72	10.65	10.92	11.33	11.43
14	11.97	12.01	11.38	9.98	9.61	8.89	9.90	9.76	10.66	10.94	11.34	11.44
15	11.97	12.01	11.35	9.97	9.63	8.96	9.93	9.81	10.69	10.96	11.35	11.44
16	11.98	12.01	11.30	10.02	9.63	8.97	10.00	9.86	10.71	10.99	11.34	11.46
17	11.98	12.00	11.23	10.03	9.60	8.93	10.02	9.89	10.72	11.00	11.36	11.48
18	11.99	12.00	11.20	10.02	9.51	8.87	10.05	9.92	10.74	11.01	11.38	11.48
19	12.00	12.00	11.15	10.06	9.52	8.89	10.12	9.96	10.80	10.85	11.40	11.44
20	12.00	12.00	11.15	10.09	9.56	8.96	10.17	10.04	10.82	10.84	11.42	11.42
21	12.01	11.97	11.12	10.14	9.61	8.99	10.21	10.09	10.84	10.88	11.44	11.43
22	12.01	11.96	11.11	10.17	9.62	9.08	10.23	10.13	10.86	10.92	11.45	11.43
23	12.02	11.96	11.10	10.18	9.59	9.12	10.25	10.16	10.89	10.95	11.42	11.44
24	12.03	11.95	11.09	10.19	9.89	9.18	10.23	10.20	10.91	10.98	11.39	11.44
25	12.04	11.94	11.04	10.18	9.53	9.27	10.02	10.24	10.93	11.01	11.42	11.41
26	12.05	11.91	11.01	10.16	9.66	9.34	9.01	10.27	10.95	11.03	11.46	11.42
27	12.05	11.89	10.97	10.17	9.77	9.38	8.90	10.31	10.96	11.06	11.48	11.43
28	12.06	11.88	10.95	10.18	9.88	9.40	8.87	10.35	10.98	11.09	11.49	11.45
29	12.06	11.88	10.94	10.03	---	9.32	8.92	10.36	11.00	11.11	11.51	11.46
30	12.07	11.87	10.94	9.36	---	9.22	8.99	10.39	11.02	11.13	11.50	11.48
31	12.07	---	10.93	9.20	---	9.26	---	10.42	---	11.15	11.51	---
MONTH	12.07	12.08	11.85	10.89	9.63	9.40	10.25	10.42	11.02	11.15	11.51	11.55
YEAR	MAX	12.08	MIN	7.53	MEAN	10.63						

GROUND WATER RECORDS

549

400208084112900 MI-44 AT TROY, OHIO

LOCATION.--Lat 40°02'08", long 84°11'29", Miami County, on left bank of Great Miami River 0.7 mi (1.1 km) east of city hall in Troy.

AQUIFER TYPE.--Water table, sand and gravel.

REMARKS.--Public water supply.

GROUND WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--August 1974 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	CAR- BONATE (CO3) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
NOV. 08...	1100	13.0	620	7.3	63	26	0	358	11	48
FEB. 07...	0930	12.0	620	7.3	67	35	0	362	15	53
MAY 01...	1015	12.0	640	7.2	92	41	0	354	17	54
AUG. 22...	1130	12.0	650	7.4	79	32	0	345	11	50

DATE	TOTAL FLUO- RIDE (F) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	HARD- NESS (CA+MG) (MG/L)	TOTAL RESI- DUE (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)
NOV. 08...	1.1	29	294	.00	.00	260	367	1500	80	--
FEB. 07...	.2	29	297	.03	.00	310	335	1400	40	--
MAY 01...	.7	36	290	.01	.04	400	390	1800	40	--
AUG. 22...	1.0	22	283	.00	.01	330	376	1300	30	0

DATE	TOTAL ARSENIC (AS) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC (ZN) (UG/L)
NOV. 08...	--	--	--	--	--	--	--	--	--
FEB. 07...	--	--	--	--	--	--	--	--	--
MAY 01...	--	--	--	--	--	--	--	--	--
AUG. 22...	0	<10	<10	0	10	0	1	10	10

GROUND WATER RECORDS

394025084162800 (Revised) MT-49 NEAR WEST CARROLLTON, OHIO

LOCATION.--Lat 39°40'25", long 84°16'28", Montgomery County, 1.2 mi (1.9 km) west of city hall in West Carrollton.

AQUIFER TYPE.--Water table, sand and gravel.

GAGE.--Water level recorder. Land-surface datum is 715 ft (218 m) above mean sea level.

REMARKS.--Additional data available: Geophysical log. Record prior to Oct. 24, 1974 furnished by Ohio Department of Natural Resources, Division of Water.

GROUND WATER LEVEL RECORDS

PERIOD OF RECORD.--November 1947 to current year.

EXTREMES.--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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33.58	35.06	36.10	35.22	31.86	22.11	20.41	20.09	20.91	22.41	23.45	24.45
2	33.72	35.10	36.15	35.18	31.66	21.89	20.34	20.06	20.95	22.48	23.26	24.76
3	33.78	35.14	36.18	35.03	31.52	21.85	20.49	19.80	21.16	22.53	23.27	24.86
4	33.84	35.19	36.21	34.96	31.40	21.80	20.48	19.76	21.22	22.31	23.29	24.88
5	33.89	35.30	36.24	34.90	31.28	21.76	20.33	19.82	21.28	22.06	23.52	24.91
6	33.85	35.27	36.26	34.82	31.19	21.82	20.30	20.07	21.27	21.86	23.62	24.79
7	33.84	35.31	36.28	34.80	31.14	21.86	20.49	20.12	21.05	21.92	23.58	24.72
8	33.91	35.34	36.30	34.76	31.04	21.84	20.51	20.18	20.98	22.21	23.73	25.03
9	34.05	35.36	36.28	34.72	30.98	21.80	20.52	20.21	21.03	22.29	23.57	25.12
10	34.07	35.39	36.21	34.51	30.93	21.76	20.56	20.02	21.33	22.34	23.59	25.12
11	34.12	35.43	36.15	34.26	30.86	21.80	20.58	19.96	21.31	22.43	23.58	25.12
12	34.24	35.47	36.15	33.97	30.86	21.71	20.46	20.01	21.37	22.26	23.84	25.11
13	34.29	35.51	36.15	33.71	30.81	21.45	20.49	20.30	21.41	22.31	23.88	24.98
14	34.18	35.55	36.14	33.56	30.77	21.30	20.66	20.32	21.23	22.42	23.95	24.86
15	34.25	35.59	36.09	33.46	30.72	21.31	20.73	20.36	21.23	22.61	23.94	24.85
16	34.37	35.62	36.05	33.40	30.66	21.19	20.74	20.47	21.29	22.69	23.76	25.13
17	34.38	35.66	35.95	33.35	30.60	21.12	20.74	20.27	21.50	22.74	23.76	25.20
18	34.36	35.69	35.86	33.24	30.54	21.03	20.75	20.24	21.64	22.78	24.06	25.24
19	---	35.74	35.76	33.18	30.33	20.83	20.69	20.30	21.69	22.55	24.15	25.28
20	---	35.77	35.72	33.11	30.18	20.81	20.73	20.56	21.75	22.38	24.23	25.16
21	---	35.82	35.67	33.05	30.08	20.72	20.97	20.62	21.59	22.45	24.26	25.16
22	---	35.85	35.66	33.01	30.00	20.75	20.97	20.71	21.64	22.76	24.31	25.36
23	---	35.86	35.66	32.95	29.88	20.73	20.96	20.76	21.72	22.83	24.19	25.43
24	34.69	35.90	35.64	32.88	28.24	20.77	20.77	20.60	21.98	22.88	24.09	25.48
25	34.74	35.95	35.58	32.80	25.47	20.86	20.58	20.60	22.07	23.00	24.40	25.55
26	34.78	35.97	35.52	32.76	23.98	20.92	20.24	20.61	22.12	22.82	24.53	25.56
27	34.82	35.99	35.42	32.73	23.00	20.85	20.05	20.68	22.16	22.82	24.59	25.45
28	34.87	36.03	35.36	32.64	22.42	20.81	20.05	20.88	22.01	22.92	24.61	25.43
29	34.95	36.05	35.31	32.56	---	20.55	20.09	21.00	22.04	23.19	24.68	25.69
30	34.97	36.06	35.30	32.43	---	20.31	20.09	21.01	22.10	23.31	24.50	25.81
31	35.01	---	35.27	32.10	---	20.35	---	20.85	---	23.40	24.41	---
MONTH	35.01	36.06	36.30	35.22	31.86	22.11	20.97	21.01	22.16	23.40	24.68	25.81
YEAR	MAX	36.30	MIN	19.76	MEAN	26.93						

