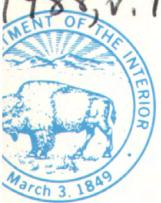
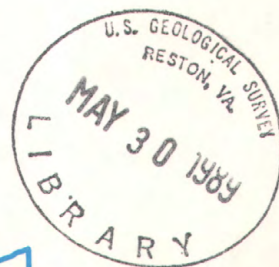


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Water Resources Data Ohio Water Year 1988

Volume 1. Ohio River Basin
Excluding Project Data



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OH-88-1
Prepared in cooperation with the State of Ohio
and with other agencies

CALENDAR FOR WATER YEAR 1988

1987

| OCTOBER | | | | | | | NOVEMBER | | | | | | | DECEMBER | | | | | | |
|---------|----|----|----|----|----|----|----------|----|----|----|----|----|----|----------|----|----|----|----|----|----|
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| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 | 29 | 30 | | | | | | 27 | 28 | 29 | 30 | 31 | | |

1988

| JANUARY | | | | | | | FEBRUARY | | | | | | | MARCH | | | | | | |
|---------|----|----|----|----|----|----|----------|----|----|----|----|----|----|-------|----|----|----|----|----|----|
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| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
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| APRIL | | | | | | | MAY | | | | | | | JUNE | | | | | | |
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| 3 | 4 | 5 | 6 | 7 | 8 | 9 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 | 29 | 30 | 31 | | | | | 26 | 27 | 28 | 29 | 30 | | |

| JULY | | | | | | | AUGUST | | | | | | | SEPTEMBER | | | | | | |
|------|----|----|----|----|----|----|--------|----|----|----|----|----|----|-----------|----|----|----|----|----|----|
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| 3 | 4 | 5 | 6 | 7 | 8 | 9 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 | 28 | 29 | 30 | 31 | | | | 25 | 26 | 27 | 28 | 29 | 30 | |
| 31 | | | | | | | | | | | | | | | | | | | | |



Water Resources Data Ohio Water Year 1988

Volume 1. Ohio River Basin Excluding Project Data

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



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OH-88-1
Prepared in cooperation with the State of Ohio
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

MANUEL LUJAN, JR., SECRETARY

GEOLOGICAL SURVEY

Dallas L. Peck, Director

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District Chief, Water Resources Division
U.S. Geological Survey
975 West Third Avenue
Columbus, OH 43212-3192

1989

PREFACE

This volume of the annual hydrologic data report of Ohio is one of the series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provides the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for Ohio are contained in 2 volumes:

Volume 1. Ohio River Basin

Volume 2. St. Lawrence River Basin - Statewide Project Data

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

| | | |
|----------------|-----------------|----------------|
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This report was prepared in cooperation with the State of Ohio and with other agencies under the general supervision of S.M. Hindall District Chief, Ohio.

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| 4. Title and Subtitle Water Resources Data--Ohio, 1988 Volume 1. Ohio River Basin | | | 5. Report Date April 1989 |
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| 15. Supplementary Notes Prepared in cooperation with the State of Ohio and with other agencies. | | | |
| 16. Abstract (Limit: 200 words) Water-resources data for the 1988 water year for Ohio consist of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; and water levels and water quality of ground-water wells. This report, in two volumes, contains records for water discharge at 133 gaging stations, stage and contents at 9 lakes and reservoirs; water quality at 34 gaging stations, 59 wells, and 47 partial-record sites; and water levels at 450 observation wells. Also included are data from miscellaneous sites. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Ohio. | | | |
| 17. Document Analysis a. Descriptors *Ohio, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rates, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperature, Sampling sites, Water levels, Water analyses, Streamflow, Water wells. b. Identifiers/Open-Ended Terms c. COSATI Field/Group | | | |
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GAGING STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

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

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DISCONTINUED STATIONS

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

| Station number | Station name | Characteristic measured | Period of record |
|----------------|--|-------------------------|------------------|
| 03087000 | BEECH CREEK NR BOLTON | TEMP | 1943-51 |
| 03088000 | DEER CREEK AT LIMAVILLE | DIS | 1941-51 |
| 03088500 | MAHONING RIVER NR DEERFIELD | DIS | 1923-31 |
| 03089000 | WILLOW CREEK NR DEERFIELD | DIS | 1941-43 |
| 03089500 | MILL CREEK NR BERLIN CENTER | DIS | 1941-71 |
| 03092500 | W B MAHONING R NR NEWTON FALLS | DIS | 1926-81 |
| 03093500 | DUCK CREEK AT LEAVITTSBURG | DIS | 1941-48 |
| 03093800 | MAHONING R AB DUCK C AT LEAVITTSBURG | TEMP | 1968-51 |
| | | COND | 1968-82 |
| | | DO | 1968-82 |
| | | PH | 1968-82 |
| 03094500 | MAHONING RIVER AT WARREN | TEMP | 1946-48 |
| | | DIS | 1924-35 |
| 03096000 | MOSQUITO CREEK AT NILES | DIS | 1929-51 |
| 03096500 | MEANDER CREEK AT OHLESTOWN | DIS | 1926-29 |
| 03097500 | MEANDER CREEK AT MINERAL RIDGE | DIS | 1929 51 |
| 03098000 | MAHONING RIVER AT YOUNGSTOWN | TEMP | 1952-53 |
| | | DIS | 1921-82 |
| 03098500 | MILL CREEK AT YOUNGSTOWN | DIS | 1943-71 |
| 03099500 | MAHONING RIVER AT LOWELLVILLE | TEMP | 1953-61 |
| | | COND | 1963-67 |
| | | DO | 1963-66 |
| | | PH | 1963-67 |
| 03109000 | LISBON CREEK AT LISBON | DIS | 1946-62 |
| 03109326 | STATELINE CREEK NR NEGLEY | DIS | 1977-78 |
| | | TEMP | 1977-78 |
| | | COND | 1977-78 |
| | | DO | 1977-78 |
| | | PH | 1977-78 |
| 03109600 | OHIO RIVER AT EAST LIVERPOOL | TEMP | 1963-64 |
| 03110500 | YELLOW CREEK AT HAMMONDSVILLE | DIS | 1915-35 |
| 03110700 | OHIO RIVER AT STRATTON | TEMP | 1961-70 |
| | | COND | 1964-70 |
| 03110983 | CONSOL RUN NR BLOOMINGDALE | DIS | 1978-81 |
| | | SED | 1979-81 |
| 03115400 | LITTLE MUSKINGUM R AT BLOOMFIELD | DIS | 1958-81 |
| 03115500 | LITTLE MUSKINGUM R AT FAY | DIS | 1915-35 |
| 03116000 | TUSCARAWAS RIVER AT CLINTON | DIS | 1926-78 |
| 03116200 | CHIPPEWA CREEK AT EASTON | DIS | 1960-81 |
| 03116500 | TUSCARAWAS R AT CRYSTAL SPRINGS | DIS | 1921-29 |
| 03117100 | TUSCARAWAS R AT NAVARRE | TEMP | 1968-84 |
| | | COND | 1968-84 |
| | | DO | 1968-84 |
| | | PH | 1968-84 |
| 03119000 | SANDY CREEK AT SANDYVILLE | DIS | 1923-47 |
| 03121500 | INDIAN F BL ATWOOD DAM NR NEW CUMBERLAND | DIS | 1960-75 |
| 03123000 | SUGAR C AB BEACH CITY DAM AT BEACH CITY | DIS | 1945-75 |
| 03125000 | HOME C NR NEW PHILADELPHIA | DIS | 1936-79 |
| 03127970 | CLEAR FORK TRIB NR HANOVER | DIS | 1978-81 |
| 03130500 | TOUBY RUN AT MANSFIELD | DIS | 1946-78 |
| 03131000 | ROCKY FORK NR MANSFIELD | DIS | 1925-32 |
| 03132000 | CLEAR FORK AT BUTLER | DIS | 1945-75 |
| 03132500 | CLEAR FORK AT NEWVILLE | DIS | 1934-39 |
| 03134000 | JEROME FORK AT JEROMEVILLE | DIS | 1925-49 |
| 03135500 | LAKE FORK NR LOUDONVILLE | DIS | 1931-39 |
| 03136000 | MOHICAN RIVER AT GREER | DIS | 1921-82 |
| 03136400 | N B KOKOSING R NR FREDERICKTOWN | DIS | 1973-78 |
| 03137000 | KOKOSING RIVER AT MILLWOOD | DIS | 1921-35 |
| 03139500 | KILLBUCK CREEK AT LAYLAND | DIS | 1923-30 |
| 03142295 | SALT FORK BL SALT F DAM NR CAMBRIDGE | DIS | 1970-81 |
| 03142500 | WILLS CREEK AT BIRDS RUN | DIS | 1928-39 |
| 03144400 | SAND FORK NR WAKATOMIKA | DIS | 1978-82 |
| | | SED | 1978-81 |
| 03144450 | OPOSSUM RUN TR NR WAKATOMIKA | DIS | 1978-82 |
| 03144500 | MUSKINGUM RIVER AT DRESDEN | DIS | 1921-84 |
| 03145500 | RACCOON C AT GRANVILLE | DIS | 1939-48 |
| 03146000 | NORTH FORK LICKING R AT UTICA | TEMP | 1970-73 |
| | | DIS | 1939-48 |
| | | | 1969-82 |
| 03147000 | LICKING R AT TOBOSO | DIS | 1902 |
| | | | 1904-06 |
| | | | 1921-61 |

DISCONTINUED STATIONS--Continued

IX

| Station number | Station name | Charac- teristic measured | Period of record |
|-------------------|---|---------------------------------|------------------------|
| 03148000 | MUSKINGUM R AT ZANESVILLE | DIS | 1939-55 |
| 03149200 | MUSKINGUM R AT PHILO | TEMP | 1965-74 |
| | | COND | 1965-74 |
| | | DO | 1965-74 |
| | | PH | 1965-74 |
| 03149500 | SALT C NR CHANDLERSVILLE | DIS | 1935-47 |
| 03150250 | MEIGS CREEK NR BEVERLY | DIS | 1972-75 |
| 03150300 | MUSKINGUM R NR BEVERLY | TEMP | 1963-70 |
| | | COND | 1964-70 |
| 03155900 | N B HUNTERS RUN NR HOOKER | SED | 1956-62 |
| 03156000 | HUNTERS RN AT LANCASTER | DIS | 1956-80 |
| 03156400 | HOCKING RN AT LANCASTER | DIS | 1956-74 |
| 03156500 | HOCKING RN NR LANCASTER | DIS | 1923-32 |
| 03158000 | CLEAR FORK NR LOGAN | DIS | 1942-47 |
| 03159500 | HOCKING RIVER AT ATHENS | DIS | 1915-76 |
| | | TEMP | 1954-65 |
| | | G HT | 1976-77 |
| | | COND | 1964-65 |
| | | SED | 1956-65 |
| 03159540 | SHADE R NR CHESTER | DIS | 1965-84 |
| 03201600 | SANDY R AB BIG FOUR HOLLOW C NR LAKE HOPE | TEMP | 1971-78 |
| | | COND | 1971-78 |
| | | PH | 1971-78 |
| | | DIS | 1970-81 |
| 03201630 | E F BIG FOUR HOLLOW C NR LAKE HOPE | DIS | 1978-79 |
| 03201660 | BIG FOUR HOLLOW C BL E F NR LAKE HOPE | DIS | 1978-81 |
| 03201700 | BIG FOUR HOLLOW C NR LAKE HOPE | TEMP | 1971-83 |
| | | COND | 1971-83 |
| | | PH | 1971-83 |
| | | DIS | 1970-83 |
| | | SED | 1978-83 |
| 03201720 | HULL HOLLOW C NR LAKE HOPE | DIS | 1978-81 |
| 03201800 | SANDY RUN NR LAKE HOPE | DIS | 1957-78 |
| | | TEMP | 1970-78 |
| | | COND | 1970-78 |
| | | DO | 1970-78 |
| 03202000 | RACCOON CREEK AT ADAMSVILLE | DIS | 1915-35 |
| | | | 1938-85 |
| | | TEMP | 1967-84 |
| | | COND | 1967-84 |
| | | DO | 1967-84 |
| | | PH | 1967-84 |
| | | SED | 1969-74 |
| | | | 1985 |
| | | PH | 1970-78 |
| 03205500 | SYMMES C AT GETAWAY | DIS | 1938-47 |
| 03217500 | SCIOTO R AT LARUE | DIS | 1926-35 |
| | | | 1938-51 |
| 03218000 | L SCIOTO R AB MARION | DIS | 1938-71 |
| 03218500 | L SCIOTO R AT STP NR MARION | DIS | 1926-35 |
| | | | 1938-39 |
| 03219000 | L SCIOTO R NR MARION | DIS | 1923-25 |
| | | | 1939 |
| 03219600 | EAGON R NR WARRENSBURG | DIS | 1949-62 |
| 03222500 | OLENTANGY R NR NEW WINCHESTER | DIS | 1946-49 |
| 03223500 | WHESTONE C NR SHAWTOWN | DIS | 1946-55 |
| 03224000 | SHAW C AT SHAWTOWN | DIS | 1946-55 |
| 03224500 | WHESTONE C NR ASHLEY | DIS | 1954-74 |
| | | COND | 1964-68 |
| 03226000 | OLENTANGY R AT DELAWARE | DIS | 1921-23 |
| 03226500 | OLENTANGY R AT STRATFORD | DIS | 1934-35 |
| | | | 1938-58 |
| 03226800 | OLENTANGY R NR WORTHINGTON | DIS | 1955-84 |
| | | TEMP | 1955-68 |
| | | SED | 1978-81 |
| 03226865 | RUSH RUN AT WORTHINGTON | DIS | 1978-81 |
| | | SED | 1978-81 |
| 03226870 | LINWORTH RD C AT COLUMBUS | DIS | 1978-81 |
| | | SED | 1978-81 |
| 03226872 | UNNAMED TR TO OLENTANGY R AT 315 EXPWY | DIS | 1979-81 |
| 03226875 | BETHEL ROAD C AT COLUMBUS | DIS | 1978-81 |
| | | SED | 1978-81 |
| 03226885 | OLENTANGY R AT HENDERSON RD AT COL | DIS | 1978-81 |
| | | SED | 1978-81 |
| 03228000 | SCIOTO BIG RUN AT BRIGGS DALE | DIS | 1946-58 |
| 03228750 | ALUM CR AT KILBOURNE | DIS | 1973-82 |
| 03228805 | ALUM CR AT AFRICA | TEMP | 1965-70 |
| | | COND | 1965-70 |

DISCONTINUED STATIONS--Continued

| Station number | Station name | Characteristic measured | Period of record |
|----------------|---------------------------------------|-------------------------|------------------|
| 03229600 | SCIOTO RIVER BL SHADEVILLE | TEMP | 1965-80 |
| | | COND | 1965-80 |
| | | DO | 1965-80 |
| | | PH | 1971-80 |
| 03230000 | SCIOTO RIVER NR CIRCLEVILLE | DIS | 1939-56 |
| 03230700 | SCIOTO RIVER AT CIRCLEVILLE | DIS | 1973-79 |
| 03230800 | DEER C AT MT STERLING | DIS | 1966-81 |
| 03232000 | PAINT C NR GREENFIELD | DIS | 1926-35 |
| | | | 1939-56 |
| | | | 1966-81 |
| | | TEMP | 1974-78 |
| 03232300 | RATTLESNAKE C AT CENTERFIELD | DIS | 1971-81 |
| | | TEMP | 1974-78 |
| 03235000 | SALT C AT TARLTON | DIS | 1946-61 |
| 03235500 | TAR HOLLOW C AT TAR HOLLOW STATE PARK | DIS | 1946-78 |
| 03235995 | SALT C NR LONDONDERRY | TEMP | 1973-74 |
| 03236000 | SALT C NR LONDONDERRY | DIS | 1938-50 |
| 03236500 | L SALT C NR JACKSON | DIS | 1925-32 |
| 03237100 | SCIOTO RIVER AT LUCASVILLE | TEMP | 1956-74 |
| | | COND | 1965-74 |
| 03239000 | L MIAMI R NR SELMA | DIS | 1952-58 |
| | | TEMP | 1952-58 |
| | | SED | 1952-58 |
| 03239500 | N F L MIAMI R NR PITCHIN | DIS | 1952-58 |
| | | TEMP | 1952-58 |
| | | SED | 1952-58 |
| 03240500 | N F MASSIE C AT CEDARVILLE | DIS | 1954-68 |
| | | TEMP | 1954-68 |
| | | SED | 1954-68 |
| 03241000 | S F MASSIE C NR CEDARVILLE | DIS | 1954-68 |
| | | TEMP | 1954-68 |
| | | SED | 1954-58 |
| 03242000 | L MIAMI R AT SPRING VALLEY | DIS | 1925-35 |
| | | | 1939-51 |
| | | | 1968-79 |
| 03242050 | L MIAMI R NR SPRING VALLEY | DIS | 1968-83 |
| | | TEMP | 1968-80 |
| | | COND | 1968-80 |
| | | DO | 1968-80 |
| | | PH | 1968-80 |
| 03242150 | CAESAR C NR XENIA | DIS | 1900 |
| | | | 1968-83 |
| 03242200 | ANDERSON F NR NEW BURLINGTON | DIS | 1968-83 |
| 03242300 | CAESAR C AT HARVEYSBURG | DIS | 1960-75 |
| | | TEMP | 1970-75 |
| | | COND | 1970-75 |
| 03242350 | CAESAR C NR WELLMAN | DIS | 1965-74 |
| 03242500 | L MIAMI R NR FORT ANCIENT | DIS | 1939-51 |
| 03243000 | TODD FORK NR WILMINGTON | DIS | 1923 |
| | | | 1942-44 |
| 03243500 | COWAN C NR WILMINGTON | DIS | 1942-50 |
| 03244000 | TODD FORK NR ROACHESTER | DIS | 1952-74 |
| | | TEMP | 1952-58 |
| | | SED | 1952-58 |
| 03245300 | L MIAMI R AT MIAMIVILLE | TEMP | 1970-75 |
| | | COND | 1970-75 |
| | | DO | 1970-75 |
| | | PH | 1970-75 |
| 03245500 | L MIAMI R AT MILFORD | TEMP | 1975-84 |
| | | COND | 1975-84 |
| | | DO | 1975-84 |
| | | PH | 1975-84 |
| | | SED | 1978-84 |
| 03246000 | E F L MIAMI R NR DODSONVILLE | DIS | 1947-48 |
| 03246200 | E F L MIAMI R NR MARATHON | DIS | 1968-83 |
| 03246400 | E F L MIAMI R NR WILLIAMSBURG | TEMP | 1970-75 |
| | | COND | 1970-75 |
| 03246500 | E F L MIAMI R AT WILLIAMSBURG | DIS | 1949-53 |
| | | | 1960-74 |
| 03247000 | E F L MIAMI R NR BANTAM | DIS | 1948-53 |
| 03247400 | SHAYLER RUN NR PERINTOWN | DIS | 1968-73 |
| 03248000 | L MIAMI R AT PLAINVILLE | DIS | 1965-71 |
| 03256000 | W F MILL C AT MT HEALTHY | DIS | 1949-53 |
| 03257000 | W F MILL C NR GREENHILLS | DIS | 1945-53 |
| 03257500 | W F MILL C AT WOODLAWN | DIS | 1952-83 |
| 03258000 | W F MILL C AT LOCKLAND | DIS | 1938-57 |
| 03260800 | STONY C NR DEGRAFF | DIS | 1957-75 |
| 03261000 | G MIAMI R AT QUINCY | DIS | 1946-49 |
| 03262500 | G MIAMI R AT PIQUA | DIS | 1914-17 |

DISCONTINUED STATIONS--Continued

XI

| Station number | Station name | Charac- teristic measured | Period of record |
|-------------------|-----------------------------------|---------------------------------|------------------------|
| 03262745 | G MIAMI R AT TIPP CITY | TEMP | 1978-80 |
| | | COND | 1978-80 |
| | | DO | 1978-80 |
| | | PH | 1978-80 |
| 03263500 | GREENVILLE C NR GREENVILLE | DIS | 1929-31 |
| 03264500 | STILLWATER R AT COVINGTON | DIS | 1930-35 |
| 03267500 | MAD R AT TREMONT CITY | DIS | 1931-33 |
| | | | 1965-74 |
| 03267600 | CHAPMAN C AT TREMONT CITY | DIS | 1967-69 |
| 03267700 | MOORE RUN NR EAGLE CITY | DIS | 1965-72 |
| 03267800 | MAD RIVER AT EAGLE CITY | DIS | 1965-71 |
| | | TEMP | 1965-69 |
| | | SED | 1965-69 |
| 03267950 | BUCK C NR NEW MOOREFIELD | DIS | 1967-76 |
| | | TEMP | 1971 |
| | | COND | 1971 |
| 03267960 | E F BUCK C NR NEW MOOREFIELD | DIS | 1967-76 |
| 03268000 | BUCK C AT NEW MOOREFIELD | DIS | 1942-58 |
| | | TEMP | 1970-75 |
| | | COND | 1970-76 |
| 03268500 | BEAVER C NR SPRINGFIELD | DIS | 1942-58 |
| | | | 1972-76 |
| 03269000 | BUCK C AT SPRINGFIELD | DIS | 1914-21 |
| | | | 1924-49 |
| | | | 1973-74 |
| 03270800 | WOLF C AT TROTWOOD | DIS | 1962-84 |
| 03271075 | G MIAMI R NR STEWART ST AT DAYTON | TEMP | 1978-80 |
| | | COND | 1978-80 |
| | | DO | 1978-80 |
| | | PH | 1978-80 |
| 03271600 | G MIAMI R NR MIAMISBURG | TEMP | 1964-78 |
| | | COND | 1964-78 |
| | | DO | 1964-78 |
| | | PH | 1964-78 |
| 03272410 | G MIAMI R AT ROCKDALE | TEMP | 1978-80 |
| | | COND | 1978-80 |
| | | DO | 1978-80 |
| | | PH | 1978-80 |
| 03272800 | SEVENMILE C AT COLLINSVILLE | DIS | 1960-62 |
| 03273000 | SEVENMILE C AT SEVENMILE | DIS | 1914-20 |
| 03273500 | FOURMILE C NR HAMILTON | DIS | 1937-60 |
| 03274500 | G MIAMI R AT VENICE | DIS | 1915-27 |
| | | | 1932-33 |
| 03274600 | G MIAMI R AT NEW BALTIMORE | TEMP | 1966 |
| | | | 1968-82 |
| | | COND | 1966 |
| | | | 1969-82 |
| | | DO | 1968-82 |
| | | PH | 1975-82 |
| 03276600 | G MIAMI R AT ELIZABETHTOWN | TEMP | 1956-74 |
| | | COND | 1964-74 |

GROUND-WATER STATIONS FOR WHICH RECORDS ARE PUBLISHED

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

| Well number | Local number | Location | Page |
|------------------|--------------|--|------|
| ASHLAND COUNTY | | | |
| 405303082170700 | AS-2 | Ashland (l) | 200 |
| 405425082173000 | AS-3 | Jerome Fork (l) | 201 |
| ATHENS COUNTY | | | |
| 392004082071600 | AT-2A | Athens (l) | 202 |
| 392009082072200 | AT-5 | Athens (l) | 203 |
| AUGLAIZE COUNTY | | | |
| 403233083574500 | AU-3 | Southwest of New Hampshire (l) | 205 |
| BELMONT COUNTY | | | |
| 400118081082200 | B-3 | Mount Olive (l) | 206 |
| BUTLER COUNTY | | | |
| 391805084261800 | BU-9 | Northwest of Sharonville (l) | 207 |
| 393202084241500 | BU-15 | Middletown (l) | 207 |
| 391904084371800 | BU-12 | East of Ross (l) | 208 |
| 392017084345200 | BU-7 | Fairfield (l) | 209 |
| 392021084340300 | BU-56 | Fairfield (l) | 210 |
| 392048084311400 | BU-8 | East of Hamilton (l) | 211 |
| 392445084333000 | BU-36 | Hamilton (c) | 212 |
| 392515084322000 | BU-5 | North of Hamilton (l) | 213 |
| 392939084231700 | BU-3 | Middletown (l) | 214 |
| 393103084240900 | BU-2 | Middletown (l) | 215 |
| CARROLL COUNTY | | | |
| 403709081052800 | C-1 | North of Carrollton (l) | 216 |
| CHAMPAIGN COUNTY | | | |
| 400638083453900 | CH-3 | Urbana (l) | 217 |
| CLARK COUNTY | | | |
| 395639084012200 | CL-9 | New Carlisle (l) | 218 |
| 395840083495200 | CL-7 | Northwest of Springfield (l) | 219 |
| COSHOCTON COUNTY | | | |
| 401256081525100 | CS-3 | North of Conesville (l) | 220 |
| DARKE COUNTY | | | |
| 400514084345700 | D-2 | East of Greenville (l) | 221 |
| DELAWARE COUNTY | | | |
| 402126083040400 | DL-3 | Delaware (l) | 222 |
| FAIRFIELD COUNTY | | | |
| 393450082403600 | F-7 | Southeast of Amanda (l) | 223 |
| 394257082362900 | F-6 | Lancaster (l) | 223 |
| 394544082271000 | F-1 | West Rushville (l) | 225 |
| 395053082361900 | F-5 | Baltimore (l) | 226 |
| FAYETTE COUNTY | | | |
| 393153083322000 | FA-1 | West of Washington Court House (l) | 227 |
| FRANKLIN COUNTY | | | |
| 394956083002700 | FR-18 | South of Shadeville (l) | 228 |
| 395118083573300 | FR-3 | Southwest of Rees (l) | 229 |
| 395157083003500 | FR-109 | Columbus (l) | 230 |
| 400101083021800 | FR-10 | Columbus (l) | 231 |

| Well Number | Local number | Location | Page |
|-------------------|--------------|--|------|
| GALLIA COUNTY | | | |
| 383638082103300 | G-2 | East of Crown City (1) | 232 |
| GREENE COUNTY | | | |
| 394330083531400 | GR-11 | Near Wilberforce (1) | 233 |
| 394411083561300 | GR-1 | North of Xenia (1) | 234 |
| 394425083551100 | GR-10 | North of Xenia (1) | 235 |
| HAMILTON COUNTY | | | |
| 391003084291500 | H-11 | Cincinnati (1) | 236 |
| 391101084172100 | H-3 | Southeast of Miami (1) | 237 |
| 391201084281600 | H-10 | Cincinnati (1) | 238 |
| 391214084470100 | H-1 | Southeast of Harrison (1) | 239 |
| 391324084272500 | H-9 | Cincinnati (1) | 240 |
| 391341084275300 | H-8 | Wyoming (1) | 241 |
| 391442084262900 | H-7 | Evendale (1) | 242 |
| 391608084254400 | H-6 | Glendale (1) | 243 |
| 391733084392400 | H-2 | South of Ross (1) | 244 |
| 391748084393800 | H-19 | Southwest of Venice (c) | 245 |
| 391817084393300 | H-4 | Southwest of Ross (1) | 246 |
| HARDIN COUNTY | | | |
| 404218083503700 | HN-1 | Alger (1) | 247 |
| HOCKING COUNTY | | | |
| 393200082235300 | HK-1 | Logan (1) | 248 |
| KNOX COUNTY | | | |
| 402344082300700 | K-1 | Mt. Vernon (1) | 249 |
| MADISON COUNTY | | | |
| 395301083272200 | M-2 | London (1) | 250 |
| 395352083292100 | M-5 | Northwest of London (1) | 251 |
| 395357083304400 | M-4 | Northwest of London (1) | 252 |
| 395740083255700 | M-3 | North of London (1) | 253 |
| MAHONING COUNTY | | | |
| 400042080453800 | MA-1 | Canfield (1) | 254 |
| MARION COUNTY | | | |
| 403413083170500 | MN-4 | Southeast of New Bloomington (1) | 255 |
| 403443083230400 | MN-1 | LaRue (1) | 256 |
| 403601083110400 | MN-2 | West of Marion (1) | 257 |
| MEDINA COUNTY | | | |
| 410120081431800 | MD-3 | Wadsworth (1) | 258 |
| MERCER COUNTY | | | |
| 402833084375200 | MR-2 | Coldwater (1) | 259 |
| MIAMI COUNTY | | | |
| 395848084085500 | MI-3 | Northeast of Tipp City (1) | 260 |
| 400308084112900 | MI-44 | Troy (c) | 261 |
| MONTGOMERY COUNTY | | | |
| 393757084173600 | MT-928 | Miamisburg (c) | 262 |
| 394012084151700 | MT-55 | West Carrollton (1) | 263 |
| 394025084162800 | MT-49 | West Carrollton (1) | 264 |
| 394425084113200 | MT-3 | Dayton (1) | 265 |
| 394533084113800 | MT-6 | Dayton (1) | 266 |
| MUSKINGUM COUNTY | | | |
| 395804081593200 | MU-1A | Zanesville (1) | 267 |

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

| Well Number | Local number | Location | Page |
|-------------------|--------------|------------------------------------|------|
| PICKAWAY COUNTY | | | |
| 393327082571600 | PK-7 | South of Circleville (1) | 268 |
| 393402082572500 | PK-4 | South of Circleville (1) | 269 |
| 393638082572300 | PK-6 | Northwest of Circleville (1) | 270 |
| 393438083072200 | PK-8 | Williamsport (1) | 271 |
| 394742083094800 | PK-9 | Near Orient (1) | 272 |
| PIKE COUNTY | | | |
| 390359083015100 | PI-2 | West of Piketon (1) | 273 |
| PORTAGE COUNTY | | | |
| 411401081025000 | PO-1 | Windham (1) | 274 |
| PREBLE COUNTY | | | |
| 394438084335900 | PR-2 | East of Eaton (1) | 275 |
| RICHLAND COUNTY | | | |
| 404625082305100 | R-4 | Mansfield (1) | 276 |
| ROSS COUNTY | | | |
| 391341083172200 | RO-7 | West of Bainbridge (1) | 277 |
| 391913082580500 | RO-8 | Chillicothe (1) | 278 |
| SHELBY COUNTY | | | |
| 401712084103500 | SH-4 | Sidney (1) | 279 |
| STARK COUNTY | | | |
| 404939081203800 | ST-5A | Canton (1) | 280 |
| 405211081253500 | ST-27 | North Canton (1) | 281 |
| SUMMIT COUNTY | | | |
| 410141081315200 | SU-4A | Akron (1) | 282 |
| TRUMBULL COUNTY | | | |
| 411604080505600 | T-3 | Near Warren (1) | 283 |
| TUSCARAWAS COUNTY | | | |
| 403207081293800 | TU-3 | Dover (1) | 284 |
| 403557081313600 | TU-4 | Strasburg (1) | 285 |
| 403653081321800 | TU-1 | North of Strasburg (1) | 286 |
| 403823081324200 | TU-5 | Near Strasburg (1) | 287 |
| UNION COUNTY | | | |
| 401826083255200 | U-4 | Southeast of Raymond (1) | 288 |
| VINTON COUNTY | | | |
| 391452082282900 | V-1 | McArthur (1) | 289 |
| WARREN COUNTY | | | |
| 392712084191700 | W-5 | East of Monroe (1) | 290 |
| WASHINGTON COUNTY | | | |
| 392553081281600 | WA-2 | Marietta (1) | 291 |
| WAYNE COUNTY | | | |
| 404655081553200 | WN-3 | Near Wooster (1) | 292 |
| 404802081583100 | WN-2A | Near Wooster (1) | 293 |
| 405745081510200 | WN-7 | Near Sterling (1) | 294 |
| 405805081462300 | WN-6 | Rittman (1) | 295 |

VOLUME 1: OHIO RIVER BASIN
EXCLUDING PROJECT DATA

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State agencies, obtains a large amount of data pertaining to the water resources in Ohio each water year. These data, accumulated during many years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to the interested parties outside the Geological Survey, the data are published annually in this report series entitled "Water Resources Data--Ohio."

This report (in two volumes) includes records on both surface and ground water in the State. Specifically, it contains: (1) Discharge records for 133 streamflow-gaging stations, 89 miscellaneous sites; (2) stage and content records for 9 streams, lakes, and reservoirs; (3) water-quality data for 34 streamflow-gaging stations, 59 wells, and 47 partial-record sites; and (4) water levels for 450 observation wells. Locations of lake- and streamflow-gaging stations, water-quality stations, and observation wells for which data are presented in this volume are shown in figure 8.

This series of annual reports for Ohio began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the 1975 water year, the report was changed to present, in two to three volumes, data on quantities of surface water, quality of surface and ground water, and ground-water levels.

Prior to introduction of this series and for several years concurrent with it, water-resources data for Ohio were published in a series of U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States, Parts 3 and 4." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on the chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and ground-water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above-mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States, and may be purchased from the Books and Open-File Reports Section, U.S. Geological Survey, Box 24525, Federal Center, Denver, CO 80225.

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report OH-88-1." For archiving and general distribution, the reports for 1971-74 water years are also identified as water-data reports. These water-data reports can be purchased in paper copy or in microfiche from the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information for ordering specific reports, including current prices, may be obtained by writing the District Chief at the address given on the back of title page or by telephoning (614) 469-5553.

COOPERATION

The U.S. Geological Survey and agencies of the State of Ohio have had cooperative agreements for the collection of water-resource records since 1898. Organizations that assist in collecting data in this report are: Ohio Department of Natural Resources, J. J. Sommer, Director; Ohio Environmental Protection Agency, R. L. Shank, Director; Ohio Department of Transportation, B. B. Hurst, Director; Miami Conservancy District, J. L. Rozelle, General Manager and Chief Engineer; City of Columbus Department of Public Service, J. R. Doult, Administrator; Director; City of Canton Water Department, J. D. Williams, Superintendent; Ross County, J. L. Kennard, Commissioner; Seneca County Soil and Water District, N. Daniel, Board Chairman; University of Toledo, R. Gallagher; City of Fremont, W. Curtis, City Engineer; Lucas County, E. J. Ciecka, Administrator; Wood County, F. G. Schutte, Sanitary Engineer; Sandusky County, K. W. Kerik, Health Commissioner; and City of Akron, K. Kostura, and A. Youngblood; City of Lima, A. Godsey, City Sanitary Engineer; Eastgate Development and Transportation Agency, J. Wells, Environment Project Manager; University of Cincinnati, J. Maynard, Department Head; Office Surface Mining, P. B. Schultz, Contracting Office; U.S. Air Force, Air Force Logistics Command; Funds or services were provided by the U.S. Army Corps of Engineers in collecting records for 72 hydrologic-data stations in this report. The Miami Conservancy District, U.S. Army Corps of Engineers, and Ohio Department Natural Resources aided in collecting records.

SUMMARY OF HYDROLOGIC CONDITIONS

Ohio is located in three physiographic provinces, each with its own distinctive hydrologic characteristics. The topography of the Till Plains section of the Central Lowlands physiographic province (fig. 1) consists of gently rolling ground moraine with bands of terminal moraine and outwash-filled valleys. Glaciation altered the courses of most streams in this area. The Eastern Lake Plains section (fig. 1) consists of wide expanses of level or nearly level land interrupted

WATER RESOURCES DATA FOR OHIO, 1988

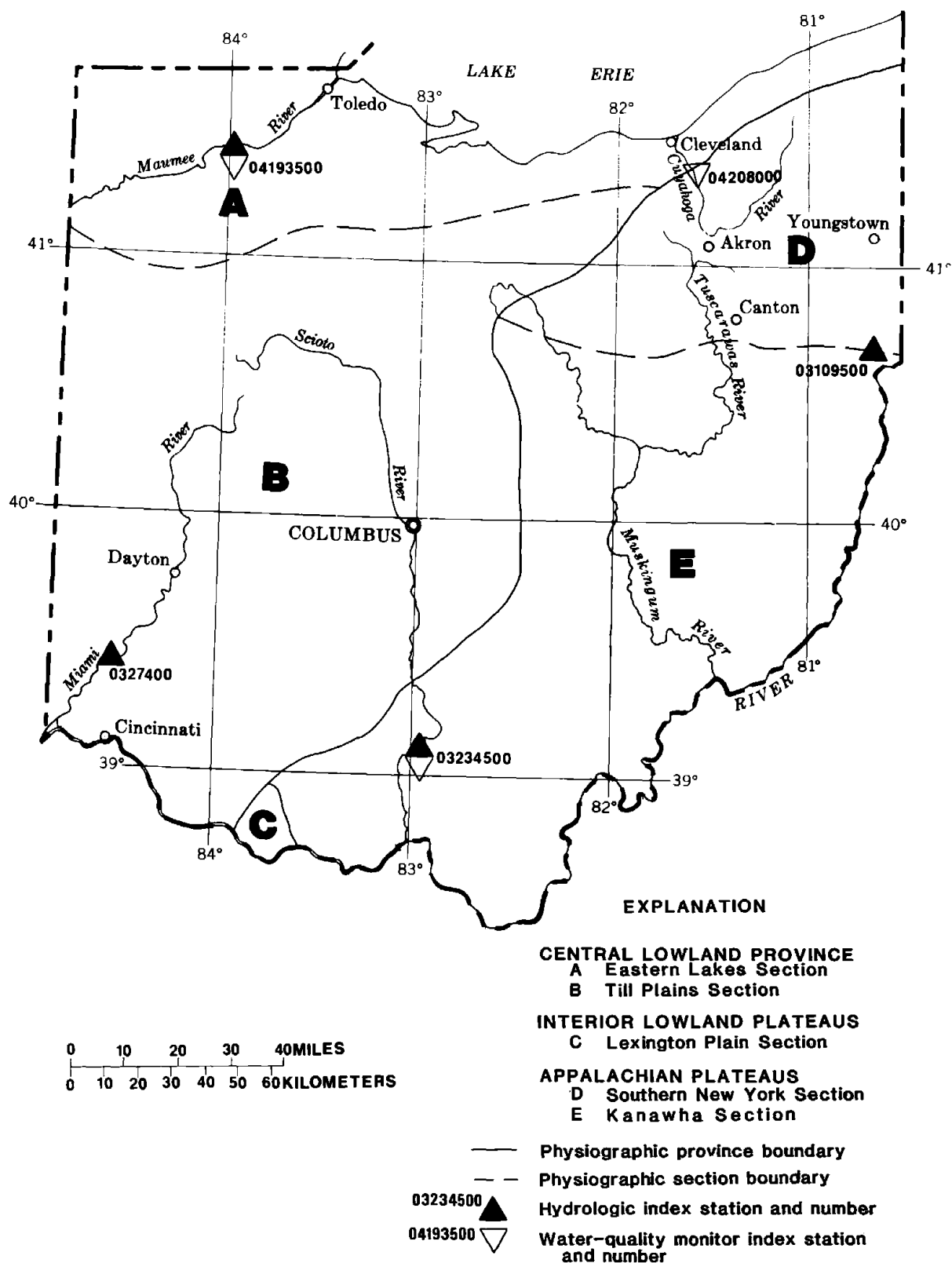


Figure 1.--Physiographic divisions and location of Hydrologic Index Stations.

only by the sporadic sandy ridges that are the last visible remnants of glacial-lake beaches. Much of the area was swamp prior to development, and marshes are still present along Lake Erie near Toledo. The Lexington Plains section of the Interior Low Plateau province (fig. 1) is characterized by rolling terrain with isolated large hills and ridges. The "barbed" drainage pattern formed when small streams were captured as their headwaters cut back into the hills over time. Streams have carved the Kanawha section of the Appalachian Plateaus province (fig. 1) into an intricate series of hollows and steep-sided ridges. Only the large streams in the section have any appreciable flood plain. In the southern New York section (fig. 1), successive waves of glaciation have subdued the relief, buried many preglacial valleys, and rerouted many streams.

Precipitation

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

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

Surface Water

Streamflow

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

At the beginning of the 1988 water year, streamflow was normal¹ throughout the State despite below-average rainfall during the previous 2 months. By November, the streamflow fell below normal throughout most of the State except for the northeast, where streamflow remained in the normal range. During December, streamflow remained below normal in the southern part of the State and rose to normal over the northern half of the State.

During January, streamflow dropped throughout the State and was either deficient or below normal for the entire State. Heavy rains in the beginning of February brought high flow, but flow was again in the below-normal range by the end of the month. Except for above-normal flow on intermittent days of heavy precipitation, flow continued in the below-normal range throughout the State from March through June.

Flow continued to decrease through July, but rose sharply in response to precipitation in mid-month; flow was higher at the end of the month as compared with the beginning of the month, but remained below normal. Flow dropped through August, except in the northern part of the State, where it increased slightly. Generally, flow was below normal throughout the State and was deficient in the southwestern corner.

Streamflow for September increased throughout most of Ohio, from slightly below normal in the western part to above normal in the central and eastern parts. This was the first time since February that above-normal flow was noted throughout most of the State.

In many parts of Ohio, drought or near-drought conditions were noted during the summer months. Some communities were forced to institute various water-saving practices. At some stations, flow was the lowest recorded since the 1930's.

Streamflow trends for the 1988 water year are reflected in graphical comparisons of monthly and annual mean discharges for 1988 and the 1951-80 reference period at four Hydrologic Index Stations (fig. 7; station locations are shown in fig. 1).

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

WATER RESOURCES DATA FOR OHIO, 1988

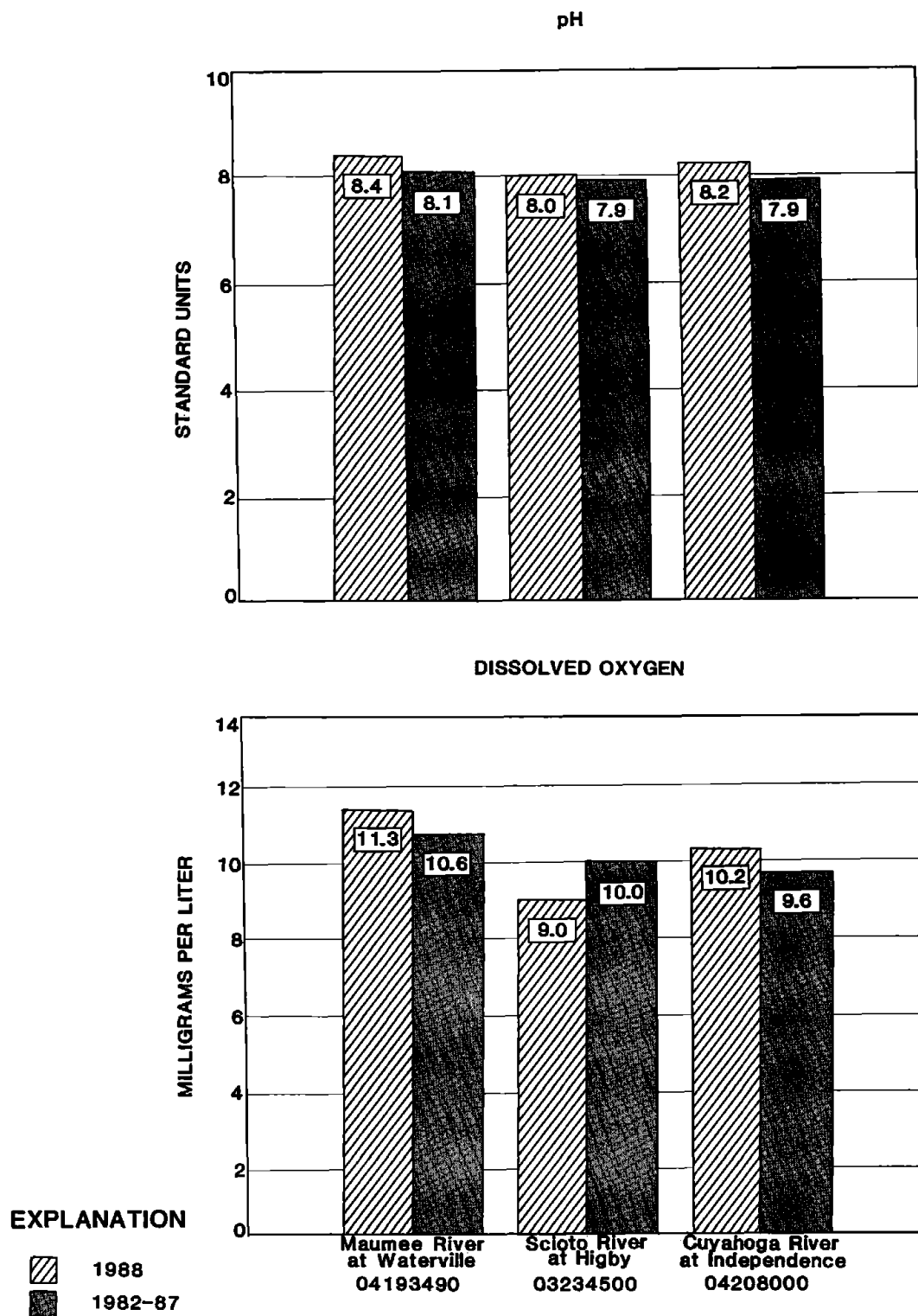


Figure 2.—Comparison of 1988 annual mean values of pH, dissolved oxygen, temperature, and specific conductance with the average of annual mean values for 1982-87 for three water-quality-monitor index stations in Ohio.

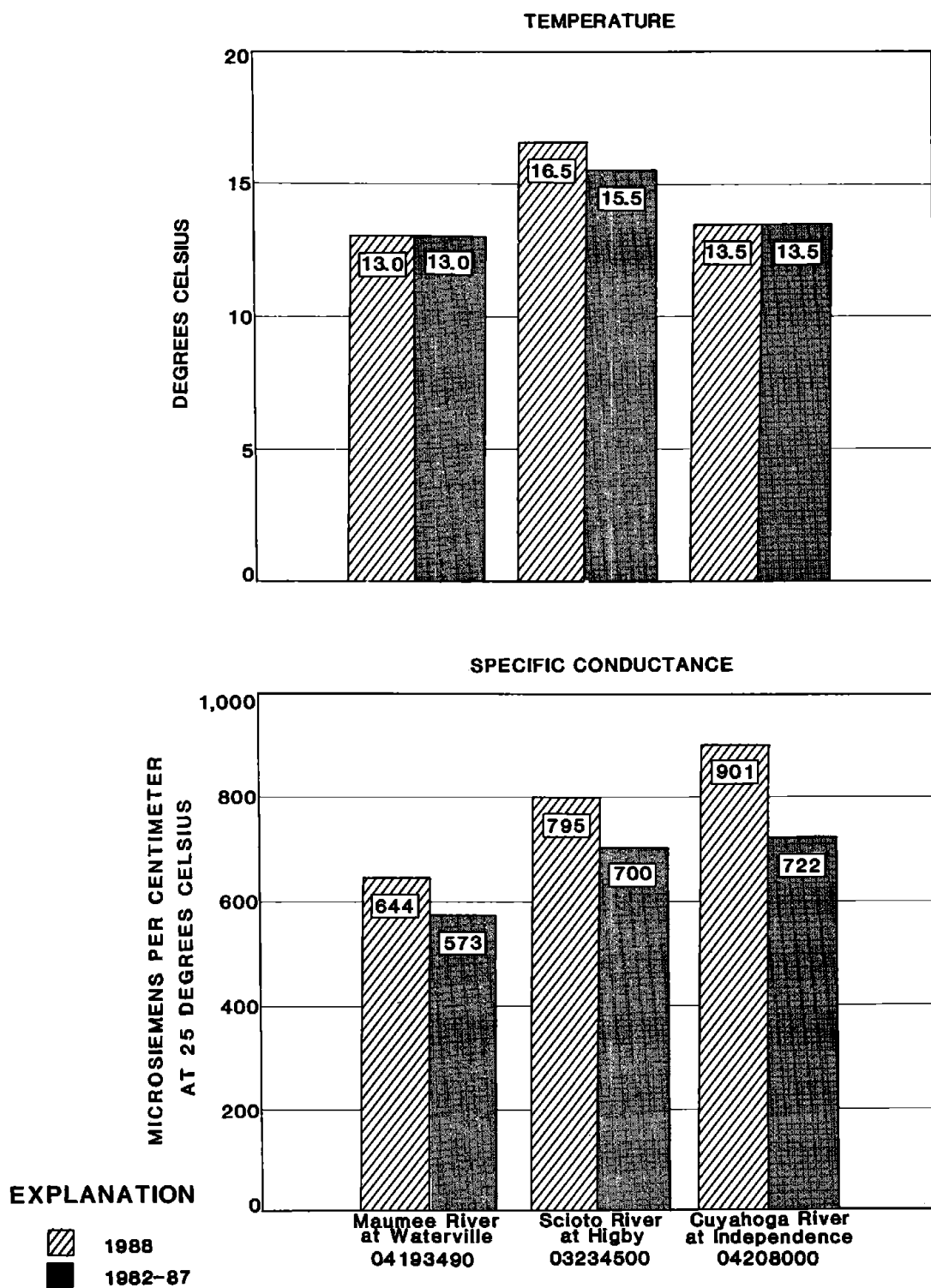


Figure 2.—Comparison of 1988 annual mean values of pH, dissolved oxygen, temperature, and specific conductance with the average of annual mean values for 1982-87 for three water-quality-monitor index stations in Ohio—Continued.

Water Quality

Surface-water quality conditions and concerns differ throughout Ohio according to land use, geology, soil, and topography. Northwestern Ohio has flat, glaciated plains with heavy soils. Land use is predominantly rural and agricultural, and water quality concerns center on issues related to agricultural practices. Southwestern Ohio has unglaciated, irregular plains. Land-use and water-quality concerns are similar to those in the northwestern part of the State. In the unglaciated, western Allegheny Plateau of southeastern Ohio, the landscape is characterized by hilly terrain dissected by steep, narrow valleys. Land is predominantly forested, but some cropland and pasture also are present. Mining and timber are the principal industries. Water-quality problems generally center on excessive acid and sediment loading from past coal-mining activities. Land use in the lake plains of northeastern Ohio is primarily urban and industrial, with some rural areas in woodlands, pasture, and orchard crops. In this area of the State, water-quality concerns center on problems such as municipal and industrial wastes and urban nonpoint sources of pollution.

On a short-term basis, water-quality data are collected in conjunction with local or regional studies. On a long-term basis, water-quality data in Ohio are collected from 10 fixed NASQAN (National Stream Quality Accounting Network) stations, which are located in nine major river basins, and one Hydrologic Benchmark station, which is located in a small, relatively pristine basin. Samples are collected either monthly, bimonthly, or quarterly and are analyzed for major anions and cations, trace metals, nutrients, suspended sediment, and selected physical properties. At three of these stations (fig. 1), water-quality monitors continuously measure temperature, dissolved-oxygen concentrations, pH, and specific conductance.

Precipitation at the end of the 1988 water year was 7.74 inches below normal statewide. As a result, mean annual discharges generally were below normal throughout the State (fig. 7). The low of precipitation and runoff is reflected in higher-than-average specific-conductance measurements in the 1988 water year. Specific conductance is directly related to the concentration of dissolved solids.

Data from the three water-quality monitors were used to calculate mean annual temperature, dissolved-oxygen concentration, pH, and specific conductance for the 1988 water year. These were compared with average annual means for the 1982-87 reference period (fig. 2). Annual mean specific conductances were significantly greater than average at all sites. Annual mean values of pH were slightly higher than average at all three sites. Annual mean dissolved-oxygen concentrations were slightly higher than average for the Cuyahoga and Maumee Rivers and lower than average for the Scioto River. The dissolved-oxygen concentration at the Cuyahoga River site remained above the State standard of 4 mg/L during the entire water year. Annual mean temperatures were about average for the Cuyahoga and Maumee Rivers, but slightly higher than average for the Scioto River.

Trace-element analyses of samples collected at NASQAN sites show that concentrations of arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver were considerably less than U.S. Environmental Protection Agency primary maximum contaminant levels for domestic water supply. Manganese concentrations equaled or exceeded 200 micrograms per liter in Hocking River below Athens on January 22, and June 1. Parts of Hocking River watershed are affected by abandoned coal mines.

Ground Water

Ground water serves the needs of 42 percent of Ohio's population. An estimated 740 million gallons per day (Mgal/d) of ground water is withdrawn for domestic, industrial, and agricultural purposes. Many people in Ohio depend on ground water as the only practical source of supply.

Ohio's unconsolidated aquifers are composed of either coarse- or fine-grained sediments. Both types are composed mainly of materials of glacial origin. The coarse-grained unconsolidated aquifers generally consist of highly permeable sand and gravel; much of the sand and gravel is alluvium derived from glaciofluvial outwash along the courses of some modern streams; thus, these aquifers sometimes are referred to as "watercourse" aquifers. Coarse-grained unconsolidated aquifers in the northwestern corner of the State (fig. 3) underlie glacial till, are locally under artesian pressure, and are highly productive. Extensive kame-terrace deposits of water-bearing gravel and sand are important ground water sources in northeastern Ohio. The fine-grained unconsolidated aquifers are similar to the coarse-grained unconsolidated aquifers in form and origin but are less permeable because of higher percentages of mixed fine sand, silt, and clay. Included in the fine-grained unconsolidated aquifers are tills that contain thin or localized stratified lenses of sand and gravel.

The principal source of water supply for much of the unglaciated upland area of southeastern Ohio is from bedrock aquifers composed of shaly sandstone and thin limestone aquifers. These strata which range from Mississippian to Permian in age, are dominated by low-yielding shales and shaly sandstones that include numerous coal-bearing strata. In some places, small water supplies are available in fractured coal beds. Several sandstone aquifers in northeastern Ohio are of regional extent and are important ground-water sources for individual and small public supplies. These include the Berea and Black Hand Sandstones of Mississippian age and several sandstone members of the Pottsville and Allegheny Formations of Pennsylvanian age. The Lake Erie coastline of northeastern Ohio is underlain by shale of Devonian and Mississippian age (fig. 3) that yields only

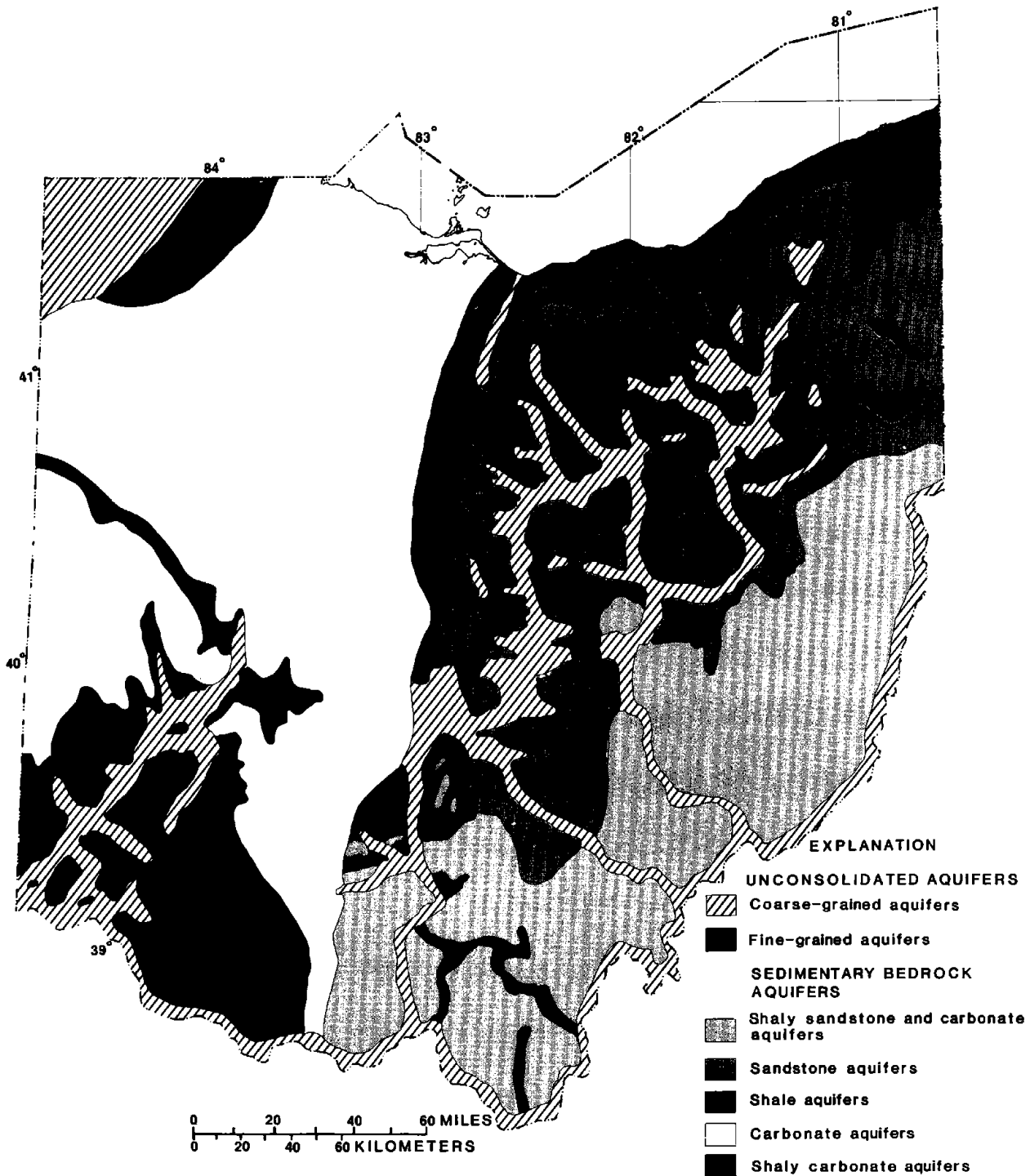


Figure 3.--Geographic distribution of principal aquifers in Ohio.

WATER RESOURCES DATA FOR OHIO, 1988

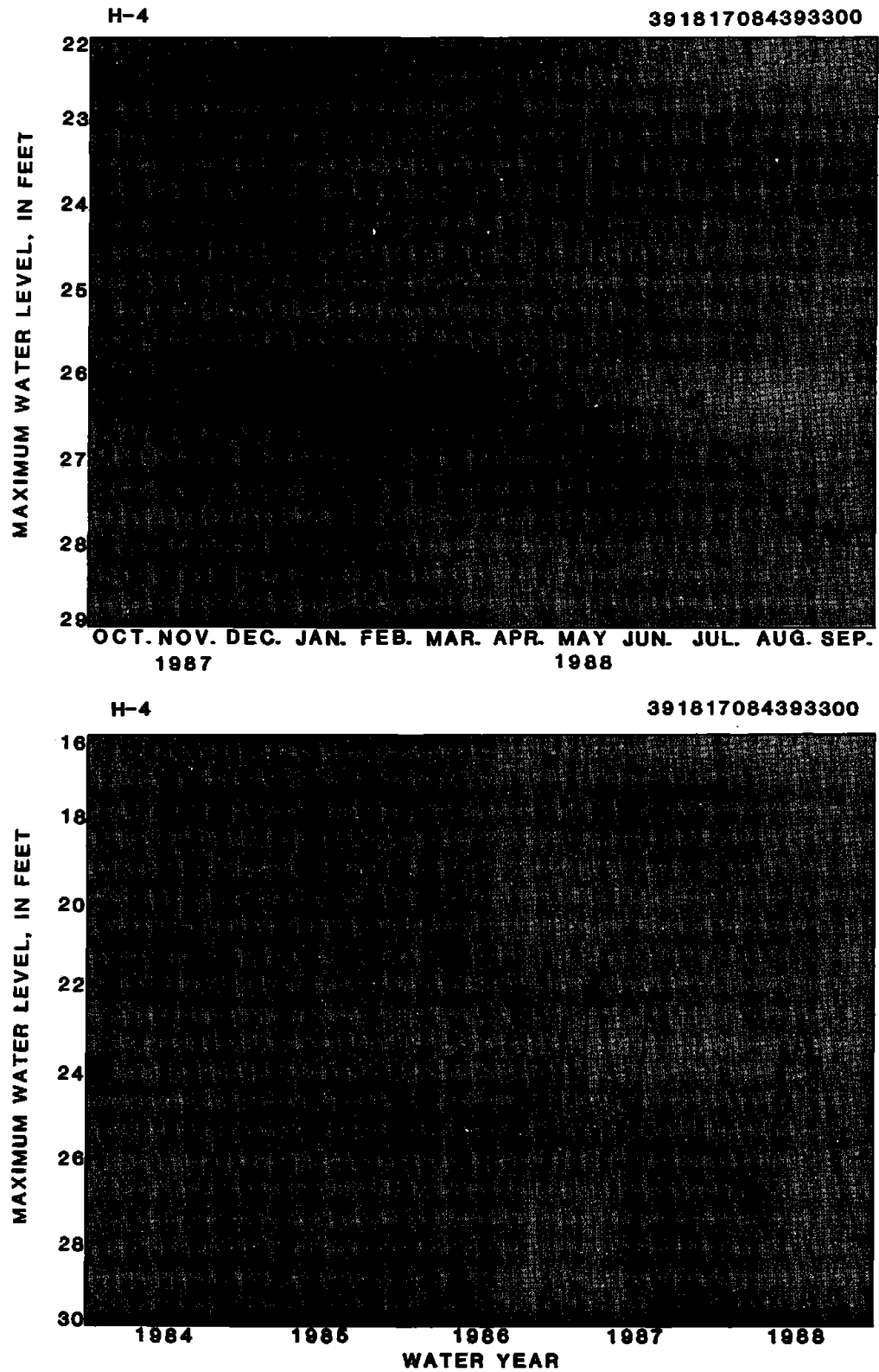


Figure 4.--Sample 1-year and 5-year hydrographs of a well completed in an unconfined unconsolidated aquifer.

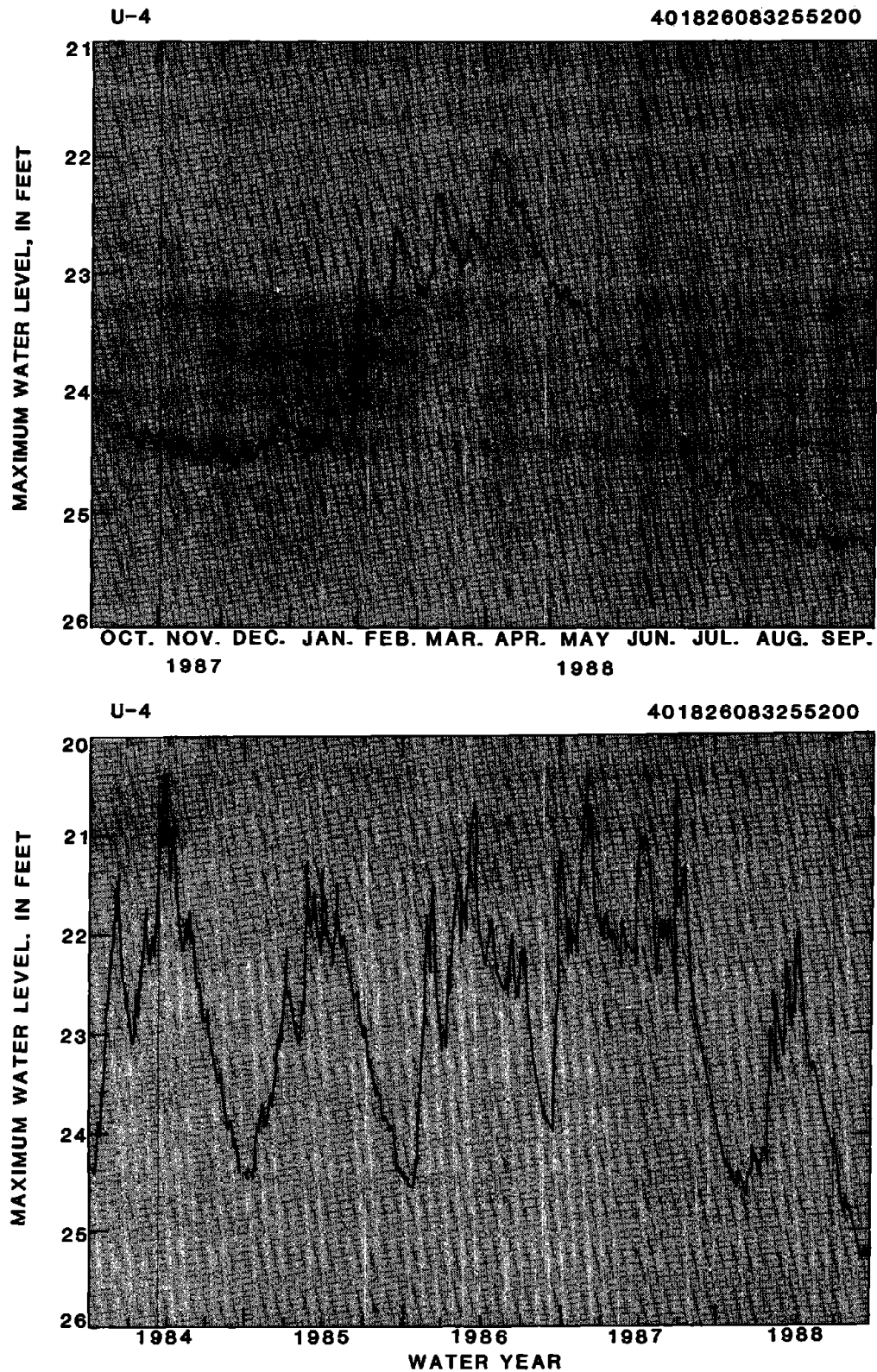


Figure 5.--Sample 1-year and 5-year hydrographs of a well completed in a confined carbonate-rock aquifer.

small amounts of water to wells. Silurian-age limestone and dolomite and Devonian limestone comprise the carbonate aquifer system (fig. 3) of much of western Ohio. Glacial cover is uneven and consists of valley fill and terminal moraine in some places. The northeastern part of western Ohio contains an area of high-yielding wells that tap a preferentially weathered zone, which developed when carbonate section was periodically exposed as land mass during the Paleozoic Era. The southwestern corner of Ohio near Cincinnati is underlain by shale and a thin limestone aquifer of Ordovician age. Away from the watercourse (coarse unconsolidated) aquifers that traverse the area, the rocks that form the uplands have only very small ground-water yields.

Ground-Water Levels

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

For water year 1988, ground-water levels started low at the beginning of the year and continued to decline through the end of the calendar year. From October through December, ground-water levels were at near record lows in the southern part of the State. Slight improvements were noted in January, but rises averaged about half of normal². Water-supply problems continued from the beginning the water year in the southeastern part of the State.

Generally, water levels rose significantly in most parts of the State in early February in response to heavy rains, but were still below normal. March water levels rose during the early part of the month and stabilized during the latter part of the month. April levels showed some response to recharge but remained below normal.

Steady declines, some caused as a result of below-average precipitation, were noted for the period May through August. Many of the observation wells continued to set new monthly lows and several reached all-time record lows. Mixed responses were observed throughout the State during September, but water levels generally stabilized within the below-normal range.

SPECIAL NETWORKS AND PROGRAM

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

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in general or regional water-quality planning and management. The approximately 500 sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the U.S. Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for; (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs; (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics; and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

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

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

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

EXPLANATION OF THE RECORDS

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

Station Identification Numbers

Each data station, whether streamsite or wellsite, is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic locations. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells and, in Ohio, for surface-water stations where only miscellaneous measurements are made.

Downstream Order System

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary with respect to the stream to which it is immediately tributary is indicated by an indentation in a "List of Stations" in the front of the report. Each indentation represents one rank. This downstream order and system of indentation show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station such as 04041000, which appears just to the left of the station name, includes the two-digit part number "04" plus the six-digit downstream order number "041000". The part number designates the major river basin; for example, part "03" is the Ohio River Basin, and part "04" is the St. Lawrence River Basin.

Latitude-Longitude System

The identification numbers for wells and miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure 6.)

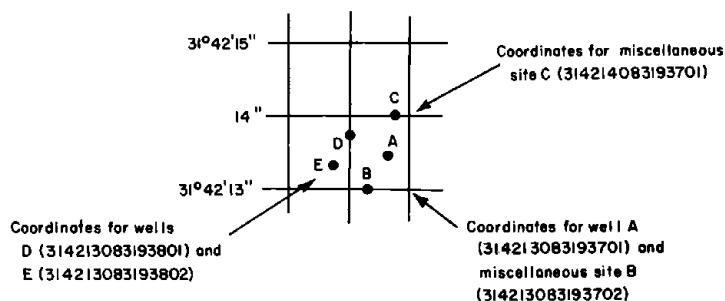


Figure 6. --System for numbering wells and miscellaneous sites (latitude and longitude)

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharge may be computed for any time, or any period of time, during the period of record. Complete records of lake or reservoir contents, similarly, are those for which stage or content may be computed or estimated with reasonable accuracy for any time or period of time. They may be obtained using a continuous stage-recording device, but need not be. Because mean daily discharges and end-of-day contents commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of a partial record is indicated by table titles such as "crest-stage partial records," or "low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report. Location of all complete-record and crest-stage stations for which data are given in this volume are shown in figure 8.

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relationships between stage and discharge. These data, together with supplemental information such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consists of a record of stage and of notations regarding factors that may affect the relationship between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Continuous records of stage are obtained with analog recorders that trace continuous graphs of stage, or with digital recorders that punch stage values on paper tapes or store stage data on cassette tapes at selected time intervals. Measurements of discharge are made with current meters using methods adapted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6.

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) Logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow-over-dams or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curve or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may so obscure the stage-discharge relation that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

At some stream-gaging stations the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method, in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

In computing records of lake or reservoir contents, it is necessary to have available from surveys, curves, or tables defining the relationship of stage and contents. The application of stage to the stage-contents curves or tables give the contents from which daily, monthly, or yearly changes are then determined. If the stage-contents relationship changes because of deposition of sediment in a lake or reservoir, periodic resurveys may be necessary to redefine the relationship. Even when this is done, the contents computed may become increasingly in error as time since the last survey increases. Discharges over lake or reservoir spillways are computed from stage-discharge relationships much as other stream discharges are computed.

For some gaging stations there are periods when no gage-height record is obtained, or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated from operator's logs, previous or following record, inflow-outflow studies, and other information.

Data Presentation

The records published for each gaging station consist of two parts--the manuscript or station description and the data table for the current water year. The manuscript provides, under various headings, descriptive information, such as station location; period of record; average discharge; historical extremes; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

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

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type maps available varies from one drainage basin to another, the accuracy of the drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.--This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not, and whose location was such that records from it can reasonably be considered equivalent with records from the present station.

REVISED RECORDS.--Published records, because of new information, occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only the peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to National Geodetic Vertical Datum of 1929 (see glossary), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a remarks statement is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

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

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

EXTREMES FOR PERIOD OF RECORD.--Extremes may include maximum and minimum stages and maximum and minimum discharges or contents. Unless otherwise qualified, the maximum discharge or content is the instantaneous maximum corresponding to the highest stage that occurred. The highest stage may have been obtained from a graphic or digital recorder, a crest-stage gage, or by direct observation of a nonrecording gage. If the maximum stage did not occur on the same day as the maximum discharge or content, it is given separately. Similarly, the minimum is the instantaneous minimum discharge, unless otherwise qualified, and was determined and is reported in the same manner as the maximum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by U.S. Geological Survey.

EXTREMES FOR CURRENT YEAR.--Extremes given here are similar to those for the period of record, except the peak discharge listing may include secondary peaks. For stations meeting certain criteria, all peak discharges and stages occurring during the water year and greater than a selected base discharge are presented under this heading. The peaks greater than the base discharge, including the highest one, are referred to as secondary peaks. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man. The time of occurrence for peaks is expressed in 24-hour local standard time. For example, 12:30 a.m. is 0030, and 1:30 p.m. is 1330. The minimum for the current water year appears below the table of peak data.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report following discovery of the error.

Although rare, occasionally the records of a discontinued station gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the data from previously published data reports may wish to contact the District office to determine if the published records were ever revised after the station was discontinued. Of course, if the data were obtained by computer retrieval, the data would be current and there would be no need to check because any published retrieval of data is always accompanied by revisions of the corresponding data in computer storage.

Manuscript information for lakes or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

The daily table for stream-gaging stations gives mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges respectively, for the month. Discharge for the month is often expressed in cubic feet per square mile (line headed "CFSM"), or in inches (line headed "IN."), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. In the yearly summary below the monthly summary, the figures shown are the appropriate discharges for the calendar and water years. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversions or reservoir contents are given. These figures are identified by symbol and corresponding footnote.

Data collected at partial-record stations follow the information for continuous record sites. Data for partial-record discharge stations are usually presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second, when collected, is a table of discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in time of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified either by flagging individual daily values with the letter "e" and printing a table footnote, "e Estimated," or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

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

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of the true; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredths of a cubic foot per second for values less than 1 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to three significant figures for more than 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or other factors. For such stations, figures of cubic feet per second per square mile and of runoff, in inches, are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Records Available

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

Information used in preparing the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables are on file in the Ohio District office. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on availability of the unpublished information or on results of statistical analyses of the published records may be obtained from the District office.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between "continuing records" as used in this report and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recording; however, because of cost, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this volume are shown in figure 8.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at a nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

On-site Measurements and Sample Collection

In obtaining water-quality data, a major concern is that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made on site when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the sample to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations" (TWRI), Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. All of these references are listed on p. 21-22 of this report. Also, detailed information on collecting, treating, and shipping samples may be obtained from the Geological Survey District office.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream-Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals depends on flow conditions and other factors that must be evaluated by the collector.

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

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for each day of record. More detailed records (hourly values) may be obtained from the U.S. Geological Survey District Office, whose address is given on the back of the title page of this report.

Water Temperatures

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small daily temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross section.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharge for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge values differ from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observation, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

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

Laboratory Measurements

Sediment samples, samples for biochemical oxygen demand (BOD), and daily samples for specific conductance are analyzed locally. All other samples are analyzed in the Geological Survey laboratories in Arvada, CO. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratory are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily, are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor, temperature record, sediment pumping sampler, or other sampling device is in operation at a station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the record.

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

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums and minimums may not have been sampled. Extremes, when given, are for both the period of record and for the current water year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to insure the most recent updates.

Remark Codes

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

| PRINTED OUTPUT | REMARK |
|----------------|---|
| E | Estimated value |
| > | Actual value is known to be greater than the value shown |
| < | Actual value is known to be less than the value shown |
| K | Results based on colony count outside the acceptable range (non-ideal colony count) |
| L | Biological organism count less than 0.5 percent (organisms may be observed rather than counted) |
| D | Biological organism count equal to or greater than 15 percent (dominant) |
| & | Biological organism estimated as dominant |

Records of Ground-Water Levels

Water-level data from a network of observation wells (as well as project wells) are given in this report. The network well data are intended to provide a sampling and historical record of water-level changes in the Nation's most important aquifers. Locations of the observation wells in this network in Ohio are shown in figure 8. Water-level data for specific projects are reported under those projects.

Data Collection and Computation

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

Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is a 15-digit number that is based on latitude and longitude. The secondary identification number is the local well number, which is provided for local needs.

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

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

Data Presentation

Each well record consists of two parts, the station description and the data table of water levels observed during the water year. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments to follow clarify information presented under the various headings.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); a landline location designation; the hydrologic-unit number; the distance and direction from a geographic point of reference; and the owner's name.

AQUIFER.--This entry describes the aquifer by age and composition.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, casing depth and (or) screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other changes since construction.

DATUM.--This entry describes both the measuring point and the land-surface altitude at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base, and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The altitude of the land-surface datum (LSD) is described in feet above (or below) National Geodetic Vertical Datum of 1929 (NGVD of 1929); it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level. It should identify wells that are also water-quality observation wells, and may be used to acknowledge the assistance of local (non-Survey) observers.

PERIOD OF PUBLISHED RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water level records by the U.S. Geological Survey or cooperating agency, and the words "to current year" if the records are to be continued to the following year. Periods for which water-level records are available, but not published by the Survey, may be noted.

EXTREMES FOR PERIOD OF PUBLISHED RECORD.--This entry contains the highest and lowest water levels of the period of published record, with respect to land-surface datum (LSD), and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in feet below (or above) land-surface datum. All periodic measurements of water levels for wells are listed. For wells equipped with recorders, daily water-level lows are published. The highest and lowest daily water levels of the water year are shown on a line below the table. Because only daily lows are published for wells with recorders, the extreme instantaneous high may be a value that is not listed in the table. Missing records are indicated by dashes in place of the water level.

Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that, for most sampling sites, they consist of only one set of measurements. The quality of ground water ordinarily changes slowly, so that frequent measuring of the same parameter is not necessary unless one is concerned with a particular problem such as monitoring for trends of a particular constituent.

Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some counties but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years.

Most methods for collecting and analyzing water samples are described in the TWRI manuals listed on p. 21-22. The data presented in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. All samples were obtained by trained personnel. The wells sampled were pumped long enough to assure that the water collected came directly from aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and the material comprising the casings.

Data Presentation

The records of ground-water quality are published intermixed with the ground-water-level data for network wells and with the specific project for project wells.

ACCESS TO WATSTORE DATA

The National WATER Data STORage and REtrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, VA.

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

General inquiries about WATSTORE may be directed to:

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

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined below. See also the table for converting inch-pound units to International System of units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot, and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Adenosine triphosphate (ATP) is an organic, phosphate-rich, compound important in the transfer of energy in organisms. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measure of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter of the original water sample.

Algae are mostly aquatic single-celled, colonial, or multicelled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal growth potential (AGP) is the maximum dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield reasonable quantities of water to wells and springs.

Artesian means confined, and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria that ferment lactose with gas formation within 48 hours at 35°C. In the laboratory, these bacteria are defined as the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C + 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory, they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5°C + 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that produce red or pink colonies within 48 hours at 35°C + 1.0°C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

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

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

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

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m³), and periphyton and benthic organisms in grams per square meter (g/m²).

Dry mass refers to the mass of residue present after drying in an oven at 105°C for zooplankton and periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and the ash mass and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism, which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons, or 2,447 cubic meters.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

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

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

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

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic foot per second (cfs, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved: That material in a representative water sample that passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totalling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

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

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface stream and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate (CaCO_3).

Hydrologic Bench-Mark Station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

Hydrologic Index Stations, in this report, refers to four continuous record gaging stations that have been selected as representative of streamflow patterns for their respective regions of Ohio. Station locations are shown in figure 1.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Measuring point (MP) is an arbitrary permanent reference point from which the distance to the water surface in a well is measured to obtain the water level.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

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

Micrograms per gram (UG/G, ug/g) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (gram) of sediment.

Microgram per kilogram (UG/KG, ug/kg) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (kilogram) of bottom material.

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

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

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

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

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

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per unit area habitat, usually square meters (m^2), acres, or hectares. Periphyton benthic organisms and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliters (mL) or liters (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Parameter code is a 5-digit number used in the U.S Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

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

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology.

The classification is as follows:

| <u>Classification</u> | <u>Size (mm)</u> | <u>Method of analysis</u> |
|-----------------------|------------------|---------------------------|
| Clay..... | 0.00024 - 0.004 | Sedimentation. |
| Silt..... | 0.004 - 0.062 | Sedimentation. |
| Sand..... | 0.062 - 2.0 | Sedimentation or sieve. |
| Gravel..... | 2.0 - 64.0 | Sieve. |

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population in terms of types, number, mass, or volume.

Periphyton is the assemblage of microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

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

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Picocurie (PCI, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per millimeter (cells/mm) of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movement within the water column and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [$\text{mg C}/(\text{m}^2/\text{time})$] for periphyton and macrophytes and [$\text{mg C}/(\text{m}^3/\text{time})$] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [$\text{mg O}_2/(\text{m}^2/\text{time})$] for periphyton and macrophytes and [$\text{mg O}_2/(\text{m}^3/\text{time})$] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

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

Recoverable from bottom material.--The amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment, thus, the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Return period is the average time interval between occurrences of a hydrological event of a given or greater magnitude, usually expressed in years. May also be called recurrence interval.

Runoff in inches (IN., in.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Bed load is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed and very close to it. In this report, bed load is considered to consist of particles in transit within 0.25 ft of the streambed.

Bed-load discharge (tons per day) is the quantity of bed load measured by dry weight that moves past a section as bed load in a given time.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that passes a section in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Suspended-sediment load is the quantity of suspended sediment passing a section in a specified period.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

7-day, 10-year low flow ($7Q_{10}$) is the discharge at the 10-year recurrence interval taken from frequency curve of annual values of the lowest mean discharge for 7 consecutive days (the 7-day low flow).

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

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

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

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

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

Substrate is the physical surface upon which an organism lives.

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

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

Surface area of a lake is that area outlined on the latest USGS topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered map was made.

Surficial bed material is the part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of the total concentration in a water-sediment mixture. The water-sediment mixture is associated with (or sorbed on) that material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms

have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata*, is the following:

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

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

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

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

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

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Total discharge is the total quantity of any individual constituent, as measured by dry mass or volume, that passes through a stream cross-section per unit of time. This term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/L of the constituent, times the factor 0.0027, times the number of days.

Total recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1980, is called the "1980 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual basic-data reports published after 1975.

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WRD is used as an abbreviation for "Water-Resources Data" in the REVISED RECORDS paragraph to refer to State annual basic-data reports published before 1975.

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

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

The reports listed below are for sale by the U.S. Geological Survey, Books and Open-File Reports Section, Federal Center, Box 25425, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

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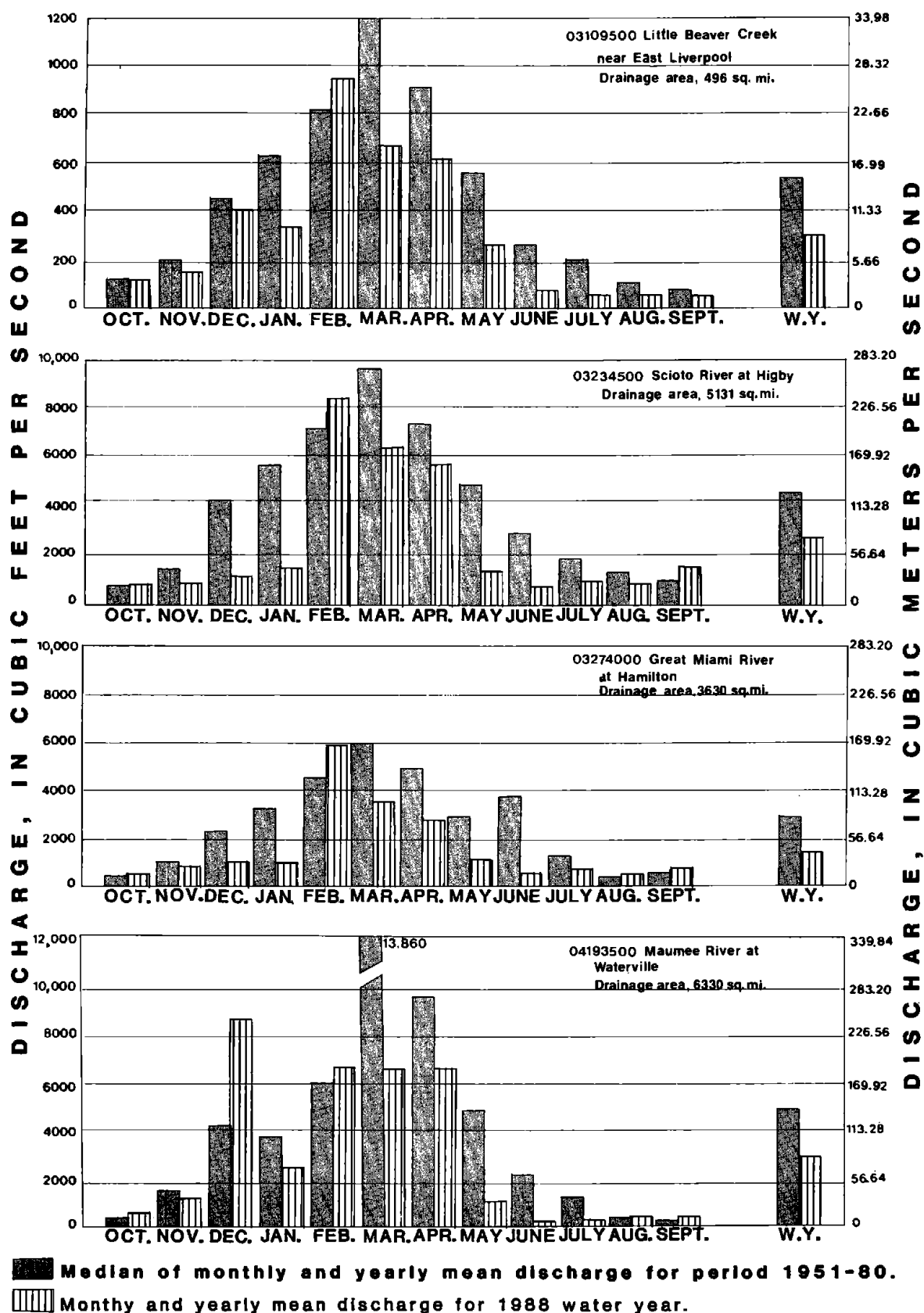


Figure 7.--Runoff during 1988 water year compared with median runoff for period 1951-1980 for four representative gaging stations.