GROUND WATER RECORDS

551

393853084170700 MT-63 IN MIAMISBURG, OHIO

LOCATION.--Lat 39°38'53", long 84°17'07", Montgomery County, on left bank of Great Miami River 0.4 mi (0.6 km) north of city hall in Miamisburg.

AQUIFER TYPE.--Water table, sand and gravel.

REMARKS.--Industrial use, Box Board Co.

GROUND WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--September 1972 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	CAR- BONATE (CO3) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
NOV. 07...	1430	14.0	840	7.2	100	30	0	442	52	87
FEB. 06...	1430	12.0	890	7.1	100	41	0	440	54	91
AUG. 21...	1300	15.0	910	6.9	110	39	0	429	52	91

DATE	TOTAL FLUO- RIDE (F) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LITY AS CACO3 (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	HARD- NESS (CA+MG) (MG/L)	TOTAL RESI- DUE (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)
NOV. 07...	.5	45	363	.00	.00	370	561	2800	200	--
FEB. 06...	.5	56	361	.00	.01	420	541	1900	160	--
AUG. 21...	.3	86	352	.00	.01	440	562	2900	170	4

DATE	TOTAL ARSENIC (AS) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC (ZN) (UG/L)
NOV. 07...	--	--	--	--	--	--	--	--	--
FEB. 06...	--	--	--	--	--	--	--	--	--
AUG. 21...	5	10	10	10	20	0	0	10	10

GROUND WATER RECORDS

395804081593200 (Revised) MU-1A NEAR ZANESVILLE, OHIO

LOCATION.--Lat 39°58'04", long 81°59'32", Muskingum County, 2.2 mi (3.5 km) northeast of the "Y" bridge in Zanesville.

AQUIFER TYPE.--Water table, sand and gravel.

GAGE.--Water level recorder. Land-surface datum is 700 ft (213 m) above mean sea level.

REMARKS.--Record prior to Jan. 17, 1975 furnished by Ohio Department of Natural Resources, Division of Water.

GROUND WATER LEVEL RECORDS

PERIOD OF RECORD.--May 1942 to current year.

EXTREMES.--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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.41	25.31	24.50	21.20	19.84	15.95	14.52	17.64	19.84	19.53	21.97	21.18
2	22.11	25.35	24.15	21.18	19.42	15.52	14.44	17.69	19.61	19.47	21.76	21.26
3	22.32	25.32	24.34	20.96	18.93	15.24	15.30	17.73	19.54	19.42	21.62	21.78
4	22.72	25.23	24.46	20.65	18.97	15.04	15.46	17.54	19.08	19.61	21.60	21.78
5	22.47	25.39	24.57	19.92	18.87	14.87	15.39	17.37	19.34	19.88	21.59	21.86
6	22.47	25.50	24.69	19.55	19.03	15.14	15.45	17.57	19.30	19.81	21.68	21.63
7	22.46	25.52	24.71	19.40	19.05	15.00	15.90	17.68	19.09	20.05	21.57	21.56
8	22.78	25.51	24.50	19.78	18.88	14.81	16.62	17.79	19.05	20.08	21.72	21.63
9	22.69	25.46	24.38	19.92	18.45	14.55	16.53	17.75	18.88	21.00	21.70	21.63
10	23.14	25.40	24.43	20.16	18.51	14.73	16.59	17.83	19.09	21.07	21.64	21.50
11	23.54	25.12	24.27	20.10	18.68	14.76	16.68	17.77	18.99	20.89	21.78	21.70
12	23.72	25.19	24.07	19.48	19.12	15.14	16.83	17.81	19.02	20.69	21.76	21.66
13	23.70	25.21	23.95	19.33	19.17	15.05	16.79	18.05	19.29	20.46	21.87	21.63
14	23.80	25.17	23.66	19.46	19.43	14.41	16.66	19.13	19.44	20.66	21.58	21.62
15	23.95	25.13	23.48	19.15	19.50	14.15	17.27	18.19	19.28	20.64	21.94	20.84
16	24.04	25.24	23.39	---	19.54	13.80	17.40	18.43	19.20	20.62	21.99	21.23
17	24.15	25.11	23.31	19.19	19.68	13.23	17.48	18.51	19.44	20.85	21.81	21.35
18	24.21	24.92	23.09	19.36	20.13	13.49	17.68	18.50	19.56	20.83	21.65	21.37
19	24.39	24.89	22.82	19.60	20.25	13.66	17.93	18.51	19.82	21.03	21.79	21.13
20	24.51	24.92	22.61	20.00	20.25	13.44	17.97	18.70	19.90	20.75	21.86	20.93
21	24.52	24.95	22.70	20.24	19.80	13.19	17.89	18.98	19.72	20.73	21.83	20.83
22	24.70	25.05	22.57	20.51	19.79	13.05	18.22	19.16	19.60	21.07	21.86	20.78
23	24.90	25.16	22.00	20.78	19.35	13.03	18.33	19.06	19.65	21.10	21.82	20.42
24	24.96	24.85	22.40	20.93	18.93	12.97	18.38	19.24	19.68	21.25	21.70	21.01
25	25.10	24.91	22.54	21.01	18.44	12.97	18.17	19.58	19.87	21.62	21.48	21.03
26	25.11	25.10	22.49	21.02	17.66	13.27	18.23	19.58	19.89	21.57	21.82	20.84
27	25.00	25.08	22.44	21.15	17.04	13.38	18.01	19.45	19.48	21.21	21.97	20.62
28	25.12	25.01	22.04	21.11	16.53	13.06	17.34	19.52	19.33	21.29	22.29	20.43
29	24.75	24.81	21.81	21.04	---	13.29	17.66	19.64	19.16	21.22	22.29	20.39
30	24.95	24.55	21.69	20.60	---	13.93	17.46	19.65	18.85	21.84	22.30	20.34
31	25.14	---	21.36	20.22	---	14.21	---	19.88	---	22.01	21.70	---
MONTH	25.14	25.52	24.71	21.20	20.25	15.95	18.38	19.88	19.90	22.01	22.30	21.86
YEAR	MAX	25.52	MIN	12.87	MEAN	20.36						

GROUND WATER RECORDS

553

395753081593500 MU-10 AT ZANESVILLE, OHIO

LOCATION.--Lat 39°57'53", long 81°59'35", Muskingum County, on left bank of Muskingum River 0.2 mi (0.3 km) north of waterworks.

AQUIFER TYPE.--Water table, sand and gravel.

REMARKS.--Public water supply.

GROUND WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--June 1967 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	CARBONATE (CO3) (MG/L)	BICARBONATE (HCO3) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CaCO3 (MG/L)
NOV. 07...	786	7.6	90	15	0	226	48	91	100	9.1	185
APR. 24...	805	7.5	85	17	0	190	45	100	120	9.6	156

DATE	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	HARDNESS (CA+MG) (MG/L)	TOTAL RESIDUE (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL LEAD (PB) (UG/L)
NOV. 07...	.92	.00	.11	.02	290	513	5	150	470	0	0
APR. 24...	.52	.00	.01	.00	280	517	3	270	400	0	2

GROUND WATER RECORDS

393327082571600 PK-7 NEAR CIRCLEVILLE, OHIO

LOCATION.--Lat 39°33'27", long 82°57'16", Pickaway County, 3.1 mi (5.0 km) south of Circleville.

AQUIFER TYPE.--Water table, sand and gravel.

GAGE.--Water level recorder. Land-surface datum is 705 ft (215 m) above mean sea level.

REMARKS.--Additional data available: Geophysical log. Record prior to Oct. 3, 1974 furnished by Ohio Department of Natural Resources, Division of Water.

GROUND WATER LEVEL RECORDS

PERIOD OF RECORD.--July 1972 to current year.

EXTREMES.--Period of record: Maximum daily low, 54.34 ft (16.563 m) Nov. 3, 1972; minimum daily low, 44.65 ft (13.609 m) Aug. 22, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51.30	51.82	51.34	51.38	51.45	50.53	47.85	46.01	45.22	45.03	45.14	45.17
2	51.31	51.82	51.52	51.44	51.43	50.43	47.79	46.02	45.22	45.06	45.05	45.45
3	51.35	51.70	51.69	51.45	51.42	50.40	47.78	45.95	45.26	45.07	44.97	45.56
4	51.36	51.59	51.73	51.56	51.38	50.39	47.78	45.70	45.22	44.96	44.87	45.64
5	51.36	51.76	51.75	51.59	51.35	50.32	47.72	45.67	45.21	44.87	44.85	45.65
6	51.19	51.79	51.76	51.53	51.40	50.26	47.48	45.71	45.14	44.79	44.86	45.66
7	51.26	51.78	51.77	51.59	51.45	50.18	47.43	45.74	45.02	44.73	44.92	45.67
8	51.34	51.76	51.83	51.54	51.44	50.19	47.49	45.77	45.12	44.79	44.93	45.75
9	51.39	51.73	51.93	51.63	51.33	50.13	47.50	45.79	45.05	44.91	44.92	45.83
10	51.48	51.59	51.92	51.61	51.30	49.81	47.40	45.80	45.13	44.94	44.73	45.82
11	51.50	51.67	51.86	51.68	51.31	49.79	47.32	45.67	45.14	44.92	44.71	45.75
12	51.49	51.76	51.95	51.68	51.42	49.72	47.30	45.60	45.03	44.83	44.80	45.76
13	51.44	51.78	51.94	51.59	51.47	49.45	47.15	45.75	44.96	44.86	44.80	45.80
14	51.48	51.78	51.93	51.62	51.46	49.37	47.03	45.75	44.90	44.94	44.78	45.76
15	51.56	51.78	51.73	51.62	51.33	49.32	47.00	45.70	44.80	45.07	44.76	45.67
16	51.57	51.78	51.62	51.61	51.23	49.18	47.00	45.69	44.94	45.07	44.79	45.75
17	51.60	51.67	51.67	51.63	51.18	49.03	46.91	45.63	44.99	45.09	44.65	45.76
18	51.62	51.71	51.69	51.45	51.15	48.98	46.75	45.42	---	45.09	44.79	45.87
19	51.55	51.76	51.68	51.35	51.06	48.96	46.70	45.54	---	45.07	45.00	45.91
20	51.40	51.78	51.70	51.45	51.00	49.03	46.66	45.62	---	45.08	45.33	45.95
21	51.48	51.88	51.59	51.51	51.01	49.01	46.55	45.69	---	45.14	45.38	45.97
22	51.54	51.94	51.49	51.56	50.98	48.71	46.52	45.64	---	45.28	45.31	46.17
23	51.60	51.89	51.47	51.55	50.84	48.64	46.38	45.52	---	45.32	45.28	46.29
24	51.66	51.65	51.46	51.43	50.83	48.43	46.24	45.36	---	45.35	45.15	46.40
25	51.67	51.69	51.48	51.31	50.88	48.64	46.21	45.32	45.08	45.37	45.22	46.46
26	51.67	51.74	51.48	51.37	50.89	48.73	46.24	45.26	45.06	45.29	45.38	46.46
27	51.55	51.71	51.45	51.41	50.83	48.71	46.09	45.35	45.02	45.05	45.42	46.44
28	51.53	51.69	51.45	51.42	50.67	48.45	45.83	45.40	45.03	45.06	45.42	46.32
29	51.69	51.63	51.40	51.46	---	47.99	45.83	45.43	44.99	45.17	45.43	46.31
30	51.75	51.56	51.48	51.47	---	47.84	45.85	45.38	44.98	45.21	45.42	46.35
31	51.75	---	51.49	51.47	---	47.82	---	45.35	---	45.20	45.26	---
MONTH	51.75	51.94	51.95	51.68	51.47	50.53	47.85	46.02	---	45.37	45.43	46.46
YEAR	MAX	51.95	MIN	44.65	MEAN	48.42						

GROUND WATER RECORDS

555

393325082571100 PK-21 NEAR CIRCLEVILLE, OHIO

LOCATION.--Lat 39°33'25", Long 82°57'11", Pickaway County, 3.0 mi (4.8 km) south of courthouse in Circleville.

AQUIFER TYPE.--Artesian, sand and gravel.

REMARKS.--Industrial use, Pittsburgh Plate Glass Co.

GROUND WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--June 1967 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	CAR- BONATE (CO3) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LITY AS CACO3 (MG/L)
NOV. 21...	--	656	7.4	90	34	0	394	7.8	11	49	25	323
JULY 02...	1200	673	7.2	82	29	0	404	7.5	17	52	41	331

DATE	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	HARD- NESS (CA+MG) (MG/L)	TOTAL RESI- DUE (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL LEAD (PB) (UG/L)
NOV. 21...	.30	.03	.00	.07	370	420	7	2800	60	0	0
JULY 02...	.19	.00	.01	.04	320	455	11	1500	150	20	2

GROUND WATER RECORDS

390359083015100 PI-2 NEAR PIKETON, OHIO

LOCATION.--Lat 39°03'59", long 83°01'51", Pike County, 1 mi (1.6 km) west of Piketon.

AQUIFER TYPE.--Water table, sand and gravel.

GAGE.--Water level recorder. Land-surface datum is 550 ft (168 m) above mean sea level.

REMARKS.--Record prior to Oct. 2, 1974 furnished by Ohio Department of Natural Resources, Division of Water.

GROUND WATER LEVEL RECORDS

PERIOD OF RECORD.--September 1969 to current year.