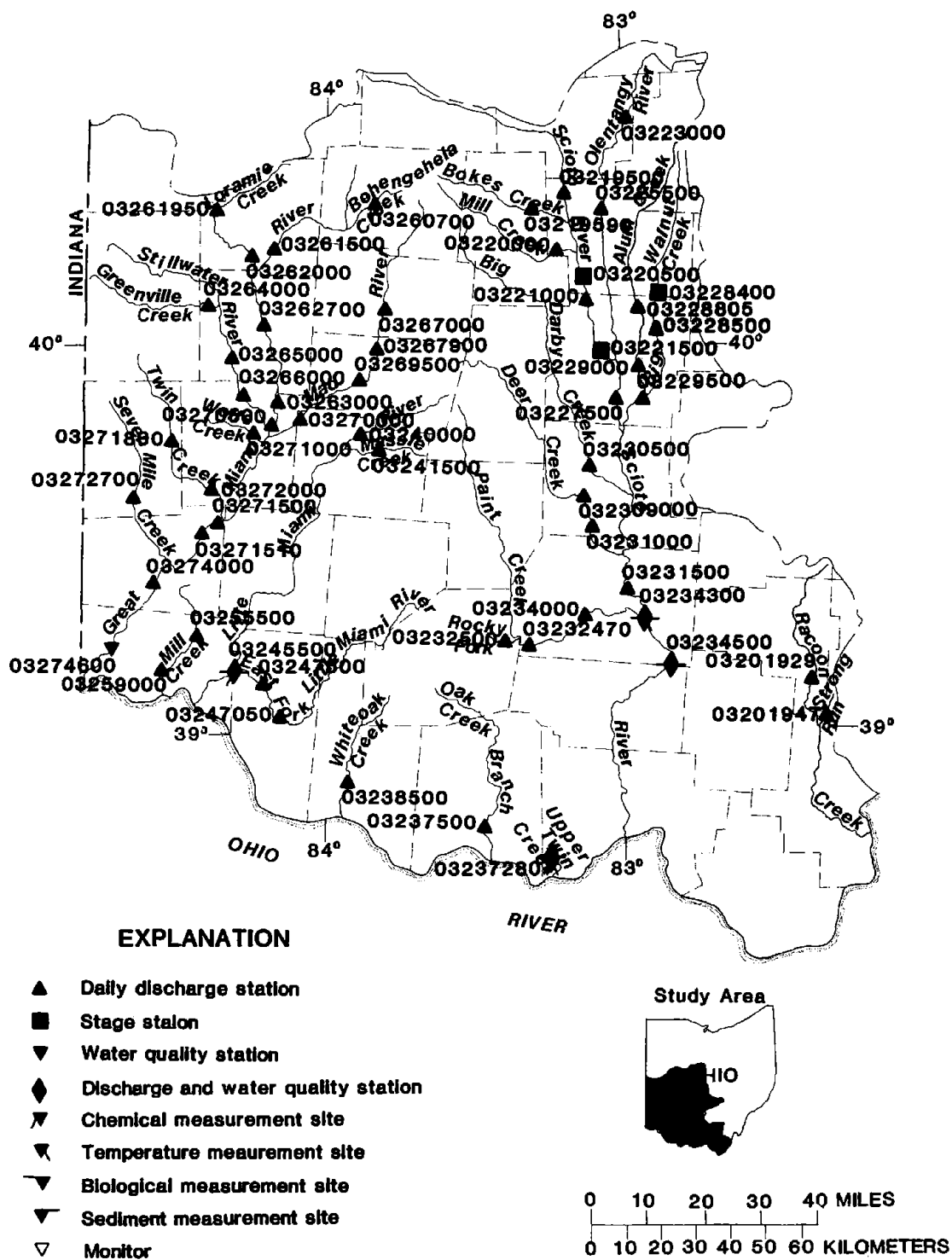


Figure 8a.—Location of data-collection stations.

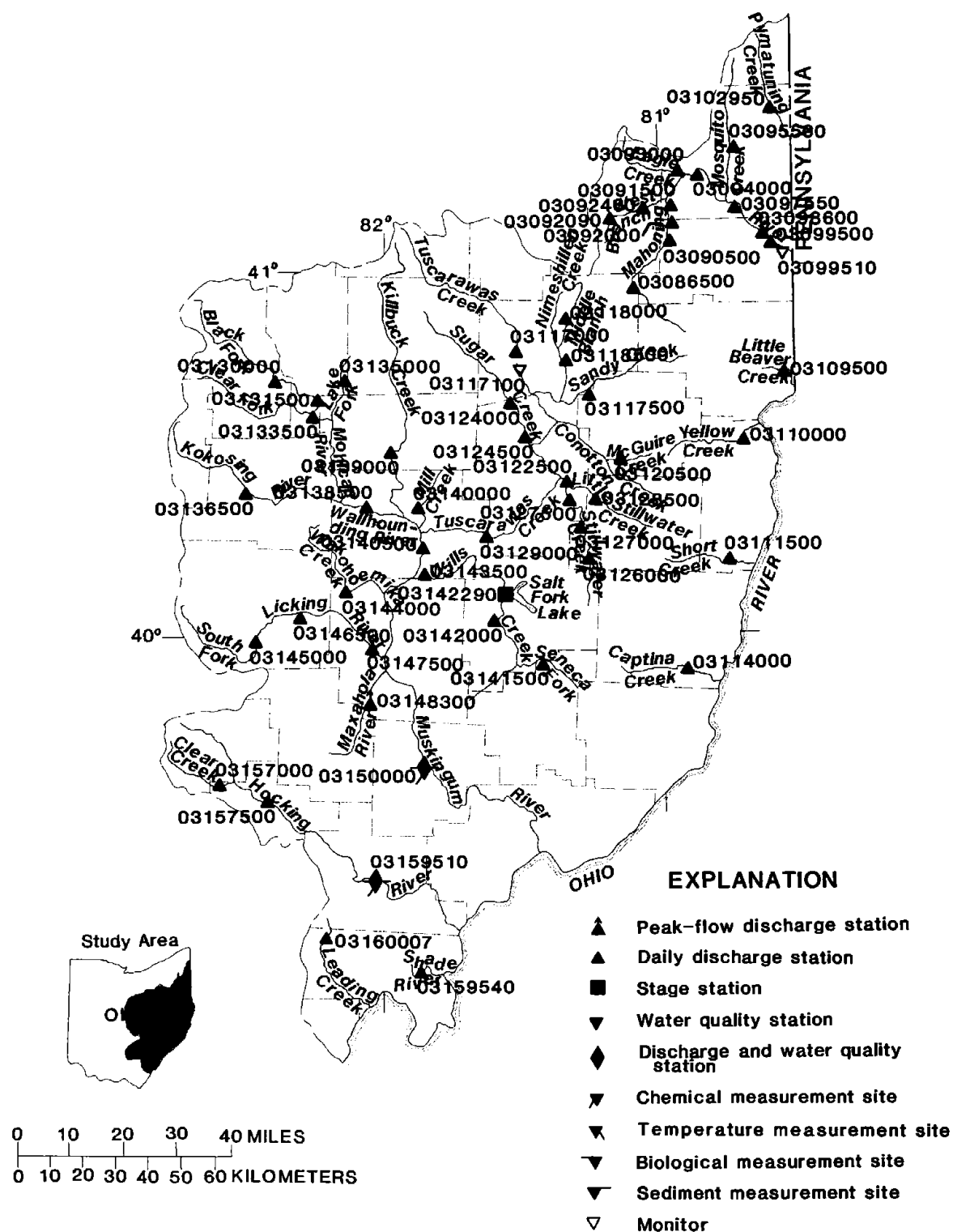


Figure 8b.—Location of data-collection stations including crest-stage sites.

WATER RESOURCES DATA FOR OHIO, 1988

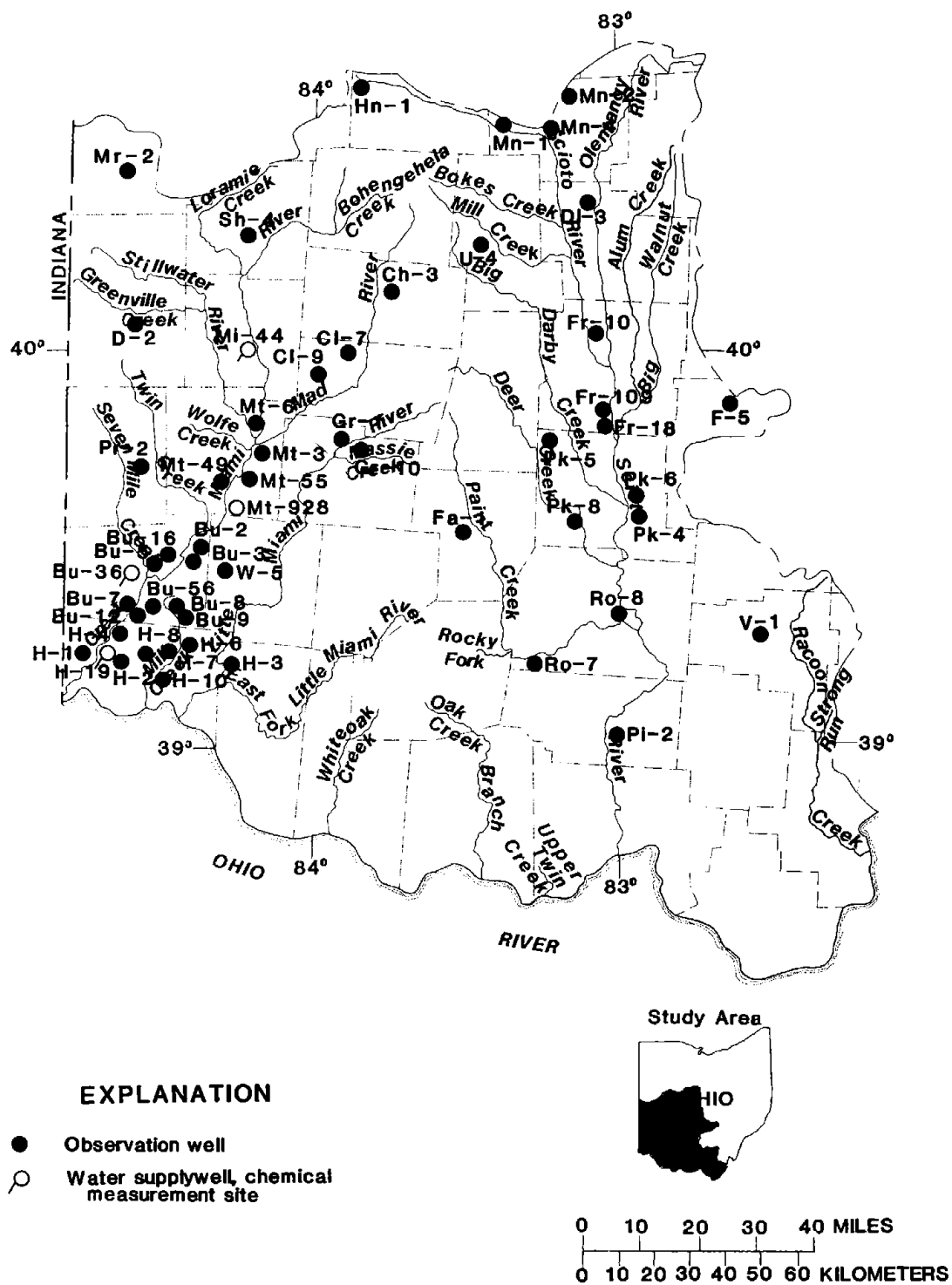


Figure 8c.—Location of wells.



HYDROLOGIC-DATA STATION RECORDS

35

OHIO RIVER BASIN

BEAVER RIVER BASIN

03086500 MAHONING RIVER AT ALLIANCE, OH

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

DRAINAGE AREA.--89.2 mi².

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

REVISED RECORDS.--WSP 1907: Drainage area.

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

REMARKS.--Estimated daily discharges: Jan. 3-18, 23-30, Feb. 7-14. Records fair except those for periods of estimated record which are poor. Flow slightly regulated by Westville Reservoir 9.3 mi upstream from station. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--47 years, 90.0 ft³/s, 13.71 in/yr, unadjusted for diversion 1941-55.

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

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|--------------------------------|------------------|--|------|--------------------------------|------------------|
| Feb. 3 | 0100 | *941 | *3.67 | No other peak greater than base discharge. | | | |

Minimum daily discharge, 0 ft³/s Aug. 17-19, 21-23, 27, 28, Sept. 2, 3, 17-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|----------|------|------|------|------|------|--------|-------|-------|-------|--------|-------|
| 1 | 17 | 34 | 60 | 84 | 146 | 43 | 56 | 87 | 12 | 1.6 | 5.7 | .90 | |
| 2 | 12 | 33 | 51 | 61 | 596 | 39 | 60 | 80 | 14 | 1.7 | 5.2 | .00 | |
| 3 | 11 | 33 | 47 | 44 | 723 | 45 | 115 | 74 | 6.7 | 1.6 | 4.2 | .00 | |
| 4 | 11 | 38 | 54 | 36 | 489 | 48 | 735 | 71 | 6.1 | 1.6 | 3.6 | 95 | |
| 5 | 11 | 36 | 58 | 31 | 337 | 46 | 469 | 83 | 6.0 | 1.5 | 3.5 | 81 | |
| 6 | 13 | 36 | 49 | 28 | 141 | 53 | 171 | 116 | 4.9 | 1.6 | 3.8 | 31 | |
| 7 | 57 | 34 | 46 | 24 | 86 | 80 | 148 | 73 | 4.1 | 1.7 | 3.9 | 11 | |
| 8 | 50 | 31 | 47 | 23 | 58 | 139 | 132 | 26 | 4.1 | 1.7 | 2.9 | 6.7 | |
| 9 | 22 | 35 | 67 | 22 | 42 | 164 | 110 | 23 | 3.3 | 1.7 | 2.6 | 5.2 | |
| 10 | 20 | 32 | 65 | 20 | 34 | 173 | 94 | 42 | 3.4 | 1.5 | 7.4 | 3.4 | |
| 11 | 32 | 28 | 54 | 19 | 28 | 113 | 81 | 44 | 2.9 | 1.7 | 5.6 | 2.1 | |
| 12 | 38 | 26 | 51 | 18 | 26 | 103 | 75 | 37 | 2.8 | 1.4 | 3.3 | .60 | |
| 13 | 25 | 24 | 45 | 18 | 24 | 108 | 72 | 30 | 2.5 | 1.7 | 4.4 | 1.3 | |
| 14 | 24 | 25 | 39 | 17 | 23 | 90 | 54 | 26 | 2.2 | 1.6 | 3.0 | 5.4 | |
| 15 | 22 | 25 | 70 | 16 | 100 | 78 | 48 | 24 | 2.0 | 1.8 | 2.5 | 3.1 | |
| 16 | 23 | 28 | 89 | 15 | 172 | 68 | 50 | 33 | 2.3 | 1.8 | .60 | 1.4 | |
| 17 | 23 | 31 | 66 | 15 | 101 | 59 | 51 | 26 | 2.5 | 1.3 | .00 | .00 | |
| 18 | 22 | 33 | 60 | 40 | 117 | 58 | 52 | 20 | 2.2 | 5.1 | .00 | .00 | |
| 19 | 22 | 24 | 56 | 64 | 121 | 65 | 55 | 115 | 2.3 | 12 | .00 | .00 | |
| 20 | 22 | 21 | 203 | 154 | 300 | 65 | 73 | 217 | 2.1 | 7.1 | 2.3 | 2.6 | |
| 21 | 20 | 20 | 197 | 126 | 167 | 61 | 80 | 71 | 1.9 | 53 | .00 | 13 | |
| 22 | 19 | 19 | 99 | 88 | 94 | 64 | 60 | 49 | 1.6 | 20 | .00 | 9.2 | |
| 23 | 23 | 19 | 81 | 60 | 118 | 78 | 46 | 47 | 1.6 | 15 | .00 | 9.3 | |
| 24 | 26 | 21 | 80 | 50 | 108 | 92 | 49 | 43 | 1.5 | 48 | 10 | 12 | |
| 25 | 31 | 28 | 77 | 42 | 69 | 87 | 46 | 35 | 1.5 | 24 | 1.9 | 14 | |
| 26 | 40 | 55 | 82 | 36 | 56 | 307 | 71 | 31 | 1.3 | 28 | 1.0 | 11 | |
| 27 | 42 | 46 | 79 | 31 | 48 | 213 | 89 | 31 | 1.5 | 13 | .00 | 11 | |
| 28 | 43 | 33 | 77 | 27 | 40 | 123 | 89 | 18 | 1.5 | 6.7 | .00 | 13 | |
| 29 | 38 | 65 | 113 | 25 | 43 | 97 | 95 | 13 | 1.6 | 5.0 | 5.1 | 13 | |
| 30 | 35 | 82 | 81 | 23 | --- | 72 | 93 | 9.9 | 1.6 | 5.2 | 8.5 | 15 | |
| 31 | 34 | --- | 72 | 93 | --- | 58 | --- | 9.6 | --- | 8.1 | 2.0 | --- | |
| TOTAL | 828 | 995 | 2315 | 1350 | 4407 | 2889 | 3419 | 1604.5 | 104.0 | 277.7 | 93.00 | 371.20 | |
| MEAN | 26.7 | 33.2 | 74.7 | 43.5 | 152 | 93.2 | 114 | 51.8 | 3.47 | 8.96 | 3.00 | 12.4 | |
| MAX | 57 | 82 | 203 | 154 | 723 | 307 | 735 | 217 | 14 | 53 | 10 | 95 | |
| MIN | 11 | 19 | 39 | 15 | 23 | 39 | 46 | 9.6 | 1.3 | 1.3 | .00 | .00 | |
| CFSM | .30 | .37 | .84 | .49 | 1.70 | 1.04 | 1.28 | .58 | .04 | .10 | .03 | .14 | |
| IN. | .35 | .41 | .97 | .56 | 1.84 | 1.20 | 1.43 | .67 | .04 | .12 | .04 | .15 | |
| CAL YR 1987 | TOTAL | 25147.1 | | MEAN | 68.9 | MAX | 1120 | MIN | 4.4 | CFSM | .77 | IN. | 10.49 |
| WTR YR 1988 | TOTAL | 18653.40 | | MEAN | 51.0 | MAX | 735 | MIN | .00 | CFSM | .57 | IN. | 7.78 |

BEAVER RIVER BASIN

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

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

DRAINAGE AREA.--248 mi².

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

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

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

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

COOPERATION.--Gage-height records, Oct. 1-29 and Nov. 28 to Dec. 18, provided by U.S. Army Corps of Engineers.

AVERAGE DISCHARGE.--58 years, 237 ft³/s (unadjusted).

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 727 ft³/s Oct. 10, gage height, 3.18 ft; minimum daily discharge, 22 ft³/s Dec. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------------|-------|------|------|------|------|------|------|------|------|----------|------|------|
| 1 | 167 | 43 | 116 | 102 | 83 | 499 | 100 | 59 | 79 | 161 | 106 | 119 |
| 2 | 179 | 57 | 116 | 105 | 87 | 494 | 100 | 59 | 75 | 160 | 106 | 119 |
| 3 | 180 | 87 | 115 | 104 | 86 | 495 | 102 | 46 | 75 | 158 | 107 | 119 |
| 4 | 180 | 106 | 116 | 76 | 195 | 505 | 110 | 37 | 75 | 158 | 108 | 87 |
| 5 | 180 | 112 | 116 | 55 | 409 | 505 | 114 | 37 | 75 | 158 | 108 | 63 |
| 6 | 181 | 112 | 116 | 106 | 444 | 329 | 312 | 37 | 73 | 158 | 108 | 63 |
| 7 | 184 | 112 | 116 | 103 | 437 | 72 | 442 | 37 | 73 | 146 | 108 | 94 |
| 8 | 184 | 112 | 115 | 126 | 434 | 60 | 442 | 37 | 74 | 123 | 108 | 114 |
| 9 | 214 | 112 | 103 | 148 | 420 | 120 | 247 | 37 | 75 | 114 | 108 | 114 |
| 10 | 522 | 112 | 102 | 148 | 425 | 376 | 114 | 37 | 81 | 114 | 108 | 114 |
| 11 | 719 | 112 | 104 | 148 | 386 | 465 | 114 | 38 | 86 | 114 | 107 | 114 |
| 12 | 427 | 112 | 102 | 144 | 365 | 443 | 114 | 38 | 86 | 114 | 116 | 109 |
| 13 | 212 | 67 | 37 | 144 | 381 | 272 | 114 | 38 | 86 | 112 | 122 | 108 |
| 14 | 243 | 124 | 101 | 147 | 367 | 86 | 102 | 37 | 86 | 110 | 122 | 121 |
| 15 | 272 | 145 | 82 | 157 | 348 | 123 | 93 | 38 | 86 | 110 | 122 | 132 |
| 16 | 293 | 188 | 22 | 169 | 227 | 232 | 91 | 39 | 86 | 110 | 122 | 132 |
| 17 | 309 | 188 | 66 | 169 | 149 | 279 | 91 | 38 | 86 | 110 | 122 | 132 |
| 18 | 309 | 141 | 95 | 169 | 151 | 273 | 91 | 37 | 86 | 110 | 122 | 132 |
| 19 | 339 | 116 | 93 | 169 | 223 | 272 | 91 | 38 | 86 | 110 | 122 | 132 |
| 20 | 356 | 116 | 95 | 169 | 351 | 272 | 91 | 38 | 114 | 110 | 122 | 127 |
| 21 | 384 | 116 | 93 | 164 | 261 | 272 | 91 | 37 | 132 | 88 | 122 | 122 |
| 22 | 400 | 116 | 93 | 158 | 62 | 207 | 91 | 37 | 148 | 70 | 122 | 122 |
| 23 | 400 | 116 | 93 | 159 | 160 | 89 | 90 | 37 | 158 | 93 | 122 | 122 |
| 24 | 394 | 116 | 94 | 158 | 274 | 87 | 89 | 37 | 156 | 108 | 121 | 122 |
| 25 | 392 | 115 | 93 | 158 | 335 | 88 | 75 | 38 | 158 | 108 | 119 | 122 |
| 26 | 308 | 114 | 95 | 166 | 390 | 92 | 60 | 50 | 158 | 107 | 119 | 122 |
| 27 | 190 | 114 | 95 | 168 | 408 | 96 | 61 | 58 | 158 | 106 | 119 | 122 |
| 28 | 103 | 115 | 117 | 114 | 453 | 97 | 60 | 58 | 159 | 106 | 121 | 114 |
| 29 | 43 | 116 | 121 | 83 | 478 | 97 | 59 | 59 | 159 | 106 | 113 | 108 |
| 30 | 43 | 116 | 104 | 83 | --- | 99 | 59 | 59 | 161 | 107 | 108 | 108 |
| 31 | 43 | --- | 102 | 83 | --- | 100 | --- | 74 | --- | 106 | 115 | --- |
| TOTAL | 8350 | 3428 | 3028 | 4152 | 8789 | 7496 | 3810 | 1346 | 3190 | 3665 | 3575 | 3429 |
| MEAN | 269 | 114 | 97.7 | 134 | 303 | 242 | 127 | 43.4 | 106 | 118 | 115 | 114 |
| MAX | 719 | 188 | 121 | 169 | 478 | 505 | 442 | 74 | 161 | 161 | 122 | 132 |
| MIN | 43 | 43 | 22 | 55 | 62 | 60 | 59 | 37 | 73 | 70 | 106 | 63 |
| (+) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5.64 | 13.1 | 5.50 |
| CAL YR 1987 TOTAL | 55473 | | | MEAN | 152 | MAX | 1360 | MIN | 22 | (+) 0 | | |
| WTR YR 1988 TOTAL | 54258 | | | MEAN | 148 | MAX | 719 | MIN | 22 | (+) 2.02 | | |

(+) Diversion in cubic feet per second, furnished by Mahoning Valley Sanitary District.

BEAVER RIVER BASIN

37

03091500 MAHONING RIVER AT PRICETOWN, OH

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

DRAINAGE AREA.--273 mi².

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

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

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

REMARKS.--Estimated daily discharges: Jan. 9-17. Records good. Flow regulated by Berlin Lake beginning 1942 and Milton Reservoir. Diversion upstream from station from Berlin Lake for part of municipal supply of Mahoning Valley Sanitary District. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--59 years, 260 ft³/s (unadjusted).

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 832 ft³/s Mar. 26, gage height, 4.25 ft; minimum daily discharge, 31 ft³/s May 25 and Sept. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|-------|------|------|------|------|------|------|------|------|------|------|
| 1 | 152 | 54 | 154 | 142 | 145 | 458 | 71 | 41 | 78 | 154 | 122 | 164 |
| 2 | 163 | 52 | 153 | 165 | 246 | 456 | 72 | 42 | 78 | 155 | 122 | 150 |
| 3 | 170 | 66 | 148 | 196 | 273 | 460 | 78 | 43 | 78 | 156 | 122 | 151 |
| 4 | 172 | 84 | 158 | 157 | 264 | 466 | 88 | 43 | 78 | 155 | 166 | 87 |
| 5 | 172 | 102 | 163 | 143 | 280 | 468 | 89 | 43 | 77 | 155 | 135 | 37 |
| 6 | 173 | 109 | 152 | 241 | 302 | 405 | 90 | 43 | 77 | 158 | 105 | 31 |
| 7 | 200 | 113 | 148 | 234 | 316 | 108 | 92 | 44 | 77 | 160 | 105 | 68 |
| 8 | 212 | 115 | 153 | 220 | 322 | 111 | 96 | 45 | 78 | 149 | 112 | 128 |
| 9 | 197 | 117 | 161 | 230 | 352 | 121 | 98 | 44 | 80 | 140 | 115 | 128 |
| 10 | 238 | 117 | 142 | 250 | 393 | 352 | 99 | 42 | 96 | 140 | 115 | 128 |
| 11 | 367 | 117 | 133 | 260 | 410 | 448 | 99 | 42 | 107 | 139 | 115 | 128 |
| 12 | 502 | 125 | 133 | 270 | 430 | 416 | 99 | 42 | 107 | 123 | 126 | 128 |
| 13 | 563 | 155 | 131 | 270 | 422 | 350 | 101 | 42 | 107 | 115 | 138 | 128 |
| 14 | 306 | 77 | 123 | 270 | 415 | 110 | 101 | 43 | 107 | 115 | 138 | 130 |
| 15 | 268 | 122 | 184 | 270 | 409 | 122 | 83 | 43 | 107 | 115 | 138 | 131 |
| 16 | 273 | 135 | 81 | 260 | 403 | 245 | 68 | 44 | 107 | 115 | 140 | 128 |
| 17 | 285 | 136 | 101 | 250 | 366 | 247 | 68 | 42 | 107 | 115 | 140 | 124 |
| 18 | 294 | 137 | 124 | 207 | 339 | 273 | 68 | 40 | 107 | 116 | 140 | 124 |
| 19 | 298 | 207 | 125 | 198 | 244 | 365 | 68 | 37 | 107 | 117 | 140 | 124 |
| 20 | 302 | 212 | 267 | 226 | 463 | 310 | 55 | 35 | 129 | 117 | 140 | 124 |
| 21 | 312 | 213 | 307 | 241 | 362 | 289 | 45 | 35 | 147 | 100 | 140 | 124 |
| 22 | 323 | 212 | 150 | 230 | 93 | 265 | 45 | 34 | 147 | 80 | 140 | 124 |
| 23 | 331 | 197 | 130 | 208 | 176 | 139 | 49 | 34 | 150 | 80 | 138 | 109 |
| 24 | 337 | 133 | 127 | 198 | 299 | 98 | 52 | 33 | 150 | 80 | 145 | 101 |
| 25 | 343 | 132 | 123 | 195 | 341 | 93 | 48 | 31 | 150 | 92 | 143 | 101 |
| 26 | 347 | 143 | 122 | 208 | 368 | 205 | 39 | 46 | 149 | 107 | 142 | 113 |
| 27 | 325 | 138 | 117 | 240 | 382 | 144 | 39 | 60 | 150 | 119 | 142 | 119 |
| 28 | 255 | 133 | 129 | 201 | 406 | 125 | 41 | 60 | 151 | 119 | 144 | 110 |
| 29 | 147 | 187 | 184 | 107 | 431 | 61 | 41 | 60 | 152 | 119 | 128 | 105 |
| 30 | 86 | 179 | 137 | 91 | --- | 58 | 41 | 60 | 152 | 121 | 117 | 118 |
| 31 | 64 | --- | 131 | 99 | --- | 71 | --- | 70 | --- | 122 | 154 | --- |
| TOTAL | 8177 | 4019 | 4591 | 6477 | 9652 | 7839 | 2123 | 1363 | 3387 | 3848 | 4107 | 3465 |
| MEAN | 264 | 134 | 148 | 209 | 333 | 253 | 70.8 | 44.0 | 113 | 124 | 132 | 116 |
| MAX | 563 | 213 | 307 | 270 | 463 | 468 | 101 | 70 | 152 | 160 | 166 | 164 |
| MIN | 64 | 52 | 81 | 91 | 93 | 58 | 39 | 31 | 77 | 80 | 105 | 31 |
| CAL YR 1987 | TOTAL | 60637 | | MEAN | 166 | MAX | 869 | MIN | 21 | | | |
| WTR YR 1988 | TOTAL | 59048 | | MEAN | 161 | MAX | 563 | MIN | 31 | | | |

BEAVER RIVER BASIN

03092000 KALE CREEK NEAR PRICETOWN, OH

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

DRAINAGE AREA.--21.9 mi².

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

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

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

REMARKS.--Estimated daily discharges: Jan. 2-17, 23-30, Feb. 4-14. Records fair except those for periods of estimated discharge, which are poor. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--48 years, 23.2 ft³/s, 14.39 in/yr.

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

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--|------|-----------------------------------|---------------------|--|------|-----------------------------------|---------------------|
| Feb. 2 | 1300 | *514 | *4.35 | No other peak greater than base discharge. | | | |
| Minimum daily discharge, 0 ft ³ /s Sept. 21-26. | | | | | | | |

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|---------|--------|--------|--------|------|-------|--------|------|-------|------|-------|-------|
| 1 | 23 | 8.2 | 31 | 18 | 49 | 11 | 9.6 | 3.9 | .48 | .08 | .30 | .66 | |
| 2 | 11 | 10 | 23 | 8.6 | 390 | 10 | 9.0 | 3.0 | .70 | .08 | .22 | .46 | |
| 3 | 8.4 | 11 | 21 | 4.5 | 123 | 13 | 17 | 2.2 | .69 | .07 | .19 | .63 | |
| 4 | 7.2 | 6.4 | 23 | 3.2 | 40 | 17 | 286 | 1.8 | .44 | .06 | .17 | 50 | |
| 5 | 6.8 | 4.0 | 37 | 2.4 | 20 | 14 | 60 | 2.1 | .37 | .05 | .16 | 19 | |
| 6 | 7.5 | 2.9 | 28 | 1.9 | 13 | 15 | 24 | 7.6 | .38 | .05 | .17 | 4.5 | |
| 7 | 54 | 1.4 | 24 | 1.6 | 9.0 | 27 | 30 | 8.6 | .37 | .05 | .16 | 1.7 | |
| 8 | 51 | .95 | 24 | 1.4 | 7.6 | 41 | 32 | 5.0 | .36 | .04 | .14 | .86 | |
| 9 | 18 | 1.9 | 60 | 1.3 | 6.6 | 41 | 16 | 3.4 | .37 | .05 | .13 | .49 | |
| 10 | 8.5 | 4.5 | 36 | 1.2 | 5.8 | 53 | 10 | 6.0 | .34 | .04 | .11 | .35 | |
| 11 | 17 | 5.0 | 17 | 1.1 | 5.2 | 31 | 6.8 | 7.8 | .29 | .07 | .10 | .30 | |
| 12 | 35 | 4.0 | 17 | 1.1 | 4.6 | 20 | 5.0 | 4.4 | .29 | .07 | .09 | .26 | |
| 13 | 14 | 3.2 | 16 | 1.0 | 4.3 | 25 | 4.1 | 2.8 | .28 | .05 | .08 | .37 | |
| 14 | 5.9 | 2.7 | 8.7 | .98 | 4.0 | 30 | 3.5 | 2.6 | .27 | .05 | .07 | .35 | |
| 15 | 3.4 | 2.2 | 65 | .94 | 27 | 23 | 3.0 | 2.9 | .28 | .04 | .06 | .37 | |
| 16 | 2.1 | 1.9 | 60 | .92 | 62 | 19 | 3.0 | 47 | .40 | .03 | .05 | .32 | |
| 17 | 1.6 | 3.0 | 13 | .90 | 42 | 17 | 3.0 | 29 | .48 | .03 | .04 | .32 | |
| 18 | 1.5 | 9.0 | 8.9 | 3.3 | 44 | 18 | 3.0 | 10 | .44 | .06 | .04 | .26 | |
| 19 | 1.3 | 11 | 8.6 | 5.4 | 45 | 21 | 2.7 | 19 | .34 | .14 | .08 | .01 | |
| 20 | 1.1 | 10 | 233 | 65 | 133 | 23 | 2.1 | 53 | .28 | .13 | .06 | .07 | |
| 21 | 1.4 | 9.9 | 158 | 60 | 103 | 20 | 2.1 | 22 | .23 | 8.2 | .05 | .00 | |
| 22 | 1.4 | 11 | 37 | 27 | 74 | 19 | 2.1 | 10 | .19 | 8.7 | .04 | .00 | |
| 23 | 1.5 | 11 | 22 | 13 | 32 | 18 | 2.2 | 5.9 | .18 | 1.8 | .08 | .00 | |
| 24 | 1.7 | 22 | 21 | 8.0 | 40 | 18 | 2.5 | 3.8 | .15 | .79 | .13 | .00 | |
| 25 | 2.1 | 32 | 19 | 5.0 | 26 | 17 | 2.9 | 2.5 | .12 | .53 | .24 | .00 | |
| 26 | 2.7 | 40 | 18 | 4.0 | 17 | 86 | 2.2 | 1.7 | .13 | 1.1 | .34 | .00 | |
| 27 | 8.3 | 31 | 16 | 3.4 | 14 | 55 | 1.7 | 1.4 | .11 | 1.2 | .23 | .02 | |
| 28 | 8.2 | 20 | 13 | 2.6 | 11 | 32 | 1.7 | 1.2 | .11 | .68 | .42 | .10 | |
| 29 | 8.9 | 70 | 25 | 2.5 | 11 | 21 | 2.2 | 1.1 | .10 | .45 | 1.1 | .11 | |
| 30 | 9.0 | 81 | 21 | 2.4 | --- | 16 | 3.7 | .83 | .09 | .35 | 2.6 | .11 | |
| 31 | 9.1 | --- | 13 | 10 | --- | 12 | --- | .50 | --- | .43 | 1.3 | --- | |
| TOTAL | 332.6 | 431.15 | 1117.2 | 262.64 | 1363.1 | 783 | 553.1 | 273.03 | 9.26 | 25.47 | 8.95 | 81.62 | |
| MEAN | 10.7 | 14.4 | 36.0 | 8.47 | 47.0 | 25.3 | 18.4 | 8.81 | .31 | .82 | .29 | 2.72 | |
| MAX | 54 | 81 | 233 | 65 | 390 | 86 | 286 | 53 | .70 | 8.7 | 2.6 | 50 | |
| MIN | 1.1 | .95 | 8.6 | .90 | 4.0 | 10 | 1.7 | .50 | .09 | .03 | .04 | .00 | |
| CFSM | .49 | .66 | 1.64 | .39 | 2.15 | 1.16 | .84 | .40 | .01 | .04 | .01 | .12 | |
| IN. | .56 | .73 | 1.90 | .45 | 2.32 | 1.33 | .94 | .46 | .02 | .04 | .02 | .14 | |
| CAL YR 1987 | TOTAL | 6174.11 | | MEAN | 16.9 | MAX | 494 | MIN | .02 | CFSM | .77 | IN. | 10.49 |
| WTR YR 1988 | TOTAL | 5241.12 | | MEAN | 14.3 | MAX | 390 | MIN | .00 | CFSM | .65 | IN. | 8.90 |

BEAVER RIVER BASIN

39

03092090 WEST BRANCH MAHONING RIVER NEAR RAVENNA, OH

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

DRAINAGE AREA.--21.8 mi².

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

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

REMARKS.--Estimated daily discharges: Jan. 2-17, 22-30, Feb. 4-14. Records fair except those for periods of estimated records, which are poor. Water-quality data collected at this site 1966 to 1978. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--23 years, 27.8 ft³/s, 17.32 in/yr.

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

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|--------------------------------|------------------|----------------------------|------|--------------------------------|------------------|
| Sept. 4 | 0200 | *671 | *5.32 | No other peaks above base. | | | |

Minimum daily discharge, .02 ft³/s July 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|---------|------|-------|--------|------|-------|-------|-------|--------|-------|-------|-------|
| 1 | 4.5 | 6.5 | 12 | 28 | 116 | 17 | 17 | 17 | 2.4 | .92 | 2.0 | 4.3 | |
| 2 | 4.2 | 3.0 | 15 | 11 | 283 | 16 | 16 | 11 | 3.4 | .93 | 6.8 | 3.3 | |
| 3 | 4.5 | 2.1 | 13 | 8.0 | 85 | 17 | 124 | 9.5 | 2.9 | .95 | 29 | 38 | |
| 4 | 3.6 | 1.8 | 16 | 6.4 | 34 | 17 | 246 | 8.3 | 3.3 | .63 | 8.0 | 376 | |
| 5 | 2.8 | 2.8 | 20 | 5.6 | 22 | 17 | 59 | 9.5 | 3.0 | .40 | 4.5 | 68 | |
| 6 | 2.5 | 4.6 | 17 | 5.2 | 15 | 21 | 34 | 17 | 2.5 | .53 | 4.3 | 29 | |
| 7 | 15 | 4.8 | 15 | 4.8 | 11 | 27 | 42 | 13 | 2.0 | .02 | 5.4 | 14 | |
| 8 | 17 | 5.0 | 25 | 4.6 | 8.6 | 28 | 31 | 8.8 | 3.7 | .20 | 3.6 | 8.0 | |
| 9 | 11 | 5.9 | 78 | 4.4 | 7.0 | 34 | 22 | 8.0 | 2.1 | .40 | 2.5 | 5.5 | |
| 10 | 5.9 | 5.7 | 43 | 4.2 | 6.2 | 38 | 17 | 16 | 1.7 | .68 | 2.1 | 3.9 | |
| 11 | 15 | 5.1 | 19 | 4.0 | 4.6 | 23 | 15 | 11 | 1.4 | 2.9 | 2.0 | 3.0 | |
| 12 | 12 | 4.3 | 22 | 4.0 | 4.2 | 20 | 13 | 7.5 | 1.2 | 2.7 | 2.2 | 3.6 | |
| 13 | 5.9 | 4.1 | 17 | 3.9 | 4.0 | 28 | 12 | 8.0 | 1.1 | 2.5 | 2.4 | 53 | |
| 14 | 3.8 | 3.8 | 10 | 3.8 | 3.8 | 24 | 12 | 8.9 | 1.1 | 2.8 | 2.2 | 20 | |
| 15 | 3.3 | 3.4 | 51 | 3.7 | 36 | 22 | 11 | 8.3 | .91 | 3.2 | 1.7 | 11 | |
| 16 | 3.0 | 3.1 | 54 | 3.6 | 53 | 24 | 12 | 46 | 1.2 | 3.2 | 2.5 | 7.5 | |
| 17 | 2.9 | 3.2 | 26 | 3.5 | 40 | 21 | 14 | 19 | 2.0 | 3.4 | 2.8 | 6.3 | |
| 18 | 3.2 | 4.2 | 21 | 17 | 53 | 25 | 14 | 12 | 1.7 | 5.2 | 3.6 | 5.8 | |
| 19 | 4.0 | 3.8 | 20 | 23 | 69 | 27 | 15 | 13 | 1.4 | 9.7 | 5.6 | 5.5 | |
| 20 | 4.7 | 4.2 | 256 | 97 | 167 | 30 | 11 | 16 | 1.4 | 6.2 | 4.3 | 5.6 | |
| 21 | 4.3 | 5.3 | 168 | 59 | 55 | 26 | 12 | 12 | 1.0 | 26 | 3.7 | 6.5 | |
| 22 | 4.8 | 4.6 | 52 | 20 | 43 | 24 | 11 | 12 | .87 | 7.4 | 3.1 | 7.7 | |
| 23 | 5.2 | 5.0 | 34 | 12 | 104 | 26 | 11 | 7.6 | 1.1 | 24 | 7.2 | 9.3 | |
| 24 | 7.0 | 9.5 | 31 | 8.8 | 50 | 37 | 15 | 13 | .92 | 14 | 7.4 | 9.3 | |
| 25 | 11 | 5.3 | 32 | 7.6 | 29 | 42 | 12 | 8.6 | .87 | 6.9 | 6.2 | 8.9 | |
| 26 | 7.5 | 11 | 30 | 6.4 | 23 | 109 | 8.8 | 6.4 | 1.2 | 15 | 8.5 | 9.4 | |
| 27 | 8.7 | 7.5 | 23 | 5.4 | 19 | 73 | 7.7 | 4.9 | 1.2 | 7.5 | 5.7 | 9.8 | |
| 28 | 15 | 4.8 | 20 | 4.6 | 17 | 41 | 8.6 | 4.2 | .90 | 4.2 | 26 | 9.7 | |
| 29 | 8.6 | 32 | 26 | 4.2 | 17 | 28 | 15 | 3.6 | 1.1 | 3.0 | 22 | 9.9 | |
| 30 | 5.1 | 25 | 20 | 3.8 | --- | 21 | 27 | 3.5 | .99 | 2.4 | 11 | 10 | |
| 31 | 3.7 | --- | 18 | 29 | --- | 17 | --- | 2.8 | --- | 2.8 | 6.5 | --- | |
| TOTAL | 209.7 | 191.4 | 1204 | 406.5 | 1379.4 | 920 | 865.1 | 346.4 | 50.56 | 160.66 | 204.8 | 761.8 | |
| MEAN | 6.76 | 6.38 | 38.8 | 13.1 | 47.6 | 29.7 | 28.8 | 11.2 | 1.69 | 5.18 | 6.61 | 25.4 | |
| MAX | 17 | 32 | 256 | 97 | 283 | 109 | 246 | 46 | 3.7 | 26 | 29 | 376 | |
| MIN | 2.5 | 1.8 | 10 | 3.5 | 3.8 | 16 | 7.7 | 2.8 | .87 | .02 | 1.7 | 3.0 | |
| CFSM | .31 | .29 | 1.78 | .60 | 2.18 | 1.36 | 1.32 | .51 | .08 | .24 | .30 | 1.17 | |
| IN. | .36 | .33 | 2.05 | .69 | 2.35 | 1.57 | 1.48 | .59 | .09 | .27 | .35 | 1.30 | |
| CAL YR 1987 | TOTAL | 7533.81 | | MEAN | 20.6 | MAX | 439 | MIN | .53 | CFSM | .94 | IN. | 12.86 |
| WTR YR 1988 | TOTAL | 6700.32 | | MEAN | 18.3 | MAX | 376 | MIN | .02 | CFSM | .84 | IN. | 11.43 |

BEAVER RIVER BASIN

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

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

DRAINAGE AREA.--81.7 mi².

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

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

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

AVERAGE DISCHARGE.--20 years, 103 ft³/s.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 155 ft³/s June 14, gage height, 4.27 ft; minimum daily, 5.1 ft³/s Apr. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|---------|------|------|------|-------|--------|------|------|------|------|------|
| 1 | 58 | 78 | 26 | 83 | 81 | 18 | 5.2 | 82 | 133 | 122 | 101 | 90 |
| 2 | 57 | 77 | 26 | 82 | 96 | 6.1 | 5.1 | 82 | 135 | 123 | 101 | 90 |
| 3 | 58 | 77 | 25 | 81 | 80 | 6.1 | 12 | 82 | 135 | 123 | 100 | 93 |
| 4 | 58 | 78 | 26 | 81 | 81 | 6.0 | 16 | 82 | 135 | 123 | 99 | 76 |
| 5 | 58 | 78 | 26 | 81 | 95 | 6.0 | 5.8 | 82 | 136 | 123 | 98 | 42 |
| 6 | 58 | 78 | 25 | 83 | 112 | 6.1 | 5.5 | 83 | 137 | 123 | 98 | 41 |
| 7 | 62 | 76 | 25 | 83 | 111 | 5.7 | 6.3 | 82 | 137 | 123 | 97 | 60 |
| 8 | 61 | 75 | 21 | 79 | 111 | 5.4 | 5.7 | 82 | 138 | 122 | 95 | 73 |
| 9 | 60 | 75 | 39 | 79 | 91 | 6.2 | 5.4 | 82 | 140 | 122 | 94 | 82 |
| 10 | 60 | 74 | 42 | 79 | 56 | 5.8 | 5.2 | 82 | 141 | 122 | 88 | 89 |
| 11 | 61 | 73 | 41 | 79 | 40 | 5.4 | 5.2 | 82 | 148 | 123 | 100 | 89 |
| 12 | 60 | 71 | 41 | 78 | 40 | 5.3 | 5.2 | 82 | 154 | 123 | 99 | 89 |
| 13 | 60 | 71 | 41 | 78 | 39 | 5.9 | 5.2 | 82 | 155 | 122 | 98 | 90 |
| 14 | 62 | 70 | 41 | 78 | 39 | 5.5 | 13 | 82 | 148 | 122 | 98 | 90 |
| 15 | 63 | 69 | 46 | 78 | 42 | 5.3 | 30 | 84 | 136 | 121 | 106 | 90 |
| 16 | 63 | 68 | 44 | 77 | 40 | 5.3 | 38 | 98 | 142 | 120 | 113 | 90 |
| 17 | 63 | 68 | 43 | 77 | 40 | 5.3 | 38 | 49 | 143 | 119 | 113 | 90 |
| 18 | 65 | 68 | 43 | 78 | 40 | 5.4 | 39 | 58 | 143 | 119 | 113 | 91 |
| 19 | 65 | 67 | 43 | 79 | 43 | 5.4 | 38 | 84 | 144 | 119 | 105 | 82 |
| 20 | 66 | 66 | 66 | 82 | 44 | 5.4 | 50 | 85 | 127 | 117 | 112 | 63 |
| 21 | 70 | 44 | 74 | 78 | 40 | 5.3 | 58 | 82 | 115 | 97 | 111 | 54 |
| 22 | 74 | 27 | 87 | 77 | 39 | 5.2 | 58 | 82 | 115 | 75 | 111 | 67 |
| 23 | 74 | 27 | 86 | 77 | 43 | 5.3 | 59 | 82 | 116 | 95 | 111 | 76 |
| 24 | 75 | 26 | 85 | 77 | 40 | 5.4 | 59 | 82 | 117 | 110 | 110 | 76 |
| 25 | 79 | 26 | 85 | 76 | 40 | 7.3 | 72 | 106 | 117 | 109 | 110 | 76 |
| 26 | 79 | 27 | 85 | 76 | 28 | 7.7 | 81 | 131 | 119 | 109 | 110 | 75 |
| 27 | 80 | 26 | 84 | 76 | 21 | 6.4 | 81 | 131 | 120 | 106 | 110 | 75 |
| 28 | 79 | 26 | 84 | 76 | 20 | 5.5 | 82 | 131 | 121 | 105 | 111 | 75 |
| 29 | 79 | 29 | 84 | 75 | 20 | 5.3 | 82 | 131 | 121 | 104 | 81 | 75 |
| 30 | 78 | 26 | 83 | 75 | --- | 5.2 | 83 | 131 | 122 | 104 | 60 | 75 |
| 31 | 78 | --- | 83 | 76 | --- | 5.2 | --- | 133 | --- | 103 | 79 | --- |
| TOTAL | 2063 | 1741 | 1650 | 2434 | 1612 | 189.4 | 1048.8 | 2829 | 3990 | 3548 | 3132 | 2324 |
| MEAN | 66.5 | 58.0 | 53.2 | 78.5 | 55.6 | 6.11 | 35.0 | 91.3 | 133 | 114 | 101 | 77.5 |
| MAX | 80 | 78 | 87 | 83 | 112 | 18 | 83 | 133 | 155 | 123 | 113 | 93 |
| MIN | 57 | 26 | 21 | 75 | 20 | 5.2 | 5.1 | 49 | 115 | 75 | 60 | 41 |
| CAL YR 1987 | TOTAL | 19362 | | MEAN | 53.0 | MAX | 89 | MIN | 21 | | | |
| WTR YR 1988 | TOTAL | 26561.2 | | MEAN | 72.6 | MAX | 155 | MIN | 5.1 | | | |

BEAVER RIVER BASIN

41

03093000 EAGLE CREEK AT PHALANX STATION, OH

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

DRAINAGE AREA.--97.6 mi².

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

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

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

REMARKS.--Estimated daily discharges: Jan. 2-17, 23-30, Feb. 6-14. Records fair. Low flow slightly regulated by mill several miles upstream from station. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--59 years, 111 ft³/s, 15.45 in/yr.

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

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|--------|------|-----------------------------------|---------------------|
| Dec. 21 | 1230 | *1,330 | *9.88 | Apr. 4 | 2230 | 1,300 | 9.79 |

Minimum daily 8.8 ft³/s July 17, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|---------|------|------|------|------|------|------|------|-------|------|------|-------|
| 1 | 32 | 34 | 104 | 111 | 249 | 77 | 67 | 77 | 24 | 12 | 16 | 17 | |
| 2 | 29 | 33 | 91 | 80 | 754 | 72 | 66 | 56 | 23 | 12 | 17 | 15 | |
| 3 | 26 | 32 | 91 | 52 | 889 | 71 | 95 | 47 | 26 | 12 | 57 | 15 | |
| 4 | 27 | 31 | 94 | 42 | 292 | 72 | 895 | 43 | 25 | 11 | 28 | 314 | |
| 5 | 27 | 30 | 110 | 37 | 199 | 64 | 762 | 43 | 25 | 11 | 18 | 581 | |
| 6 | 23 | 28 | 103 | 34 | 140 | 68 | 236 | 89 | 23 | 11 | 16 | 113 | |
| 7 | 43 | 27 | 92 | 32 | 110 | 93 | 204 | 77 | 22 | 10 | 19 | 58 | |
| 8 | 86 | 27 | 90 | 31 | 88 | 106 | 217 | 54 | 21 | 10 | 17 | 39 | |
| 9 | 85 | 28 | 219 | 30 | 74 | 108 | 147 | 45 | 19 | 9.9 | 15 | 29 | |
| 10 | 49 | 33 | 255 | 29 | 68 | 159 | 108 | 71 | 18 | 9.6 | 14 | 25 | |
| 11 | 61 | 32 | 132 | 29 | 62 | 105 | 89 | 66 | 17 | 9.9 | 15 | 22 | |
| 12 | 79 | 29 | 111 | 29 | 56 | 80 | 73 | 50 | 17 | 12 | 17 | 20 | |
| 13 | 50 | 28 | 123 | 28 | 50 | 99 | 64 | 41 | 17 | 10 | 14 | 35 | |
| 14 | 38 | 27 | 83 | 28 | 48 | 98 | 59 | 43 | 17 | 9.8 | 14 | 41 | |
| 15 | 32 | 27 | 142 | 27 | 79 | 83 | 56 | 39 | 16 | 9.3 | 13 | 26 | |
| 16 | 34 | 27 | 336 | 27 | 211 | 78 | 65 | 137 | 16 | 8.9 | 12 | 22 | |
| 17 | 30 | 27 | 177 | 26 | 168 | 77 | 68 | 144 | 16 | 8.8 | 12 | 20 | |
| 18 | 28 | 30 | 122 | 56 | 216 | 83 | 64 | 60 | 17 | 6.8 | 12 | 19 | |
| 19 | 30 | 31 | 108 | 102 | 230 | 93 | 69 | 55 | 17 | 11 | 13 | 19 | |
| 20 | 28 | 28 | 345 | 275 | 554 | 105 | 63 | 150 | 16 | 13 | 15 | 19 | |
| 21 | 27 | 28 | 1070 | 417 | 501 | 93 | 59 | 94 | 16 | 41 | 13 | 18 | |
| 22 | 27 | 29 | 460 | 176 | 195 | 81 | 59 | 62 | 15 | 46 | 12 | 18 | |
| 23 | 34 | 30 | 182 | 88 | 321 | 82 | 57 | 49 | 15 | 21 | 12 | 18 | |
| 24 | 33 | 39 | 144 | 70 | 410 | 107 | 63 | 44 | 14 | 27 | 17 | 18 | |
| 25 | 35 | 51 | 126 | 56 | 156 | 103 | 69 | 43 | 13 | 22 | 16 | 18 | |
| 26 | 40 | 66 | 121 | 49 | 107 | 265 | 65 | 37 | 13 | 54 | 14 | 17 | |
| 27 | 42 | 69 | 95 | 44 | 98 | 329 | 58 | 33 | 13 | 35 | 14 | 17 | |
| 28 | 74 | 51 | 81 | 40 | 82 | 202 | 43 | 30 | 13 | 20 | 18 | 17 | |
| 29 | 59 | 110 | 90 | 38 | 78 | 123 | 55 | 28 | 12 | 17 | 62 | 16 | |
| 30 | 44 | 191 | 82 | 36 | --- | 95 | 84 | 26 | 12 | 15 | 52 | 16 | |
| 31 | 37 | --- | 72 | 79 | --- | 77 | --- | 25 | --- | 15 | 25 | --- | |
| TOTAL | 1289 | 1253 | 5451 | 2198 | 6485 | 3348 | 4079 | 1858 | 528 | 523.0 | 609 | 1622 | |
| MEAN | 41.6 | 41.8 | 176 | 70.9 | 224 | 108 | 136 | 59.9 | 17.6 | 16.9 | 19.6 | 54.1 | |
| MAX | 86 | 191 | 1070 | 417 | 889 | 329 | 895 | 150 | 26 | 54 | 62 | 581 | |
| MIN | 23 | 27 | 72 | 26 | 48 | 64 | 43 | 25 | 12 | 8.8 | 12 | 15 | |
| CFSM | .43 | .43 | 1.80 | .73 | 2.30 | 1.11 | 1.39 | .61 | .18 | .17 | .20 | .55 | |
| IN. | .49 | .48 | 2.08 | .84 | 2.47 | 1.28 | 1.55 | .71 | .20 | .20 | .23 | .62 | |
| CAL YR 1987 | TOTAL | 36094 | | MEAN | 98.9 | MAX | 2170 | MIN | 16 | CFSM | 1.01 | IN. | 13.76 |
| WTR YR 1988 | TOTAL | 29243.0 | | MEAN | 79.9 | MAX | 1070 | MIN | 8.8 | CFSM | .82 | IN. | 11.15 |

BEAVER RIVER BASIN

03094000 MAHONING RIVER AT LEAVITTSBURG, OH

LOCATION.--Lat 41°14'21", long 80°52'51", in T.4 N., R.4 W., Trumbull County, Hydrologic Unit 05030103, on right bank at upstream side of Leavitt Road Bridge at Leavittsburg, 300 ft downstream from Duck Creek and 1.2 mi downstream from Eagle Creek.

DRAINAGE AREA.--575 mi².

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

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 871.25 ft above National Geodetic Vertical Datum of 1929. Prior to July 2, 1941, nonrecording gage, and July 2, 1941, to July 22, 1952, water-stage recorder, at site 50 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Feb. 6-19. Records good except for periods of estimated record, which are fair. Flow regulated by Berlin Lake, 25 mi upstream, beginning in 1942, by Milton Reservoir, 17 mi upstream, and by Michael J. Kirwan Reservoir, 20 mi upstream on West Branch, beginning in 1966. Diversion upstream from station from Berlin Lake for part of municipal supply of Mahoning Valley Sanitary District (see station 0309500). Water-quality data collected at this site 1943 to 1971. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--48 years, 582 ft³/s.

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,720 ft³/s Feb. 3, gage height 8.27 ft; minimum daily, 153 ft³/s Nov. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|-------|-------|-------|-------|-------|------|------|------|------|------|
| 1 | 356 | 158 | 470 | 422 | 513 | 558 | 229 | 268 | 244 | 245 | 222 | 305 |
| 2 | 320 | 153 | 384 | 356 | 1800 | 566 | 226 | 236 | 255 | 247 | 224 | 288 |
| 3 | 314 | 164 | 372 | 311 | 2330 | 555 | 279 | 218 | 255 | 248 | 249 | 295 |
| 4 | 313 | 185 | 384 | 302 | 1110 | 561 | 1630 | 208 | 257 | 248 | 256 | 630 |
| 5 | 310 | 205 | 446 | 190 | 869 | 546 | 1600 | 216 | 253 | 247 | 267 | 745 |
| 6 | 308 | 213 | 420 | 156 | 600 | 557 | 567 | 284 | 247 | 247 | 213 | 370 |
| 7 | 499 | 217 | 375 | 217 | 540 | 407 | 477 | 301 | 244 | 248 | 208 | 198 |
| 8 | 612 | 220 | 371 | 228 | 500 | 358 | 489 | 255 | 240 | 247 | 211 | 246 |
| 9 | 499 | 236 | 515 | 242 | 480 | 354 | 387 | 231 | 239 | 234 | 212 | 257 |
| 10 | 418 | 240 | 550 | 275 | 460 | 545 | 321 | 251 | 240 | 228 | 212 | 256 |
| 11 | 533 | 242 | 407 | 272 | 450 | 645 | 283 | 267 | 261 | 245 | 206 | 255 |
| 12 | 679 | 244 | 353 | 283 | 450 | 559 | 260 | 234 | 272 | 233 | 216 | 253 |
| 13 | 752 | 278 | 359 | 303 | 440 | 586 | 243 | 222 | 272 | 216 | 228 | 265 |
| 14 | 579 | 210 | 308 | 280 | 440 | 424 | 231 | 222 | 271 | 212 | 228 | 280 |
| 15 | 377 | 216 | 442 | 279 | 560 | 310 | 229 | 216 | 262 | 212 | 227 | 261 |
| 16 | 369 | 253 | 743 | 291 | 720 | 342 | 231 | 578 | 259 | 210 | 237 | 226 |
| 17 | 369 | 263 | 467 | 318 | 660 | 415 | 241 | 553 | 264 | 209 | 246 | 245 |
| 18 | 376 | 282 | 407 | 353 | 780 | 393 | 240 | 276 | 261 | 211 | 250 | 232 |
| 19 | 380 | 328 | 383 | 396 | 796 | 452 | 240 | 294 | 257 | 238 | 261 | 240 |
| 20 | 383 | 356 | 882 | 658 | 1310 | 534 | 225 | 550 | 253 | 233 | 255 | 252 |
| 21 | 380 | 349 | 1940 | 932 | 1290 | 460 | 213 | 427 | 259 | 362 | 261 | 222 |
| 22 | 401 | 319 | 1280 | 657 | 704 | 433 | 219 | 297 | 254 | 279 | 257 | 200 |
| 23 | 422 | 302 | 583 | 481 | 599 | 372 | 220 | 248 | 246 | 193 | 273 | 211 |
| 24 | 433 | 268 | 477 | 415 | 879 | 305 | 232 | 221 | 246 | 203 | 280 | 200 |
| 25 | 440 | 277 | 440 | 396 | 632 | 319 | 235 | 210 | 245 | 211 | 275 | 198 |
| 26 | 446 | 298 | 422 | 349 | 546 | 553 | 223 | 228 | 245 | 258 | 279 | 198 |
| 27 | 465 | 299 | 382 | 326 | 536 | 791 | 214 | 254 | 244 | 267 | 275 | 213 |
| 28 | 468 | 277 | 347 | 359 | 517 | 497 | 212 | 252 | 244 | 241 | 310 | 212 |
| 29 | 359 | 285 | 415 | 267 | 532 | 371 | 225 | 245 | 246 | 230 | 363 | 200 |
| 30 | 245 | 461 | 405 | 233 | --- | 265 | 253 | 240 | 245 | 224 | 309 | 199 |
| 31 | 188 | --- | 347 | 282 | --- | 248 | --- | 234 | --- | 227 | 264 | --- |
| TOTAL | 12993 | 7798 | 16076 | 10829 | 22043 | 14281 | 10874 | 8736 | 7580 | 7353 | 7774 | 8152 |
| MEAN | 419 | 260 | 519 | 349 | 760 | 461 | 362 | 282 | 253 | 237 | 251 | 272 |
| MAX | 752 | 461 | 1940 | 932 | 2330 | 791 | 1630 | 578 | 272 | 362 | 363 | 745 |
| MIN | 188 | 153 | 308 | 156 | 440 | 248 | 212 | 208 | 239 | 193 | 206 | 198 |
| CAL YR 1987 | TOTAL | 151092 | | MEAN | 414 | MAX | 4590 | MIN | 129 | | | |
| WTR YR 1988 | TOTAL | 134489 | | MEAN | 367 | MAX | 2330 | MIN | 153 | | | |

BEAVER RIVER BASIN

43

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

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

DRAINAGE AREA.--97.5 mi².

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

REVISED RECORDS.--WSP 1907: Drainage area.

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

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

AVERAGE DISCHARGE.--48 years, 87.8 ft³/s (unadjusted).

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 876 ft³/s Oct. 26, gage height, 3.73 ft, minimum daily 2.10 ft³/s Apr. 30, May 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|----------|------|--------|--------|--------|-------|-------|-------|-------|------|-------|
| 1 | 70 | 192 | 68 | 100 | 5.9 | 307 | 4.9 | 2.1 | 8.1 | 18 | 28 | 56 |
| 2 | 67 | 95 | 69 | 101 | 7.2 | 271 | 4.7 | 3.6 | 7.7 | 18 | 28 | 56 |
| 3 | 67 | 105 | 69 | 102 | 6.1 | 228 | 5.0 | 9.5 | 7.7 | 18 | 28 | 55 |
| 4 | 68 | 104 | 68 | 100 | 5.1 | 199 | 6.1 | 8.8 | 8.2 | 18 | 28 | 24 |
| 5 | 70 | 103 | 69 | 102 | 5.1 | 144 | 4.5 | 11 | 8.2 | 27 | 44 | 6.1 |
| 6 | 69 | 103 | 68 | 103 | 5.1 | 95 | 4.5 | 11 | 7.5 | 32 | 54 | 5.8 |
| 7 | 71 | 103 | 68 | 103 | 5.1 | 70 | 4.4 | 11 | 11 | 32 | 53 | 37 |
| 8 | 70 | 103 | 68 | 95 | 5.1 | 59 | 4.1 | 11 | 8.0 | 32 | 58 | 54 |
| 9 | 69 | 103 | 68 | 91 | 4.9 | 35 | 4.1 | 11 | 14 | 32 | 60 | 54 |
| 10 | 72 | 105 | 68 | 90 | 4.8 | 14 | 3.9 | 9.8 | 18 | 32 | 75 | 54 |
| 11 | 73 | 108 | 68 | 58 | 5.1 | 7.3 | 3.7 | 8.6 | 43 | 32 | 107 | 54 |
| 12 | 73 | 106 | 68 | 19 | 5.1 | 7.2 | 3.0 | 8.7 | 58 | 32 | 120 | 37 |
| 13 | 84 | 104 | 68 | 8.5 | 5.5 | 7.1 | 2.9 | 6.8 | 44 | 32 | 120 | 27 |
| 14 | 88 | 100 | 68 | 7.9 | 5.7 | 6.8 | 2.9 | 4.3 | 33 | 31 | 124 | 27 |
| 15 | 87 | 103 | 67 | 7.7 | 5.5 | 6.2 | 2.7 | 4.9 | 32 | 31 | 124 | 27 |
| 16 | 97 | 101 | 67 | 6.7 | 7.1 | 5.7 | 2.7 | 6.4 | 33 | 30 | 125 | 27 |
| 17 | 103 | 101 | 68 | 6.6 | 11 | 5.5 | 2.7 | 7.7 | 24 | 31 | 126 | 27 |
| 18 | 100 | 101 | 68 | 7.5 | 12 | 5.5 | 2.7 | 7.6 | 19 | 29 | 125 | 27 |
| 19 | 99 | 100 | 68 | 8.1 | 12 | 5.1 | 2.7 | 7.9 | 21 | 28 | 124 | 13 |
| 20 | 99 | 100 | 70 | 7.8 | 12 | 4.7 | 2.6 | 7.8 | 21 | 28 | 124 | 5.4 |
| 21 | 102 | 63 | 69 | 6.8 | 13 | 4.5 | 2.7 | 8.1 | 21 | 14 | 126 | 5.5 |
| 22 | 106 | 35 | 91 | 5.5 | 55 | 4.4 | 2.7 | 8.2 | 21 | 5.8 | 126 | 19 |
| 23 | 102 | 35 | 104 | 6.1 | 102 | 4.2 | 2.7 | 8.2 | 21 | 5.9 | 126 | 27 |
| 24 | 100 | 35 | 105 | 5.9 | 161 | 4.0 | 2.6 | 8.6 | 21 | 5.9 | 125 | 27 |
| 25 | 100 | 50 | 105 | 5.9 | 291 | 3.8 | 2.6 | 8.9 | 22 | 5.5 | 104 | 27 |
| 26 | 432 | 68 | 105 | 5.7 | 360 | 3.9 | 2.5 | 8.6 | 22 | 5.5 | 92 | 27 |
| 27 | 873 | 68 | 105 | 6.2 | 357 | 3.7 | 4.9 | 8.5 | 22 | 19 | 92 | 27 |
| 28 | 866 | 68 | 105 | 6.6 | 357 | 3.7 | 3.8 | 8.6 | 22 | 28 | 92 | 15 |
| 29 | 670 | 68 | 104 | 6.7 | 357 | 5.2 | 2.4 | 8.5 | 20 | 29 | 66 | 8.2 |
| 30 | 553 | 68 | 100 | 6.5 | --- | 4.8 | 2.1 | 8.2 | 19 | 29 | 56 | 8.2 |
| 31 | 419 | --- | 100 | 6.1 | --- | 5.0 | --- | 8.0 | --- | 28 | 56 | --- |
| TOTAL | 5919 | 2698 | 2456 | 1192.8 | 2188.4 | 1530.3 | 103.8 | 251.9 | 637.4 | 738.6 | 2736 | 864.2 |
| MEAN | 191 | 89.9 | 79.2 | 38.5 | 75.5 | 49.4 | 3.46 | 8.13 | 21.2 | 23.8 | 88.3 | 28.8 |
| MAX | 873 | 192 | 105 | 103 | 360 | 307 | 6.1 | 11 | 58 | 32 | 126 | 56 |
| MIN | 67 | 35 | 67 | 5.5 | 4.8 | 3.7 | 2.1 | 2.1 | 7.5 | 5.5 | 28 | 5.4 |
| (+) | 20.7 | 19.9 | 21.3 | 22.4 | 22.8 | 22.2 | 21.9 | 22.9 | 26.5 | 25.9 | 24.7 | 22.8 |
| CAL YR 1987 | TOTAL | 30122.18 | | MEAN | 82.5 | MAX | 873 | MIN | .88 | (+) | 21.6 | |
| WTR YR 1988 | TOTAL | 21316.4 | | MEAN | 58.2 | MAX | 873 | MIN | 2.1 | (+) | 22.8 | |

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

BEAVER RIVER BASIN

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

LOCATION.--Lat 41°10'21", long 80°45'26", Trumbull County, Hydrologic Unit 05030103, on right bank 20 ft downstream from Conrail Spur Line, 100 ft downstream from Meander Creek, 0.2 mi upstream from Belmont Road, 0.4 mi downstream from Mosquito Creek in Niles.

DRAINAGE AREA.--854 mi².

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

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

REMARKS.--Estimated daily discharges: Feb. 1-17. Records good except those for estimated record, which are fair. Water diverted upstream from station for municipal supply for cities of Niles, Warren, and Youngstown. Some sewage returned to river upstream from station. Water also diverted upstream and downstream from station for industrial use, some of which is returned to river upstream from station. Flow regulated by Berlin Lake, 37 mi upstream, beginning in 1942, by Milton Reservoir, 29 mi upstream, by Michael J. Kiwan Reservoir, 32 mi upstream on West Branch, beginning in 1966 by Mosquito Creek Lake, 11 mi upstream, beginning in 1943, by Meander Creek Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge 3,300 ft³/s Feb. 3, 1988; minimum daily discharge, 238 ft³/s Sept. 30, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 3,300 ft³/s Feb. 3; minimum daily discharge, 238 ft³/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 628 | 759 | 810 | 682 | 700 | 977 | 339 | 359 | 322 | 337 | 325 | 363 |
| 2 | 546 | 584 | 658 | 594 | 2800 | 983 | 329 | 329 | 349 | 339 | 334 | 382 |
| 3 | 501 | 418 | 626 | 541 | 3300 | 955 | 543 | 299 | 335 | 342 | 363 | 398 |
| 4 | 473 | 385 | 673 | 508 | 2500 | 931 | 2160 | 286 | 334 | 345 | 376 | 1060 |
| 5 | 461 | 378 | 737 | 473 | 1400 | 878 | 2540 | 303 | 333 | 334 | 376 | 969 |
| 6 | 460 | 384 | 706 | 471 | 900 | 839 | 1100 | 377 | 329 | 338 | 403 | 593 |
| 7 | 932 | 382 | 629 | 467 | 780 | 744 | 762 | 416 | 321 | 333 | 346 | 325 |
| 8 | 1040 | 382 | 601 | 429 | 720 | 565 | 778 | 362 | 323 | 333 | 346 | 289 |
| 9 | 824 | 399 | 728 | 351 | 660 | 587 | 627 | 323 | 314 | 330 | 344 | 343 |
| 10 | 650 | 395 | 839 | 381 | 640 | 704 | 497 | 338 | 315 | 320 | 343 | 337 |
| 11 | 754 | 387 | 694 | 401 | 640 | 845 | 442 | 339 | 330 | 366 | 362 | 334 |
| 12 | 892 | 386 | 585 | 379 | 640 | 770 | 379 | 309 | 366 | 330 | 383 | 341 |
| 13 | 961 | 397 | 568 | 364 | 620 | 769 | 348 | 303 | 386 | 321 | 400 | 363 |
| 14 | 876 | 384 | 529 | 345 | 560 | 706 | 331 | 296 | 370 | 311 | 403 | 333 |
| 15 | 624 | 341 | 743 | 340 | 740 | 480 | 315 | 291 | 358 | 316 | 396 | 329 |
| 16 | 583 | 371 | 1130 | 339 | 1020 | 440 | 320 | 882 | 364 | 317 | 392 | 310 |
| 17 | 591 | 384 | 882 | 357 | 1040 | 518 | 339 | 955 | 365 | 314 | 405 | 298 |
| 18 | 595 | 398 | 670 | 402 | 1030 | 532 | 340 | 519 | 350 | 331 | 406 | 333 |
| 19 | 607 | 404 | 637 | 458 | 1050 | 586 | 323 | 431 | 333 | 389 | 432 | 311 |
| 20 | 607 | 436 | 1230 | 844 | 1610 | 707 | 318 | 841 | 328 | 371 | 417 | 333 |
| 21 | 599 | 434 | 2260 | 1220 | 1790 | 650 | 302 | 745 | 332 | 906 | 411 | 302 |
| 22 | 637 | 407 | 2020 | 949 | 986 | 585 | 298 | 506 | 346 | 546 | 406 | 260 |
| 23 | 653 | 363 | 1020 | 666 | 898 | 555 | 309 | 402 | 346 | 447 | 462 | 256 |
| 24 | 671 | 355 | 792 | 562 | 1230 | 496 | 309 | 350 | 345 | 374 | 466 | 267 |
| 25 | 682 | 341 | 729 | 523 | 1050 | 498 | 314 | 322 | 347 | 334 | 439 | 257 |
| 26 | 690 | 400 | 685 | 498 | 921 | 804 | 304 | 315 | 349 | 393 | 437 | 255 |
| 27 | 799 | 431 | 637 | 417 | 948 | 1160 | 292 | 338 | 334 | 375 | 389 | 264 |
| 28 | 1120 | 420 | 586 | 411 | 938 | 830 | 291 | 340 | 337 | 351 | 520 | 275 |
| 29 | 1200 | 562 | 624 | 410 | 946 | 586 | 301 | 327 | 341 | 335 | 626 | 259 |
| 30 | 1050 | 933 | 670 | 351 | --- | 434 | 341 | 322 | 342 | 343 | 508 | 238 |
| 31 | 870 | --- | 599 | 378 | --- | 365 | --- | 317 | --- | 340 | 387 | --- |
| TOTAL | 22576 | 13000 | 25297 | 15511 | 33057 | 21479 | 16191 | 12842 | 10244 | 11461 | 12603 | 10977 |
| MEAN | 728 | 433 | 816 | 500 | 1140 | 693 | 540 | 414 | 341 | 370 | 407 | 366 |
| MAX | 1200 | 933 | 2260 | 1220 | 3300 | 1160 | 2540 | 955 | 386 | 906 | 626 | 1060 |
| MIN | 460 | 341 | 529 | 339 | 560 | 365 | 291 | 286 | 314 | 311 | 325 | 238 |
| WTR YR 1988 | TOTAL | 205238 | | MEAN | 561 | MAX | 3300 | MIN | 238 | | | |

BEAVER RIVER BASIN

45

03098600 MAHONING RIVER BELOW WEST AVENUE AT YOUNGSTOWN, OH

LOCATION.--Lat 41°06'18", long 80°39'46", Mahoning County, Hydrologic Unit 05030103, on left bank 200 ft below West Avenue Bridge, 0.4 mi upstream from Spring Common Bridge, 0.6 mi downstream from Mill Creek, in Youngstown.

DRAINAGE AREA.--978 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 824.10 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: July 22-26. Records good. Water diverted upstream from station for municipal supply for city of Youngstown. Some sewage returned to river upstream from station. Water also diverted upstream and downstream from station by a private company for industrial use, some of which is returned to river upstream from station. Flow regulated by Berlin Lake, 49 mi upstream, beginning in 1942, by Milton Reservoir, 41 mi upstream, by Michael J. Kirwan Reservoir, 44 mi upstream on West Branch, beginning in 1966 by Mosquito Creek Lake, 23 mi upstream, beginning in 1943, by Meander Creek Reservoir, 12 mi upstream, beginning in 1929, and by reservoir on Squaw Creek, 6 mi upstream, and 2 small reservoirs on Mill Creek 0.6 mi upstream. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 3,970 ft³/s Feb. 2, 1988; gage height 5.84 ft; minimum daily discharge 288 ft³/s Sept. 30, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 3,970 ft³/s Feb. 2; gage height 5.84 ft; minimum daily discharge 288 ft³/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 738 | 780 | 945 | 846 | 752 | 1020 | 414 | 427 | 337 | 392 | 370 | 388 |
| 2 | 619 | 626 | 769 | 706 | 3310 | 1030 | 393 | 404 | 380 | 379 | 365 | 409 |
| 3 | 570 | 460 | 711 | 616 | 3800 | 1010 | 691 | 366 | 368 | 377 | 401 | 417 |
| 4 | 521 | 416 | 783 | 586 | 2750 | 994 | 3110 | 342 | 359 | 380 | 365 | 1340 |
| 5 | 490 | 410 | 849 | 451 | 1620 | 939 | 3250 | 397 | 349 | 380 | 383 | 1150 |
| 6 | 477 | 416 | 804 | 364 | 966 | 905 | 1470 | 493 | 344 | 386 | 425 | 749 |
| 7 | 1020 | 421 | 712 | 407 | 870 | 858 | 1010 | 524 | 351 | 398 | 367 | 418 |
| 8 | 1200 | 421 | 684 | 438 | 844 | 682 | 985 | 465 | 348 | 397 | 347 | 323 |
| 9 | 929 | 443 | 825 | 428 | 758 | 710 | 831 | 395 | 339 | 395 | 349 | 388 |
| 10 | 707 | 443 | 943 | 433 | 749 | 822 | 665 | 386 | 330 | 384 | 354 | 390 |
| 11 | 805 | 443 | 795 | 443 | 735 | 941 | 564 | 365 | 338 | 430 | 389 | 388 |
| 12 | 928 | 443 | 675 | 434 | 730 | 863 | 469 | 353 | 378 | 416 | 431 | 396 |
| 13 | 983 | 449 | 640 | 427 | 706 | 861 | 423 | 353 | 415 | 386 | 410 | 466 |
| 14 | 929 | 454 | 606 | 400 | 642 | 835 | 400 | 365 | 419 | 359 | 415 | 405 |
| 15 | 668 | 399 | 933 | 378 | 914 | 587 | 380 | 330 | 401 | 355 | 392 | 398 |
| 16 | 601 | 416 | 1330 | 384 | 1190 | 524 | 374 | 946 | 433 | 357 | 393 | 359 |
| 17 | 599 | 454 | 1060 | 401 | 1180 | 573 | 382 | 1150 | 432 | 361 | 415 | 333 |
| 18 | 604 | 504 | 783 | 498 | 1160 | 609 | 395 | 684 | 398 | 397 | 428 | 402 |
| 19 | 604 | 478 | 737 | 571 | 1180 | 651 | 375 | 618 | 374 | 603 | 463 | 386 |
| 20 | 609 | 511 | 1550 | 1110 | 1800 | 782 | 369 | 1100 | 367 | 506 | 443 | 454 |
| 21 | 606 | 525 | 2500 | 1440 | 1990 | 743 | 356 | 1010 | 376 | 957 | 429 | 388 |
| 22 | 617 | 495 | 2250 | 1130 | 1140 | 661 | 347 | 663 | 383 | 600 | 423 | 319 |
| 23 | 634 | 437 | 1180 | 790 | 1030 | 643 | 356 | 499 | 383 | 500 | 542 | 314 |
| 24 | 649 | 431 | 897 | 666 | 1330 | 599 | 367 | 417 | 390 | 450 | 575 | 323 |
| 25 | 670 | 410 | 826 | 631 | 1160 | 598 | 380 | 369 | 390 | 400 | 487 | 306 |
| 26 | 662 | 498 | 781 | 591 | 979 | 1070 | 371 | 337 | 382 | 440 | 538 | 298 |
| 27 | 746 | 533 | 723 | 508 | 999 | 1390 | 345 | 348 | 380 | 404 | 437 | 307 |
| 28 | 1040 | 519 | 666 | 468 | 987 | 1040 | 339 | 361 | 382 | 372 | 575 | 320 |
| 29 | 1200 | 793 | 733 | 479 | 988 | 734 | 351 | 351 | 395 | 343 | 831 | 314 |
| 30 | 1070 | 1110 | 774 | 428 | --- | 563 | 411 | 340 | 399 | 450 | 634 | 288 |
| 31 | 882 | --- | 694 | 455 | --- | 448 | --- | 336 | --- | 389 | 452 | --- |
| TOTAL | 23377 | 15138 | 29158 | 17907 | 37259 | 24685 | 20573 | 15494 | 11320 | 13343 | 13828 | 13136 |
| MEAN | 754 | 505 | 941 | 578 | 1285 | 796 | 686 | 500 | 377 | 430 | 446 | 438 |
| MAX | 1200 | 1110 | 2500 | 1440 | 3800 | 1390 | 3250 | 1150 | 433 | 957 | 831 | 1340 |
| MIN | 477 | 399 | 606 | 364 | 642 | 448 | 339 | 330 | 330 | 343 | 347 | 288 |
| WTR YR 1988 | TOTAL | 235218 | MEAN | 643 | MAX | 3800 | MIN | 288 | | | | |

BEAVER RIVER BASIN

03099500 MAHONING RIVER AT LOWELLVILLE, OH

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

DRAINAGE AREA.--1,073 mi².

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

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

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

REMARKS.--Estimated daily discharges: June 27 to July 18. Records good except those for estimated record, which are poor. Flow regulated by 5 flood control reservoirs at points 21 mi to 58 mi upstream and by reservoirs on Squaw Creek, 15 mi upstream, on Dry Run, 9 mi upstream, and on Yellow Creek, 5 mi upstream. Water-quality data collected at this site 1949 to 1973. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--46 years, 1,118 ft³/s.

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,445 ft³/s Feb. 4, gage height, 5.93 ft; minimum daily, 315 ft³/s, Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 1140 | 916 | 1130 | 950 | 934 | 1160 | 494 | 493 | 495 | 390 | 439 | 423 |
| 2 | 983 | 757 | 923 | 795 | 3570 | 1170 | 468 | 475 | 590 | 380 | 418 | 439 |
| 3 | 920 | 594 | 848 | 664 | 3910 | 1140 | 794 | 438 | 558 | 370 | 458 | 446 |
| 4 | 834 | 525 | 940 | 794 | 3480 | 1120 | 3820 | 417 | 546 | 370 | 450 | 1500 |
| 5 | 798 | 518 | 992 | 651 | 2050 | 1050 | 3560 | 551 | 528 | 380 | 446 | 1300 |
| 6 | 782 | 520 | 934 | 535 | 1220 | 1020 | 1820 | 717 | 519 | 380 | 496 | 876 |
| 7 | 1500 | 521 | 831 | 566 | 1030 | 995 | 1210 | 656 | 519 | 390 | 447 | 502 |
| 8 | 1730 | 521 | 800 | 601 | 1010 | 820 | 1140 | 596 | 512 | 390 | 406 | 360 |
| 9 | 1380 | 560 | 941 | 589 | 915 | 854 | 967 | 543 | 498 | 380 | 410 | 423 |
| 10 | 1070 | 552 | 1060 | 590 | 898 | 945 | 787 | 585 | 483 | 380 | 419 | 419 |
| 11 | 1210 | 548 | 913 | 600 | 886 | 1050 | 668 | 521 | 488 | 390 | 431 | 413 |
| 12 | 1350 | 543 | 775 | 587 | 885 | 981 | 563 | 499 | 522 | 420 | 567 | 423 |
| 13 | 1390 | 546 | 709 | 581 | 859 | 980 | 501 | 512 | 563 | 390 | 460 | 540 |
| 14 | 1330 | 548 | 668 | 556 | 785 | 973 | 467 | 534 | 550 | 370 | 460 | 441 |
| 15 | 1010 | 484 | 1120 | 526 | 1100 | 713 | 451 | 491 | 507 | 360 | 456 | 431 |
| 16 | 909 | 499 | 1560 | 529 | 1400 | 627 | 441 | 1300 | 584 | 360 | 457 | 392 |
| 17 | 894 | 549 | 1230 | 545 | 1400 | 660 | 440 | 1480 | 534 | 360 | 473 | 359 |
| 18 | 893 | 603 | 877 | 687 | 1360 | 716 | 464 | 959 | 473 | 400 | 484 | 445 |
| 19 | 897 | 565 | 816 | 754 | 1400 | 754 | 433 | 1140 | 433 | 507 | 539 | 425 |
| 20 | 898 | 600 | 1840 | 1490 | 2070 | 884 | 421 | 1720 | 422 | 350 | 496 | 527 |
| 21 | 895 | 610 | 2750 | 1740 | 2360 | 872 | 419 | 1400 | 414 | 1660 | 466 | 442 |
| 22 | 920 | 579 | 2590 | 1440 | 1400 | 778 | 395 | 927 | 405 | 901 | 460 | 356 |
| 23 | 930 | 522 | 1370 | 1020 | 1230 | 753 | 434 | 732 | 396 | 1010 | 643 | 359 |
| 24 | 941 | 514 | 977 | 882 | 1560 | 704 | 448 | 690 | 383 | 775 | 658 | 351 |
| 25 | 963 | 491 | 896 | 839 | 1380 | 707 | 439 | 598 | 379 | 494 | 542 | 328 |
| 26 | 948 | 592 | 848 | 785 | 1140 | 1310 | 428 | 537 | 397 | 580 | 622 | 324 |
| 27 | 1060 | 610 | 786 | 682 | 1150 | 1650 | 398 | 508 | 390 | 518 | 479 | 330 |
| 28 | 1330 | 595 | 728 | 627 | 1120 | 1260 | 399 | 512 | 380 | 477 | 606 | 347 |
| 29 | 1420 | 1040 | 818 | 634 | 1130 | 880 | 426 | 495 | 380 | 440 | 961 | 338 |
| 30 | 1260 | 1310 | 844 | 589 | --- | 690 | 498 | 484 | 390 | 511 | 725 | 315 |
| 31 | 1030 | --- | 770 | 617 | --- | 547 | --- | 485 | --- | 601 | 520 | --- |
| TOTAL | 33615 | 18332 | 33284 | 23445 | 43632 | 28763 | 24193 | 21995 | 14238 | 15684 | 15894 | 14574 |
| MEAN | 1084 | 611 | 1074 | 756 | 1505 | 928 | 806 | 710 | 475 | 506 | 513 | 486 |
| MAX | 1730 | 1310 | 2750 | 1740 | 3910 | 1650 | 3820 | 1720 | 590 | 1660 | 961 | 1500 |
| MIN | 782 | 484 | 668 | 526 | 785 | 547 | 395 | 417 | 379 | 350 | 406 | 315 |
| CAL YR 1987 | TOTAL | 360130 | | MEAN | 987 | MAX | 8690 | MIN | 317 | | | |
| WTR YR 1988 | TOTAL | 287649 | | MEAN | 786 | MAX | 3910 | MIN | 315 | | | |

BEAVER RIVER BASIN

47

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

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

DRAINAGE AREA.--1,075 mi².