EXTREMES.--Period of record: Maximum daily low, 26.15 ft (7.971 m) Dec. 1, 1971; minimum daily low, 11.25 ft (3.429 m) Mar. 1, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.49	25.43	25.06	22.53	21.43	11.25	15.24	18.39	21.51	22.56	24.04	25.00
2	24.56	25.45	24.94	22.54	21.34	11.69	15.24	18.38	21.54	22.61	24.09	25.02
3	24.59	25.47	24.92	22.49	21.18	12.26	15.46	18.35	21.62	22.66	24.14	25.03
4	24.63	25.49	24.86	22.46	20.97	12.83	15.60	18.40	21.63	22.72	24.19	25.03
5	24.67	25.51	24.81	22.44	20.75	13.17	15.75	18.46	21.67	22.77	24.24	25.03
6	24.71	25.53	24.74	22.38	20.57	13.46	15.89	18.55	21.69	22.83	24.29	25.03
7	24.75	25.54	24.66	22.34	20.52	13.79	16.06	18.65	21.72	22.88	24.34	25.04
8	24.78	25.54	24.58	22.30	20.46	14.10	16.26	18.73	21.73	22.93	24.38	25.04
9	24.82	25.54	24.54	22.33	20.42	14.32	16.45	18.84	21.73	22.98	24.42	25.05
10	24.87	25.52	24.49	22.32	20.40	14.57	16.68	18.96	21.71	23.03	24.45	25.06
11	24.91	25.51	24.39	22.29	20.41	14.77	16.91	19.06	21.70	23.08	24.49	25.08
12	24.95	25.49	24.27	22.27	20.47	14.89	17.15	19.20	21.72	23.13	24.52	25.10
13	24.98	25.48	24.14	22.18	20.54	15.04	17.39	19.34	21.76	23.18	24.55	25.11
14	25.01	25.47	24.00	22.02	20.59	15.15	17.59	19.45	21.79	23.23	24.57	25.11
15	25.06	25.45	23.86	21.80	20.64	15.18	17.84	19.57	21.83	23.28	24.61	25.10
16	25.10	25.41	23.73	21.59	20.70	15.15	18.06	19.71	21.88	23.33	24.63	25.08
17	25.14	25.37	23.61	21.46	20.78	15.17	18.23	19.82	21.94	23.37	24.64	25.05
18	25.18	25.33	23.49	21.34	20.86	15.18	18.41	19.94	21.99	23.42	24.66	25.06
19	25.20	25.29	23.34	21.30	20.94	15.13	18.66	20.07	22.03	23.47	24.66	25.07
20	25.24	25.26	23.19	21.35	20.98	15.15	18.85	20.19	22.04	23.51	24.68	25.07
21	25.25	25.23	23.02	21.38	20.99	15.14	19.03	20.31	22.06	23.55	24.69	25.07
22	25.28	25.23	22.89	21.40	20.96	15.22	19.18	20.42	22.09	23.60	24.71	25.05
23	25.29	25.22	22.80	21.41	20.87	15.27	19.31	20.53	22.13	23.64	24.72	25.03
24	25.32	25.21	22.74	21.41	20.43	15.21	19.36	20.65	22.17	23.68	24.74	24.90
25	25.34	25.20	22.72	21.45	20.02	15.36	18.85	20.75	22.22	23.72	24.77	24.80
26	25.35	25.19	22.73	21.55	17.81	15.39	18.81	20.86	22.28	23.75	24.81	24.77
27	25.37	25.18	22.70	21.59	15.92	15.40	18.80	20.98	22.33	23.80	24.83	24.71
28	25.38	25.16	22.65	21.60	12.05	15.40	18.68	21.09	22.40	23.85	24.85	24.65
29	25.39	25.15	22.61	21.59	---	15.25	18.53	21.19	22.46	23.90	24.88	24.59
30	25.41	25.12	22.57	21.56	---	15.23	18.47	21.29	22.51	23.95	24.93	24.53
31	25.42	---	22.54	21.53	---	15.24	---	21.40	---	24.00	24.96	---
MONTH	25.42	25.54	25.06	22.54	21.43	15.40	19.36	21.40	22.51	24.00	24.96	25.11
YEAR	MAX	25.54	MIN	11.25	MEAN	21.90						

GROUND WATER RECORDS

557

391922082580000 (Revised) RO-3 AT CHILLICOTHE, OHIO

LOCATION.--Lat 39°19'22", long 82°58'00", Ross County, 1.1 mi (1.8 km) southeast of courthouse in Chillicothe.

AQUIFER TYPE.--Water table, sand and gravel.

GAGE.--Water level recorder. Land-surface datum is 610 ft (186 m) above mean sea level.

REMARKS.--Record prior to Oct. 22, 1974 furnished by Ohio Department of Natural Resources, Division of Water.

GROUND WATER LEVEL RECORDS

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

EXTREMES.--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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	28.43	28.49	28.00	26.30	24.55	21.53	22.03	23.48	24.25	25.04	25.42
2	---	28.47	28.40	27.93	26.28	24.34	21.51	21.99	23.57	24.28	25.09	25.42
3	---	28.50	28.42	27.85	26.25	24.14	21.42	21.96	23.63	24.30	25.13	25.42
4	---	28.51	28.44	27.75	26.22	23.95	21.41	21.90	23.68	24.32	25.18	25.41
5	---	28.52	28.45	27.68	26.18	23.76	21.41	21.86	23.70	24.34	25.21	25.39
6	---	28.54	28.46	27.61	26.11	23.58	21.40	21.83	23.67	24.36	25.27	25.25
7	---	28.56	28.45	27.55	26.06	23.44	21.39	21.82	23.71	24.38	25.31	25.24
8	---	28.58	28.42	27.51	26.04	23.32	21.41	21.83	23.75	24.39	25.35	25.22
9	27.60	28.57	28.41	27.47	26.00	23.26	21.43	21.85	23.77	24.41	25.39	25.18
10	27.59	28.57	28.43	27.45	25.98	23.20	21.46	21.88	23.79	24.43	25.40	25.15
11	27.61	28.55	28.43	27.37	25.94	23.12	21.50	21.90	23.80	24.45	25.37	25.12
12	27.65	28.47	28.43	27.34	25.92	23.08	21.55	21.92	23.81	24.46	25.42	24.84
13	27.70	28.46	28.41	27.32	25.88	22.98	21.61	21.94	23.84	24.48	25.49	24.82
14	27.75	28.48	28.42	27.28	25.88	22.96	21.67	22.01	23.86	24.51	25.55	24.81
15	27.78	28.51	28.41	27.24	25.87	22.89	21.74	22.08	23.87	24.55	25.57	24.80
16	27.81	28.54	28.34	27.18	25.87	22.89	21.80	22.17	23.90	24.58	25.59	24.77
17	27.86	28.55	28.33	27.15	25.86	22.87	21.83	22.26	23.91	24.62	25.56	24.71
18	27.90	28.55	28.33	27.14	25.83	22.82	21.85	22.33	23.82	24.65	25.57	24.69
19	27.94	28.54	28.30	27.07	25.81	22.68	21.85	22.43	23.85	24.65	25.57	24.53
20	27.97	28.51	28.26	27.04	25.78	22.48	21.91	22.52	23.88	24.67	25.56	24.52
21	28.04	28.49	28.21	27.01	25.75	22.42	21.98	22.63	23.91	24.70	25.55	24.49
22	28.12	28.52	28.18	26.98	25.73	22.32	22.02	22.72	23.94	24.73	25.53	24.47
23	28.17	28.55	28.15	26.91	25.70	22.24	22.05	22.82	23.97	24.76	25.52	24.44
24	28.22	28.57	28.13	26.80	25.66	22.04	22.05	22.91	23.99	24.80	25.51	24.13
25	28.27	28.58	28.10	26.69	25.28	21.96	21.93	22.99	24.03	24.83	25.51	24.04
26	28.31	28.60	28.08	26.56	25.12	21.93	21.99	23.07	24.07	24.87	25.52	24.04
27	28.33	28.61	28.08	26.54	24.93	21.90	22.04	23.13	24.10	24.92	25.54	24.01
28	28.35	28.59	28.06	26.51	24.75	21.86	22.05	23.22	24.13	24.95	25.56	23.97
29	28.37	28.58	28.06	26.47	---	21.69	22.07	23.30	24.18	24.97	25.56	23.92
30	28.39	28.58	28.06	26.41	---	21.57	22.06	23.35	24.21	24.98	25.56	23.86
31	28.40	---	28.05	26.39	---	21.55	---	23.43	---	25.00	25.55	---
MONTH	---	28.61	28.49	28.00	26.30	24.55	22.07	23.43	24.21	25.00	25.59	25.42
YEAR	MAX	28.61	MIN	21.39	MEAN	25.22						