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1967 to current year.

pH: January 1967 to current year.

WATER TEMPERATURES: January 1967 to current year.

DISSOLVED OXYGEN: January 1967 to current year.

INSTRUMENTATION.--Water-quality monitor.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

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

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

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

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

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1050 microsiemens Oct. 26; minimum, 350 microsiemens April 5.

pH: Maximum, 8.3 units Sept. 10; minimum, 6.9 units Jan. 28.

WATER TEMPERATURES: Maximum, 30.0°C Aug. 4; minimum, 1.5°C Jan. 6.

DISSOLVED OXYGEN: Maximum, 13.1 mg/L Feb. 22; minimum, 3.8 mg/L Aug. 26.

BEAVER RIVER BASIN

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

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|------|-----|----------|-----|-----|----------|-----|-----|---------|-----|-----|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | 548 | 492 | 519 | 438 | 400 | 421 | 624 | 588 | 615 | 706 | 632 | 654 |
| 2 | 548 | 542 | 544 | 480 | 400 | 445 | --- | --- | --- | 636 | 606 | 619 |
| 3 | 554 | 534 | 544 | 516 | 480 | 492 | --- | --- | --- | 610 | 576 | 592 |
| 4 | 568 | 554 | 560 | 538 | 518 | 529 | --- | --- | --- | 676 | 592 | 604 |
| 5 | 606 | 568 | 582 | 590 | 542 | 561 | --- | --- | --- | 698 | 594 | 630 |
| 6 | 616 | 602 | 608 | 600 | 584 | 592 | --- | --- | --- | 626 | 604 | 615 |
| 7 | 614 | 500 | 560 | 610 | 590 | 598 | --- | --- | --- | 638 | 626 | 632 |
| 8 | 536 | 476 | 500 | 604 | 592 | 599 | 614 | 600 | 608 | 638 | 600 | 616 |
| 9 | 504 | 492 | 496 | 594 | 562 | 585 | 614 | 602 | 607 | 634 | 616 | 625 |
| 10 | 502 | 480 | 499 | 588 | 566 | 581 | 612 | 582 | 595 | 622 | 606 | 613 |
| 11 | --- | --- | --- | 594 | 576 | 584 | 620 | 564 | 579 | 634 | 600 | 609 |
| 12 | 546 | 536 | 542 | 586 | 574 | 581 | 630 | 612 | 622 | 634 | 600 | 616 |
| 13 | 536 | 524 | 530 | 592 | 572 | 581 | 628 | 612 | 617 | 672 | 600 | 633 |
| 14 | 554 | 524 | 536 | 590 | 576 | 583 | 620 | 610 | 614 | 678 | 658 | 667 |
| 15 | 564 | 542 | 553 | 590 | 574 | 579 | 706 | 576 | 621 | 690 | 678 | 684 |
| 16 | 564 | 534 | 546 | 598 | 582 | 590 | 638 | 554 | 587 | 702 | 672 | 689 |
| 17 | 574 | 558 | 563 | 602 | 590 | 594 | 630 | 596 | 610 | 700 | 688 | 696 |
| 18 | 576 | 564 | 570 | 596 | 564 | 578 | 636 | 602 | 615 | 822 | 686 | 735 |
| 19 | 564 | 552 | 558 | 588 | 582 | 585 | 608 | 588 | 601 | 806 | 704 | 748 |
| 20 | 562 | 546 | 555 | 602 | 586 | 593 | 634 | 549 | 584 | 702 | 644 | 677 |
| 21 | 572 | 556 | 564 | 602 | 578 | 586 | 518 | 454 | 505 | 636 | 572 | 611 |
| 22 | 558 | 550 | 555 | 638 | 590 | 608 | 452 | 354 | 395 | 570 | 520 | 540 |
| 23 | 568 | 558 | 561 | 636 | 600 | 608 | 424 | 358 | 394 | 558 | 522 | 545 |
| 24 | 568 | 550 | 555 | 690 | 632 | 652 | 516 | 426 | 460 | 556 | 528 | 537 |
| 25 | 558 | 532 | 544 | 654 | 644 | 650 | 490 | 466 | 476 | 594 | 556 | 569 |
| 26 | 1050 | 556 | 670 | 708 | 644 | 666 | 514 | 488 | 495 | 612 | 590 | 597 |
| 27 | 572 | 532 | 555 | 882 | 640 | 679 | 516 | 504 | 510 | 634 | 614 | 618 |
| 28 | 548 | 494 | 532 | 672 | 618 | 642 | 546 | 506 | 518 | 656 | 638 | 648 |
| 29 | 488 | 440 | 453 | 616 | 520 | 572 | 702 | 572 | 658 | 656 | 644 | 650 |
| 30 | 442 | 428 | 435 | 608 | 586 | 595 | 678 | 638 | 655 | 678 | 654 | 665 |
| 31 | 438 | 400 | 431 | --- | --- | --- | 712 | 640 | 657 | 686 | 664 | 676 |
| MONTH | 1050 | 400 | 541 | 882 | 400 | 584 | 712 | 354 | 568 | 822 | 520 | 633 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 766 | 674 | 706 | 532 | 518 | 526 | 628 | 618 | 623 | 682 | 664 | 673 |
| 2 | 738 | 586 | 631 | 576 | 524 | 536 | 656 | 632 | 644 | 672 | 644 | 660 |
| 3 | --- | --- | --- | 562 | 520 | 531 | 658 | 532 | 635 | 664 | 650 | 659 |
| 4 | --- | --- | --- | 716 | 562 | 598 | 580 | 466 | 513 | 666 | 658 | 662 |
| 5 | --- | --- | --- | 718 | 576 | 620 | 462 | 350 | 393 | 674 | 614 | 648 |
| 6 | --- | --- | --- | 614 | 582 | 593 | 408 | 354 | 377 | 656 | 500 | 591 |
| 7 | --- | --- | --- | 620 | 584 | 599 | 432 | 400 | 417 | 660 | 648 | 653 |
| 8 | 600 | 542 | 554 | 652 | 620 | 631 | --- | --- | --- | 660 | 648 | 652 |
| 9 | 614 | 594 | 601 | 680 | 644 | 653 | --- | --- | --- | 660 | 646 | 655 |
| 10 | 636 | 614 | 626 | 676 | 646 | 667 | --- | --- | --- | 684 | 640 | 659 |
| 11 | 678 | 640 | 660 | 646 | 586 | 614 | --- | --- | --- | 706 | 658 | 696 |
| 12 | 706 | 646 | 672 | 590 | 574 | 577 | --- | --- | --- | 714 | 700 | 708 |
| 13 | 708 | 646 | 674 | --- | --- | --- | --- | --- | --- | 716 | 696 | 709 |
| 14 | 747 | 654 | 683 | --- | --- | --- | --- | --- | --- | 718 | 694 | 703 |
| 15 | 834 | 726 | 770 | 694 | 642 | 651 | 678 | 678 | 673 | 720 | 706 | 714 |
| 16 | 724 | 678 | 702 | 716 | 646 | 676 | 656 | 640 | 647 | 708 | 614 | 647 |
| 17 | 694 | 646 | 657 | 684 | 662 | 670 | 654 | 642 | 650 | 608 | 544 | 569 |
| 18 | --- | --- | --- | 680 | 630 | 647 | 660 | 648 | 654 | 572 | 542 | 555 |
| 19 | 608 | 576 | 583 | 648 | 626 | 634 | 664 | 650 | 658 | 574 | 486 | 548 |
| 20 | 628 | 552 | 601 | 766 | 636 | 655 | 662 | 642 | 652 | 586 | 496 | 571 |
| 21 | 542 | 466 | 487 | 716 | 636 | 661 | 676 | 642 | 661 | 584 | 542 | 554 |
| 22 | 504 | 468 | 477 | 658 | 636 | 650 | 666 | 648 | 661 | 574 | 550 | 559 |
| 23 | 584 | 502 | 540 | 650 | 644 | 647 | 670 | 650 | 664 | 600 | 574 | 580 |
| 24 | 586 | 514 | 555 | 654 | 638 | 644 | 670 | 646 | 662 | 608 | 558 | 581 |
| 25 | 510 | 485 | 492 | 672 | 654 | 662 | 678 | 664 | 671 | 598 | 576 | 582 |
| 26 | 504 | 472 | 486 | 714 | 666 | 688 | 690 | 672 | 680 | 624 | 604 | 615 |
| 27 | 518 | 480 | 505 | 662 | 588 | 632 | 684 | 658 | 671 | 652 | 626 | 640 |
| 28 | 518 | 480 | 507 | 584 | 552 | 564 | 670 | 660 | 663 | 654 | 644 | 649 |
| 29 | 526 | 496 | 512 | 568 | 544 | 553 | 686 | 658 | 669 | 656 | 640 | 651 |
| 30 | --- | --- | --- | 580 | 560 | 571 | 678 | 660 | 669 | 646 | 638 | 642 |
| 31 | --- | --- | --- | 622 | 582 | 595 | --- | --- | --- | 660 | 642 | 652 |
| MONTH | 834 | 466 | 595 | 766 | 518 | 619 | 690 | 350 | 618 | 720 | 486 | 633 |

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

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----------------------------------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 668 | 660 | 663 | 656 | 644 | 651 | 654 | 592 | 628 | 636 | 614 | 627 |
| 2 | --- | --- | --- | 660 | 648 | 652 | 674 | 654 | 660 | 644 | 636 | 640 |
| 3 | --- | --- | --- | 666 | 650 | 659 | 686 | 640 | 663 | 656 | 632 | 649 |
| 4 | --- | --- | --- | 650 | 646 | 648 | 654 | 642 | 649 | 630 | 492 | 550 |
| 5 | --- | --- | --- | 658 | 638 | 649 | 652 | 614 | 634 | 540 | 452 | 495 |
| 6 | --- | --- | --- | 646 | 636 | 641 | 638 | 620 | 631 | 554 | 538 | 549 |
| 7 | --- | --- | --- | 644 | 634 | 639 | 636 | 620 | 627 | 536 | 508 | 516 |
| 8 | 682 | 659 | 669 | 652 | 636 | 642 | 628 | 612 | 622 | 548 | 524 | 539 |
| 9 | 684 | 658 | 675 | 650 | 640 | 644 | 622 | 596 | 608 | 582 | 550 | 566 |
| 10 | 686 | 672 | 681 | 656 | 634 | 644 | 626 | 602 | 619 | 648 | 588 | 626 |
| 11 | 684 | 640 | 661 | 644 | 630 | 636 | 620 | 598 | 611 | 634 | 624 | 628 |
| 12 | 646 | 628 | 640 | 646 | 630 | 636 | 610 | 468 | 550 | 662 | 622 | 646 |
| 13 | 634 | 616 | 624 | 634 | 622 | 628 | 592 | 578 | 586 | 638 | 592 | 612 |
| 14 | 640 | 622 | 628 | 622 | 604 | 612 | 586 | 556 | 570 | 610 | 600 | 605 |
| 15 | 660 | 640 | 645 | 634 | 612 | 629 | 582 | 558 | 570 | 632 | 614 | 622 |
| 16 | 662 | 638 | 651 | 650 | 632 | 644 | 588 | 572 | 578 | 648 | 632 | 640 |
| 17 | 654 | 640 | 648 | 654 | 640 | 649 | 582 | 566 | 575 | 666 | 642 | 654 |
| 18 | 651 | 627 | 644 | 650 | 626 | 642 | 578 | 564 | 574 | 656 | 612 | 639 |
| 19 | 667 | 643 | 657 | 630 | 498 | 571 | 574 | 556 | 565 | 648 | 620 | 638 |
| 20 | 659 | 643 | 648 | 634 | 586 | 615 | 568 | 548 | 557 | 660 | 544 | 621 |
| 21 | 667 | 659 | 661 | 612 | 358 | 523 | 574 | 550 | 562 | 634 | 600 | 613 |
| 22 | 658 | 648 | 655 | 516 | 440 | 480 | 566 | 552 | 559 | 666 | 636 | 653 |
| 23 | 658 | 646 | 654 | 550 | 394 | 511 | 568 | 426 | 544 | 676 | 624 | 661 |
| 24 | 662 | 648 | 657 | 584 | 530 | 548 | 534 | 428 | 507 | 650 | 624 | 640 |
| 25 | 654 | 648 | 651 | 632 | 590 | 623 | 560 | 528 | 543 | 676 | 650 | 668 |
| 26 | 656 | 642 | 651 | 650 | 614 | 631 | 562 | 502 | 539 | 684 | 670 | 677 |
| 27 | 656 | 648 | 651 | 658 | 638 | 652 | 576 | 550 | 561 | 678 | 666 | 672 |
| 28 | 656 | 646 | 653 | 682 | 644 | 664 | 570 | 498 | 546 | 678 | 662 | 671 |
| 29 | 656 | 644 | 652 | 684 | 658 | 675 | 544 | 512 | 532 | 666 | 648 | 658 |
| 30 | 658 | 644 | 653 | 694 | 582 | 670 | 572 | 512 | 533 | 668 | 648 | 660 |
| 31 | --- | --- | --- | 592 | 546 | 576 | 610 | 576 | 593 | --- | --- | --- |
| MONTH | 686 | 616 | 653 | 694 | 358 | 622 | 686 | 426 | 584 | 684 | 452 | 621 |
| YEAR | MAXIMUM 1050 MINIMUM 350 MEAN 606 | | | | | | | | | | | |

PH (STANDARD UNITS), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
| | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
| 1 | 7.7 | 7.3 | 7.4 | 7.5 | 7.4 | 7.5 | 7.6 | 7.4 | 7.6 | 7.9 | 7.7 | 7.8 |
| 2 | 7.6 | 7.4 | 7.4 | 7.7 | 7.4 | 7.5 | --- | --- | --- | 7.9 | 7.8 | 7.8 |
| 3 | 7.4 | 7.3 | 7.4 | 7.6 | 7.3 | 7.5 | --- | --- | --- | 7.9 | 7.8 | 7.8 |
| 4 | 7.7 | 7.3 | 7.4 | 7.3 | 7.2 | 7.3 | --- | --- | --- | 8.0 | 7.6 | 7.9 |
| 5 | 7.4 | 7.3 | 7.4 | 7.3 | 7.2 | 7.3 | --- | --- | --- | 7.7 | 7.6 | 7.7 |
| 6 | 7.4 | 7.3 | 7.4 | 7.4 | 7.3 | 7.3 | --- | --- | --- | 7.8 | 7.7 | 7.7 |
| 7 | 7.5 | 7.1 | 7.4 | 7.4 | 7.3 | 7.4 | --- | --- | --- | 7.8 | 7.6 | 7.7 |
| 8 | 7.6 | 7.5 | 7.5 | 7.4 | 7.3 | 7.4 | 7.6 | 7.5 | 7.6 | 7.8 | 7.6 | 7.7 |
| 9 | 7.6 | 7.5 | 7.5 | 7.4 | 7.3 | 7.4 | 7.6 | 7.5 | 7.5 | 7.8 | 7.6 | 7.7 |
| 10 | 7.5 | 7.4 | 7.4 | 7.4 | 7.2 | 7.3 | 7.6 | 7.5 | 7.6 | 7.8 | 7.6 | 7.7 |
| 11 | --- | --- | --- | 7.3 | 7.3 | 7.3 | 7.7 | 7.5 | 7.6 | 7.7 | 7.6 | 7.7 |
| 12 | 7.6 | 7.4 | 7.6 | 7.4 | 7.3 | 7.4 | 7.8 | 7.5 | 7.6 | 7.8 | 7.6 | 7.7 |
| 13 | 7.6 | 7.4 | 7.5 | 7.4 | 7.3 | 7.4 | 7.8 | 7.5 | 7.6 | 7.7 | 7.6 | 7.6 |
| 14 | 7.8 | 7.5 | 7.6 | 7.6 | 7.4 | 7.5 | 7.6 | 7.5 | 7.6 | 7.8 | 7.6 | 7.6 |
| 15 | 7.6 | 7.4 | 7.6 | 7.5 | 7.4 | 7.4 | 7.7 | 7.4 | 7.6 | 7.8 | 7.6 | 7.7 |
| 16 | 7.5 | 7.3 | 7.4 | 7.4 | 7.4 | 7.4 | 7.8 | 7.7 | 7.8 | 7.8 | 7.6 | 7.7 |
| 17 | 7.5 | 7.4 | 7.4 | 7.4 | 7.2 | 7.3 | 7.8 | 7.7 | 7.8 | 7.7 | 7.6 | 7.7 |
| 18 | 7.6 | 7.4 | 7.5 | 7.4 | 7.2 | 7.3 | 7.8 | 7.7 | 7.7 | 7.7 | 7.6 | 7.6 |
| 19 | 7.5 | 7.4 | 7.4 | 7.4 | 7.3 | 7.4 | 7.8 | 7.6 | 7.7 | 7.7 | 7.6 | 7.7 |
| 20 | 7.5 | 7.4 | 7.4 | 7.4 | 7.3 | 7.4 | 7.9 | 7.6 | 7.8 | 7.9 | 7.7 | 7.8 |
| 21 | 7.4 | 7.3 | 7.4 | 7.5 | 7.4 | 7.4 | 8.1 | 7.6 | 7.9 | 7.9 | 7.8 | 7.8 |
| 22 | 7.4 | 7.3 | 7.4 | 7.6 | 7.4 | 7.5 | 7.6 | 7.4 | 7.6 | 8.1 | 7.6 | 7.7 |
| 23 | 7.5 | 7.3 | 7.4 | 7.5 | 7.4 | 7.5 | 7.8 | 7.6 | 7.6 | 7.8 | 7.6 | 7.8 |
| 24 | 7.4 | 7.3 | 7.4 | 7.6 | 7.4 | 7.5 | 7.8 | 7.6 | 7.7 | 7.9 | 7.6 | 7.8 |
| 25 | 7.5 | 7.2 | 7.4 | 7.5 | 7.4 | 7.5 | 7.6 | 7.6 | 7.6 | 7.7 | 7.6 | 7.7 |
| 26 | 7.5 | 7.4 | 7.4 | 7.5 | 7.4 | 7.4 | 7.7 | 7.6 | 7.6 | 7.7 | 7.6 | 7.6 |
| 27 | 7.4 | 7.3 | 7.4 | 7.5 | 7.4 | 7.5 | 7.7 | 7.6 | 7.7 | 7.7 | 7.7 | 7.7 |
| 28 | 7.5 | 7.3 | 7.4 | 7.5 | 7.5 | 7.5 | 7.7 | 7.6 | 7.7 | 7.8 | 6.9 | 7.6 |
| 29 | 7.4 | 7.3 | 7.4 | 7.8 | 7.5 | 7.6 | 7.7 | 7.6 | 7.7 | 7.7 | 7.6 | 7.7 |
| 30 | 7.5 | 7.4 | 7.4 | 7.7 | 7.5 | 7.6 | 7.8 | 7.7 | 7.7 | 7.7 | 7.6 | 7.7 |
| 31 | 7.5 | 7.4 | 7.4 | --- | --- | --- | 7.8 | 7.7 | 7.8 | 7.8 | 7.7 | 7.7 |
| MONTH | 7.8 | 7.1 | 7.4 | 7.8 | 7.2 | 7.4 | 8.1 | 7.4 | 7.7 | 8.1 | 6.9 | 7.7 |

BEAVER RIVER BASIN

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

PH (STANDARD UNITS), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

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

BEAVER RIVER BASIN

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

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|------|------|----------|------|------|----------|------|------|---------|------|------|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | 21.5 | 19.5 | 20.0 | 12.0 | 11.0 | 11.5 | 11.0 | 10.5 | 11.0 | 7.0 | 5.0 | 5.5 |
| 2 | 19.0 | 18.0 | 18.5 | 13.0 | 12.0 | 12.5 | --- | --- | --- | 5.0 | 4.5 | 4.5 |
| 3 | 18.0 | 17.5 | 17.5 | 14.5 | 13.0 | 14.0 | --- | --- | --- | 5.5 | 4.5 | 5.5 |
| 4 | 18.0 | 16.5 | 17.5 | 16.5 | 14.0 | 15.0 | --- | --- | --- | 5.0 | 4.0 | 4.5 |
| 5 | 18.0 | 17.0 | 17.5 | 16.5 | 15.5 | 16.0 | --- | --- | --- | 3.5 | 2.0 | 3.0 |
| 6 | 18.0 | 17.5 | 17.5 | 15.5 | 14.5 | 15.0 | --- | --- | --- | 2.0 | 1.5 | 2.0 |
| 7 | 17.5 | 16.5 | 17.5 | 15.0 | 14.0 | 14.5 | --- | --- | --- | 3.0 | 2.0 | 2.5 |
| 8 | 17.0 | 14.5 | 15.5 | 15.5 | 14.5 | 15.0 | 8.5 | 7.5 | 8.0 | 4.5 | 3.0 | 4.0 |
| 9 | 14.5 | 13.5 | 14.0 | 15.0 | 14.5 | 15.0 | 9.5 | 8.0 | 9.0 | 4.5 | 4.0 | 4.5 |
| 10 | 14.5 | 13.5 | 14.0 | 14.0 | 12.5 | 13.5 | 9.5 | 9.0 | 9.5 | 5.5 | 4.5 | 5.0 |
| 11 | --- | --- | --- | 12.5 | 12.0 | 12.5 | 9.0 | 8.5 | 9.0 | 5.0 | 4.0 | 4.5 |
| 12 | 14.5 | 14.0 | 14.5 | 12.0 | 11.5 | 12.0 | 9.5 | 9.0 | 9.5 | 6.0 | 5.0 | 5.5 |
| 13 | 14.0 | 13.0 | 13.5 | 12.0 | 11.0 | 11.5 | 9.0 | 9.0 | 9.0 | 6.0 | 5.0 | 5.5 |
| 14 | 13.0 | 12.5 | 12.5 | 12.5 | 11.0 | 12.0 | 9.0 | 8.0 | 8.5 | 5.5 | 4.5 | 5.0 |
| 15 | 13.5 | 12.5 | 13.0 | 13.0 | 12.0 | 12.5 | 8.0 | 7.5 | 7.5 | 5.5 | 4.5 | 5.0 |
| 16 | 15.5 | 13.0 | 14.0 | 13.0 | 11.5 | 12.5 | 7.5 | 6.0 | 7.0 | 6.0 | 4.5 | 5.5 |
| 17 | 16.0 | 15.0 | 15.5 | 14.0 | 13.0 | 13.5 | 7.0 | 6.0 | 6.5 | 8.0 | 6.5 | 7.0 |
| 18 | 15.5 | 15.0 | 15.5 | 14.0 | 13.0 | 13.5 | 7.0 | 6.0 | 6.5 | 7.5 | 7.0 | 7.5 |
| 19 | 15.5 | 14.5 | 15.0 | 14.0 | 12.5 | 13.5 | 7.0 | 6.0 | 6.5 | 8.0 | 7.0 | 7.5 |
| 20 | 15.5 | 15.0 | 15.5 | 12.5 | 11.0 | 12.5 | 8.0 | 7.0 | 7.5 | 7.0 | 6.0 | 6.5 |
| 21 | 15.0 | 14.0 | 14.5 | 11.0 | 9.5 | 10.0 | 7.0 | 6.0 | 6.5 | 6.0 | 4.0 | 5.0 |
| 22 | 14.5 | 14.0 | 14.5 | 9.5 | 9.0 | 9.5 | 7.0 | 6.0 | 6.5 | 4.0 | 3.0 | 3.5 |
| 23 | 14.5 | 14.0 | 14.5 | 9.0 | 8.5 | 9.0 | 8.0 | 6.5 | 7.5 | 4.0 | 3.0 | 3.5 |
| 24 | 14.5 | 14.0 | 14.0 | 10.5 | 9.0 | 10.0 | 7.5 | 5.5 | 6.5 | 5.0 | 4.5 | 4.5 |
| 25 | 14.0 | 12.5 | 13.0 | 12.5 | 10.5 | 11.5 | 7.5 | 7.0 | 7.0 | 5.5 | 5.0 | 5.0 |
| 26 | 13.5 | 12.0 | 13.0 | 12.5 | 11.5 | 12.0 | 7.5 | 7.0 | 7.5 | 5.0 | 4.0 | 4.5 |
| 27 | 13.5 | 13.0 | 13.5 | 12.5 | 11.0 | 12.0 | 7.5 | 7.0 | 7.0 | 4.0 | 3.0 | 3.5 |
| 28 | 13.5 | 12.0 | 13.0 | 12.0 | 11.5 | 11.5 | 7.0 | 6.5 | 7.0 | 3.5 | 2.5 | 3.0 |
| 29 | 12.0 | 11.0 | 11.5 | 11.5 | 11.0 | 11.5 | 7.5 | 6.5 | 7.0 | 5.5 | 3.0 | 4.0 |
| 30 | 12.0 | 10.5 | 11.5 | 11.5 | 10.5 | 11.0 | 6.5 | 6.0 | 6.5 | 7.5 | 5.5 | 6.5 |
| 31 | 12.0 | 11.0 | 11.5 | --- | --- | --- | 7.0 | 6.0 | 6.0 | 8.5 | 7.0 | 7.5 |
| MONTH | 21.5 | 10.5 | 15.0 | 16.5 | 8.5 | 12.5 | 11.0 | 5.5 | 7.6 | 8.5 | 1.5 | 5.0 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 10.0 | 8.5 | 9.0 | 6.5 | 5.5 | 6.0 | 15.0 | 14.0 | 14.5 | 18.0 | 15.0 | 16.5 |
| 2 | 9.5 | 5.0 | 6.5 | 6.5 | 6.0 | 6.0 | 16.0 | 15.0 | 15.5 | 18.0 | 16.5 | 17.0 |
| 3 | --- | --- | --- | 6.5 | 6.0 | 6.0 | 16.5 | 15.0 | 16.0 | 19.0 | 16.5 | 18.0 |
| 4 | --- | --- | --- | 6.0 | 5.5 | 5.5 | 15.0 | 13.0 | 13.5 | 18.0 | 17.0 | 17.5 |
| 5 | --- | --- | --- | 6.0 | 4.5 | 5.5 | 14.5 | 13.0 | 13.5 | 18.0 | 17.0 | 17.5 |
| 6 | --- | --- | --- | 6.0 | 4.5 | 5.5 | 15.5 | 14.0 | 14.5 | 19.5 | 16.0 | 18.0 |
| 7 | --- | --- | --- | 6.5 | 5.5 | 6.0 | 14.5 | 14.5 | 14.5 | 21.0 | 18.5 | 19.5 |
| 8 | 3.5 | 2.5 | 3.5 | 8.0 | 5.5 | 7.0 | --- | --- | --- | 22.0 | 19.5 | 20.5 |
| 9 | 3.5 | 2.0 | 2.5 | 9.0 | 8.0 | 8.5 | --- | --- | --- | 20.5 | 20.0 | 20.5 |
| 10 | 4.0 | 2.5 | 3.5 | 10.0 | 8.0 | 9.0 | --- | --- | --- | 21.0 | 18.5 | 19.5 |
| 11 | 5.0 | 3.5 | 4.0 | 9.5 | 8.0 | 9.0 | --- | --- | --- | 22.5 | 19.5 | 21.0 |
| 12 | 4.5 | 4.0 | 4.5 | 9.0 | 8.5 | 8.5 | --- | --- | --- | 22.0 | 20.0 | 21.0 |
| 13 | 4.0 | 3.0 | 3.5 | --- | --- | --- | --- | --- | --- | 22.0 | 21.0 | 21.5 |
| 14 | 5.0 | 3.0 | 4.5 | --- | --- | --- | --- | --- | --- | 23.0 | 20.0 | 21.5 |
| 15 | 5.0 | 4.5 | 5.0 | 6.5 | 6.0 | 6.0 | 15.0 | 14.5 | 15.0 | 23.0 | 20.5 | 22.0 |
| 16 | 5.5 | 4.0 | 5.0 | 7.0 | 6.0 | 6.5 | 14.0 | 13.5 | 13.5 | 24.0 | 21.0 | 22.5 |
| 17 | 6.0 | 5.0 | 5.5 | 8.0 | 7.0 | 7.5 | 16.0 | 12.5 | 14.0 | 22.0 | 20.0 | 20.5 |
| 18 | --- | --- | --- | 8.0 | 7.0 | 8.0 | 15.0 | 13.0 | 14.0 | 20.5 | 19.0 | 20.0 |
| 19 | 5.0 | 4.5 | 5.0 | 7.0 | 5.5 | 6.0 | 13.0 | 12.0 | 12.5 | 19.5 | 18.0 | 19.0 |
| 20 | 6.0 | 5.0 | 5.5 | 6.0 | 5.5 | 6.0 | 14.5 | 11.5 | 13.0 | 20.5 | 18.0 | 19.0 |
| 21 | 6.0 | 4.0 | 5.0 | 7.0 | 5.0 | 6.0 | 15.0 | 13.5 | 14.5 | 20.0 | 18.5 | 19.5 |
| 22 | 4.0 | 3.0 | 4.0 | 7.5 | 5.5 | 6.5 | 16.0 | 13.0 | 14.5 | 21.5 | 18.5 | 20.0 |
| 23 | 6.0 | 4.0 | 5.0 | 10.0 | 6.5 | 8.0 | 16.0 | 14.5 | 15.5 | 22.5 | 20.0 | 21.0 |
| 24 | 6.0 | 5.0 | 5.5 | 11.0 | 9.0 | 10.0 | 16.0 | 15.0 | 15.5 | 21.5 | 21.0 | 21.5 |
| 25 | 4.5 | 4.0 | 4.5 | 12.0 | 10.5 | 11.0 | 17.5 | 14.5 | 16.0 | 20.5 | 19.0 | 19.5 |
| 26 | 5.0 | 4.0 | 4.5 | 12.5 | 11.0 | 12.0 | 18.0 | 16.0 | 17.0 | 21.0 | 18.0 | 19.5 |
| 27 | 5.0 | 4.5 | 5.0 | 11.5 | 10.0 | 11.0 | 17.5 | 16.5 | 17.0 | 23.0 | 20.0 | 21.0 |
| 28 | 5.5 | 4.5 | 5.0 | 11.0 | 9.0 | 10.0 | 16.5 | 15.5 | 16.0 | 24.5 | 21.5 | 23.0 |
| 29 | 6.0 | 5.0 | 5.5 | 13.0 | 10.0 | 11.5 | 15.5 | 14.5 | 15.0 | 25.5 | 22.5 | 24.0 |
| 30 | --- | --- | --- | 15.5 | 12.0 | 13.5 | 16.0 | 14.5 | 15.0 | 26.0 | 24.0 | 25.0 |
| 31 | --- | --- | --- | 14.5 | 12.0 | 13.5 | --- | --- | --- | 26.0 | 24.5 | 25.5 |
| MONTH | 10.0 | 2.0 | 5.0 | 15.5 | 4.5 | 8.0 | 18.0 | 11.5 | 15.0 | 26.0 | 15.0 | 20.5 |

BEAVER RIVER BASIN

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

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|--------------|------|------|-------------|------|------|-----------|------|------|-----------|------|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 26.0 | 25.0 | 25.0 | 23.5 | 22.0 | 22.5 | 28.5 | 25.5 | 27.0 | 24.5 | 22.5 | 23.5 |
| 2 | --- | --- | --- | 24.0 | 21.0 | 22.5 | 29.0 | 27.0 | 28.0 | 25.5 | 22.5 | 24.0 |
| 3 | --- | --- | --- | 25.0 | 22.5 | 23.5 | 29.0 | 26.5 | 28.0 | 25.0 | 24.0 | 24.5 |
| 4 | --- | --- | --- | 25.5 | 23.5 | 24.5 | 30.0 | 27.5 | 28.5 | 23.5 | 22.0 | 23.0 |
| 5 | --- | --- | --- | 25.5 | 24.0 | 24.5 | 29.0 | 27.5 | 28.0 | 22.0 | 20.5 | 21.5 |
| 6 | 25.5 | 24.0 | 24.5 | 26.0 | 23.5 | 25.0 | 27.5 | 26.5 | 27.0 | 21.0 | 20.0 | 20.5 |
| 7 | 26.0 | 24.0 | 25.0 | 28.0 | 24.5 | 26.0 | 28.0 | 25.5 | 26.5 | 20.5 | 19.0 | 20.0 |
| 8 | 26.5 | 24.0 | 25.0 | 29.0 | 27.0 | 28.0 | 27.5 | 25.0 | 26.5 | 21.5 | 19.0 | 20.5 |
| 9 | 25.0 | 18.5 | 22.5 | 28.5 | 27.0 | 28.0 | 27.5 | 25.5 | 26.5 | 22.5 | 20.0 | 21.0 |
| 10 | 23.5 | 22.5 | 23.0 | 28.0 | 27.0 | 27.5 | 27.0 | 25.5 | 26.5 | 24.5 | 22.0 | 23.0 |
| 11 | 26.5 | 21.5 | 24.5 | 28.0 | 27.0 | 27.5 | 28.5 | 26.0 | 27.0 | 23.5 | 22.0 | 23.0 |
| 12 | 27.5 | 24.5 | 26.0 | 28.0 | 27.0 | 27.5 | 29.5 | 27.0 | 28.5 | 22.5 | 20.5 | 22.0 |
| 13 | 27.5 | 25.0 | 26.5 | 28.0 | 26.0 | 27.0 | 29.0 | 27.5 | 28.5 | 23.5 | 22.0 | 23.0 |
| 14 | 27.5 | 24.5 | 26.5 | 28.5 | 27.0 | 28.0 | 29.0 | 27.5 | 28.5 | 22.5 | 20.5 | 21.5 |
| 15 | 26.5 | 24.0 | 25.0 | 29.0 | 27.0 | 28.0 | 28.5 | 27.5 | 28.0 | 23.5 | 20.5 | 22.0 |
| 16 | 27.0 | 24.0 | 25.5 | 29.0 | 27.0 | 28.0 | 28.0 | 26.0 | 27.0 | 23.0 | 21.5 | 22.5 |
| 17 | 26.5 | 24.0 | 26.0 | 28.5 | 27.0 | 28.0 | 29.0 | 26.0 | 27.5 | 23.5 | 22.5 | 23.0 |
| 18 | 26.5 | 24.0 | 25.5 | 28.0 | 26.5 | 27.0 | 28.5 | 27.5 | 28.0 | 23.0 | 22.0 | 22.5 |
| 19 | 27.0 | 24.0 | 25.5 | 26.5 | 25.0 | 26.0 | 27.5 | 26.5 | 26.5 | 24.5 | 22.5 | 24.0 |
| 20 | 27.0 | 24.5 | 25.5 | 26.0 | 25.5 | 26.0 | 27.5 | 25.5 | 26.5 | 25.0 | 24.0 | 24.5 |
| 21 | 28.0 | 25.5 | 27.0 | 26.0 | 23.5 | 25.0 | 25.0 | 23.5 | 24.5 | 24.5 | 21.5 | 23.0 |
| 22 | 28.5 | 26.5 | 27.5 | 25.0 | 23.5 | 24.5 | 24.5 | 22.0 | 23.5 | 22.0 | 21.5 | 21.5 |
| 23 | 28.5 | 27.0 | 28.0 | 24.5 | 22.5 | 24.0 | 23.0 | 21.5 | 22.5 | 22.0 | 21.5 | 22.0 |
| 24 | 27.5 | 25.0 | 26.5 | 24.5 | 22.5 | 23.5 | 23.0 | 21.5 | 22.0 | 21.5 | 20.5 | 21.0 |
| 25 | 27.5 | 25.0 | 26.5 | 25.0 | 23.5 | 24.0 | 24.0 | 21.5 | 22.5 | 22.0 | 20.0 | 21.0 |
| 26 | 27.5 | 25.0 | 26.0 | 24.5 | 22.5 | 23.5 | 25.0 | 23.5 | 24.0 | 22.0 | 21.0 | 21.5 |
| 27 | 25.5 | 23.5 | 24.5 | 27.0 | 24.0 | 25.5 | 24.5 | 23.0 | 24.0 | 21.5 | 20.0 | 21.0 |
| 28 | 24.5 | 23.0 | 24.0 | 28.0 | 25.0 | 26.5 | 25.5 | 24.0 | 24.5 | 21.5 | 20.5 | 21.0 |
| 29 | 24.5 | 23.0 | 24.0 | 29.0 | 26.0 | 27.5 | 25.0 | 23.5 | 24.5 | 21.0 | 20.0 | 20.5 |
| 30 | 24.5 | 23.0 | 24.0 | 28.5 | 27.0 | 28.0 | 24.0 | 22.5 | 23.5 | 21.5 | 20.5 | 21.0 |
| 31 | --- | --- | --- | 28.0 | 26.0 | 27.0 | 24.0 | 22.5 | 23.0 | --- | --- | --- |
| MONTH | 28.5 | 18.5 | 25.5 | 29.0 | 21.0 | 26.0 | 30.0 | 21.5 | 26.0 | 25.5 | 19.0 | 22.0 |
| YEAR | MAXIMUM 30.0 | | | MINIMUM 1.5 | | | MEAN 16.0 | | | | | |

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|---------|-----|------|----------|-----|------|----------|------|------|---------|------|------|
| | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
| 1 | 5.9 | 4.5 | 4.9 | 8.4 | 8.0 | 8.2 | 8.9 | 8.4 | 8.7 | 10.4 | 9.6 | 10.0 |
| 2 | 5.7 | 4.8 | 5.2 | 7.9 | 6.4 | 7.6 | --- | --- | --- | 10.2 | 10.0 | 10.1 |
| 3 | 6.0 | 4.7 | 5.4 | 6.5 | 5.9 | 6.2 | --- | --- | --- | --- | --- | --- |
| 4 | 6.0 | 5.1 | 5.6 | 5.8 | 4.8 | 5.1 | --- | --- | --- | 10.3 | 9.9 | 10.1 |
| 5 | 5.9 | 4.8 | 5.4 | 4.9 | 4.5 | 4.7 | --- | --- | --- | 10.4 | 10.1 | 10.3 |
| 6 | 5.5 | 4.2 | 4.9 | 5.1 | 4.4 | 4.8 | --- | --- | --- | 10.4 | 10.0 | 10.2 |
| 7 | 6.4 | 4.8 | 5.6 | 5.1 | 4.6 | 4.8 | --- | --- | --- | 10.3 | 10.0 | 10.2 |
| 8 | 7.6 | 6.4 | 7.1 | 5.1 | 4.5 | 4.8 | 10.1 | 9.6 | 9.9 | 10.3 | 9.8 | 10.1 |
| 9 | 7.8 | 5.9 | 7.3 | 5.0 | 4.4 | 4.7 | 9.7 | 9.3 | 9.5 | 10.3 | 9.7 | 10.0 |
| 10 | 5.8 | 4.9 | 5.6 | 6.5 | 4.4 | 5.4 | 9.9 | 9.3 | 9.5 | 10.2 | 9.4 | 9.9 |
| 11 | --- | --- | --- | 6.9 | 6.1 | 6.5 | 9.9 | 9.2 | 9.5 | 10.2 | 9.8 | 10.0 |
| 12 | 6.5 | 5.9 | 6.3 | 7.1 | 6.8 | 6.9 | 9.6 | 9.3 | 9.4 | 9.8 | 9.3 | 9.6 |
| 13 | 8.6 | 7.6 | 8.1 | 6.8 | 6.4 | 6.7 | 9.5 | 9.2 | 9.4 | 9.7 | 9.2 | 9.5 |
| 14 | 8.4 | 6.7 | 7.8 | 7.2 | 6.6 | 6.9 | 9.7 | 9.2 | 9.5 | 9.7 | 9.2 | 9.5 |
| 15 | 9.1 | 8.1 | 8.3 | 7.0 | 6.5 | 6.7 | 10.0 | 9.2 | 9.5 | 9.7 | 9.3 | 9.5 |
| 16 | 8.1 | 6.9 | 7.8 | 7.0 | 6.6 | 6.8 | 10.7 | 10.0 | 10.4 | 9.7 | 9.2 | 9.4 |
| 17 | 7.3 | 6.6 | 7.0 | 6.4 | 5.5 | 6.0 | 11.2 | 10.7 | 10.9 | 9.3 | 8.4 | 8.7 |
| 18 | 7.5 | 6.4 | 7.0 | 6.8 | 5.2 | 6.1 | 10.9 | 10.4 | 10.8 | 8.8 | 8.4 | 8.6 |
| 19 | 7.5 | 6.6 | 7.0 | 6.8 | 6.3 | 6.5 | 10.4 | 10.0 | 10.3 | 9.5 | 8.4 | 9.0 |
| 20 | 7.2 | 6.3 | 6.8 | 7.0 | 5.6 | 6.3 | 10.0 | 7.9 | 9.1 | 10.7 | 9.2 | 10.1 |
| 21 | 7.3 | 6.0 | 6.8 | 8.4 | 6.7 | 7.6 | 10.8 | 10.1 | 10.3 | 11.2 | 10.5 | 10.8 |
| 22 | 7.6 | 6.4 | 7.0 | 8.4 | 7.7 | 8.0 | 10.4 | 9.7 | 10.2 | 11.8 | 11.3 | 11.5 |
| 23 | 7.5 | 6.6 | 7.0 | 8.4 | 7.8 | 8.1 | 10.2 | 8.8 | 9.7 | 11.4 | 10.8 | 11.2 |
| 24 | 7.4 | 6.5 | 7.1 | 8.4 | 7.3 | 7.6 | 11.0 | 6.9 | 9.6 | 10.8 | 10.6 | 10.7 |
| 25 | 8.2 | 6.6 | 7.5 | 8.1 | 6.8 | 7.1 | 10.3 | 10.0 | 10.2 | 10.8 | 10.4 | 10.6 |
| 26 | 7.9 | 7.0 | 7.5 | 7.2 | 5.4 | 6.4 | 10.3 | 10.0 | 10.1 | 10.8 | 10.4 | 10.6 |
| 27 | 7.8 | 7.1 | 7.4 | 7.9 | 6.7 | 7.3 | 10.2 | 9.8 | 10.0 | 11.1 | 10.4 | 10.7 |
| 28 | 8.7 | 7.7 | 8.3 | 8.0 | 7.3 | 7.7 | 10.0 | 9.3 | 9.8 | 11.1 | 10.7 | 10.9 |
| 29 | 9.0 | 8.4 | 8.7 | 9.0 | 7.6 | 8.2 | 9.9 | 9.2 | 9.6 | 10.8 | 10.0 | 10.3 |
| 30 | 9.2 | 8.7 | 8.9 | 9.1 | 8.5 | 8.7 | 10.1 | 9.6 | 9.9 | 10.0 | 9.6 | 9.8 |
| 31 | 9.2 | 8.5 | 8.9 | --- | --- | --- | 10.4 | 9.6 | 10.0 | 9.5 | 8.9 | 9.1 |
| MONTH | 9.2 | 4.2 | 6.9 | 9.1 | 4.4 | 6.6 | 11.2 | 6.9 | 9.8 | 11.8 | 8.4 | 10.0 |

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OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

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

BEAVER RIVER BASIN

03102950 PYMATUNING CREEK AT KINSMAN, OH

LOCATION.--Lat 41°26'34", long 80°35'18", in T.7 N., R.1 W., Trumbull County, Hydrologic Unit 05030102, on left bank at downstream side of bridge on State Highway 7 at Kinsman, 0.8 mi downstream from Sugar Creek, and 1.2 mi upstream from Stratton Creek.

DRAINAGE AREA.--96.7 mi².

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

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

REMARKS.--Estimated daily discharges: Jan. 3-17, 26-30, Feb. 4-19, 24-Mar. 7. Records fair, except for periods of estimated record, which are poor. Water-quality data collected at this site 1966 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--23 years, 128 ft³/s, 17.98 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,740 ft³/s Nov. 6, 1985, gage height, 12.40 ft from rating curve extended above 800 ft³/s; minimum daily discharge, 0.05 ft³/s July 10, 1988.

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 2 | 2000 | *676 | *10.07 | | | | |

Minimum daily discharge, 0.05 ft³/s July 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|----------|------|------|------|------|------|--------|-------|--------|-------|--------|-------|
| 1 | 96 | 114 | 282 | 116 | 155 | 110 | 72 | 118 | 2.1 | 1.9 | 63 | 26 | |
| 2 | 120 | 108 | 295 | 130 | 491 | 120 | 61 | 100 | 7.0 | 1.8 | 32 | 16 | |
| 3 | 127 | 98 | 271 | 70 | 602 | 130 | 81 | 68 | 14 | 1.6 | 18 | 12 | |
| 4 | 116 | 89 | 236 | 50 | 400 | 110 | 525 | 49 | 11 | 2.0 | 10 | 173 | |
| 5 | 98 | 79 | 217 | 40 | 280 | 86 | 574 | 43 | 7.3 | 2.2 | 7.3 | 239 | |
| 6 | 78 | 71 | 200 | 35 | 190 | 76 | 454 | 49 | 3.3 | 1.7 | 7.2 | 220 | |
| 7 | 218 | 65 | 185 | 30 | 140 | 90 | 331 | 44 | 1.4 | 1.9 | 6.1 | 172 | |
| 8 | 397 | 60 | 179 | 27 | 110 | 115 | 238 | 33 | .91 | .51 | 5.6 | 97 | |
| 9 | 379 | 60 | 268 | 25 | 80 | 141 | 171 | 20 | .60 | .10 | 4.2 | 48 | |
| 10 | 365 | 64 | 323 | 24 | 68 | 189 | 122 | 33 | .31 | .05 | 3.9 | 27 | |
| 11 | 331 | 64 | 331 | 23 | 56 | 175 | 87 | 47 | .17 | .18 | 7.4 | 17 | |
| 12 | 274 | 59 | 328 | 22 | 48 | 138 | 66 | 40 | .22 | .27 | 19 | 9.6 | |
| 13 | 202 | 52 | 275 | 21 | 42 | 134 | 55 | 26 | .28 | .27 | 24 | 12 | |
| 14 | 141 | 46 | 204 | 21 | 38 | 129 | 47 | 19 | .39 | .39 | 17 | 13 | |
| 15 | 102 | 42 | 239 | 20 | 35 | 111 | 44 | 14 | .54 | .10 | 10 | 10 | |
| 16 | 75 | 39 | 347 | 20 | 190 | 97 | 51 | 123 | .85 | .27 | 7.8 | 8.1 | |
| 17 | 59 | 36 | 310 | 20 | 170 | 87 | 59 | 193 | 1.2 | .32 | 6.0 | 6.9 | |
| 18 | 54 | 45 | 272 | 53 | 200 | 85 | 59 | 151 | 1.2 | .14 | 4.8 | 19 | |
| 19 | 51 | 49 | 221 | 84 | 280 | 93 | 56 | 104 | 1.1 | .24 | 5.1 | 42 | |
| 20 | 48 | 46 | 356 | 189 | 508 | 103 | 47 | 130 | 1.3 | .26 | 4.1 | 25 | |
| 21 | 45 | 44 | 580 | 283 | 546 | 98 | 45 | 147 | .89 | 3.2 | 3.6 | 18 | |
| 22 | 58 | 42 | 604 | 285 | 484 | 86 | 45 | 115 | 1.0 | 5.9 | 3.3 | 14 | |
| 23 | 76 | 43 | 528 | 261 | 489 | 85 | 43 | 67 | 1.5 | 16 | 3.3 | 12 | |
| 24 | 93 | 59 | 380 | 184 | 360 | 100 | 47 | 42 | 1.4 | 48 | 4.8 | 11 | |
| 25 | 100 | 93 | 266 | 123 | 250 | 115 | 53 | 32 | 1.5 | 17 | 4.6 | 9.9 | |
| 26 | 96 | 153 | 193 | 68 | 160 | 245 | 49 | 25 | 1.8 | 15 | 6.1 | 9.2 | |
| 27 | 103 | 176 | 143 | 54 | 120 | 305 | 40 | 18 | 1.8 | 21 | 6.2 | 7.7 | |
| 28 | 153 | 168 | 117 | 45 | 110 | 308 | 36 | 12 | 1.8 | 15 | 14 | 8.0 | |
| 29 | 169 | 195 | 104 | 42 | 100 | 240 | 42 | 7.7 | 2.0 | 10 | 39 | 8.1 | |
| 30 | 165 | 279 | 93 | 38 | --- | 149 | 90 | 5.4 | 1.9 | 8.8 | 55 | 8.0 | |
| 31 | 137 | --- | 97 | 67 | --- | 94 | --- | 3.4 | --- | 82 | 43 | --- | |
| TOTAL | 4526 | 2538 | 8444 | 2470 | 6702 | 4144 | 3690 | 1878.5 | 70.76 | 258.10 | 445.4 | 1298.5 | |
| MEAN | 146 | 84.6 | 272 | 79.7 | 231 | 134 | 123 | 60.6 | 2.36 | 8.33 | 14.4 | 43.3 | |
| MAX | 397 | 279 | 604 | 285 | 602 | 308 | 574 | 193 | 14 | 82 | 63 | 239 | |
| MIN | 45 | 36 | 93 | 20 | 35 | 76 | 36 | 3.4 | .17 | .05 | 3.3 | 6.9 | |
| CFSM | 1.51 | .87 | 2.81 | .82 | 2.39 | 1.39 | 1.27 | .63 | .02 | .09 | .15 | .45 | |
| IN. | 1.74 | .98 | 3.25 | .95 | 2.58 | 1.59 | 1.42 | .72 | .03 | .10 | .17 | .50 | |
| CAL YR 1987 | TOTAL | 47006.9 | | MEAN | 129 | MAX | 1340 | MIN | 1.9 | CFSM | 1.33 | IN. | 18.08 |
| WTR YR 1988 | TOTAL | 36465.26 | | MEAN | 99.6 | MAX | 604 | MIN | .05 | CFSM | 1.03 | IN. | 14.03 |

LITTLE BEAVER CREEK BASIN

55

03109500 LITTLE BEAVER CREEK NEAR EAST LIVERPOOL, OH

LOCATION.--Lat 40°40'33", long 80°32'27", Columbiana County, Hydrologic Unit 05030101, on right bank at downstream side of Grimms Bridge, 1.5 mi upstream from Island Run, 4 mi upstream from mouth, and 4 mi northeast of East Liverpool.

DRAINAGE AREA.--496 mi².

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

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

GAGE.--Water-stage recorder. Datum of gage is 702.77 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 22, 1926, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 3-17, 23-30, Feb. 6-14. Records good except for periods of estimated records, which are poor. Water-quality data collected at this site 1964-1978. Sediment data collected at this site 1969 to 1974. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--73 years, 520 ft³/s, 14.24 in/yr.

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

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---|------|-----------------------------------|---------------------|----------------------------|------|-----------------------------------|---------------------|
| Feb. 2 | 1300 | *6,120 | *9.47 | No other peaks above base. | | | |
| Minimum discharge, 20 ft ³ /s July 10. | | | | | | | |

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|-------|-------|-------|-------|-------|------|------|------|------|-------|
| 1 | 194 | 103 | 485 | 462 | 538 | 367 | 544 | 276 | 126 | 35 | 100 | 70 |
| 2 | 150 | 99 | 354 | 390 | 4360 | 355 | 512 | 241 | 134 | 34 | 87 | 55 |
| 3 | 128 | 99 | 307 | 340 | 3310 | 400 | 569 | 220 | 131 | 33 | 234 | 47 |
| 4 | 112 | 98 | 313 | 310 | 3410 | 427 | 2750 | 213 | 122 | 32 | 106 | 100 |
| 5 | 102 | 98 | 339 | 280 | 2390 | 360 | 1890 | 230 | 112 | 30 | 79 | 149 |
| 6 | 91 | 95 | 303 | 260 | 1100 | 384 | 1200 | 301 | 104 | 29 | 74 | 135 |
| 7 | 129 | 91 | 263 | 250 | 800 | 505 | 1150 | 319 | 95 | 25 | 79 | 96 |
| 8 | 248 | 90 | 246 | 230 | 560 | 672 | 1050 | 250 | 88 | 24 | 66 | 71 |
| 9 | 191 | 93 | 279 | 220 | 440 | 872 | 840 | 225 | 83 | 22 | 58 | 59 |
| 10 | 145 | 99 | 329 | 210 | 360 | 985 | 712 | 290 | 76 | 20 | 48 | 52 |
| 11 | 141 | 97 | 280 | 200 | 310 | 791 | 625 | 329 | 76 | 21 | 43 | 47 |
| 12 | 160 | 96 | 255 | 190 | 260 | 673 | 558 | 270 | 74 | 23 | 42 | 43 |
| 13 | 153 | 93 | 243 | 180 | 230 | 842 | 504 | 228 | 71 | 23 | 43 | 75 |
| 14 | 127 | 93 | 211 | 170 | 200 | 777 | 462 | 234 | 66 | 22 | 41 | 77 |
| 15 | 110 | 91 | 248 | 170 | 710 | 677 | 429 | 206 | 62 | 44 | 39 | 69 |
| 16 | 103 | 89 | 540 | 160 | 851 | 607 | 411 | 278 | 61 | 29 | 40 | 56 |
| 17 | 98 | 90 | 406 | 160 | 610 | 563 | 394 | 329 | 74 | 24 | 36 | 54 |
| 18 | 96 | 120 | 315 | 387 | 599 | 544 | 372 | 243 | 71 | 24 | 33 | 63 |
| 19 | 94 | 112 | 284 | 515 | 589 | 557 | 355 | 249 | 67 | 58 | 51 | 89 |
| 20 | 92 | 111 | 737 | 1060 | 986 | 575 | 323 | 453 | 60 | 104 | 70 | 75 |
| 21 | 89 | 111 | 1200 | 1260 | 845 | 526 | 308 | 420 | 55 | 254 | 59 | 72 |
| 22 | 86 | 105 | 626 | 601 | 594 | 490 | 295 | 276 | 52 | 207 | 48 | 69 |
| 23 | 83 | 107 | 477 | 380 | 684 | 545 | 277 | 222 | 47 | 123 | 43 | 64 |
| 24 | 93 | 116 | 440 | 300 | 710 | 647 | 284 | 425 | 43 | 154 | 64 | 65 |
| 25 | 107 | 123 | 426 | 260 | 538 | 627 | 293 | 401 | 39 | 149 | 73 | 61 |
| 26 | 108 | 156 | 435 | 240 | 463 | 1520 | 256 | 274 | 37 | 93 | 66 | 58 |
| 27 | 116 | 208 | 405 | 220 | 450 | 1350 | 239 | 216 | 37 | 89 | 52 | 51 |
| 28 | 127 | 177 | 364 | 210 | 394 | 1000 | 250 | 188 | 36 | 84 | 45 | 46 |
| 29 | 128 | 669 | 471 | 200 | 386 | 824 | 298 | 167 | 35 | 65 | 71 | 44 |
| 30 | 115 | 960 | 448 | 190 | --- | 703 | 305 | 151 | 36 | 56 | 124 | 42 |
| 31 | 106 | --- | 367 | 418 | --- | 603 | --- | 139 | --- | 96 | 102 | --- |
| TOTAL | 3822 | 4689 | 12396 | 10423 | 27677 | 20768 | 18455 | 8263 | 2170 | 2026 | 2116 | 2054 |
| MEAN | 123 | 156 | 400 | 336 | 954 | 670 | 615 | 267 | 72.3 | 65.4 | 68.3 | 68.5 |
| MAX | 248 | 960 | 1200 | 1260 | 4360 | 1520 | 2750 | 453 | 134 | 254 | 234 | 149 |
| MIN | 83 | 89 | 211 | 160 | 200 | 355 | 239 | 139 | 35 | 20 | 33 | 42 |
| CFSM | .25 | .31 | .81 | .68 | 1.92 | 1.35 | 1.24 | .54 | .15 | .13 | .14 | .14 |
| IN. | .29 | .35 | .93 | .78 | 2.08 | 1.56 | 1.38 | .62 | .16 | .15 | .16 | .15 |
| CAL YR 1987 | TOTAL | 138634 | MEAN | 380 | MAX | 3810 | MIN | 46 | CFSM | .77 | IN. | 10.40 |
| WTR YR 1988 | TOTAL | 114859 | MEAN | 314 | MAX | 4360 | MIN | 20 | CFSM | .63 | IN. | 8.61 |

YELLOW CREEK BASIN

03110000 YELLOW CREEK NEAR HAMMONDSVILLE, OH

LOCATION.--Lat 40°32'16", long 80°43'31", in sec. 29, T.8 N., R.2 W., Jefferson County, Hydrologic Unit 05030101, on right bank 1,000 ft upstream from Lowery Run, 0.9 mi upstream from Brush Creek and 1.6 mi southwest of Hammondsville.

DRAINAGE AREA.--147 mi².

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

REVISED RECORDS.--WSP 1907: Drainage area.

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

REMARKS.--Estimated daily discharges: Jan. 3-17, 23-30, Feb. 7-14. Records fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--48 years, 160 ft³/s, 14.78 in/yr.

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

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

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--|------|-----------------------------------|---------------------|--|------|-----------------------------------|---------------------|
| Feb. 2 | 1900 | *2,000 | *5.92 | No other peaks higher than base discharge. | | | |
| Minimum daily discharge, 2.6 ft ³ /s July 10. | | | | | | | |

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|---------|------|------|------|------|------|------|-------|-------|-------|-------|
| 1 | 61 | 25 | 153 | 117 | 99 | 100 | 170 | 57 | 18 | 3.5 | 5.4 | 13 |
| 2 | 38 | 21 | 116 | 95 | 1310 | 91 | 157 | 50 | 17 | 3.5 | 5.1 | 8.7 |
| 3 | 32 | 19 | 89 | 84 | 1130 | 105 | 164 | 43 | 18 | 3.5 | 6.9 | 7.2 |
| 4 | 29 | 19 | 100 | 74 | 1190 | 125 | 782 | 40 | 17 | 3.3 | 7.1 | 13 |
| 5 | 26 | 18 | 120 | 66 | 847 | 105 | 551 | 47 | 16 | 3.2 | 8.8 | 54 |
| 6 | 23 | 17 | 96 | 62 | 488 | 132 | 407 | 48 | 14 | 3.1 | 7.9 | 29 |
| 7 | 68 | 17 | 79 | 58 | 300 | 233 | 362 | 44 | 12 | 3.1 | 6.9 | 19 |
| 8 | 97 | 17 | 73 | 54 | 210 | 292 | 298 | 38 | 12 | 3.0 | 6.0 | 12 |
| 9 | 55 | 18 | 81 | 52 | 140 | 372 | 236 | 36 | 15 | 2.8 | 6.4 | 9.2 |
| 10 | 40 | 20 | 96 | 50 | 100 | 412 | 201 | 42 | 16 | 2.6 | 5.4 | 7.8 |
| 11 | 40 | 22 | 96 | 48 | 82 | 308 | 180 | 41 | 13 | 2.9 | 4.7 | 6.7 |
| 12 | 46 | 21 | 89 | 47 | 66 | 264 | 162 | 36 | 11 | 3.5 | 4.1 | 6.1 |
| 13 | 38 | 21 | 79 | 46 | 60 | 374 | 146 | 33 | 10 | 3.8 | 6.0 | 9.1 |
| 14 | 31 | 21 | 62 | 44 | 56 | 324 | 133 | 31 | 9.7 | 3.7 | 4.2 | 34 |
| 15 | 34 | 20 | 65 | 42 | 167 | 283 | 124 | 30 | 9.9 | 3.5 | 4.1 | 19 |
| 16 | 47 | 19 | 82 | 40 | 196 | 234 | 115 | 37 | 11 | 3.5 | 5.0 | 11 |
| 17 | 43 | 19 | 74 | 38 | 155 | 204 | 106 | 46 | 10 | 3.2 | 4.6 | 11 |
| 18 | 79 | 27 | 63 | 83 | 155 | 196 | 103 | 33 | 9.6 | 3.3 | 4.5 | 10 |
| 19 | 112 | 35 | 57 | 108 | 152 | 192 | 98 | 39 | 8.2 | 5.6 | 9.6 | 9.9 |
| 20 | 52 | 27 | 156 | 420 | 248 | 194 | 85 | 44 | 7.0 | 7.5 | 27 | 8.6 |
| 21 | 26 | 25 | 227 | 282 | 210 | 173 | 83 | 39 | 6.5 | 40 | 13 | 7.4 |
| 22 | 23 | 23 | 173 | 166 | 193 | 156 | 78 | 35 | 6.0 | 52 | 8.6 | 6.6 |
| 23 | 22 | 22 | 145 | 100 | 204 | 162 | 75 | 34 | 5.6 | 16 | 8.0 | 6.0 |
| 24 | 21 | 22 | 120 | 86 | 188 | 172 | 76 | 56 | 5.1 | 11 | 8.3 | 5.4 |
| 25 | 21 | 25 | 108 | 74 | 149 | 176 | 68 | 75 | 4.4 | 15 | 8.3 | 5.0 |
| 26 | 22 | 26 | 124 | 64 | 135 | 442 | 61 | 52 | 4.5 | 10 | 10 | 4.5 |
| 27 | 24 | 28 | 125 | 60 | 138 | 397 | 58 | 37 | 4.1 | 9.8 | 7.7 | 4.0 |
| 28 | 24 | 30 | 116 | 56 | 113 | 313 | 60 | 30 | 3.9 | 9.7 | 7.7 | 3.5 |
| 29 | 26 | 280 | 132 | 52 | 115 | 262 | 77 | 25 | 3.9 | 7.6 | 12 | 3.3 |
| 30 | 24 | 323 | 99 | 50 | --- | 223 | 68 | 23 | 3.6 | 6.4 | 59 | 3.0 |
| 31 | 23 | --- | 107 | 74 | --- | 187 | --- | 20 | --- | 6.7 | 25 | --- |
| TOTAL | 1247 | 1227 | 3298 | 2692 | 8596 | 7203 | 5284 | 1241 | 302.0 | 256.3 | 307.3 | 347.0 |
| MEAN | 40.2 | 40.9 | 106 | 86.8 | 296 | 232 | 176 | 40.0 | 10.1 | 8.27 | 9.91 | 11.6 |
| MAX | 112 | 323 | 227 | 420 | 1310 | 442 | 782 | 75 | 18 | 52 | 59 | 54 |
| MIN | 21 | 17 | 57 | 38 | 56 | 91 | 58 | 20 | 3.6 | 2.6 | 4.1 | 3.0 |
| CFSM | .27 | .28 | .72 | .59 | 2.01 | 1.58 | 1.20 | .27 | .07 | .06 | .07 | .08 |
| IN. | .32 | .31 | .83 | .68 | 2.18 | 1.82 | 1.34 | .31 | .08 | .06 | .08 | .09 |
| CAL YR 1987 | TOTAL | 42637.3 | MEAN | 117 | MAX | 1660 | MIN | 7.5 | CFSM | .80 | IN. | 10.79 |
| WTR YR 1988 | TOTAL | 32000.6 | MEAN | 87.4 | MAX | 1310 | MIN | 2.6 | CFSM | .59 | IN. | 8.10 |

SHORT CREEK BASIN

57

03111500 SHORT CREEK NEAR DILLONVALE, OH

LOCATION.--Lat 40°11'36", long 80°44'04", in sec. 30, T.4 N., R.2 W., Jefferson County, Hydrologic Unit 05030106, on right bank at downstream side of bridge on State Highway 150, 2.1 mi east of Dillonvale, 2.2 mi downstream from Jug Run, and 2.9 mi upstream from Little Short Creek.

DRAINAGE AREA.--123 mi².

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

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

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

REMARKS.--Estimated daily discharges: Jan. 3-18, 23-31, Feb. 6-14, and July 10-18. Records poor. Water-quality data collected at this site 1964 to 1977. Sediment data collected 1969 to 1974. U.S. Army Corps of Engineers satellite telemeter at station. Water year 1986 stream flow records published in 1987 water year report.

AVERAGE DISCHARGE.--47 years, 129 ft³/s, 14.24 in/yr.

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

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|--------|------|-----------------------------------|---------------------|
| Jan. 20 | 0500 | 1,280 | 4.70 | Feb. 2 | 1330 | *2,840 | *7.27 |

Minimum daily discharge, 11 ft³/s July 17, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|-------|------|------|------|------|------|------|------|------|------|-------|
| 1 | 58 | 35 | 110 | 138 | 230 | 90 | 130 | 101 | 33 | 19 | 16 | 18 |
| 2 | 53 | 35 | 95 | 104 | 2010 | 87 | 125 | 90 | 32 | 19 | 17 | 17 |
| 3 | 42 | 33 | 83 | 76 | 685 | 111 | 143 | 84 | 33 | 18 | 32 | 17 |
| 4 | 39 | 35 | 107 | 62 | 766 | 254 | 320 | 83 | 33 | 18 | 24 | 73 |
| 5 | 37 | 37 | 116 | 56 | 426 | 200 | 211 | 92 | 32 | 18 | 19 | 38 |
| 6 | 36 | 37 | 92 | 52 | 250 | 194 | 179 | 94 | 31 | 17 | 26 | 23 |
| 7 | 48 | 37 | 77 | 50 | 180 | 205 | 175 | 89 | 29 | 16 | 23 | 19 |
| 8 | 57 | 32 | 70 | 48 | 140 | 215 | 161 | 83 | 27 | 16 | 18 | 18 |
| 9 | 42 | 32 | 70 | 47 | 110 | 200 | 144 | 84 | 72 | 15 | 18 | 16 |
| 10 | 45 | 43 | 78 | 46 | 96 | 191 | 133 | 126 | 45 | 14 | 18 | 15 |
| 11 | 46 | 38 | 68 | 46 | 84 | 163 | 126 | 104 | 34 | 14 | 15 | 15 |
| 12 | 48 | 36 | 66 | 45 | 78 | 158 | 119 | 95 | 31 | 13 | 15 | 14 |
| 13 | 40 | 33 | 61 | 44 | 74 | 235 | 113 | 89 | 29 | 13 | 16 | 47 |
| 14 | 38 | 32 | 53 | 43 | 70 | 195 | 109 | 91 | 27 | 12 | 15 | 34 |
| 15 | 35 | 32 | 64 | 42 | 143 | 176 | 106 | 86 | 26 | 12 | 15 | 21 |
| 16 | 37 | 31 | 69 | 42 | 144 | 161 | 104 | 84 | 26 | 12 | 14 | 18 |
| 17 | 32 | 30 | 64 | 41 | 127 | 151 | 99 | 81 | 27 | 11 | 14 | 17 |
| 18 | 37 | 49 | 59 | 41 | 127 | 147 | 98 | 79 | 26 | 11 | 14 | 19 |
| 19 | 34 | 45 | 58 | 137 | 127 | 151 | 98 | 93 | 24 | 23 | 32 | 18 |
| 20 | 30 | 40 | 171 | 728 | 170 | 148 | 93 | 86 | 22 | 58 | 29 | 19 |
| 21 | 34 | 38 | 158 | 216 | 138 | 143 | 91 | 80 | 22 | 120 | 20 | 18 |
| 22 | 38 | 38 | 102 | 156 | 125 | 130 | 89 | 71 | 22 | 48 | 16 | 18 |
| 23 | 35 | 52 | 93 | 100 | 134 | 125 | 89 | 64 | 20 | 34 | 15 | 17 |
| 24 | 37 | 39 | 83 | 86 | 128 | 123 | 93 | 99 | 20 | 28 | 25 | 17 |
| 25 | 35 | 37 | 83 | 74 | 113 | 127 | 88 | 73 | 21 | 24 | 20 | 18 |
| 26 | 34 | 37 | 163 | 66 | 104 | 231 | 84 | 60 | 21 | 21 | 17 | 18 |
| 27 | 37 | 37 | 136 | 60 | 106 | 209 | 84 | 54 | 20 | 24 | 16 | 18 |
| 28 | 38 | 37 | 138 | 58 | 94 | 173 | 90 | 49 | 19 | 23 | 16 | 18 |
| 29 | 36 | 303 | 190 | 54 | 95 | 158 | 117 | 44 | 19 | 20 | 21 | 18 |
| 30 | 36 | 189 | 127 | 52 | --- | 146 | 115 | 38 | 19 | 18 | 34 | 18 |
| 31 | 35 | --- | 127 | 50 | --- | 132 | --- | 36 | --- | 17 | 21 | --- |
| TOTAL | 1229 | 1529 | 3031 | 2860 | 7074 | 5129 | 3726 | 2482 | 842 | 726 | 611 | 654 |
| MEAN | 39.6 | 51.0 | 97.8 | 92.3 | 244 | 165 | 124 | 80.1 | 28.1 | 23.4 | 19.7 | 21.8 |
| MAX | 58 | 303 | 190 | 728 | 2010 | 254 | 320 | 126 | 72 | 120 | 34 | 73 |
| MIN | 30 | 30 | 53 | 41 | 70 | 87 | 84 | 36 | 19 | 11 | 14 | 14 |
| CFSM | .32 | .41 | .80 | .75 | 1.98 | 1.34 | 1.01 | .65 | .23 | .19 | .16 | .18 |
| IN. | .37 | .46 | .92 | .86 | 2.14 | 1.55 | 1.13 | .75 | .25 | .22 | .18 | .20 |
| CAL YR 1987 | TOTAL | 35045 | MEAN | 96.0 | MAX | 989 | MIN | 23 | CFSM | .78 | IN. | 10.60 |
| WTR YR 1988 | TOTAL | 29893 | MEAN | 81.7 | MAX | 2010 | MIN | 11 | CFSM | .66 | IN. | 9.04 |

CAPTINA CREEK BASIN

03114000 CAPTINA CREEK AT ARMSTRONGS MILLS, OH

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

DRAINAGE AREA.--134 mi².

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

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 739.53 ft above National Geodetic Vertical Datum of 1929. Aug. 20, 1926 to Sept. 30, 1935, nonrecording gage at same site, at datum 1.0 ft higher.

REMARKS.--Estimated daily discharges: Jan. 3-17, 23-31, Feb. 6-14. Records good except for periods of estimated record, which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--39 years, 162 ft³/s, 16.42 in/yr.

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

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|---------|------|-----------------------------------|---------------------|
| Jan. 20 | 0200 | 3,400 | 7.68 | Mar. 4 | 1530 | 3,160 | 7.41 |
| Feb. 2 | 1030 | *8,450 | *11.67 | July 20 | 1730 | 4,300 | 2.65 |
| Feb. 7 | 1430 | 3,000 | 7.22 | | | | |

Minimum daily discharge, 0.0 ft³/s July 6-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|----------|------|------|-------|-------|------|------|-------|---------|--------|-------|-------|
| 1 | 21 | 10 | 121 | 367 | 451 | 68 | 153 | 52 | 17 | 1.3 | 14 | 9.3 | |
| 2 | 16 | 11 | 86 | 225 | 4720 | 64 | 139 | 47 | 16 | 1.3 | 12 | 6.9 | |
| 3 | 13 | 9.5 | 67 | 140 | 1500 | 133 | 137 | 44 | 22 | .75 | 10 | 6.2 | |
| 4 | 14 | 8.9 | 227 | 100 | 1390 | 1840 | 1110 | 43 | 18 | .35 | 8.9 | 11 | |
| 5 | 13 | 8.9 | 217 | 86 | 764 | 939 | 503 | 59 | 16 | .15 | 7.8 | 35 | |
| 6 | 12 | 8.5 | 113 | 74 | 460 | 574 | 337 | 74 | 13 | .00 | 9.9 | 20 | |
| 7 | 15 | 8.3 | 76 | 66 | 200 | 414 | 293 | 58 | 11 | .00 | 8.8 | 14 | |
| 8 | 31 | 10 | 62 | 60 | 150 | 305 | 231 | 49 | 10 | .00 | 6.6 | 9.0 | |
| 9 | 23 | 13 | 68 | 56 | 110 | 274 | 180 | 46 | 30 | .00 | 4.0 | 7.7 | |
| 10 | 17 | 22 | 96 | 52 | 90 | 255 | 152 | 93 | 32 | .00 | 4.4 | 6.3 | |
| 11 | 18 | 27 | 75 | 48 | 72 | 192 | 133 | 85 | 17 | .00 | 3.5 | 5.4 | |
| 12 | 18 | 20 | 70 | 45 | 64 | 174 | 127 | 75 | 13 | .00 | 2.3 | 5.0 | |
| 13 | 16 | 17 | 57 | 42 | 58 | 368 | 111 | 62 | 10 | .00 | 2.8 | 8.2 | |
| 14 | 14 | 15 | 45 | 40 | 54 | 271 | 99 | 69 | 7.9 | .00 | 4.6 | 18 | |
| 15 | 13 | 15 | 60 | 38 | 183 | 223 | 90 | 58 | 6.5 | .00 | 3.6 | 12 | |
| 16 | 12 | 13 | 68 | 36 | 133 | 187 | 80 | 51 | 6.0 | .00 | 2.2 | 8.2 | |
| 17 | 12 | 13 | 58 | 35 | 108 | 170 | 74 | 43 | 5.7 | .00 | 1.6 | 7.5 | |
| 18 | 12 | 16 | 49 | 207 | 105 | 168 | 112 | 40 | 5.3 | .00 | .91 | 11 | |
| 19 | 12 | 20 | 45 | 253 | 113 | 184 | 119 | 58 | 4.7 | .00 | 1.7 | 9.1 | |
| 20 | 12 | 17 | 466 | 1650 | 218 | 176 | 83 | 53 | 3.8 | 540 | 27 | 8.8 | |
| 21 | 12 | 16 | 322 | 594 | 159 | 169 | 75 | 44 | 3.2 | 1620 | 26 | 11 | |
| 22 | 11 | 13 | 191 | 346 | 129 | 170 | 67 | 39 | 2.2 | 334 | 12 | 9.3 | |
| 23 | 10 | 13 | 142 | 200 | 143 | 165 | 67 | 37 | 2.3 | 147 | 11 | 7.6 | |
| 24 | 10 | 14 | 105 | 140 | 124 | 152 | 76 | 51 | 2.0 | 132 | 58 | 9.3 | |
| 25 | 10 | 16 | 145 | 110 | 100 | 176 | 62 | 52 | 2.1 | 76 | 26 | 11 | |
| 26 | 9.6 | 20 | 750 | 90 | 101 | 851 | 55 | 38 | 2.0 | 52 | 15 | 12 | |
| 27 | 10 | 22 | 428 | 72 | 91 | 485 | 51 | 32 | 1.8 | 41 | 10 | 10 | |
| 28 | 12 | 39 | 537 | 62 | 77 | 318 | 56 | 28 | 1.8 | 33 | 7.9 | 8.0 | |
| 29 | 12 | 621 | 651 | 54 | 76 | 251 | 72 | 24 | 1.6 | 25 | 11 | 7.1 | |
| 30 | 11 | 292 | 334 | 50 | --- | 205 | 60 | 21 | 1.4 | 19 | 19 | 5.7 | |
| 31 | 10 | --- | 264 | 45 | --- | 167 | --- | 19 | --- | 15 | 14 | --- | |
| TOTAL | 431.6 | 1349.1 | 5995 | 5383 | 11943 | 10088 | 4904 | 1544 | 285.3 | 3037.85 | 346.51 | 309.6 | |
| MEAN | 13.9 | 45.0 | 193 | 174 | 412 | 325 | 163 | 49.8 | 9.51 | 98.0 | 11.2 | 10.3 | |
| MAX | 31 | 621 | 750 | 1650 | 4720 | 1840 | 1110 | 93 | 32 | 1620 | 58 | 35 | |
| MIN | 9.6 | 8.3 | 45 | 35 | 54 | 64 | 51 | 19 | 1.4 | .00 | .91 | 5.0 | |
| CFSM | .10 | .34 | 1.44 | 1.30 | 3.07 | 2.43 | 1.22 | .37 | .07 | .73 | .08 | .08 | |
| IN. | .12 | .37 | 1.66 | 1.49 | 3.32 | 2.80 | 1.36 | .43 | .08 | .84 | .10 | .09 | |
| CAL YR 1987 | TOTAL | 47390.9 | | MEAN | 130 | MAX | 2450 | MIN | 3.1 | CFSM | .97 | IN. | 13.16 |
| WTR YR 1988 | TOTAL | 45616.96 | | MEAN | 125 | MAX | 4720 | MIN | .00 | CFSM | .93 | IN. | 12.66 |

MUSKINGUM RIVER BASIN

59

03117000 TUSCARAWAS RIVER AT MASSILLON, OH

LOCATION.--Lat 40°46'13", long 81°31'27", in sec. 20 T.10 N., R.9 W., Stark County, Hydrologic Unit 05040001, on left bank at sewage-treatment works, 0.7 mi south of Massillon, and 3 mi downstream from Newman Creek.

DRAINAGE AREA.--518 mi².

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

REVISED RECORDS.--WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 916.00 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 19, 1944, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 3-19, 25-30. Records fair. Some water diverted through the Portage Lakes into the Ohio Canal at Long Lake, 28 mi and 3 mi south of Akron. Part of the diverted water flows through the Ohio Canal into the Cuyahoga River basin. Flow affected by industrial plants upstream from station and supplemented at times by diversion from Nimisila Reservoir, capacity, 6,500 acre-ft, since 1939. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--51 years, 440 ft³/s.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,890 ft³/s Sept. 4, gage height, 7.79 ft; minimum daily, 49 ft³/s July 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|-------|-------|-------|------|------|------|------|------|
| 1 | 125 | 96 | 157 | 199 | 595 | 282 | 381 | 230 | 93 | 64 | 89 | 100 |
| 2 | 116 | 98 | 169 | 150 | 2140 | 275 | 348 | 193 | 100 | 63 | 84 | 93 |
| 3 | 108 | 98 | 165 | 120 | 2160 | 295 | 513 | 173 | 129 | 61 | 80 | 298 |
| 4 | 101 | 98 | 184 | 110 | 1480 | 316 | 2260 | 163 | 116 | 61 | 78 | 2720 |
| 5 | 104 | 103 | 212 | 100 | 865 | 311 | 1900 | 189 | 100 | 60 | 77 | 1820 |
| 6 | 97 | 99 | 183 | 90 | 518 | 308 | 1090 | 235 | 97 | 59 | 83 | 811 |
| 7 | 122 | 93 | 165 | 84 | 466 | 367 | 760 | 202 | 94 | 58 | 87 | 335 |
| 8 | 135 | 90 | 160 | 78 | 355 | 648 | 644 | 161 | 91 | 57 | 77 | 196 |
| 9 | 118 | 108 | 197 | 74 | 306 | 784 | 502 | 169 | 88 | 56 | 73 | 137 |
| 10 | 106 | 126 | 224 | 70 | 285 | 802 | 421 | 233 | 84 | 54 | 69 | 120 |
| 11 | 135 | 115 | 198 | 66 | 264 | 562 | 377 | 268 | 77 | 56 | 73 | 109 |
| 12 | 154 | 106 | 188 | 64 | 269 | 449 | 337 | 223 | 72 | 58 | 73 | 109 |
| 13 | 135 | 101 | 174 | 62 | 257 | 487 | 310 | 196 | 70 | 55 | 66 | 177 |
| 14 | 187 | 96 | 151 | 60 | 251 | 462 | 288 | 153 | 69 | 54 | 55 | 193 |
| 15 | 245 | 87 | 204 | 58 | 390 | 405 | 264 | 128 | 76 | 53 | 70 | 126 |
| 16 | 294 | 88 | 371 | 58 | 616 | 379 | 235 | 144 | 75 | 51 | 73 | 112 |
| 17 | 239 | 100 | 280 | 56 | 476 | 365 | 222 | 192 | 91 | 49 | 75 | 106 |
| 18 | 231 | 107 | 231 | 54 | 541 | 399 | 216 | 145 | 105 | 51 | 79 | 100 |
| 19 | 254 | 108 | 203 | 54 | 624 | 424 | 211 | 132 | 88 | 99 | 173 | 99 |
| 20 | 141 | 102 | 419 | 563 | 1650 | 411 | 198 | 139 | 75 | 70 | 141 | 103 |
| 21 | 112 | 107 | 695 | 548 | 1330 | 405 | 194 | 134 | 71 | 644 | 93 | 100 |
| 22 | 102 | 108 | 473 | 303 | 686 | 379 | 197 | 122 | 67 | 631 | 81 | 99 |
| 23 | 112 | 109 | 367 | 214 | 749 | 408 | 186 | 122 | 66 | 295 | 96 | 101 |
| 24 | 121 | 124 | 293 | 178 | 792 | 459 | 184 | 118 | 65 | 264 | 151 | 100 |
| 25 | 104 | 143 | 244 | 150 | 520 | 473 | 177 | 117 | 64 | 131 | 113 | 97 |
| 26 | 108 | 160 | 249 | 130 | 398 | 2010 | 173 | 109 | 62 | 127 | 100 | 98 |
| 27 | 111 | 160 | 240 | 120 | 349 | 1990 | 168 | 104 | 63 | 115 | 95 | 97 |
| 28 | 131 | 132 | 222 | 110 | 303 | 1120 | 171 | 99 | 62 | 100 | 139 | 97 |
| 29 | 125 | 145 | 289 | 100 | 286 | 711 | 260 | 96 | 62 | 92 | 318 | 97 |
| 30 | 113 | 170 | 262 | 98 | --- | 547 | 268 | 95 | 63 | 88 | 267 | 96 |
| 31 | 106 | --- | 213 | 219 | --- | 439 | --- | 94 | --- | 86 | 139 | --- |
| TOTAL | 4492 | 3377 | 7782 | 4340 | 19921 | 17672 | 13455 | 4878 | 2435 | 3762 | 3267 | 8846 |
| MEAN | 145 | 113 | 251 | 140 | 687 | 570 | 449 | 157 | 81.2 | 121 | 105 | 295 |
| MAX | 294 | 170 | 695 | 563 | 2160 | 2010 | 2260 | 268 | 129 | 644 | 318 | 2720 |
| MIN | 97 | 87 | 151 | 54 | 251 | 275 | 168 | 94 | 62 | 49 | 55 | 93 |

| | | | | | | | | |
|-------------|-------|--------|------|-----|-----|------|-----|----|
| CAL YR 1987 | TOTAL | 114580 | MEAN | 314 | MAX | 4120 | MIN | 76 |
| WTR YR 1988 | TOTAL | 94227 | MEAN | 257 | MAX | 2720 | MIN | 49 |

MUSKINGUM RIVER BASIN

03117100 TUSCARAWAS RIVER AT NAVARRE, OH

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

DRAINAGE AREA.--534 mi².

PERIOD OF RECORD.--March 1968 to September 1986, August 1987 to current year.