GROUND WATER RECORDS

405052081193700 (Revised) ST-4 NEAR CANTON, OHIO

LOCATION.--Lat 40°50'52", long 81°19'37", Stark County, northeast of Canton on Harbort Avenue.

AQUIFER TYPE.--Water table, sand and gravel.

GAGE.--Water level recorder. Land-surface datum is 1,075 ft (328 m) above mean sea level.

REMARKS.--Record prior to April 17, 1975 furnished by Ohio Department of Natural Resources, Division of Water.

GROUND WATER LEVEL RECORDS

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

EXTREMES.--Period of record: Maximum daily low, 22.02 ft (6.712 m) Jan. 28-Feb. 25, 1956; minimum daily low, 6.93 ft (2.112 m) Feb. 6, 1952.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.75	13.28	13.10	11.20	10.03	9.00	9.05	10.06	10.67	10.87	11.74	12.45
2	12.76	13.30	13.07	11.11	9.98	8.95	9.07	10.08	10.66	10.89	11.77	12.45
3	12.78	13.31	13.05	11.05	9.95	8.93	9.09	10.10	10.73	10.92	11.80	12.44
4	12.80	13.32	13.04	10.97	9.93	8.94	9.12	10.11	10.73	10.94	11.83	12.44
5	12.82	13.32	13.03	10.93	9.92	8.96	9.15	10.13	10.72	10.97	11.86	12.44
6	12.84	13.32	13.02	10.89	9.90	8.99	9.18	10.14	10.71	10.99	11.89	12.44
7	12.85	13.32	13.00	10.85	9.90	9.01	9.22	10.17	10.69	11.02	11.93	12.44
8	12.87	13.32	12.96	10.82	9.90	9.03	9.25	10.19	10.67	11.05	11.96	12.44
9	12.89	13.32	12.93	10.78	9.90	9.05	9.29	10.20	10.65	11.07	11.98	12.45
10	12.91	13.32	12.89	10.62	8.99	9.08	9.32	10.22	10.64	11.10	12.01	12.45
11	12.94	13.31	12.83	10.43	---	9.10	9.35	10.24	10.64	11.14	12.04	12.47
12	12.96	13.31	12.77	10.29	---	9.12	9.39	10.26	10.63	11.17	12.07	12.47
13	12.98	13.31	12.71	10.18	---	9.14	9.44	10.28	10.63	11.20	12.10	12.47
14	13.00	13.30	12.65	10.11	---	9.15	9.48	10.30	10.63	11.23	12.12	12.45
15	13.01	13.29	12.60	10.06	---	9.17	9.51	10.32	10.63	11.26	12.14	12.43
16	13.03	13.29	12.53	10.03	---	9.19	9.54	10.34	10.63	11.29	12.16	12.39
17	13.04	13.28	12.47	10.02	---	9.20	9.67	10.37	10.64	11.33	12.18	12.39
18	13.05	13.27	12.40	10.02	---	9.20	9.70	10.39	10.66	11.37	12.20	12.38
19	13.07	13.26	12.34	10.02	---	9.20	9.73	10.42	10.68	11.40	12.22	12.36
20	13.08	13.25	12.29	10.03	10.22	9.18	9.76	10.45	10.70	11.43	12.24	12.32
21	13.10	13.25	12.23	10.05	10.00	9.10	9.80	10.47	10.73	11.46	12.27	12.27
22	13.12	13.24	12.19	10.06	9.98	9.04	9.83	10.49	10.74	11.49	12.28	12.20
23	13.14	13.23	12.14	10.08	9.96	9.00	9.86	10.51	10.75	11.53	12.31	12.14
24	13.15	13.22	12.10	10.10	9.90	8.96	9.89	10.54	10.76	11.55	12.33	12.09
25	13.17	13.22	12.03	10.12	9.64	8.95	9.91	10.56	10.77	11.59	12.35	12.05
26	13.19	13.22	11.91	10.13	9.43	8.95	9.94	10.58	10.78	11.62	12.37	12.01
27	13.20	13.20	11.74	10.15	9.20	8.96	9.97	10.60	10.80	11.65	12.39	11.96
28	13.22	13.18	11.57	10.17	9.08	8.98	9.99	10.62	10.82	11.60	12.41	11.93
29	13.23	13.15	11.45	10.17	---	8.99	10.01	10.64	10.84	11.63	12.43	11.90
30	13.24	13.13	11.35	10.17	---	9.00	10.04	10.65	10.85	11.67	12.44	11.88
31	13.26	---	11.26	10.10	---	9.01	---	10.66	---	11.71	12.45	---
MONTH	13.26	13.32	13.10	11.20	---	9.20	10.04	10.66	10.85	11.71	12.45	12.47
YEAR	MAX	13.32	MIN	8.93	MEAN	11.23						

GROUND WATER RECORDS

559

403207081293800 TU-3 AT DOVER, OHIO

LOCATION.--Lat 40°32'07", long 81°29'38", Tuscarawas County, in the northwest part of Dover.

AQUIFER TYPE.--Water table, sand and gravel.

GAGE.--Water level recorder. Land-surface datum is 880 ft (268 m) above mean sea level.

REMARKS.--Record prior to April 21, 1975 furnished by Ohio Department of Natural Resources, Division of Water.