PERIOD OF DAILY RECORD.--

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

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

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

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

INSTRUMENTATION.--Water-quality monitor.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

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

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

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

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

EXTREMES FOR CURRENT YEAR--

SPECIFIC CONDUCTANCE: Maximum, 2,370 microsiemens Oct. 25; minimum, 405 microsiemens Sept. 4.

pH: Maximum, 9.1 units July 3, 4, Aug. 9; minimum, 7.3 units Feb. 6.

WATER TEMPERATURES: Maximum, 28.0°C July 29, Aug. 3, 4, 13, 14; minimum, 0.5°C several days during winter.

DISSOLVED OXYGEN: Maximum, 18.0 mg/L July 13; minimum, 1.6 mg/L June 16.

MUSKINGUM RIVER BASIN

61

03117100 TUSCARAWAS RIVER AT NAVARRE OH--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|------|------|------|----------|------|------|----------|------|------|---------|------|------|
| OCTOBER | | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
| 1 | 1940 | 1830 | 1880 | 1590 | 1510 | 1560 | 1520 | 1370 | 1440 | 1320 | 1290 | 1310 |
| 2 | 1940 | 1640 | 1820 | 1670 | 1570 | 1610 | 1390 | 1270 | 1320 | 1380 | 1300 | 1340 |
| 3 | --- | --- | --- | 1750 | 1670 | 1700 | 1410 | 1320 | 1360 | 1450 | 1340 | 1360 |
| 4 | --- | --- | --- | 1780 | 1680 | 1730 | 1460 | 1310 | 1360 | 1530 | 1390 | 1460 |
| 5 | --- | --- | --- | 1810 | 1660 | 1760 | 1410 | 1310 | 1350 | 1530 | 1400 | 1490 |
| 6 | 1540 | 1440 | 1490 | 1710 | 1640 | 1660 | 1430 | 1380 | 1400 | 1520 | 1470 | 1490 |
| 7 | 1600 | 1400 | 1480 | 1680 | 1530 | 1640 | 1500 | 1420 | 1460 | 1730 | 1460 | 1600 |
| 8 | --- | --- | --- | 1640 | 1530 | 1600 | 1480 | 1420 | 1450 | 1720 | 1560 | 1640 |
| 9 | --- | --- | --- | 1650 | 1540 | 1590 | 1580 | 1460 | 1540 | 1710 | 1620 | 1660 |
| 10 | --- | --- | --- | 1610 | 1540 | 1570 | 1560 | 1420 | 1510 | 1660 | 1600 | 1640 |
| 11 | --- | --- | --- | 1620 | 1500 | 1580 | 1410 | 1380 | 1390 | 1680 | 1550 | 1620 |
| 12 | --- | --- | --- | 1480 | 1410 | 1440 | 1400 | 1370 | 1380 | 1710 | 1600 | 1660 |
| 13 | --- | --- | --- | 1530 | 1410 | 1470 | 1420 | 1330 | 1360 | 1710 | 1610 | 1650 |
| 14 | --- | --- | --- | 1580 | 1520 | 1540 | 1360 | 1290 | 1320 | 1770 | 1600 | 1660 |
| 15 | --- | --- | --- | 1590 | 1520 | 1560 | 1410 | 1280 | 1330 | 1730 | 1660 | 1690 |
| 16 | 1170 | 1090 | 1120 | 1630 | 1480 | 1580 | 1500 | 1260 | 1380 | 1850 | 1610 | 1720 |
| 17 | 1140 | 1040 | 1080 | 1670 | 1590 | 1630 | 1250 | 1160 | 1210 | 1840 | 1700 | 1760 |
| 18 | 1150 | 1040 | 1110 | 1690 | 1620 | 1650 | 1340 | 1250 | 1290 | 1730 | 1650 | 1700 |
| 19 | 1100 | 983 | 1030 | 1750 | 1700 | 1720 | 1550 | 1340 | 1470 | 1660 | 1490 | 1620 |
| 20 | 1200 | 1090 | 1140 | 1730 | 1530 | 1630 | 1550 | 1480 | 1520 | 1340 | 663 | 1060 |
| 21 | 1320 | 1170 | 1210 | 1540 | 1430 | 1480 | 1480 | 1090 | 1220 | 750 | 576 | 659 |
| 22 | 1630 | 1290 | 1420 | 1590 | 1480 | 1530 | 1100 | 1050 | 1070 | 903 | 720 | 811 |
| 23 | 1950 | 1650 | 1830 | 1560 | 1470 | 1510 | 1200 | 1100 | 1140 | 1150 | 906 | 1030 |
| 24 | 2110 | 1920 | 2000 | 1570 | 1490 | 1530 | 1210 | 1130 | 1160 | 1260 | 1110 | 1200 |
| 25 | 2370 | 1630 | 2050 | 1710 | 1580 | 1640 | 1330 | 1210 | 1250 | 1450 | 1260 | 1350 |
| 26 | 1620 | 1460 | 1540 | 1690 | 1530 | 1570 | 1330 | 1300 | 1320 | 1390 | 1300 | 1350 |
| 27 | 1940 | 1600 | 1790 | 1710 | 1460 | 1600 | 1300 | 1270 | 1290 | 1420 | 1340 | 1360 |
| 28 | 1870 | 1670 | 1750 | 1430 | 1320 | 1360 | 1310 | 1280 | 1300 | 1530 | 1380 | 1490 |
| 29 | 2080 | 1740 | 1920 | 1400 | 1310 | 1360 | 1330 | 1290 | 1310 | 1470 | 1380 | 1420 |
| 30 | 2050 | 1570 | 1720 | 1510 | 1380 | 1450 | 1310 | 1220 | 1260 | 1580 | 1440 | 1510 |
| 31 | 1720 | 1580 | 1640 | --- | --- | --- | 1350 | 1230 | 1270 | 1500 | 1440 | 1470 |
| MONTH | 2370 | 983 | 1550 | 1810 | 1310 | 1570 | 1580 | 1050 | 1340 | 1850 | 576 | 1440 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| FEBRUARY | | | | MARCH | | | APRIL | | | MAY | | |
| 1 | 1470 | 894 | 1240 | 1240 | 1160 | 1210 | 1020 | 942 | 975 | 1390 | 1080 | 1160 |
| 2 | 891 | 630 | 717 | 1240 | 1190 | 1220 | 1040 | 1010 | 1020 | 1180 | 1110 | 1140 |
| 3 | 699 | 633 | 660 | 1300 | 1210 | 1230 | 1060 | 726 | 938 | 1300 | 1180 | 1240 |
| 4 | 810 | 696 | 741 | 1340 | 1180 | 1230 | --- | --- | --- | 1360 | 1300 | 1320 |
| 5 | 912 | 783 | 851 | 1300 | 1210 | 1250 | --- | --- | --- | 1390 | 1220 | 1300 |
| 6 | 1080 | 927 | 1010 | 1480 | 1230 | 1360 | --- | --- | --- | 1420 | 1170 | 1310 |
| 7 | 1030 | 966 | 1010 | 1470 | 1240 | 1360 | --- | --- | --- | 1230 | 1130 | 1170 |
| 8 | 1220 | 1030 | 1120 | 1210 | 867 | 1070 | 864 | 786 | 823 | 1200 | 1160 | 1180 |
| 9 | 1260 | 1210 | 1240 | 858 | 807 | 834 | 927 | 855 | 891 | 1300 | 1200 | 1270 |
| 10 | 1290 | 1260 | 1270 | 831 | 804 | 814 | 966 | 915 | 939 | 1390 | 1070 | 1240 |
| 11 | 1350 | 1280 | 1320 | 918 | 834 | 874 | 1050 | 969 | 1010 | 1440 | 1120 | 1270 |
| 12 | 1410 | 1320 | 1350 | 978 | 918 | 947 | 1090 | 1050 | 1070 | 1240 | 972 | 1060 |
| 13 | 1420 | 1360 | 1390 | 1010 | 960 | 981 | 1120 | 1080 | 1100 | 1140 | 957 | 1070 |
| 14 | 1520 | 1340 | 1390 | 1030 | 960 | 988 | 1190 | 1120 | 1140 | 1230 | 978 | 1120 |
| 15 | 1480 | 1230 | 1360 | 1090 | 996 | 1030 | 1230 | 1190 | 1210 | 1290 | 1240 | 1270 |
| 16 | 1290 | 1050 | 1180 | 1170 | 1060 | 1100 | 1300 | 1210 | 1240 | 1400 | 1270 | 1320 |
| 17 | 1140 | 996 | 1060 | 1270 | 1150 | 1200 | 1300 | 1260 | 1280 | 1630 | 1120 | 1440 |
| 18 | 1060 | 975 | 1020 | 1210 | 1150 | 1170 | 1330 | 1280 | 1300 | 1200 | 1080 | 1130 |
| 19 | 969 | 852 | 935 | 1150 | 1090 | 1120 | 1360 | 1330 | 1340 | 1250 | 1200 | 1210 |
| 20 | 828 | 612 | 709 | 1170 | 1030 | 1080 | 1360 | 1280 | 1300 | 1400 | 1260 | 1320 |
| 21 | 717 | 645 | 674 | 1190 | 1070 | 1110 | 1380 | 1290 | 1320 | 1430 | 1310 | 1390 |
| 22 | 852 | 723 | 800 | 1320 | 1190 | 1240 | 1450 | 1330 | 1390 | 1350 | 1270 | 1300 |
| 23 | 918 | 846 | 884 | 1210 | 1080 | 1130 | 1320 | 1250 | 1280 | 1400 | 1120 | 1370 |
| 24 | 828 | 756 | 778 | 1080 | 1020 | 1040 | 1340 | 1260 | 1300 | 1470 | 1310 | 1380 |
| 25 | 897 | 768 | 834 | 1030 | 813 | 988 | 1380 | 1320 | 1340 | 1520 | 1480 | 1490 |
| 26 | 999 | 894 | 941 | 870 | 564 | 669 | 1380 | 1310 | 1340 | 1600 | 1440 | 1530 |
| 27 | 1100 | 993 | 1030 | 681 | 600 | 637 | 1380 | 1340 | 1360 | 1480 | 1430 | 1450 |
| 28 | 1120 | 1070 | 1100 | 777 | 684 | 725 | 1380 | 1310 | 1360 | 1550 | 1490 | 1530 |
| 29 | 1160 | 1100 | 1130 | 855 | 780 | 823 | 1460 | 1290 | 1340 | 1680 | 1530 | 1620 |
| 30 | --- | --- | --- | 909 | 849 | 872 | 1360 | 1050 | 1110 | 1710 | 1620 | 1670 |
| 31 | --- | --- | --- | 948 | 906 | 925 | --- | --- | --- | 1740 | 1690 | 1710 |
| MONTH | 1520 | 612 | 1030 | 1480 | 564 | 1040 | 1460 | 726 | 1180 | 1740 | 957 | 1320 |

MUSKINGUM RIVER BASIN

03117100 TUSCARAWAS RIVER AT NAVARRE OH--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|--------------|------|------|-------------|------|------|-----------|------|------|-----------|------|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 1770 | 1730 | 1750 | 2260 | 2020 | 2120 | 1680 | 1580 | 1640 | 1070 | 1030 | 1050 |
| 2 | 1760 | 1620 | 1720 | 2170 | 1900 | 2070 | 1810 | 1630 | 1730 | 1420 | 1080 | 1210 |
| 3 | 1820 | 1670 | 1760 | 1990 | 1680 | 1880 | 1680 | 1600 | 1630 | 1520 | 603 | 1420 |
| 4 | 1900 | 1810 | 1870 | 1760 | 1610 | 1710 | 1760 | 1610 | 1690 | 618 | 405 | 480 |
| 5 | 1860 | 1360 | 1570 | 1720 | 1600 | 1670 | 1740 | 1630 | 1700 | 624 | 486 | 566 |
| 6 | 1570 | 1390 | 1500 | 1830 | 1590 | 1740 | 1740 | 1650 | 1690 | 741 | 627 | 667 |
| 7 | 1670 | 1520 | 1600 | 1910 | 1760 | 1820 | 2000 | 1690 | 1890 | 867 | 750 | 816 |
| 8 | 1720 | 1650 | 1690 | 1830 | 1650 | 1790 | 2040 | 1580 | 1920 | 1080 | 876 | 995 |
| 9 | 1840 | 1730 | 1780 | 1770 | 1610 | 1740 | 1590 | 1510 | 1550 | 1220 | 1080 | 1130 |
| 10 | 1840 | 1770 | 1800 | 1830 | 1710 | 1750 | 1570 | 1490 | 1530 | 1340 | 1230 | 1280 |
| 11 | 1860 | 1780 | 1830 | 1920 | 1750 | 1880 | 1760 | 1540 | 1660 | 1430 | 1340 | 1380 |
| 12 | 1920 | 1800 | 1870 | 2160 | 1910 | 2050 | 1900 | 1770 | 1830 | 1540 | 1400 | 1480 |
| 13 | 1970 | 1820 | 1900 | 2210 | 2040 | 2110 | 1940 | 1790 | 1880 | 1500 | 1280 | 1400 |
| 14 | 2070 | 1860 | 1970 | 2310 | 1900 | 2160 | 1980 | 1640 | 1830 | 1660 | 1010 | 1270 |
| 15 | 2200 | 1970 | 2090 | 1870 | 1480 | 1630 | 1870 | 1520 | 1750 | 1150 | 1040 | 1080 |
| 16 | 2090 | 1950 | 2020 | 1740 | 1490 | 1620 | 1760 | 1410 | 1630 | 1290 | 1150 | 1210 |
| 17 | 2040 | 1900 | 1990 | 1830 | 1720 | 1760 | 1850 | 1630 | 1740 | 1410 | 1290 | 1340 |
| 18 | 2020 | 1950 | 1980 | 1890 | 1730 | 1850 | 1890 | 1460 | 1750 | 1500 | 1400 | 1440 |
| 19 | 2170 | 1570 | 1990 | 1930 | 1360 | 1710 | 1810 | 930 | 1290 | 1630 | 1510 | 1580 |
| 20 | 1570 | 1480 | 1520 | 2170 | 1180 | 1650 | 1990 | 987 | 1430 | 1680 | 1530 | 1630 |
| 21 | 1710 | 1540 | 1640 | 1340 | 564 | 813 | 1000 | 960 | 981 | 1720 | 1610 | 1670 |
| 22 | 1750 | 1710 | 1730 | 765 | 585 | 655 | 1200 | 1010 | 1110 | 1750 | 1670 | 1710 |
| 23 | 1870 | 1750 | 1820 | 882 | 600 | 750 | 1350 | 1120 | 1270 | 1750 | 1660 | 1710 |
| 24 | 1890 | 1760 | 1830 | 1150 | 798 | 979 | 1740 | 1190 | 1360 | 1750 | 1660 | 1710 |
| 25 | 1890 | 1760 | 1820 | 1020 | 804 | 903 | 1840 | 1060 | 1280 | 1700 | 1630 | 1670 |
| 26 | 1850 | 1750 | 1810 | 1270 | 885 | 1040 | 1150 | 1080 | 1100 | 1690 | 1600 | 1660 |
| 27 | 1920 | 1760 | 1840 | 1430 | 1280 | 1380 | 1370 | 1160 | 1240 | 1660 | 1600 | 1630 |
| 28 | 1990 | 1830 | 1900 | 1430 | 1240 | 1290 | 1460 | 1290 | 1390 | 1680 | 1610 | 1630 |
| 29 | 2000 | 1860 | 1940 | 1420 | 1320 | 1380 | 1590 | 828 | 1110 | 1710 | 1640 | 1670 |
| 30 | 2040 | 1860 | 1970 | 1510 | 1420 | 1480 | 909 | 816 | 862 | 1680 | 1570 | 1640 |
| 31 | --- | --- | --- | 1580 | 1500 | 1540 | 1030 | 891 | 958 | --- | --- | --- |
| MONTH | 2200 | 1360 | 1820 | 2310 | 564 | 1580 | 2040 | 816 | 1500 | 1750 | 405 | 1340 |
| YEAR | MAXIMUM 2370 | | | MINIMUM 405 | | | MEAN 1390 | | | | | |

PH (STANDARD UNITS), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
| | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
| 1 | 8.0 | 7.8 | 7.9 | 8.1 | 7.8 | 7.9 | 8.1 | 7.9 | 8.0 | 8.1 | 8.0 | 8.0 |
| 2 | 7.9 | 7.8 | 7.9 | 8.0 | 7.7 | 7.9 | 8.2 | 7.9 | 8.0 | 8.1 | 8.0 | 8.0 |
| 3 | --- | --- | --- | 8.1 | 7.7 | 7.9 | 8.1 | 7.9 | 8.0 | 8.1 | 8.0 | 8.1 |
| 4 | --- | --- | --- | 8.1 | 7.8 | 7.9 | 8.2 | 7.9 | 8.0 | 8.1 | 8.0 | 8.0 |
| 5 | --- | --- | --- | 8.2 | 7.8 | 7.9 | 8.1 | 8.0 | 8.1 | 8.1 | 7.9 | 8.0 |
| 6 | 8.0 | 7.9 | 8.0 | 8.2 | 7.8 | 8.0 | 8.2 | 8.0 | 8.1 | 8.0 | 8.0 | 8.0 |
| 7 | 8.0 | 7.9 | 7.9 | 8.3 | 7.9 | 8.1 | 8.2 | 8.0 | 8.1 | 8.0 | 7.9 | 7.9 |
| 8 | --- | --- | --- | 8.3 | 7.9 | 8.1 | 8.3 | 8.0 | 8.1 | 7.9 | 7.8 | 7.9 |
| 9 | --- | --- | --- | 8.1 | 7.8 | 7.9 | 8.1 | 8.0 | 8.0 | 7.9 | 7.8 | 7.9 |
| 10 | --- | --- | --- | 8.0 | 7.9 | 7.9 | 8.0 | 7.9 | 8.0 | 7.9 | 7.8 | 7.8 |
| 11 | --- | --- | --- | 8.2 | 7.9 | 8.0 | 8.1 | 7.9 | 8.0 | 7.9 | 7.8 | 7.8 |
| 12 | --- | --- | --- | 8.2 | 7.9 | 8.1 | 8.1 | 7.9 | 8.0 | 7.9 | 7.8 | 7.8 |
| 13 | --- | --- | --- | 8.2 | 7.9 | 8.1 | 8.1 | 8.0 | 8.0 | 7.9 | 7.8 | 7.9 |
| 14 | --- | --- | --- | 8.2 | 7.9 | 8.0 | 8.3 | 8.0 | 8.1 | 8.0 | 7.8 | 7.9 |
| 15 | --- | --- | --- | 8.3 | 7.9 | 8.1 | 8.1 | 8.0 | 8.1 | 8.0 | 7.8 | 7.9 |
| 16 | 8.1 | 7.9 | 8.0 | 8.3 | 7.9 | 8.0 | 8.1 | 8.0 | 8.1 | 8.0 | 7.9 | 7.9 |
| 17 | 8.0 | 7.9 | 7.9 | 8.0 | 7.9 | 8.0 | 8.1 | 8.0 | 8.0 | 8.0 | 7.9 | 7.9 |
| 18 | 8.2 | 7.9 | 8.0 | 8.0 | 7.8 | 7.9 | 8.2 | 8.0 | 8.1 | 8.0 | 7.9 | 7.9 |
| 19 | 8.2 | 7.9 | 8.1 | 8.2 | 7.8 | 8.0 | 8.2 | 8.0 | 8.1 | 8.0 | 7.9 | 8.0 |
| 20 | 8.0 | 7.9 | 8.0 | 8.2 | 7.9 | 8.0 | 8.1 | 8.0 | 8.0 | 8.0 | 7.7 | 7.9 |
| 21 | 8.1 | 7.9 | 8.0 | 8.3 | 8.0 | 8.1 | 7.9 | 7.8 | 7.9 | 7.8 | 7.8 | 7.8 |
| 22 | 8.1 | 7.9 | 8.0 | 8.4 | 8.0 | 8.2 | 8.0 | 7.9 | 7.9 | 7.9 | 7.8 | 7.9 |
| 23 | 8.0 | 7.8 | 7.9 | 8.4 | 8.0 | 8.2 | 8.1 | 7.9 | 8.0 | 8.0 | 7.9 | 7.9 |
| 24 | 7.9 | 7.8 | 7.8 | 8.4 | 8.0 | 8.1 | 8.1 | 8.0 | 8.0 | 8.0 | 7.9 | 8.0 |
| 25 | 7.8 | 7.6 | 7.7 | 8.3 | 7.9 | 8.1 | 8.0 | 8.0 | 8.0 | 8.0 | 7.9 | 8.0 |
| 26 | 7.9 | 7.8 | 7.8 | 8.0 | 7.8 | 7.9 | 8.0 | 7.9 | 8.0 | 8.1 | 7.9 | 8.0 |
| 27 | 7.8 | 7.7 | 7.8 | 8.0 | 7.8 | 7.9 | 8.1 | 7.9 | 8.0 | 8.1 | 7.9 | 8.0 |
| 28 | 7.9 | 7.8 | 7.8 | 8.1 | 7.8 | 8.0 | 8.0 | 8.0 | 8.0 | 8.0 | 7.9 | 7.9 |
| 29 | 8.0 | 7.7 | 7.8 | 8.0 | 7.9 | 7.9 | 8.1 | 8.0 | 8.0 | 8.0 | 7.9 | 8.0 |
| 30 | 8.0 | 7.8 | 7.9 | 8.0 | 7.8 | 7.9 | 8.1 | 8.0 | 8.0 | 8.1 | 7.9 | 8.0 |
| 31 | 8.0 | 7.8 | 7.9 | --- | --- | --- | 8.0 | 8.0 | 8.0 | 8.1 | 7.9 | 8.0 |
| MONTH | 8.2 | 7.6 | 7.9 | 8.4 | 7.7 | 8.0 | 8.3 | 7.8 | 8.0 | 8.1 | 7.7 | 7.9 |

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PH (STANDARD UNITS), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|-----|-----|------|-------|-----|------|--------|-----|------|-----------|-----|------|
| FEBRUARY | | | | MARCH | | | APRIL | | | MAY | | |
| 1 | 7.9 | 7.8 | 7.9 | 8.0 | 7.6 | 7.8 | 8.0 | 7.7 | 7.9 | 8.3 | 7.7 | 8.0 |
| 2 | 7.8 | 7.6 | 7.7 | 7.9 | 7.8 | 7.9 | 8.0 | 7.8 | 7.9 | 8.1 | 7.7 | 7.9 |
| 3 | 7.7 | 7.6 | 7.7 | 7.9 | 7.8 | 7.8 | 7.8 | 7.7 | 7.7 | 8.5 | 7.7 | 8.0 |
| 4 | 7.8 | 7.6 | 7.7 | 8.0 | 7.7 | 7.9 | --- | --- | --- | 8.2 | 7.8 | 8.0 |
| 5 | 7.9 | 7.6 | 7.9 | 8.1 | 7.8 | 7.9 | --- | --- | --- | 7.8 | 7.7 | 7.8 |
| 6 | 7.9 | 7.3 | 7.6 | 8.1 | 7.9 | 8.0 | --- | --- | --- | 8.0 | 7.7 | 7.8 |
| 7 | 7.8 | 7.6 | 7.7 | 8.1 | 7.9 | 8.0 | --- | --- | --- | 8.3 | 7.7 | 7.9 |
| 8 | 7.8 | 7.7 | 7.8 | 7.9 | 7.8 | 7.9 | 7.8 | 7.7 | 7.8 | 8.5 | 7.7 | 8.0 |
| 9 | 7.9 | 7.8 | 7.9 | 7.8 | 7.7 | 7.8 | 7.9 | 7.8 | 7.8 | 8.3 | 7.7 | 8.0 |
| 10 | 7.9 | 7.8 | 7.9 | 7.8 | 7.7 | 7.7 | 7.9 | 7.8 | 7.9 | 8.1 | 7.7 | 7.9 |
| 11 | 8.0 | 7.9 | 7.9 | 7.9 | 7.7 | 7.8 | 8.0 | 7.8 | 7.9 | 8.0 | 7.7 | 7.8 |
| 12 | 8.0 | 7.9 | 8.0 | 7.9 | 7.8 | 7.8 | 8.1 | 7.7 | 7.9 | 7.9 | 7.6 | 7.8 |
| 13 | 8.0 | 8.0 | 8.0 | 7.9 | 7.8 | 7.8 | 8.3 | 7.8 | 8.0 | 8.0 | 7.7 | 7.8 |
| 14 | 8.0 | 7.9 | 8.0 | 8.0 | 7.8 | 7.9 | 8.3 | 7.8 | 8.0 | 8.1 | 7.7 | 7.8 |
| 15 | 7.9 | 7.9 | 7.9 | 8.2 | 7.9 | 8.0 | 8.3 | 7.8 | 8.0 | 8.2 | 7.7 | 7.9 |
| 16 | 7.9 | 7.5 | 7.8 | 8.2 | 7.9 | 8.1 | 8.2 | 7.9 | 8.0 | 7.9 | 7.7 | 7.7 |
| 17 | 7.9 | 7.8 | 7.9 | 8.3 | 8.0 | 8.1 | 8.4 | 7.9 | 8.1 | 8.0 | 7.7 | 7.8 |
| 18 | 7.9 | 7.8 | 7.9 | 8.2 | 8.0 | 8.1 | 8.3 | 7.9 | 8.0 | 7.9 | 7.6 | 7.8 |
| 19 | 7.9 | 7.8 | 7.9 | 8.2 | 8.0 | 8.1 | 8.2 | 7.8 | 8.0 | 7.9 | 7.7 | 7.8 |
| 20 | 7.8 | 7.7 | 7.7 | 8.4 | 8.0 | 8.2 | 8.2 | 7.8 | 8.0 | 7.9 | 7.7 | 7.8 |
| 21 | 7.7 | 7.6 | 7.7 | 8.5 | 8.0 | 8.2 | 8.2 | 7.8 | 7.9 | 8.0 | 7.7 | 7.8 |
| 22 | 7.8 | 7.7 | 7.8 | 8.4 | 8.0 | 8.2 | 8.4 | 7.7 | 8.0 | 8.1 | 7.7 | 7.9 |
| 23 | 7.9 | 7.8 | 7.9 | 8.4 | 7.9 | 8.1 | 8.2 | 7.8 | 8.0 | 8.0 | 7.7 | 7.9 |
| 24 | 7.8 | 7.8 | 7.8 | 8.1 | 7.9 | 8.0 | 8.0 | 7.7 | 7.9 | 7.9 | 7.6 | 7.8 |
| 25 | 7.8 | 7.7 | 7.7 | 7.9 | 7.7 | 7.9 | 8.3 | 7.7 | 8.0 | 8.1 | 7.7 | 7.9 |
| 26 | 7.7 | 7.6 | 7.7 | 7.7 | 7.5 | 7.6 | 8.5 | 7.8 | 8.1 | 8.1 | 7.7 | 7.9 |
| 27 | 7.7 | 7.6 | 7.7 | 7.5 | 7.5 | 7.5 | 8.3 | 7.8 | 8.0 | 8.1 | 7.8 | 7.9 |
| 28 | 7.7 | 7.6 | 7.6 | 7.8 | 7.5 | 7.7 | 8.0 | 7.8 | 7.9 | 8.1 | 7.8 | 7.9 |
| 29 | 7.6 | 7.6 | 7.6 | 7.9 | 7.8 | 7.8 | 8.0 | 7.8 | 7.9 | 8.2 | 7.8 | 8.0 |
| 30 | --- | --- | --- | 7.9 | 7.7 | 7.8 | 8.2 | 7.8 | 7.9 | 8.2 | 7.8 | 8.0 |
| 31 | --- | --- | --- | 8.0 | 7.7 | 7.8 | --- | --- | --- | 8.1 | 7.8 | 8.0 |
| MONTH | 8.0 | 7.3 | 7.8 | 8.5 | 7.5 | 7.9 | 8.5 | 7.7 | 7.9 | 8.5 | 7.6 | 7.9 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| JUNE | | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 8.1 | 7.8 | 7.9 | 8.8 | 8.2 | 8.5 | 8.7 | 8.2 | 8.4 | 7.9 | 7.7 | 7.8 |
| 2 | 8.1 | 7.7 | 7.9 | 8.9 | 8.2 | 8.5 | 8.7 | 7.9 | 8.3 | 8.0 | 7.7 | 7.9 |
| 3 | 8.3 | 7.8 | 8.1 | 9.1 | 8.1 | 8.6 | 8.9 | 7.9 | 8.3 | 8.0 | 7.6 | 7.8 |
| 4 | 8.5 | 7.9 | 8.2 | 9.1 | 8.1 | 8.6 | 8.9 | 8.0 | 8.4 | 7.6 | 7.4 | 7.5 |
| 5 | 8.5 | 8.0 | 8.3 | 9.0 | 7.9 | 8.5 | | | | | | |

MUSKINGUM RIVER BASIN

03117100 TUSCARAWAS RIVER AT NAVARRE OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|------|------|----------|------|------|----------|------|------|---------|------|------|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | 17.0 | 15.5 | 16.0 | 12.5 | 10.5 | 11.5 | 8.5 | 7.5 | 8.5 | 3.5 | 1.5 | 2.5 |
| 2 | 16.5 | 14.0 | 15.0 | 14.0 | 12.0 | 13.0 | 7.5 | 6.5 | 7.0 | 2.5 | 1.0 | 1.5 |
| 3 | --- | --- | --- | 15.0 | 13.5 | 14.0 | 6.5 | 5.5 | 5.5 | 2.0 | 1.0 | 1.5 |
| 4 | --- | --- | --- | 15.5 | 13.5 | 14.5 | 5.5 | 5.0 | 5.5 | 2.5 | 1.0 | 2.0 |
| 5 | --- | --- | --- | 15.5 | 12.0 | 13.5 | 5.0 | 4.0 | 4.5 | 1.5 | .5 | 1.0 |
| 6 | 15.5 | 14.0 | 14.5 | 12.0 | 9.5 | 10.5 | 5.0 | 4.0 | 4.5 | 1.5 | .5 | 1.0 |
| 7 | 15.0 | 13.5 | 14.0 | 11.5 | 10.0 | 10.5 | 5.5 | 4.0 | 4.5 | 2.0 | .5 | 1.5 |
| 8 | --- | --- | --- | 12.0 | 10.5 | 11.0 | 7.5 | 5.0 | 6.0 | 3.0 | 2.0 | 2.5 |
| 9 | --- | --- | --- | 12.0 | 10.5 | 11.5 | 9.0 | 7.0 | 8.0 | 2.5 | 1.0 | 2.0 |
| 10 | --- | --- | --- | 10.0 | 7.5 | 9.0 | 8.5 | 7.5 | 8.5 | 2.5 | 1.0 | 2.0 |
| 11 | --- | --- | --- | 8.0 | 7.0 | 7.5 | 8.5 | 7.0 | 8.0 | 3.0 | 1.0 | 2.0 |
| 12 | --- | --- | --- | 8.0 | 6.0 | 7.0 | 8.0 | 6.5 | 7.5 | 4.0 | 2.5 | 3.0 |
| 13 | --- | --- | --- | 8.5 | 6.5 | 7.5 | 6.5 | 5.5 | 6.0 | 3.5 | 2.0 | 2.5 |
| 14 | --- | --- | --- | 9.5 | 7.0 | 8.0 | 6.5 | 5.0 | 6.0 | 2.5 | 1.0 | 2.0 |
| 15 | --- | --- | --- | 9.0 | 7.5 | 8.5 | 6.5 | 5.0 | 6.0 | 3.0 | 1.5 | 2.0 |
| 16 | 14.0 | 11.0 | 12.5 | 10.5 | 7.5 | 9.0 | 5.0 | 4.0 | 4.5 | 4.0 | 2.0 | 3.0 |
| 17 | 13.5 | 12.0 | 12.5 | 12.5 | 10.5 | 11.5 | 4.0 | 3.5 | 4.0 | 3.5 | 3.0 | 3.5 |
| 18 | 13.0 | 11.5 | 12.5 | 12.0 | 9.5 | 10.5 | 4.0 | 3.0 | 3.5 | 3.5 | 3.0 | 3.0 |
| 19 | 13.0 | 11.0 | 12.0 | 10.0 | 8.5 | 9.5 | 4.5 | 3.5 | 4.0 | 3.0 | 1.5 | 2.5 |
| 20 | 13.0 | 12.0 | 12.5 | 9.5 | 7.0 | 8.5 | 6.5 | 5.0 | 5.5 | 2.5 | 1.5 | 2.5 |
| 21 | 12.5 | 11.0 | 11.5 | 6.5 | 4.5 | 5.0 | 6.0 | 4.5 | 5.5 | 3.5 | 2.5 | 3.0 |
| 22 | 11.5 | 9.5 | 10.5 | 5.5 | 3.5 | 4.5 | 4.5 | 3.5 | 4.0 | 3.0 | 2.5 | 3.0 |
| 23 | 12.5 | 10.5 | 11.5 | 6.5 | 4.0 | 5.0 | 5.0 | 3.5 | 4.0 | 3.0 | 2.5 | 3.0 |
| 24 | 12.0 | 10.0 | 11.0 | 8.0 | 6.0 | 7.0 | 5.5 | 3.5 | 4.5 | 3.5 | 3.0 | 3.0 |
| 25 | 11.5 | 9.5 | 10.5 | 10.5 | 7.5 | 8.5 | 6.0 | 5.5 | 6.0 | 4.5 | 2.5 | 3.5 |
| 26 | 11.5 | 9.0 | 10.0 | 10.5 | 9.0 | 9.5 | 6.0 | 5.5 | 6.0 | 3.0 | .5 | 2.0 |
| 27 | 11.5 | 10.5 | 11.0 | 10.0 | 8.5 | 9.0 | 5.5 | 4.5 | 5.0 | 2.5 | 1.0 | 2.0 |
| 28 | 11.0 | 9.0 | 10.0 | 10.5 | 9.0 | 10.0 | 5.0 | 4.5 | 5.0 | 3.0 | 1.0 | 2.0 |
| 29 | 11.0 | 9.5 | 10.0 | 10.5 | 10.0 | 10.0 | 5.0 | 3.0 | 4.0 | 4.0 | 1.5 | 2.5 |
| 30 | 12.0 | 9.0 | 10.0 | 10.0 | 9.0 | 9.0 | 3.0 | 2.0 | 2.5 | 4.5 | 2.5 | 3.5 |
| 31 | 12.5 | 10.0 | 11.0 | --- | --- | --- | 3.5 | 2.0 | 2.5 | 5.5 | 2.5 | 4.0 |
| MONTH | 17.0 | 9.0 | 12.0 | 15.5 | 3.5 | 9.5 | 9.0 | 2.0 | 5.5 | 5.5 | .5 | 2.5 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 6.5 | 5.5 | 6.0 | 5.0 | 2.5 | 3.5 | 12.5 | 11.5 | 12.5 | 16.0 | 11.0 | 13.0 |
| 2 | 6.0 | 3.5 | 4.5 | 4.5 | 3.0 | 4.0 | 13.5 | 11.5 | 12.5 | 15.5 | 13.0 | 14.0 |
| 3 | 3.0 | 3.0 | 3.0 | 4.5 | 3.0 | 3.5 | 13.5 | 13.0 | 13.5 | 17.5 | 13.5 | 15.0 |
| 4 | 3.0 | 2.5 | 3.0 | 4.5 | 3.0 | 3.5 | --- | --- | --- | 16.0 | 14.0 | 15.0 |
| 5 | 2.5 | .5 | 1.5 | 5.0 | 1.5 | 3.0 | --- | --- | --- | 15.0 | 14.5 | 15.0 |
| 6 | .5 | .5 | .5 | 5.5 | 2.0 | 3.5 | --- | --- | --- | 17.5 | 14.0 | 15.5 |
| 7 | .5 | .5 | .5 | 6.5 | 3.5 | 5.0 | --- | --- | --- | 19.0 | 14.5 | 16.5 |
| 8 | 1.5 | .5 | 1.0 | 8.0 | 5.0 | 6.5 | 10.5 | 9.0 | 10.0 | 20.0 | 15.5 | 17.5 |
| 9 | 2.0 | 1.0 | 1.5 | 7.5 | 6.5 | 7.0 | 11.5 | 8.0 | 9.5 | 20.0 | 18.0 | 18.5 |
| 10 | 3.0 | 1.0 | 2.0 | 7.5 | 6.0 | 6.5 | 13.5 | 9.0 | 11.0 | 20.5 | 17.5 | 18.5 |
| 11 | 3.0 | 1.0 | 2.0 | 7.5 | 5.0 | 6.5 | 14.5 | 10.5 | 12.5 | 20.5 | 17.0 | 19.0 |
| 12 | 3.0 | 1.5 | 2.0 | 7.5 | 6.0 | 7.0 | 15.5 | 11.5 | 13.0 | 20.5 | 16.5 | 18.5 |
| 13 | 2.5 | .5 | 1.0 | 7.0 | 5.5 | 6.5 | 16.0 | 12.0 | 14.0 | 19.5 | 17.5 | 18.5 |
| 14 | 2.5 | .5 | 1.5 | 5.5 | 4.0 | 5.0 | 15.0 | 13.5 | 14.0 | 20.5 | 17.0 | 18.5 |
| 15 | 2.5 | 1.5 | 2.0 | 5.0 | 3.0 | 4.0 | 13.5 | 11.5 | 12.5 | 22.0 | 17.0 | 19.5 |
| 16 | 2.5 | 1.5 | 2.0 | 4.5 | 3.5 | 4.0 | 11.5 | 9.5 | 10.5 | 21.0 | 19.0 | 19.5 |
| 17 | 4.5 | 1.5 | 3.0 | 6.0 | 3.5 | 4.5 | 13.0 | 8.0 | 10.5 | 21.0 | 19.5 | 20.0 |
| 18 | 5.0 | 2.5 | 3.5 | 5.5 | 4.0 | 5.0 | 12.5 | 11.0 | 11.5 | 19.5 | 17.5 | 18.5 |
| 19 | 4.0 | 3.0 | 3.5 | 6.0 | 4.0 | 5.0 | 13.0 | 10.0 | 11.5 | 18.5 | 17.0 | 17.5 |
| 20 | 4.0 | 2.5 | 3.0 | 6.0 | 3.5 | 4.5 | 12.5 | 9.5 | 11.0 | 18.0 | 17.0 | 17.5 |
| 21 | 4.0 | 2.0 | 3.0 | 6.5 | 3.5 | 5.0 | 12.5 | 10.0 | 11.0 | 20.5 | 16.5 | 18.0 |
| 22 | 4.5 | 1.0 | 3.0 | 7.0 | 3.5 | 5.0 | 13.5 | 10.5 | 12.0 | 22.0 | 17.5 | 19.5 |
| 23 | 3.5 | 1.5 | 3.0 | 10.0 | 5.0 | 7.0 | 16.0 | 11.5 | 13.5 | 22.5 | 19.0 | 21.0 |
| 24 | 3.0 | 2.0 | 2.5 | 12.0 | 8.5 | 10.0 | 14.0 | 12.5 | 13.0 | 22.0 | 19.5 | 20.5 |
| 25 | 3.5 | 2.0 | 2.5 | 12.0 | 10.5 | 11.5 | 16.0 | 11.5 | 13.5 | 19.5 | 16.0 | 17.5 |
| 26 | 4.0 | 1.5 | 3.0 | 10.5 | 9.0 | 9.5 | 16.5 | 11.5 | 14.0 | 20.0 | 15.0 | 17.0 |
| 27 | 3.5 | 3.0 | 3.0 | 9.0 | 7.5 | 8.0 | 15.0 | 13.0 | 14.0 | 21.0 | 16.5 | 18.5 |
| 28 | 4.5 | 2.5 | 3.5 | 8.0 | 6.0 | 7.0 | 13.0 | 11.5 | 12.0 | 22.0 | 17.5 | 19.5 |
| 29 | 5.0 | 3.0 | 4.0 | 11.5 | 7.5 | 9.0 | 11.5 | 10.5 | 11.0 | 23.0 | 19.0 | 21.0 |
| 30 | --- | --- | --- | 13.5 | 10.5 | 12.0 | 14.0 | 9.0 | 11.5 | 24.0 | 20.5 | 22.0 |
| 31 | --- | --- | --- | 14.0 | 11.0 | 12.5 | --- | --- | --- | 24.5 | 21.5 | 23.0 |
| MONTH | 6.5 | .5 | 2.5 | 14.0 | 1.5 | 6.5 | 16.5 | 8.0 | 12.1 | 24.5 | 11.0 | 18.0 |

03117100 TUSCARAWAS RIVER AT NAVARRE OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----------------------------------|------|------|------|------|------|------|--------|------|------|-----------|------|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 24.5 | 21.5 | 23.5 | 20.5 | 17.5 | 19.0 | 27.0 | 23.0 | 25.0 | 22.5 | 18.5 | 20.5 |
| 2 | 24.0 | 20.5 | 21.5 | 21.5 | 18.0 | 19.5 | 27.5 | 24.5 | 26.0 | 22.5 | 19.0 | 20.5 |
| 3 | 21.0 | 18.5 | 19.5 | 23.0 | 19.5 | 21.0 | 28.0 | 24.5 | 26.0 | 22.5 | 20.0 | 21.0 |
| 4 | 20.0 | 16.5 | 18.0 | 24.0 | 20.5 | 22.5 | 28.0 | 25.0 | 27.0 | 20.0 | 19.5 | 20.0 |
| 5 | 21.0 | 17.0 | 19.0 | 25.0 | 21.5 | 23.0 | 27.5 | 25.0 | 27.0 | 20.0 | 19.0 | 20.0 |
| 6 | 23.0 | 19.5 | 21.0 | 25.5 | 21.5 | 24.0 | 26.5 | 25.0 | 25.5 | 19.0 | 17.5 | 18.5 |
| 7 | 24.5 | 21.5 | 23.0 | 26.5 | 23.0 | 25.0 | 27.5 | 24.0 | 25.5 | 19.0 | 16.5 | 17.5 |
| 8 | 23.5 | 21.5 | 23.0 | 26.5 | 22.5 | 25.0 | 27.0 | 24.0 | 25.5 | 19.5 | 16.0 | 17.5 |
| 9 | 22.0 | 19.0 | 20.5 | 26.5 | 24.0 | 25.5 | 26.5 | 24.0 | 25.5 | 20.0 | 17.0 | 18.5 |
| 10 | 20.0 | 17.0 | 18.5 | 26.0 | 23.5 | 24.5 | 26.5 | 24.0 | 25.5 | 21.5 | 18.0 | 19.5 |
| 11 | 21.0 | 16.5 | 18.5 | 26.0 | 22.0 | 24.5 | 27.0 | 25.0 | 26.0 | 21.5 | 18.0 | 19.5 |
| 12 | 22.0 | 18.5 | 20.5 | 25.5 | 23.5 | 24.5 | 27.5 | 24.5 | 26.5 | 21.5 | 18.5 | 20.0 |
| 13 | 23.5 | 20.0 | 21.5 | 25.0 | 22.0 | 23.5 | 28.0 | 26.0 | 27.0 | 21.0 | 19.5 | 20.5 |
| 14 | 24.5 | 21.5 | 23.0 | 26.0 | 23.5 | 24.5 | 28.0 | 26.0 | 27.5 | 21.0 | 18.0 | 19.5 |
| 15 | 25.0 | 22.5 | 24.0 | 26.5 | 24.0 | 25.0 | 27.5 | 26.0 | 26.5 | 20.5 | 17.5 | 19.0 |
| 16 | 25.0 | 22.0 | 23.0 | 27.5 | 24.0 | 26.0 | 26.0 | 23.5 | 25.0 | 20.5 | 17.0 | 18.5 |
| 17 | 24.0 | 19.5 | 22.0 | 27.0 | 25.0 | 26.0 | 27.5 | 23.5 | 25.5 | 20.5 | 19.0 | 19.5 |
| 18 | 24.0 | 20.0 | 22.0 | 25.0 | 23.0 | 24.5 | 27.0 | 25.0 | 26.0 | 21.0 | 19.5 | 20.0 |
| 19 | 24.0 | 21.0 | 22.5 | 25.0 | 23.5 | 24.5 | 25.0 | 22.5 | 23.5 | 21.0 | 19.5 | 20.5 |
| 20 | 25.0 | 22.0 | 23.5 | 24.5 | 23.0 | 23.5 | 25.0 | 22.5 | 23.5 | 22.0 | 20.0 | 21.0 |
| 21 | 26.5 | 23.5 | 25.0 | 23.5 | 21.5 | 22.5 | 24.0 | 21.0 | 22.5 | 22.0 | 19.0 | 20.0 |
| 22 | 26.0 | 24.5 | 25.5 | 24.0 | 22.0 | 23.0 | 23.0 | 19.5 | 21.5 | 19.5 | 18.0 | 19.0 |
| 23 | 25.5 | 24.0 | 25.0 | 24.0 | 21.5 | 23.0 | 23.0 | 20.5 | 21.5 | 20.0 | 19.0 | 19.5 |
| 24 | 24.5 | 21.0 | 23.0 | 25.5 | 22.0 | 23.5 | 23.0 | 20.0 | 21.0 | 19.5 | 17.5 | 18.5 |
| 25 | 25.5 | 22.0 | 23.5 | 25.0 | 21.5 | 23.5 | 23.5 | 20.0 | 21.5 | 19.5 | 17.0 | 18.0 |
| 26 | 25.5 | 21.5 | 23.5 | 25.5 | 22.5 | 23.5 | 23.5 | 20.0 | 21.5 | 19.0 | 16.0 | 18.0 |
| 27 | 22.5 | 19.0 | 21.0 | 26.5 | 23.0 | 24.5 | 23.0 | 19.5 | 21.5 | 19.5 | 16.5 | 18.0 |
| 28 | 22.0 | 19.5 | 20.5 | 27.0 | 23.0 | 25.0 | 23.0 | 21.0 | 22.0 | 19.0 | 17.0 | 18.0 |
| 29 | 22.5 | 19.0 | 21.0 | 28.0 | 23.5 | 25.5 | 21.5 | 20.0 | 21.0 | 19.5 | 17.0 | 18.0 |
| 30 | 21.5 | 18.5 | 20.0 | 27.5 | 24.5 | 26.0 | 21.5 | 18.5 | 20.0 | 20.0 | 18.0 | 19.0 |
| 31 | --- | --- | --- | 26.0 | 24.0 | 25.5 | 22.0 | 18.0 | 20.0 | --- | --- | --- |
| MONTH | 26.5 | 16.5 | 22.0 | 28.0 | 17.5 | 24.0 | 28.0 | 18.0 | 24.0 | 22.5 | 16.0 | 19.0 |
| YEAR | MAXIMUM 28.0 MINIMUM .5 MEAN 13.0 | | | | | | | | | | | |

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|---------|------|------|----------|------|------|----------|------|------|---------|------|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 7.4 | 6.0 | 6.6 | 9.6 | 6.6 | 8.0 | 9.6 | 7.9 | 8.7 | 11.4 | 10.8 | 11.1 |
| 2 | 7.4 | 6.3 | 6.9 | 9.6 | 6.3 | 7.8 | 10.9 | 8.6 | 9.6 | 12.2 | 11.1 | 11.6 |
| 3 | --- | --- | --- | 9.6 | 6.1 | 7.7 | 10.5 | 9.2 | 9.7 | 12.7 | 11.4 | 12.0 |
| 4 | --- | --- | --- | 9.4 | 6.0 | 7.6 | 11.1 | 9.2 | 10.0 | 12.4 | 11.4 | 11.8 |
| 5 | --- | --- | --- | 9.9 | 5.8 | 7.7 | 11.0 | 9.9 | 10.3 | 12.3 | 11.2 | 11.7 |
| 6 | 8.4 | 7.4 | 7.9 | 10.7 | 6.9 | 8.7 | 11.6 | 9.7 | 10.5 | 12.1 | 11.3 | 11.7 |
| 7 | 8.5 | 7.4 | 7.8 | 11.1 | 7.3 | 9.0 | 11.7 | 10.2 | 10.8 | 11.7 | 10.7 | 11.2 |
| 8 | --- | --- | --- | 11.2 | 7.4 | 9.2 | 11.8 | 10.1 | 10.7 | 11.4 | 10.5 | 10.9 |
| 9 | --- | --- | --- | 9.2 | 7.1 | 7.7 | 10.3 | 8.9 | 9.6 | 11.3 | 10.3 | 10.7 |
| 10 | --- | --- | --- | 8.8 | 7.3 | 7.9 | 9.6 | 8.1 | 8.7 | 11.1 | 9.9 | 10.4 |
| 11 | --- | --- | --- | 10.6 | 7.8 | 9.1 | 10.1 | 8.3 | 9.0 | 11.2 | 9.9 | 10.5 |
| 12 | --- | --- | --- | 10.9 | 8.2 | 9.5 | 10.2 | 8.5 | 9.2 | 11.3 | 9.9 | 10.6 |
| 13 | --- | --- | --- | 11.0 | 8.3 | 9.5 | 10.6 | 9.0 | 9.7 | 11.5 | 10.1 | 10.8 |
| 14 | --- | --- | --- | 11.1 | 8.3 | 9.5 | 11.8 | 9.3 | 10.3 | 11.1 | 10.1 | 10.6 |
| 15 | --- | --- | --- | 11.6 | 8.2 | 9.7 | 10.4 | 9.7 | 10.1 | 11.6 | 9.6 | 10.5 |
| 16 | 9.7 | 8.0 | 8.7 | 11.6 | 8.1 | 9.5 | 10.6 | 10.1 | 10.3 | 11.5 | 9.8 | 10.6 |
| 17 | 8.9 | 7.8 | 8.2 | 9.2 | 7.7 | 8.4 | 11.4 | 10.1 | 10.7 | 11.0 | 9.5 | 10.3 |
| 18 | 9.6 | 7.7 | 8.5 | 8.9 | 7.3 | 8.0 | 12.1 | 10.7 | 11.2 | 10.6 | 9.3 | 10.0 |
| 19 | 10.0 | 7.9 | 8.8 | 10.6 | 7.3 | 8.9 | 11.7 | 10.8 | 11.2 | 11.1 | 9.8 | 10.3 |
| 20 | 8.8 | 7.8 | 8.3 | 10.6 | 7.5 | 9.0 | 10.8 | 9.8 | 10.5 | 10.4 | 8.7 | 9.8 |
| 21 | 9.5 | 7.4 | 8.4 | 12.4 | 9.0 | 10.5 | 9.8 | 9.1 | 9.4 | 9.9 | 9.1 | 9.6 |
| 22 | 9.1 | 7.5 | 8.3 | 12.9 | 9.8 | 11.1 | 10.7 | 9.8 | 10.3 | 10.5 | 9.8 | 10.2 |
| 23 | 8.9 | 7.0 | 7.9 | 12.8 | 9.9 | 11.2 | 11.2 | 10.3 | 10.7 | 11.0 | 10.2 | 10.5 |
| 24 | 7.9 | 6.6 | 7.3 | 12.7 | 9.4 | 10.9 | 11.4 | 10.5 | 10.9 | 10.9 | 10.1 | 10.5 |
| 25 | 7.3 | 4.8 | 6.0 | 11.7 | 9.1 | 10.2 | 10.5 | 10.1 | 10.3 | 11.5 | 10.3 | 10.7 |
| 26 | 8.5 | 6.7 | 7.5 | 9.2 | 7.8 | 8.5 | 10.2 | 9.4 | 9.8 | 12.0 | 10.4 | 11.2 |
| 27 | 7.6 | 6.3 | 7.0 | 9.6 | 7.7 | 8.4 | 11.2 | 9.7 | 10.3 | 12.4 | 10.9 | 11.5 |
| 28 | 8.6 | 6.6 | 7.5 | 10.2 | 7.5 | 8.6 | 11.1 | 10.2 | 10.6 | 12.0 | 10.6 | 11.2 |
| 29 | 9.0 | 6.7 | 7.7 | 9.0 | 7.8 | 8.3 | 11.9 | 10.5 | 11.0 | 12.1 | 10.6 | 11.3 |
| 30 | 9.5 | 6.9 | 8.1 | 9.1 | 7.4 | 8.2 | 11.8 | 10.1 | 11.0 | 12.2 | 10.2 | 11.0 |
| 31 | 9.6 | 6.9 | 8.1 | --- | --- | --- | 11.3 | 11.1 | 11.2 | 11.5 | 9.9 | 10.7 |
| MONTH | 10.0 | 4.8 | 7.8 | 12.9 | 5.8 | 8.9 | 12.1 | 7.9 | 10.2 | 12.7 | 8.7 | 10.8 |

03117100 TUSCARAWAS RIVER AT NAVARRE OH--Continued

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|------|------|------|-------|------|------|--------|-----|------|-----------|-----|------|
| FEBRUARY | | | | MARCH | | | APRIL | | | MAY | | |
| 1 | 10.2 | 9.2 | 9.7 | 8.4 | 7.3 | 7.7 | 9.6 | 6.9 | 8.1 | 10.9 | 6.5 | 8.3 |
| 2 | 10.3 | 6.8 | 8.6 | 8.4 | 7.3 | 7.9 | 8.9 | 7.3 | 7.9 | 9.8 | 5.8 | 7.6 |
| 3 | 8.0 | 6.5 | 7.2 | 10.1 | 8.3 | 9.2 | 7.6 | 6.5 | 7.1 | 12.6 | 5.7 | 8.5 |
| 4 | 10.3 | 7.4 | 8.7 | 11.8 | 9.9 | 10.7 | --- | --- | --- | 10.4 | 5.8 | 7.8 |
| 5 | 12.3 | 9.9 | 11.8 | 12.6 | 10.7 | 11.5 | --- | --- | --- | 6.9 | 5.3 | 6.0 |
| 6 | 12.6 | 12.2 | 12.4 | 13.2 | 11.3 | 12.0 | --- | --- | --- | 8.1 | 4.9 | 6.3 |
| 7 | 12.6 | 12.3 | 12.5 | 13.0 | 11.3 | 12.0 | --- | --- | --- | 10.4 | 4.8 | 7.1 |
| 8 | 12.3 | 11.8 | 12.1 | 11.7 | 10.8 | 11.3 | 9.2 | 8.6 | 8.9 | 11.3 | 5.1 | 7.8 |
| 9 | 12.0 | 11.1 | 11.7 | 11.0 | 10.2 | 10.8 | 9.6 | 8.8 | 9.2 | 10.5 | 4.6 | 7.0 |
| 10 | 11.6 | 11.0 | 11.2 | 11.0 | 10.3 | 10.6 | 9.8 | 8.7 | 9.2 | 8.6 | 4.7 | 6.3 |
| 11 | 11.3 | 10.8 | 11.1 | 12.1 | 10.8 | 11.3 | 9.8 | 8.1 | 8.8 | 7.7 | 4.0 | 5.7 |
| 12 | 11.2 | 10.7 | 10.9 | 11.2 | 10.2 | 10.7 | 10.9 | 7.5 | 9.0 | 7.3 | 4.0 | 5.4 |
| 13 | 11.2 | 10.8 | 11.0 | 10.8 | 9.9 | 10.3 | 11.4 | 7.3 | 9.0 | 7.9 | 4.5 | 5.8 |
| 14 | 11.5 | 10.8 | 11.1 | 12.5 | 10.5 | 11.3 | 11.1 | 6.9 | 8.5 | 8.3 | 4.7 | 6.1 |
| 15 | 10.9 | 10.5 | 10.8 | 13.4 | 11.7 | 12.4 | 11.0 | 6.5 | 8.5 | 9.4 | 4.7 | 6.7 |
| 16 | 10.5 | 9.7 | 10.1 | 12.9 | 11.4 | 12.2 | 10.5 | 6.9 | 8.5 | 6.1 | 4.1 | 4.6 |
| 17 | 10.8 | 10.4 | 10.5 | 13.2 | 10.8 | 11.9 | 12.2 | 7.3 | 9.5 | 7.8 | 4.2 | 5.5 |
| 18 | 11.2 | 10.3 | 10.6 | 12.2 | 10.8 | 11.4 | 11.3 | 7.0 | 8.8 | 6.4 | 4.1 | 5.3 |
| 19 | 10.4 | 10.2 | 10.3 | 13.1 | 10.7 | 11.7 | 11.0 | 6.6 | 8.6 | 6.9 | 4.2 | 5.5 |
| 20 | 11.0 | 9.2 | 10.0 | 14.5 | 11.3 | 12.6 | 10.5 | 6.6 | 8.3 | 6.8 | 4.6 | 5.6 |
| 21 | 11.4 | 10.2 | 10.8 | 14.9 | 11.9 | 13.2 | 10.5 | 6.3 | 8.1 | 7.9 | 4.7 | 6.1 |
| 22 | 11.5 | 7.5 | 9.9 | 14.9 | 12.3 | 13.3 | 11.8 | 6.0 | 8.6 | 8.2 | 4.6 | 6.2 |
| 23 | 10.7 | 9.0 | 9.9 | 15.4 | 11.7 | 13.1 | 9.9 | 5.9 | 7.7 | 7.9 | 4.3 | 6.0 |
| 24 | 9.1 | 8.2 | 8.7 | 12.9 | 11.0 | 11.8 | 8.7 | 5.1 | 6.7 | 6.3 | 2.8 | 4.7 |
| 25 | 8.8 | 7.8 | 8.3 | 10.9 | 9.9 | 10.4 | 12.2 | 5.4 | 8.3 | 7.9 | 4.4 | 5.9 |
| 26 | 9.2 | 8.2 | 8.8 | 10.0 | 7.9 | 8.7 | 13.6 | 6.3 | 9.4 | 8.4 | 4.9 | 6.6 |
| 27 | 9.3 | 8.1 | 8.9 | 8.4 | 7.8 | 7.9 | 11.1 | 6.0 | 8.4 | 8.5 | 4.9 | 6.7 |
| 28 | 8.5 | 8.0 | 8.3 | 10.5 | 8.3 | 10.0 | 9.1 | 6.1 | 7.4 | 8.6 | 4.8 | 6.6 |
| 29 | 8.2 | 7.7 | 8.0 | 10.4 | 8.9 | 10.0 | 8.5 | 6.5 | 7.3 | 8.8 | 4.7 | 6.7 |
| 30 | --- | --- | --- | 9.4 | 7.8 | 8.7 | 10.5 | 6.5 | 8.2 | 8.9 | 4.7 | 6.7 |
| 31 | --- | --- | --- | 9.1 | 7.3 | 8.0 | --- | --- | --- | 8.7 | 4.5 | 6.7 |
| MONTH | 12.6 | 6.5 | 10.1 | 15.4 | 7.3 | 10.8 | 13.6 | 5.1 | 8.4 | 12.6 | 2.8 | 6.4 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| JUNE | | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 8.5 | 4.4 | 6.5 | 12.7 | 6.5 | 9.3 | 12.8 | 6.0 | 9.7 | 7.3 | 5.7 | 6.4 |
| 2 | 8.5 | 4.7 | 6.6 | 15.3 | 6.6 | 10.1 | 12.9 | 5.5 | 9.5 | 7.8 | 5.7 | 6.6 |
| 3 | 10.4 | 5.7 | 7.9 | 17.4 | 7.0 | 10.8 | 14.1 | 5.7 | 10.1 | 7.0 | 5.4 | 6.1 |

MUSKINGUM RIVER BASIN

67

03117500 SANDY CREEK AT WAYNESBURG, OH

LOCATION.--Lat 40°40'21", long 81°15'36", in sec. 21, T.17 N., R.7 W., Stark County, Hydrologic Unit 05040001, on upstream side of left pier of bridge on State Highway 183 in Waynesburg, 300 ft downstream from Little Sandy Creek, and 0.6 mi upstream from Indian Run.

DRAINAGE AREA.--253 mi².

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

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

GAGE.--Water-stage recorder. Datum of gage is 955.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 3-17, 25-30, Feb. 6-15. Records good except for periods of estimated record, and discharges between 800 and 1,600 ft³/s, which are fair. Water-quality data collected at this site 1964 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--50 years, 269 ft³/s, 14.44 in/yr.

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

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---|------|--------------------------------|------------------|---|------|--------------------------------|------------------|
| Feb. 2 | 2000 | *2,660 | *5.95 | No other discharge greater than base discharge. | | | |
| Minimum discharge, 22 ft ³ /s July 17. | | | | | | | |

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|-------|------|------|-------|-------|------|------|------|------|------|-------|
| 1 | 80 | 57 | 149 | 190 | 317 | 210 | 270 | 107 | 70 | 29 | 54 | 46 |
| 2 | 68 | 58 | 132 | 143 | 1930 | 200 | 255 | 96 | 68 | 29 | 39 | 33 |
| 3 | 65 | 67 | 122 | 120 | 2270 | 225 | 330 | 91 | 68 | 28 | 47 | 35 |
| 4 | 65 | 83 | 131 | 100 | 2040 | 229 | 1230 | 87 | 66 | 29 | 54 | 103 |
| 5 | 61 | 80 | 149 | 96 | 1370 | 196 | 812 | 99 | 64 | 27 | 36 | 97 |
| 6 | 59 | 76 | 130 | 90 | 800 | 204 | 607 | 134 | 60 | 27 | 33 | 74 |
| 7 | 150 | 75 | 118 | 84 | 600 | 278 | 529 | 113 | 55 | 26 | 34 | 56 |
| 8 | 151 | 74 | 112 | 78 | 400 | 407 | 470 | 94 | 52 | 25 | 30 | 46 |
| 9 | 100 | 75 | 133 | 74 | 230 | 505 | 373 | 89 | 49 | 25 | 27 | 40 |
| 10 | 79 | 69 | 142 | 70 | 200 | 567 | 309 | 134 | 49 | 25 | 25 | 36 |
| 11 | 93 | 48 | 125 | 66 | 170 | 455 | 268 | 123 | 48 | 26 | 23 | 31 |
| 12 | 102 | 45 | 122 | 64 | 160 | 379 | 238 | 99 | 47 | 26 | 26 | 29 |
| 13 | 85 | 43 | 115 | 62 | 150 | 412 | 217 | 89 | 45 | 25 | 35 | 49 |
| 14 | 74 | 42 | 101 | 60 | 140 | 395 | 198 | 86 | 43 | 26 | 29 | 78 |
| 15 | 86 | 41 | 138 | 60 | 130 | 338 | 184 | 82 | 41 | 25 | 26 | 68 |
| 16 | 102 | 41 | 201 | 58 | 469 | 305 | 175 | 101 | 44 | 23 | 30 | 49 |
| 17 | 95 | 47 | 163 | 58 | 351 | 285 | 165 | 108 | 47 | 22 | 27 | 42 |
| 18 | 85 | 50 | 139 | 91 | 346 | 292 | 156 | 88 | 45 | 23 | 25 | 38 |
| 19 | 78 | 48 | 130 | 111 | 342 | 301 | 148 | 90 | 40 | 44 | 37 | 37 |
| 20 | 76 | 55 | 311 | 364 | 617 | 299 | 144 | 91 | 38 | 48 | 43 | 43 |
| 21 | 76 | 53 | 386 | 381 | 487 | 281 | 148 | 85 | 36 | 93 | 32 | 45 |
| 22 | 76 | 49 | 261 | 250 | 362 | 266 | 143 | 77 | 36 | 80 | 26 | 41 |
| 23 | 86 | 48 | 217 | 191 | 429 | 304 | 142 | 76 | 34 | 53 | 28 | 36 |
| 24 | 85 | 44 | 205 | 170 | 419 | 349 | 147 | 164 | 32 | 85 | 36 | 34 |
| 25 | 86 | 49 | 192 | 140 | 315 | 329 | 127 | 170 | 32 | 85 | 36 | 34 |
| 26 | 87 | 100 | 204 | 130 | 267 | 643 | 106 | 146 | 30 | 62 | 32 | 30 |
| 27 | 88 | 102 | 195 | 110 | 258 | 630 | 102 | 111 | 29 | 58 | 28 | 30 |
| 28 | 91 | 80 | 172 | 100 | 228 | 507 | 109 | 97 | 28 | 52 | 27 | 28 |
| 29 | 87 | 130 | 226 | 96 | 221 | 418 | 144 | 87 | 29 | 41 | 45 | 27 |
| 30 | 80 | 197 | 182 | 90 | --- | 353 | 125 | 80 | 29 | 39 | 80 | 27 |
| 31 | 61 | --- | 156 | 192 | --- | 301 | --- | 74 | --- | 67 | 68 | --- |
| TOTAL | 2657 | 2026 | 5259 | 3889 | 16018 | 10863 | 8371 | 3168 | 1354 | 1273 | 1118 | 1362 |
| MEAN | 85.7 | 67.5 | 170 | 125 | 552 | 350 | 279 | 102 | 45.1 | 41.1 | 36.1 | 45.4 |
| MAX | 151 | 197 | 386 | 381 | 2270 | 643 | 1230 | 170 | 70 | 93 | 80 | 103 |
| MIN | 59 | 41 | 101 | 58 | 130 | 196 | 102 | 74 | 28 | 22 | 23 | 27 |
| CFSM | .34 | .27 | .67 | .49 | 2.18 | 1.38 | 1.10 | .40 | .18 | .16 | .14 | .18 |
| IN. | .39 | .30 | .77 | .57 | 2.36 | 1.60 | 1.23 | .47 | .20 | .19 | .16 | .20 |
| CAL YR 1987 | TOTAL | 69974 | MEAN | 192 | MAX | 2020 | MIN | 37 | CFSM | .76 | IN. | 10.29 |
| WTR YR 1988 | TOTAL | 57358 | MEAN | 157 | MAX | 2270 | MIN | 22 | CFSM | .62 | IN. | 8.43 |

MUSKINGUM RIVER BASIN

03118000 MIDDLE BRANCH NIMISHILLEN CREEK AT CANTON, OH

LOCATION.--Lat 40°50'29", long 81°21'14" in NE 1/4 sec. 27, T.11 N., R.8 W., Stark County, Hydrologic Unit 05040001, on right bank at downstream side of bridge on Martindale Road, 2.4 mi upstream from mouth, and 0.5 mi northeast of Canton.

DRAINAGE AREA.--43.1 mi².

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

REVISED RECORDS.--WSP 1033: 1942(M), 1943(P), 1944(M). WSP 1305: 1946(M). WSP 1143: 1948. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,046.60 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 4-17, 24-30, Feb. 5-15. Records fair except for estimated daily discharges which are poor. Part of municipal water supply for city of Canton is pumped from its northeast well field; a portion of pumpage is believed to be derived from creek as recharge to aquifer supplying well field about 1 mi downstream from gage. Mean pumpage for water year 1988, 12.4 ft³/s. At times low flow regulated by small pools above station. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--47 years, 35.8 ft³/s.

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

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 2 | 1800 | *267 | *3.74 | | | | |

Minimum daily discharge, 1.3 ft³/s Sept. 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|------|-------|------|------|------|-------|-------|-------|------|-------|
| 1 | 5.5 | 4.8 | 19 | 20 | 34 | 18 | 22 | 14 | 7.1 | 2.9 | 4.2 | 2.9 |
| 2 | 4.9 | 4.7 | 18 | 19 | 198 | 18 | 20 | 13 | 7.2 | 3.0 | 3.9 | 2.6 |
| 3 | 4.8 | 3.8 | 16 | 17 | 161 | 19 | 26 | 12 | 6.8 | 3.1 | 3.4 | 5.1 |
| 4 | 4.8 | 3.8 | 17 | 15 | 119 | 21 | 173 | 11 | 6.3 | 3.0 | 3.2 | 68 |
| 5 | 4.5 | 3.6 | 19 | 14 | 70 | 19 | 116 | 13 | 5.8 | 3.2 | 3.0 | 79 |
| 6 | 4.8 | 3.5 | 18 | 14 | 44 | 19 | 61 | 13 | 5.5 | 3.1 | 2.8 | 30 |
| 7 | 9.7 | 3.6 | 17 | 13 | 30 | 21 | 45 | 13 | 5.3 | 3.0 | 2.7 | 11 |
| 8 | 11 | 3.6 | 18 | 12 | 25 | 36 | 43 | 12 | 5.2 | 3.0 | 2.6 | 5.9 |
| 9 | 9.2 | 9.9 | 22 | 11 | 21 | 46 | 35 | 11 | 5.2 | 3.2 | 2.6 | 4.3 |
| 10 | 7.6 | 44 | 26 | 11 | 19 | 56 | 29 | 14 | 5.1 | 3.1 | 2.5 | 3.4 |
| 11 | 8.4 | 8.6 | 24 | 10 | 18 | 40 | 26 | 13 | 5.2 | 3.2 | 2.5 | 2.8 |
| 12 | 7.7 | 7.8 | 21 | 9.6 | 17 | 31 | 23 | 11 | 5.2 | 3.1 | 2.4 | 2.6 |
| 13 | 7.4 | 7.8 | 19 | 9.2 | 16 | 33 | 22 | 9.6 | 5.3 | 2.9 | 2.3 | 3.2 |
| 14 | 6.7 | 7.6 | 18 | 9.0 | 15 | 33 | 20 | 9.0 | 5.2 | 2.7 | 2.2 | 2.8 |
| 15 | 6.1 | 7.8 | 25 | 8.8 | 15 | 29 | 19 | 8.8 | 5.2 | 2.6 | 2.2 | 2.4 |
| 16 | 5.7 | 7.8 | 28 | 8.6 | 40 | 26 | 18 | 11 | 5.4 | 2.4 | 2.1 | 2.1 |
| 17 | 5.4 | 8.0 | 24 | 8.4 | 31 | 24 | 18 | 11 | 5.3 | 2.3 | 2.1 | 1.9 |
| 18 | 4.9 | 9.3 | 21 | 14 | 30 | 25 | 17 | 9.9 | 5.2 | 2.8 | 2.1 | 1.9 |
| 19 | 4.7 | 8.9 | 20 | 15 | 33 | 26 | 17 | 10 | 5.2 | 4.7 | 4.3 | 1.9 |
| 20 | 4.6 | 9.0 | 41 | 35 | 86 | 28 | 16 | 11 | 5.0 | 4.7 | 3.4 | 2.1 |
| 21 | 4.2 | 9.6 | 67 | 40 | 85 | 27 | 15 | 11 | 4.7 | 19 | 2.8 | 1.8 |
| 22 | 4.0 | 9.3 | 42 | 30 | 50 | 26 | 15 | 10 | 4.8 | 14 | 2.5 | 1.8 |
| 23 | 4.0 | 6.5 | 31 | 24 | 35 | 26 | 15 | 9.3 | 5.1 | 11 | 4.2 | 1.8 |
| 24 | 4.2 | 9.2 | 26 | 19 | 36 | 28 | 15 | 9.1 | 5.0 | 8.0 | 5.6 | 1.8 |
| 25 | 4.6 | 9.2 | 24 | 16 | 29 | 28 | 14 | 8.5 | 4.8 | 7.8 | 3.7 | 1.6 |
| 26 | 4.3 | 10 | 24 | 15 | 24 | 68 | 14 | 7.9 | 4.6 | 13 | 3.0 | 1.5 |
| 27 | 5.0 | 10 | 23 | 14 | 22 | 63 | 13 | 7.6 | 4.2 | 11 | 2.5 | 1.4 |
| 28 | 5.5 | 10 | 22 | 13 | 20 | 42 | 14 | 7.7 | 3.8 | 7.6 | 2.5 | 1.3 |
| 29 | 5.4 | 12 | 23 | 12 | 19 | 33 | 15 | 7.9 | 3.4 | 5.8 | 3.8 | 1.3 |
| 30 | 5.1 | 18 | 22 | 12 | --- | 28 | 15 | 7.5 | 3.1 | 4.9 | 3.2 | 1.3 |
| 31 | 4.8 | --- | 20 | 19 | --- | 24 | --- | 7.3 | --- | 4.5 | 3.1 | --- |
| TOTAL | 179.5 | 271.7 | 755 | 487.6 | 1342 | 961 | 911 | 324.1 | 155.2 | 168.6 | 93.4 | 251.5 |
| MEAN | 5.79 | 9.06 | 24.4 | 15.7 | 46.3 | 31.0 | 30.4 | 10.5 | 5.17 | 5.44 | 3.01 | 8.38 |
| MAX | 11 | 44 | 67 | 40 | 198 | 68 | 173 | 14 | 7.2 | 19 | 5.6 | 79 |
| MIN | 4.0 | 3.5 | 16 | 8.4 | 15 | 18 | 13 | 7.3 | 3.1 | 2.3 | 2.1 | 1.3 |
| CAL YR 1987 | TOTAL | 8869.1 | MEAN | 24.3 | MAX | 452 | MIN | 3.5 | | | | |
| WTR YR 1988 | TOTAL | 5900.6 | MEAN | 16.1 | MAX | 198 | MIN | 1.3 | | | | |

MUSKINGUM RIVER BASIN

69

03118500 NIMISHILLEN CREEK AT NORTH INDUSTRY, OH

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

DRAINAGE AREA.--175 mi².

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

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

GAGE.--Water-stage recorder. Datum of gage is 970.77 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 13, 1923, nonrecording gage at site 1 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Jan. 3-17, 24-30, Feb. 10-14. Records good except for periods of estimated record, which are fair. Low flow slightly regulated by plants at Canton. Records include diversion from Sugar Creek well field. Mean pumpage for the 1988 water year, 15.4 ft³/s. See REMARKS for station 03124500. Water-quality data collected at this site 1964 to 1969, 1975, 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--67 years, 187 ft³/s.

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

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|---------|------|-----------------------------------|---------------------|
| Feb. 2 | 0630 | 2,050 | 5.21 | Sept. 4 | 0100 | 2,050 | 5.21 |
| July 21 | 0400 | *2,190 | *5.40 | | | | |

Minimum daily, 47 ft³/s July 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|-------|------|------|------|------|------|------|------|------|------|------|
| 1 | 94 | 69 | 133 | 133 | 351 | 144 | 151 | 114 | 69 | 63 | 72 | 75 |
| 2 | 95 | 71 | 138 | 114 | 1670 | 147 | 149 | 114 | 89 | 61 | 85 | 73 |
| 3 | 90 | 72 | 127 | 100 | 636 | 162 | 437 | 112 | 70 | 55 | 80 | 259 |
| 4 | 85 | 71 | 160 | 96 | 738 | 170 | 1080 | 110 | 66 | 54 | 83 | 964 |
| 5 | 85 | 71 | 137 | 90 | 373 | 162 | 444 | 188 | 62 | 58 | 89 | 283 |
| 6 | 95 | 69 | 122 | 84 | 224 | 163 | 293 | 155 | 65 | 58 | 109 | 145 |
| 7 | 208 | 67 | 120 | 80 | 182 | 207 | 296 | 122 | 68 | 56 | 88 | 109 |
| 8 | 124 | 66 | 124 | 76 | 170 | 302 | 255 | 112 | 68 | 53 | 98 | 93 |
| 9 | 101 | 87 | 148 | 72 | 158 | 348 | 213 | 193 | 68 | 53 | 102 | 81 |
| 10 | 94 | 74 | 139 | 68 | 140 | 301 | 188 | 186 | 69 | 50 | 105 | 73 |
| 11 | 146 | 72 | 129 | 66 | 130 | 247 | 176 | 124 | 71 | 51 | 105 | 68 |
| 12 | 109 | 71 | 130 | 64 | 120 | 230 | 164 | 110 | 70 | 52 | 103 | 74 |
| 13 | 96 | 72 | 112 | 62 | 110 | 228 | 156 | 148 | 79 | 51 | 100 | 168 |
| 14 | 91 | 70 | 110 | 62 | 110 | 227 | 147 | 104 | 83 | 50 | 93 | 84 |
| 15 | 87 | 66 | 236 | 60 | 322 | 231 | 141 | 95 | 85 | 49 | 143 | 71 |
| 16 | 84 | 69 | 170 | 60 | 253 | 231 | 139 | 174 | 92 | 48 | 74 | 69 |
| 17 | 86 | 105 | 148 | 60 | 195 | 227 | 136 | 110 | 84 | 47 | 66 | 67 |
| 18 | 80 | 105 | 132 | 122 | 202 | 231 | 138 | 101 | 75 | 83 | 78 | 65 |
| 19 | 80 | 76 | 128 | 170 | 258 | 228 | 133 | 110 | 70 | 210 | 243 | 67 |
| 20 | 77 | 76 | 351 | 364 | 516 | 228 | 129 | 102 | 74 | 81 | 76 | 103 |
| 21 | 73 | 74 | 258 | 199 | 289 | 233 | 137 | 94 | 70 | 629 | 64 | 70 |
| 22 | 74 | 69 | 185 | 152 | 206 | 231 | 128 | 87 | 73 | 113 | 64 | 68 |
| 23 | 72 | 73 | 162 | 131 | 287 | 235 | 140 | 93 | 75 | 213 | 163 | 69 |
| 24 | 73 | 74 | 146 | 120 | 224 | 279 | 125 | 102 | 75 | 103 | 119 | 65 |
| 25 | 83 | 88 | 141 | 110 | 181 | 338 | 117 | 84 | 72 | 92 | 76 | 62 |
| 26 | 73 | 115 | 157 | 100 | 161 | 306 | 115 | 78 | 66 | 144 | 78 | 64 |
| 27 | 101 | 81 | 137 | 96 | 155 | 256 | 114 | 77 | 70 | 93 | 67 | 66 |
| 28 | 83 | 79 | 156 | 92 | 142 | 224 | 157 | 72 | 69 | 78 | 85 | 64 |
| 29 | 76 | 240 | 165 | 90 | 144 | 207 | 157 | 69 | 68 | 74 | 190 | 64 |
| 30 | 74 | 143 | 136 | 86 | --- | 183 | 126 | 67 | 64 | 70 | 94 | 65 |
| 31 | 71 | --- | 135 | 148 | --- | 163 | --- | 69 | --- | 70 | 78 | --- |
| TOTAL | 2860 | 2535 | 4772 | 3327 | 8647 | 7069 | 6281 | 3476 | 2179 | 2962 | 3070 | 3648 |
| MEAN | 92.3 | 84.5 | 154 | 107 | 298 | 228 | 209 | 112 | 72.6 | 95.5 | 99.0 | 122 |
| MAX | 208 | 240 | 351 | 364 | 1670 | 348 | 1080 | 193 | 92 | 629 | 243 | 964 |
| MIN | 71 | 66 | 110 | 60 | 110 | 144 | 114 | 67 | 62 | 47 | 64 | 62 |
| CAL YR 1987 | TOTAL | 63934 | | MEAN | 175 | MAX | 2750 | MIN | 66 | | | |
| WTR YR 1988 | TOTAL | 50826 | | MEAN | 139 | MAX | 1670 | MIN | 47 | | | |

MUSKINGUM RIVER BASIN

03120500 MCGUIRE CREEK BELOW LEESVILLE DAM, NEAR LEESVILLE, OH

LOCATION.--Lat 40°28'13", long 81°11'48", in E. 1/2 sec. 36, T.13 N., R.6 W., Carroll County, Hydrologic Unit 05040001, on left bank at outlet of Leesville Dam, 1.3 mi upstream from mouth, and 1.4 mi northeast of Leesville.

DRAINAGE AREA.--48.3 mi².

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

REVISED RECORDS.--WSP 1907: Drainage area.

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

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

AVERAGE DISCHARGE.--50 years, 53.2 ft³/s.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 267 ft³/s Feb. 7, gage height, 4.49 ft; minimum daily, 1.1 ft³/s July 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|---------|--------|-------|--------|--------|------|-------|-------|------|------|------|
| 1 | 14 | 6.0 | 100 | 7.7 | 12 | 120 | 73 | 22 | 7.4 | 2.0 | 2.1 | 1.9 |
| 2 | 11 | 5.9 | 99 | 7.7 | 5.3 | 43 | 69 | 19 | 6.9 | 2.0 | 2.1 | 1.9 |
| 3 | 10 | 5.8 | 98 | 7.7 | 1.9 | 5.6 | 67 | 17 | 6.5 | 2.0 | 1.5 | 2.0 |
| 4 | 8.7 | 5.7 | 98 | 7.7 | 2.0 | 5.6 | 137 | 16 | 6.0 | 2.0 | 1.5 | 2.8 |
| 5 | 7.7 | 5.5 | 98 | 18 | 54 | 5.6 | 176 | 20 | 5.7 | 2.0 | 1.8 | 3.1 |
| 6 | 8.0 | 5.1 | 97 | 40 | 160 | 5.6 | 147 | 24 | 5.2 | 1.8 | 1.8 | 3.0 |
| 7 | 26 | 4.8 | 96 | 48 | 227 | 82 | 110 | 21 | 4.9 | 1.7 | 1.7 | 2.8 |
| 8 | 29 | 4.7 | 96 | 39 | 264 | 72 | 89 | 18 | 4.5 | 1.3 | 1.7 | 2.6 |
| 9 | 23 | 5.0 | 96 | 20 | 201 | 1.7 | 60 | 17 | 4.5 | 1.3 | 1.7 | 2.5 |
| 10 | 20 | 5.1 | 96 | 20 | 64 | 1.5 | 59 | 21 | 3.9 | 1.3 | 1.8 | 2.5 |
| 11 | 22 | 4.8 | 96 | 20 | 8.2 | 1.5 | 57 | 23 | 3.5 | 1.3 | 1.8 | 2.4 |
| 12 | 18 | 4.5 | 96 | 20 | 8.2 | 1.5 | 53 | 19 | 3.1 | 1.3 | 1.7 | 2.4 |
| 13 | 16 | 4.4 | 95 | 16 | 8.2 | 2.0 | 50 | 17 | 2.8 | 2.0 | 1.6 | 4.3 |
| 14 | 14 | 4.3 | 64 | 14 | 8.0 | 3.8 | 46 | 16 | 2.6 | 1.1 | 1.5 | 4.7 |
| 15 | 12 | 4.2 | 49 | 10 | 8.1 | 26 | 41 | 15 | 2.3 | 1.5 | 1.6 | 4.5 |
| 16 | 10 | 5.4 | 49 | 4.2 | 37 | 29 | 38 | 19 | 2.1 | 2.6 | 1.7 | 4.1 |
| 17 | 9.4 | 6.1 | 18 | 4.2 | 116 | 27 | 35 | 18 | 2.1 | 1.9 | 1.7 | 4.4 |
| 18 | 9.1 | 44 | 3.1 | 4.2 | 174 | 37 | 34 | 16 | 1.8 | 1.4 | 1.8 | 4.2 |
| 19 | 8.6 | 65 | 3.1 | 4.2 | 129 | 46 | 32 | 16 | 1.5 | 1.3 | 1.9 | 4.1 |
| 20 | 8.4 | 89 | 3.2 | 35 | 53 | 52 | 28 | 15 | 1.7 | 1.6 | 1.9 | 4.0 |
| 21 | 8.1 | 102 | 35 | 66 | 53 | 55 | 26 | 14 | 1.9 | 1.6 | 1.9 | 3.9 |
| 22 | 7.7 | 102 | 52 | 74 | 128 | 53 | 24 | 13 | 1.6 | 1.6 | 1.9 | 3.6 |
| 23 | 7.5 | 102 | 60 | 74 | 164 | 50 | 23 | 13 | 2.2 | 1.7 | 2.0 | 3.5 |
| 24 | 7.2 | 102 | 64 | 74 | 155 | 50 | 23 | 19 | 2.6 | 1.5 | 2.0 | 3.4 |
| 25 | 7.4 | 102 | 64 | 74 | 42 | 53 | 21 | 24 | 2.5 | 1.3 | 1.9 | 3.3 |
| 26 | 6.9 | 100 | 64 | 74 | 2.6 | 74 | 19 | 19 | 2.4 | 1.3 | 1.9 | 3.0 |
| 27 | 6.7 | 100 | 64 | 74 | 2.5 | 83 | 17 | 16 | 2.2 | 1.4 | 1.9 | 2.8 |
| 28 | 6.7 | 100 | 64 | 33 | 2.5 | 85 | 20 | 14 | 2.2 | 1.5 | 1.9 | 2.7 |
| 29 | 6.4 | 100 | 64 | 12 | 82 | 84 | 27 | 11 | 2.2 | 2.0 | 2.1 | 2.6 |
| 30 | 6.2 | 100 | 26 | 12 | --- | 81 | 26 | 9.6 | 2.1 | 2.1 | 2.2 | 2.5 |
| 31 | 6.1 | --- | 7.7 | 12 | --- | 77 | --- | 8.4 | --- | 2.1 | 2.1 | --- |
| TOTAL | 361.8 | 1295.3 | 2015.1 | 926.6 | 2172.5 | 1313.4 | 1627 | 530.0 | 100.9 | 51.5 | 56.7 | 95.5 |
| MEAN | 11.7 | 43.2 | 65.0 | 29.9 | 74.9 | 42.4 | 54.2 | 17.1 | 3.36 | 1.66 | 1.83 | 3.18 |
| MAX | 29 | 102 | 100 | 74 | 264 | 120 | 176 | 24 | 7.4 | 2.6 | 2.2 | 4.7 |
| MIN | 6.1 | 4.2 | 3.1 | 4.2 | 1.9 | 1.5 | 17 | 8.4 | 1.5 | 1.1 | 1.5 | 1.9 |
| CAL YR 1987 | TOTAL | 10945.5 | | MEAN | 30.0 | MAX | 192 | MIN | 1.2 | | | |
| WTR YR 1988 | TOTAL | 10546.3 | | MEAN | 28.8 | MAX | 264 | MIN | 1.1 | | | |

MUSKINGUM RIVER BASIN

71

03122500 TUSCARAWAS RIVER BELOW DOVER DAM, NEAR DOVER, OH

LOCATION.--Lat 40°31'47", long 81°25'48", in T.9 N., R.2 W., Tuscarawas County, Hydrologic Unit 05040001, on left bank at downstream side of bridge on State Highway 416, 2.2 mi downstream from Dover Dam, 1.5 mi east of Dover, and 3.4 mi upstream from Sugar Creek.