GROUND WATER LEVEL RECORDS

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

EXTREMES.--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.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.70	9.42	8.39	---	5.60	4.94	5.24	6.88	7.44	8.15	9.07	8.66
2	8.74	9.42	8.44	---	5.27	4.87	5.24	6.71	7.25	8.22	9.10	8.62
3	8.79	9.40	8.23	---	5.50	4.90	5.32	6.51	7.17	8.26	9.10	8.62
4	8.80	9.33	8.19	---	5.42	4.84	5.43	6.53	7.17	8.20	9.05	8.65
5	8.82	---	8.19	---	5.49	4.82	5.46	6.74	7.22	8.18	9.04	8.67
6	8.81	---	8.43	---	5.51	4.73	5.50	6.75	7.21	8.23	9.03	8.50
7	8.90	---	8.12	---	5.52	4.64	5.58	6.75	7.18	8.36	9.13	8.40
8	8.93	---	8.11	---	5.58	4.57	5.78	6.78	7.27	8.44	9.16	8.44
9	8.98	---	7.81	---	5.67	4.67	5.81	6.83	7.36	8.27	9.21	8.49
10	8.98	---	7.50	---	5.69	4.84	6.04	6.86	7.17	8.25	9.22	8.49
11	9.04	---	7.36	---	5.75	4.91	6.10	6.87	7.40	8.24	9.23	8.48
12	9.05	---	7.25	---	5.88	4.91	5.90	6.92	7.18	8.27	9.25	8.55
13	9.05	---	7.40	---	5.90	4.95	5.88	6.98	7.21	8.30	9.25	8.47
14	9.10	---	7.30	---	5.98	4.80	6.11	7.03	7.22	8.21	8.81	8.48
15	9.11	---	7.20	---	6.00	4.88	6.23	7.05	7.27	8.15	8.69	8.52
16	9.04	---	7.05	---	6.02	4.87	6.31	7.13	7.61	8.19	8.65	8.55
17	9.04	---	7.15	---	6.05	4.88	6.39	7.05	7.63	8.48	8.58	8.56
18	9.10	---	6.95	---	5.92	4.85	6.31	7.09	7.70	8.50	8.64	8.44
19	9.11	---	7.07	---	5.75	4.79	6.35	7.05	7.74	8.51	8.92	8.05
20	8.85	---	---	---	5.38	4.78	6.33	7.07	7.79	8.50	8.98	7.63
21	9.19	---	---	---	5.70	4.74	6.44	7.39	7.85	8.58	9.00	7.56
22	9.20	---	---	6.10	5.80	4.50	6.50	7.45	7.89	8.63	9.03	7.60
23	9.20	---	7.00	6.11	5.80	4.60	6.52	7.47	7.99	8.65	9.05	7.68
24	9.20	---	---	6.12	5.00	4.79	6.62	7.52	8.03	8.70	9.05	7.55
25	9.25	8.49	---	6.39	5.08	4.83	6.66	7.52	8.08	8.74	9.15	7.34
26	---	8.37	---	6.35	5.10	4.98	6.64	7.54	8.15	8.73	9.21	7.30
27	---	8.40	---	6.35	5.13	5.00	6.48	7.59	8.12	8.74	9.23	7.33
28	9.48	8.13	---	6.37	5.12	5.01	6.62	7.61	7.91	8.85	9.22	7.39
29	9.44	8.14	---	6.25	---	5.03	6.76	7.61	7.98	8.90	9.22	7.44
30	9.45	8.15	---	5.58	---	5.06	6.83	7.63	8.09	8.96	9.16	---
31	9.43	---	---	5.48	---	5.11	---	7.59	---	9.02	9.01	---
MONTH	9.48	---	---	---	6.05	5.11	6.83	7.63	8.15	9.02	9.25	8.67
YEAR	MAX	9.48	MIN	4.50	MEAN	7.35						

GROUND WATER RECORDS

403210081293100 TU-10 IN DOVER, OHIO

LOCATION.--Lat 40°32'10", long 81°29'31", Tuscarawas County, 1.8 mi (2.9 km) northwest of fairgrounds in Dover.

AQUIFER TYPE.--Water table, sand and gravel.

REMARKS.--Public water supply.

GROUND WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--June 1967 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	CAR- BONATE (CO3) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LITY AS CAC03 (MG/L)
NOV. 19...	525	7.6	80	21	0	216	4.0	5.9	100	8.7	177
APR. 22...	518	7.4	72	19	0	218	4.0	7.6	96	14	179

DATE	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	HARD- NESS (CA+MG) (MG/L)	TOTAL RESI- DUE (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL LEAD (PB) (UG/L)
NOV. 19...	1.5	.01	.02	.03	290	363	0	290	260	<10	2
APR. 22...	.02	.01	.38	.00	260	353	0	170	220	0	2

GROUND WATER RECORDS

561

401826083255200 U-4 NEAR RAYMOND, OHIO

LOCATION.--Lat 40°18'26", long 83°25'52", Union County, 2.6 mi (4.2 km) southeast of Raymond.

AQUIFER TYPE.--Artesian, limestone.

GAGE.--Water level recorder. Land-surface datum is 1,040 ft (317 m) above mean sea level.

REMARKS.--Additional data available: Geophysical log, chemical analyses, well test. Record prior to Oct. 8, 1974 furnished by Ohio Department of Natural Resources, Division of Water.

GROUND WATER LEVEL RECORDS

PERIOD OF RECORD.--January 1973 to current year.

EXTREMES.--Period of record: Maximum daily low, 23.60 ft (7.193 m) Oct. 21, 1974; minimum daily low, 19.32 ft (5.889 m) Feb. 24, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	23.45	22.84	21.27	20.82	20.49	20.81	21.18	22.01	22.44	22.86	23.20
2	---	23.48	22.86	21.43	20.92	20.66	20.83	21.22	22.04	22.47	22.77	23.23
3	---	23.51	23.01	21.30	20.97	20.93	20.96	21.25	21.98	22.47	22.77	23.28
4	---	23.42	23.06	21.38	20.94	20.93	21.13	21.15	21.97	22.35	22.80	23.16
5	---	23.23	23.03	21.55	20.82	20.95	21.20	21.17	21.90	22.25	22.83	23.13
6	---	23.35	22.93	21.47	20.81	21.04	21.21	21.25	21.86	22.26	22.87	23.06
7	---	23.34	22.84	21.54	20.95	20.99	21.22	21.31	21.72	22.27	22.96	23.07
8	23.27	23.34	22.63	21.46	21.03	20.93	21.26	21.36	21.87	22.19	22.99	23.12
9	23.31	23.39	22.49	20.59	21.22	20.96	21.28	21.41	21.92	22.26	22.98	23.24
10	23.36	23.29	22.47	20.58	21.21	20.93	21.25	21.45	21.97	22.28	22.97	23.19
11	23.41	23.17	22.45	20.51	21.16	21.00	21.28	21.41	21.95	22.35	22.94	22.92
12	23.42	23.10	22.42	20.72	21.26	20.92	21.43	21.42	21.84	22.35	23.03	23.02
13	23.42	23.02	22.38	20.84	21.38	20.49	21.55	21.55	21.92	22.41	23.00	23.09
14	23.34	23.09	22.27	20.98	21.43	20.62	21.51	21.53	21.89	22.36	22.99	23.16
15	23.43	23.14	22.06	21.08	21.40	20.83	21.45	21.48	21.89	22.39	22.98	23.18
16	23.34	23.19	21.78	21.31	21.34	20.81	21.48	21.66	21.97	22.48	22.91	23.08
17	23.35	23.15	21.66	21.38	21.13	20.70	21.46	21.77	22.00	22.45	22.95	23.11
18	23.41	23.15	21.76	21.23	20.52	20.42	21.34	21.60	22.07	22.44	23.04	23.06
19	23.44	23.08	21.85	21.25	20.73	20.30	21.51	21.63	22.12	22.36	23.06	22.90
20	23.56	22.93	21.91	21.36	20.85	20.53	21.68	21.71	22.16	22.36	23.19	22.83
21	23.60	23.03	21.90	21.47	21.00	20.56	21.78	21.79	22.22	22.42	23.14	22.89
22	23.59	23.11	22.03	21.60	20.99	20.67	21.77	21.80	22.20	22.48	23.22	22.91
23	23.50	23.11	22.01	21.58	20.71	20.73	21.72	21.80	22.24	22.57	23.19	22.89
24	23.43	23.10	21.73	21.49	19.32	20.63	21.56	21.84	22.30	22.50	23.14	22.88
25	23.42	23.04	21.42	21.30	19.90	20.96	21.22	21.88	22.28	22.59	23.15	22.82
26	23.46	23.06	21.53	21.17	20.21	21.21	21.36	21.86	22.24	22.62	23.25	22.79
27	23.42	22.95	21.54	21.30	20.33	21.25	21.40	21.91	22.23	22.60	23.33	22.84
28	23.43	23.03	21.60	21.34	20.35	21.15	21.25	21.96	22.29	22.62	23.34	22.83
29	23.47	23.07	21.60	21.19	---	20.79	21.05	21.96	22.35	22.72	23.28	22.84
30	23.49	23.07	21.68	20.62	---	20.51	21.13	21.88	22.41	22.77	23.19	22.84
31	23.49	---	21.69	20.77	---	20.67	---	21.93	---	22.80	23.15	---
MONTH	---	23.51	23.06	21.60	21.43	21.25	21.78	21.96	22.41	22.80	23.34	23.28
YEAR	MAX	23.60	MIN	19.32	MEAN	22.07						

GROUND WATER RECORDS

392556081281500 WA-10 IN MARIETTA, OHIO

LOCATION.--Lat 39°25'56", long 81°28'15", Washington County, on left bank of Muskingum River 0.2 mi (0.3 km) north of fairgrounds in Marietta.

AQUIFER TYPE.--Water table, sand and gravel.

REMARKS.--Public water supply.

GROUND WATER QUALITY RECORDS

CHEMICAL ANALYSES

PERIOD OF RECORD.--June 1973 to current year.

WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG/L)	CARBONATE (CO3) (MG/L)	BICARBONATE (HCO3) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CaCO3 (MG/L)
DEC. 05...	746	7.3	89	19	0	166	37	78	140	13	136
APR. 24...	600	7.2	65	16	0	174	27	44	110	18	143

DATE	AMMONIA NITROGEN (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	HARDNESS (CA+MG) (MG/L)	TOTAL RESIDUE (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	TOTAL IRON (FE) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL LEAD (PB) (UG/L)
DEC. 05...	.13	.00	.03	.01	300	497	6	300	730	0	2
APR. 24...	.06	.01	.24	.05	230	382	3	290	500	0	3

CHEMICAL ANALYSES OF GROUND WATER IN FRANKLIN COUNTY

The following table contains chemical analyses of ground water from the glacial-outwash aquifer adjacent to the Scioto River and Big Walnut Creek in south Franklin County. This data was collected as part of an appraisal of the ground-water resources in south Franklin County.

395008083015700 - FR-35 J HANCOCK SE OF GROVE CITY OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	HYDROGEN SULFIDE (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	SODIUM ADSORPTION RATIO	PERCENT SODIUM
APR. 22...	1400	917	7.6	.0	12	120	38	22	20	.4	9

DATE	CARBONATE (CO3) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CAC03 (MG/L)	DIS-SOLVED SULFATE (S04) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
APR. 22...	0	400	16	328	140	42	.4	.01	2.0	.01	.08

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
APR. 22...	592	460	130	4.5	1	0	0	40	30	9	610

395037082581900 - FR-36 J&P SAND&GRAVEL CO N OF LOCKBOURNE OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	HYDROGEN SULFIDE (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	SODIUM ADSORPTION RATIO	PERCENT SODIUM
APR. 16...	1130	695	7.2	.0	14	110	33	3.7	1.1	.1	2

DATE	CARBONATE (CO3) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CAC03 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
APR. 16...	0	384	39	315	73	12	.3	.00	.04	.04	.06

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA,MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
APR. 16...	439	410	96	4.5	13	<10	0	2200	50	8	320

395138082580800 - FR-38 I H SHICK W OF REESE OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	HYDRO- GEN SULFIDE (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM	CAR- BONATE (CO3) (MG/L)
APR. 16...	1060	7.2	.0	11	130	49	40	.5	.8	14	0
DATE	BICAR- BONATE (HCO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)
APR. 16...	472	48	387	100	52	.3	.00	13	.02	.12	616
DATE	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)	
APR. 16...	530	140	4.1	4	10	0	40	10	70	90	

394844082593800 - FR-39 LB MOREHEAD W OF LOCKBOURNE OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	HYDRO- GEN SULFIDE (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
APR. 24...	0945	814	7.4	.1	11	110	34	6.6	6.7	.1	3
DATE	CAR- BONATE (CO3) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)
APR. 24...	0	356	23	292	64	30	.2	.01	16	.00	.00
DATE	DIS- SOLVED SOLIDS (SUM OF CONSTITU- TENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
APR. 24...	438	410	120	5.0	4	10	10	30	10	3	210

CHEMICAL ANALYSES OF GROUND WATER IN FRANKLIN COUNTY--Continued

395032082563800 - FR-41 GLEISSNER S OF REESE OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	HYDRO- GEN SULFIDE (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
APR. 24...	1430	701	7.4	.4	20	100	36	5.0	.9	.1	3
DATE	CAR- BONATE (CO3) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)
APR. 24...	0	476	30	390	28	4.7	.4	.00	.01	.13	.20
DATE	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GNESE (MN) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
APR. 24...	433	400	8	2.5	30	0	0	3200	60	10	290

394832083015500 - FR-40 J CORDLE SE OF GROVE CITY OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	HYDROGEN SULFIDE (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	SODIUM ADSORPTION RATIO	PERCENT SODIUM
APR. 17...	1415	980	7.4	.0	11	110	39	52	4.2	1.1	20

DATE	CARBONATE (CO3) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
APR. 17...	0	438	28	359	97	66	.4	.01	3.4	.01	.11

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
APR. 17...	596	440	76	3.1	0	10	10	20	10	10	960

395009082540900 - FR-42 S OF GROVEPORT OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	HYDRO- GEN SULFIDE (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
APR. 14...	1000	673	7.4	.0	14	100	30	3.7	1.2	.1	2
DATE	CAR- BONATE (CO3) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)
APR. 14...	0	380	24	312	66	18	.1	.00	.09	.06	.00
DATE	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
APR. 14...	421	370	62	3.0	3	0	0	230	140	0	250

394847082542000 - FR-44 AT OLD SCHOOLHOUSE SOUTH OF GROVEPORT OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	HYDROGEN SULFIDE (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	SODIUM ADSORPTION RATIO	PERCENT SODIUM	
APR. 18...	1030	463	7.5	.0	7.7	62	19	13	.6	.4	11	
DATE		CARBONATE (CO3) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
APR. 18...	0		238	12	195	58	7.6	.1	.00	.01	.00	.01
DATE		DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
APR. 18...	285		230	38	5.0	1	<10	0	40	20	1	460

395143082563800 - FR-47 INDUSTRIAL PARK E OF REESE OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	HYDRO- GEN SULFIDE (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM	
APR. 15...	1530	679	7.4	.2	10	100	28	6.8	8.6	.2	4	
DATE		CAR- BONATE (CO3) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)
APR. 15...	0		384	24	315	38	4.9	.3	.00	8.6	.05	.04
DATE		DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
APR. 15...	386		370	50	4.8	1	0	0	40	20	9	120