DRAINAGE AREA.--1,405 mi².

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

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

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

REMARKS.--Estimated daily discharges: Jan. 2-17, 24-30, Feb. 4-15. Records fair except for estimated daily discharges, which are poor. 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 1988 water year, 15.4 ft³/s (see REMARKS for station 03124500). Flow regulated by four flood-control reservoirs since 1936 at points 2.2 mi to 25 mi upstream. Water quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--65 years, 1,425 ft³/s.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,440 ft³/s Feb. 3, gage height, 6.99 ft; minimum daily, 202 ft³/s Sept. 26, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|
| 1 | 450 | 352 | 853 | 994 | 1290 | 1260 | 1020 | 903 | 391 | 278 | 268 | 386 |
| 2 | 397 | 330 | 751 | 880 | 4030 | 1180 | 1050 | 803 | 392 | 286 | 321 | 293 |
| 3 | 366 | 434 | 716 | 800 | 5190 | 1120 | 1400 | 714 | 429 | 278 | 417 | 283 |
| 4 | 339 | 502 | 739 | 740 | 4100 | 1220 | 4000 | 658 | 424 | 260 | 306 | 2060 |
| 5 | 315 | 525 | 858 | 660 | 2600 | 1130 | 4930 | 616 | 396 | 257 | 272 | 2940 |
| 6 | 323 | 518 | 820 | 620 | 1700 | 1110 | 3950 | 696 | 364 | 251 | 259 | 1690 |
| 7 | 529 | 532 | 712 | 580 | 1400 | 1300 | 2950 | 808 | 359 | 254 | 275 | 834 |
| 8 | 732 | 527 | 684 | 540 | 1300 | 1930 | 2460 | 700 | 343 | 253 | 258 | 485 |
| 9 | 534 | 534 | 713 | 520 | 1100 | 2280 | 2000 | 613 | 338 | 253 | 240 | 342 |
| 10 | 425 | 534 | 826 | 500 | 1000 | 2490 | 1690 | 790 | 332 | 248 | 229 | 268 |
| 11 | 452 | 517 | 812 | 490 | 960 | 2180 | 1500 | 825 | 332 | 249 | 229 | 227 |
| 12 | 522 | 480 | 787 | 470 | 920 | 1760 | 1370 | 784 | 315 | 261 | 233 | 217 |
| 13 | 469 | 467 | 748 | 460 | 860 | 1750 | 1060 | 666 | 297 | 280 | 237 | 333 |
| 14 | 409 | 469 | 663 | 450 | 820 | 1810 | 1370 | 677 | 293 | 271 | 239 | 504 |
| 15 | 470 | 463 | 701 | 440 | 800 | 1620 | 1100 | 572 | 296 | 261 | 222 | 381 |
| 16 | 529 | 469 | 1030 | 430 | 2210 | 1510 | 1030 | 610 | 315 | 264 | 316 | 280 |
| 17 | 563 | 780 | 984 | 430 | 2120 | 1410 | 978 | 687 | 333 | 260 | 257 | 242 |
| 18 | 545 | 884 | 781 | 752 | 1930 | 1400 | 930 | 631 | 328 | 258 | 241 | 219 |
| 19 | 536 | 816 | 663 | 928 | 2010 | 1490 | 908 | 583 | 314 | 478 | 473 | 205 |
| 20 | 489 | 778 | 854 | 1740 | 2990 | 1480 | 857 | 586 | 293 | 531 | 507 | 229 |
| 21 | 378 | 717 | 1700 | 2280 | 3430 | 1460 | 829 | 565 | 290 | 845 | 358 | 267 |
| 22 | 343 | 702 | 1670 | 1760 | 2360 | 1370 | 811 | 529 | 297 | 1260 | 259 | 218 |
| 23 | 343 | 663 | 1400 | 1210 | 2320 | 1360 | 789 | 505 | 285 | 802 | 254 | 219 |
| 24 | 376 | 398 | 1300 | 980 | 2650 | 1490 | 807 | 634 | 275 | 774 | 469 | 217 |
| 25 | 408 | 404 | 1120 | 880 | 2040 | 1430 | 749 | 784 | 280 | 549 | 450 | 209 |
| 26 | 386 | 536 | 1100 | 800 | 1600 | 2710 | 706 | 660 | 274 | 507 | 340 | 202 |
| 27 | 411 | 591 | 1130 | 760 | 1350 | 3920 | 682 | 561 | 263 | 472 | 305 | 204 |
| 28 | 468 | 520 | 1080 | 700 | 1220 | 3040 | 676 | 497 | 269 | 396 | 277 | 203 |
| 29 | 454 | 628 | 1200 | 680 | 1140 | 2200 | 801 | 452 | 268 | 343 | 545 | 202 |
| 30 | 420 | 884 | 1270 | 660 | --- | 1800 | 898 | 417 | 271 | 274 | 734 | 207 |
| 31 | 382 | --- | 1040 | 833 | --- | 1510 | --- | 400 | --- | 255 | 577 | --- |
| TOTAL | 13763 | 16954 | 29705 | 24967 | 57440 | 53720 | 44301 | 19926 | 9656 | 12208 | 10367 | 14566 |
| MEAN | 444 | 565 | 958 | 805 | 1981 | 1733 | 1477 | 643 | 322 | 394 | 334 | 486 |
| MAX | 732 | 884 | 1700 | 2280 | 5190 | 3920 | 4930 | 903 | 429 | 1260 | 734 | 2940 |
| MIN | 315 | 330 | 663 | 430 | 800 | 1110 | 676 | 400 | 263 | 248 | 222 | 202 |
| CAL YR 1987 | TOTAL | 382535 | MEAN | 1048 | MAX | 5520 | MIN | 276 | | | | |
| WTR YR 1988 | TOTAL | 307573 | MEAN | 840 | MAX | 5190 | MIN | 202 | | | | |

MUSKINGUM RIVER BASIN

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

LOCATION.--Lat 40°38'08", long 81°33'11", in T10 N., R.3 W., Tuscarawas County, Hydrologic Unit 05040001, on right bank 1,000 ft downstream from Beach City Dam, 0.4 mi downstream from South Fork, and 1.8 mi southeast of Beach City.

DRAINAGE AREA.--300 mi².

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

REVISED RECORDS.--WSP 953: 1941.

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

REMARKS.--Estimated daily discharges: Dec. 31-Jan. 19, 24-30, Feb. 7-14. Records good except periods of estimated record which are fair. Flood flow regulated by Beach City Lake. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--50 years, 273 ft³/s.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,170 ft³/s Feb. 3, gage height, 6.51 ft; minimum daily, 4.6 ft³/s July 10, 12, 15-18, Aug. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|---------|------|------|-------|-------|------|------|-------|--------|-------|------|
| 1 | 56 | 36 | 73 | 95 | 335 | 203 | 245 | 100 | 42 | 8.7 | 26 | 33 |
| 2 | 49 | 34 | 69 | 78 | 1010 | 192 | 206 | 84 | 40 | 8.6 | 25 | 22 |
| 3 | 43 | 34 | 74 | 60 | 1630 | 202 | 266 | 77 | 50 | 8.3 | 30 | 22 |
| 4 | 41 | 35 | 80 | 50 | 2100 | 225 | 1010 | 73 | 47 | 8.5 | 25 | 470 |
| 5 | 39 | 34 | 108 | 40 | 2060 | 199 | 1350 | 81 | 41 | 8.3 | 19 | 740 |
| 6 | 36 | 32 | 95 | 35 | 2070 | 209 | 856 | 120 | 36 | 6.2 | 17 | 489 |
| 7 | 51 | 31 | 77 | 31 | 400 | 281 | 566 | 105 | 33 | 6.2 | 23 | 211 |
| 8 | 82 | 30 | 73 | 29 | 280 | 572 | 535 | 82 | 29 | 6.2 | 21 | 111 |
| 9 | 58 | 31 | 93 | 28 | 220 | 757 | 431 | 73 | 28 | 5.8 | 16 | 71 |
| 10 | 45 | 37 | 110 | 27 | 190 | 765 | 350 | 103 | 29 | 4.6 | 12 | 53 |
| 11 | 55 | 40 | 98 | 27 | 170 | 541 | 299 | 106 | 26 | 5.2 | 10 | 43 |
| 12 | 92 | 36 | 98 | 26 | 160 | 400 | 261 | 80 | 24 | 4.6 | 9.6 | 37 |
| 13 | 71 | 33 | 101 | 26 | 150 | 429 | 225 | 66 | 23 | 8.0 | 9.0 | 103 |
| 14 | 55 | 32 | 83 | 26 | 140 | 418 | 216 | 64 | 21 | 5.8 | 7.8 | 160 |
| 15 | 46 | 32 | 115 | 25 | 313 | 347 | 191 | 60 | 20 | 4.6 | 5.8 | 81 |
| 16 | 43 | 31 | 204 | 25 | 821 | 309 | 172 | 60 | 23 | 4.6 | 4.6 | 52 |
| 17 | 41 | 33 | 158 | 25 | 528 | 297 | 161 | 71 | 32 | 4.6 | 15 | 42 |
| 18 | 39 | 41 | 119 | 25 | 444 | 336 | 150 | 59 | 32 | 4.6 | 13 | 40 |
| 19 | 40 | 42 | 102 | 25 | 437 | 331 | 147 | 60 | 25 | 27 | 18 | 37 |
| 20 | 39 | 37 | 193 | 374 | 946 | 300 | 132 | 119 | 21 | 138 | 55 | 38 |
| 21 | 35 | 35 | 353 | 675 | 1030 | 274 | 124 | 98 | 19 | 181 | 37 | 43 |
| 22 | 33 | 31 | 236 | 315 | 574 | 246 | 120 | 72 | 16 | 183 | 22 | 38 |
| 23 | 31 | 31 | 177 | 180 | 530 | 246 | 115 | 63 | 13 | 45 | 18 | 30 |
| 24 | 32 | 32 | 150 | 110 | 568 | 274 | 118 | 110 | 13 | 44 | 31 | 28 |
| 25 | 34 | 38 | 137 | 92 | 387 | 257 | 107 | 227 | 12 | 376 | 49 | 27 |
| 26 | 39 | 56 | 143 | 80 | 297 | 595 | 96 | 136 | 11 | 179 | 30 | 24 |
| 27 | 41 | 83 | 159 | 70 | 282 | 365 | 91 | 87 | 10 | 53 | 21 | 22 |
| 28 | 48 | 62 | 148 | 62 | 240 | 670 | 92 | 65 | 9.1 | 43 | 19 | 20 |
| 29 | 51 | 62 | 249 | 54 | 216 | 427 | 122 | 54 | 8.8 | 36 | 37 | 19 |
| 30 | 43 | 82 | 224 | 50 | --- | 338 | 123 | 48 | 8.8 | 26 | 79 | 21 |
| 31 | 38 | --- | 120 | 179 | --- | 278 | --- | 44 | --- | 23 | 54 | --- |
| TOTAL | 1446 | 1203 | 4219 | 2944 | 18528 | 11783 | 8877 | 2647 | 742.7 | 1467.4 | 758.8 | 3127 |
| MEAN | 46.6 | 40.1 | 136 | 95.0 | 639 | 380 | 296 | 85.4 | 24.8 | 47.3 | 24.5 | 104 |
| MAX | 92 | 83 | 353 | 675 | 2100 | 865 | 1350 | 227 | 50 | 376 | 79 | 740 |
| MIN | 31 | 30 | 69 | 25 | 140 | 192 | 91 | 44 | 8.8 | 4.6 | 4.6 | 19 |
| CAL YR 1987 | TOTAL | 63713 | | MEAN | 175 | MAX | 1760 | MIN | 17 | | | |
| WTR YR 1988 | TOTAL | 57742.9 | | MEAN | 158 | MAX | 2100 | MIN | 4.6 | | | |

MUSKINGUM RIVER BASIN

73

03124500 SUGAR CREEK AT STRASBURG, OH

LOCATION.--Lat 40°35'15", long 81°31'24", in NW 1/4 sec. 1, T.9 N., R.3 W., Tuscarawas County, Hydrologic Unit 05040001, on left bank 150 ft upstream from bridge on State Highway 21, 0.8 mi upstream from Broad Run, and 0.1 mi southeast of Strasburg.

DRAINAGE AREA.--311 mi².

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

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

GAGE.--Water-stage recorder. Datum of gage is 896.24 ft above National Geodetic Vertical Datum of 1929. July 29, 1931 to Mar. 31, 1933, and Dec. 10, 1934, to July 31, 1939, nonrecording gage, and Oct. 1, 1961, to May 26, 1964 water-stage recorder at datum 2.00 ft higher.

REMARKS.--Estimated daily discharges: Jan. 1-19, 25-30, Feb. 7-14. Records fair. Flood flow regulated by Beach City Lake 5.0 mi upstream, since August 1937. Part of municipal water supply for city of Canton, starting May 1962, is pumped from well field 4.3 mi upstream; pumpage is returned to Nimishillen Creek. Mean pumpage for water year 1988, 15.4 ft³/s. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--31 years (1931-32, 1935-38, 1961-88), 305 ft³/s.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,250 ft³/s Feb. 4, gage height, 5.71 ft; minimum daily, 2.4 ft³/s July 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|---------|------|------|-------|-------|------|------|-------|--------|-------|------|
| 1 | 51 | 35 | 74 | 100 | 260 | 208 | 251 | 106 | 42 | 8.8 | 24 | 36 |
| 2 | 49 | 34 | 67 | 80 | 1080 | 194 | 207 | 91 | 42 | 8.5 | 28 | 24 |
| 3 | 41 | 33 | 72 | 66 | 1540 | 199 | 269 | 84 | 49 | 8.5 | 34 | 22 |
| 4 | 40 | 34 | 74 | 54 | 2200 | 223 | 970 | 81 | 49 | 7.8 | 28 | 419 |
| 5 | 38 | 33 | 97 | 41 | 2160 | 206 | 1450 | 86 | 42 | 7.5 | 23 | 798 |
| 6 | 35 | 32 | 96 | 35 | 1950 | 205 | 911 | 123 | 37 | 6.3 | 19 | 540 |
| 7 | 44 | 29 | 79 | 30 | 500 | 270 | 587 | 116 | 34 | 5.8 | 21 | 220 |
| 8 | 78 | 28 | 71 | 28 | 320 | 544 | 550 | 96 | 31 | 5.3 | 23 | 114 |
| 9 | 60 | 29 | 84 | 28 | 250 | 738 | 455 | 86 | 29 | 5.1 | 18 | 74 |
| 10 | 46 | 32 | 101 | 28 | 220 | 765 | 370 | 111 | 29 | 4.2 | 15 | 54 |
| 11 | 48 | 37 | 98 | 27 | 190 | 570 | 315 | 127 | 28 | 3.7 | 13 | 41 |
| 12 | 85 | 36 | 92 | 27 | 170 | 422 | 273 | 104 | 25 | 3.9 | 11 | 35 |
| 13 | 74 | 32 | 99 | 27 | 160 | 429 | 233 | 89 | 24 | 3.5 | 11 | 76 |
| 14 | 57 | 30 | 86 | 27 | 150 | 439 | 224 | 83 | 22 | 4.3 | 10 | 157 |
| 15 | 47 | 30 | 97 | 27 | 344 | 362 | 194 | 83 | 20 | 3.9 | 9.0 | 84 |
| 16 | 42 | 30 | 184 | 26 | 834 | 321 | 176 | 79 | 23 | 2.6 | 8.2 | 52 |
| 17 | 41 | 31 | 158 | 26 | 581 | 302 | 165 | 89 | 28 | 2.4 | 11 | 41 |
| 18 | 38 | 37 | 119 | 26 | 473 | 341 | 153 | 76 | 32 | 3.2 | 14 | 36 |
| 19 | 38 | 41 | 101 | 26 | 460 | 342 | 150 | 75 | 26 | 9.8 | 14 | 34 |
| 20 | 38 | 37 | 145 | 280 | 910 | 311 | 137 | 120 | 22 | 113 | 48 | 35 |
| 21 | 35 | 36 | 349 | 601 | 1070 | 284 | 128 | 110 | 19 | 147 | 42 | 36 |
| 22 | 32 | 32 | 248 | 281 | 614 | 252 | 124 | 82 | 17 | 200 | 25 | 35 |
| 23 | 31 | 30 | 180 | 143 | 537 | 248 | 119 | 70 | 14 | 54 | 21 | 27 |
| 24 | 30 | 31 | 150 | 106 | 591 | 276 | 120 | 111 | 13 | 42 | 28 | 24 |
| 25 | 33 | 36 | 136 | 80 | 416 | 266 | 112 | 225 | 12 | 352 | 60 | 23 |
| 26 | 34 | 48 | 134 | 68 | 316 | 558 | 102 | 142 | 11 | 200 | 40 | 22 |
| 27 | 39 | 79 | 153 | 62 | 294 | 844 | 95 | 92 | 10 | 59 | 28 | 19 |
| 28 | 43 | 63 | 147 | 58 | 253 | 687 | 95 | 70 | 9.8 | 41 | 24 | 18 |
| 29 | 50 | 60 | 225 | 56 | 224 | 450 | 117 | 58 | 9.4 | 38 | 31 | 17 |
| 30 | 43 | 77 | 209 | 56 | --- | 355 | 127 | 51 | 8.7 | 26 | 75 | 17 |
| 31 | 37 | --- | 120 | 125 | --- | 289 | --- | 46 | --- | 24 | 58 | --- |
| TOTAL | 1397 | 1152 | 4045 | 2645 | 19067 | 11900 | 9179 | 2962 | 757.9 | 1401.1 | 814.2 | 3130 |
| MEAN | 45.1 | 38.4 | 130 | 85.3 | 657 | 384 | 306 | 95.5 | 25.3 | 45.2 | 26.3 | 104 |
| MAX | 85 | 79 | 349 | 601 | 2200 | 844 | 1450 | 225 | 49 | 352 | 75 | 798 |
| MIN | 30 | 28 | 67 | 26 | 150 | 194 | 95 | 46 | 8.7 | 2.4 | 8.2 | 17 |
| CAL YR 1987 | TOTAL | 69007 | | MEAN | 189 | MAX | 1930 | MIN | 20 | | | |
| WTR YR 1988 | TOTAL | 58450.2 | | MEAN | 160 | MAX | 2200 | MIN | 2.4 | | | |

MUSKINGUM RIVER BASIN

03126000 STILLWATER CREEK AT PIEDMONT, OH

LOCATION.--Lat 40°11'41", long 81°12'56", in sec. 35, T.10 N., R.6 W., Harrison County, Hydrologic Unit 05040001, on left bank 400 ft downstream from outlet of Piedmont Dam and Boggs Fork, and 0.7 mi northwest of Piedmont.

DRAINAGE AREA.--122 mi².

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

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

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

REMARKS.--Estimated daily discharges: Jan. 9-17, 23-31, Feb. 11-15. Records fair. Flow regulated by Piedmont Lake. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--50 years, 137 ft³/s.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 866 ft³/s Feb. 2, gage height, 8.17 ft; minimum daily, 0.9 ft³/s July 17, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|----------|------|------|------|------|------|------|-------|--------|-------|-------|
| 1 | 26 | 16 | 269 | 109 | 144 | 83 | 182 | 73 | 22 | 3.8 | 13 | 5.9 |
| 2 | 20 | 17 | 279 | 92 | 690 | 82 | 108 | 68 | 24 | 3.5 | 13 | 5.3 |
| 3 | 19 | 16 | 283 | 88 | 512 | 93 | 130 | 65 | 23 | 3.0 | 22 | 5.6 |
| 4 | 18 | 16 | 301 | 142 | 369 | 216 | 324 | 64 | 20 | 2.8 | 13 | 15 |
| 5 | 18 | 16 | 298 | 125 | 248 | 266 | 300 | 77 | 17 | 2.8 | 9.5 | 14 |
| 6 | 18 | 15 | 284 | 63 | 352 | 287 | 337 | 79 | 16 | 2.5 | 15 | 11 |
| 7 | 42 | 14 | 277 | 31 | 470 | 243 | 297 | 74 | 14 | 2.3 | 17 | 9.2 |
| 8 | 33 | 14 | 274 | 17 | 511 | 244 | 159 | 69 | 11 | 1.9 | 12 | 8.2 |
| 9 | 30 | 17 | 277 | 16 | 327 | 69 | 120 | 68 | 29 | 1.3 | 10 | 7.2 |
| 10 | 25 | 19 | 278 | 14 | 183 | 65 | 117 | 91 | 25 | 1.2 | 8.7 | 6.9 |
| 11 | 27 | 18 | 219 | 13 | 150 | 53 | 113 | 85 | 22 | 1.2 | 7.8 | 6.7 |
| 12 | 27 | 17 | 190 | 13 | 120 | 50 | 111 | 79 | 20 | 1.3 | 7.2 | 6.3 |
| 13 | 25 | 17 | 186 | 12 | 110 | 88 | 108 | 73 | 19 | 1.2 | 6.8 | 14 |
| 14 | 22 | 16 | 118 | 12 | 98 | 69 | 105 | 67 | 16 | 1.2 | 6.3 | 15 |
| 15 | 20 | 16 | 83 | 12 | 90 | 62 | 102 | 62 | 13 | 1.0 | 5.7 | 11 |
| 16 | 19 | 127 | 51 | 11 | 170 | 81 | 100 | 58 | 13 | 1.0 | 5.1 | 9.5 |
| 17 | 19 | 202 | 30 | 11 | 180 | 64 | 98 | 53 | 13 | .90 | 4.5 | 12 |
| 18 | 20 | 200 | 28 | 32 | 179 | 75 | 97 | 49 | 12 | .90 | 4.2 | 12 |
| 19 | 19 | 197 | 27 | 136 | 160 | 88 | 97 | 60 | 10 | 2.7 | 4.9 | 11 |
| 20 | 19 | 195 | 69 | 402 | 146 | 97 | 92 | 56 | 9.9 | 14 | 6.0 | 12 |
| 21 | 19 | 194 | 130 | 355 | 129 | 106 | 88 | 52 | 9.4 | 44 | 5.5 | 11 |
| 22 | 18 | 192 | 151 | 278 | 160 | 105 | 86 | 48 | 8.9 | 47 | 4.5 | 10 |
| 23 | 17 | 205 | 147 | 220 | 184 | 102 | 86 | 48 | 7.8 | 57 | 4.8 | 9.6 |
| 24 | 17 | 214 | 90 | 170 | 179 | 103 | 87 | 77 | 7.1 | 54 | 7.3 | 9.7 |
| 25 | 17 | 227 | 66 | 110 | 173 | 107 | 82 | 56 | 6.6 | 46 | 6.3 | 9.9 |
| 26 | 17 | 234 | 114 | 72 | 134 | 152 | 80 | 48 | 6.0 | 37 | 5.2 | 9.7 |
| 27 | 18 | 233 | 91 | 58 | 89 | 148 | 76 | 43 | 5.3 | 32 | 4.6 | 9.2 |
| 28 | 18 | 235 | 166 | 54 | 87 | 141 | 77 | 38 | 5.0 | 29 | 4.5 | 8.6 |
| 29 | 17 | 276 | 216 | 50 | 86 | 137 | 80 | 35 | 4.7 | 24 | 8.8 | 8.0 |
| 30 | 17 | 285 | 188 | 48 | --- | 204 | 78 | 31 | 4.3 | 20 | 10 | 7.4 |
| 31 | 16 | --- | 127 | 46 | --- | 231 | --- | 27 | --- | 15 | 7.3 | --- |
| TOTAL | 657 | 3460 | 5307 | 2812 | 6430 | 3911 | 3917 | 1873 | 414.0 | 455.50 | 260.5 | 290.9 |
| MEAN | 21.2 | 115 | 171 | 90.7 | 222 | 126 | 131 | 60.4 | 13.8 | 14.7 | 8.40 | 9.70 |
| MAX | 42 | 285 | 301 | 402 | 690 | 287 | 337 | 91 | 29 | 57 | 22 | 15 |
| MIN | 16 | 14 | 27 | 11 | 86 | 50 | 76 | 27 | 4.3 | .90 | 4.2 | 5.3 |
| CAL YR 1987 | TOTAL | 32660.5 | | MEAN | 89.5 | MAX | 524 | MIN | 9.5 | | | |
| WTR YR 1988 | TOTAL | 29787.90 | | MEAN | 81.4 | MAX | 690 | MIN | .90 | | | |

MUSKINGUM RIVER BASIN

75

03127000 STILLWATER CREEK AT TIPPECANOE, OH

LOCATION.--Lat 40°16'13", long 81°17'26", in NW 1/4 sec. 22, T.12 N., R.7 W., Harrison County, Hydrologic Unit 05040001, on left bank at downstream side of highway bridge at Tippecanoe, 0.4 mi downstream from Brushy Fork, 3.6 mi upstream from Weaver Run, 6 mi upstream from Laurel Creek, and 9 mi south of Dennison.

DRAINAGE AREA.--282 mi².

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

REVISED RECORDS.--WSP 1907: Drainage area.

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

REMARKS.--Estimated daily discharges: Jan. 9-17, 24-31, Feb. 12-15. Records good except those for periods of estimated record which are fair. Flow regulated by Clendening Lake on Brushy Fork, 1.9 mi upstream, and Piedmont Lake, 16 mi upstream. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--50 years, 319 ft³/s.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,160 ft³/s Feb. 3, gage height, 14.44 ft; minimum daily discharge, 13 ft³/s July 12-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|-------|-------|------|-------|-------|------|------|------|------|------|------|
| 1 | 76 | 41 | 529 | 287 | 220 | 170 | 411 | 126 | 45 | 18 | 27 | 18 |
| 2 | 58 | 41 | 508 | 233 | 1260 | 161 | 292 | 113 | 41 | 17 | 25 | 16 |
| 3 | 49 | 42 | 511 | 206 | 2040 | 181 | 281 | 105 | 47 | 16 | 30 | 16 |
| 4 | 47 | 41 | 549 | 255 | 2070 | 464 | 870 | 102 | 40 | 16 | 31 | 36 |
| 5 | 43 | 39 | 597 | 320 | 1550 | 666 | 1090 | 123 | 33 | 16 | 24 | 47 |
| 6 | 41 | 35 | 547 | 158 | 957 | 773 | 813 | 149 | 30 | 15 | 23 | 34 |
| 7 | 116 | 33 | 549 | 107 | 993 | 794 | 658 | 134 | 27 | 15 | 31 | 26 |
| 8 | 140 | 32 | 567 | 53 | 1130 | 752 | 471 | 117 | 23 | 14 | 29 | 21 |
| 9 | 103 | 35 | 564 | 40 | 937 | 339 | 354 | 111 | 47 | 14 | 27 | 19 |
| 10 | 85 | 41 | 577 | 35 | 453 | 280 | 318 | 173 | 63 | 14 | 23 | 18 |
| 11 | 82 | 43 | 482 | 33 | 322 | 220 | 296 | 179 | 50 | 14 | 20 | 17 |
| 12 | 82 | 41 | 369 | 31 | 260 | 184 | 281 | 164 | 43 | 13 | 20 | 16 |
| 13 | 74 | 40 | 356 | 30 | 230 | 292 | 268 | 144 | 37 | 13 | 18 | 22 |
| 14 | 66 | 40 | 319 | 28 | 200 | 290 | 251 | 130 | 33 | 13 | 17 | 32 |
| 15 | 62 | 39 | 191 | 28 | 190 | 287 | 235 | 114 | 28 | 13 | 16 | 29 |
| 16 | 56 | 120 | 142 | 27 | 398 | 269 | 222 | 105 | 24 | 13 | 16 | 25 |
| 17 | 52 | 343 | 81 | 27 | 426 | 222 | 212 | 94 | 24 | 14 | 16 | 25 |
| 18 | 52 | 352 | 72 | 67 | 414 | 230 | 205 | 86 | 22 | 14 | 15 | 25 |
| 19 | 52 | 346 | 67 | 194 | 385 | 254 | 205 | 94 | 20 | 14 | 14 | 25 |
| 20 | 51 | 364 | 137 | 977 | 384 | 267 | 190 | 114 | 19 | 17 | 14 | 24 |
| 21 | 47 | 393 | 317 | 1250 | 339 | 283 | 176 | 102 | 19 | 73 | 15 | 26 |
| 22 | 48 | 386 | 380 | 983 | 335 | 288 | 166 | 93 | 16 | 76 | 15 | 25 |
| 23 | 46 | 388 | 347 | 630 | 423 | 277 | 158 | 86 | 14 | 82 | 14 | 24 |
| 24 | 45 | 405 | 280 | 380 | 422 | 269 | 158 | 151 | 16 | 84 | 15 | 23 |
| 25 | 44 | 413 | 157 | 220 | 386 | 267 | 152 | 153 | 17 | 73 | 16 | 22 |
| 26 | 43 | 430 | 282 | 160 | 314 | 436 | 140 | 114 | 15 | 60 | 16 | 22 |
| 27 | 44 | 432 | 332 | 140 | 221 | 484 | 127 | 96 | 18 | 51 | 15 | 22 |
| 28 | 46 | 439 | 377 | 130 | 198 | 423 | 124 | 83 | 20 | 46 | 14 | 21 |
| 29 | 47 | 501 | 611 | 120 | 172 | 379 | 138 | 73 | 19 | 41 | 20 | 21 |
| 30 | 44 | 583 | 530 | 120 | --- | 377 | 139 | 64 | 18 | 36 | 34 | 21 |
| 31 | 43 | --- | 371 | 110 | --- | 439 | --- | 55 | --- | 32 | 24 | --- |
| TOTAL | 1884 | 6478 | 11698 | 7379 | 17629 | 11017 | 9401 | 3547 | 868 | 947 | 634 | 718 |
| MEAN | 60.8 | 216 | 377 | 238 | 608 | 355 | 313 | 114 | 28.9 | 30.5 | 20.5 | 23.9 |
| MAX | 140 | 583 | 611 | 1250 | 2070 | 794 | 1090 | 179 | 63 | 84 | 34 | 47 |
| MIN | 41 | 32 | 67 | 27 | 172 | 161 | 124 | 55 | 14 | 13 | 14 | 16 |
| CAL YR 1987 | TOTAL | 76071 | MEAN | 208 | MAX | 1800 | MIN | 16 | | | | |
| WTR YR 1988 | TOTAL | 72200 | MEAN | 197 | MAX | 2070 | MIN | 13 | | | | |

MUSKINGUM RIVER BASIN

03127500 STILLWATER CREEK AT UHRICHSVILLE, OH

LOCATION.--Lat 40°23'10", long 81°20'50", Tuscarawas County, Hydrologic Unit 05040001, on left bank at concrete dam of Dennison Water Supply Co. at Uhrichsville, 2.2 mi upstream from Little Stillwater Creek.

DRAINAGE AREA.--367 mi².

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

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

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

REMARKS.--Estimated daily discharges: Jan. 9-17, 25-31, Feb. 4-6, 12-15. Records fair, except estimated daily discharges, which are poor. Flow regulated by Piedmont Lake, 35 mi upstream, and Clendening Lake on Brushy Fork, 22 mi upstream, beginning in 1938. Water is diverted from Dennison water-supply dam 1.7 mi upstream from station for municipal supply of cities of Dennison and Uhrichsville; diversion not included in figures of daily discharge. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--66 years, 429 ft³/s.

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

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

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,600 ft³/s Feb. 5, maximum gage height, 5.13 ft Feb. 4 (backwater from Tuscarawas River); minimum daily discharge, 15 ft³/s July 11-13

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|-------|-------|------|-------|-------|-------|------|------|------|------|------|
| 1 | 109 | 38 | 621 | 403 | 250 | 215 | 488 | 151 | 66 | 23 | 38 | 34 |
| 2 | 95 | 38 | 569 | 343 | 1330 | 208 | 427 | 136 | 60 | 22 | 35 | 29 |
| 3 | 75 | 40 | 555 | 259 | 2400 | 214 | 346 | 124 | 57 | 21 | 39 | 28 |
| 4 | 63 | 43 | 582 | 256 | 2500 | 366 | 651 | 115 | 58 | 21 | 40 | 43 |
| 5 | 59 | 43 | 667 | 281 | 2600 | 696 | 1220 | 123 | 51 | 20 | 41 | 69 |
| 6 | 54 | 45 | 670 | 277 | 1900 | 870 | 1170 | 163 | 43 | 19 | 43 | 57 |
| 7 | 92 | 44 | 609 | 162 | 1330 | 1050 | 917 | 176 | 41 | 17 | 44 | 42 |
| 8 | 194 | 42 | 614 | 128 | 1230 | 1060 | 745 | 153 | 39 | 17 | 45 | 33 |
| 9 | 151 | 42 | 622 | 80 | 1210 | 781 | 532 | 137 | 42 | 17 | 35 | 29 |
| 10 | 101 | 46 | 646 | 58 | 811 | 521 | 426 | 177 | 84 | 16 | 33 | 27 |
| 11 | 85 | 53 | 642 | 50 | 452 | 410 | 387 | 247 | 92 | 15 | 31 | 25 |
| 12 | 85 | 59 | 505 | 45 | 350 | 325 | 360 | 225 | 75 | 15 | 29 | 24 |
| 13 | 81 | 57 | 423 | 42 | 300 | 373 | 343 | 194 | 67 | 15 | 27 | 54 |
| 14 | 69 | 56 | 395 | 40 | 260 | 458 | 323 | 171 | 62 | 16 | 25 | 55 |
| 15 | 59 | 55 | 329 | 39 | 250 | 394 | 299 | 156 | 57 | 16 | 25 | 45 |
| 16 | 54 | 55 | 224 | 38 | 507 | 380 | 276 | 139 | 54 | 16 | 25 | 35 |
| 17 | 51 | 182 | 158 | 38 | 534 | 332 | 259 | 127 | 50 | 16 | 25 | 32 |
| 18 | 46 | 342 | 116 | 74 | 525 | 307 | 248 | 115 | 47 | 16 | 25 | 31 |
| 19 | 45 | 358 | 102 | 118 | 513 | 322 | 242 | 112 | 43 | 19 | 31 | 32 |
| 20 | 47 | 353 | 131 | 710 | 609 | 336 | 234 | 132 | 37 | 22 | 26 | 29 |
| 21 | 43 | 393 | 308 | 1410 | 569 | 342 | 216 | 142 | 36 | 50 | 25 | 28 |
| 22 | 39 | 412 | 436 | 1320 | 431 | 349 | 200 | 126 | 37 | 117 | 26 | 32 |
| 23 | 38 | 403 | 432 | 892 | 490 | 344 | 189 | 114 | 34 | 107 | 29 | 31 |
| 24 | 38 | 422 | 395 | 668 | 535 | 333 | 186 | 122 | 31 | 145 | 29 | 29 |
| 25 | 39 | 442 | 272 | 350 | 487 | 328 | 183 | 196 | 28 | 119 | 28 | 29 |
| 26 | 38 | 445 | 270 | 240 | 429 | 489 | 172 | 161 | 26 | 88 | 30 | 27 |
| 27 | 42 | 431 | 462 | 180 | 338 | 678 | 158 | 122 | 23 | 64 | 30 | 27 |
| 28 | 43 | 437 | 424 | 160 | 269 | 597 | 147 | 103 | 23 | 55 | 28 | 26 |
| 29 | 45 | 470 | 603 | 150 | 243 | 512 | 151 | 91 | 26 | 51 | 44 | 25 |
| 30 | 46 | 606 | 663 | 140 | --- | 463 | 162 | 84 | 24 | 47 | 64 | 25 |
| 31 | 37 | --- | 545 | 140 | --- | 481 | --- | 75 | --- | 42 | 49 | --- |
| TOTAL | 2063 | 6452 | 13990 | 9091 | 23652 | 14534 | 11657 | 4409 | 1413 | 1244 | 1044 | 1032 |
| MEAN | 66.5 | 215 | 451 | 293 | 816 | 469 | 389 | 142 | 47.1 | 40.1 | 33.7 | 34.4 |
| MAX | 194 | 606 | 670 | 1410 | 2600 | 1060 | 1220 | 247 | 92 | 145 | 64 | 69 |
| MIN | 37 | 38 | 102 | 38 | 243 | 208 | 147 | 75 | 23 | 15 | 25 | 24 |
| CAL YR 1987 | TOTAL | 99214 | MEAN | 272 | MAX | 2500 | MIN | 23 | | | | |
| WTR YR 1988 | TOTAL | 90581 | MEAN | 247 | MAX | 2600 | MIN | 15 | | | | |

MUSKINGUM RIVER BASIN

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

LOCATION.--Lat 40°21'25", long 81°13'49", in NW 1/4 sec. 4, T.13 N., R.7 W., Harrison County, Hydrologic Unit 05040001, on right bank 150 ft downstream from outlet of lake at Tappan Dam, 1 mi west of Tappan, and 2 mi upstream from Plum Run.

DRAINAGE AREA.--71.1 mi².

PERIOD OF RECORD.--October 1938 to current year. Published as Little Stillwater Creek at Tappan 1938-39.

REVISED RECORDS.--WSP 1907: Drainage area.

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

REMARKS.--Estimated daily discharges: Nov. 22-Jan. 11, Aug. 4-Sept. 30. Records fair except those for periods of estimated record, which are poor. Flow completely regulated by Tappan Lake. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--50 years, 76.7 ft³/s.

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

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 442 ft³/s Feb. 8; minimum daily, .65 ft³/s Aug. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|----------|------|------|--------|--------|-------|-------|-------|-------|-------|------|
| 1 | 33 | 20 | 150 | 18 | 174 | 108 | .75 | .79 | .81 | .80 | .66 | 1.2 |
| 2 | 31 | 60 | 100 | 17 | 174 | 106 | .75 | .79 | .81 | .78 | .68 | 1.2 |
| 3 | 31 | 112 | 45 | 17 | 174 | 105 | .76 | .79 | .77 | .78 | .79 | 1.4 |
| 4 | 29 | 130 | 30 | 17 | 72 | 45 | .78 | .78 | .75 | .78 | .79 | 1.6 |
| 5 | 16 | 129 | 30 | 17 | 7.7 | 7.0 | .78 | .78 | .75 | .78 | .80 | 1.8 |
| 6 | 25 | 128 | 30 | 75 | 71 | 7.0 | .80 | .79 | .75 | .78 | .70 | 1.8 |
| 7 | 35 | 128 | 30 | 75 | 312 | 6.7 | .78 | .81 | .75 | .78 | .70 | 1.8 |
| 8 | 36 | 128 | 30 | 13 | 442 | 4.4 | .78 | .81 | .75 | .78 | .75 | 1.8 |
| 9 | 36 | 127 | 22 | 13 | 423 | .73 | .78 | .84 | .75 | .75 | .75 | 1.8 |
| 10 | 37 | 128 | 17 | 13 | 411 | .73 | .78 | .84 | .75 | .75 | .75 | 1.8 |
| 11 | 37 | 128 | 17 | 13 | 396 | .74 | .78 | .81 | .75 | .75 | .75 | 2.0 |
| 12 | 36 | 157 | 17 | 14 | 395 | .75 | .78 | .80 | .75 | .76 | .75 | 2.2 |
| 13 | 35 | 176 | 17 | 50 | 389 | .75 | .78 | .81 | .74 | .76 | .75 | 2.6 |
| 14 | 35 | 177 | 17 | 36 | 378 | .75 | .79 | .82 | .73 | .76 | .70 | 2.4 |
| 15 | 34 | 174 | 21 | 15 | 376 | .75 | .81 | .78 | .73 | .76 | .70 | 2.2 |
| 16 | 34 | 202 | 17 | 15 | 311 | .73 | .81 | .83 | .73 | .76 | .75 | 2.2 |
| 17 | 33 | 216 | 17 | 15 | 160 | .73 | .81 | .81 | .73 | .74 | .80 | 2.2 |
| 18 | 33 | 242 | 17 | 15 | 98 | .73 | .81 | .81 | .73 | .70 | .80 | 2.2 |
| 19 | 32 | 256 | 17 | 45 | 96 | .73 | .81 | .81 | .74 | .70 | .80 | 2.2 |
| 20 | 32 | 248 | 17 | 126 | 96 | .73 | .81 | .81 | .75 | .70 | .80 | 2.2 |
| 21 | 28 | 247 | 90 | 242 | 96 | .73 | .81 | .82 | .75 | .70 | .75 | 2.2 |
| 22 | 25 | 240 | 16 | 224 | 121 | .73 | .81 | .78 | .98 | .70 | .75 | 2.2 |
| 23 | 25 | 240 | 14 | 63 | 134 | .74 | .82 | .78 | .84 | .70 | .70 | 2.2 |
| 24 | 24 | 240 | 13 | 63 | 104 | .75 | .79 | .81 | .84 | .70 | .70 | 2.2 |
| 25 | 24 | 240 | 17 | 126 | 52 | .76 | .79 | .81 | .84 | .70 | .70 | 2.2 |
| 26 | 23 | 230 | 17 | 180 | 6.9 | .78 | .79 | .81 | .84 | .66 | .70 | 2.2 |
| 27 | 22 | 180 | 17 | 179 | 9.8 | .78 | .78 | .81 | .84 | .66 | .70 | 2.2 |
| 28 | 21 | 150 | 160 | 176 | 9.6 | .78 | .78 | .81 | .84 | .66 | .65 | 2.2 |
| 29 | 20 | 150 | 180 | 177 | 73 | .78 | .79 | .81 | .84 | .66 | .80 | 2.0 |
| 30 | 20 | 150 | 200 | 175 | --- | .78 | .80 | .81 | .84 | .66 | .90 | 2.0 |
| 31 | 20 | --- | 18 | 173 | --- | .75 | --- | .81 | --- | .66 | 1.0 | --- |
| TOTAL | 902 | 5133 | 1400 | 2397 | 5562.0 | 406.31 | 23.69 | 24.97 | 23.47 | 22.61 | 23.32 | 60.2 |
| MEAN | 29.1 | 171 | 45.2 | 77.3 | 192 | 13.1 | .79 | .81 | .78 | .73 | .75 | 2.01 |
| MAX | 37 | 256 | 200 | 242 | 442 | 108 | .82 | .84 | .98 | .80 | 1.0 | 2.6 |
| MIN | 16 | 20 | 13 | 13 | 6.9 | .73 | .75 | .78 | .73 | .66 | .65 | 1.2 |
| CAL YR 1987 | TOTAL | 19893.6 | | MEAN | 54.5 | MAX | 399 | MIN | 1.8 | | | |
| WTR YR 1988 | TOTAL | 15978.57 | | MEAN | 43.7 | MAX | 442 | MIN | .65 | | | |

MUSKINGUM RIVER BASIN

03129000 TUSCARAWAS RIVER AT NEWCOMERSTOWN, OH

LOCATION.--Lat 40°15'41", long 81°36'33", in T.5 N., R.3 W., Tuscarawas County, Hydrologic Unit 05040001, on right bank 150 ft upstream from highway bridge, 0.2 mi south of Newcomerstown, 2 mi upstream from Buckhorn Creek, and 4 mi downstream from Dunlap Creek.

DRAINAGE AREA.--2,443 mi².

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

REVISED RECORDS.--WSP 728: 1929(M). WSP 873: 1935. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 780.00 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 28, 1925, and July 18, 1935, to Feb. 13, 1939, nonrecording gage, Sept. 28, 1925, to July 17, 1935, water-stage recorder at site 1.5 mi upstream at datum 5.03 ft higher prior to Oct. 1, 1934, and 0.03 ft higher Oct. 1, 1934, to Feb. 13, 1939.

REMARKS.--Estimated daily discharges: Jan. 4-18, 25-30. Records good except for periods of estimated record which are fair. Diversion from basin at Portage Lakes (see REMARKS for station 03117000). Flow regulated by eight flood-control reservoirs at points 40 mi to 64 mi upstream. Water-quality data collected at this site 1946 to 1949, 1955 to 1977. U.S. Army of Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--67 years, 2,527 ft³/s.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of about 21.5 ft, at site and datum used prior to Oct. 1, 1934, discharge, 83,000 ft³/s computed by U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,300 ft³/s Feb. 4, gage height, 8.55 ft; minimum daily, 255 ft³/s July 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 772 | 552 | 1840 | 1780 | 1770 | 1900 | 2430 | 1340 | 601 | 293 | 422 | 641 |
| 2 | 771 | 533 | 1710 | 1610 | 6230 | 1940 | 2220 | 1220 | 584 | 291 | 419 | 473 |
| 3 | 693 | 555 | 1580 | 1340 | 9140 | 1880 | 2080 | 1130 | 593 | 288 | 577 | 411 |
| 4 | 640 | 693 | 1600 | 1100 | 9850 | 2040 | 4100 | 1070 | 594 | 281 | 524 | 813 |
| 5 | 595 | 747 | 1790 | 900 | 10800 | 2220 | 7260 | 1100 | 578 | 269 | 447 | 3930 |
| 6 | 572 | 737 | 1850 | 800 | 9680 | 2360 | 7170 | 1320 | 534 | 274 | 423 | 3180 |
| 7 | 848 | 735 | 1680 | 740 | 8570 | 2810 | 5480 | 1440 | 505 | 280 | 398 | 1840 |
| 8 | 1150 | 744 | 1590 | 680 | 7110 | 3270 | 4470 | 1330 | 488 | 276 | 392 | 1090 |
| 9 | 1140 | 752 | 1610 | 640 | 5850 | 4160 | 3700 | 1220 | 498 | 273 | 373 | 796 |
| 10 | 915 | 768 | 1670 | 620 | 4960 | 4180 | 3000 | 1230 | 474 | 269 | 345 | 642 |
| 11 | 842 | 770 | 1750 | 600 | 3670 | 3970 | 2620 | 1600 | 474 | 266 | 323 | 551 |
| 12 | 906 | 759 | 1630 | 580 | 3250 | 3130 | 2370 | 1520 | 454 | 268 | 315 | 500 |
| 13 | 919 | 771 | 1480 | 560 | 2930 | 2820 | 2180 | 1400 | 429 | 267 | 316 | 736 |
| 14 | 822 | 775 | 1400 | 540 | 2370 | 2970 | 2030 | 1270 | 406 | 280 | 307 | 823 |
| 15 | 759 | 770 | 1340 | 540 | 2760 | 2810 | 1910 | 1180 | 398 | 273 | 299 | 857 |
| 16 | 792 | 763 | 1450 | 520 | 3850 | 2510 | 1770 | 1040 | 397 | 265 | 284 | 665 |
| 17 | 829 | 931 | 1600 | 520 | 4160 | 2330 | 1660 | 1070 | 425 | 258 | 343 | 563 |
| 18 | 818 | 1400 | 1360 | 500 | 3470 | 2240 | 1600 | 1050 | 417 | 255 | 300 | 504 |
| 19 | 797 | 1550 | 1170 | 1100 | 3370 | 2280 | 1540 | 959 | 409 | 319 | 323 | 469 |
| 20 | 775 | 1510 | 1260 | 2730 | 4090 | 2340 | 1490 | 945 | 387 | 651 | 563 | 452 |
| 21 | 697 | 1470 | 2020 | 4040 | 5580 | 2310 | 1410 | 973 | 366 | 857 | 560 | 472 |
| 22 | 596 | 1470 | 2640 | 3950 | 4710 | 2200 | 1370 | 927 | 358 | 1610 | 437 | 473 |
| 23 | 559 | 1460 | 2280 | 2780 | 3740 | 2120 | 1320 | 847 | 349 | 1440 | 353 | 439 |
| 24 | 550 | 1360 | 2030 | 2030 | 4130 | 2130 | 1290 | 869 | 334 | 1130 | 378 | 428 |
| 25 | 570 | 1250 | 1790 | 1800 | 3820 | 2210 | 1280 | 1200 | 321 | 927 | 538 | 412 |
| 26 | 582 | 1340 | 1610 | 1600 | 2910 | 2610 | 1220 | 1250 | 318 | 983 | 511 | 395 |
| 27 | 572 | 1480 | 1770 | 1400 | 2410 | 5120 | 1160 | 1020 | 308 | 789 | 415 | 381 |
| 28 | 602 | 1380 | 1820 | 1200 | 2110 | 5200 | 1120 | 858 | 297 | 616 | 373 | 377 |
| 29 | 624 | 1380 | 2160 | 1100 | 1910 | 3890 | 1190 | 765 | 301 | 517 | 435 | 370 |
| 30 | 617 | 1680 | 2420 | 1000 | --- | 3100 | 1390 | 699 | 298 | 472 | 837 | 363 |
| 31 | 588 | --- | 2210 | 1290 | --- | 2680 | --- | 648 | --- | 479 | 826 | --- |
| TOTAL | 22912 | 31085 | 54110 | 40590 | 139200 | 87730 | 73830 | 34490 | 12895 | 15716 | 13356 | 24046 |
| MEAN | 739 | 1036 | 1745 | 1309 | 4800 | 2830 | 2461 | 1113 | 430 | 507 | 431 | 802 |
| MAX | 1150 | 1680 | 2640 | 4040 | 10800 | 5200 | 7260 | 1600 | 601 | 1610 | 837 | 3930 |
| MIN | 550 | 533 | 1170 | 500 | 1770 | 1880 | 1120 | 648 | 297 | 255 | 284 | 363 |
| CAL YR 1987 | TOTAL | 629203 | | MEAN | 1724 | MAX | 10400 | MIN | 404 | | | |
| WTR YR 1988 | TOTAL | 549960 | | MEAN | 1503 | MAX | 10800 | MIN | 255 | | | |

MUSKINGUM RIVER BASIN

79

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

LOCATION.--Lat 40°44'16", long 82°21'48", in NE 1/4 sec. 35, T.23 N., R.17 W., Ashland County, Hydrologic Unit 05040002, on left bank 700 ft downstream from Charles Mill Dam, 2.5 mi south of Mifflin, and 4 mi upstream from Rocky Fork.

DRAINAGE AREA.--217 mi².

PERIOD OF RECORD.--October 1938 to current year. Prior to October 1940, published as Black Fork near Mifflin. Monthly discharge only for October 1938, published in WSP 1305.

REVISED RECORDS.--WSP 1907: Drainage area.

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

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

AVERAGE DISCHARGE.--50 years, 203 ft³/s.

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 942 ft³/s Feb. 23, gage height, 4.91 ft; minimum daily, 2.3 ft³/s July 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|---------|------|------|-------|-------|------|--------|-------|-------|------|------|
| 1 | 25 | 40 | 98 | 163 | 132 | 286 | 403 | 84 | 20 | 6.5 | 21 | 60 |
| 2 | 24 | 39 | 88 | 160 | 170 | 254 | 341 | 82 | 20 | 6.7 | 21 | 60 |
| 3 | 27 | 38 | 80 | 160 | 186 | 236 | 342 | 79 | 21 | 5.8 | 20 | 60 |
| 4 | 25 | 37 | 80 | 160 | 327 | 228 | 456 | 76 | 18 | 5.4 | 20 | 57 |
| 5 | 24 | 40 | 79 | 159 | 501 | 214 | 575 | 77 | 17 | 5.1 | 23 | 55 |
| 6 | 25 | 33 | 78 | 156 | 540 | 204 | 654 | 78 | 17 | 4.4 | 20 | 55 |
| 7 | 27 | 30 | 86 | 152 | 528 | 201 | 681 | 75 | 17 | 5.1 | 20 | 55 |
| 8 | 27 | 30 | 100 | 146 | 464 | 224 | 632 | 72 | 16 | 3.8 | 20 | 55 |
| 9 | 24 | 35 | 113 | 142 | 336 | 292 | 585 | 71 | 17 | 2.6 | 19 | 57 |
| 10 | 26 | 33 | 121 | 136 | 286 | 387 | 536 | 78 | 13 | 2.3 | 20 | 57 |
| 11 | 33 | 33 | 138 | 130 | 249 | 485 | 471 | 81 | 12 | 4.3 | 21 | 57 |
| 12 | 32 | 30 | 146 | 124 | 229 | 539 | 394 | 86 | 12 | 4.7 | 21 | 58 |
| 13 | 32 | 30 | 145 | 119 | 205 | 521 | 336 | 87 | 11 | 3.1 | 21 | 59 |
| 14 | 31 | 31 | 144 | 113 | 190 | 465 | 293 | 82 | 10 | 3.5 | 22 | 58 |
| 15 | 30 | 30 | 146 | 92 | 188 | 406 | 221 | 77 | 9.4 | 3.4 | 22 | 57 |
| 16 | 29 | 87 | 152 | 75 | 191 | 357 | 153 | 79 | 10 | 3.2 | 22 | 57 |
| 17 | 31 | 104 | 159 | 74 | 213 | 315 | 143 | 75 | 11 | 3.5 | 22 | 57 |
| 18 | 30 | 98 | 160 | 74 | 253 | 286 | 142 | 72 | 9.7 | 3.8 | 21 | 57 |
| 19 | 29 | 91 | 158 | 76 | 317 | 267 | 134 | 69 | 9.2 | 13 | 21 | 56 |
| 20 | 30 | 97 | 162 | 105 | 464 | 258 | 125 | 67 | 8.8 | 15 | 21 | 54 |
| 21 | 29 | 109 | 163 | 121 | 664 | 244 | 122 | 65 | 8.7 | 41 | 21 | 54 |
| 22 | 26 | 106 | 163 | 127 | 787 | 231 | 100 | 62 | 8.0 | 17 | 21 | 55 |
| 23 | 25 | 106 | 165 | 128 | 901 | 225 | 84 | 37 | 8.8 | 17 | 22 | 54 |
| 24 | 27 | 104 | 165 | 126 | 933 | 235 | 86 | 9.9 | 6.0 | 16 | 22 | 54 |
| 25 | 30 | 104 | 164 | 123 | 872 | 251 | 83 | 13 | 5.5 | 15 | 22 | 54 |
| 26 | 28 | 103 | 163 | 118 | 757 | 309 | 82 | 12 | 7.6 | 17 | 21 | 53 |
| 27 | 34 | 102 | 163 | 114 | 620 | 475 | 81 | 14 | 5.4 | 18 | 20 | 53 |
| 28 | 36 | 101 | 164 | 110 | 474 | 651 | 84 | 16 | 4.4 | 19 | 21 | 53 |
| 29 | 38 | 100 | 164 | 105 | 339 | 679 | 86 | 18 | 4.3 | 20 | 18 | 53 |
| 30 | 40 | 99 | 163 | 104 | --- | 595 | 85 | 19 | 4.0 | 21 | 16 | 50 |
| 31 | 40 | --- | 163 | 109 | --- | 493 | --- | 20 | --- | 21 | 44 | --- |
| TOTAL | 914 | 2020 | 4233 | 3801 | 12316 | 10813 | 8510 | 1832.9 | 341.8 | 327.2 | 666 | 1674 |
| MEAN | 29.5 | 67.3 | 137 | 123 | 425 | 349 | 284 | 59.1 | 11.4 | 10.6 | 21.5 | 55.8 |
| MAX | 40 | 109 | 165 | 163 | 933 | 679 | 681 | 87 | 21 | 41 | 44 | 60 |
| MIN | 24 | 30 | 78 | 74 | 132 | 201 | 81 | 9.9 | 4.0 | 2.3 | 16 | 50 |
| CAL YR 1987 | TOTAL | 83647.7 | | MEAN | 229 | MAX | 1320 | MIN | 9.7 | | | |
| WTR YR 1988 | TOTAL | 47448.9 | | MEAN | 130 | MAX | 933 | MIN | 2.3 | | | |

MUSKINGUM RIVER BASIN

03131500 BLACK FORK AT LOUDONVILLE, OH

LOCATION.--Lat 40°38'09", long 82°14'22", in NW 1/4 sec. 1, T.19 N., R.16 W., Ashland County, Hydrologic Unit 05040002, on right bank at downstream side of bridge on State Highway 3 at Loudonville, 1.5 mi downstream from Big Run.

DRAINAGE AREA.--349 mi².

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

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

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

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

AVERAGE DISCHARGE.--57 years, 356 ft³/s.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,220 ft³/s Mar. 26, gage height, 8.82 ft; minimum daily, 63 ft³/s July 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|------|------|-------|-------|-------|------|------|------|------|------|
| 1 | 122 | 127 | 184 | 267 | 614 | 414 | 610 | 179 | 90 | 71 | 107 | 114 |
| 2 | 114 | 125 | 190 | 248 | 1290 | 369 | 519 | 172 | 92 | 70 | 93 | 116 |
| 3 | 114 | 125 | 175 | 242 | 561 | 352 | 966 | 168 | 100 | 68 | 83 | 195 |
| 4 | 116 | 124 | 188 | 239 | 566 | 345 | 1500 | 165 | 92 | 66 | 80 | 325 |
| 5 | 112 | 124 | 187 | 245 | 700 | 323 | 928 | 174 | 89 | 64 | 85 | 148 |
| 6 | 112 | 122 | 172 | 273 | 754 | 322 | 930 | 194 | 87 | 64 | 88 | 128 |
| 7 | 114 | 116 | 166 | 239 | 716 | 361 | 1080 | 169 | 88 | 64 | 83 | 119 |
| 8 | 121 | 114 | 181 | 218 | 589 | 528 | 1030 | 162 | 87 | 63 | 79 | 116 |
| 9 | 112 | 124 | 221 | 206 | 492 | 740 | 849 | 161 | 90 | 64 | 79 | 114 |
| 10 | 110 | 136 | 234 | 196 | 412 | 715 | 765 | 254 | 88 | 65 | 80 | 114 |
| 11 | 142 | 122 | 224 | 188 | 355 | 709 | 687 | 371 | 83 | 69 | 103 | 112 |
| 12 | 137 | 119 | 300 | 188 | 350 | 755 | 587 | 218 | 80 | 74 | 87 | 106 |
| 13 | 121 | 115 | 258 | 185 | 309 | 785 | 499 | 186 | 79 | 67 | 153 | 179 |
| 14 | 117 | 114 | 238 | 177 | 288 | 701 | 434 | 173 | 80 | 65 | 94 | 130 |
| 15 | 119 | 115 | 307 | 167 | 404 | 630 | 371 | 163 | 79 | 66 | 85 | 115 |
| 16 | 116 | 126 | 323 | 143 | 419 | 549 | 273 | 175 | 82 | 66 | 82 | 111 |
| 17 | 115 | 187 | 272 | 138 | 366 | 486 | 259 | 165 | 88 | 65 | 80 | 111 |
| 18 | 124 | 186 | 260 | 160 | 480 | 442 | 255 | 157 | 85 | 68 | 81 | 108 |
| 19 | 118 | 177 | 255 | 167 | 607 | 413 | 248 | 157 | 79 | 141 | 94 | 108 |
| 20 | 115 | 170 | 365 | 442 | 1340 | 399 | 234 | 159 | 78 | 100 | 94 | 109 |
| 21 | 114 | 184 | 355 | 264 | 874 | 386 | 232 | 153 | 78 | 459 | 85 | 107 |
| 22 | 113 | 182 | 287 | 221 | 874 | 362 | 218 | 144 | 77 | 131 | 79 | 106 |
| 23 | 111 | 182 | 276 | 209 | 1220 | 355 | 185 | 137 | 77 | 150 | 82 | 107 |
| 24 | 111 | 187 | 270 | 206 | 1120 | 364 | 191 | 100 | 76 | 266 | 135 | 105 |
| 25 | 135 | 187 | 270 | 204 | 983 | 667 | 182 | 93 | 76 | 116 | 82 | 104 |
| 26 | 125 | 215 | 278 | 196 | 848 | 1370 | 179 | 91 | 73 | 130 | 79 | 102 |
| 27 | 124 | 191 | 275 | 190 | 719 | 845 | 178 | 91 | 73 | 117 | 78 | 102 |
| 28 | 162 | 184 | 268 | 188 | 577 | 884 | 186 | 91 | 73 | 98 | 137 | 104 |
| 29 | 131 | 186 | 339 | 182 | 483 | 937 | 207 | 90 | 72 | 94 | 150 | 102 |
| 30 | 129 | 191 | 270 | 194 | --- | 837 | 189 | 91 | 71 | 92 | 120 | 103 |
| 31 | 128 | --- | 261 | 284 | --- | 712 | --- | 90 | --- | 120 | 89 | --- |
| TOTAL | 3754 | 4557 | 7849 | 6666 | 19310 | 18057 | 14971 | 4893 | 2462 | 3213 | 2926 | 3720 |
| MEAN | 121 | 152 | 253 | 215 | 666 | 582 | 499 | 158 | 82.1 | 104 | 94.4 | 124 |
| MAX | 162 | 215 | 365 | 442 | 1340 | 1370 | 1500 | 371 | 100 | 459 | 153 | 325 |
| MIN | 110 | 114 | 166 | 138 | 288 | 322 | 178 | 90 | 71 | 63 | 78 | 102 |
| CAL YR 1987 | TOTAL | 150511 | | MEAN | 412 | MAX | 4920 | MIN | 102 | | | |
| WTR YR 1988 | TOTAL | 92378 | | MEAN | 252 | MAX | 1500 | MIN | 63 | | | |

MUSKINGUM RIVER BASIN

81

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

LOCATION.--Lat 40°37'13", long 82°19'28", in NE 1/4 sec. 7, T.19 N., R.16 W., Ashland County, Hydrologic Unit 05040002, on right bank 0.2 mi downstream from Pleasant Hill Dam, 2.8 mi south of Perrysville, and 4.7 mi upstream from the confluence of Clear Fork and Black Fork.

DRAINAGE AREA.--198 mi².

PERIOD OF RECORD.--October 1938 to current year. Published as Clear Fork near Perrysville prior to 1940. Monthly discharge only for October 1938, published in WSP 1305.

REVISED RECORDS.--WSP 1907: Drainage area.

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

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Pleasant Hill Lake. Water diverted from Clear Fork Reservoir (upstream from Pleasant Hill Lake) for municipal supply of city of Mansfield since 1953; mean pumpage for 1988 water year 15.1 ft³/s returned to Rocky Fork as sewage effluent. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--50 years, 198 ft³/s .

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 710 ft³/s Mar. 28, gage height 2.96 ft; minimum daily, 24 ft³/s Aug. 7,8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|-------|------|------|------|------|------|------|------|------|------|------|
| 1 | 37 | 39 | 148 | 90 | 336 | 90 | 220 | 109 | 41 | 30 | 30 | 26 |
| 2 | 35 | 39 | 158 | 89 | 544 | 99 | 209 | 102 | 40 | 29 | 29 | 26 |
| 3 | 34 | 39 | 163 | 88 | 551 | 151 | 269 | 97 | 40 | 30 | 27 | 26 |
| 4 | 35 | 39 | 163 | 60 | 457 | 152 | 585 | 93 | 38 | 31 | 25 | 34 |
| 5 | 34 | 40 | 163 | 48 | 333 | 151 | 647 | 96 | 37 | 32 | 25 | 38 |
| 6 | 35 | 36 | 163 | 48 | 311 | 150 | 685 | 102 | 36 | 28 | 26 | 32 |
| 7 | 38 | 35 | 162 | 48 | 197 | 150 | 691 | 98 | 36 | 26 | 24 | 27 |
| 8 | 37 | 35 | 161 | 48 | 106 | 112 | 678 | 92 | 34 | 26 | 24 | 27 |
| 9 | 40 | 39 | 161 | 48 | 84 | 117 | 653 | 90 | 34 | 26 | 26 | 27 |
| 10 | 46 | 39 | 151 | 47 | 83 | 283 | 536 | 100 | 34 | 26 | 26 | 26 |
| 11 | 48 | 38 | 116 | 46 | 82 | 282 | 297 | 105 | 34 | 25 | 25 | 25 |
| 12 | 46 | 37 | 88 | 46 | 83 | 261 | 229 | 103 | 32 | 25 | 26 | 28 |
| 13 | 41 | 36 | 88 | 46 | 83 | 265 | 218 | 90 | 35 | 25 | 26 | 34 |
| 14 | 38 | 36 | 96 | 46 | 84 | 255 | 204 | 82 | 35 | 25 | 26 | 34 |
| 15 | 37 | 36 | 141 | 46 | 85 | 237 | 191 | 75 | 33 | 25 | 25 | 31 |
| 16 | 36 | 59 | 118 | 46 | 85 | 221 | 176 | 75 | 32 | 25 | 25 | 29 |
| 17 | 38 | 66 | 91 | 46 | 130 | 202 | 163 | 71 | 33 | 25 | 25 | 29 |
| 18 | 38 | 63 | 75 | 46 | 198 | 180 | 150 | 66 | 31 | 25 | 25 | 29 |
| 19 | 38 | 60 | 75 | 46 | 221 | 169 | 143 | 64 | 30 | 25 | 25 | 28 |
| 20 | 38 | 70 | 74 | 147 | 451 | 167 | 134 | 67 | 39 | 26 | 25 | 29 |
| 21 | 38 | 75 | 98 | 237 | 571 | 159 | 128 | 64 | 36 | 27 | 25 | 28 |
| 22 | 36 | 75 | 120 | 135 | 551 | 145 | 122 | 61 | 33 | 32 | 25 | 27 |
| 23 | 34 | 76 | 90 | 88 | 524 | 140 | 119 | 59 | 31 | 37 | 25 | 26 |
| 24 | 36 | 77 | 66 | 88 | 524 | 142 | 118 | 57 | 31 | 43 | 25 | 25 |
| 25 | 37 | 89 | 61 | 77 | 440 | 186 | 119 | 52 | 32 | 32 | 25 | 25 |
| 26 | 37 | 95 | 61 | 62 | 373 | 476 | 112 | 49 | 32 | 35 | 25 | 27 |
| 27 | 40 | 109 | 61 | 48 | 356 | 501 | 108 | 47 | 32 | 35 | 25 | 30 |
| 28 | 41 | 128 | 81 | 47 | 353 | 624 | 109 | 46 | 32 | 33 | 25 | 30 |
| 29 | 41 | 127 | 123 | 63 | 216 | 680 | 117 | 45 | 32 | 31 | 25 | 30 |
| 30 | 40 | 141 | 122 | 85 | --- | 616 | 116 | 44 | 32 | 30 | 25 | 29 |
| 31 | 39 | --- | 90 | 85 | --- | 376 | --- | 42 | --- | 32 | 25 | --- |
| TOTAL | 1188 | 1873 | 3528 | 2190 | 8412 | 7739 | 8246 | 2343 | 1027 | 902 | 790 | 862 |
| MEAN | 38.3 | 62.4 | 114 | 70.6 | 290 | 250 | 275 | 75.6 | 34.2 | 29.1 | 25.5 | 28.7 |
| MAX | 48 | 141 | 163 | 237 | 571 | 680 | 691 | 109 | 41 | 43 | 30 | 38 |
| MIN | 34 | 35 | 61 | 46 | 82 | 90 | 108 | 42 | 30 | 25 | 24 | 25 |
| CAL YR 1987 | TOTAL | 71905 | MEAN | 197 | MAX | 1950 | MIN | 34 | | | | |
| WTR YR 1988 | TOTAL | 39100 | MEAN | 107 | MAX | 691 | MIN | 24 | | | | |

MUSKINGUM RIVER BASIN

03135000 LAKE FORK BELOW MOHICANVILLE DAM, NEAR MOHICANVILLE, OH

LOCATION.--Lat 40°43'24", long 82°09'18", in sec. 3, T.20 N., R.15 W., Ashland County, Hydrologic Unit 05040001, on right bank 800 ft downstream from Mohicanville Dam, 2 mi east of Mohicanville, and 2.4 mi downstream from the confluence of Jerome and Muddy Forks.

DRAINAGE AREA.--271 mi².

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

REVISED RECORDS.--WSP 1907: Drainage area.

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

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

AVERAGE DISCHARGE.--50 years, 239 ft³/s.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,180 ft³/s Mar. 26, gage height, 8.36 ft; minimum daily, 9.4 ft³/s July 16, 17.

| PROVISIONAL DATA DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988 | | | | | | | | | | | | |
|---|-------------|---------|------|------|-------|-------|-------|------|------|--------|------|------|
| | MEAN VALUES | | | | | | | | | | | |
| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
| 1 | 32 | 35 | 45 | 110 | 767 | 191 | 358 | 99 | 34 | 13 | 47 | 62 |
| 2 | 31 | 34 | 49 | 104 | 1040 | 185 | 319 | 87 | 34 | 13 | 30 | 46 |
| 3 | 29 | 34 | 48 | 90 | 1050 | 204 | 571 | 81 | 40 | 13 | 37 | 113 |
| 4 | 39 | 34 | 56 | 69 | 860 | 202 | 1070 | 77 | 35 | 13 | 35 | 669 |
| 5 | 33 | 33 | 61 | 57 | 606 | 182 | 1060 | 87 | 32 | 12 | 30 | 335 |
| 6 | 30 | 31 | 54 | 54 | 405 | 180 | 925 | 98 | 30 | 12 | 36 | 207 |
| 7 | 32 | 31 | 49 | 40 | 334 | 277 | 896 | 85 | 29 | 11 | 29 | 133 |
| 8 | 36 | 30 | 48 | 40 | 250 | 783 | 801 | 75 | 27 | 11 | 24 | 95 |
| 9 | 33 | 35 | 62 | 42 | 217 | 867 | 540 | 77 | 25 | 10 | 21 | 76 |
| 10 | 33 | 41 | 90 | 39 | 165 | 686 | 406 | 130 | 24 | 9.9 | 22 | 62 |
| 11 | 50 | 35 | 78 | 35 | 141 | 447 | 334 | 142 | 25 | 9.7 | 108 | 50 |
| 12 | 51 | 35 | 84 | 37 | 188 | 362 | 284 | 129 | 24 | 21 | 46 | 46 |
| 13 | 42 | 34 | 86 | 44 | 245 | 386 | 247 | 91 | 22 | 14 | 29 | 216 |
| 14 | 36 | 34 | 69 | 41 | 211 | 327 | 219 | 75 | 22 | 12 | 22 | 160 |
| 15 | 35 | 33 | 132 | 37 | 345 | 279 | 190 | 66 | 22 | 10 | 18 | 92 |
| 16 | 37 | 32 | 256 | 36 | 478 | 256 | 169 | 76 | 22 | 9.4 | 19 | 63 |
| 17 | 36 | 33 | 139 | 40 | 334 | 242 | 152 | 89 | 26 | 9.4 | 20 | 52 |
| 18 | 41 | 36 | 98 | 59 | 514 | 266 | 140 | 73 | 24 | 10 | 19 | 47 |
| 19 | 37 | 35 | 83 | 61 | 622 | 266 | 130 | 69 | 21 | 24 | 401 | 43 |
| 20 | 37 | 34 | 223 | 513 | 1050 | 248 | 119 | 71 | 19 | 46 | 221 | 44 |
| 21 | 38 | 34 | 332 | 281 | 966 | 231 | 121 | 69 | 19 | 152 | 81 | 40 |
| 22 | 36 | 32 | 175 | 136 | 657 | 227 | 115 | 61 | 18 | 227 | 46 | 35 |
| 23 | 35 | 32 | 131 | 101 | 839 | 297 | 110 | 56 | 17 | 84 | 45 | 33 |
| 24 | 38 | 34 | 105 | 84 | 691 | 353 | 110 | 54 | 16 | 187 | 117 | 32 |
| 25 | 60 | 35 | 101 | 73 | 421 | 461 | 100 | 48 | 16 | 128 | 54 | 30 |
| 26 | 76 | 47 | 114 | 61 | 321 | 1100 | 94 | 46 | 14 | 110 | 43 | 28 |
| 27 | 79 | 43 | 113 | 70 | 284 | 1110 | 91 | 45 | 14 | 115 | 34 | 27 |
| 28 | 69 | 40 | 105 | 59 | 227 | 1060 | 94 | 42 | 14 | 59 | 90 | 26 |
| 29 | 49 | 42 | 198 | 58 | 212 | 966 | 115 | 40 | 14 | 40 | 201 | 26 |
| 30 | 43 | 48 | 146 | 100 | --- | 620 | 122 | 38 | 14 | 31 | 208 | 25 |
| 31 | 38 | --- | 120 | 297 | --- | 439 | --- | 36 | --- | 33 | 99 | --- |
| TOTAL | 1291 | 1066 | 3450 | 2868 | 14440 | 13700 | 10002 | 2312 | 693 | 1449.4 | 2232 | 2913 |
| MEAN | 41.6 | 35.5 | 111 | 92.5 | 498 | 442 | 333 | 74.6 | 23.1 | 46.8 | 72.0 | 97.1 |
| MAX | 79 | 48 | 332 | 513 | 1050 | 1110 | 1070 | 142 | 40 | 227 | 401 | 669 |
| MIN | 29 | 30 | 45 | 35 | 141 | 180 | 91 | 36 | 14 | 9.4 | 18 | 25 |
| CAL YR 1987 | TOTAL | 72071 | | MEAN | 197 | MAX | 1110 | MIN | 26 | | | |
| WTR YR 1988 | TOTAL | 56416.4 | | MEAN | 154 | MAX | 1110 | MIN | 9.4 | | | |

MUSKINGUM RIVER BASIN

83

03136500 KOKOSING RIVER AT MOUNT VERNON, OH

LOCATION.--Lat 40°24'20", long 82°30'00", in sec. 2, T.6 N., R.13 W., Knox County, Hydrologic Unit 05040003, on right bank 300 ft downstream from Tilden Avenue Bridge at Mount Vernon, 0.8 mi downstream from North Branch, and 2.7 mi upstream from Dry Creek.

DRAINAGE AREA.--202 mi².

PERIOD OF RECORD.--February 1953 to current year.

REVISED RECORDS.--WSP 2107: Drainage area.

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

REMARKS.--Estimated daily discharges: Jan. 3-19, 26-30. Records good except for periods of estimated record, which are fair. Some regulation by Knox Lake, capacity, 3,750 acre-ft, 8.2 mi upstream on East Branch of North Branch Kokosing River beginning in 1954 and North Branch Kokosing River Lake 10.0 mi upstream on North Branch Kokosing River, beginning in June 1972. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--35 years, (1954-88), 213 ft³/s.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,580, ft³/s Feb. 2, gage height 5.12 ft; minimum daily, 8.6 ft³/s Aug. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|---------|------|------|-------|------|------|------|------|------|-------|------|
| 1 | 31 | 38 | 38 | 81 | 401 | 139 | 193 | 81 | 38 | 19 | 38 | 16 |
| 2 | 32 | 37 | 40 | 70 | 2050 | 134 | 177 | 75 | 38 | 18 | 34 | 14 |
| 3 | 30 | 37 | 40 | 58 | 1510 | 158 | 609 | 73 | 39 | 16 | 31 | 35 |
| 4 | 29 | 37 | 46 | 52 | 888 | 181 | 1540 | 71 | 37 | 16 | 25 | 99 |
| 5 | 29 | 37 | 47 | 47 | 545 | 152 | 847 | 72 | 34 | 16 | 22 | 72 |
| 6 | 29 | 35 | 44 | 43 | 335 | 154 | 523 | 79 | 32 | 18 | 23 | 47 |
| 7 | 32 | 34 | 42 | 38 | 254 | 245 | 498 | 76 | 32 | 17 | 22 | 34 |
| 8 | 33 | 32 | 42 | 35 | 188 | 516 | 531 | 68 | 31 | 16 | 17 | 28 |
| 9 | 33 | 34 | 42 | 34 | 153 | 650 | 392 | 69 | 35 | 15 | 15 | 24 |
| 10 | 33 | 37 | 51 | 32 | 133 | 615 | 304 | 82 | 38 | 12 | 15 | 20 |
| 11 | 38 | 37 | 52 | 31 | 121 | 404 | 251 | 92 | 32 | 18 | 14 | 18 |
| 12 | 39 | 37 | 56 | 30 | 136 | 304 | 214 | 84 | 30 | 17 | 14 | 18 |
| 13 | 37 | 35 | 57 | 29 | 120 | 302 | 186 | 75 | 28 | 14 | 14 | 43 |
| 14 | 37 | 34 | 56 | 28 | 112 | 262 | 166 | 71 | 28 | 16 | 12 | 46 |
| 15 | 36 | 33 | 60 | 28 | 186 | 220 | 148 | 63 | 28 | 15 | 12 | 37 |
| 16 | 34 | 33 | 79 | 27 | 270 | 195 | 135 | 60 | 30 | 13 | 13 | 29 |
| 17 | 34 | 38 | 80 | 27 | 225 | 177 | 126 | 58 | 39 | 10 | 13 | 28 |
| 18 | 33 | 39 | 66 | 27 | 310 | 176 | 121 | 57 | 36 | 11 | 13 | 25 |
| 19 | 33 | 36 | 58 | 29 | 443 | 183 | 116 | 58 | 30 | 63 | 14 | 23 |
| 20 | 35 | 34 | 65 | 207 | 1230 | 179 | 107 | 63 | 27 | 69 | 13 | 24 |
| 21 | 34 | 32 | 118 | 216 | 672 | 169 | 105 | 59 | 26 | 205 | 10 | 23 |
| 22 | 33 | 30 | 103 | 117 | 407 | 157 | 101 | 53 | 26 | 176 | 8.6 | 23 |
| 23 | 33 | 30 | 84 | 91 | 498 | 148 | 99 | 52 | 26 | 123 | 15 | 22 |
| 24 | 31 | 30 | 72 | 74 | 550 | 146 | 92 | 70 | 25 | 95 | 20 | 21 |
| 25 | 31 | 33 | 68 | 62 | 331 | 312 | 88 | 75 | 23 | 66 | 15 | 18 |
| 26 | 33 | 37 | 73 | 49 | 227 | 1390 | 87 | 58 | 20 | 98 | 14 | 15 |
| 27 | 38 | 37 | 79 | 45 | 201 | 855 | 85 | 52 | 19 | 79 | 13 | 15 |
| 28 | 42 | 37 | 82 | 41 | 162 | 495 | 87 | 47 | 19 | 57 | 15 | 15 |
| 29 | 42 | 39 | 122 | 39 | 150 | 357 | 90 | 42 | 21 | 43 | 26 | 14 |
| 30 | 43 | 38 | 113 | 42 | --- | 269 | 89 | 40 | 21 | 39 | 26 | 14 |
| 31 | 41 | --- | 94 | 92 | --- | 219 | --- | 38 | --- | 39 | 22 | --- |
| TOTAL | 1068 | 1057 | 2069 | 1821 | 12808 | 9863 | 8107 | 2013 | 888 | 1429 | 558.6 | 860 |
| MEAN | 34.5 | 35.2 | 66.7 | 58.7 | 442 | 318 | 270 | 64.9 | 29.6 | 46.1 | 18.0 | 28.7 |
| MAX | 43 | 39 | 122 | 216 | 2050 | 1390 | 1540 | 92 | 39 | 205 | 38 | 99 |
| MIN | 29 | 30 | 38 | 27 | 112 | 134 | 85 | 38 | 19 | 10 | 8.6 | 14 |
| CAL YR 1987 | TOTAL | 66611 | | MEAN | 182 | MAX | 4260 | MIN | 27 | | | |
| WTR YR 1988 | TOTAL | 42541.6 | | MEAN | 116 | MAX | 2050 | MIN | 8.6 | | | |

MUSKINGUM RIVER BASIN

03138500 WALHONDING RIVER BELOW MOHAWK DAM, AT NELLIE, OH

LOCATION.--Lat 40°20'29", long 82°03'56", in T.6 N., R.8 W., Coshocton County, Hydrologic Unit 05040003, on right bank at upstream side of bridge on U.S. Highway 36 at Nellie, 0.5 mi upstream from Mohawk Creek, and 1.7 mi downstream from Mohawk Dam.

DRAINAGE AREA.--1,505 mi².

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

REVISED RECORDS.--WSP 1907: Drainage area.

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

REMARKS.--Estimated daily discharges: Jan. 3-19. Records good except those for periods of estimated record, which are fair. Flow regulated beginning 1936 by 5 flood-control reservoirs at points 1.7 mi to 54 mi upstream. Water-quality data collected at this site 1964 to 1977.

AVERAGE DISCHARGE.--67 years, 1,517 ft³/s.

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,140 ft³/s Apr. 4, gage height, 11.20 ft; minimum daily, 158 ft³/s July 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|-------|-------|-------|-------|-------|-------|------|-------|------|-------|
| 1 | 334 | 333 | 535 | 844 | 2100 | 1370 | 2090 | 721 | 336 | 190 | 337 | 305 |
| 2 | 345 | 327 | 536 | 720 | 5460 | 1190 | 1830 | 667 | 333 | 190 | 301 | 290 |
| 3 | 318 | 320 | 567 | 560 | 5840 | 1270 | 1870 | 633 | 338 | 184 | 272 | 320 |
| 4 | 312 | 322 | 566 | 460 | 5850 | 1340 | 5990 | 610 | 342 | 179 | 253 | 1290 |
| 5 | 312 | 319 | 591 | 420 | 6050 | 1240 | 6370 | 619 | 314 | 175 | 252 | 1290 |
| 6 | 307 | 314 | 574 | 380 | 6340 | 1220 | 6030 | 696 | 297 | 169 | 280 | 741 |
| 7 | 323 | 304 | 546 | 360 | 3230 | 1510 | 4390 | 672 | 285 | 168 | 301 | 541 |
| 8 | 339 | 299 | 542 | 350 | 2130 | 2400 | 4500 | 611 | 279 | 164 | 253 | 436 |
| 9 | 338 | 309 | 567 | 330 | 1780 | 3150 | 3730 | 580 | 280 | 162 | 228 | 380 |
| 10 | 325 | 331 | 627 | 320 | 1550 | 3490 | 3120 | 666 | 275 | 161 | 221 | 343 |
| 11 | 360 | 341 | 643 | 310 | 1310 | 2920 | 2600 | 755 | 267 | 163 | 217 | 319 |
| 12 | 417 | 320 | 628 | 300 | 1300 | 2470 | 2130 | 898 | 256 | 165 | 308 | 305 |
| 13 | 371 | 311 | 685 | 290 | 1160 | 2450 | 1870 | 694 | 246 | 180 | 246 | 422 |
| 14 | 330 | 307 | 618 | 290 | 1040 | 2320 | 1660 | 626 | 241 | 173 | 290 | 645 |
| 15 | 314 | 307 | 621 | 280 | 1350 | 2060 | 1490 | 572 | 241 | 172 | 225 | 498 |
| 16 | 310 | 309 | 899 | 280 | 2100 | 1820 | 1300 | 554 | 244 | 166 | 203 | 393 |
| 17 | 306 | 571 | 880 | 270 | 1790 | 1660 | 1170 | 563 | 264 | 158 | 196 | 362 |
| 18 | 307 | 653 | 723 | 270 | 1870 | 1550 | 1100 | 543 | 264 | 172 | 196 | 358 |
| 19 | 315 | 642 | 651 | 270 | 2300 | 1530 | 1040 | 536 | 248 | 312 | 196 | 334 |
| 20 | 305 | 624 | 680 | 1310 | 4960 | 1480 | 964 | 567 | 232 | 445 | 605 | 317 |
| 21 | 301 | 478 | 1120 | 2110 | 4930 | 1410 | 914 | 548 | 229 | 799 | 378 | 306 |
| 22 | 298 | 469 | 1090 | 1600 | 3640 | 1300 | 885 | 510 | 229 | 1110 | 258 | 298 |
| 23 | 294 | 464 | 920 | 911 | 3500 | 1260 | 836 | 485 | 221 | 588 | 226 | 286 |
| 24 | 292 | 468 | 799 | 859 | 4020 | 1350 | 809 | 490 | 213 | 713 | 279 | 281 |
| 25 | 303 | 485 | 718 | 713 | 3120 | 1380 | 780 | 670 | 211 | 678 | 355 | 276 |
| 26 | 339 | 519 | 717 | 643 | 2530 | 4710 | 741 | 493 | 207 | 483 | 260 | 268 |
| 27 | 365 | 538 | 737 | 607 | 2220 | 5140 | 718 | 434 | 196 | 553 | 230 | 261 |
| 28 | 387 | 520 | 736 | 641 | 1930 | 4080 | 713 | 404 | 194 | 424 | 228 | 258 |
| 29 | 402 | 531 | 884 | 736 | 1700 | 3860 | 745 | 382 | 191 | 342 | 405 | 258 |
| 30 | 350 | 543 | 1060 | 832 | --- | 3400 | 764 | 366 | 192 | 302 | 524 | 253 |
| 31 | 341 | --- | 918 | 1080 | --- | 2680 | --- | 351 | --- | 291 | 427 | --- |
| TOTAL | 10260 | 12578 | 22378 | 19346 | 87100 | 69010 | 63149 | 17916 | 7665 | 10131 | 8950 | 12634 |
| MEAN | 331 | 419 | 722 | 624 | 3003 | 2226 | 2105 | 578 | 256 | 327 | 289 | 421 |
| MAX | 417 | 653 | 1120 | 2110 | 6340 | 5140 | 6370 | 898 | 342 | 1110 | 605 | 1290 |
| MIN | 292 | 299 | 535 | 270 | 1040 | 1190 | 713 | 351 | 191 | 158 | 196 | 253 |
| CAL YR 1987 | TOTAL | 500606 | | MEAN | 1372 | MAX | 6880 | MIN | 286 | | | |
| WTR YR 1988 | TOTAL | 341117 | | MEAN | 932 | MAX | 6370 | MIN | 158 | | | |

MUSKINGUM RIVER BASIN

85

03139000 KILLBUCK CREEK AT KILLBUCK, OH

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

DRAINAGE AREA.--464 mi².

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

REVISED RECORDS.--WSP 873: 1935. WSP 1555: 1935. WSP 1907: Drainage area. WRD-OH-70-1: 1969. WRD-OH-77-1: Drainage area. WRD-OH-87-1: 1984-86.

GAGE.--Water-stage recorder. Datum of gage is 788.05 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1949, nonrecording gage and Oct. 1, 1949 to Oct. 5, 1976, water-stage recorder and nonrecording gage, at site 0.9 mi upstream at same datum.

REMARKS.--Estimated daily discharges: Jan. 3-19, 27-30, Feb. 12-14, July 18-22, Sept. 4-6, 13, 14, 17-30. Records fair except those for periods of estimated record which are poor. Water-quality data collected at this site 1962 to 1977. Sediment data collected 1962 to 1969. U.S. Army Corps of Engineers Satellite telemeter at station.

AVERAGE DISCHARGE.--58 years, 417 ft³/s, 12.26 in/yr.

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

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|--------------------------------|------------------|---|------|--------------------------------|------------------|
| Feb. 2 | 2000 | *2,470 | *15.36 | No other discharges above base discharge. | | | |

Minimum daily discharge 36 ft³/s July 17, Aug. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|------|------|-------|-------|-------|------|------|------|------|------|
| 1 | 86 | 95 | 117 | 192 | 574 | 351 | 631 | 211 | 84 | 45 | 71 | 82 |
| 2 | 80 | 93 | 117 | 147 | 2040 | 323 | 548 | 194 | 84 | 46 | 71 | 67 |
| 3 | 80 | 96 | 119 | 130 | 2020 | 322 | 599 | 185 | 94 | 45 | 61 | 86 |
| 4 | 82 | 92 | 125 | 110 | 1680 | 331 | 1320 | 176 | 91 | 40 | 61 | 700 |
| 5 | 86 | 89 | 140 | 96 | 1430 | 305 | 1360 | 182 | 87 | 38 | 64 | 520 |
| 6 | 73 | 83 | 134 | 88 | 1100 | 307 | 1330 | 211 | 81 | 37 | 76 | 390 |
| 7 | 80 | 80 | 120 | 82 | 813 | 375 | 1260 | 196 | 77 | 40 | 60 | 247 |
| 8 | 99 | 78 | 114 | 78 | 652 | 652 | 1140 | 172 | 72 | 40 | 52 | 182 |
| 9 | 89 | 87 | 111 | 72 | 490 | 868 | 912 | 162 | 72 | 39 | 48 | 139 |
| 10 | 87 | 107 | 118 | 70 | 414 | 891 | 722 | 206 | 70 | 38 | 46 | 112 |
| 11 | 106 | 96 | 147 | 68 | 347 | 771 | 608 | 208 | 72 | 38 | 44 | 94 |
| 12 | 131 | 90 | 156 | 66 | 320 | 683 | 525 | 204 | 75 | 40 | 48 | 86 |
| 13 | 120 | 90 | 158 | 64 | 300 | 689 | 464 | 183 | 71 | 43 | 45 | 110 |
| 14 | 96 | 102 | 144 | 64 | 280 | 619 | 414 | 170 | 70 | 42 | 40 | 170 |
| 15 | 87 | 106 | 157 | 62 | 526 | 548 | 364 | 154 | 68 | 40 | 37 | 127 |
| 16 | 81 | 96 | 232 | 60 | 590 | 492 | 328 | 145 | 71 | 38 | 36 | 103 |
| 17 | 79 | 96 | 263 | 60 | 531 | 451 | 302 | 145 | 79 | 36 | 44 | 94 |
| 18 | 80 | 83 | 202 | 58 | 535 | 435 | 286 | 136 | 75 | 52 | 42 | 88 |
| 19 | 85 | 92 | 172 | 58 | 598 | 433 | 276 | 149 | 71 | 192 | 62 | 84 |
| 20 | 82 | 104 | 203 | 630 | 1210 | 416 | 254 | 202 | 62 | 131 | 148 | 78 |
| 21 | 81 | 104 | 330 | 432 | 1060 | 388 | 243 | 159 | 61 | 313 | 82 | 74 |
| 22 | 80 | 90 | 314 | 328 | 918 | 367 | 234 | 137 | 65 | 342 | 58 | 72 |
| 23 | 80 | 84 | 241 | 243 | 931 | 360 | 223 | 125 | 66 | 382 | 54 | 70 |
| 24 | 83 | 83 | 209 | 197 | 867 | 381 | 216 | 152 | 59 | 229 | 99 | 66 |
| 25 | 89 | 89 | 200 | 162 | 712 | 434 | 205 | 177 | 59 | 163 | 88 | 64 |
| 26 | 110 | 122 | 192 | 137 | 581 | 1120 | 203 | 136 | 59 | 157 | 63 | 60 |
| 27 | 112 | 135 | 177 | 130 | 510 | 1120 | 196 | 124 | 56 | 117 | 57 | 58 |
| 28 | 117 | 124 | 167 | 120 | 434 | 1160 | 197 | 110 | 52 | 92 | 55 | 56 |
| 29 | 121 | 123 | 207 | 110 | 386 | 1170 | 214 | 101 | 47 | 77 | 163 | 56 |
| 30 | 106 | 117 | 213 | 110 | --- | 1030 | 228 | 94 | 47 | 73 | 146 | 54 |
| 31 | 101 | --- | 196 | 215 | --- | 795 | --- | 87 | --- | 78 | 111 | --- |
| TOTAL | 2869 | 2926 | 5495 | 4439 | 22849 | 18587 | 15802 | 4993 | 2097 | 3083 | 2132 | 4189 |
| MEAN | 92.5 | 97.5 | 177 | 143 | 788 | 600 | 527 | 161 | 69.9 | 99.5 | 68.8 | 140 |
| MAX | 131 | 135 | 330 | 630 | 2040 | 1170 | 1360 | 211 | 94 | 382 | 163 | 700 |
| MIN | 73 | 78 | 111 | 58 | 280 | 305 | 196 | 87 | 47 | 36 | 36 | 54 |
| CFSM | .20 | .21 | .38 | .31 | 1.70 | 1.29 | 1.14 | .35 | .15 | .21 | .15 | .30 |
| IN. | .23 | .23 | .44 | .36 | 1.83 | 1.49 | 1.27 | .40 | .17 | .25 | .17 | .34 |
| CAL YR 1987 | TOTAL | 114040 | MEAN | 312 | MAX | 3190 | MIN | 57 | CFSM | .67 | IN. | 9.14 |
| WTR YR 1988 | TOTAL | 89461 | MEAN | 244 | MAX | 2040 | MIN | 36 | CFSM | .53 | IN. | 7.17 |

MUSKINGUM RIVER BASIN

03140000 MILL CREEK NEAR COSHOCTON, OH

LOCATION.--Lat 40°21'46", long 81°51'45", Coshocton County, Hydrologic Unit 05040003, on left bank 0.5 mi downstream from Little Mill Creek and 6 mi north of Coshocton.

DRAINAGE AREA.--27.2 mi².

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

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

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

REMARKS.--Estimated daily discharges: Jan. 3-19, 24-30, Feb. 6-8, 11-15. Records fair. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--52 years, 28.5 ft³/s, 14.23 in/yr.

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

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|--|------|-----------------------------------|---------------------|
| Feb. 2 | 0545 | *2,150 | *11.72 | No other peak greater than base discharge. | | | |

Minimum daily discharge 0.16 ft³/s July 14-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|---------|-------|-------|------|------|-------|-------|-------|--------|-------|--------|------|
| 1 | 2.8 | 2.3 | 6.8 | 22 | 199 | 21 | 23 | 7.2 | 2.1 | .25 | 2.2 | .71 | |
| 2 | 2.5 | 2.3 | 7.3 | 15 | 799 | 21 | 21 | 6.7 | 2.3 | .26 | 2.1 | .45 | |
| 3 | 2.4 | 2.3 | 7.0 | 12 | 185 | 24 | 89 | 6.5 | 3.0 | .27 | 2.6 | 1.3 | |
| 4 | 2.7 | 2.3 | 11 | 9.6 | 194 | 27 | 179 | 6.1 | 2.3 | .27 | 1.6 | 52 | |
| 5 | 2.3 | 2.2 | 12 | 8.0 | 101 | 22 | 74 | 8.9 | 2.0 | .25 | 1.3 | 6.6 | |
| 6 | 2.3 | 2.1 | 8.5 | 7.2 | 70 | 30 | 56 | 8.8 | 1.9 | .23 | 2.4 | 3.6 | |
| 7 | 10 | 2.0 | 7.4 | 6.6 | 50 | 56 | 56 | 6.4 | 1.6 | .21 | 2.2 | 2.3 | |
| 8 | 5.4 | 2.1 | 7.4 | 6.0 | 40 | 72 | 47 | 5.6 | 1.4 | .19 | 1.4 | 1.8 | |
| 9 | 3.4 | 2.5 | 9.4 | 5.6 | 29 | 67 | 39 | 5.8 | 1.7 | .18 | 1.1 | 1.4 | |
| 10 | 3.1 | 3.0 | 10 | 5.2 | 25 | 53 | 35 | 5.9 | 1.7 | .18 | .90 | 1.3 | |
| 11 | 8.7 | 2.3 | 9.0 | 5.0 | 22 | 41 | 32 | 5.0 | 1.3 | .20 | .75 | 1.1 | |
| 12 | 6.4 | 2.1 | 12 | 4.8 | 19 | 38 | 28 | 4.5 | 1.3 | .17 | .64 | 1.0 | |
| 13 | 4.3 | 2.1 | 9.6 | 4.6 | 16 | 43 | 25 | 4.4 | 1.2 | .17 | .52 | 19 | |
| 14 | 3.6 | 2.1 | 8.1 | 4.5 | 15 | 36 | 23 | 4.1 | 1.1 | .16 | .46 | 5.3 | |
| 15 | 3.3 | 2.1 | 21 | 4.4 | 14 | 32 | 20 | 4.0 | 1.0 | .16 | .39 | 3.0 | |
| 16 | 3.2 | 2.1 | 18 | 4.3 | 54 | 29 | 19 | 5.0 | 1.2 | .16 | .31 | 2.1 | |
| 17 | 3.0 | 2.2 | 14 | 4.2 | 43 | 26 | 17 | 4.3 | 2.9 | .16 | .31 | 3.6 | |
| 18 | 3.1 | 2.7 | 11 | 4.1 | 40 | 26 | 17 | 3.9 | 1.5 | .34 | .30 | 3.0 | |
| 19 | 2.9 | 2.4 | 11 | 4.0 | 65 | 25 | 15 | 9.8 | 1.2 | .36 | .30 | 2.3 | |
| 20 | 2.7 | 2.2 | 37 | 144 | 137 | 24 | 14 | 12 | 1.0 | 13 | .36 | 3.5 | |
| 21 | 2.4 | 2.1 | 26 | 34 | 62 | 21 | 13 | 6.2 | .85 | 105 | .35 | 3.5 | |
| 22 | 2.2 | 2.0 | 20 | 21 | 46 | 19 | 12 | 5.0 | .72 | 12 | .33 | 2.1 | |
| 23 | 2.2 | 1.9 | 18 | 17 | 54 | 19 | 12 | 5.0 | .58 | 7.9 | .39 | 1.8 | |
| 24 | 2.2 | 2.2 | 15 | 14 | 43 | 18 | 11 | 7.3 | .48 | 5.0 | 1.5 | 1.6 | |
| 25 | 2.4 | 2.5 | 16 | 12 | 35 | 23 | 9.7 | 6.4 | .43 | 3.5 | 1.2 | 1.5 | |
| 26 | 2.7 | 7.9 | 20 | 10 | 30 | 60 | 9.1 | 4.2 | .38 | 3.1 | .92 | 1.3 | |
| 27 | 2.8 | 4.9 | 17 | 9.6 | 30 | 41 | 8.7 | 3.7 | .34 | 2.7 | .58 | 1.2 | |
| 28 | 3.9 | 4.5 | 31 | 8.8 | 25 | 34 | 9.0 | 3.3 | .31 | 2.0 | .50 | 1.1 | |
| 29 | 2.9 | 9.8 | 38 | 8.4 | 24 | 31 | 9.1 | 3.1 | .31 | 1.7 | 2.6 | 1.0 | |
| 30 | 2.5 | 9.2 | 23 | 8.0 | --- | 28 | 8.0 | 2.9 | .29 | 1.5 | 3.4 | .94 | |
| 31 | 2.3 | --- | 24 | 19 | --- | 24 | --- | 2.6 | --- | 2.4 | 1.3 | --- | |
| TOTAL | 106.6 | 92.4 | 485.5 | 442.9 | 2466 | 1031 | 930.6 | 174.6 | 38.39 | 199.61 | 35.21 | 131.40 | |
| MEAN | 3.44 | 3.08 | 15.7 | 14.3 | 85.0 | 33.3 | 31.0 | 5.63 | 1.28 | 6.44 | 1.14 | 4.38 | |
| MAX | 10 | 9.8 | 38 | 144 | 799 | 72 | 179 | 12 | 3.0 | 105 | 3.4 | 52 | |
| MIN | 2.2 | 1.9 | 6.8 | 4.0 | 14 | 18 | 8.0 | 2.6 | .29 | .16 | .30 | .45 | |
| CFSM | .13 | .11 | .58 | .53 | 3.12 | 1.22 | 1.14 | .21 | .05 | .24 | .04 | .16 | |
| IN. | .15 | .13 | .66 | .61 | 3.37 | 1.41 | 1.27 | .24 | .05 | .27 | .05 | .18 | |
| CAL YR 1987 | TOTAL | 6621.3 | | MEAN | 18.1 | MAX | 415 | MIN | 1.1 | CFSM | .67 | IN. | 9.06 |
| WTR YR 1988 | TOTAL | 6134.21 | | MEAN | 16.8 | MAX | 799 | MIN | .16 | CFSM | .62 | IN. | 8.39 |

MUSKINGUM RIVER BASIN

03140500 MUSKINGUM RIVER NEAR COSHOCTON, OH

LOCATION.--Lat 40°14'54", long 81°52'23", in T.5 N., R.6 W., Coshocton County, Hydrologic Unit 05040004, on right bank at upstream side of highway bridge, 1 mi southwest of Coshocton, and 2 mi downstream from confluence of Tuscarawas and Walhonding Rivers.

DRAINAGE AREA.--4,859 mi².

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

REVISED RECORDS.--WSP 1907: Drainage area.

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

REMARKS.--Estimated daily discharges: Jan. 5-19, Sept. 28, 29. Records good except for period of estimated record which are fair. Flow regulated by 13 flood-control reservoirs at points 19 mi to 88 mi upstream. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--52 years, 4,949 ft³/s.

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,800 ft³/s Feb. 4, gage height, 15.21 ft; minimum daily, 510 ft³/s July 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|---------|-------|-------|--------|--------|--------|-------|-------|-------|-------|-------|
| 1 | 1200 | 1070 | 2440 | 3130 | 4330 | 4260 | 5860 | 2590 | 1290 | 610 | 1000 | 1360 |
| 2 | 1280 | 1030 | 2410 | 2670 | 17300 | 4080 | 5260 | 2380 | 1250 | 604 | 1000 | 1090 |
| 3 | 1200 | 1010 | 2340 | 2340 | 21300 | 4060 | 5200 | 2240 | 1250 | 599 | 949 | 964 |
| 4 | 1120 | 1080 | 2330 | 2250 | 21600 | 4320 | 11000 | 2130 | 1260 | 587 | 1090 | 1780 |
| 5 | 1070 | 1150 | 2490 | 1300 | 20800 | 4370 | 15200 | 2150 | 1220 | 566 | 949 | 3990 |
| 6 | 1030 | 1130 | 2580 | 1200 | 19300 | 4510 | 15700 | 2290 | 1160 | 550 | 922 | 4740 |
| 7 | 1200 | 1120 | 2450 | 1100 | 14600 | 5320 | 12100 | 2440 | 1100 | 549 | 938 | 3920 |
| 8 | 1570 | 1120 | 2310 | 1100 | 10800 | 6670 | 10800 | 2310 | 1050 | 543 | 886 | 2700 |
| 9 | 1660 | 1140 | 2340 | 1000 | 8790 | 8400 | 9200 | 2160 | 1060 | 528 | 815 | 1950 |
| 10 | 1460 | 1160 | 2420 | 1000 | 7710 | 8950 | 7670 | 2100 | 1020 | 522 | 762 | 1600 |
| 11 | 1400 | 1200 | 2550 | 980 | 6140 | 8230 | 6650 | 2430 | 992 | 528 | 727 | 1340 |
| 12 | 1480 | 1190 | 2550 | 960 | 5630 | 6970 | 5830 | 2590 | 959 | 525 | 744 | 1190 |
| 13 | 1530 | 1170 | 2430 | 940 | 5260 | 6540 | 5280 | 2370 | 924 | 528 | 751 | 1400 |
| 14 | 1400 | 1180 | 2300 | 920 | 4500 | 6490 | 4790 | 2170 | 882 | 538 | 733 | 1780 |
| 15 | 1270 | 1180 | 2240 | 900 | 5220 | 6080 | 4500 | 2070 | 854 | 540 | 706 | 1870 |
| 16 | 1250 | 1170 | 2450 | 880 | 6910 | 5510 | 4090 | 1940 | 853 | 527 | 630 | 1600 |
| 17 | 1270 | 1330 | 2790 | 880 | 7090 | 5100 | 3770 | 1930 | 896 | 510 | 616 | 1410 |
| 18 | 1280 | 1900 | 2520 | 860 | 6480 | 4810 | 3580 | 1960 | 927 | 520 | 654 | 1290 |
| 19 | 1260 | 2150 | 2190 | 860 | 6670 | 4800 | 3420 | 1910 | 879 | 728 | 618 | 1160 |
| 20 | 1240 | 2170 | 2250 | 4020 | 10000 | 4780 | 3250 | 2100 | 843 | 1300 | 836 | 1080 |
| 21 | 1220 | 2060 | 3030 | 6070 | 12200 | 4630 | 3080 | 2040 | 795 | 2030 | 1310 | 1030 |
| 22 | 1120 | 2000 | 4010 | 6220 | 10200 | 4410 | 2960 | 1920 | 779 | 2740 | 1070 | 1030 |
| 23 | 1050 | 1990 | 3680 | 4580 | 8590 | 4240 | 2860 | 1800 | 754 | 2890 | 876 | 983 |
| 24 | 1030 | 1970 | 3210 | 3490 | 9310 | 4280 | 2740 | 1810 | 728 | 2540 | 791 | 945 |
| 25 | 1030 | 1840 | 2920 | 3050 | 8370 | 4530 | 2670 | 2130 | 703 | 2370 | 957 | 915 |
| 26 | 1060 | 1930 | 2710 | 2780 | 6800 | 7720 | 2530 | 2280 | 679 | 1860 | 1040 | 883 |
| 27 | 1130 | 2090 | 2740 | 2530 | 5880 | 11100 | 2420 | 1960 | 654 | 1850 | 894 | 844 |
| 28 | 1150 | 2090 | 2900 | 2370 | 5220 | 10600 | 2350 | 1720 | 635 | 1580 | 789 | 825 |
| 29 | 1220 | 2050 | 3320 | 2270 | 4690 | 9370 | 2370 | 1570 | 622 | 1260 | 883 | 800 |
| 30 | 1160 | 2230 | 3760 | 2260 | --- | 8050 | 2580 | 1460 | 619 | 1100 | 1280 | 791 |
| 31 | 1110 | --- | 3610 | 2500 | --- | 6830 | --- | 1370 | --- | 1030 | 1580 | --- |
| TOTAL | 38450 | 45900 | 84270 | 67410 | 281690 | 190010 | 169710 | 64320 | 27637 | 33152 | 27796 | 47260 |
| MEAN | 1240 | 1530 | 2718 | 2175 | 9713 | 6129 | 5657 | 2075 | 921 | 1069 | 897 | 1575 |
| MAX | 1660 | 2230 | 4010 | 6220 | 21600 | 11100 | 15700 | 2590 | 1290 | 2890 | 1580 | 4740 |
| MIN | 1030 | 1010 | 2190 | 860 | 4330 | 4060 | 2350 | 1370 | 619 | 510 | 616 | 791 |
| CAL YR 1987 | TOTAL | 1354132 | | MEAN | 3710 | MAX | 22400 | MIN | 894 | | | |
| WTR YR 1988 | TOTAL | 1077605 | | MEAN | 2944 | MAX | 21600 | MIN | 510 | | | |

MUSKINGUM RIVER BASIN

03141500 SENECA FORK BELOW SENECAVILLE DAM, NEAR SENECAVILLE, OH

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

DRAINAGE AREA.--118 mi².

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

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

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

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Senecaville Lake. Water is diverted from Senecaville Lake for U.S. Fish Hatchery; figures for diversion after 1982 unavailable, diversion not included in figures of daily discharge. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--50 years, 130 ft³/s.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 833 ft³/s Feb. 8, gage height, 8.74 ft; minimum daily, 1.8 ft³/s, Sept. 15.

REVISIONS.--Revised figures of discharges for the water year 1987, superceding those published in the report for 1987 are given below.

| | | | |
|----------------|----------------|----------------|----------------|
| Nov. 10....113 | Nov. 16....312 | Nov. 22....351 | Nov. 28....161 |
| 11....135 | 17....310 | 23....346 | 29....220 |
| 12....153 | 18....307 | 24....372 | 30....220 |
| 13....211 | 19....305 | 25....392 | |
| 14....273 | 20....305 | 26....325 | |
| 15....318 | 21....338 | 27....6.1 | |
| TOTAL | | | |
| MEAN | | | |
| MAX | | | |
| MIN | | | |
| November 1986 | 5739.1 | 191 | 392 |
| Cal Yr 1986 | 39340.53 | 108 | 833 |
| Wtr Yr 1987 | 35569.70 | 97.5 | 833 |

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|---------|--------|--------|--------|--------|--------|--------|-------|--------|------|------|
| 1 | 4.5 | 4.3 | 263 | 227 | 101 | 118 | 117 | 6.2 | 4.9 | 4.2 | 2.8 | 2.5 |
| 2 | 5.0 | 136 | 104 | 227 | 113 | 176 | 3.8 | 6.2 | 5.1 | 4.0 | 2.7 | 2.6 |
| 3 | 5.0 | 217 | 18 | 225 | 17 | 157 | 3.6 | 66 | 4.9 | 4.0 | 2.4 | 2.6 |
| 4 | 5.0 | 189 | 88 | 224 | 9.3 | 49 | 58 | 93 | 4.4 | 3.8 | 2.3 | 2.8 |
| 5 | 5.2 | 169 | 127 | 146 | 188 | 6.1 | 227 | 94 | 3.9 | 3.6 | 2.2 | 2.8 |
| 6 | 5.4 | 169 | 127 | 41 | 696 | 5.9 | 509 | 55 | 4.4 | 4.5 | 2.2 | 2.8 |
| 7 | 6.2 | 167 | 50 | 6.3 | 779 | 5.5 | 593 | 4.4 | 4.2 | 4.4 | 2.4 | 2.7 |
| 8 | 5.6 | 167 | 4.2 | 5.3 | 829 | 4.7 | 403 | 4.6 | 4.4 | 3.3 | 2.4 | 2.8 |
| 9 | 5.6 | 167 | 4.2 | 5.0 | 633 | 4.5 | 135 | 65 | 5.2 | 2.2 | 2.3 | 2.6 |
| 10 | 5.6 | 190 | 4.5 | 4.9 | 160 | 146 | 135 | 152 | 4.3 | 2.1 | 2.2 | 2.6 |
| 11 | 5.2 | 218 | 4.6 | 4.9 | 119 | 193 | 324 | 140 | 3.8 | 2.4 | 2.2 | 2.6 |
| 12 | 4.5 | 221 | 4.5 | 4.9 | 110 | 92 | 287 | 54 | 3.6 | 2.4 | 2.2 | 2.5 |
| 13 | 4.5 | 223 | 4.6 | 60 | 60 | 92 | 215 | 5.3 | 4.5 | 2.7 | 2.2 | 2.4 |
| 14 | 4.6 | 222 | 53 | 59 | 59 | 296 | 107 | 5.0 | 4.5 | 2.2 | 2.3 | 2.3 |
| 15 | 4.6 | 222 | 85 | 36 | 59 | 439 | 3.7 | 4.9 | 4.6 | 2.2 | 2.5 | 1.8 |
| 16 | 4.6 | 234 | 54 | 4.4 | 137 | 186 | 4.2 | 5.0 | 4.8 | 2.5 | 2.5 | 2.2 |
| 17 | 4.8 | 243 | 54 | 4.4 | 229 | 4.2 | 4.1 | 5.1 | 4.8 | 2.5 | 2.5 | 2.5 |
| 18 | 5.1 | 242 | 54 | 4.4 | 251 | 4.6 | 5.8 | 5.0 | 4.7 | 2.2 | 2.5 | 2.6 |
| 19 | 5.3 | 256 | 54 | 56 | 109 | 5.0 | 4.2 | 5.1 | 4.7 | 2.2 | 2.6 | 2.9 |
| 20 | 5.3 | 262 | 54 | 55 | 4.9 | 5.6 | 4.1 | 5.1 | 4.6 | 2.6 | 2.6 | 3.2 |
| 21 | 5.3 | 259 | 50 | 110 | 4.9 | 250 | 4.0 | 4.8 | 4.5 | 36 | 2.6 | 3.2 |
| 22 | 5.3 | 258 | 47 | 288 | 41 | 394 | 4.2 | 3.6 | 4.9 | 180 | 2.6 | 3.5 |
| 23 | 5.1 | 256 | 46 | 312 | 199 | 210 | 4.1 | 57 | 4.1 | 225 | 2.6 | 3.7 |
| 24 | 4.9 | 255 | 46 | 310 | 251 | 4.5 | 4.1 | 93 | 4.3 | 224 | 2.6 | 2.5 |
| 25 | 4.1 | 254 | 46 | 413 | 132 | 4.9 | 60 | 56 | 4.6 | 222 | 2.6 | 2.6 |
| 26 | 3.7 | 253 | 45 | 472 | 4.2 | 4.9 | 93 | 4.3 | 4.2 | 77 | 2.6 | 2.5 |
| 27 | 3.6 | 251 | 45 | 357 | 4.2 | 5.1 | 93 | 4.9 | 4.1 | 3.0 | 2.5 | 2.6 |
| 28 | 3.6 | 250 | 97 | 72 | 4.2 | 252 | 93 | 4.9 | 4.1 | 2.9 | 2.5 | 2.6 |
| 29 | 3.6 | 249 | 166 | 6.9 | 4.2 | 494 | 56 | 4.3 | 4.0 | 2.8 | 2.6 | 2.6 |
| 30 | 3.7 | 320 | 211 | 6.9 | --- | 550 | 6.0 | 4.0 | 4.1 | 2.8 | 2.6 | 2.6 |
| 31 | 3.8 | --- | 228 | 6.9 | --- | 298 | --- | 5.1 | --- | 2.8 | 2.6 | --- |
| TOTAL | 148.3 | 6523.3 | 2238.6 | 3755.2 | 5307.9 | 4457.5 | 3560.9 | 1022.8 | 133.2 | 1038.3 | 76.4 | 80.2 |
| MEAN | 4.78 | 217 | 72.2 | 121 | 183 | 144 | 119 | 33.0 | 4.44 | 33.5 | 2.46 | 2.67 |
| MAX | 6.2 | 320 | 263 | 472 | 829 | 550 | 593 | 152 | 5.2 | 225 | 2.8 | 3.7 |
| MIN | 3.6 | 4.3 | 4.2 | 4.4 | 4.2 | 4.2 | 3.6 | 3.6 | 3.6 | 2.1 | 2.2 | 1.8 |
| CAL YR 1987 | TOTAL | 25212.1 | | MEAN | 69.1 | MAX | 673 | MIN | 2.8 | | | |
| WTR YR 1988 | TOTAL | 28342.6 | | MEAN | 77.4 | MAX | 829 | MIN | 1.8 | | | |

MUSKINGUM RIVER BASIN

89

03142000 WILLS CREEK AT CAMBRIDGE, OH

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

DRAINAGE AREA.--406 mi².

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

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

GAGE.--Water-stage recorder. Datum of gage is 772.34 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 6, 1927, nonrecording gage at site 1.5 mi downstream at different datum. Oct. 6, 1927, to Sept. 30, 1928, and May 22, 1937, to Oct. 18, 1938, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Jan. 4-11, 14-16, 25-30. Records fair except for periods of estimated daily discharges which are poor. Flow regulated by Senecaville Lake on Seneca Fork, 22 mi upstream, beginning in 1937. Water is diverted 2.7 mi upstream from station for municipal supply of city of Cambridge; diversion not included in figures of daily discharge. Water-quality data collected at this site 1964 to 1975, 1977.

AVERAGE DISCHARGE.--53 years, 443 ft³/s (unadjusted).

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,210 ft³/s Apr. 4, gage height, 16.55 ft; minimum daily 2.4 ft³/s July 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|----------|------|------|-------|-------|-------|------|-------|--------|-------|-------|
| 1 | 56 | 37 | 447 | 482 | 292 | 149 | 497 | 101 | 45 | 4.6 | 23 | 32 |
| 2 | 36 | 32 | 331 | 472 | 1880 | 216 | 332 | 80 | 37 | 3.3 | 19 | 21 |
| 3 | 23 | 155 | 198 | 387 | 3530 | 371 | 238 | 75 | 29 | 3.0 | 15 | 20 |
| 4 | 17 | 269 | 147 | 290 | 4170 | 1320 | 1090 | 106 | 35 | 2.7 | 13 | 70 |
| 5 | 17 | 236 | 352 | 170 | 3820 | 2230 | 1580 | 209 | 35 | 2.7 | 12 | 259 |
| 6 | 27 | 214 | 291 | 100 | 3570 | 2320 | 1080 | 258 | 28 | 5.3 | 18 | 98 |
| 7 | 60 | 210 | 230 | 60 | 3570 | 1660 | 936 | 216 | 26 | 7.6 | 21 | 47 |
| 8 | 121 | 212 | 140 | 50 | 1900 | 689 | 967 | 112 | 20 | 6.9 | 19 | 27 |
| 9 | 67 | 215 | 73 | 46 | 951 | 474 | 662 | 94 | 42 | 4.7 | 15 | 20 |
| 10 | 39 | 214 | 70 | 46 | 759 | 434 | 425 | 214 | 74 | 3.2 | 12 | 18 |
| 11 | 32 | 241 | 73 | 46 | 391 | 490 | 382 | 378 | 48 | 4.0 | 11 | 15 |
| 12 | 28 | 278 | 70 | 46 | 401 | 471 | 539 | 305 | 31 | 2.7 | 11 | 15 |
| 13 | 28 | 279 | 70 | 57 | 354 | 511 | 447 | 188 | 18 | 2.6 | 9.8 | 31 |
| 14 | 23 | 275 | 61 | 75 | 289 | 610 | 386 | 100 | 17 | 2.8 | 8.2 | 35 |
| 15 | 18 | 273 | 102 | 85 | 357 | 664 | 277 | 95 | 18 | 3.6 | 8.3 | 33 |
| 16 | 18 | 269 | 192 | 60 | 466 | 724 | 152 | 80 | 13 | 3.6 | 8.2 | 19 |
| 17 | 18 | 286 | 157 | 50 | 428 | 464 | 128 | 68 | 11 | 2.6 | 8.8 | 12 |
| 18 | 20 | 297 | 124 | 77 | 494 | 283 | 146 | 55 | 9.2 | 2.4 | 10 | 12 |
| 19 | 17 | 302 | 113 | 217 | 509 | 306 | 208 | 61 | 8.1 | 5.7 | 13 | 14 |
| 20 | 20 | 310 | 190 | 1160 | 541 | 327 | 188 | 82 | 7.6 | 88 | 34 | 15 |
| 21 | 23 | 307 | 405 | 1870 | 479 | 298 | 130 | 87 | 7.6 | 1100 | 23 | 14 |
| 22 | 24 | 302 | 273 | 1040 | 292 | 511 | 116 | 68 | 11 | 1120 | 15 | 14 |
| 23 | 35 | 300 | 190 | 658 | 287 | 610 | 110 | 79 | 11 | 445 | 16 | 11 |
| 24 | 36 | 299 | 172 | 575 | 483 | 406 | 115 | 299 | 11 | 401 | 39 | 15 |
| 25 | 37 | 302 | 169 | 430 | 490 | 232 | 114 | 307 | 5.6 | 306 | 66 | 15 |
| 26 | 33 | 302 | 494 | 300 | 333 | 465 | 131 | 196 | 4.2 | 261 | 33 | 13 |
| 27 | 37 | 306 | 705 | 200 | 194 | 628 | 182 | 87 | 3.5 | 109 | 19 | 14 |
| 28 | 41 | 318 | 402 | 150 | 178 | 409 | 180 | 59 | 3.5 | 23 | 14 | 13 |
| 29 | 47 | 368 | 699 | 120 | 160 | 556 | 189 | 48 | 4.5 | 16 | 70 | 7.6 |
| 30 | 37 | 451 | 586 | 110 | --- | 736 | 182 | 41 | 4.9 | 16 | 120 | 7.5 |
| 31 | 31 | --- | 438 | 151 | --- | 683 | --- | 45 | --- | 19 | 64 | --- |
| TOTAL | 1066 | 7859 | 7964 | 9580 | 31568 | 20247 | 12109 | 4193 | 618.7 | 3978.0 | 768.3 | 937.1 |
| MEAN | 34.4 | 262 | 257 | 309 | 1089 | 653 | 404 | 135 | 20.6 | 128 | 24.8 | 31.2 |
| MAX | 121 | 451 | 705 | 1870 | 4170 | 2320 | 1580 | 378 | 74 | 1120 | 120 | 259 |
| MIN | 17 | 32 | 61 | 46 | 160 | 149 | 110 | 41 | 3.5 | 2.4 | 8.2 | 7.5 |
| CAL YR 1987 | TOTAL | 88777.6 | | MEAN | 243 | MAX | 3100 | MIN | 6.8 | | | |
| WTR YR 1988 | TOTAL | 100888.1 | | MEAN | 276 | MAX | 4170 | MIN | 2.4 | | | |

MUSKINGUM RIVER BASIN

03142290 SALT FORK LAKE NEAR CAMBRIDGE.

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

DRAINAGE AREA.--159 mi².

PERIOD OF RECORD. September 1968 to current year.

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

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

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

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

EXTREMES FOR CURRENT YEAR: Maximum contents, 58,430 acre-ft Feb. 4, elevation, 804.91 ft; minimum, 42,040 acre-ft Aug. 22, 23, 27-29, elevation, 800.03 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DATE | Elevation (feet) | Contents (acre-feet) | Change in contents (acre-feet) |
|-------------------|---------------------|-------------------------|-----------------------------------|
| Sept. 30..... | 800.52 | 43,560 | -- |
| Oct. 31..... | 800.49 | 43,470 | -90 |
| Nov. 30..... | 800.66 | 44,000 | +530 |
| Dec. 31..... | 801.76 | 47,480 | +3,480 |
| CAL YR 1987 | -- | -- | +1,050 |
| Jan. 31..... | 801.65 | 47,130 | -350 |
| Feb. 29..... | 801.66 | 47,160 | +30 |
| Mar. 31..... | 801.87 | 47,830 | +670 |
| Apr. 30..... | 801.07 | 45,270 | -2,560 |
| May 31..... | 800.94 | 44,860 | -410 |
| June 30..... | 800.27 | 42,790 | -2,070 |
| July 31..... | 800.28 | 42,820 | +30 |
| Aug. 31..... | 800.26 | 42,760 | -60 |
| Sept. 30..... | 800.24 | 42,690 | -70 |
| WTR YR 1988..... | -- | -- | -870 |

MUSKINGUM RIVER BASIN

91

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

LOCATION.--Lat 40°09'34", long 81°50'51", in sec. 22, T.4 N., R.6 W., Coshocton County, Hydrologic Unit 05040005, on left bank 1,200 ft downstream from Wills Creek Dam, 1.3 mi southeast of town of Wills Creek, 2.7 mi southeast of Conesville, and 6.2 mi upstream from mouth.

DRAINAGE AREA.--842 mi².

PERIOD OF RECORD.--October 1938 to current year. Prior to October 1939, published as Wills Creek at Wills Creek.

REVISED RECORDS.--WSP 1907: Drainage area.

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

REMARKS.--Estimated daily discharges: Jan. 8-16, 27-31. Records good except for estimated period, which is fair. Flow regulated by Senecaville Lake on Seneca Fork, 80 mi upstream, Salt Fork Reservoir 43 mi upstream, and Wills Creek Lake, 0.2 mi upstream (see station 03142290). Water-quality data collected at this site 1957, 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--50 years, 923 ft³/s.

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,200 ft³/s Feb. 9, gage height, 15.11 ft; minimum daily, 20 ft³/s July 17, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|-------|-------|-------|-------|-------|------|------|------|------|------|
| 1 | 100 | 81 | 444 | 855 | 537 | 527 | 1050 | 343 | 171 | 31 | 129 | 169 |
| 2 | 113 | 79 | 497 | 777 | 1480 | 487 | 932 | 329 | 155 | 28 | 94 | 154 |
| 3 | 123 | 75 | 501 | 751 | 2810 | 500 | 846 | 292 | 148 | 27 | 97 | 138 |
| 4 | 121 | 71 | 444 | 688 | 2520 | 805 | 1050 | 258 | 139 | 26 | 84 | 201 |
| 5 | 111 | 89 | 379 | 618 | 2800 | 1590 | 1550 | 256 | 128 | 26 | 71 | 202 |
| 6 | 101 | 168 | 352 | 497 | 3460 | 2370 | 2130 | 286 | 119 | 25 | 82 | 211 |
| 7 | 111 | 225 | 399 | 442 | 4410 | 2830 | 2030 | 334 | 112 | 24 | 85 | 243 |
| 8 | 128 | 238 | 394 | 360 | 5030 | 2810 | 1730 | 371 | 108 | 24 | 75 | 215 |
| 9 | 146 | 243 | 356 | 310 | 5070 | 2170 | 1540 | 361 | 130 | 24 | 68 | 162 |
| 10 | 178 | 243 | 311 | 270 | 4980 | 1530 | 1340 | 362 | 132 | 23 | 66 | 119 |
| 11 | 189 | 242 | 259 | 240 | 4360 | 1210 | 1050 | 357 | 129 | 24 | 60 | 91 |
| 12 | 172 | 242 | 229 | 220 | 2100 | 1090 | 882 | 404 | 132 | 26 | 54 | 78 |
| 13 | 152 | 254 | 219 | 200 | 1220 | 1080 | 849 | 476 | 132 | 24 | 48 | 139 |
| 14 | 135 | 277 | 208 | 180 | 991 | 1100 | 852 | 468 | 121 | 23 | 43 | 145 |
| 15 | 123 | 290 | 193 | 170 | 921 | 1150 | 770 | 395 | 106 | 23 | 38 | 131 |
| 16 | 114 | 296 | 194 | 160 | 998 | 1120 | 683 | 331 | 96 | 21 | 35 | 120 |
| 17 | 106 | 299 | 205 | 196 | 1030 | 1130 | 572 | 289 | 91 | 20 | 32 | 110 |
| 18 | 100 | 299 | 240 | 219 | 1010 | 1030 | 493 | 255 | 82 | 20 | 30 | 98 |
| 19 | 94 | 309 | 257 | 226 | 1010 | 847 | 447 | 238 | 74 | 31 | 30 | 86 |
| 20 | 88 | 319 | 267 | 530 | 1210 | 757 | 428 | 231 | 67 | 63 | 37 | 74 |
| 21 | 84 | 325 | 292 | 1210 | 1360 | 744 | 443 | 221 | 62 | 112 | 39 | 66 |
| 22 | 88 | 332 | 360 | 1940 | 1210 | 714 | 426 | 218 | 56 | 290 | 35 | 61 |
| 23 | 99 | 332 | 458 | 1930 | 1020 | 729 | 386 | 225 | 53 | 872 | 40 | 58 |
| 24 | 93 | 332 | 440 | 1390 | 906 | 863 | 361 | 238 | 47 | 857 | 52 | 55 |
| 25 | 89 | 329 | 387 | 1070 | 899 | 862 | 343 | 259 | 43 | 548 | 51 | 53 |
| 26 | 84 | 337 | 398 | 941 | 896 | 820 | 326 | 351 | 43 | 445 | 50 | 50 |
| 27 | 84 | 341 | 506 | 680 | 825 | 950 | 310 | 403 | 40 | 322 | 57 | 48 |
| 28 | 84 | 350 | 836 | 560 | 683 | 1120 | 316 | 362 | 39 | 260 | 65 | 49 |
| 29 | 83 | 364 | 928 | 470 | 584 | 1030 | 333 | 294 | 37 | 252 | 90 | 47 |
| 30 | 82 | 388 | 914 | 410 | --- | 941 | 342 | 238 | 34 | 242 | 128 | 46 |
| 31 | 81 | --- | 957 | 370 | --- | 1010 | --- | 199 | --- | 204 | 152 | --- |
| TOTAL | 3456 | 7769 | 12824 | 18880 | 56330 | 35916 | 24810 | 9644 | 2826 | 4937 | 2017 | 3419 |
| MEAN | 111 | 259 | 414 | 609 | 1942 | 1159 | 827 | 311 | 94.2 | 159 | 65.1 | 114 |
| MAX | 189 | 388 | 957 | 1940 | 5070 | 2830 | 2130 | 476 | 171 | 872 | 152 | 243 |
| MIN | 81 | 71 | 193 | 160 | 537 | 487 | 310 | 199 | 34 | 20 | 30 | 46 |
| CAL YR 1987 | TOTAL | 196354 | | MEAN | 538 | MAX | 4980 | MIN | 51 | | | |
| WTR YR 1988 | TOTAL | 182828 | | MEAN | 500 | MAX | 5070 | MIN | 20 | | | |

MUSKINGUM RIVER BASIN

03144000 WAKATOMIKA CREEK NEAR FRAZEYSBURG, OH

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

DRAINAGE AREA.--140 mi².

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

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

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

REMARKS.--Estimated daily discharges: Jan. 1-19, 24-31, Feb. 6-19. Records good except for estimated daily discharges, which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1970 to 1974. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--52 years, 152 ft³/s, 14.74 in/yr.

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

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---|------|-----------------------------------|---------------------|--|------|-----------------------------------|---------------------|
| Feb. 2 | 1930 | *4,960 | *9.34 | No other peak greater than base discharge. | | | |
| Minimum discharge, 3.3 ft ³ /s July 17-20. | | | | | | | |

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|---------|------|------|-------|------|------|------|-------|-------|-------|--------|
| 1 | 8.8 | 24 | 24 | 60 | 398 | 84 | 109 | 48 | 21 | 4.9 | 16 | 6.5 |
| 2 | 9.3 | 23 | 23 | 50 | 2990 | 80 | 105 | 46 | 19 | 4.9 | 12 | 5.2 |
| 3 | 11 | 22 | 22 | 44 | 1330 | 106 | 208 | 45 | 23 | 4.8 | 8.9 | 9.3 |
| 4 | 11 | 23 | 28 | 36 | 856 | 198 | 818 | 45 | 20 | 4.6 | 7.3 | 337 |
| 5 | 9.2 | 23 | 34 | 33 | 514 | 190 | 454 | 59 | 17 | 4.6 | 6.6 | 103 |
| 6 | 8.7 | 21 | 29 | 30 | 380 | 272 | 316 | 70 | 16 | 4.3 | 19 | 47 |
| 7 | 9.8 | 20 | 24 | 27 | 300 | 374 | 351 | 58 | 14 | 4.4 | 22 | 30 |
| 8 | 17 | 25 | 21 | 25 | 220 | 327 | 377 | 50 | 13 | 4.0 | 12 | 22 |
| 9 | 15 | 18 | 21 | 24 | 170 | 292 | 276 | 50 | 37 | 3.7 | 12 | 16 |
| 10 | 13 | 20 | 24 | 23 | 140 | 267 | 222 | 62 | 21 | 3.6 | 7.2 | 13 |
| 11 | 12 | 20 | 25 | 21 | 120 | 194 | 183 | 60 | 15 | 3.7 | 6.3 | 11 |
| 12 | 19 | 19 | 28 | 21 | 100 | 167 | 153 | 54 | 13 | 3.7 | 5.9 | 9.4 |
| 13 | 19 | 19 | 31 | 20 | 94 | 192 | 129 | 49 | 11 | 4.1 | 5.5 | 89 |
| 14 | 14 | 17 | 27 | 19 | 86 | 159 | 114 | 47 | 11 | 3.8 | 5.2 | 69 |
| 15 | 11 | 17 | 28 | 19 | 140 | 135 | 100 | 43 | 9.6 | 3.7 | 4.8 | 40 |
| 16 | 11 | 17 | 34 | 19 | 180 | 118 | 89 | 42 | 10 | 3.5 | 4.3 | 28 |
| 17 | 11 | 17 | 30 | 18 | 160 | 107 | 82 | 39 | 16 | 3.3 | 4.0 | 28 |
| 18 | 12 | 18 | 27 | 18 | 150 | 104 | 80 | 36 | 12 | 3.3 | 3.7 | 33 |
| 19 | 12 | 19 | 23 | 18 | 180 | 106 | 74 | 36 | 10 | 3.3 | 4.3 | 26 |
| 20 | 12 | 18 | 39 | 447 | 646 | 102 | 67 | 58 | 9.1 | 32 | 29 | 25 |
| 21 | 13 | 18 | 59 | 165 | 348 | 92 | 64 | 49 | 7.9 | 193 | 19 | 24 |
| 22 | 14 | 16 | 38 | 87 | 246 | 85 | 61 | 40 | 7.5 | 69 | 7.2 | 18 |
| 23 | 13 | 16 | 28 | 68 | 231 | 83 | 60 | 40 | 6.9 | 31 | 6.4 | 17 |
| 24 | 14 | 16 | 23 | 54 | 204 | 80 | 64 | 100 | 6.4 | 36 | 13 | 14 |
| 25 | 25 | 20 | 23 | 50 | 146 | 88 | 57 | 63 | 6.1 | 21 | 8.9 | 13 |
| 26 | 18 | 24 | 46 | 43 | 119 | 391 | 54 | 48 | 5.7 | 20 | 6.4 | 11 |
| 27 | 23 | 30 | 55 | 37 | 118 | 279 | 53 | 40 | 5.3 | 25 | 5.3 | 10 |
| 28 | 31 | 26 | 49 | 34 | 99 | 202 | 54 | 35 | 5.0 | 15 | 5.0 | 9.2 |
| 29 | 32 | 23 | 98 | 32 | 92 | 167 | 55 | 31 | 5.1 | 11 | 8.7 | 8.9 |
| 30 | 28 | 25 | 74 | 30 | --- | 143 | 52 | 27 | 5.0 | 9.2 | 17 | 8.6 |
| 31 | 25 | --- | 75 | 43 | --- | 117 | --- | 25 | --- | 11 | 9.2 | --- |
| TOTAL | 481.8 | 614 | 1110 | 1615 | 10757 | 5301 | 4881 | 1495 | 378.6 | 549.4 | 302.1 | 1081.1 |
| MEAN | 15.5 | 20.5 | 35.8 | 52.1 | 371 | 171 | 163 | 48.2 | 12.6 | 17.7 | 9.75 | 36.0 |
| MAX | 32 | 30 | 98 | 447 | 2990 | 391 | 818 | 100 | 37 | 193 | 29 | 337 |
| MIN | 8.7 | 16 | 21 | 18 | 86 | 80 | 52 | 25 | 5.0 | 3.3 | 3.7 | 5.2 |
| CFSM | .11 | .15 | .26 | .37 | 2.65 | 1.22 | 1.16 | .34 | .09 | .13 | .07 | .26 |
| IN. | .13 | .16 | .29 | .43 | 2.86 | 1.41 | 1.30 | .40 | .10 | .15 | .08 | .29 |
| CAL YR 1987 | TOTAL | 36961.8 | MEAN | 101 | MAX | 1960 | MIN | 7.5 | CFSM | .72 | IN. | 9.82 |
| WTR YR 1988 | TOTAL | 28566.0 | MEAN | 78.0 | MAX | 2990 | MIN | 3.3 | CFSM | .56 | IN. | 7.59 |

MUSKINGUM RIVER BASIN

93

03145000 SOUTH FORK LICKING RIVER NEAR HEBRON, OH

LOCATION.--Lat 39°59'19", long 82°28'30", in NW 1/4 sec. 3, T.1 N., R.12 W., Licking County, Hydrologic Unit 05040006, on right bank at upstream side of bridge on county road, 800 ft downstream from Beaver Run, 2.3 mi north of Hebron, and 2.5 mi upstream from Ramp Creek.

DRAINAGE AREA.--133 mi².

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

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

GAGE.--Water-stage recorder. Datum of gage is 856.08 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 13, 1974 nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Nov. 22-Dec. 14, Sept. 1-30. Records good except for periods of estimated discharges which are fair. Occasional regulation by Buckeye Lake, capacity, 27,300 acre-ft, on unnamed tributary 5.6 mi upstream from station. Occasional diversion from Buckeye Lake into Jonathan Creek which bypasses station. Water-quality data collected at this site 1969 to 1977.

AVERAGE DISCHARGE.--29 years, 151 ft³/s.

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,980 ft³/s Feb. 2, gage height 9.79 ft; minimum daily, 2.1 ft³/s Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|---------|--------|------|-------|------|------|------|-------|--------|-------|------|
| 1 | 4.5 | 7.7 | 160 | 41 | 543 | 263 | 69 | 23 | 14 | 4.0 | 11 | 30 |
| 2 | 3.2 | 6.0 | 150 | 35 | 1740 | 67 | 76 | 21 | 13 | 4.0 | 11 | 28 |
| 3 | 2.1 | 5.5 | 38 | 30 | 1800 | 154 | 236 | 20 | 13 | 4.1 | 11 | 200 |
| 4 | 2.3 | 6.9 | 24 | 23 | 1220 | 661 | 925 | 20 | 12 | 4.0 | 8.0 | 500 |
| 5 | 5.6 | 7.9 | 20 | 32 | 622 | 503 | 370 | 23 | 10 | 4.4 | 8.9 | 260 |
| 6 | 4.9 | 5.6 | 18 | 24 | 364 | 423 | 211 | 33 | 12 | 4.3 | 21 | 110 |
| 7 | 7.9 | 4.8 | 16 | 23 | 338 | 290 | 330 | 38 | 14 | 4.6 | 16 | 62 |
| 8 | 6.7 | 4.8 | 15 | 23 | 149 | 207 | 425 | 26 | 13 | 4.3 | 14 | 37 |
| 9 | 4.0 | 6.0 | 20 | 23 | 109 | 176 | 211 | 26 | 11 | 4.1 | 11 | 27 |
| 10 | 5.7 | 6.6 | 29 | 22 | 75 | 174 | 147 | 39 | 8.7 | 4.1 | 8.4 | 22 |
| 11 | 8.6 | 7.8 | 40 | 22 | 67 | 131 | 116 | 40 | 7.9 | 4.7 | 7.5 | 35 |
| 12 | 5.7 | 8.8 | 60 | 22 | 110 | 109 | 95 | 28 | 7.8 | 3.7 | 6.7 | 56 |
| 13 | 6.7 | 7.9 | 45 | 19 | 137 | 129 | 77 | 25 | 7.5 | 4.8 | 5.9 | 90 |
| 14 | 7.3 | 5.8 | 19 | 16 | 117 | 122 | 66 | 22 | 7.2 | 4.7 | 5.8 | 64 |
| 15 | 4.5 | 4.9 | 14 | 16 | 190 | 98 | 57 | 21 | 7.2 | 4.0 | 5.7 | 47 |
| 16 | 3.7 | 6.8 | 11 | 15 | 226 | 83 | 52 | 19 | 6.9 | 4.3 | 5.6 | 34 |
| 17 | 2.9 | 134 | 9.6 | 15 | 132 | 98 | 48 | 16 | 6.9 | 4.3 | 5.6 | 32 |
| 18 | 2.9 | 147 | 9.5 | 16 | 156 | 216 | 46 | 15 | 6.4 | 7.3 | 5.6 | 27 |
| 19 | 2.9 | 144 | 9.7 | 50 | 337 | 230 | 42 | 17 | 6.3 | 12 | 7.9 | 26 |
| 20 | 4.5 | 151 | 17 | 638 | 932 | 227 | 36 | 18 | 6.7 | 61 | 7.2 | 24 |
| 21 | 5.4 | 165 | 19 | 279 | 469 | 216 | 34 | 17 | 6.5 | 424 | 43 | 23 |
| 22 | 4.3 | 150 | 19 | 116 | 329 | 213 | 31 | 19 | 6.5 | 284 | 24 | 22 |
| 23 | 4.8 | 160 | 16 | 73 | 332 | 168 | 31 | 23 | 6.7 | 310 | 31 | 22 |
| 24 | 5.2 | 172 | 13 | 57 | 373 | 72 | 30 | 54 | 6.7 | 299 | 83 | 21 |
| 25 | 5.9 | 180 | 18 | 45 | 376 | 77 | 27 | 41 | 6.8 | 146 | 42 | 21 |
| 26 | 8.6 | 176 | 58 | 55 | 342 | 378 | 25 | 26 | 6.7 | 81 | 19 | 22 |
| 27 | 11 | 170 | 76 | 47 | 341 | 230 | 24 | 19 | 6.3 | 77 | 12 | 20 |
| 28 | 12 | 175 | 67 | 36 | 328 | 146 | 23 | 16 | 5.7 | 36 | 9.9 | 19 |
| 29 | 10 | 188 | 182 | 32 | 319 | 117 | 23 | 15 | 5.0 | 20 | 15 | 19 |
| 30 | 8.8 | 175 | 150 | 33 | --- | 95 | 23 | 15 | 4.4 | 14 | 27 | 19 |
| 31 | 13 | --- | 120 | 53 | --- | 77 | --- | 16 | --- | 13 | 31 | --- |
| TOTAL | 185.6 | 2390.8 | 1462.8 | 1931 | 12573 | 6150 | 3906 | 751 | 252.8 | 1856.7 | 520.7 | 1919 |
| MEAN | 5.99 | 79.7 | 47.2 | 62.3 | 434 | 198 | 130 | 24.2 | 8.43 | 59.9 | 16.8 | 64.0 |
| MAX | 13 | 188 | 182 | 638 | 1800 | 661 | 925 | 54 | 14 | 424 | 83 | 500 |
| MIN | 2.1 | 4.8 | 9.5 | 15 | 67 | 67 | 23 | 15 | 4.4 | 3.7 | 5.6 | 19 |
| CAL YR 1987 | TOTAL | 24405.4 | | MEAN | 66.9 | MAX | 1400 | MIN | 2.1 | | | |
| WTR YR 1988 | TOTAL | 33899.4 | | MEAN | 92.6 | MAX | 1800 | MIN | 2.1 | | | |

MUSKINGUM RIVER BASIN

03146500 LICKING RIVER NEAR NEWARK, OH

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

DRAINAGE AREA.--537 mi².

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

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

GAGE.--Water-stage recorder. Datum of gage is 779.02 ft above National Geodetic Vertical Datum of 1929. Prior to May 9, 1940, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records fair. Occasional regulation by Buckeye Lake, capacity, 27,300 acre-ft, on South Fork 15.2 mi upstream. Water-quality data collected at this site 1962 to 1980. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--49 years, 593 ft³/s.

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

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---|------|-----------------------------------|---------------------|---|------|-----------------------------------|---------------------|
| Feb. 2 | 2300 | *14,300 | *13.20 | No other peaks greater than base discharge. | | | |
| Minimum daily discharge, 46 ft ³ /s July 14. | | | | | | | |

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|------|------|-------|-------|-------|------|------|------|------|------|
| 1 | 61 | 61 | 194 | 173 | 1960 | 639 | 413 | 162 | 97 | 58 | 111 | 70 |
| 2 | 59 | 58 | 187 | 124 | 10800 | 399 | 403 | 155 | 105 | 58 | 100 | 66 |
| 3 | 58 | 56 | 101 | 119 | 7330 | 590 | 1030 | 154 | 102 | 53 | 95 | 274 |
| 4 | 55 | 56 | 91 | 109 | 4380 | 1870 | 5100 | 149 | 92 | 52 | 90 | 3100 |
| 5 | 53 | 57 | 79 | 83 | 2660 | 1450 | 2160 | 174 | 88 | 51 | 97 | 1310 |
| 6 | 64 | 57 | 71 | 88 | 1530 | 1560 | 1200 | 212 | 85 | 53 | 132 | 457 |
| 7 | 91 | 52 | 68 | 77 | 1210 | 1710 | 1510 | 217 | 85 | 56 | 126 | 258 |
| 8 | 74 | 54 | 66 | 73 | 881 | 1340 | 1830 | 178 | 83 | 57 | 98 | 178 |
| 9 | 65 | 57 | 106 | 72 | 674 | 1100 | 1010 | 172 | 124 | 53 | 89 | 144 |
| 10 | 62 | 57 | 135 | 67 | 595 | 1080 | 727 | 193 | 89 | 51 | 79 | 121 |
| 11 | 89 | 57 | 142 | 67 | 534 | 796 | 583 | 192 | 80 | 57 | 75 | 109 |
| 12 | 68 | 57 | 154 | 67 | 736 | 656 | 493 | 164 | 76 | 49 | 72 | 150 |
| 13 | 68 | 56 | 139 | 69 | 677 | 700 | 420 | 162 | 74 | 47 | 72 | 416 |
| 14 | 66 | 55 | 96 | 67 | 570 | 650 | 379 | 151 | 73 | 46 | 70 | 338 |
| 15 | 68 | 50 | 84 | 66 | 1120 | 540 | 340 | 140 | 72 | 47 | 66 | 197 |
| 16 | 59 | 53 | 72 | 64 | 1400 | 468 | 309 | 135 | 72 | 47 | 65 | 144 |
| 17 | 62 | 126 | 72 | 72 | 859 | 440 | 286 | 126 | 76 | 47 | 63 | 129 |
| 18 | 57 | 172 | 67 | 89 | 872 | 572 | 276 | 121 | 72 | 52 | 61 | 124 |
| 19 | 52 | 164 | 66 | 175 | 1320 | 650 | 263 | 144 | 67 | 109 | 65 | 127 |
| 20 | 59 | 163 | 99 | 2110 | 3770 | 648 | 242 | 146 | 66 | 171 | 112 | 126 |
| 21 | 56 | 183 | 99 | 950 | 1850 | 594 | 233 | 136 | 66 | 1870 | 91 | 112 |
| 22 | 57 | 189 | 106 | 360 | 1170 | 551 | 221 | 126 | 65 | 1020 | 83 | 106 |
| 23 | 56 | 191 | 97 | 240 | 1100 | 507 | 214 | 146 | 64 | 1340 | 100 | 100 |
| 24 | 58 | 193 | 87 | 195 | 1270 | 392 | 212 | 179 | 62 | 909 | 116 | 95 |
| 25 | 61 | 206 | 97 | 169 | 1030 | 435 | 194 | 170 | 61 | 406 | 89 | 91 |
| 26 | 53 | 204 | 154 | 139 | 845 | 2280 | 186 | 140 | 59 | 336 | 72 | 89 |
| 27 | 69 | 200 | 192 | 134 | 807 | 1340 | 179 | 124 | 57 | 271 | 65 | 89 |
| 28 | 70 | 197 | 188 | 117 | 731 | 852 | 181 | 112 | 59 | 175 | 64 | 85 |
| 29 | 63 | 215 | 290 | 112 | 694 | 662 | 177 | 106 | 59 | 130 | 98 | 86 |
| 30 | 62 | 199 | 282 | 122 | --- | 551 | 173 | 99 | 58 | 108 | 78 | 84 |
| 31 | 60 | --- | 234 | 175 | --- | 454 | --- | 99 | --- | 115 | 82 | --- |
| TOTAL | 1955 | 3495 | 3915 | 6544 | 53375 | 26476 | 20944 | 4684 | 2288 | 7894 | 2676 | 8775 |
| MEAN | 63.1 | 117 | 126 | 211 | 1841 | 854 | 698 | 151 | 76.3 | 255 | 86.3 | 293 |
| MAX | 91 | 215 | 290 | 2110 | 10800 | 2280 | 5100 | 217 | 124 | 1870 | 132 | 3100 |
| MIN | 52 | 50 | 66 | 64 | 534 | 392 | 173 | 99 | 57 | 46 | 61 | 66 |
| CAL YR 1987 | TOTAL | 153002 | | MEAN | 419 | MAX | 6990 | MIN | 50 | | | |
| WTR YR 1988 | TOTAL | 143021 | | MEAN | 391 | MAX | 10800 | MIN | 46 | | | |

MUSKINGUM RIVER BASIN

95

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

LOCATION.--Lat 39°59'18", long 82°04'50", in T.1 N., R.8 W., Muskingum County, Hydrologic Unit 05040006, on left bank 500 ft downstream from Dillon Dam, 2.0 mi northwest of Dillon Falls, and 5.8 mi upstream from mouth.

DRAINAGE AREA.--742 mi².

PERIOD OF RECORD.--October 1939 to current year. Prior to October 1962, published as Licking River at Dillon.

REVISED RECORDS.--WSP 2107: Drainage area.

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

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

AVERAGE DISCHARGE.--21 years (water years 1940-60), 760 ft³/s; 28 years (water years 1961-88), 858 ft³/s.

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,700 ft³/s Feb. 5, gage height, 9.62 ft; minimum daily, 58 ft³/s July 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|------|------|-------|-------|-------|------|------|------|------|-------|
| 1 | 104 | 108 | 318 | 294 | 595 | 775 | 230 | 274 | 106 | 82 | 246 | 88 |
| 2 | 105 | 108 | 182 | 255 | 1130 | 595 | 100 | 229 | 91 | 82 | 186 | 88 |
| 3 | 103 | 108 | 206 | 195 | 1550 | 594 | 114 | 217 | 90 | 83 | 88 | 91 |
| 4 | 103 | 108 | 192 | 159 | 2090 | 1530 | 2330 | 242 | 89 | 82 | 88 | 1560 |
| 5 | 103 | 105 | 166 | 131 | 3690 | 2060 | 4050 | 336 | 88 | 83 | 88 | 2630 |
| 6 | 104 | 107 | 142 | 100 | 4440 | 2030 | 3450 | 423 | 88 | 75 | 88 | 954 |
| 7 | 105 | 108 | 107 | 90 | 4450 | 2020 | 1900 | 363 | 110 | 63 | 87 | 285 |
| 8 | 103 | 108 | 106 | 104 | 4430 | 1670 | 1820 | 283 | 121 | 60 | 213 | 317 |
| 9 | 105 | 107 | 107 | 111 | 4380 | 1420 | 1060 | 280 | 168 | 58 | 276 | 296 |
| 10 | 106 | 121 | 107 | 110 | 4410 | 1270 | 1060 | 402 | 172 | 60 | 158 | 175 |
| 11 | 106 | 130 | 147 | 109 | 4370 | 1080 | 1430 | 341 | 141 | 60 | 80 | 145 |
| 12 | 106 | 143 | 181 | 110 | 2580 | 832 | 1200 | 266 | 140 | 59 | 80 | 147 |
| 13 | 106 | 175 | 250 | 106 | 648 | 832 | 785 | 229 | 121 | 60 | 81 | 663 |
| 14 | 106 | 184 | 198 | 108 | 644 | 924 | 679 | 181 | 91 | 60 | 81 | 487 |
| 15 | 107 | 182 | 168 | 108 | 650 | 807 | 547 | 178 | 83 | 59 | 80 | 260 |
| 16 | 108 | 166 | 135 | 108 | 1520 | 611 | 509 | 351 | 77 | 59 | 81 | 313 |
| 17 | 108 | 158 | 107 | 108 | 1790 | 535 | 439 | 284 | 79 | 58 | 81 | 279 |
| 18 | 110 | 210 | 108 | 107 | 987 | 717 | 274 | 186 | 80 | 59 | 81 | 204 |
| 19 | 110 | 262 | 107 | 207 | 988 | 633 | 273 | 186 | 80 | 70 | 82 | 172 |
| 20 | 110 | 293 | 108 | 1520 | 1060 | 630 | 361 | 262 | 87 | 69 | 81 | 172 |
| 21 | 109 | 337 | 198 | 1930 | 1940 | 945 | 499 | 239 | 91 | 721 | 81 | 170 |
| 22 | 108 | 322 | 201 | 919 | 3420 | 680 | 326 | 226 | 85 | 1640 | 81 | 172 |
| 23 | 108 | 244 | 124 | 269 | 2620 | 631 | 195 | 182 | 83 | 686 | 175 | 171 |
| 24 | 107 | 251 | 138 | 264 | 1940 | 558 | 230 | 354 | 84 | 859 | 221 | 172 |
| 25 | 108 | 284 | 138 | 459 | 1280 | 418 | 469 | 279 | 84 | 713 | 219 | 171 |
| 26 | 108 | 282 | 140 | 344 | 855 | 421 | 366 | 207 | 82 | 528 | 171 | 114 |
| 27 | 108 | 282 | 178 | 221 | 709 | 1930 | 263 | 188 | 83 | 470 | 95 | 77 |
| 28 | 108 | 282 | 406 | 191 | 765 | 2210 | 266 | 161 | 83 | 276 | 88 | 76 |
| 29 | 108 | 281 | 400 | 191 | 953 | 1260 | 381 | 161 | 83 | 172 | 89 | 77 |
| 30 | 108 | 464 | 534 | 169 | --- | 765 | 272 | 163 | 83 | 83 | 88 | 104 |
| 31 | 108 | --- | 447 | 171 | --- | 520 | --- | 153 | --- | 86 | 87 | --- |
| TOTAL | 3306 | 6020 | 6046 | 9268 | 60884 | 31903 | 25878 | 7826 | 2943 | 7575 | 3721 | 10630 |
| MEAN | 107 | 201 | 195 | 299 | 2099 | 1029 | 863 | 252 | 98.1 | 244 | 120 | 354 |
| MAX | 110 | 464 | 534 | 1930 | 4450 | 2210 | 4050 | 423 | 172 | 1640 | 276 | 2630 |
| MIN | 103 | 105 | 106 | 90 | 595 | 418 | 100 | 153 | 77 | 58 | 80 | 76 |
| CAL YR 1987 | TOTAL | 182935 | | MEAN | 501 | MAX | 4530 | MIN | 83 | | | |
| WTR YR 1988 | TOTAL | 176000 | | MEAN | 481 | MAX | 4450 | MIN | 58 | | | |

MUSKINGUM RIVER BASIN

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH

(National stream quality accounting network station)

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

DRAINAGE AREA.--7,422 mi².

WATER-DISCHARGE RECORDS

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

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

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

REMARKS.--Estimated daily discharges: Nov. 5-10. Records good except for period of estimated record which are fair. Flow regulated by 17 flood-control reservoirs 36.6 mi to 148 mi upstream from station. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--67 years, 7,584 ft³/s.

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 31,600 ft³/s Feb. 4, gage height, 9.42 ft; minimum daily, 567 ft³/s July 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|---------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 1 | 1450 | 1420 | 3280 | 5620 | 5070 | 7310 | 9610 | 3720 | 1980 | 782 | 1480 | 1900 |
| 2 | 1530 | 1340 | 3340 | 4800 | 22000 | 6530 | 8350 | 3670 | 1940 | 748 | 1540 | 1650 |
| 3 | 1640 | 1300 | 3390 | 4190 | 28700 | 6750 | 7750 | 3370 | 1960 | 756 | 1300 | 1410 |
| 4 | 1590 | 1250 | 3500 | 3610 | 30400 | 13000 | 13700 | 3160 | 1840 | 762 | 1170 | 2310 |
| 5 | 1490 | 1440 | 3410 | 2780 | 28400 | 12600 | 20700 | 3460 | 1810 | 767 | 1240 | 6720 |
| 6 | 1450 | 1500 | 3410 | 2450 | 27400 | 12000 | 22500 | 3960 | 1750 | 754 | 1360 | 7370 |
| 7 | 1550 | 1580 | 3370 | 2120 | 26100 | 12500 | 21000 | 3830 | 1670 | 732 | 1470 | 5110 |
| 8 | 1640 | 1620 | 3260 | 2170 | 23200 | 13200 | 18200 | 3710 | 1650 | 704 | 1290 | 3800 |
| 9 | 1900 | 1630 | 3140 | 2460 | 20800 | 14100 | 15700 | 3500 | 1880 | 648 | 1360 | 2900 |
| 10 | 2070 | 1650 | 3040 | 2310 | 19300 | 14400 | 13700 | 3740 | 1850 | 602 | 1260 | 2270 |
| 11 | 1980 | 1660 | 3140 | 2130 | 18100 | 13600 | 12100 | 3760 | 1660 | 648 | 1000 | 1880 |
| 12 | 1880 | 1670 | 3360 | 2160 | 14900 | 11900 | 10600 | 3850 | 1580 | 647 | 921 | 1680 |
| 13 | 1930 | 1700 | 3310 | 2100 | 9840 | 11100 | 9130 | 3980 | 1580 | 624 | 912 | 2120 |
| 14 | 1960 | 1730 | 3200 | 2110 | 8080 | 10700 | 8080 | 3740 | 1440 | 601 | 946 | 3000 |
| 15 | 1820 | 1750 | 2940 | 2040 | 8100 | 10400 | 7510 | 3390 | 1390 | 609 | 881 | 2660 |
| 16 | 1670 | 1770 | 2970 | 1960 | 10100 | 9480 | 6820 | 3130 | 1300 | 569 | 807 | 2510 |
| 17 | 1630 | 1780 | 3140 | 1870 | 11500 | 8730 | 6090 | 3190 | 1280 | 579 | 752 | 2240 |
| 18 | 1630 | 1990 | 3350 | 1880 | 10800 | 8420 | 5720 | 2970 | 1310 | 567 | 743 | 1980 |
| 19 | 1630 | 2580 | 3140 | 2270 | 10200 | 8060 | 5430 | 2960 | 1330 | 632 | 836 | 1760 |
| 20 | 1610 | 2850 | 2990 | 7500 | 13300 | 7790 | 5020 | 3000 | 1280 | 1480 | 772 | 1550 |
| 21 | 1560 | 2920 | 3140 | 10100 | 16700 | 7800 | 4970 | 3200 | 1230 | 3290 | 1060 | 1550 |
| 22 | 1500 | 2850 | 4340 | 10600 | 18200 | 7430 | 4660 | 3070 | 1130 | 5250 | 1420 | 1450 |
| 23 | 1410 | 2780 | 4950 | 9370 | 15800 | 6960 | 4160 | 2980 | 1100 | 4470 | 1230 | 1450 |
| 24 | 1330 | 2740 | 4580 | 7340 | 13900 | 6780 | 4240 | 3490 | 968 | 4650 | 1390 | 1380 |
| 25 | 1330 | 2770 | 4220 | 5980 | 13400 | 6750 | 3960 | 3650 | 932 | 4500 | 1150 | 1350 |
| 26 | 1290 | 2730 | 4390 | 5230 | 11400 | 8040 | 4120 | 3570 | 954 | 3290 | 1310 | 1260 |
| 27 | 1350 | 2780 | 4180 | 4610 | 9730 | 13400 | 3740 | 3510 | 898 | 3090 | 1210 | 1120 |
| 28 | 1420 | 2960 | 4470 | 4060 | 8720 | 16200 | 3600 | 3100 | 871 | 2520 | 1060 | 1060 |
| 29 | 1420 | 3020 | 5390 | 3880 | 7850 | 14700 | 3640 | 2780 | 850 | 2160 | 1740 | 1020 |
| 30 | 1500 | 3070 | 5640 | 3790 | --- | 12600 | 3560 | 2520 | 843 | 1690 | 1690 | 1020 |
| 31 | 1440 | --- | 5950 | 3760 | --- | 11000 | --- | 2350 | --- | 1540 | 1770 | --- |
| TOTAL | 49600 | 62830 | 115930 | 127250 | 461990 | 324230 | 268360 | 104310 | 42256 | 50661 | 37070 | 69480 |
| MEAN | 1600 | 2094 | 3740 | 4105 | 15930 | 10460 | 8945 | 3365 | 1409 | 1634 | 1196 | 2316 |
| MAX | 2070 | 3070 | 5950 | 10600 | 30400 | 16200 | 22500 | 3980 | 1980 | 5250 | 1770 | 7370 |
| MIN | 1290 | 1250 | 2940 | 1870 | 5070 | 6530 | 3560 | 2350 | 843 | 567 | 743 | 1020 |
| CAL YR 1987 | TOTAL | 2063830 | | MEAN | 5654 | MAX | 35500 | MIN | 1150 | | | |
| WTR YR 1988 | TOTAL | 1713967 | | MEAN | 4683 | MAX | 30400 | MIN | 567 | | | |

MUSKINGUM RIVER BASIN

97

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: November 1978 to current year.

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

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,710 mg/L Aug. 11, 1980; minimum daily, 2 mg/L Jan. 28, 1983.

SEDIMENT LOADS.--Maximum daily 167,000 tons Aug. 11, 1980; minimum daily, 19 tons Jan. 22, 23, 1984.

EXTREMES FOR CURRENT YEAR.--Sediment discharge not available - will be published in 1989 WDR.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DATE | TIME | STREAM- FLOW, INSTAN- TANEOUS (CFS) | SPE- CIFIC CON- DUCT- ANCE (US/CM) | PH (STAND- ARD UNITS) | TEMPER- ATURE AIR (DEG C) | TEMPER- ATURE WATER (DEG C) | TUR- BID- ITY (FTU) | OXYGEN, DIS- SOLVED (MG/L) | OXYGEN, DIS- SOLVED SATUR- ATION | COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) | STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) |
|--------------|------|---|---|--------------------------------|------------------------------------|--------------------------------------|------------------------------|-------------------------------------|--|--|--|
| OCT 06... | 1100 | 1450 | 820 | 8.5 | 12.0 | 15.5 | 12 | 7.9 | 83 | 120 | K30 |
| JAN 21... | 0915 | 9820 | 625 | 7.7 | 0.0 | 2.0 | 83 | 12.6 | 95 | 1800 | K15000 |
| FEB 18... | 0945 | 10800 | 560 | 7.9 | 7.0 | 2.5 | 22 | 13.9 | 105 | K1400 | 7500 |
| APR 25... | 0930 | 3910 | 685 | 8.7 | 14.5 | 12.5 | 4.3 | 10.2 | 99 | 50 | K24 |
| JUN 02... | 0915 | 1940 | 686 | 8.3 | 22.0 | 24.0 | 6.9 | 8.6 | 106 | 40 | 40 |
| AUG 24... | 1115 | 1410 | 830 | 7.8 | 24.0 | 26.0 | 5.5 | 6.9 | 89 | 1600 | 1600 |

| DATE | HARD- NESS TOTAL (MG/L AS CACO3) | HARD- NESS NONCARB TOT FLD MG/L AS CACO3 | CALCIUM DIS- SOLVED (MG/L AS CA) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) | SODIUM, DIS- SOLVED (MG/L AS NA) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) | BICAR- BONATE IT-FLD (MG/L AS HCO3) | CAR- BONATE IT-FLD (MG/L AS CO3) | ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3 | SULFATE DIS- SOLVED (MG/L AS SO4) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) |
|--------------|---|---|--|--|--|---|--|---|---|---|---|
| OCT 06... | 330 | 160 | 89 | 25 | 47 | 5.0 | 184 | 8 | 159 | 160 | 76 |
| JAN 21... | 250 | 140 | 66 | 20 | 31 | 5.2 | 127 | 0 | 106 | 130 | 49 |
| FEB 18... | 220 | 130 | 59 | 18 | 26 | 4.2 | 117 | 0 | 96 | 98 | 44 |
| APR 25... | 260 | 130 | 70 | 21 | 27 | 3.0 | 142 | 12 | 134 | 130 | 47 |
| JUN 02... | 280 | 160 | 71 | 24 | 35 | 4.3 | 139 | 0 | 115 | 150 | 51 |
| AUG 24... | 280 | 140 | 72 | 24 | 50 | 6.4 | 164 | 0 | 134 | 170 | 83 |

| DATE | FLUO- RIDE, DIS- SOLVED (MG/L AS F) | SILICA, DIS- SOLVED (MG/L AS SiO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) | PHOS- PHOROUS TOTAL (MG/L AS P) | PHOS- PHOROUS DIS- SOLVED (MG/L AS P) | PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P) |
|--------------|--|---|--|---|---|--|---|--|---|--|--|
| OCT 06... | 0.3 | 4.3 | 531 | <0.01 | 1.2 | 0.02 | 0.02 | 1.3 | 0.11 | 0.05 | 0.02 |
| JAN 21... | 0.3 | 6.0 | 376 | 0.03 | 1.7 | 0.39 | 0.40 | 1.1 | 0.11 | 0.03 | <0.01 |
| FEB 18... | 0.2 | 7.6 | 342 | 0.01 | 2.2 | 0.27 | 0.23 | 0.90 | 0.14 | 0.03 | 0.02 |
| APR 25... | 0.2 | 3.0 | 390 | 0.02 | 1.2 | 0.02 | 0.01 | 0.90 | 0.07 | 0.02 | <0.01 |
| JUN 02... | 0.3 | 0.16 | 430 | 0.03 | 0.5 | 0.03 | 0.02 | 0.30 | 0.05 | 0.02 | <0.01 |
| AUG 24... | 0.3 | 3.3 | 498 | 0.05 | 0.5 | 0.29 | 0.29 | 0.80 | 0.11 | 0.06 | 0.03 |

MUSKINGUM RIVER BASIN

03150000 MUSKINGUM RIVER AT MCCONNELSVILLE, OH--Continued

| DATE | ALUM- INUM, DIS- SOLVED (UG/L AS AL) | ARSENIC DIS- SOLVED (UG/L AS AS) | BARIUM, DIS- SOLVED (UG/L AS BA) | BERYL- LIUM, DIS- SOLVED (UG/L AS BE) | CADMIUM DIS- SOLVED (UG/L AS CD) | CHRO- MIUM, DIS- SOLVED (UG/L AS CR) | COBALT, DIS- SOLVED (UG/L AS CO) | COPPER, DIS- SOLVED (UG/L AS CU) | IRON, DIS- SOLVED (UG/L AS FE) | LEAD, DIS- SOLVED (UG/L AS PB) | LITHIUM DIS- SOLVED (UG/L AS LI) |
|-----------|---|--|--|--|--|---|--|--|--|--|--|
| OCT 06... | 10 | 2 * | 52 | <0.5 | <1 | <1 | <3 | 3 | 7 | <5 | 18 |
| JAN 21... | 20 | <1 | 39 | <0.5 | <1 | <1 | <3 | 22 | 20 | 8 | 8 |
| FEB 18... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| APR 25... | 60 | 1 | 41 | <0.5 | <1 | <1 | <3 | 2 | 8 | <5 | 10 |
| JUN 02... | 40 | <1 | 50 | <0.5 | <1 | <1 | <3 | 4 | 4 | <5 | 15 |
| AUG 24... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | MANGA- NESE, DIS- SOLVED (UG/L AS MN) | MERCURY DIS- SOLVED (UG/L AS HG) | MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) | NICKEL, DIS- SOLVED (UG/L AS NI) | SELE- NIUM, DIS- SOLVED (UG/L AS SE) | SILVER, DIS- SOLVED (UG/L AS AG) | STRON- TIUM, DIS- SOLVED (UG/L AS SR) | VANA- DIUM, DIS- SOLVED (UG/L AS V) | ZINC, DIS- SOLVED (UG/L AS ZN) | SEDI- MENT, SUS- PENDE (MG/L) |
|-----------|--|--|---|--|---|--|--|--|--|---|
| OCT 06... | 16 | <0.1 | <10 | 4 | <1 | <1.0 | 310 | <6 | 7 | 25 |
| JAN 21... | 630 | <0.1 | <10 | 6 | <1 | <1.0 | 240 | <6 | 13 | 132 |
| FEB 18... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 50 |
| APR 25... | 110 | <0.1 | <10 | 5 | <1 | <1.0 | 260 | <6 | <3 | 21 |
| JUN 02... | 12 | <0.1 | <10 | 3 | <1 | <1.0 | 300 | <6 | 4 | 19 |
| AUG 24... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 14 |

K Results based on colony count outside the acceptable range

HOCKING RIVER BASIN

99

03157000 CLEAR CREEK NEAR ROCKBRIDGE, OH

LOCATION.--Lat 39°35'18", long 82°34'43", in NE 1/4 sec. 20, T.13 N., R.18 W., Hocking County, Hydrologic Unit 05030204, on left bank at upstream side of county road bridge, 400 ft downstream from unnamed right bank tributary, 2.0 mi upstream from mouth, and 3 mi west of Rockbridge.

DRAINAGE AREA.--89.0 mi².

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

REVISED RECORDS.--WSP 1305: 1940(M), 1943(M), 1945(M). WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 760.13 ft above National Geodetic Vertical Datum of 1929. Prior to May 2, 1940, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 2-18, 26-30. Records good except for periods of estimated record which are fair. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--49 years, 88.0 ft³/s, 13.43 in/yr.