395229082564600 - FR-49 OBETZ CEMETERY AT OBETZ OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	HYDRO- GEN SULFIDE (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM	
APR. 14...	1130	717	7.2	.7	12	110	37	4.7	1.4	.1	2	
DATE		CAR- BONATE (CO3) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)
APR. 14...	0		400	40	328	94	11	.2	.01	.01	.06	.05
DATE		DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
APR. 14...	470		430	99	6.8	13	0	0	2000	140	28	1900

395230082591300 - FR-52 FISHER NR OHETZ OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	HYDROGEN SULFIDE (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	SODIUM ADSORPTION RATIO	PERCENT SODIUM
APR. 24...	0915	728	7.4	.0	13	110	35	5.9	1.3	.1	3
DATE	CARBONATE (CO3) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
APR. 24...	0	376	24	308	98	13	.4	.01	.00	.03	.00
DATE	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
APR. 24...	464	420	110	3.2	1	<10	0	2300	80	1	130

395241082533900 - FR-53 HARPER N OF GROVEPORT OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	HYDROGEN SULFIDE (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	SODIUM ADSORPTION RATIO	PERCENT SODIUM
APR. 17...	0930	615	7.4	.0	8.6	75	22	17	16	.4	11

DATE	CARBONATE (CO3) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CaCO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
APR. 17...	0	282	18	231	37	22	.2	.00	9.8	.01	.01

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
APR. 17...	337	280	47	4.0	0	0	0	30	10	1	80

CHEMICAL ANALYSES OF GROUND WATER IN FRANKLIN COUNTY--Continued

394930082563800 - FR-56 RICKENBACKER AFB NR LOCKBOURNE OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	HYDRO- GEN SULFIDE (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
APR. 28...	1415	665	7.5	.0	18	98	31	8.0	1.6	.2	4
DATE	CAR- BONATE (CO3) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)
APR. 28...	0	458	23	376	21	5.9	.3	.02	.23	.29	.01
DATE	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
APR. 28...	411	370	0	6.9	21	0	10	1400	150	0	90

394927082595800 - FR-70 ST JOSEPH CEMETERY AT SHADEVILLE OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	HYDRO- GEN SULFIDE (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
APR. 10...	1430	435	7.8	.0	9.3	64	22	3.1	3.8	.1	3
DATE	CAR- BONATE (CO3) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)
APR. 10...	0	278	7.1	228	17	5.1	.2	.01	.73	.18	.03
DATE	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
APR. 10...	262	250	22	2.6	3	0	0	10	20	0	130

CHEMICAL ANALYSES OF GROUND WATER IN FRANKLIN COUNTY--Continued

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395114083010400 - FR-101 MAHMAN FARMS ON SCIOTO NR SHADEVILLE OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	FLOW RATE (GPM)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	HYDROGEN SULFIDE (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	SODIUM ADSORPTION RATIO	PERCENT SODIUM
MAY 06...	1400	--	458	7.4	4.8	12	120	40	14	1.7	.3	6
AUG. 27...	1200	12	475	6.8	22	14	140	56	21	2.8	.4	7

DATE	CARBONATE (CO3) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CAC03 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)
MAY 06...	0	350	22	287	180	32	.6	.01	.00	.09	.01
AUG. 27...	0	444	113	364	240	27	1.4	.00	.01	.18	.01

DATE	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
MAY 06...	574	460	180	4.0	--	--	--	1100	60	--	--
AUG. 27...	721	580	220	--	0	10	10	160	30	4	20

395046083003100 - FR-103 COLS TEST PATTERN N OF SHADEVILLE OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	HYDROGEN SULFIDE (MG/L)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	SODIUM ADSORPTION RATIO
DEC. 11...	1530	810	7.0	2.0	14	120	41	18	1.3	.4
20...	1000	849	7.2	1.1	14	110	40	10	1.2	.2

DATE	PERCENT SODIUM	CARBONATE (CO3) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	ALKALINITY AS CAC03 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)
DEC. 11...	8	0	446	71	366	120	40	.7	.00
20...	5	0	414	42	340	98	25	.6	.01

DATE	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
DEC. 11...	.02	.16	.01	575	470	100	.5	240	50
20...	.17	.07	.01	503	440	100	.9	470	50

CHEMICAL ANALYSES OF GROUND WATER IN FRANKLIN COUNTY--Continued

395020083003100 - FR-104 COLS TEST PATTERN N OF SHADEVILLE OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	HYDRO- GEN SULFIDE (MG/L)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
APR. 02...	1400	746	7.4	.1	13	100	35	10	1.4	.2	5
AUG. 26...	1230	714	7.2	.0	13	100	37	7.2	1.2	.2	4
29...	1200	755	6.8	.0	13	104	30	6.9	1.2	.2	4

DATE	CAR- BONATE (CO ₃) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)
APR. 02...	0	400	25	326	72	25	.6	.01	.00	.24	.33
AUG. 26...	0	400	40	328	63	16	.5	.01	.04	.13	.03
29...	0	384	97	315	72	19	.5	.02	.35	.09	.01

DATE	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
APR. 02...	455	390	66	.8	--	--	--	1200	70	--	--
AUG. 26...	437	400	74	1.4	3	10	10	1500	50	1	2200
29...	437	380	68	5.6	2	10	10	1300	50	5	60

394954083002800 - FR-106 COLS TEST PATTERN N OF SHADEVILLE OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	HYDRO- GEN SULFIDE (MG/L)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	SODIUM AD- SORP- TION RATIO
FEB. 07...	1500	845	7.3	.0	12	110	42	5.7	1.8	.1
12...	1400	804	7.2	.0	12	120	37	6.0	2.0	.1

DATE	PERCENT SODIUM	CAR- BONATE (CO ₃) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CARBON DIOXIDE (CO ₂) (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)
FEB. 07...	3	0	392	31	322	81	57	.2	.03
12...	3	0	396	40	325	76	40	.2	.00

DATE	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
FEB. 07...	1.3	.05	.10	505	450	130	1.5	2100	80
12...	.03	.09	.01	490	450	130	.7	1400	80

CHEMICAL ANALYSES OF GROUND WATER IN FRANKLIN COUNTY--Continued

573

394808082582500 - PK-42 HRYAN S OF LOCKBOURNE OH

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	HYDRO- GEN SULFIDE (MG/L)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM	
APR. 23...	1345	720	7.4	.0	8.6	100	32	3.0	12	.1	2	
DATE		CAR- BONATE (C03) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CARBON DIOXIDE (C02) (MG/L)	ALKA- LINITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)
APR. 23...	0	450	29	369	34	7.6	.3	.08	2.1	4.3	.53	
DATE		DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL ARSENIC (AS) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL ZINC (ZN) (UG/L)
APR. 23...	420	380	12	8.1	3	10	0	270	70	8	140	

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 1975. 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.

393333084441400	Acton Lake	Butler County
410202080595100	Berlin Lake	Mahoning County
395548082274300	Buckeye Lake	Perry County
404152082363300	Clear Fork Reservoir	Richland County
392317083552100	Cowan Lake	Clinton County
393717083130200	Deer Creek Lake	Pickaway County
403135084291400	Grand Lake St. Marys	Mercer County
404746080520900	Guilford Lake	Columbiana County
400636082530200	Hoover Reservoir	Franklin County
391914082211800	Lake Hope	Vinton County
402201084212800	Lake Loraie	Shelby County
383624082375300	Lake Vesuvius	Lawrence County
391450083212200	Paint Creek Lake	Highland County
391111083263200	Rocky Fork Lake	Highland County
400617081331600	Salt Fork Lake	Guernsey County

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