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

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--|------|--------------------------------|------------------|----------------------------|------|--------------------------------|------------------|
| Feb. 2 | 1030 | *2,240 | *8.51 | No other peaks above base. | | | |
| Minimum discharge, 7.6 ft ³ /s July 18. | | | | | | | |

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|---------|------|------|------|------|------|------|------|-------|-------|-------|------|
| 1 | 14 | 14 | 18 | 34 | 200 | 48 | 55 | 40 | 19 | 14 | 13 | 10 | |
| 2 | 12 | 16 | 20 | 26 | 1300 | 50 | 56 | 38 | 19 | 13 | 11 | 9.8 | |
| 3 | 12 | 15 | 23 | 23 | 416 | 119 | 221 | 37 | 21 | 12 | 10 | 11 | |
| 4 | 12 | 14 | 45 | 21 | 372 | 693 | 693 | 37 | 18 | 11 | 10 | 69 | |
| 5 | 12 | 15 | 30 | 19 | 204 | 341 | 231 | 43 | 18 | 11 | 10 | 26 | |
| 6 | 13 | 14 | 22 | 19 | 136 | 234 | 172 | 46 | 17 | 11 | 18 | 18 | |
| 7 | 18 | 15 | 19 | 18 | 113 | 168 | 258 | 39 | 17 | 10 | 16 | 14 | |
| 8 | 15 | 16 | 19 | 18 | 82 | 134 | 239 | 37 | 16 | 10 | 12 | 12 | |
| 9 | 13 | 17 | 21 | 18 | 68 | 126 | 157 | 36 | 18 | 9.8 | 11 | 11 | |
| 10 | 13 | 16 | 20 | 18 | 61 | 117 | 128 | 37 | 17 | 9.9 | 9.9 | 11 | |
| 11 | 17 | 14 | 19 | 18 | 58 | 95 | 110 | 35 | 16 | 11 | 9.2 | 11 | |
| 12 | 15 | 14 | 23 | 18 | 73 | 90 | 94 | 33 | 16 | 11 | 10 | 11 | |
| 13 | 13 | 14 | 20 | 18 | 62 | 94 | 82 | 30 | 15 | 11 | 9.7 | 117 | |
| 14 | 13 | 15 | 19 | 18 | 66 | 82 | 75 | 31 | 14 | 11 | 13 | 48 | |
| 15 | 13 | 15 | 30 | 18 | 135 | 74 | 67 | 30 | 14 | 10 | 8.8 | 27 | |
| 16 | 13 | 15 | 24 | 18 | 111 | 67 | 61 | 29 | 14 | 9.9 | 9.7 | 21 | |
| 17 | 13 | 16 | 20 | 19 | 84 | 64 | 58 | 27 | 14 | 8.7 | 9.2 | 19 | |
| 18 | 12 | 17 | 19 | 25 | 78 | 66 | 68 | 26 | 14 | 8.4 | 9.7 | 19 | |
| 19 | 14 | 15 | 19 | 38 | 105 | 69 | 61 | 28 | 14 | 10 | 16 | 17 | |
| 20 | 13 | 15 | 25 | 224 | 187 | 65 | 54 | 29 | 13 | 27 | 15 | 17 | |
| 21 | 14 | 15 | 25 | 83 | 111 | 58 | 52 | 30 | 13 | 45 | 11 | 15 | |
| 22 | 13 | 15 | 22 | 56 | 84 | 53 | 55 | 26 | 13 | 24 | 9.5 | 15 | |
| 23 | 13 | 15 | 22 | 46 | 88 | 53 | 56 | 29 | 13 | 17 | 12 | 14 | |
| 24 | 13 | 16 | 20 | 41 | 97 | 52 | 53 | 32 | 12 | 14 | 15 | 14 | |
| 25 | 14 | 20 | 24 | 36 | 74 | 59 | 49 | 29 | 12 | 12 | 11 | 16 | |
| 26 | 14 | 19 | 73 | 30 | 62 | 127 | 47 | 25 | 12 | 13 | 9.7 | 14 | |
| 27 | 15 | 19 | 51 | 27 | 61 | 87 | 46 | 23 | 12 | 13 | 8.9 | 13 | |
| 28 | 15 | 17 | 42 | 26 | 53 | 71 | 45 | 22 | 12 | 11 | 9.0 | 13 | |
| 29 | 14 | 20 | 48 | 27 | 51 | 66 | 45 | 21 | 11 | 11 | 18 | 13 | |
| 30 | 14 | 21 | 36 | 29 | --- | 61 | 42 | 20 | 12 | 11 | 16 | 12 | |
| 31 | 14 | --- | 35 | 36 | --- | 54 | --- | 19 | --- | 14 | 11 | --- | |
| TOTAL | 423 | 479 | 853 | 1065 | 4592 | 3537 | 3430 | 964 | 446 | 414.7 | 362.3 | 637.8 | |
| MEAN | 13.6 | 16.0 | 27.5 | 34.4 | 158 | 114 | 114 | 31.1 | 14.9 | 13.4 | 11.7 | 21.3 | |
| MAX | 18 | 21 | 73 | 224 | 1300 | 693 | 693 | 46 | 21 | 45 | 18 | 117 | |
| MIN | 12 | 14 | 18 | 18 | 51 | 48 | 42 | 19 | 11 | 8.4 | 8.8 | 9.8 | |
| CFSM | .15 | .18 | .31 | .39 | 1.78 | 1.28 | 1.28 | .35 | .17 | .15 | .13 | .24 | |
| IN. | .18 | .20 | .36 | .45 | 1.92 | 1.48 | 1.43 | .40 | .19 | .17 | .15 | .27 | |
| CAL YR 1987 | TOTAL | 17099 | | MEAN | 46.8 | MAX | 795 | MIN | 10 | CFSM | .53 | IN. | 7.15 |
| WTR YR 1988 | TOTAL | 17203.8 | | MEAN | 47.0 | MAX | 1300 | MIN | 8.4 | CFSM | .53 | IN. | 7.19 |

HOCKING RIVER BASIN

03157500 HOCKING RIVER AT ENTERPRISE, OH

LOCATION.--Lat 39°33'54", long 82°28'30", in NW 1/4 sec. 5, T.14 N., R.17 W., Hocking County, Hydrologic Unit 05030204, on right bank at upstream side of bridge at Enterprise, 4.0 mi downstream from Buck Run, and 4.3 mi upstream from Scott Creek.

DRAINAGE AREA.--459 mi².

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

REVISED RECORDS.--WSP 873: 1938. WSP 1907: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 723.58 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 24, 1933, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 1-19 and Jan. 27-30. Records good, except for periods of estimated record, which are fair. Flood flow affected by temporary retention in eight retarding basins, combined capacity, 8,710 acre-ft constructed between 1955 and 1961 upstream from station. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--58 years, 454 ft³/s, 13.43 in/yr.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1907, reached a stage of 22.0 ft, from floodmark, discharge, 36,000 ft³/s, from reports of U.S. Army Corps of Engineers.

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|--------|------|-----------------------------------|---------------------|
| Feb. 2 | 2400 | *6,410 | *12.96 | Apr. 4 | 0730 | 3,780 | 9.44 |
| Mar. 4 | 2230 | 4,570 | 10.71 | | | | |

Minimum daily discharge, 37 ft³/s Jul. 18 and Aug. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|-------|------|------|-------|-------|-------|------|------|------|------|------|------|
| 1 | 76 | 55 | 72 | 130 | 516 | 274 | 328 | 189 | 89 | 53 | 61 | 50 | |
| 2 | 56 | 54 | 75 | 110 | 4390 | 267 | 322 | 180 | 86 | 49 | 52 | 44 | |
| 3 | 50 | 56 | 77 | 98 | 4470 | 474 | 528 | 172 | 103 | 47 | 45 | 44 | |
| 4 | 48 | 55 | 146 | 84 | 2660 | 3330 | 3070 | 166 | 99 | 44 | 43 | 285 | |
| 5 | 48 | 53 | 137 | 76 | 1770 | 3220 | 1680 | 215 | 89 | 43 | 46 | 151 | |
| 6 | 50 | 50 | 93 | 70 | 1040 | 1960 | 1130 | 285 | 81 | 42 | 75 | 86 | |
| 7 | 75 | 52 | 81 | 66 | 677 | 1390 | 1230 | 233 | 77 | 41 | 70 | 65 | |
| 8 | 76 | 54 | 75 | 66 | 579 | 1020 | 1360 | 202 | 76 | 41 | 60 | 56 | |
| 9 | 65 | 60 | 76 | 66 | 447 | 853 | 930 | 191 | 92 | 39 | 49 | 49 | |
| 10 | 57 | 65 | 77 | 66 | 379 | 798 | 743 | 211 | 98 | 43 | 43 | 47 | |
| 11 | 66 | 61 | 75 | 66 | 344 | 647 | 628 | 201 | 80 | 48 | 40 | 45 | |
| 12 | 62 | 61 | 84 | 66 | 414 | 572 | 527 | 182 | 72 | 49 | 41 | 44 | |
| 13 | 59 | 61 | 78 | 66 | 313 | 638 | 447 | 166 | 68 | 47 | 47 | 403 | |
| 14 | 54 | 60 | 72 | 66 | 332 | 573 | 397 | 162 | 66 | 46 | 53 | 251 | |
| 15 | 54 | 59 | 88 | 66 | 640 | 501 | 355 | 151 | 65 | 44 | 42 | 128 | |
| 16 | 59 | 59 | 92 | 66 | 674 | 448 | 318 | 142 | 61 | 44 | 40 | 86 | |
| 17 | 57 | 65 | 83 | 68 | 501 | 414 | 296 | 131 | 61 | 39 | 40 | 76 | |
| 18 | 53 | 72 | 75 | 70 | 451 | 409 | 333 | 123 | 59 | 37 | 42 | 73 | |
| 19 | 51 | 63 | 69 | 90 | 507 | 443 | 343 | 126 | 57 | 46 | 51 | 69 | |
| 20 | 51 | 62 | 89 | 1280 | 1230 | 420 | 288 | 138 | 55 | 95 | 64 | 70 | |
| 21 | 53 | 60 | 109 | 714 | 881 | 375 | 269 | 136 | 56 | 278 | 42 | 63 | |
| 22 | 51 | 55 | 101 | 383 | 610 | 338 | 269 | 124 | 65 | 145 | 38 | 61 | |
| 23 | 51 | 60 | 88 | 277 | 569 | 325 | 268 | 124 | 60 | 85 | 39 | 58 | |
| 24 | 51 | 62 | 80 | 229 | 594 | 311 | 270 | 174 | 55 | 72 | 76 | 57 | |
| 25 | 58 | 77 | 93 | 206 | 466 | 319 | 246 | 230 | 54 | 62 | 62 | 62 | |
| 26 | 57 | 71 | 274 | 173 | 377 | 753 | 232 | 160 | 54 | 55 | 46 | 56 | |
| 27 | 58 | 71 | 271 | 170 | 368 | 606 | 220 | 132 | 50 | 54 | 40 | 53 | |
| 28 | 64 | 67 | 189 | 150 | 319 | 477 | 217 | 118 | 50 | 50 | 37 | 51 | |
| 29 | 60 | 76 | 239 | 140 | 297 | 421 | 217 | 107 | 49 | 46 | 87 | 50 | |
| 30 | 60 | 77 | 169 | 140 | --- | 379 | 203 | 99 | 53 | 45 | 125 | 48 | |
| 31 | 57 | --- | 140 | 175 | --- | 335 | --- | 94 | --- | 62 | 69 | --- | |
| TOTAL | 1787 | 1853 | 3467 | 5493 | 26815 | 23290 | 17664 | 5064 | 2080 | 1891 | 1665 | 2681 | |
| MEAN | 57.6 | 61.8 | 112 | 177 | 925 | 751 | 589 | 163 | 69.3 | 61.0 | 53.7 | 89.4 | |
| MAX | 76 | 77 | 274 | 1280 | 4470 | 3330 | 3070 | 285 | 103 | 278 | 125 | 403 | |
| MIN | 48 | 50 | 69 | 66 | 297 | 267 | 203 | 94 | 49 | 37 | 37 | 44 | |
| CFSM | .13 | .13 | .24 | .39 | 2.02 | 1.64 | 1.28 | .36 | .15 | .13 | .12 | .19 | |
| IN. | .14 | .15 | .28 | .45 | 2.17 | 1.89 | 1.43 | .41 | .17 | .15 | .13 | .22 | |
| CAL YR 1987 | TOTAL | 83500 | | MEAN | 229 | MAX | 5140 | MIN | 39 | CFSM | .50 | IN. | 6.77 |
| WTR YR 1988 | TOTAL | 93750 | | MEAN | 256 | MAX | 4470 | MIN | 37 | CFSM | .56 | IN. | 7.60 |

HOCKING RIVER BASIN

101

03159510 HOCKING RIVER BELOW ATHENS, OH

NATIONAL STREAM-QUALITY ACCOUNTING NETWORK STATION

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

DRAINAGE AREA.--957 mi².

WATER-DISCHARGE RECORDS

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

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

REMARKS.--Estimated daily discharges: Jan. 4-19, Jan. 28 to Feb. 1 and Feb. 4-29. Records good except for estimated daily discharges, which are fair. Some regulation by Burr Oak Reservoir on East Branch Sunday Creek 34.3 mi upstream beginning 1952; by Hocking Lake, capacity 3,080 acre-ft, on Clear Fork 44.7 mi upstream beginning in 1949; by temporary retention in eight retarding basins, combined capacity, 8,710 acre-ft, constructed between 1955 and 1961 upstream from Lancaster, and Dow Lake capacity 1,884 acre-ft, on Strouds Run, 1.1 mi upstream. U.S. Army Corps of Engineers Satellite Telemeter at station.

AVERAGE DISCHARGE.--12 years, 1,029 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,600 ft³/s Feb. 27, 1979, gage height, 25.45 ft; minimum daily, 52 ft³/s Sept. 19, 1986.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,200 ft³/s Mar. 5, gage height, 22.33 ft; minimum daily, 56 ft³/s Aug. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|------|------|-------|-------|-------|-------|------|------|------|------|
| 1 | 65 | 68 | 95 | 247 | 270 | 502 | 688 | 469 | 217 | 91 | 72 | 107 |
| 2 | 75 | 66 | 97 | 247 | 3420 | 459 | 647 | 434 | 192 | 98 | 80 | 76 |
| 3 | 75 | 65 | 95 | 170 | 8410 | 488 | 686 | 405 | 188 | 81 | 80 | 67 |
| 4 | 65 | 65 | 104 | 160 | 8800 | 6380 | 4110 | 384 | 188 | 77 | 72 | 78 |
| 5 | 61 | 65 | 154 | 150 | 5400 | 10700 | 5800 | 417 | 179 | 77 | 71 | 149 |
| 6 | 61 | 64 | 184 | 140 | 4000 | 9170 | 3200 | 826 | 169 | 73 | 65 | 191 |
| 7 | 67 | 63 | 141 | 140 | 2900 | 5850 | 2670 | 910 | 155 | 72 | 89 | 120 |
| 8 | 68 | 63 | 114 | 130 | 2100 | 3890 | 2600 | 667 | 145 | 68 | 116 | 92 |
| 9 | 77 | 71 | 108 | 130 | 1600 | 2440 | 2150 | 560 | 142 | 63 | 85 | 75 |
| 10 | 77 | 79 | 101 | 120 | 1300 | 2000 | 1660 | 615 | 143 | 62 | 76 | 68 |
| 11 | 72 | 82 | 102 | 120 | 1000 | 1540 | 1400 | 644 | 146 | 62 | 72 | 64 |
| 12 | 67 | 80 | 107 | 110 | 860 | 1300 | 1230 | 590 | 142 | 64 | 70 | 62 |
| 13 | 76 | 75 | 102 | 110 | 1000 | 1360 | 1080 | 537 | 127 | 63 | 70 | 127 |
| 14 | 71 | 73 | 104 | 110 | 820 | 1390 | 949 | 434 | 120 | 64 | 65 | 282 |
| 15 | 66 | 72 | 116 | 110 | 1200 | 1350 | 845 | 378 | 115 | 65 | 62 | 341 |
| 16 | 62 | 73 | 107 | 100 | 1500 | 1100 | 736 | 351 | 111 | 62 | 62 | 186 |
| 17 | 59 | 78 | 116 | 100 | 1600 | 966 | 656 | 318 | 107 | 61 | 60 | 131 |
| 18 | 61 | 82 | 115 | 100 | 1300 | 901 | 752 | 290 | 103 | 61 | 58 | 106 |
| 19 | 63 | 79 | 105 | 120 | 1100 | 942 | 1170 | 288 | 105 | 68 | 58 | 97 |
| 20 | 62 | 81 | 111 | 838 | 2000 | 972 | 936 | 286 | 101 | 83 | 63 | 95 |
| 21 | 59 | 77 | 107 | 2090 | 2700 | 903 | 764 | 303 | 102 | 141 | 63 | 89 |
| 22 | 57 | 75 | 129 | 1030 | 2300 | 843 | 714 | 294 | 100 | 369 | 64 | 85 |
| 23 | 57 | 74 | 139 | 634 | 1600 | 797 | 730 | 290 | 98 | 220 | 60 | 83 |
| 24 | 60 | 74 | 124 | 476 | 1200 | 767 | 703 | 934 | 99 | 127 | 59 | 87 |
| 25 | 58 | 78 | 128 | 396 | 940 | 700 | 664 | 792 | 96 | 96 | 63 | 85 |
| 26 | 58 | 79 | 282 | 341 | 800 | 885 | 683 | 639 | 93 | 86 | 70 | 83 |
| 27 | 61 | 90 | 542 | 255 | 700 | 1290 | 633 | 491 | 92 | 80 | 66 | 80 |
| 28 | 63 | 87 | 449 | 250 | 600 | 1060 | 540 | 366 | 91 | 74 | 59 | 79 |
| 29 | 62 | 92 | 368 | 230 | 550 | 902 | 527 | 292 | 93 | 73 | 56 | 76 |
| 30 | 67 | 87 | 425 | 230 | --- | 896 | 505 | 264 | 91 | 74 | 64 | 74 |
| 31 | 70 | --- | 302 | 240 | --- | 787 | --- | 241 | --- | 74 | 129 | --- |
| TOTAL | 2022 | 2257 | 5273 | 9624 | 61970 | 63530 | 40428 | 14709 | 3850 | 2829 | 2199 | 3335 |
| MEAN | 65.2 | 75.2 | 170 | 310 | 2137 | 2049 | 1348 | 474 | 128 | 91.3 | 70.9 | 111 |
| MAX | 77 | 92 | 542 | 2090 | 8800 | 10700 | 5800 | 934 | 217 | 369 | 129 | 341 |
| MIN | 57 | 63 | 95 | 100 | 270 | 459 | 505 | 241 | 91 | 61 | 56 | 62 |
| CAL YR 1987 | TOTAL | 175058 | MEAN | 480 | MAX | 10100 | MIN | 54 | | | | |
| WTR YR 1988 | TOTAL | 212026 | MEAN | 579 | MAX | 10700 | MIN | 56 | | | | |

HOCKING RIVER BASIN

03159510 HOCKING RIVER BELOW ATHENS, OH--Continued

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

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DATE | TIME | STREAM- FLOW, INSTAN- TANEOUS (CFS) | SPE- CIFIC CON- DUCT- ANCE (US/CM) | PH (STAND- ARD UNITS) | TEMPER- ATURE AIR (DEG C) | TEMPER- ATURE WATER (DEG C) | TUR- BID- ITY (FTU) | OXYGEN, DIS- SOLVED (MG/L) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) | COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) | STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) |
|--------------|------|---|---|--------------------------------|------------------------------------|--------------------------------------|------------------------------|-------------------------------------|--|--|--|
| OCT 19... | 1015 | 80 | 1160 | 8.00 | 19.0 | 13.5 | 1.7 | 10.5 | 104 | 170 | 100 |
| JAN 22... | 1015 | 1080 | 436 | 7.40 | 3.0 | 1.0 | 79 | 12.0 | 87 | 4800 | K8800 |
| JUN 01... | 0915 | 226 | 778 | 7.40 | 31.0 | 22.0 | 5.2 | 7.5 | 89 | 200 | 210 |
| AUG 03... | 0945 | 80 | 1050 | 7.80 | 31.0 | 29.0 | 7.2 | 3.9 | 52 | 200 | 670 |

| DATE | HARD- NESS TOTAL (MG/L AS CACO3) | HARD- NESS NONCARB WAT TOT FLD MG/L AS CACO3 | CALCIUM DIS- SOLVED (MG/L AS CA) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) | SODIUM, DIS- SOLVED (MG/L AS NA) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) | BICAR- BONATE IT-FLD (MG/L AS HCO3) | ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3 | SULFATE DIS- SOLVED (MG/L AS SO4) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) |
|--------------|---|--|--|--|--|---|--|---|---|---|--|
| OCT 19... | 390 | 240 | 99 | 34 | 93 | 5.1 | 183 | 142 | 270 | 120 | 0.3 |
| JAN 22... | 190 | 140 | 48 | 16 | 17 | 4.2 | 61 | 50 | 110 | 34 | 0.2 |
| JUN 01... | 300 | 190 | 75 | 27 | 46 | 3.2 | 132 | 110 | 190 | 65 | 0.3 |
| AUG 03... | 370 | 250 | 93 | 33 | 81 | 4.9 | 144 | 116 | 270 | 120 | 0.4 |

| DATE | SILICA, DIS- SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) | PHOS- PHOROUS TOTAL (MG/L AS P) | PHOS- PHOROUS DIS- SOLVED (MG/L AS P) | PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P) | ALUM- INUM, DIS- SOLVED (UG/L AS AL) |
|--------------|---|--|---|---|--|---|--|---|--|--|---|
| OCT 19... | 4.7 | 729 | 0.03 | 1.5 | 0.10 | 0.12 | 0.80 | 0.20 | 0.19 | 0.17 | 20 |
| JAN 22... | 6.5 | 270 | 0.03 | 1.8 | 0.37 | 0.33 | 1.8 | 0.33 | 0.01 | <0.01 | 20 |
| JUN 01... | 6.8 | 506 | 0.02 | 0.8 | 0.10 | 0.08 | 0.30 | 0.08 | 0.04 | 0.03 | 20 |
| AUG 03... | 0.89 | 705 | 0.02 | <0.1 | 0.10 | 0.08 | 1.0 | 0.07 | 0.03 | 0.01 | 50 |

| DATE | ARSENIC DIS- SOLVED (UG/L AS AS) | BARIUM, DIS- SOLVED (UG/L AS BA) | BERYL- LIUM, DIS- SOLVED (UG/L AS BE) | CADMIUM DIS- SOLVED (UG/L AS CD) | CHRO- MIUM, DIS- SOLVED (UG/L AS CR) | COBALT, DIS- SOLVED (UG/L AS CO) | COPPER, DIS- SOLVED (UG/L AS CU) | IRON, DIS- SOLVED (UG/L AS FE) | LEAD, DIS- SOLVED (UG/L AS PB) | LITHIUM DIS- SOLVED (UG/L AS LI) |
|--------------|--|--|--|--|---|--|--|--|--|--|
| OCT 19... | 1 | 54 | <0.5 | <1 | <1 | <3 | 3 | 5 | <5 | 26 |
| JAN 22... | <1 | <100 | <10 | <1 | <1 | <50 | 3 | 20 | <5 | <10 |
| JUN 01... | <1 | 52 | <0.5 | <1 | <1 | <3 | 4 | 17 | <5 | 21 |
| AUG 03... | <1 | 68 | <0.5 | <1 | <1 | <3 | 3 | 12 | <5 | 24 |

HOCKING RIVER BASIN

103

03159510 HOCKING RIVER BELOW ATHENS, OH--Continued

| DATE | MANGA- NESE, DIS- SOLVED (UG/L AS MN) | MERCURY DIS- SOLVED (UG/L AS HG) | MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) | NICKEL, DIS- SOLVED (UG/L AS NI) | SELE- NIUM, DIS- SOLVED (UG/L AS SE) | SILVER, DIS- SOLVED (UG/L AS AG) | STRON- TIUM, DIS- SOLVED (UG/L AS SR) | VANA- DIUM, DIS- SOLVED (UG/L AS V) | ZINC, DIS- SOLVED (UG/L AS ZN) | SEDI- MENT, SUS- PENDE (MG/L) |
|--------------|--|--|---|--|---|--|--|--|--|---|
| OCT 19... | 170 | <0.1 | <10 | 4 | <1 | 1.0 | 470 | <6 | 11 | 10 |
| JAN 22... | 800 | <0.1 | 1 | 6 | <1 | <1.0 | 240 | <1 | 10 | 194 |
| JUN 01... | 200 | 0.1 | <10 | 9 | <1 | 1.0 | 400 | <6 | 11 | 19 |
| AUG 03... | 180 | <0.1 | <10 | 6 | <1 | <1.0 | 500 | <6 | 21 | 29 |

K Results based on colony count outside the acceptable range

SHADE RIVER BASIN

03159540 SHADE RIVER NEAR CHESTER, OH

LOCATION.--Lat 39°03'49", long 81°52'55", in NE 1/4 sec. 10, T.3N., R.12 W., Meigs County, Hydrologic Unit 05030202, on right bank at downstream side of bridge on Oak Hill Road, 200 ft upstream from Sugar Run, 2.8 mi southeast of Chester, and 8.5 mi northeast of Pomeroy.

DRAINAGE AREA.--156 mi², includes that of Sugar Run.

PERIOD OF RECORD.--Water years 1956, 1962-64 (Occasional low-flow measurements), June 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 576.91 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 1-16 and Feb. 7-18. Records fair. Water-quality data collected at this site 1965-77, 1979-81. Sediment data collected 1970-74. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--23 years, 162 ft³/s, 14.10 in/yr.

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

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|
| Mar. 5 | 0600 | *2,060 | *15.64 |

Minimum discharge, 0.24 ft³/s Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|----------|-------|--------|------|------|------|--------|-------|--------|-------|-------|------|
| 1 | .46 | .63 | 2.1 | 23 | 46 | 32 | 48 | 34 | 8.7 | .46 | 1.1 | .36 | |
| 2 | .41 | .69 | 3.1 | 24 | 901 | 28 | 49 | 29 | 7.3 | .45 | 1.4 | .36 | |
| 3 | .38 | .70 | 2.4 | 14 | 1280 | 33 | 50 | 26 | 6.0 | .42 | 1.1 | .41 | |
| 4 | .31 | .70 | 3.5 | 9.4 | 634 | 764 | 687 | 26 | 5.2 | .47 | .93 | 1.1 | |
| 5 | .24 | .70 | 3.9 | 6.8 | 440 | 1590 | 585 | 71 | 5.1 | 1.9 | .86 | 1.4 | |
| 6 | .25 | .70 | 5.5 | 5.2 | 143 | 392 | 205 | 99 | 4.7 | .31 | .89 | 1.2 | |
| 7 | .39 | .82 | 4.9 | 4.0 | 100 | 211 | 200 | 79 | 3.9 | .30 | .95 | .98 | |
| 8 | .54 | .85 | 3.9 | 3.8 | 66 | 133 | 205 | 57 | 3.3 | .31 | 1.1 | .86 | |
| 9 | .63 | 1.3 | 3.3 | 3.6 | 54 | 104 | 138 | 46 | 2.8 | .30 | .99 | .75 | |
| 10 | .50 | 2.3 | 3.2 | 3.5 | 47 | 97 | 99 | 43 | 2.6 | .30 | .96 | .66 | |
| 11 | .45 | 3.2 | 3.1 | 3.4 | 42 | 82 | 81 | 39 | 2.2 | .46 | .89 | .59 | |
| 12 | .39 | 1.8 | 4.2 | 3.3 | 40 | 72 | 69 | 32 | 2.0 | .46 | .76 | .55 | |
| 13 | .39 | 1.1 | 3.9 | 3.3 | 38 | 120 | 59 | 26 | 1.8 | .40 | .63 | .67 | |
| 14 | .39 | .80 | 3.6 | 3.3 | 37 | 130 | 53 | 22 | 1.6 | .37 | .56 | .58 | |
| 15 | .39 | .68 | 5.0 | 3.2 | 36 | 92 | 48 | 20 | 1.4 | .37 | .55 | .51 | |
| 16 | .38 | .63 | 5.0 | 3.2 | 35 | 77 | 43 | 19 | 1.2 | .42 | .60 | .52 | |
| 17 | .34 | .72 | 6.5 | 4.4 | 35 | 70 | 39 | 16 | 1.4 | .40 | .54 | .63 | |
| 18 | .31 | 1.0 | 6.1 | 13 | 37 | 67 | 57 | 13 | 1.2 | .44 | .57 | .61 | |
| 19 | .31 | .92 | 4.9 | 47 | 46 | 81 | 202 | 12 | 1.1 | .75 | .59 | .57 | |
| 20 | .39 | .77 | 5.1 | 509 | 123 | 82 | 104 | 18 | .87 | 1.8 | .66 | .76 | |
| 21 | .41 | .60 | 5.6 | 285 | 110 | 70 | 72 | 26 | .80 | 42 | .64 | .73 | |
| 22 | .39 | .50 | 8.5 | 123 | 67 | 59 | 63 | 31 | .80 | 27 | .62 | .64 | |
| 23 | .41 | .48 | 8.5 | 86 | 66 | 54 | 68 | 26 | .81 | 7.2 | .61 | .67 | |
| 24 | .43 | .49 | 6.5 | 69 | 65 | 51 | 61 | 47 | .80 | 3.3 | .62 | .78 | |
| 25 | .43 | .56 | 11 | 59 | 55 | 48 | 54 | 62 | .68 | 1.9 | .51 | .87 | |
| 26 | .43 | .73 | 167 | 45 | 44 | 75 | 49 | 40 | .64 | 1.4 | .46 | .85 | |
| 27 | .46 | .84 | 162 | 37 | 44 | 85 | 45 | 24 | .59 | 1.1 | .45 | .86 | |
| 28 | .48 | .85 | 70 | 27 | 40 | 71 | 41 | 17 | .54 | .96 | .41 | .84 | |
| 29 | .50 | 1.4 | 50 | 24 | 36 | 60 | 41 | 14 | .54 | .84 | .43 | .82 | |
| 30 | .56 | 2.0 | 34 | 30 | --- | 55 | 39 | 12 | .53 | 4.1 | .42 | .97 | |
| 31 | .63 | --- | 21 | 37 | --- | 49 | --- | 9.8 | --- | 1.5 | .39 | --- | |
| TOTAL | 12.98 | 29.46 | 627.3 | 1512.4 | 4707 | 4934 | 3554 | 1035.8 | 71.10 | 102.39 | 22.19 | 22.10 | |
| MEAN | .42 | .98 | 20.2 | 48.8 | 162 | 159 | 118 | 33.4 | 2.37 | 3.30 | .72 | .74 | |
| MAX | .63 | 3.2 | 167 | 509 | 1280 | 1590 | 687 | 99 | 8.7 | 42 | 1.4 | 1.4 | |
| MIN | .24 | .48 | 2.1 | 3.2 | 35 | 28 | 39 | 9.8 | .53 | .30 | .39 | .36 | |
| CFSM | .00 | .01 | .13 | .31 | 1.04 | 1.02 | .76 | .21 | .02 | .02 | .00 | .00 | |
| IN. | .00 | .01 | .15 | .36 | 1.12 | 1.18 | .85 | .25 | .02 | .02 | .01 | .01 | |
| CAL YR 1987 | TOTAL | 28186.50 | | MEAN | 77.2 | MAX | 2190 | MIN | .18 | CFSM | .49 | IN. | 6.72 |
| WTR YR 1988 | TOTAL | 16630.72 | | MEAN | 45.4 | MAX | 1590 | MIN | .24 | CFSM | .29 | IN. | 3.97 |

LEADING CREEK BASIN

105

03160007 LEADING CREEK BELOW CARPETER, OH

LOCATION.--Lat 39°09'45", long 82°13'12", Meigs County, Hydrologic Unit 05030202, on left bank 150 ft downstream of St Rt 143 bridge over Leading Creek at Carpenter, Ohio, 300 ft east of intersection of St Rt 143 and Meigs Co Rd 10, and 0.95 mi east of intersection St Rt 143 and Columbia Twp Rd 13.

DRAINAGE AREA.--13.3 mi².

PERIOD OF RECORD.--October 1987 to September 1988.

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

REMARKS.--Estimated daily discharges: Jan. 4-16 and June 9-24. Records good, except for periods of estimated daily discharges, which are fair. Data collected for Surface-Water Effects of Longwall Mining project, additional data in Volume 2 of this report.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 303 ft³/s, gage height, 18.49 ft on Mar. 3; minimum daily discharge, 0.00 ft³/s, many days. First year of record.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-----|--------|--------|--------|-------|-------|-------|--------|--------|-------|-------|-------|
| 1 | .0 | .0 | 48 | 1.9 | 2.2 | 1.7 | 3.6 | 2.0 | 22 | .78 | 2.0 | .0 |
| 2 | .0 | .0 | 48 | 2.3 | 170 | 1.5 | 3.7 | 1.7 | 17 | .62 | 1.7 | .0 |
| 3 | .0 | .0 | 48 | 1.6 | 38 | 3.6 | 20 | 1.5 | 16 | .48 | 1.4 | .02 |
| 4 | .0 | .0 | 49 | .90 | 50 | 171 | 164 | 1.2 | 16 | .35 | 1.2 | .15 |
| 5 | .0 | .0 | 57 | .82 | 18 | 64 | 32 | 1.9 | 14 | .25 | 1.0 | .04 |
| 6 | .0 | .0 | 52 | .70 | 15 | 30 | 23 | 4.4 | 11 | .14 | 1.1 | .01 |
| 7 | .0 | .0 | 50 | .62 | 15 | 19 | 28 | 2.6 | 9.4 | .06 | 1.1 | .0 |
| 8 | .0 | .01 | 50 | .54 | 9.9 | 14 | 22 | 1.8 | 8.3 | .02 | .93 | .0 |
| 9 | .0 | .23 | 49 | .47 | 3.4 | 12 | 14 | 1.6 | 7.5 | .0 | .73 | .0 |
| 10 | .0 | 3.4 | 50 | .42 | 2.4 | 13 | 11 | 1.5 | 7.0 | .0 | .58 | .0 |
| 11 | .0 | 16 | 51 | .37 | 2.2 | 9.3 | 8.5 | 1.1 | 6.7 | .0 | .41 | .0 |
| 12 | .0 | 25 | 52 | .35 | 2.7 | 8.5 | 6.9 | .84 | 6.0 | .0 | .29 | .0 |
| 13 | .0 | 31 | 51 | .34 | 2.7 | 21 | 5.8 | .71 | 5.5 | .0 | .25 | .0 |
| 14 | .0 | 35 | 51 | .33 | 2.3 | 13 | 5.0 | .68 | 5.2 | .0 | .24 | .0 |
| 15 | .0 | 37 | 55 | .32 | 2.6 | 9.7 | 4.5 | .84 | 4.8 | .0 | .13 | .0 |
| 16 | .0 | 38 | 60 | .45 | 2.8 | 8.3 | 4.0 | .41 | 4.4 | .0 | .11 | .0 |
| 17 | .0 | 39 | 58 | .49 | 3.3 | 7.7 | 3.8 | .39 | 4.0 | .0 | .04 | .0 |
| 18 | .0 | 43 | 56 | 1.7 | 2.1 | 8.3 | 16 | .33 | 3.7 | .0 | .01 | .0 |
| 19 | .0 | 46 | 55 | 18 | 4.8 | 15 | 15 | .47 | 3.4 | .0 | .04 | .0 |
| 20 | .0 | 46 | 57 | 46 | 17 | 11 | 8.2 | .58 | 3.2 | .22 | .12 | .0 |
| 21 | .0 | 46 | 58 | 8.6 | 8.1 | 7.6 | 6.3 | .91 | 2.9 | 2.5 | .05 | .0 |
| 22 | .0 | 45 | 58 | 3.6 | 5.1 | 5.9 | 7.1 | 1.1 | 2.7 | 13 | .01 | .0 |
| 23 | .0 | 41 | 57 | 2.3 | 4.8 | 5.2 | 7.5 | 1.6 | 2.5 | 9.2 | .04 | .07 |
| 24 | .0 | 40 | 56 | 1.6 | 4.6 | 4.8 | 6.6 | 6.9 | 2.3 | 6.5 | .08 | .26 |
| 25 | .0 | 40 | 60 | 1.2 | 3.4 | 4.5 | 5.1 | 3.2 | 2.1 | 5.0 | .02 | 2.5 |
| 26 | .0 | 41 | 45 | 1.1 | 2.4 | 7.9 | 4.4 | 1.6 | 1.8 | 4.3 | .0 | 5.0 |
| 27 | .0 | 43 | 6.9 | 1.1 | 2.0 | 6.6 | 3.7 | 1.1 | 1.5 | 3.9 | .0 | 4.7 |
| 28 | .0 | 45 | 4.1 | .74 | 1.9 | 5.0 | 3.3 | 1.9 | 1.3 | 3.4 | .0 | 4.1 |
| 29 | .0 | 46 | 3.5 | .43 | 1.9 | 4.4 | 3.1 | 15 | 1.1 | 3.0 | .0 | 3.6 |
| 30 | .0 | 47 | 1.9 | .49 | --- | 3.9 | 2.5 | 28 | .96 | 2.6 | .0 | 3.1 |
| 31 | .0 | --- | 1.2 | .51 | --- | 3.4 | --- | 23 | --- | 2.4 | .0 | --- |
| TOTAL | 0.0 | 793.64 | 1398.6 | 100.29 | 400.6 | 500.8 | 448.6 | 110.86 | 194.26 | 58.72 | 13.58 | 23.55 |
| MEAN | .00 | 26.5 | 45.1 | 3.24 | 13.8 | 16.2 | 15.0 | 3.58 | 6.48 | 1.89 | .44 | .78 |
| MAX | .00 | 47 | 60 | 46 | 170 | 171 | 164 | 28 | 22 | 13 | 2.0 | 5.0 |
| MIN | .00 | .00 | 1.2 | .32 | 1.9 | 1.5 | 2.5 | .33 | .96 | .00 | .00 | .00 |
| MED | .00 | 37 | 51 | .74 | 3.4 | 8.3 | 6.7 | 1.5 | 4.6 | .25 | .12 | .00 |
| AC-FT | .0 | 1570 | 2770 | 199 | 795 | 993 | 890 | 220 | 385 | 116 | 27 | 47 |
| CFSM | .00 | 1.99 | 3.39 | .24 | 1.04 | 1.21 | 1.12 | .27 | .49 | .14 | .03 | .06 |
| IN. | .00 | 2.22 | 3.91 | .28 | 1.12 | 1.40 | 1.25 | .31 | .54 | .16 | .04 | .07 |

WTR YR 1988 TOTAL 4043.50 MEAN 11.0 MAX 171 MIN .00 MED 2.3 AC-FT 8020 CFSM .83 IN. 11.31

RACCOON CREEK BASIN

03201929 ZINNS RUN NEAR RADCLIFF, OH

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

DRAINAGE AREA.--3.41 mi².

PERIOD OF RECORD.--October 1987 to September 1988.

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

REMARKS.--Estimated daily discharges: Jan. 3-16, Apr. 17-27, Jun. 28-Jul. 25. Records good, except those before March 10 and for estimated daily discharges which are fair. Data collected for Surface-Water Effects of Longwall Mining project, additional data in Volume 2 of this report.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 680 ft³/s, gage height, 19.68 ft on Mar. 7; minimum daily discharge, 0.00 ft³/s, many days. First year of record.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-----|-----|------|-------|--------|---------|--------|-------|------|------|-----|-----|
| 1 | .0 | .0 | .0 | .63 | 1.6 | .73 | .0 | .64 | .18 | .05 | .0 | .0 |
| 2 | .0 | .0 | .0 | .65 | 53 | .72 | .0 | .59 | .18 | .05 | .0 | .0 |
| 3 | .0 | .0 | .0 | .52 | 29 | 1.9 | 15 | .56 | .18 | .05 | .0 | .0 |
| 4 | .0 | .0 | .0 | .40 | 30 | 67 | 59 | .54 | .17 | .05 | .0 | .0 |
| 5 | .0 | .0 | .0 | .36 | 18 | 280 | 17 | .87 | .16 | .02 | .0 | .0 |
| 6 | .0 | .0 | .0 | .32 | 13 | 654 | 7.5 | 1.4 | .15 | .0 | .0 | .0 |
| 7 | .0 | .0 | .0 | .28 | 13 | 680 | 6.4 | 1.0 | .14 | .0 | .0 | .0 |
| 8 | .0 | .0 | .0 | .26 | 9.0 | 401 | 4.7 | .81 | .13 | .0 | .0 | .0 |
| 9 | .0 | .0 | .0 | .23 | 4.4 | 11 | 3.4 | .81 | .13 | .0 | .0 | .0 |
| 10 | .0 | .0 | .0 | .21 | 1.2 | 2.3 | 2.6 | .70 | .14 | .06 | .0 | .0 |
| 11 | .0 | .0 | .0 | .20 | .99 | 1.6 | 2.0 | .55 | .11 | .09 | .0 | .0 |
| 12 | .0 | .0 | .0 | .19 | 1.3 | 1.7 | 1.7 | .51 | .13 | .13 | .0 | .0 |
| 13 | .0 | .0 | .0 | .18 | 1.3 | 3.3 | 1.4 | .48 | .17 | .05 | .0 | .0 |
| 14 | .0 | .0 | .0 | .13 | 1.1 | 2.0 | 1.3 | .50 | .20 | .05 | .0 | .0 |
| 15 | .0 | .0 | .0 | .12 | 1.2 | 1.4 | 1.1 | .42 | .15 | .04 | .0 | .0 |
| 16 | .0 | .0 | .0 | .21 | 1.0 | .98 | .94 | .35 | .11 | .0 | .0 | .0 |
| 17 | .0 | .0 | .0 | .45 | .96 | .74 | 1.2 | .29 | .08 | .0 | .0 | .0 |
| 18 | .0 | .0 | .0 | .81 | .97 | .83 | 2.0 | .26 | .08 | .0 | .0 | .0 |
| 19 | .0 | .0 | .0 | 2.6 | 1.5 | 1.1 | 3.3 | .30 | .07 | .0 | .0 | .0 |
| 20 | .0 | .0 | .0 | 9.5 | 3.0 | .69 | 2.5 | .33 | .07 | .05 | .0 | .0 |
| 21 | .0 | .0 | .0 | 2.2 | 1.9 | .37 | 2.0 | .33 | .07 | .09 | .0 | .0 |
| 22 | .0 | .0 | .0 | 1.3 | 1.6 | .21 | 1.6 | .38 | .07 | .06 | .0 | .0 |
| 23 | .0 | .0 | .0 | 1.0 | 1.5 | .16 | 1.5 | .85 | .07 | .04 | .0 | .0 |
| 24 | .0 | .0 | .0 | .84 | 1.3 | .11 | 1.6 | 1.6 | .06 | .04 | .0 | .0 |
| 25 | .0 | .0 | .0 | .71 | 1.1 | .07 | 1.3 | .60 | .06 | .03 | .0 | .0 |
| 26 | .0 | .0 | 2.3 | .69 | 1.1 | .12 | 1.1 | .38 | .06 | .0 | .0 | .0 |
| 27 | .0 | .0 | .78 | .62 | 1.0 | .03 | .96 | .29 | .05 | .0 | .0 | .0 |
| 28 | .0 | .0 | .62 | .51 | .87 | .0 | .86 | .24 | .05 | .0 | .0 | .0 |
| 29 | .0 | .0 | .57 | .52 | .81 | .0 | .85 | .22 | .05 | .0 | .0 | .0 |
| 30 | .0 | .0 | .46 | .53 | --- | .0 | .73 | .19 | .05 | .0 | .0 | .0 |
| 31 | .0 | --- | .43 | .52 | --- | .0 | --- | .18 | --- | .0 | .0 | --- |
| TOTAL | 0.0 | 0.0 | 5.16 | 27.69 | 196.70 | 2114.06 | 145.54 | 17.17 | 3.32 | 0.95 | 0.0 | 0.0 |
| MEAN | .00 | .00 | .17 | .89 | 6.78 | 68.2 | 4.85 | .55 | .11 | .031 | .00 | .00 |
| MAX | .00 | .00 | 2.3 | 9.5 | 53 | 680 | 59 | 1.6 | .20 | .13 | .00 | .00 |
| MIN | .00 | .00 | .00 | .12 | .81 | .00 | .00 | .18 | .05 | .00 | .00 | .00 |
| MED | .00 | .00 | .00 | .52 | 1.3 | .83 | 1.6 | .50 | .11 | .03 | .00 | .00 |
| AC-FT | .0 | .0 | 10 | 55 | 390 | 4190 | 289 | 34 | 6.6 | 1.9 | .0 | .0 |
| CFSM | .00 | .00 | .05 | .26 | 1.99 | 20.0 | 1.42 | .16 | .03 | .01 | .00 | .00 |
| IN. | .00 | .00 | .06 | .30 | 2.15 | 23.06 | 1.59 | .19 | .04 | .01 | .00 | .00 |

WTR YR 1988 TOTAL 2510.59 MEAN 6.86 MAX 680 MIN .00 MED .05 AC-FT 4980 CFSM 2.01 IN. 27.39

RACoon CREEK BASIN

107

03201947 STRONGS RUN NEAR EWINGTON, OH

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

DRAINAGE AREA.--15.8 mi².

PERIOD OF RECORD.--October 1987 to September 1988.

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

REMARKS.--Estimated daily discharges; Jan. 3-16. Records good except for period of estimated daily discharges, which are fair. Data collected as part of Surface-Water Effects of Longwall Mining project, additional data in Volume 2 of this report.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 483.2 ft³/s, gage height, 6.97 ft on Feb. 2; minimum daily discharge, 0.00 ft³/s, many days. First year of record.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-----|-----|-------|-------|-------|-------|-------|-------|-------|------|-----|-----|
| 1 | .0 | .0 | .0 | 1.9 | 2.8 | 1.6 | 4.1 | 2.9 | .69 | .21 | .0 | .0 |
| 2 | .0 | .0 | .0 | 1.9 | 246 | 1.3 | 4.0 | 2.6 | .62 | .20 | .0 | .0 |
| 3 | .0 | .0 | .0 | 1.8 | 70 | 2.3 | 5.0 | 2.4 | .56 | .18 | .0 | .0 |
| 4 | .0 | .0 | .0 | 1.2 | 54 | 189 | 98 | 2.2 | .54 | .15 | .0 | .0 |
| 5 | .0 | .0 | .0 | .80 | 23 | 98 | 22 | 2.5 | .56 | .11 | .0 | .0 |
| 6 | .0 | .0 | .0 | .50 | 2.5 | 22 | 15 | 4.3 | .51 | .06 | .0 | .0 |
| 7 | .0 | .0 | .0 | .31 | 4.0 | 22 | 16 | 3.5 | .48 | .01 | .0 | .0 |
| 8 | .0 | .0 | .0 | .28 | 8.1 | 39 | 14 | 2.9 | .48 | .0 | .0 | .0 |
| 9 | .0 | .0 | .0 | .27 | 6.9 | 22 | 11 | 2.7 | .47 | .0 | .0 | .0 |
| 10 | .0 | .0 | .0 | .25 | 5.9 | 8.5 | 9.5 | 3.3 | .48 | .25 | .0 | .0 |
| 11 | .0 | .0 | .01 | .24 | 5.3 | 6.9 | 8.4 | 2.7 | .47 | .30 | .0 | .0 |
| 12 | .0 | .0 | .0 | .23 | 5.2 | 6.5 | 7.2 | 2.2 | .45 | .23 | .0 | .0 |
| 13 | .0 | .0 | .0 | .22 | 4.1 | 12 | 6.2 | 1.9 | .46 | .20 | .0 | .0 |
| 14 | .0 | .0 | .05 | .22 | 2.0 | 9.2 | 5.2 | 1.9 | .61 | .18 | .0 | .0 |
| 15 | .0 | .0 | .53 | .21 | 3.7 | 7.6 | 4.4 | 1.8 | .41 | .16 | .0 | .0 |
| 16 | .0 | .0 | .96 | 1.1 | 3.2 | 6.8 | 3.9 | 1.6 | .34 | .07 | .0 | .0 |
| 17 | .0 | .0 | .94 | 1.5 | 2.7 | 6.4 | 3.7 | 1.4 | .33 | .0 | .0 | .0 |
| 18 | .0 | .0 | .85 | 2.1 | 2.3 | 6.3 | 7.1 | 1.2 | .32 | .0 | .0 | .0 |
| 19 | .0 | .0 | .82 | 3.8 | 2.9 | 8.1 | 10 | 1.2 | .30 | .0 | .0 | .0 |
| 20 | .0 | .0 | 1.1 | 37 | 5.8 | 7.1 | 7.2 | 1.1 | .30 | .16 | .0 | .0 |
| 21 | .0 | .0 | 1.2 | 11 | 4.2 | 6.0 | 6.3 | 1.1 | .30 | .30 | .0 | .0 |
| 22 | .0 | .0 | 1.1 | 7.1 | 3.5 | 5.3 | 6.3 | 1.8 | .30 | .20 | .0 | .0 |
| 23 | .0 | .0 | 1.1 | 5.1 | 3.7 | 5.0 | 6.6 | 1.6 | .28 | .18 | .0 | .0 |
| 24 | .0 | .0 | 1.1 | 3.7 | 3.4 | 4.9 | 5.5 | 11 | .27 | .16 | .0 | .0 |
| 25 | .0 | .0 | 1.4 | 3.2 | 2.9 | 4.6 | 4.8 | 5.4 | .24 | .11 | .0 | .0 |
| 26 | .0 | .0 | 7.7 | 2.4 | 2.2 | 5.5 | 4.4 | 3.0 | .24 | .05 | .0 | .0 |
| 27 | .0 | .0 | 5.3 | 2.2 | 2.3 | 5.3 | 4.0 | 1.9 | .22 | .02 | .0 | .0 |
| 28 | .0 | .0 | 3.4 | 2.0 | 2.1 | 4.5 | 3.6 | 1.4 | .20 | .0 | .0 | .0 |
| 29 | .0 | .0 | 2.7 | 1.9 | 1.8 | 4.5 | 3.6 | 1.1 | .19 | .0 | .0 | .0 |
| 30 | .0 | .0 | 2.2 | 2.0 | --- | 4.1 | 3.2 | .92 | .21 | .0 | .0 | .0 |
| 31 | .0 | --- | 1.9 | 2.2 | --- | 4.0 | --- | .75 | --- | .0 | .0 | --- |
| TOTAL | 0.0 | 0.0 | 34.36 | 98.63 | 486.5 | 536.3 | 310.2 | 76.27 | 11.83 | 3.49 | 0.0 | 0.0 |
| MEAN | .00 | .00 | 1.11 | 3.18 | 16.8 | 17.3 | 10.3 | 2.46 | .39 | .11 | .00 | .00 |
| MAX | .00 | .00 | 7.7 | 37 | 246 | 189 | 98 | 11 | .69 | .30 | .00 | .00 |
| MIN | .00 | .00 | .00 | .21 | 1.8 | 1.3 | 3.2 | .75 | .19 | .00 | .00 | .00 |
| MED | .00 | .00 | .82 | 1.9 | 3.7 | 6.4 | 6.2 | 1.9 | .37 | .11 | .00 | .00 |
| AC-FT | .0 | .0 | 68 | 196 | 965 | 1060 | 615 | 151 | 23 | 6.9 | .0 | .0 |
| CFSM | .00 | .00 | .07 | .20 | 1.06 | 1.09 | .65 | .16 | .02 | .01 | .00 | .00 |
| IN. | .00 | .00 | .08 | .23 | 1.15 | 1.26 | .73 | .18 | .03 | .01 | .00 | .00 |

WTR YR 1988 TOTAL 1557.58 MEAN 4.26 MAX 246 MIN .00 MED .30 AC-FT 3090 CFSM .27 IN. 3.67

SCIOTO RIVER BASIN

03219500 SCIOTO RIVER NEAR PROSPECT, OH

LOCATION.--Lat 40°25'10", long 83°11'50", Delaware County, Hydrologic Unit 05060001, on right bank at downstream side of Hoskins Bridge, 1.5 mi upstream from Ottawa Creek, 2.0 mi south of Prospect, and 2.5 mi downstream from Patton Run.

DRAINAGE AREA.--567 mi².

PERIOD OF RECORD.--July 1925 to October 1932, October 1939 to current year. Published as "at Prospect" 1925-32. Gage-height records collected in this vicinity since 1915 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 886.9 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). July 24, 1925, to Oct. 31, 1932, nonrecording gage at site 2.5 mi upstream at datum 4.8 ft higher. Oct. 16 to Dec. 5, 1939, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Jan. 3-19, 26-31, June 6-14. Records good except for estimated daily discharges, which are fair. Water-quality data collected at this site 1964 to 1977. Sediment data collected 1951 to 1953. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--56 years, 456 ft³/s, 10.92 in/yr.

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

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

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Mar. 11 | 0500 | *2,390 | *7.13 | | | | |

Minimum discharge 8.9 ft³/s Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|---------|------|------|-------|-------|-------|------|------|------|------|-------|-------|
| 1 | 14 | 28 | 34 | 249 | 491 | 290 | 257 | 105 | 56 | 17 | 44 | 22 | |
| 2 | 15 | 24 | 37 | 193 | 1670 | 270 | 235 | 101 | 58 | 17 | 32 | 20 | |
| 3 | 15 | 23 | 37 | 160 | 1970 | 261 | 351 | 94 | 68 | 16 | 28 | 33 | |
| 4 | 14 | 23 | 41 | 130 | 2170 | 266 | 1070 | 93 | 65 | 15 | 22 | 57 | |
| 5 | 14 | 24 | 44 | 110 | 1630 | 260 | 1030 | 97 | 63 | 14 | 21 | 35 | |
| 6 | 15 | 23 | 49 | 90 | 764 | 237 | 746 | 102 | 60 | 14 | 24 | 22 | |
| 7 | 17 | 24 | 61 | 80 | 580 | 273 | 656 | 104 | 54 | 15 | 24 | 16 | |
| 8 | 18 | 23 | 59 | 72 | 459 | 582 | 997 | 101 | 47 | 15 | 18 | 15 | |
| 9 | 17 | 25 | 52 | 68 | 391 | 1510 | 1030 | 95 | 41 | 16 | 17 | 15 | |
| 10 | 16 | 30 | 50 | 64 | 306 | 2080 | 704 | 112 | 35 | 15 | 18 | 15 | |
| 11 | 18 | 27 | 49 | 62 | 256 | 2320 | 506 | 111 | 30 | 15 | 19 | 13 | |
| 12 | 21 | 25 | 55 | 60 | 209 | 1620 | 409 | 115 | 26 | 15 | 15 | 13 | |
| 13 | 19 | 25 | 55 | 60 | 207 | 919 | 348 | 115 | 24 | 16 | 14 | 28 | |
| 14 | 18 | 25 | 55 | 58 | 195 | 737 | 307 | 103 | 22 | 16 | 13 | 28 | |
| 15 | 17 | 24 | 75 | 58 | 199 | 588 | 274 | 92 | 23 | 17 | 13 | 19 | |
| 16 | 18 | 23 | 125 | 58 | 282 | 454 | 242 | 89 | 24 | 17 | 14 | 15 | |
| 17 | 18 | 24 | 188 | 58 | 392 | 382 | 216 | 84 | 30 | 16 | 14 | 16 | |
| 18 | 18 | 25 | 243 | 58 | 551 | 359 | 203 | 79 | 25 | 16 | 14 | 14 | |
| 19 | 20 | 24 | 185 | 70 | 843 | 386 | 192 | 78 | 21 | 21 | 15 | 13 | |
| 20 | 21 | 23 | 155 | 175 | 1600 | 430 | 178 | 78 | 19 | 24 | 14 | 12 | |
| 21 | 19 | 23 | 166 | 203 | 1760 | 393 | 168 | 77 | 20 | 72 | 12 | 12 | |
| 22 | 20 | 22 | 199 | 204 | 1900 | 340 | 162 | 71 | 20 | 101 | 11 | 12 | |
| 23 | 21 | 20 | 232 | 193 | 1590 | 303 | 154 | 72 | 20 | 185 | 12 | 11 | |
| 24 | 22 | 21 | 191 | 153 | 1260 | 283 | 145 | 78 | 20 | 134 | 20 | 11 | |
| 25 | 24 | 23 | 159 | 120 | 974 | 283 | 138 | 70 | 19 | 94 | 16 | 11 | |
| 26 | 26 | 29 | 147 | 96 | 577 | 460 | 128 | 65 | 18 | 146 | 14 | 9.4 | |
| 27 | 29 | 28 | 143 | 80 | 454 | 686 | 118 | 66 | 16 | 202 | 13 | 9.1 | |
| 28 | 37 | 29 | 175 | 68 | 388 | 517 | 115 | 66 | 16 | 115 | 20 | 10 | |
| 29 | 31 | 33 | 259 | 64 | 320 | 390 | 110 | 62 | 17 | 67 | 40 | 10 | |
| 30 | 29 | 37 | 292 | 60 | --- | 332 | 110 | 57 | 17 | 48 | 30 | 10 | |
| 31 | 31 | --- | 316 | 80 | --- | 292 | --- | 54 | --- | 44 | 22 | --- | |
| TOTAL | 632 | 757 | 3928 | 3254 | 24388 | 18503 | 11299 | 2686 | 974 | 1535 | 603 | 526.5 | |
| MEAN | 20.4 | 25.2 | 127 | 105 | 841 | 597 | 377 | 86.6 | 32.5 | 49.5 | 19.5 | 17.6 | |
| MAX | 37 | 37 | 316 | 249 | 2170 | 2320 | 1070 | 115 | 68 | 202 | 44 | 57 | |
| MIN | 14 | 20 | 34 | 58 | 195 | 237 | 110 | 54 | 16 | 14 | 11 | 9.1 | |
| CFSM | .04 | .04 | .22 | .19 | 1.48 | 1.05 | .66 | .15 | .06 | .09 | .03 | .03 | |
| IN. | .04 | .05 | .26 | .21 | 1.60 | 1.21 | .74 | .18 | .06 | .10 | .04 | .03 | |
| CAL YR 1987 | TOTAL | 159124 | | MEAN | 436 | MAX | 8250 | MIN | 13 | CFSM | .77 | IN. | 10.44 |
| WTR YR 1988 | TOTAL | 69085.5 | | MEAN | 189 | MAX | 2320 | MIN | 9.1 | CFSM | .33 | IN. | 4.53 |

SCIOTO RIVER BASIN

109

03219590 BOKES CREEK NEAR WARRENSBURG, OH

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

DRAINAGE AREA.--83.2 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 870 ft above National Geodetic Vertical Datum of 1929 from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-7, Jan. 5 to Feb. 15. Records fair except for periods of estimated record, which are poor.

AVERAGE DISCHARGE.--6 years, 66.8 ft³/s, 10.85 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,420 ft³/s July 3, 1987, gage height 13.54 ft; minimum, no flow many days during 1982-1988.

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|---|------|-----------------------------------|---------------------|
| Feb. 2 | -- | *850 | -- | No other peaks greater than base discharge. | | | |

Minimum, no flow many days during the year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|----------|-------|-------|------|------|------|-------|-------|--------|-------|-------|------|
| 1 | .00 | .00 | 2.0 | 26 | 200 | 35 | 39 | 11 | 3.3 | .00 | 4.4 | .00 | |
| 2 | .00 | .00 | 2.1 | 24 | 700 | 34 | 35 | 10 | 3.3 | .00 | 3.5 | .00 | |
| 3 | .00 | .00 | 2.5 | 24 | 380 | 33 | 240 | 9.0 | 3.3 | .00 | 2.5 | .84 | |
| 4 | .00 | .00 | 3.0 | 16 | 200 | 35 | 476 | 8.1 | 3.5 | .00 | 1.4 | 14 | |
| 5 | .00 | .00 | 2.9 | 12 | 120 | 37 | 220 | 8.5 | 2.8 | .00 | .57 | 26 | |
| 6 | .00 | .00 | 2.7 | 13 | 92 | 40 | 134 | 8.8 | 2.2 | .00 | .11 | 12 | |
| 7 | .00 | .00 | 2.7 | 11 | 60 | 72 | 168 | 8.8 | 1.9 | .00 | .00 | 6.4 | |
| 8 | .00 | .00 | 3.1 | 10 | 45 | 174 | 282 | 9.3 | .92 | .00 | .00 | 4.4 | |
| 9 | .00 | .00 | 3.9 | 9.4 | 30 | 419 | 165 | 11 | .90 | .00 | .00 | 3.4 | |
| 10 | .00 | .00 | 4.1 | 8.8 | 25 | 420 | 100 | 11 | .72 | .00 | .00 | 2.6 | |
| 11 | .00 | .00 | 4.1 | 8.0 | 21 | 194 | 73 | 14 | .57 | .00 | .00 | 1.9 | |
| 12 | .00 | .00 | 4.1 | 7.8 | 19 | 119 | 57 | 18 | .38 | .00 | .00 | 1.5 | |
| 13 | .00 | .00 | 4.1 | 7.6 | 17 | 92 | 46 | 19 | .19 | .00 | .00 | 1.8 | |
| 14 | .00 | .00 | 4.1 | 7.6 | 20 | 80 | 38 | 16 | .00 | .00 | .00 | 1.7 | |
| 15 | .00 | .00 | 6.0 | 7.6 | 30 | 60 | 32 | 14 | .00 | .00 | .00 | 2.0 | |
| 16 | .00 | .00 | 7.9 | 7.5 | 35 | 46 | 28 | 12 | .06 | .00 | .00 | 2.1 | |
| 17 | .00 | .00 | 9.9 | 7.4 | 53 | 41 | 24 | 11 | .16 | .00 | .00 | 2.0 | |
| 18 | .00 | .00 | 17 | 10 | 75 | 39 | 22 | 9.5 | .13 | .00 | .00 | 1.6 | |
| 19 | .00 | .00 | 13 | 20 | 151 | 42 | 20 | 9.5 | .00 | .00 | .00 | 1.7 | |
| 20 | .00 | .00 | 12 | 38 | 403 | 49 | 18 | 9.5 | .00 | .00 | .00 | 2.0 | |
| 21 | .00 | .00 | 11 | 70 | 394 | 44 | 17 | 9.4 | .00 | 36 | .00 | 1.7 | |
| 22 | .00 | .00 | 9.2 | 54 | 192 | 38 | 15 | 8.9 | .00 | 20 | .00 | 1.3 | |
| 23 | .00 | .00 | 9.0 | 38 | 164 | 35 | 15 | 10 | .00 | 7.4 | .00 | .84 | |
| 24 | .00 | .00 | 9.0 | 30 | 196 | 32 | 14 | 12 | .00 | 4.8 | .00 | .71 | |
| 25 | .00 | .00 | 10 | 24 | 106 | 48 | 13 | 8.3 | .00 | 4.7 | .00 | .45 | |
| 26 | .00 | .00 | 10 | 16 | 71 | 141 | 13 | 6.8 | .00 | 5.4 | .00 | .26 | |
| 27 | .00 | .12 | 9.6 | 13 | 58 | 157 | 12 | 5.6 | .00 | 4.3 | .00 | .12 | |
| 28 | .00 | .71 | 9.5 | 11 | 46 | 95 | 11 | 5.1 | .00 | 4.7 | .00 | .02 | |
| 29 | .00 | 1.7 | 17 | 9.0 | 39 | 72 | 11 | 4.7 | .00 | 6.8 | .00 | .00 | |
| 30 | .00 | 1.7 | 22 | 11 | --- | 58 | 11 | 4.4 | .00 | 5.4 | .00 | .00 | |
| 31 | .00 | --- | 24 | 30 | --- | 47 | --- | 3.7 | --- | 5.5 | .00 | --- | |
| TOTAL | .00 | 4.23 | 251.5 | 581.7 | 3942 | 2828 | 2349 | 306.9 | 24.33 | 105.00 | 12.48 | 93.34 | |
| MEAN | .00 | .14 | 8.11 | 18.8 | 136 | 91.2 | 78.3 | 9.90 | .81 | 3.39 | .40 | 3.11 | |
| MAX | .00 | 1.7 | 24 | 70 | 700 | 420 | 476 | 19 | 3.5 | 36 | 4.4 | 26 | |
| MIN | .00 | .00 | 2.0 | 7.4 | 17 | 32 | 11 | 3.7 | .00 | .00 | .00 | .00 | |
| CFSM | .00 | .00 | .10 | .23 | 1.63 | 1.10 | .94 | .12 | .01 | .04 | .00 | .04 | |
| IN. | .00 | .00 | .11 | .26 | 1.76 | 1.26 | 1.05 | .14 | .01 | .05 | .01 | .04 | |
| CAL YR 1987 | TOTAL | 20038.45 | | MEAN | 54.9 | MAX | 2190 | MIN | .00 | CFSM | .66 | IN. | 8.96 |
| WTR YR 1988 | TOTAL | 10498.48 | | MEAN | 28.7 | MAX | 700 | MIN | .00 | CFSM | .34 | IN. | 4.69 |

SCIOTO RIVER BASIN

03220000 MILL CREEK NEAR BELLEPOINT, OH

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

DRAINAGE AREA.--178 mi².

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

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 865.14 ft above National Geodetic Vertical Datum of 1929 (levels by students of Ohio State University, City of Columbus bench mark). Prior to Jan. 1, 1948, nonrecording gage, at same site and datum.

REMARKS.--Estimated daily discharges: Oct. 17-20, Jan. 5-9 and Feb. 7-13. Records fair. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--46 years, 154 ft³/s, 11.75 in/yr.

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

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

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|--|------|-----------------------------------|---------------------|
| Feb. 2 | 0715 | *2,720 | *6.67 | No other peak discharge greater than base discharge. | | | |

Minimum daily discharge, 0.93 ft³/s July 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|----------|-------|--------|-------|------|------|-------|-------|---------|-------|-------|------|
| 1 | 6.3 | 6.5 | 13 | 32 | 311 | 52 | 64 | 26 | 5.7 | 2.7 | 11 | 8.9 | |
| 2 | 4.3 | 6.1 | 9.7 | 23 | 2520 | 51 | 54 | 24 | 5.7 | 3.1 | 9.4 | 6.9 | |
| 3 | 3.9 | 5.8 | 13 | 19 | 1700 | 59 | 795 | 24 | 6.6 | 2.3 | 7.5 | 39 | |
| 4 | 4.7 | 6.6 | 16 | 18 | 785 | 75 | 1640 | 26 | 7.8 | 1.9 | 6.7 | 223 | |
| 5 | 3.7 | 8.3 | 20 | 13 | 401 | 70 | 540 | 26 | 7.1 | 1.5 | 7.6 | 65 | |
| 6 | 3.9 | 9.0 | 13 | 12 | 159 | 96 | 305 | 25 | 5.8 | 2.1 | 7.7 | 33 | |
| 7 | 8.2 | 9.8 | 11 | 11 | 90 | 325 | 608 | 27 | 5.6 | 1.5 | 7.5 | 19 | |
| 8 | 8.5 | 9.2 | 13 | 10 | 64 | 746 | 768 | 23 | 5.9 | 1.4 | 7.1 | 15 | |
| 9 | 11 | 9.9 | 13 | 9.8 | 54 | 835 | 317 | 26 | 6.0 | 1.8 | 7.9 | 11 | |
| 10 | 14 | 11 | 11 | 9.7 | 49 | 588 | 178 | 31 | 6.2 | 2.1 | 4.8 | 9.7 | |
| 11 | 11 | 9.6 | 13 | 11 | 45 | 274 | 128 | 30 | 7.3 | 3.0 | 5.3 | 8.5 | |
| 12 | 7.6 | 9.7 | 13 | 13 | 52 | 169 | 97 | 32 | 6.1 | 1.7 | 13 | 8.5 | |
| 13 | 7.3 | 9.2 | 15 | 14 | 45 | 146 | 77 | 32 | 7.5 | 1.3 | 8.5 | 10 | |
| 14 | 6.3 | 9.4 | 13 | 14 | 53 | 128 | 66 | 27 | 4.5 | .93 | 6.2 | 19 | |
| 15 | 6.5 | 7.8 | 17 | 13 | 96 | 95 | 56 | 28 | 3.8 | 1.1 | 5.2 | 12 | |
| 16 | 7.8 | 8.2 | 34 | 12 | 124 | 74 | 51 | 23 | 5.8 | 1.8 | 6.3 | 11 | |
| 17 | 8.0 | 6.7 | 42 | 17 | 132 | 66 | 42 | 24 | 6.2 | 2.4 | 4.9 | 46 | |
| 18 | 8.4 | 5.4 | 31 | 21 | 203 | 63 | 42 | 24 | 10 | 2.4 | 6.4 | 34 | |
| 19 | 6.0 | 6.4 | 20 | 36 | 515 | 64 | 41 | 22 | 8.2 | 14 | 7.2 | 17 | |
| 20 | 4.4 | 7.4 | 18 | 207 | 1370 | 65 | 38 | 22 | 4.4 | 33 | 11 | 14 | |
| 21 | 4.2 | 9.1 | 25 | 212 | 700 | 57 | 34 | 20 | 2.6 | 469 | 9.1 | 13 | |
| 22 | 6.5 | 7.5 | 30 | 120 | 261 | 53 | 34 | 21 | 2.0 | 139 | 7.1 | 9.8 | |
| 23 | 8.8 | 7.9 | 32 | 65 | 353 | 48 | 34 | 22 | 2.6 | 66 | 6.1 | 9.9 | |
| 24 | 8.4 | 9.5 | 22 | 44 | 421 | 45 | 31 | 30 | 3.6 | 39 | 9.9 | 8.2 | |
| 25 | 8.1 | 12 | 19 | 32 | 176 | 155 | 25 | 22 | 3.9 | 19 | 11 | 6.2 | |
| 26 | 9.5 | 11 | 22 | 27 | 104 | 597 | 29 | 18 | 3.4 | 52 | 7.7 | 6.8 | |
| 27 | 9.7 | 12 | 34 | 34 | 89 | 331 | 26 | 18 | 3.8 | 85 | 6.3 | 6.2 | |
| 28 | 16 | 12 | 44 | 26 | 69 | 164 | 25 | 15 | 2.9 | 25 | 10 | 5.7 | |
| 29 | 11 | 12 | 43 | 25 | 57 | 115 | 28 | 9.4 | 2.6 | 14 | 12 | 6.9 | |
| 30 | 9.5 | 19 | 53 | 28 | --- | 89 | 24 | 7.6 | 2.0 | 10 | 19 | 6.0 | |
| 31 | 7.5 | --- | 47 | 34 | --- | 71 | --- | 7.2 | --- | 10 | 12 | --- | |
| TOTAL | 241.0 | 274.0 | 719.7 | 1162.5 | 10998 | 5766 | 6197 | 712.2 | 155.6 | 1010.03 | 261.4 | 689.2 | |
| MEAN | 7.77 | 9.13 | 23.2 | 37.5 | 379 | 186 | 207 | 23.0 | 5.19 | 32.6 | 8.43 | 23.0 | |
| MAX | 16 | 19 | 53 | 212 | 2520 | 835 | 1640 | 32 | 10 | 469 | 19 | 223 | |
| MIN | 3.7 | 5.4 | 9.7 | 9.7 | 45 | 45 | 24 | 7.2 | 2.0 | .93 | 4.8 | 5.7 | |
| CFSM | .04 | .05 | .13 | .21 | 2.13 | 1.04 | 1.16 | .13 | .03 | .18 | .05 | .13 | |
| IN. | .05 | .06 | .15 | .24 | 2.30 | 1.21 | 1.30 | .15 | .03 | .21 | .05 | .14 | |
| CAL YR 1987 | TOTAL | 38407.4 | | MEAN | 105 | MAX | 4230 | MIN | 2.4 | CFSM | .59 | IN. | 8.03 |
| WTR YR 1988 | TOTAL | 28186.63 | | MEAN | 77.0 | MAX | 2520 | MIN | .93 | CFSM | .43 | IN. | 5.89 |

SCIOTO RIVER BASIN

111

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

LOCATION.--Lat 40°08'36", long 83°07'14", Delaware County, Hydrologic Unit 05060001, on left bank, 0.2 mi north of county line, 0.8 mi downstream from O'Shaughnessy Dam, and 3.0 mi north of Dublin.

DRAINAGE AREA.--980 mi².

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

REVISED RECORDS.--WSP 803: 1924-35. WSP 1725: 1924. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 775.00 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 26, 1921, nonrecording gage at site 0.8 mi upstream at same datum. Aug. 26, 1921, to Oct. 13, 1924, nonrecording gage at site 100 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Jan. 2-19, 26-31, March 21-May 10. Records good except for estimated daily discharges which are fair. Flow regulated since 1924 by O'Shaughnessy Reservoir 0.8 mi upstream (see station 03220500). Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--67 years, 789 ft³/s.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 25, 1913 reached a stage of 24.6 ft, discharge, 74,500 ft³/s at Griggs Dam, 9 mi downstream from gage, computed by C.E. Sherman, Ohio State University.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,150 ft³/s Feb. 2, gage height, 8.63 ft; minimum daily, 15 ft³/s Oct. 4-7, 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|------|------|-------|-------|-------|------|------|------|------|------|
| 1 | 60 | 42 | 23 | 346 | 445 | 450 | 420 | 170 | 76 | 76 | 81 | 47 |
| 2 | 34 | 37 | 24 | 210 | 5520 | 423 | 390 | 160 | 74 | 75 | 80 | 46 |
| 3 | 18 | 36 | 25 | 150 | 4990 | 459 | 1200 | 160 | 77 | 76 | 79 | 60 |
| 4 | 15 | 31 | 29 | 120 | 3650 | 495 | 2000 | 150 | 72 | 77 | 83 | 77 |
| 5 | 15 | 20 | 27 | 100 | 2700 | 452 | 1500 | 150 | 69 | 79 | 76 | 100 |
| 6 | 15 | 20 | 28 | 96 | 1320 | 475 | 1100 | 160 | 69 | 89 | 72 | 103 |
| 7 | 15 | 21 | 36 | 88 | 793 | 766 | 1500 | 170 | 69 | 105 | 66 | 86 |
| 8 | 16 | 22 | 53 | 84 | 764 | 1460 | 1900 | 160 | 68 | 102 | 62 | 77 |
| 9 | 15 | 26 | 62 | 80 | 615 | 2740 | 1400 | 150 | 70 | 86 | 60 | 74 |
| 10 | 17 | 28 | 66 | 78 | 505 | 3310 | 1100 | 150 | 67 | 87 | 59 | 75 |
| 11 | 22 | 42 | 67 | 76 | 418 | 3040 | 800 | 165 | 63 | 81 | 59 | 69 |
| 12 | 21 | 64 | 70 | 74 | 351 | 2430 | 640 | 135 | 61 | 60 | 60 | 69 |
| 13 | 20 | 64 | 70 | 70 | 273 | 1620 | 560 | 150 | 61 | 60 | 60 | 73 |
| 14 | 20 | 64 | 71 | 70 | 278 | 1200 | 500 | 141 | 61 | 59 | 59 | 62 |
| 15 | 21 | 63 | 73 | 68 | 366 | 1010 | 440 | 131 | 60 | 74 | 68 | 63 |
| 16 | 28 | 61 | 74 | 66 | 515 | 783 | 390 | 229 | 58 | 86 | 75 | 68 |
| 17 | 71 | 60 | 77 | 66 | 611 | 636 | 350 | 113 | 54 | 85 | 69 | 66 |
| 18 | 16 | 59 | 105 | 64 | 934 | 572 | 330 | 117 | 54 | 86 | 67 | 68 |
| 19 | 16 | 58 | 139 | 80 | 1530 | 575 | 310 | 114 | 54 | 53 | 65 | 77 |
| 20 | 29 | 57 | 153 | 124 | 3640 | 649 | 300 | 110 | 64 | 39 | 61 | 123 |
| 21 | 45 | 55 | 160 | 208 | 3250 | 600 | 280 | 109 | 74 | 44 | 55 | 174 |
| 22 | 64 | 53 | 171 | 360 | 2510 | 540 | 260 | 107 | 94 | 28 | 50 | 102 |
| 23 | 64 | 52 | 232 | 322 | 2470 | 500 | 250 | 107 | 85 | 31 | 49 | 68 |
| 24 | 64 | 52 | 271 | 265 | 2210 | 470 | 230 | 99 | 89 | 39 | 48 | 37 |
| 25 | 65 | 53 | 266 | 199 | 1650 | 460 | 220 | 108 | 88 | 55 | 43 | 38 |
| 26 | 64 | 55 | 222 | 150 | 1060 | 1200 | 210 | 100 | 90 | 56 | 42 | 48 |
| 27 | 54 | 52 | 185 | 130 | 775 | 980 | 200 | 98 | 86 | 63 | 40 | 62 |
| 28 | 33 | 54 | 216 | 112 | 635 | 800 | 190 | 95 | 83 | 78 | 41 | 56 |
| 29 | 33 | 47 | 311 | 105 | 528 | 620 | 180 | 91 | 80 | 79 | 47 | 55 |
| 30 | 125 | 22 | 299 | 100 | --- | 520 | 170 | 89 | 77 | 75 | 46 | 56 |
| 31 | 115 | --- | 418 | 100 | --- | 470 | --- | 82 | --- | 85 | 48 | --- |
| TOTAL | 1210 | 1370 | 4023 | 4161 | 45306 | 30705 | 19320 | 4070 | 2147 | 2168 | 1870 | 2179 |
| MEAN | 39.0 | 45.7 | 130 | 134 | 1562 | 990 | 644 | 131 | 71.6 | 69.9 | 60.3 | 72.6 |
| MAX | 125 | 64 | 418 | 360 | 5520 | 3310 | 2000 | 229 | 94 | 105 | 83 | 174 |
| MIN | 15 | 20 | 23 | 64 | 273 | 423 | 170 | 82 | 54 | 28 | 40 | 37 |
| CAL YR 1987 | TOTAL | 242115 | | MEAN | 663 | MAX | 17600 | MIN | 15 | | | |
| WTR YR 1988 | TOTAL | 118529 | | MEAN | 324 | MAX | 5520 | MIN | 15 | | | |

SCIOTO RIVER BASIN

03223000 OLENTANGY RIVER AT CLARIDON, OH

LOCATION.--Lat 40°34'58", long 82°59'20", in NW 1/4 sec. 26, T.5 S., R.16 E., Marion County, Hydrologic Unit 05060001, on left bank 900 ft downstream from bridge on State Highway 95, 0.5 mi east of Claridon, 0.8 mi downstream from Otter Creek, and 1.4 mi upstream from Beaver Run.

DRAINAGE AREA.--157 mi².

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

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

GAGE.--Water-stage recorder. Datum of gage is 961.72 ft above National Geodetic Vertical Datum of 1929. (Levels by U.S. Army Corps of Engineers). Prior to Aug. 18, 1969 water-stage recorder at site 1,000 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Jan. 5-18, 25-29. Records good except estimated daily discharges, which are fair. Small diversion at gage for irrigation of golf course. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974. Water Year 1986 stream flow records published in 1987 Water Year data report. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--42 years, 155 ft³/s, 13.41 in/yr.

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

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|--------------------------------|------------------|--|------|--------------------------------|------------------|
| Feb. 2 | 2230 | *1,630 | 8.68 | No other peak greater than base discharge. | | | |

Minimum discharge, 0.50 ft³/s Aug. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|----------|------|------|-------|------|-------|-------|-------|-------|--------|-------|-------|
| 1 | 4.1 | 9.4 | 13 | 60 | 622 | 66 | 84 | 29 | 8.5 | 1.9 | 15 | 8.2 | |
| 2 | 4.0 | 8.1 | 16 | 60 | 1380 | 64 | 78 | 26 | 8.5 | 1.8 | 11 | 6.5 | |
| 3 | 4.0 | 7.2 | 16 | 47 | 1390 | 69 | 328 | 24 | 9.5 | 2.1 | 6.0 | 8.6 | |
| 4 | 4.3 | 7.1 | 23 | 35 | 700 | 73 | 1160 | 24 | 9.3 | 2.3 | 4.1 | 11 | |
| 5 | 4.7 | 6.9 | 24 | 27 | 337 | 69 | 772 | 24 | 10 | 2.1 | 3.5 | 15 | |
| 6 | 4.7 | 6.5 | 27 | 21 | 231 | 69 | 279 | 25 | 8.5 | 1.8 | 3.0 | 13 | |
| 7 | 5.3 | 6.3 | 22 | 19 | 213 | 96 | 224 | 25 | 8.1 | 1.6 | 2.8 | 7.5 | |
| 8 | 6.1 | 6.3 | 22 | 19 | 145 | 344 | 360 | 23 | 7.4 | 1.6 | 2.4 | 5.7 | |
| 9 | 5.3 | 8.1 | 39 | 18 | 100 | 884 | 247 | 23 | 7.3 | 1.5 | 1.8 | 4.8 | |
| 10 | 6.2 | 8.6 | 46 | 18 | 68 | 777 | 163 | 27 | 6.9 | 1.4 | 1.7 | 3.6 | |
| 11 | 8.5 | 8.7 | 39 | 17 | 64 | 367 | 124 | 30 | 6.5 | 1.2 | 1.2 | 3.1 | |
| 12 | 8.6 | 13 | 38 | 17 | 58 | 245 | 100 | 31 | 7.1 | 1.5 | 1.1 | 3.7 | |
| 13 | 9.9 | 11 | 43 | 17 | 68 | 208 | 83 | 27 | 5.9 | 1.7 | 1.1 | 6.6 | |
| 14 | 9.3 | 10 | 38 | 17 | 55 | 174 | 73 | 21 | 5.8 | 1.9 | 1.0 | 4.7 | |
| 15 | 7.3 | 10 | 75 | 17 | 132 | 131 | 64 | 19 | 5.2 | 1.6 | .98 | 8.7 | |
| 16 | 6.6 | 10 | 181 | 17 | 325 | 114 | 57 | 19 | 4.8 | 1.5 | .90 | 7.1 | |
| 17 | 6.4 | 9.4 | 100 | 17 | 293 | 98 | 53 | 18 | 5.6 | 1.5 | 1.2 | 5.5 | |
| 18 | 5.0 | 9.5 | 52 | 22 | 386 | 113 | 51 | 17 | 5.7 | 1.2 | 2.0 | 4.6 | |
| 19 | 5.4 | 8.9 | 40 | 30 | 519 | 124 | 47 | 16 | 6.9 | 2.4 | 2.4 | 3.9 | |
| 20 | 6.3 | 8.3 | 85 | 177 | 1250 | 121 | 43 | 16 | 6.3 | 7.2 | 2.0 | 2.9 | |
| 21 | 5.6 | 8.1 | 172 | 223 | 966 | 103 | 41 | 16 | 4.8 | 18 | 1.7 | 2.6 | |
| 22 | 6.6 | 7.3 | 116 | 96 | 359 | 90 | 38 | 16 | 4.1 | 24 | 1.5 | 2.6 | |
| 23 | 6.9 | 7.3 | 70 | 53 | 381 | 90 | 37 | 16 | 3.4 | 20 | 2.5 | 2.2 | |
| 24 | 6.9 | 7.3 | 53 | 39 | 356 | 90 | 35 | 15 | 3.0 | 15 | 4.1 | 2.7 | |
| 25 | 7.3 | 7.9 | 52 | 31 | 188 | 114 | 32 | 13 | 2.9 | 10 | 2.9 | 2.7 | |
| 26 | 8.8 | 9.1 | 66 | 27 | 123 | 520 | 30 | 11 | 2.7 | 10 | 6.7 | 2.4 | |
| 27 | 17 | 9.5 | 75 | 24 | 114 | 426 | 29 | 10 | 2.5 | 19 | 4.1 | 2.8 | |
| 28 | 15 | 13 | 80 | 21 | 74 | 210 | 29 | 9.8 | 2.2 | 18 | 5.4 | 2.4 | |
| 29 | 17 | 14 | 191 | 20 | 76 | 149 | 30 | 9.5 | 2.5 | 8.2 | 8.2 | 2.3 | |
| 30 | 17 | 14 | 140 | 32 | --- | 119 | 31 | 9.2 | 2.3 | 5.5 | 14 | 2.2 | |
| 31 | 12 | --- | 84 | 92 | --- | 96 | --- | 9.0 | --- | 10 | 12 | --- | |
| TOTAL | 242.1 | 270.8 | 2038 | 1330 | 10973 | 6213 | 4722 | 598.5 | 174.2 | 197.5 | 128.28 | 159.6 | |
| MEAN | 7.81 | 9.03 | 65.7 | 42.9 | 378 | 200 | 157 | 19.3 | 5.81 | 6.37 | 4.14 | 5.32 | |
| MAX | 17 | 14 | 191 | 223 | 1390 | 884 | 1160 | 31 | 10 | 24 | 15 | 15 | |
| MIN | 4.0 | 6.3 | 13 | 17 | 55 | 64 | 29 | 9.0 | 2.2 | 1.2 | .90 | 2.2 | |
| CFSM | .05 | .06 | .42 | .27 | 2.41 | 1.27 | 1.00 | .12 | .04 | .04 | .03 | .03 | |
| IN. | .06 | .06 | .48 | .32 | 2.60 | 1.47 | 1.12 | .14 | .04 | .05 | .03 | .04 | |
| CAL YR 1987 | TOTAL | 64620.0 | | MEAN | 177 | MAX | 10400 | MIN | 4.0 | CFSM | 1.13 | IN. | 15.31 |
| WTR YR 1988 | TOTAL | 27046.98 | | MEAN | 73.9 | MAX | 1390 | MIN | .90 | CFSM | .47 | IN. | 6.41 |

SCIOTO RIVER BASIN

113

03225500 OLENTANGY RIVER NEAR DELAWARE, OH

LOCATION.--Lat 40°21'18", long 83°04'02", in NE 1/4 T.5 N., R.19 W., Delaware County, Hydrologic Unit 05060001, on left bank 500 ft upstream from highway bridge, 1,000 ft downstream from Delaware Dam, 1.3 ft upstream from Norfolk and Western Railway bridge, and 4.0 mi north of Delaware.

DRAINAGE AREA.--393 mi².

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 878.00 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1950, water-stage recorder at this site 500 ft downstream at datum 1.72 ft lower. Oct. 1, 1950 to Sept. 30, 1985, at datum 78.42 ft lower.

REMARKS.--No estimated daily discharges. Records good. Flow completely regulated by Delaware Lake since 1951. Water-quality data collected at this site 1965 to 1977. Water-temperature data collected 1946 to 1961. U.S. Army Corps of Engineers Satellite Telemeter at station.

AVERAGE DISCHARGE.--23 years (water years 1924-34, 1939-50), 358 ft³/s; 38 years (water years 1951-88), 352 ft³/s.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,650 ft³/s Feb. 3, gage height, 7.54 ft; minimum daily, 5.7 ft³/s Apr. 24 and Jul. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|---------|------|------|-------|-------|---------|------|-------|-------|-------|------|
| 1 | 21 | 21 | 128 | 139 | 584 | 255 | 157 | 25 | 8.3 | 11 | 29 | 21 |
| 2 | 21 | 22 | 45 | 139 | 1810 | 255 | 24 | 59 | 9.1 | 13 | 30 | 21 |
| 3 | 21 | 22 | 46 | 139 | 2900 | 388 | 66 | 78 | 9.1 | 12 | 33 | 27 |
| 4 | 21 | 22 | 76 | 92 | 3560 | 403 | 1860 | 78 | 9.7 | 12 | 40 | 24 |
| 5 | 21 | 22 | 95 | 69 | 2320 | 250 | 2540 | 78 | 9.9 | 12 | 41 | 21 |
| 6 | 21 | 22 | 95 | 68 | 464 | 252 | 1510 | 78 | 11 | 6.9 | 41 | 21 |
| 7 | 21 | 21 | 95 | 51 | 197 | 261 | 747 | 77 | 10 | 5.7 | 41 | 21 |
| 8 | 21 | 21 | 95 | 36 | 235 | 707 | 449 | 77 | 9.9 | 6.8 | 31 | 21 |
| 9 | 21 | 91 | 96 | 33 | 314 | 1640 | 286 | 78 | 9.9 | 8.6 | 18 | 21 |
| 10 | 21 | 132 | 96 | 33 | 350 | 2020 | 286 | 78 | 11 | 8.6 | 17 | 20 |
| 11 | 21 | 132 | 96 | 33 | 263 | 1140 | 539 | 78 | 14 | 7.8 | 15 | 19 |
| 12 | 21 | 96 | 97 | 33 | 180 | 621 | 492 | 77 | 14 | 6.7 | 12 | 19 |
| 13 | 20 | 52 | 97 | 33 | 114 | 616 | 278 | 76 | 11 | 7.1 | 9.9 | 21 |
| 14 | 19 | 295 | 95 | 33 | 113 | 235 | 276 | 76 | 9.9 | 8.0 | 9.9 | 20 |
| 15 | 19 | 48 | 97 | 33 | 124 | 261 | 202 | 76 | 9.3 | 8.9 | 10 | 19 |
| 16 | 19 | 80 | 208 | 33 | 595 | 288 | 106 | 76 | 9.3 | 12 | 9.9 | 19 |
| 17 | 19 | 105 | 282 | 34 | 846 | 246 | 106 | 60 | 9.3 | 9.8 | 9.9 | 22 |
| 18 | 20 | 117 | 191 | 34 | 854 | 192 | 106 | 52 | 9.7 | 7.7 | 9.9 | 21 |
| 19 | 20 | 124 | 98 | 59 | 953 | 167 | 106 | 52 | 8.5 | 8.5 | 10 | 21 |
| 20 | 22 | 123 | 98 | 258 | 1020 | 168 | 106 | 52 | 7.9 | 9.1 | 10 | 21 |
| 21 | 21 | 123 | 184 | 475 | 1030 | 302 | 72 | 104 | 7.2 | 20 | 10 | 21 |
| 22 | 21 | 123 | 225 | 288 | 1970 | 288 | 12 | 42 | 8.0 | 9.8 | 10 | 20 |
| 23 | 21 | 123 | 225 | 123 | 2150 | 121 | 465 | 42 | 8.2 | 8.8 | 10 | 20 |
| 24 | 21 | 123 | 143 | 123 | 1940 | 13 | 5.7 | 42 | 7.7 | 8.6 | 10 | 19 |
| 25 | 21 | 164 | 99 | 215 | 878 | 36 | 9.5 | 24 | 7.2 | 13 | 9.6 | 19 |
| 26 | 21 | 185 | 99 | 114 | 44 | 555 | 13 | 15 | 7.3 | 22 | 10 | 20 |
| 27 | 22 | 185 | 99 | 43 | 72 | 833 | 14 | 15 | 7.3 | 22 | 11 | 18 |
| 28 | 21 | 178 | 280 | 43 | 71 | 512 | 12 | 12 | 7.3 | 22 | 11 | 18 |
| 29 | 21 | 177 | 367 | 61 | 195 | 400 | 24 | 13 | 7.7 | 25 | 16 | 24 |
| 30 | 21 | 176 | 367 | 70 | --- | 397 | 28 | 13 | 7.7 | 28 | 19 | 22 |
| 31 | 21 | --- | 209 | 70 | --- | 395 | --- | 11 | --- | 28 | 20 | --- |
| TOTAL | 642 | 3125 | 4523 | 3007 | 26146 | 14217 | 10897.2 | 1714 | 276.4 | 389.4 | 564.1 | 621 |
| MEAN | 20.7 | 104 | 146 | 97.0 | 902 | 459 | 363 | 55.3 | 9.21 | 12.6 | 18.2 | 20.7 |
| MAX | 22 | 295 | 367 | 475 | 3560 | 2020 | 2540 | 104 | 14 | 28 | 41 | 27 |
| MIN | 19 | 21 | 45 | 33 | 44 | 13 | 5.7 | 11 | 7.2 | 5.7 | 9.6 | 18 |
| CAL YR 1987 | TOTAL | 128424 | | MEAN | 352 | MAX | 4460 | MIN | 18 | | | |
| WTR YR 1988 | TOTAL | 66122.1 | | MEAN | 181 | MAX | 3560 | MIN | 5.7 | | | |

SCIOTO RIVER BASIN

03227500 SCIOTO RIVER AT COLUMBUS, OH

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

DRAINAGE AREA.--1,629 mi².

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

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

GAGE.--Water-stage recorder. Datum of gage is 680.00 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1924, nonrecording gage at site 200 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Jan. 7-17, Jan. 27 to Feb. 1. Records good except for estimated daily discharges, which are fair. Flow regulated by Griggs Reservoir 10.4 mi upstream (see station 03221500), O'Shaughnessy Reservoir 20.4 mi upstream (see station 03220500), and Delaware Lake 35 mi upstream from station. Records include sewage return flow from Frank Road Treatment Plant. Shadeville Treatment Plant flow enters downstream. Water supply for city of Columbus is obtained from Scioto River downstream from Griggs Dam and Big Walnut Creek downstream from Central College. For statement on diversions from Big Walnut Creek, see REMARKS for station 03229500. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--68 years, 1,395 ft³/s.

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,700 ft³/s Feb. 3, gage height, 16.21 ft; minimum daily, 80 ft³/s July 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|-------|-------|-------|-------|-------|------|------|------|------|------|
| 1 | 133 | 133 | 346 | 929 | 350 | 882 | 1130 | 291 | 132 | 124 | 335 | 134 |
| 2 | 129 | 141 | 327 | 634 | 2030 | 945 | 825 | 282 | 137 | 112 | 214 | 135 |
| 3 | 122 | 139 | 252 | 551 | 10900 | 1490 | 2320 | 283 | 177 | 113 | 426 | 970 |
| 4 | 116 | 143 | 416 | 754 | 8590 | 1750 | 6400 | 308 | 137 | 112 | 232 | 1370 |
| 5 | 122 | 152 | 261 | 476 | 8280 | 1250 | 6110 | 465 | 128 | 122 | 189 | 505 |
| 6 | 121 | 142 | 240 | 278 | 6280 | 1220 | 4040 | 476 | 129 | 134 | 332 | 305 |
| 7 | 194 | 138 | 241 | 240 | 1850 | 1470 | 3180 | 333 | 130 | 123 | 205 | 232 |
| 8 | 209 | 140 | 249 | 230 | 1250 | 2040 | 3150 | 299 | 132 | 109 | 169 | 196 |
| 9 | 173 | 166 | 256 | 210 | 1160 | 3750 | 2710 | 347 | 416 | 102 | 154 | 172 |
| 10 | 175 | 178 | 252 | 210 | 1100 | 5140 | 2150 | 378 | 163 | 88 | 197 | 164 |
| 11 | 332 | 255 | 268 | 200 | 1120 | 4650 | 1750 | 355 | 146 | 133 | 242 | 156 |
| 12 | 201 | 276 | 360 | 200 | 853 | 3350 | 1740 | 313 | 147 | 98 | 131 | 257 |
| 13 | 177 | 275 | 280 | 190 | 624 | 2580 | 1320 | 298 | 142 | 87 | 130 | 636 |
| 14 | 160 | 182 | 264 | 190 | 816 | 2050 | 1020 | 321 | 149 | 92 | 127 | 284 |
| 15 | 150 | 420 | 409 | 190 | 1090 | 1430 | 980 | 295 | 155 | 85 | 123 | 180 |
| 16 | 147 | 196 | 312 | 190 | 1300 | 1350 | 825 | 303 | 169 | 82 | 131 | 165 |
| 17 | 137 | 197 | 341 | 200 | 1770 | 1140 | 670 | 385 | 211 | 80 | 120 | 929 |
| 18 | 131 | 229 | 457 | 348 | 2030 | 1060 | 647 | 254 | 135 | 191 | 120 | 347 |
| 19 | 139 | 217 | 450 | 323 | 3730 | 984 | 566 | 249 | 123 | 794 | 311 | 238 |
| 20 | 165 | 230 | 524 | 878 | 5370 | 1010 | 537 | 249 | 123 | 1260 | 1040 | 212 |
| 21 | 150 | 245 | 435 | 809 | 4320 | 1000 | 516 | 237 | 147 | 2640 | 341 | 257 |
| 22 | 140 | 255 | 424 | 874 | 4330 | 1070 | 469 | 272 | 141 | 528 | 160 | 265 |
| 23 | 139 | 268 | 525 | 962 | 4770 | 952 | 454 | 418 | 130 | 441 | 422 | 209 |
| 24 | 140 | 273 | 590 | 693 | 4000 | 785 | 850 | 345 | 133 | 645 | 339 | 169 |
| 25 | 155 | 321 | 693 | 576 | 3060 | 912 | 388 | 262 | 133 | 215 | 167 | 140 |
| 26 | 151 | 519 | 816 | 482 | 1400 | 2120 | 331 | 216 | 127 | 204 | 133 | 137 |
| 27 | 168 | 367 | 527 | 430 | 1070 | 2400 | 323 | 193 | 120 | 186 | 118 | 131 |
| 28 | 184 | 331 | 475 | 360 | 927 | 2300 | 322 | 160 | 107 | 168 | 116 | 130 |
| 29 | 158 | 613 | 834 | 310 | 815 | 1490 | 332 | 151 | 126 | 170 | 536 | 136 |
| 30 | 147 | 390 | 859 | 300 | --- | 1340 | 314 | 153 | 125 | 171 | 267 | 141 |
| 31 | 136 | --- | 877 | 310 | --- | 1190 | --- | 144 | --- | 402 | 155 | --- |
| TOTAL | 4901 | 7531 | 13560 | 13527 | 85185 | 55100 | 46369 | 9035 | 4470 | 9811 | 7682 | 9302 |
| MEAN | 158 | 251 | 437 | 436 | 2937 | 1777 | 1546 | 291 | 149 | 316 | 248 | 310 |
| MAX | 332 | 613 | 877 | 962 | 10900 | 5140 | 6400 | 476 | 416 | 2640 | 1040 | 1370 |
| MIN | 116 | 133 | 240 | 190 | 350 | 785 | 314 | 144 | 107 | 80 | 116 | 130 |
| CAL YR 1987 | TOTAL | 431446 | MEAN | 1182 | MAX | 17100 | MIN | 116 | | | | |
| WTR YR 1988 | TOTAL | 266473 | MEAN | 728 | MAX | 10900 | MIN | 80 | | | | |

SCIOTO RIVER BASIN

115

03228500 BIG WALNUT CREEK AT CENTRAL COLLEGE, OH

LOCATION.--Lat 40°06'13", long 82°53'03", T.2 N., R.17 W., Franklin County, Hydrologic Unit 05060001, on right bank at upstream side of county road bridge, 0.2 mi east of Central College, 0.4 mi downstream from Hoover Dam, and 3 mi southeast of Westerville.

DRAINAGE AREA.--190 mi².

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

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

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

REMARKS.--No estimated daily discharges. Records good. Flow completely regulated by Hoover Reservoir since September 1954. (See station 03228400). Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--50 years, 188 ft³/s.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,410 ft³/s Apr. 4, gage height, 9.88 ft; minimum daily, 85 ft³/s Feb. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|-------|------|------|------|------|------|------|------|------|------|------|
| 1 | 134 | 117 | 108 | 105 | 114 | 103 | 104 | 145 | 173 | 140 | 115 | 114 |
| 2 | 134 | 115 | 104 | 100 | 136 | 99 | 104 | 152 | 143 | 165 | 133 | 103 |
| 3 | 134 | 121 | 115 | 100 | 92 | 99 | 162 | 124 | 124 | 148 | 129 | 121 |
| 4 | 133 | 118 | 112 | 105 | 92 | 91 | 2230 | 127 | 119 | 147 | 122 | 106 |
| 5 | 133 | 119 | 110 | 112 | 89 | 96 | 802 | 110 | 137 | 160 | 122 | 110 |
| 6 | 133 | 103 | 109 | 107 | 100 | 101 | 395 | 115 | 168 | 170 | 103 | 122 |
| 7 | 134 | 112 | 116 | 104 | 108 | 100 | 587 | 143 | 179 | 155 | 116 | 110 |
| 8 | 128 | 112 | 107 | 103 | 108 | 101 | 432 | 130 | 178 | 118 | 135 | 109 |
| 9 | 123 | 112 | 107 | 102 | 99 | 103 | 269 | 124 | 112 | 125 | 123 | 109 |
| 10 | 141 | 103 | 107 | 103 | 102 | 103 | 213 | 107 | 122 | 122 | 131 | 125 |
| 11 | 139 | 107 | 102 | 107 | 107 | 114 | 192 | 138 | 153 | 119 | 113 | 120 |
| 12 | 128 | 112 | 102 | 107 | 107 | 114 | 145 | 118 | 177 | 115 | 142 | 116 |
| 13 | 128 | 112 | 103 | 106 | 106 | 112 | 121 | 139 | 145 | 115 | 119 | 108 |
| 14 | 127 | 112 | 113 | 101 | 106 | 112 | 122 | 122 | 189 | 117 | 131 | 112 |
| 15 | 125 | 112 | 104 | 99 | 112 | 108 | 121 | 150 | 171 | 123 | 134 | 104 |
| 16 | 122 | 109 | 103 | 98 | 107 | 91 | 120 | 158 | 149 | 125 | 125 | 127 |
| 17 | 110 | 101 | 102 | 101 | 108 | 92 | 121 | 131 | 127 | 124 | 135 | 103 |
| 18 | 140 | 104 | 104 | 95 | 108 | 98 | 122 | 136 | 171 | 126 | 123 | 119 |
| 19 | 139 | 111 | 113 | 105 | 88 | 97 | 118 | 131 | 166 | 108 | 114 | 109 |
| 20 | 136 | 113 | 100 | 94 | 85 | 98 | 120 | 125 | 168 | 101 | 105 | 110 |
| 21 | 130 | 112 | 101 | 101 | 110 | 106 | 114 | 138 | 158 | 101 | 108 | 119 |
| 22 | 125 | 112 | 102 | 96 | 102 | 103 | 123 | 160 | 157 | 97 | 115 | 114 |
| 23 | 125 | 112 | 102 | 96 | 99 | 103 | 112 | 150 | 148 | 90 | 107 | 107 |
| 24 | 125 | 112 | 102 | 96 | 96 | 103 | 112 | 111 | 172 | 99 | 95 | 125 |
| 25 | 125 | 106 | 97 | 95 | 95 | 113 | 112 | 136 | 167 | 106 | 109 | 116 |
| 26 | 123 | 103 | 92 | 104 | 95 | 103 | 112 | 117 | 158 | 107 | 115 | 116 |
| 27 | 124 | 92 | 90 | 103 | 95 | 95 | 122 | 172 | 154 | 102 | 103 | 111 |
| 28 | 123 | 94 | 101 | 100 | 95 | 98 | 120 | 166 | 151 | 114 | 100 | 133 |
| 29 | 123 | 95 | 100 | 99 | 95 | 104 | 119 | 165 | 143 | 114 | 99 | 132 |
| 30 | 123 | 114 | 91 | 94 | --- | 104 | 119 | 158 | 163 | 114 | 89 | 132 |
| 31 | 123 | --- | 113 | 95 | --- | 104 | --- | 185 | --- | 110 | 107 | --- |
| TOTAL | 3990 | 3277 | 3232 | 3133 | 2956 | 3168 | 7765 | 4283 | 4642 | 3777 | 3617 | 3462 |
| MEAN | 129 | 109 | 104 | 101 | 102 | 102 | 259 | 138 | 155 | 122 | 117 | 115 |
| MAX | 141 | 121 | 116 | 112 | 136 | 114 | 2230 | 185 | 189 | 170 | 142 | 133 |
| MIN | 110 | 92 | 90 | 94 | 85 | 91 | 104 | 107 | 112 | 90 | 89 | 103 |
| CAL YR 1987 | TOTAL | 71539 | | MEAN | 196 | MAX | 2390 | MIN | 90 | | | |
| WTR YR 1988 | TOTAL | 47302 | | MEAN | 129 | MAX | 2230 | MIN | 85 | | | |

SCIOTO RIVER BASIN

03228805 ALUM CREEK AT AFRICA, OH

LOCATION.--Lat 40°11'00", long 82°57'47", in SE 1/4 sec. 1, T.3 N., R.18 W., Delaware County, Hydrologic Unit 05060001, on right bank 400 ft upstream of bridge on Lewis Center Road, 1,200 ft downstream from outlet of Alum Creek Dam, 0.3 mi west of Africa, 2.8 mi upstream from Westerville Reservoir outlet, and 4.2 mi northwest of Westerville.

DRAINAGE AREA.--122 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 822.00 ft above National Geodetic Vertical Datum of 1929. (levels by U.S. Army Corps of Engineers). July 9, 1974 to Sept. 30, 1985, at datum 22.00 ft lower. Oct. 17, 1973 to July 9, 1974 nonrecording gage at bridge 400 ft downstream at datum 22.00 ft lower. Prior to Oct. 17, 1973 water-stage recorder 600 ft downstream at datum 4.63 ft lower.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated by Alum Creek Lake since August 1973. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--9 years (water years 1964-72), 115 ft³/s, 15 years (water years 1974-88), 105 ft³/s.

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 736 ft³/s Feb. 22 gage height, 4.07 ft; minimum daily, 3.9 ft³/s Oct. 23, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|---------|-------|-------|--------|--------|------|-------|-------|-------|-------|-------|
| 1 | 6.0 | 30 | 13 | 6.8 | 13 | 8.5 | 42 | 10 | 9.3 | 9.5 | 12 | 8.8 |
| 2 | 5.5 | 30 | 13 | 6.8 | 18 | 8.5 | 17 | 11 | 8.3 | 9.5 | 8.5 | 8.3 |
| 3 | 5.7 | 80 | 13 | 6.8 | 8.3 | 16 | 28 | 11 | 8.0 | 9.5 | 8.5 | 11 |
| 4 | 5.1 | 122 | 13 | 6.8 | 146 | 23 | 37 | 11 | 7.5 | 9.9 | 8.5 | 10 |
| 5 | 4.9 | 122 | 13 | 7.2 | 304 | 23 | 37 | 10 | 7.0 | 10 | 9.1 | 9.0 |
| 6 | 4.9 | 122 | 13 | 7.2 | 71 | 23 | 37 | 10 | 9.0 | 10 | 9.5 | 9.1 |
| 7 | 5.6 | 121 | 12 | 7.2 | 15 | 100 | 37 | 10 | 10 | 11 | 8.3 | 8.6 |
| 8 | 5.5 | 120 | 10 | 7.2 | 15 | 248 | 152 | 9.8 | 9.8 | 11 | 8.5 | 8.2 |
| 9 | 5.3 | 122 | 10 | 7.2 | 15 | 348 | 233 | 9.6 | 9.1 | 11 | 8.1 | 8.3 |
| 10 | 5.3 | 124 | 10 | 7.2 | 14 | 388 | 234 | 8.3 | 8.5 | 11 | 8.1 | 8.1 |
| 11 | 5.4 | 122 | 11 | 7.0 | 9.2 | 317 | 88 | 7.1 | 8.5 | 9.5 | 7.9 | 8.7 |
| 12 | 5.3 | 93 | 11 | 6.7 | 7.7 | 225 | 24 | 8.5 | 8.5 | 8.5 | 8.0 | 8.6 |
| 13 | 5.3 | 66 | 11 | 6.5 | 7.7 | 225 | 24 | 9.6 | 8.5 | 8.5 | 7.9 | 9.0 |
| 14 | 5.3 | 66 | 11 | 6.5 | 7.7 | 142 | 24 | 6.3 | 8.5 | 7.5 | 7.9 | 8.4 |
| 15 | 5.6 | 66 | 9.2 | 6.5 | 9.0 | 40 | 24 | 6.4 | 8.5 | 7.2 | 7.4 | 8.5 |
| 16 | 5.0 | 66 | 7.7 | 6.5 | 8.1 | 23 | 25 | 7.5 | 8.8 | 7.6 | 7.7 | 9.4 |
| 17 | 4.5 | 66 | 7.7 | 6.5 | 8.1 | 13 | 24 | 8.1 | 9.4 | 7.7 | 9.2 | 9.9 |
| 18 | 4.5 | 65 | 7.7 | 6.5 | 8.1 | 10 | 25 | 7.3 | 9.5 | 8.2 | 8.3 | 8.2 |
| 19 | 4.4 | 64 | 7.7 | 8.1 | 9.5 | 12 | 25 | 7.7 | 9.5 | 8.6 | 10 | 7.4 |
| 20 | 4.2 | 52 | 7.7 | 7.8 | 9.3 | 13 | 25 | 7.8 | 9.3 | 9.3 | 9.4 | 7.5 |
| 21 | 4.9 | 26 | 7.7 | 7.2 | 8.5 | 13 | 15 | 7.5 | 9.5 | 9.9 | 8.6 | 7.6 |
| 22 | 4.9 | 26 | 7.7 | 7.2 | 369 | 13 | 10 | 7.9 | 9.5 | 9.3 | 11 | 7.7 |
| 23 | 3.9 | 20 | 7.7 | 7.2 | 701 | 13 | 10 | 8.4 | 9.9 | 9.0 | 13 | 7.6 |
| 24 | 4.0 | 12 | 7.7 | 7.2 | 697 | 12 | 10 | 8.6 | 9.2 | 7.9 | 11 | 7.6 |
| 25 | 4.2 | 12 | 7.7 | 7.2 | 503 | 13 | 10 | 8.1 | 8.5 | 7.7 | 9.5 | 7.3 |
| 26 | 3.9 | 13 | 7.7 | 7.7 | 78 | 14 | 10 | 9.5 | 8.5 | 7.9 | 10 | 7.6 |
| 27 | 16 | 13 | 7.7 | 7.7 | 8.5 | 14 | 10 | 9.9 | 8.9 | 7.4 | 9.5 | 7.7 |
| 28 | 31 | 13 | 8.1 | 7.5 | 8.5 | 33 | 11 | 10 | 9.0 | 7.8 | 9.5 | 7.7 |
| 29 | 31 | 13 | 7.9 | 7.2 | 8.5 | 149 | 11 | 10 | 9.0 | 10 | 10 | 7.7 |
| 30 | 31 | 13 | 7.7 | 7.0 | --- | 185 | 10 | 10 | 9.4 | 10 | 9.4 | 7.9 |
| 31 | 30 | --- | 7.2 | 6.7 | --- | 150 | --- | 9.8 | --- | 16 | 9.2 | --- |
| TOTAL | 268.1 | 1880 | 296.5 | 218.8 | 3085.7 | 2815.0 | 1269 | 276.7 | 266.9 | 287.9 | 283.5 | 251.4 |
| MEAN | 8.65 | 62.7 | 9.56 | 7.06 | 106 | 90.8 | 42.3 | 8.93 | 8.90 | 9.29 | 9.15 | 8.38 |
| MAX | 31 | 124 | 13 | 8.1 | 701 | 388 | 234 | 11 | 10 | 16 | 13 | 11 |
| MIN | 3.9 | 12 | 7.2 | 6.5 | 7.7 | 8.5 | 10 | 6.3 | 7.0 | 7.2 | 7.4 | 7.3 |
| CAL YR 1987 | TOTAL | 22645.9 | | MEAN | 62.0 | MAX | 1610 | MIN | 3.4 | | | |
| WTR YR 1988 | TOTAL | 11199.5 | | MEAN | 30.6 | MAX | 701 | MIN | 3.9 | | | |

SCIOTO RIVER BASIN

117

03229000 ALUM CREEK AT COLUMBUS, OH

LOCATION.--Lat 39°56'42", long 82°56'28", in NW 1/4 sec. 24, T.5 N., R.22 W., Franklin County, Hydrologic Unit 05060001, on left bank 0.2 mi downstream from Livingston Avenue bridge in Columbus, and 6 mi upstream from mouth.

DRAINAGE AREA.--189 mi².

PERIOD OF RECORD.--July 1923 to December 1935, January 1938 to current year.

REVISED RECORDS.--WSP 758: 1933. WSP 1305: 1928(M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 733.69 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Alum Creek Lake 19 mi upstream, since Aug. 1973. Water-quality data collected at this site 1960 to 1977. Sediment data collected 1960 to 1965. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--62 years, 172 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,400 ft³/s Jan. 22, 1959, gage height, 19.59 ft (from high-water mark in well), from rating curve extended above 17,000 ft³/s on basis of contracted-opening measurement of peak flow; no flow Sept. 21-29, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,760 ft³/s Feb. 2, gage height, 8.29 ft; minimum daily, 4.5 ft³/s Oct. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|---------|------|-------|------|------|------|------|-------|--------|--------|------|
| 1 | 12 | 30 | 20 | 36 | 540 | 32 | 116 | 24 | 11 | 8.2 | 29 | 14 |
| 2 | 9.5 | 29 | 24 | 21 | 2020 | 38 | 49 | 24 | 18 | 7.5 | 18 | 28 |
| 3 | 7.2 | 30 | 28 | 15 | 327 | 195 | 753 | 24 | 47 | 7.7 | 13 | 593 |
| 4 | 6.9 | 106 | 86 | 13 | 352 | 301 | 812 | 25 | 18 | 7.8 | 11 | 450 |
| 5 | 5.9 | 142 | 29 | 12 | 519 | 142 | 174 | 88 | 14 | 7.7 | 13 | 61 |
| 6 | 5.8 | 146 | 19 | 11 | 221 | 136 | 134 | 79 | 12 | 7.1 | 75 | 26 |
| 7 | 25 | 144 | 16 | 11 | 103 | 115 | 260 | 30 | 11 | 6.3 | 22 | 20 |
| 8 | 45 | 147 | 17 | 11 | 56 | 282 | 369 | 25 | 10 | 7.1 | 13 | 17 |
| 9 | 18 | 169 | 16 | 11 | 51 | 361 | 309 | 42 | 141 | 20 | 11 | 15 |
| 10 | 11 | 140 | 15 | 10 | 49 | 461 | 293 | 47 | 24 | 12 | 155 | 14 |
| 11 | 62 | 132 | 16 | 9.8 | 53 | 440 | 238 | 29 | 16 | 9.2 | 94 | 13 |
| 12 | 26 | 128 | 42 | 9.5 | 90 | 298 | 62 | 24 | 13 | 12 | 17 | 37 |
| 13 | 11 | 64 | 21 | 9.5 | 66 | 297 | 56 | 22 | 11 | 9.8 | 96 | 126 |
| 14 | 7.4 | 54 | 16 | 9.5 | 50 | 274 | 53 | 34 | 11 | 8.1 | 18 | 26 |
| 15 | 6.7 | 53 | 47 | 9.3 | 184 | 82 | 51 | 24 | 10 | 6.8 | 15 | 18 |
| 16 | 4.5 | 53 | 29 | 9.0 | 90 | 68 | 50 | 24 | 14 | 6.1 | 19 | 17 |
| 17 | 5.5 | 60 | 18 | 11 | 59 | 47 | 48 | 22 | 38 | 213 | 10 | 235 |
| 18 | 6.0 | 61 | 16 | 50 | 65 | 41 | 47 | 17 | 18 | 426 | 8.7 | 36 |
| 19 | 6.0 | 59 | 16 | 106 | 165 | 40 | 41 | 21 | 14 | 1090 | 57 | 24 |
| 20 | 6.1 | 59 | 68 | 266 | 338 | 41 | 37 | 39 | 12 | 116 | 439 | 20 |
| 21 | 6.7 | 44 | 33 | 43 | 90 | 39 | 38 | 21 | 15 | 382 | 44 | 18 |
| 22 | 7.2 | 25 | 19 | 29 | 150 | 33 | 31 | 18 | 9.8 | 209 | 16 | 17 |
| 23 | 6.9 | 25 | 18 | 20 | 836 | 32 | 26 | 91 | 9.3 | 34 | 127 | 15 |
| 24 | 6.5 | 24 | 18 | 18 | 796 | 31 | 35 | 43 | 8.2 | 41 | 62 | 14 |
| 25 | 12 | 27 | 61 | 16 | 729 | 204 | 27 | 50 | 9.2 | 22 | 20 | 14 |
| 26 | 16 | 88 | 111 | 15 | 214 | 267 | 25 | 19 | 9.4 | 181 | 12 | 15 |
| 27 | 16 | 33 | 33 | 14 | 45 | 91 | 25 | 16 | 8.7 | 16 | 9.3 | 14 |
| 28 | 35 | 19 | 59 | 13 | 35 | 63 | 30 | 15 | 12 | 14 | 8.0 | 14 |
| 29 | 32 | 100 | 57 | 12 | 33 | 128 | 32 | 14 | 9.3 | 12 | 164 | 13 |
| 30 | 31 | 28 | 26 | 13 | --- | 230 | 28 | 12 | 8.7 | 12 | 42 | 13 |
| 31 | 31 | --- | 23 | 14 | --- | 225 | --- | 12 | --- | 73 | 19 | --- |
| TOTAL | 487.8 | 2219 | 1017 | 847.6 | 8326 | 5034 | 4249 | 975 | 562.6 | 2984.4 | 1657.0 | 1937 |
| MEAN | 15.7 | 74.0 | 32.8 | 27.3 | 287 | 162 | 142 | 31.5 | 18.8 | 96.3 | 53.5 | 64.6 |
| MAX | 62 | 169 | 111 | 266 | 2020 | 461 | 812 | 91 | 141 | 1090 | 439 | 593 |
| MIN | 4.5 | 1 | 15 | 9.0 | 33 | 31 | 25 | 12 | 8.2 | 6.1 | 8.0 | 13 |
| CAL YR 1987 | TOTAL | 36953.4 | | MEAN | 101 | MAX | 1650 | MIN | 4.4 | | | |
| WTR YR 1988 | TOTAL | 30296.4 | | MEAN | 82.8 | MAX | 2020 | MIN | 4.5 | | | |

SCIOTO RIVER BASIN

03229500 BIG WALNUT CREEK AT REES, OH

LOCATION.--Lat 39°51'24", long 82°57'26", in NE 1/4 sec. 26, T.4 N., R.22 W., Franklin County, Hydrologic Unit 05060001, on right bank at downstream side of bridge on Reese Road, 0.5 mi southwest of Rees, 4.2 mi downstream from Alum Creek, and 10.5 mi upstream from mouth.

DRAINAGE AREA.--544 mi².

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

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

GAGE.--Water-stage recorder. Datum of gage is 698.20 ft above National Geodetic Vertical Datum of 1929. Aug. 18, 1921, to Oct. 23, 1927, nonrecording gage at site 0.3 mi upstream at datum 2.00 ft higher prior to Oct. 1, 1924, at present datum thereafter.

REMARKS.--No estimated daily discharges. Record good. Flow regulated by Hoover Reservoir 26 mi upstream (see station 03228400) and Alum Creek Lake 30 mi upstream since August 1973. Beginning June 15, 1956, diversion at Morse Road Treatment Plant, 21 mi upstream from station, for municipal water supply for the city of Columbus. Water-quality data collected at this site 1964 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--64 years, 521 ft³/s (adjusted for diversion).

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,250 ft³/s Feb. 2, gage height, 11.04 ft; minimum daily, 22 ft³/s July 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|-------|-------|-------|------|------|------|------|------|
| 1 | 81 | 89 | 73 | 122 | 1130 | 126 | 270 | 94 | 50 | 27 | 150 | 60 |
| 2 | 65 | 90 | 71 | 84 | 5520 | 123 | 197 | 81 | 48 | 28 | 83 | 50 |
| 3 | 59 | 85 | 81 | 77 | 1530 | 458 | 1250 | 96 | 123 | 27 | 62 | 486 |
| 4 | 62 | 112 | 252 | 69 | 1260 | 1250 | 3940 | 84 | 80 | 27 | 62 | 2360 |
| 5 | 55 | 170 | 130 | 55 | 933 | 688 | 1880 | 147 | 60 | 26 | 58 | 412 |
| 6 | 54 | 166 | 83 | 53 | 511 | 577 | 861 | 283 | 54 | 28 | 109 | 188 |
| 7 | 108 | 174 | 67 | 48 | 341 | 449 | 1000 | 125 | 47 | 26 | 132 | 122 |
| 8 | 147 | 176 | 63 | 49 | 233 | 480 | 1310 | 108 | 45 | 25 | 64 | 97 |
| 9 | 89 | 199 | 62 | 55 | 198 | 539 | 776 | 122 | 243 | 24 | 52 | 80 |
| 10 | 66 | 184 | 70 | 50 | 171 | 668 | 640 | 209 | 130 | 22 | 46 | 69 |
| 11 | 194 | 162 | 58 | 47 | 155 | 612 | 540 | 110 | 72 | 44 | 386 | 60 |
| 12 | 126 | 160 | 127 | 47 | 339 | 470 | 303 | 84 | 55 | 46 | 106 | 60 |
| 13 | 67 | 131 | 93 | 50 | 230 | 499 | 225 | 88 | 59 | 37 | 136 | 487 |
| 14 | 52 | 99 | 66 | 48 | 195 | 445 | 186 | 80 | 64 | 38 | 111 | 171 |
| 15 | 44 | 108 | 99 | 45 | 538 | 274 | 177 | 85 | 54 | 36 | 63 | 96 |
| 16 | 52 | 105 | 112 | 46 | 520 | 200 | 168 | 83 | 46 | 36 | 72 | 71 |
| 17 | 36 | 106 | 73 | 49 | 288 | 169 | 160 | 76 | 94 | 33 | 57 | 331 |
| 18 | 42 | 114 | 56 | 140 | 299 | 151 | 154 | 74 | 74 | 33 | 52 | 162 |
| 19 | 43 | 102 | 53 | 146 | 423 | 160 | 133 | 68 | 51 | 578 | 125 | 100 |
| 20 | 65 | 98 | 133 | 1180 | 1220 | 159 | 134 | 150 | 59 | 1060 | 566 | 81 |
| 21 | 51 | 94 | 140 | 315 | 456 | 153 | 122 | 102 | 79 | 2430 | 290 | 65 |
| 22 | 50 | 69 | 77 | 159 | 272 | 137 | 132 | 76 | 58 | 407 | 96 | 59 |
| 23 | 61 | 69 | 65 | 115 | 964 | 134 | 102 | 166 | 48 | 795 | 308 | 53 |
| 24 | 45 | 72 | 61 | 97 | 1050 | 130 | 116 | 200 | 39 | 1080 | 392 | 48 |
| 25 | 67 | 101 | 124 | 88 | 915 | 297 | 98 | 158 | 34 | 228 | 110 | 46 |
| 26 | 69 | 161 | 370 | 75 | 453 | 1080 | 97 | 87 | 32 | 191 | 67 | 46 |
| 27 | 63 | 135 | 176 | 72 | 201 | 434 | 86 | 70 | 31 | 181 | 52 | 50 |
| 28 | 117 | 81 | 157 | 67 | 147 | 264 | 91 | 62 | 29 | 108 | 51 | 44 |
| 29 | 94 | 207 | 226 | 72 | 133 | 238 | 109 | 65 | 31 | 79 | 388 | 41 |
| 30 | 89 | 122 | 118 | 81 | --- | 354 | 106 | 61 | 30 | 66 | 203 | 43 |
| 31 | 89 | --- | 96 | 89 | --- | 343 | --- | 55 | --- | 148 | 85 | --- |
| TOTAL | 2302 | 3741 | 3432 | 3690 | 20625 | 12061 | 15363 | 3349 | 1919 | 7914 | 4534 | 6038 |
| MEAN | 74.3 | 125 | 111 | 119 | 711 | 389 | 512 | 108 | 64.0 | 255 | 146 | 201 |
| MAX | 194 | 207 | 370 | 1180 | 5520 | 1250 | 3940 | 283 | 243 | 2430 | 566 | 2360 |
| MIN | 36 | 69 | 53 | 45 | 133 | 123 | 86 | 55 | 29 | 22 | 46 | 41 |
| (+) | 129 | 123 | 118 | 123 | 121 | 116 | 121 | 145 | 167 | 138 | 131 | 126 |

CAL YR 1987 TOTAL 100552 MEAN 275 MAX 3490 MIN 36 (+) 133
 WTR YR 1988 TOTAL 84968 MEAN 232 MAX 5520 MIN 22 (+) 130

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

SCIOTO RIVER BASIN

119

03230500 BIG DARBY CREEK AT DARBYVILLE, OH

LOCATION.--Lat 39°42'02", long 83°06'37", Pickaway County, Hydrologic Unit 05060001, on left bank 150 ft downstream from bridge on State Highway 316, 0.4 mi northeast of Darbyville, 0.4 mi upstream from Lizzard Run, and 3.0 mi downstream from Greenbrier Creek.

DRAINAGE AREA.--534 mi².

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

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

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

REMARKS.--Estimated daily discharges: Jan. 5-17, 22-31. Records good except for estimated daily discharges, which are fair. Water-quality data collected at this site 1964 to 1977. Sediment data collected 1969 to 1974. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--64 years, 451 ft³/s, 11.47 in/yr.

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

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|--------------------------------|------------------|--|------|--------------------------------|------------------|
| Feb. 3 | 1500 | *4,840 | *9.16 | No other peak greater than base discharge. | | | |

Minimum discharge, 5.4 ft³/s Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|-------|------|------|-------|-------|-------|------|------|------|------|------|------|
| 1 | 13 | 50 | 53 | 107 | 197 | 269 | 301 | 136 | 56 | 17 | 50 | 23 | |
| 2 | 12 | 40 | 48 | 99 | 2420 | 245 | 287 | 130 | 54 | 15 | 48 | 22 | |
| 3 | 12 | 41 | 52 | 92 | 4690 | 326 | 698 | 126 | 56 | 16 | 41 | 48 | |
| 4 | 10 | 38 | 57 | 78 | 3270 | 961 | 3000 | 122 | 55 | 18 | 37 | 150 | |
| 5 | 11 | 37 | 51 | 68 | 1980 | 928 | 2650 | 127 | 54 | 15 | 50 | 75 | |
| 6 | 11 | 37 | 48 | 62 | 1100 | 843 | 1420 | 137 | 50 | 14 | 37 | 179 | |
| 7 | 11 | 43 | 48 | 56 | 750 | 940 | 1160 | 128 | 47 | 15 | 33 | 122 | |
| 8 | 10 | 44 | 52 | 50 | 643 | 1090 | 1380 | 120 | 45 | 16 | 32 | 83 | |
| 9 | 10 | 38 | 52 | 46 | 491 | 1130 | 1120 | 119 | 49 | 17 | 29 | 60 | |
| 10 | 11 | 36 | 48 | 43 | 370 | 975 | 801 | 140 | 52 | 16 | 26 | 48 | |
| 11 | 14 | 35 | 46 | 42 | 311 | 760 | 656 | 125 | 51 | 13 | 25 | 40 | |
| 12 | 16 | 35 | 45 | 41 | 301 | 582 | 549 | 119 | 46 | 15 | 23 | 35 | |
| 13 | 23 | 38 | 47 | 40 | 259 | 520 | 461 | 109 | 43 | 16 | 20 | 636 | |
| 14 | 25 | 38 | 44 | 40 | 247 | 461 | 382 | 104 | 40 | 18 | 20 | 160 | |
| 15 | 26 | 39 | 50 | 40 | 359 | 416 | 336 | 103 | 38 | 18 | 18 | 88 | |
| 16 | 26 | 37 | 50 | 40 | 445 | 353 | 293 | 100 | 36 | 18 | 19 | 60 | |
| 17 | 38 | 33 | 50 | 40 | 440 | 304 | 265 | 94 | 37 | 17 | 18 | 62 | |
| 18 | 39 | 33 | 85 | 58 | 434 | 278 | 254 | 87 | 39 | 15 | 19 | 65 | |
| 19 | 28 | 39 | 85 | 114 | 632 | 271 | 239 | 83 | 38 | 18 | 20 | 65 | |
| 20 | 28 | 42 | 78 | 567 | 1790 | 271 | 217 | 81 | 36 | 28 | 20 | 66 | |
| 21 | 29 | 36 | 67 | 296 | 2140 | 253 | 201 | 80 | 34 | 104 | 20 | 63 | |
| 22 | 28 | 35 | 61 | 200 | 1020 | 227 | 197 | 82 | 33 | 180 | 18 | 54 | |
| 23 | 26 | 37 | 63 | 160 | 769 | 214 | 188 | 84 | 32 | 270 | 24 | 48 | |
| 24 | 27 | 37 | 81 | 140 | 853 | 211 | 182 | 102 | 30 | 172 | 33 | 40 | |
| 25 | 28 | 36 | 78 | 120 | 722 | 222 | 171 | 110 | 28 | 129 | 24 | 38 | |
| 26 | 29 | 42 | 84 | 110 | 526 | 510 | 158 | 93 | 26 | 89 | 21 | 33 | |
| 27 | 29 | 42 | 83 | 100 | 417 | 946 | 152 | 83 | 25 | 77 | 20 | 32 | |
| 28 | 31 | 48 | 86 | 94 | 352 | 629 | 150 | 74 | 21 | 80 | 18 | 31 | |
| 29 | 35 | 53 | 115 | 88 | 297 | 488 | 147 | 69 | 20 | 65 | 25 | 27 | |
| 30 | 37 | 59 | 105 | 84 | --- | 409 | 142 | 64 | 20 | 55 | 26 | 27 | |
| 31 | 58 | --- | 103 | 82 | --- | 343 | --- | 60 | --- | 50 | 23 | --- | |
| TOTAL | 731 | 1198 | 2015 | 3197 | 28225 | 16375 | 18157 | 3191 | 1191 | 1606 | 837 | 2480 | |
| MEAN | 23.6 | 39.9 | 65.0 | 103 | 973 | 528 | 605 | 103 | 39.7 | 51.8 | 27.0 | 82.7 | |
| MAX | 58 | 59 | 115 | 567 | 4690 | 1130 | 3000 | 140 | 56 | 270 | 50 | 636 | |
| MIN | 10 | 33 | 44 | 40 | 197 | 211 | 142 | 60 | 20 | 13 | 18 | 22 | |
| CFSM | .04 | .07 | .12 | .19 | 1.82 | .99 | 1.13 | .19 | .07 | .10 | .05 | .15 | |
| IN. | .05 | .08 | .14 | .22 | 1.97 | 1.14 | 1.26 | .22 | .08 | .11 | .06 | .17 | |
| CAL YR 1987 | TOTAL | 87402 | | MEAN | 239 | MAX | 5150 | MIN | 10 | CFSM | .45 | IN. | 6.09 |
| WTR YR 1988 | TOTAL | 79203 | | MEAN | 216 | MAX | 4690 | MIN | 10 | CFSM | .40 | IN. | 5.52 |

SCIOTO RIVER BASIN

03230900 DEER CREEK NEAR PANCOASTBURG, OH

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

DRAINAGE AREA.--277 mi².

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

REVISED RECORDS.--WRD Ohio 1972: 1971.

GAGE.--Water-stage recorder. Datum of gage is 768.00 ft above National Geodetic Vertical Datum of 1929, U.S. Army Corps of Engineers bench mark. Oct. 23, 1963, to June 30, 1966, crest-stage gage at site 200 ft upstream at datum 8.16 ft lower. July 1, 1966 to Sept. 30, 1983 at datum 68.00 ft lower.

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

AVERAGE DISCHARGE.--22 years 252 ft³/s.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,650 ft³/s Feb. 4, gage height, 5.17 ft; minimum daily, 9.5 ft³/s Sept. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|---------|------|------|-------|------|------|------|-------|-------|------|--------|
| 1 | 11 | 112 | 31 | 30 | 42 | 15 | 13 | 83 | 17 | 9.9 | 10 | 11 |
| 2 | 52 | 110 | 31 | 30 | 705 | 47 | 13 | 85 | 18 | 9.9 | 10 | 12 |
| 3 | 108 | 125 | 31 | 31 | 1230 | 154 | 14 | 62 | 18 | 9.9 | 10 | 13 |
| 4 | 107 | 145 | 31 | 30 | 1380 | 459 | 13 | 52 | 20 | 9.9 | 12 | 12 |
| 5 | 106 | 144 | 31 | 35 | 1410 | 568 | 13 | 52 | 19 | 9.9 | 12 | 9.5 |
| 6 | 104 | 144 | 31 | 39 | 545 | 566 | 90 | 52 | 19 | 9.9 | 12 | 10 |
| 7 | 104 | 143 | 31 | 39 | 329 | 568 | 188 | 52 | 19 | 9.9 | 12 | 41 |
| 8 | 104 | 142 | 31 | 34 | 364 | 565 | 521 | 52 | 20 | 9.9 | 12 | 83 |
| 9 | 103 | 161 | 31 | 28 | 307 | 749 | 656 | 52 | 20 | 9.9 | 12 | 83 |
| 10 | 102 | 171 | 31 | 28 | 182 | 678 | 649 | 52 | 20 | 9.9 | 12 | 83 |
| 11 | 100 | 169 | 31 | 28 | 137 | 298 | 243 | 52 | 20 | 10 | 12 | 83 |
| 12 | 100 | 168 | 31 | 28 | 137 | 206 | 18 | 52 | 19 | 10 | 11 | 84 |
| 13 | 100 | 167 | 31 | 27 | 137 | 204 | 18 | 51 | 19 | 10 | 12 | 379 |
| 14 | 100 | 167 | 31 | 22 | 137 | 203 | 108 | 50 | 19 | 10 | 12 | 734 |
| 15 | 123 | 166 | 32 | 20 | 137 | 203 | 181 | 49 | 15 | 10 | 12 | 576 |
| 16 | 155 | 138 | 31 | 20 | 248 | 95 | 182 | 48 | 10 | 9.9 | 12 | 372 |
| 17 | 153 | 114 | 25 | 20 | 296 | 13 | 182 | 47 | 10 | 9.9 | 12 | 371 |
| 18 | 152 | 113 | 20 | 20 | 296 | 13 | 182 | 31 | 10 | 9.9 | 12 | 205 |
| 19 | 152 | 113 | 20 | 20 | 296 | 12 | 108 | 21 | 10 | 10 | 12 | 68 |
| 20 | 129 | 111 | 20 | 372 | 301 | 12 | 74 | 20 | 10 | 11 | 12 | 68 |
| 21 | 115 | 109 | 20 | 520 | 309 | 12 | 71 | 20 | 9.9 | 10 | 12 | 77 |
| 22 | 115 | 106 | 20 | 154 | 611 | 12 | 71 | 20 | 9.9 | 9.9 | 12 | 82 |
| 23 | 115 | 104 | 20 | 50 | 827 | 12 | 71 | 20 | 9.9 | 9.9 | 12 | 81 |
| 24 | 115 | 104 | 20 | 51 | 568 | 12 | 73 | 19 | 10 | 9.9 | 12 | 82 |
| 25 | 114 | 122 | 20 | 52 | 272 | 12 | 74 | 19 | 10 | 9.9 | 12 | 81 |
| 26 | 114 | 145 | 20 | 52 | 269 | 12 | 77 | 19 | 9.9 | 10 | 12 | 81 |
| 27 | 113 | 145 | 20 | 52 | 296 | 12 | 79 | 18 | 9.9 | 10 | 12 | 81 |
| 28 | 113 | 143 | 24 | 52 | 294 | 13 | 80 | 18 | 9.9 | 10 | 12 | 82 |
| 29 | 113 | 142 | 30 | 35 | 112 | 12 | 80 | 18 | 9.9 | 10 | 12 | 82 |
| 30 | 113 | 94 | 30 | 27 | --- | 12 | 82 | 18 | 9.9 | 10 | 12 | 82 |
| 31 | 113 | --- | 30 | 27 | --- | 13 | --- | 18 | --- | 10 | 12 | --- |
| TOTAL | 3418 | 4037 | 836 | 1973 | 12174 | 5762 | 4224 | 1222 | 431.2 | 309.3 | 365 | 4108.5 |
| MEAN | 110 | 135 | 27.0 | 63.6 | 420 | 186 | 141 | 39.4 | 14.4 | 9.98 | 11.8 | 137 |
| MAX | 155 | 171 | 32 | 520 | 1410 | 749 | 656 | 85 | 20 | 11 | 12 | 734 |
| MIN | 11 | 94 | 20 | 20 | 42 | 12 | 13 | 18 | 9.9 | 9.9 | 10 | 9.5 |
| CAL YR 1987 | TOTAL | 37817.2 | | MEAN | 104 | MAX | 1150 | MIN | 7.7 | | | |
| WTR YR 1988 | TOTAL | 38860.0 | | MEAN | 106 | MAX | 1410 | MIN | 9.5 | | | |

SCIOTO RIVER BASIN

121

03231000 DEER CREEK AT WILLIAMSPORT, OH

LOCATION.--Lat 39°35'09", long 83°07'22", Pickaway County, Hydrologic Unit 05060002, on left bank at downstream side of bridge on U.S. Highway 22 at west edge of Williamsport, 2.0 mi downstream from Dry Run, and 7.6 mi upstream from Hay Run.

DRAINAGE AREA.--333 mi².

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

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

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

REMARKS.--Estimated daily discharges: Jan. 5-18, 24-30. Records good except for estimated daily discharges, which are fair. Flow regulated by Deer Creek Lake 9.0 mi upstream beginning in 1968. Water-quality data collected at this site 1965 to 1977.

AVERAGE DISCHARGE.--53 years (1926-35, 1938-56, 1962-88), 296 ft³/s.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,150 ft³/s Feb. 4, gage height, 7.63 ft; minimum daily, 6.6 ft³/s Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|--------|---------|------|------|-------|------|------|------|------|-------|------|------|
| 1 | 6.6 | 129 | 43 | 34 | 99 | 40 | 37 | 96 | 19 | 10 | 12 | 12 |
| 2 | 14 | 129 | 39 | 37 | 1240 | 54 | 39 | 97 | 19 | 10 | 12 | 12 |
| 3 | 124 | 136 | 38 | 44 | 1680 | 176 | 121 | 85 | 20 | 9.3 | 11 | 20 |
| 4 | 125 | 165 | 39 | 39 | 1840 | 956 | 307 | 65 | 20 | 9.2 | 11 | 30 |
| 5 | 126 | 164 | 39 | 36 | 1930 | 865 | 147 | 67 | 21 | 9.5 | 13 | 19 |
| 6 | 128 | 162 | 39 | 40 | 940 | 793 | 142 | 68 | 22 | 9.5 | 13 | 14 |
| 7 | 129 | 162 | 38 | 45 | 378 | 730 | 273 | 63 | 21 | 9.3 | 13 | 16 |
| 8 | 126 | 162 | 38 | 46 | 426 | 686 | 545 | 64 | 21 | 9.4 | 12 | 81 |
| 9 | 126 | 173 | 37 | 42 | 339 | 833 | 766 | 66 | 22 | 9.1 | 11 | 85 |
| 10 | 126 | 189 | 37 | 35 | 223 | 820 | 749 | 66 | 21 | 9.1 | 11 | 85 |
| 11 | 126 | 189 | 36 | 33 | 155 | 380 | 421 | 64 | 22 | 10 | 12 | 85 |
| 12 | 126 | 189 | 36 | 33 | 155 | 240 | 61 | 62 | 23 | 10 | 11 | 90 |
| 13 | 126 | 189 | 36 | 33 | 164 | 232 | 50 | 62 | 25 | 10 | 11 | 328 |
| 14 | 124 | 189 | 36 | 32 | 174 | 229 | 93 | 61 | 22 | 10 | 12 | 843 |
| 15 | 135 | 189 | 37 | 28 | 171 | 218 | 195 | 59 | 22 | 10 | 11 | 737 |
| 16 | 191 | 174 | 37 | 25 | 246 | 154 | 192 | 58 | 14 | 10 | 12 | 435 |
| 17 | 191 | 135 | 37 | 24 | 309 | 42 | 195 | 57 | 13 | 10 | 12 | 432 |
| 18 | 191 | 134 | 23 | 24 | 311 | 41 | 199 | 49 | 12 | 9.2 | 12 | 318 |
| 19 | 186 | 131 | 20 | 66 | 357 | 41 | 150 | 27 | 12 | 10 | 12 | 74 |
| 20 | 162 | 131 | 20 | 521 | 441 | 39 | 97 | 27 | 12 | 16 | 13 | 71 |
| 21 | 137 | 128 | 20 | 678 | 363 | 35 | 95 | 26 | 11 | 18 | 12 | 73 |
| 22 | 137 | 125 | 20 | 259 | 591 | 32 | 95 | 26 | 11 | 14 | 12 | 82 |
| 23 | 137 | 124 | 20 | 102 | 921 | 34 | 96 | 27 | 11 | 13 | 14 | 82 |
| 24 | 137 | 124 | 20 | 80 | 690 | 35 | 94 | 29 | 10 | 14 | 15 | 83 |
| 25 | 137 | 130 | 20 | 70 | 334 | 37 | 93 | 25 | 11 | 15 | 12 | 82 |
| 26 | 136 | 162 | 21 | 62 | 264 | 53 | 94 | 23 | 11 | 15 | 12 | 81 |
| 27 | 133 | 162 | 21 | 56 | 303 | 48 | 96 | 20 | 10 | 14 | 11 | 81 |
| 28 | 133 | 163 | 20 | 52 | 300 | 41 | 95 | 19 | 10 | 12 | 12 | 81 |
| 29 | 133 | 166 | 26 | 48 | 166 | 41 | 95 | 19 | 11 | 11 | 16 | 81 |
| 30 | 131 | 148 | 32 | 45 | --- | 40 | 96 | 19 | 11 | 11 | 13 | 81 |
| 31 | 129 | --- | 34 | 47 | --- | 36 | --- | 20 | --- | 12 | 12 | --- |
| TOTAL | 4068.6 | 4653 | 959 | 2716 | 15510 | 8001 | 5728 | 1516 | 490 | 348.6 | 378 | 4594 |
| MEAN | 131 | 155 | 30.9 | 87.6 | 535 | 258 | 191 | 48.9 | 16.3 | 11.2 | 12.2 | 153 |
| MAX | 191 | 189 | 43 | 678 | 1930 | 956 | 766 | 97 | 25 | 18 | 16 | 843 |
| MIN | 6.6 | 124 | 20 | 24 | 99 | 32 | 37 | 19 | 10 | 9.1 | 11 | 12 |
| CAL YR 1987 | TOTAL | 49099.1 | | MEAN | 135 | MAX | 1470 | MIN | 6.1 | | | |
| WTR YR 1988 | TOTAL | 48962.2 | | MEAN | 134 | MAX | 1930 | MIN | 6.6 | | | |

SCIOTO RIVER BASIN

03231500 SCIOTO RIVER AT CHILLICOTHE, OH

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

DRAINAGE AREA.--3,849 mi².

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

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

GAGE.--Water-stage recorder. Datum of gage is 594.05 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1914, nonrecording gage at site 1,300 ft upstream of different datum. Apr. 1, 1921, to Aug. 6, 1930, nonrecording gage, at site 1,400 ft upstream at present datum. Aug. 7, 1930, to Sept. 30, 1969, water-stage recorder 900 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated by 6 reservoirs 36 mi to 91 mi upstream from station. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--68 years, 3,438 ft³/s.

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 24,400 ft³/s Feb. 4, gage height, 11.80 ft; minimum daily, 488 ft³/s Aug. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|-------|-------|--------|--------|--------|-------|-------|-------|-------|-------|
| 1 | 499 | 656 | 1030 | 1530 | 1000 | 2370 | 2830 | 1450 | 865 | 627 | 877 | 654 |
| 2 | 530 | 654 | 826 | 1410 | 9080 | 2250 | 2670 | 1380 | 841 | 641 | 988 | 546 |
| 3 | 505 | 643 | 803 | 1110 | 19600 | 2430 | 2700 | 1360 | 832 | 606 | 767 | 552 |
| 4 | 580 | 657 | 777 | 1130 | 23700 | 9120 | 11600 | 1340 | 887 | 566 | 836 | 3380 |
| 5 | 576 | 656 | 1060 | 1410 | 20700 | 11400 | 16100 | 1370 | 893 | 552 | 744 | 4530 |
| 6 | 577 | 706 | 896 | 1210 | 13800 | 7180 | 12800 | 1610 | 826 | 551 | 693 | 1880 |
| 7 | 600 | 745 | 754 | 955 | 7050 | 5840 | 8830 | 1830 | 792 | 569 | 778 | 1380 |
| 8 | 633 | 738 | 708 | 968 | 4390 | 5540 | 8840 | 1470 | 786 | 568 | 780 | 1120 |
| 9 | 773 | 765 | 700 | 904 | 3800 | 6110 | 8730 | 1340 | 775 | 540 | 643 | 1040 |
| 10 | 748 | 788 | 698 | 869 | 3320 | 8240 | 6820 | 1410 | 1120 | 550 | 577 | 958 |
| 11 | 695 | 839 | 692 | 856 | 2990 | 9110 | 5580 | 1610 | 1000 | 546 | 526 | 898 |
| 12 | 848 | 836 | 691 | 800 | 2890 | 7800 | 4350 | 1390 | 845 | 539 | 898 | 867 |
| 13 | 846 | 880 | 810 | 763 | 2850 | 6120 | 3790 | 1290 | 779 | 625 | 666 | 2880 |
| 14 | 704 | 906 | 800 | 780 | 2380 | 5090 | 3080 | 1240 | 735 | 592 | 562 | 3730 |
| 15 | 662 | 822 | 737 | 749 | 2490 | 4300 | 2820 | 1240 | 745 | 571 | 579 | 2370 |
| 16 | 643 | 881 | 827 | 693 | 3880 | 3370 | 2710 | 1500 | 738 | 551 | 519 | 1630 |
| 17 | 664 | 827 | 846 | 677 | 3700 | 3020 | 2470 | 1400 | 744 | 539 | 501 | 1360 |
| 18 | 660 | 715 | 779 | 674 | 4010 | 2670 | 2320 | 1230 | 799 | 522 | 488 | 2190 |
| 19 | 644 | 733 | 874 | 902 | 4390 | 2560 | 2260 | 1110 | 806 | 538 | 519 | 1440 |
| 20 | 643 | 734 | 904 | 2820 | 7630 | 2470 | 2010 | 1050 | 733 | 1720 | 704 | 1110 |
| 21 | 623 | 736 | 993 | 4970 | 11500 | 2460 | 1900 | 1090 | 712 | 3810 | 1620 | 1030 |
| 22 | 650 | 743 | 995 | 2700 | 8980 | 2360 | 1860 | 1110 | 738 | 5740 | 1140 | 1010 |
| 23 | 621 | 746 | 908 | 2150 | 7960 | 2340 | 1820 | 1080 | 753 | 2110 | 688 | 1020 |
| 24 | 618 | 752 | 949 | 1680 | 9430 | 2190 | 1780 | 1310 | 703 | 2330 | 926 | 948 |
| 25 | 633 | 782 | 1030 | 1360 | 8200 | 2030 | 2030 | 1450 | 682 | 2560 | 1250 | 903 |
| 26 | 631 | 845 | 1290 | 1170 | 6610 | 2980 | 1620 | 1330 | 662 | 1270 | 756 | 818 |
| 27 | 650 | 1050 | 1730 | 1070 | 3970 | 5310 | 1510 | 1140 | 646 | 1030 | 582 | 795 |
| 28 | 652 | 1030 | 1330 | 1030 | 3120 | 4850 | 1460 | 1010 | 635 | 968 | 506 | 786 |
| 29 | 677 | 939 | 1240 | 927 | 2770 | 4120 | 1450 | 941 | 638 | 809 | 519 | 775 |
| 30 | 700 | 1210 | 1680 | 894 | --- | 3200 | 1470 | 890 | 635 | 738 | 1090 | 754 |
| 31 | 672 | --- | 1490 | 896 | --- | 3030 | --- | 877 | --- | 696 | 979 | --- |
| TOTAL | 20157 | 24014 | 29847 | 40057 | 206190 | 141860 | 130210 | 39848 | 23345 | 34574 | 23701 | 43354 |
| MEAN | 650 | 800 | 963 | 1292 | 7110 | 4576 | 4340 | 1285 | 778 | 1115 | 765 | 1445 |
| MAX | 848 | 1210 | 1730 | 4970 | 23700 | 11400 | 16100 | 1830 | 1120 | 5740 | 1620 | 4530 |
| MIN | 499 | 643 | 691 | 674 | 1000 | 2030 | 1450 | 877 | 635 | 522 | 488 | 546 |
| CAL YR 1987 | TOTAL | 910872 | | MEAN | 2496 | MAX | 23800 | MIN | 401 | | | |
| WTR YR 1988 | TOTAL | 757157 | | MEAN | 2069 | MAX | 23700 | MIN | 488 | | | |

SCIOTO RIVER BASIN

123

03231500 SCIOTO RIVER AT CHILLICOTHE, OH

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1950-51, 1965-1981, November 1985 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1965 to October 1981, November 1985 to current year.

pH: June 1971 to October 1981, November 1985 to current year.

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

DISSOLVED OXYGEN: May 1965 to October 1981, November 1985 to current year.

INSTRUMENTATION.--Water-quality monitor.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,210 micromhos Jan. 13, 1976; minimum, 150 micromhos June 29, 1972.

pH: Maximum, 9.3 units Aug. 24-26, 1981, May 1, 1988; minimum, 6.3 units Mar. 6, 1979.

WATER TEMPERATURES: Maximum, 32.5°C July 17, Aug. 18, 1988; minimum 0.0°C on many days during winters.

DISSOLVED OXYGEN: Maximum, \geq 20.0 mg/L on several days during 1978, 1981, 1986, and 1988; minimum, 0.0 mg/L April 27, Aug. 12, Sept. 22, 1966.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1060 microsiemens Dec. 7; minimum, 384 micromhos July 22.

pH: Maximum recorded, 9.3 units May 1; minimum recorded, 7.3 units Aug. 30.

WATER TEMPERATURES: Maximum, 32.5°C July 17, Aug. 18; minimum, 0.0°C several days during winter.

DISSOLVED OXYGEN: Maximum, \geq 20.0 mg/L Apr. 30, May 1-3, Aug. 11; minimum, 3.5 mg/L July 22.

SCIOTO RIVER BASIN

03231500 SCIOTO RIVER AT CHILLICOTHE OH--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|-----|-----|----------|-----|-----|----------|------|------|---------|-----|-----|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | 786 | 748 | 767 | 724 | 714 | 718 | 690 | 684 | 685 | 766 | 738 | 753 |
| 2 | 796 | 782 | 788 | 724 | 718 | 722 | 708 | 680 | 699 | 778 | 768 | 771 |
| 3 | 808 | 792 | 801 | 724 | 714 | 719 | 676 | 652 | 660 | 784 | 778 | 781 |
| 4 | 806 | 770 | 793 | 728 | 724 | 726 | 676 | 654 | 662 | 800 | 782 | 791 |
| 5 | 764 | 730 | 742 | 730 | 726 | 728 | 718 | 678 | 698 | --- | --- | --- |
| 6 | 730 | 716 | 725 | 740 | 730 | 734 | 958 | 716 | 833 | --- | --- | --- |
| 7 | 720 | 712 | 715 | 756 | 742 | 750 | 1060 | 900 | 993 | --- | --- | --- |
| 8 | 712 | 698 | 703 | 760 | 742 | 751 | 1050 | 1020 | 1030 | --- | --- | --- |
| 9 | 704 | 696 | 701 | 744 | 738 | 742 | 1030 | 836 | 949 | --- | --- | --- |
| 10 | 700 | 686 | 694 | 742 | 732 | 738 | 990 | 852 | 900 | --- | --- | --- |
| 11 | 684 | 670 | 675 | 732 | 702 | 715 | 866 | 860 | 863 | --- | --- | --- |
| 12 | 674 | 656 | 668 | 704 | 688 | 697 | 862 | 858 | 860 | --- | --- | --- |
| 13 | 682 | 658 | 665 | 698 | 688 | 693 | 896 | 860 | 874 | --- | --- | --- |
| 14 | 744 | 686 | 711 | 688 | 672 | 676 | 908 | 892 | 902 | --- | --- | --- |
| 15 | 754 | 708 | 741 | 710 | 680 | 699 | 900 | 892 | 895 | --- | --- | --- |
| 16 | 704 | 654 | 673 | 702 | 690 | 696 | 900 | 852 | 876 | --- | --- | --- |
| 17 | 652 | 638 | 645 | 720 | 702 | 713 | 850 | 844 | 846 | --- | --- | --- |
| 18 | 662 | 638 | 648 | 722 | 706 | 711 | 850 | 844 | 847 | --- | --- | --- |
| 19 | 700 | 664 | 682 | 756 | 722 | 741 | 852 | 814 | 844 | --- | --- | --- |
| 20 | 712 | 700 | 706 | 746 | 702 | 721 | 810 | 786 | 795 | --- | --- | --- |
| 21 | 714 | 708 | 712 | 710 | 698 | 703 | 818 | 804 | 813 | --- | --- | --- |
| 22 | 742 | 710 | 723 | 744 | 710 | 728 | 824 | 800 | 815 | 622 | 548 | 584 |
| 23 | 756 | 742 | 751 | 742 | 706 | 721 | 828 | 804 | 822 | 726 | 624 | 677 |
| 24 | 754 | 740 | 744 | 712 | 704 | 708 | 798 | 770 | 778 | 730 | 722 | 727 |
| 25 | 746 | 734 | 741 | 704 | 696 | 701 | 792 | 772 | 782 | 744 | 732 | 740 |
| 26 | 732 | 724 | 728 | 730 | 696 | 706 | 786 | 778 | 783 | 778 | 742 | 756 |
| 27 | 734 | 726 | 731 | 740 | 724 | 731 | 790 | 774 | 781 | 800 | 782 | 793 |
| 28 | 750 | 734 | 743 | 748 | 718 | 737 | 776 | 726 | 748 | 824 | 802 | 814 |
| 29 | 754 | 744 | 748 | 718 | 706 | 711 | 726 | 712 | 719 | 844 | 826 | 837 |
| 30 | 762 | 754 | 759 | 704 | 666 | 679 | 772 | 718 | 747 | 858 | 846 | 853 |
| 31 | 770 | 726 | 750 | --- | --- | --- | 770 | 724 | 739 | 906 | 856 | 884 |
| MONTH | 808 | 638 | 722 | 760 | 666 | 717 | 1060 | 652 | 814 | 906 | 548 | 769 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 926 | 906 | 916 | 664 | 638 | 649 | 722 | 712 | 719 | 784 | 761 | 773 |
| 2 | 918 | 534 | 738 | 680 | 664 | 671 | 722 | 708 | 715 | 784 | 761 | 770 |
| 3 | 520 | 466 | 483 | 690 | 658 | 682 | 718 | 606 | 689 | 784 | 761 | 771 |
| 4 | 538 | 476 | 511 | 642 | 448 | 530 | 604 | 486 | 531 | 792 | 769 | 781 |
| 5 | 530 | 504 | 514 | 512 | 442 | 463 | 508 | 484 | 491 | 800 | 776 | 791 |
| 6 | 544 | 518 | 532 | 598 | 518 | 562 | 596 | 508 | 546 | 800 | 784 | 792 |
| 7 | 582 | 546 | 563 | 640 | 600 | 624 | 620 | 592 | 606 | 816 | 800 | 811 |
| 8 | 618 | 586 | 598 | 642 | 634 | 638 | 596 | 573 | 586 | 816 | 761 | 794 |
| 9 | --- | --- | --- | 646 | 638 | 642 | 588 | 565 | 574 | 769 | 745 | 757 |
| 10 | --- | --- | --- | 640 | 616 | 630 | 596 | 580 | 586 | 765 | 745 | 753 |
| 11 | --- | --- | --- | 654 | 624 | 638 | 612 | 596 | 604 | 808 | 769 | 795 |
| 12 | --- | --- | --- | 638 | 620 | 626 | 651 | 612 | 634 | 808 | 761 | 791 |
| 13 | --- | --- | --- | 626 | 612 | 621 | 674 | 643 | 658 | 769 | 722 | 749 |
| 14 | --- | --- | --- | 632 | 610 | 621 | 682 | 660 | 672 | 776 | 745 | 764 |
| 15 | --- | --- | --- | 628 | 618 | 622 | 706 | 674 | 691 | 784 | 769 | 776 |
| 16 | --- | --- | --- | 638 | 620 | 626 | 714 | 690 | 702 | 822 | 769 | 788 |
| 17 | --- | --- | --- | 656 | 640 | 649 | 722 | 706 | 712 | 800 | 776 | 789 |
| 18 | 860 | 792 | 839 | 666 | 652 | 658 | 729 | 706 | 716 | 794 | 780 | 788 |
| 19 | 782 | 686 | 733 | 692 | 666 | 678 | 729 | 714 | 724 | 796 | 788 | 792 |
| 20 | 684 | 632 | 661 | 704 | 692 | 697 | 737 | 722 | 730 | 794 | 786 | 791 |
| 21 | 630 | 590 | 611 | 714 | 702 | 707 | 745 | 729 | 736 | 798 | 784 | 790 |
| 22 | 636 | 594 | 615 | 716 | 706 | 711 | 745 | 729 | 738 | 812 | 788 | 801 |
| 23 | 636 | 592 | 623 | 716 | 712 | 714 | 761 | 737 | 747 | 820 | 794 | 809 |
| 24 | 586 | 524 | 554 | --- | --- | --- | 769 | 753 | 759 | 808 | 796 | 803 |
| 25 | 526 | 522 | 524 | --- | --- | --- | 769 | 745 | 759 | 830 | 802 | 813 |
| 26 | 522 | 508 | 513 | --- | --- | --- | 784 | 729 | 758 | 830 | 768 | 804 |
| 27 | 580 | 520 | 550 | 736 | 652 | 687 | 729 | 706 | 720 | 764 | 748 | 753 |
| 28 | 626 | 584 | 604 | 658 | 632 | 647 | 753 | 722 | 740 | 758 | 744 | 749 |
| 29 | 638 | 628 | 634 | 668 | 640 | 658 | 769 | 745 | 757 | 790 | 760 | 774 |
| 30 | --- | --- | --- | 686 | 664 | 671 | 776 | 761 | 772 | 800 | 792 | 797 |
| 31 | --- | --- | --- | 712 | 688 | 701 | --- | --- | --- | 812 | 798 | 807 |
| MONTH | 926 | 466 | 616 | 736 | 442 | 644 | 784 | 484 | 679 | 830 | 722 | 784 |

SCIOTO RIVER BASIN

125

03231500 SCIOTO RIVER AT CHILLICOTHE OH--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|--------------|-----|------|-------------|-----|------|----------|-----|------|-----------|-----|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 818 | 802 | 811 | 886 | 876 | 881 | --- | --- | --- | 822 | 720 | 775 |
| 2 | 830 | 810 | 818 | --- | --- | --- | --- | --- | --- | 718 | 664 | 687 |
| 3 | 846 | 830 | 842 | --- | --- | --- | --- | --- | --- | 660 | 584 | 639 |
| 4 | 846 | 830 | 838 | --- | --- | --- | --- | --- | --- | 706 | 544 | 654 |
| 5 | 838 | 832 | 835 | --- | --- | --- | 772 | 758 | 761 | 508 | 402 | 426 |
| 6 | 848 | 838 | 843 | --- | --- | --- | 808 | 774 | 792 | 496 | 432 | 463 |
| 7 | 866 | 850 | 861 | --- | --- | --- | 822 | 798 | 812 | 554 | 498 | 526 |
| 8 | 866 | 844 | 856 | 892 | 880 | 888 | 798 | 786 | 792 | 628 | 556 | 586 |
| 9 | 846 | 834 | 841 | 894 | 870 | 883 | 830 | 802 | 819 | 660 | 630 | 648 |
| 10 | 860 | 836 | 842 | 896 | 880 | 887 | 842 | 828 | 835 | 688 | 660 | 674 |
| 11 | 870 | 860 | 865 | 904 | 892 | 897 | 826 | 778 | 800 | 710 | 690 | 696 |
| 12 | 882 | 866 | 871 | 906 | 882 | 895 | 814 | 778 | 793 | 726 | 698 | 717 |
| 13 | 882 | 814 | 850 | 886 | 866 | 877 | 850 | 816 | 835 | 700 | 528 | 615 |
| 14 | 812 | 772 | 791 | 876 | 856 | 867 | 880 | 850 | 864 | 626 | 416 | 489 |
| 15 | 772 | 750 | 761 | 866 | 840 | 854 | 870 | 762 | 820 | 550 | 486 | 526 |
| 16 | 804 | 762 | 777 | 848 | 822 | 836 | 762 | 702 | 725 | 576 | 552 | 558 |
| 17 | 838 | 804 | 820 | 830 | 798 | 814 | 772 | 724 | 746 | 604 | 578 | 590 |
| 18 | 856 | 842 | 851 | 826 | 792 | 803 | 834 | 774 | 784 | 736 | 602 | 664 |
| 19 | 850 | 836 | 845 | 808 | 762 | 790 | 784 | 730 | 763 | 756 | 698 | 733 |
| 20 | 862 | 848 | 854 | 832 | 710 | 799 | 818 | 752 | 790 | 696 | 682 | 688 |
| 21 | 880 | 858 | 868 | 832 | 550 | 721 | 864 | 818 | 835 | 708 | 694 | 698 |
| 22 | 880 | 844 | 862 | 534 | 384 | 430 | 836 | 684 | 751 | 734 | 710 | 722 |
| 23 | 848 | 818 | 834 | 482 | 404 | 441 | 682 | 648 | 667 | 742 | 726 | 734 |
| 24 | 852 | 832 | 841 | 628 | 488 | 554 | 648 | 634 | 639 | 756 | 736 | 746 |
| 25 | 862 | 846 | 855 | 630 | 560 | 590 | 738 | 648 | 694 | 768 | 758 | 763 |
| 26 | 870 | 848 | 859 | 552 | 504 | 515 | 744 | 642 | 700 | 772 | 752 | 761 |
| 27 | 860 | 838 | 849 | 558 | 510 | 531 | 638 | 590 | 609 | 754 | 742 | 749 |
| 28 | 856 | 836 | 848 | 640 | 562 | 596 | 604 | 588 | 595 | 768 | 748 | 758 |
| 29 | 872 | 854 | 860 | 692 | 644 | 678 | 660 | 594 | 616 | 780 | 768 | 774 |
| 30 | 990 | 866 | 878 | 720 | 688 | 704 | 782 | 664 | 713 | 786 | 780 | 783 |
| 31 | --- | --- | --- | 724 | 722 | 724 | 820 | 786 | 812 | --- | --- | --- |
| MONTH | 990 | 750 | 841 | 906 | 384 | 738 | 880 | 588 | 754 | 822 | 402 | 661 |
| YEAR | MAXIMUM 1060 | | | MINIMUM 384 | | | MEAN 730 | | | | | |

PH (STANDARD UNITS), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

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

SCIOTO RIVER BASIN

03231500 SCIOTO RIVER AT CHILLICOTHE OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|----------|------|-----|-------|------|-----|--------|------|-----|-----------|------|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | 7.9 | 7.9 | 7.9 | 7.9 | 7.9 | 7.9 | 8.1 | 7.9 | 8.0 | 9.3 | 8.9 | 9.1 |
| 2 | 7.9 | 7.7 | 7.8 | 7.9 | 7.9 | 7.9 | 8.1 | 8.0 | 8.1 | 9.2 | 8.9 | 9.1 |
| 3 | 7.8 | 7.7 | 7.7 | 7.9 | 7.9 | 7.9 | 8.1 | 8.0 | 8.0 | 9.1 | 8.8 | 9.0 |
| 4 | 7.9 | 7.8 | 7.8 | 8.0 | 7.9 | 7.9 | 8.0 | 7.7 | 7.8 | 9.1 | 8.7 | 8.9 |
| 5 | 7.9 | 7.8 | 7.8 | 7.9 | 7.8 | 7.9 | 7.8 | 7.7 | 7.8 | 8.7 | 8.3 | 8.4 |
| 6 | 7.8 | 7.8 | 7.8 | 7.9 | 7.9 | 7.9 | 8.0 | 7.8 | 7.9 | 8.4 | 8.1 | 8.2 |
| 7 | 7.9 | 7.8 | 7.8 | 7.9 | 7.9 | 7.9 | 8.2 | 8.0 | 8.1 | 8.2 | 7.9 | 8.0 |
| 8 | 7.9 | 7.9 | 7.9 | 7.9 | 7.9 | 7.9 | 8.2 | 8.1 | 8.1 | 8.2 | 7.8 | 8.0 |
| 9 | 7.9 | 7.9 | 7.9 | 8.0 | 7.9 | 7.9 | 8.2 | 8.2 | 8.2 | 8.4 | 8.0 | 8.2 |
| 10 | --- | --- | --- | 8.0 | 8.0 | 8.0 | 8.2 | 8.2 | 8.2 | 8.5 | 8.1 | 8.3 |
| 11 | --- | --- | --- | 8.1 | 8.0 | 8.0 | 8.2 | 8.2 | 8.2 | 8.4 | 8.0 | 8.1 |
| 12 | --- | --- | --- | 8.1 | 8.0 | 8.1 | 8.2 | 8.1 | 8.2 | 8.2 | 7.9 | 8.0 |
| 13 | --- | --- | --- | 8.1 | 8.0 | 8.1 | 8.2 | 8.1 | 8.2 | 8.0 | 7.9 | 8.0 |
| 14 | --- | --- | --- | 8.0 | 8.0 | 8.0 | 8.2 | 8.1 | 8.1 | 8.2 | 8.0 | 8.0 |
| 15 | --- | --- | --- | 8.0 | 8.0 | 8.0 | 8.2 | 8.1 | 8.1 | 8.1 | 7.9 | 7.9 |
| 16 | --- | --- | --- | 8.0 | 8.0 | 8.0 | 8.3 | 8.1 | 8.2 | 8.9 | 7.8 | 8.4 |
| 17 | 7.9 | 7.9 | 7.9 | 8.1 | 8.0 | 8.0 | 8.4 | 8.2 | 8.3 | 8.7 | 8.5 | 8.6 |
| 18 | 7.9 | 7.9 | 7.9 | 8.1 | 7.9 | 8.0 | 8.4 | 8.2 | 8.3 | 8.6 | 8.3 | 8.5 |
| 19 | 8.0 | 7.9 | 7.9 | 8.1 | 8.1 | 8.1 | 8.7 | 8.3 | 8.5 | 8.4 | 8.2 | 8.3 |
| 20 | 8.0 | 7.9 | 7.9 | 8.1 | 8.0 | 8.1 | 8.8 | 8.4 | 8.6 | 8.4 | 8.0 | 8.2 |
| 21 | 8.0 | 7.9 | 7.9 | 8.1 | 8.1 | 8.1 | 8.9 | 8.5 | 8.7 | 8.4 | 8.1 | 8.2 |
| 22 | 8.0 | 8.0 | 8.0 | 8.1 | 8.1 | 8.1 | 8.9 | 8.5 | 8.7 | 8.5 | 8.2 | 8.3 |
| 23 | 8.0 | 8.0 | 8.0 | 8.1 | 8.1 | 8.1 | 8.9 | 8.6 | 8.8 | 8.3 | 8.1 | 8.2 |
| 24 | 8.0 | 7.9 | 7.9 | 8.1 | 8.0 | 8.1 | 8.9 | 8.6 | 8.8 | 8.4 | 8.1 | 8.2 |
| 25 | 7.9 | 7.9 | 7.9 | 8.0 | 8.0 | 8.0 | 9.1 | 8.7 | 8.9 | 8.4 | 8.0 | 8.2 |
| 26 | 7.9 | 7.9 | 7.9 | 8.1 | 8.0 | 8.1 | 9.1 | 8.6 | 8.9 | 8.4 | 8.0 | 8.2 |
| 27 | 7.9 | 7.9 | 7.9 | 8.0 | 7.9 | 7.9 | 9.2 | 8.8 | 9.0 | 8.3 | 7.9 | 8.1 |
| 28 | 7.9 | 7.9 | 7.9 | 8.0 | 8.0 | 8.0 | 9.1 | 8.9 | 9.0 | 8.4 | 8.0 | 8.2 |
| 29 | 7.9 | 7.9 | 7.9 | 8.0 | 8.0 | 8.0 | 9.2 | 8.8 | 9.0 | 8.5 | 8.2 | 8.3 |
| 30 | --- | --- | --- | 8.0 | 7.9 | 8.0 | 9.2 | 8.9 | 9.1 | 8.7 | 8.2 | 8.4 |
| 31 | --- | --- | --- | 8.1 | 7.9 | 8.0 | --- | --- | --- | 8.8 | 8.4 | 8.6 |
| MONTH | 8.0 | 7.7 | 7.9 | 8.1 | 7.8 | 8.0 | 9.2 | 7.7 | 8.4 | 9.3 | 7.8 | 8.3 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 8.8 | 8.5 | 8.6 | 8.7 | 8.4 | 8.6 | --- | --- | --- | 7.9 | 7.7 | 7.8 |
| 2 | 8.6 | 8.3 | 8.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3 | 8.4 | 8.1 | 8.3 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4 | 8.5 | 8.1 | 8.3 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5 | 8.7 | 8.3 | 8.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6 | 8.7 | 8.3 | 8.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 7 | 8.8 | 8.4 | 8.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 8.8 | 8.5 | 8.6 | 9.2 | 8.9 | 9.0 | --- | --- | --- | --- | --- | --- |
| 9 | 8.9 | 8.5 | 8.7 | 9.1 | 8.7 | 8.9 | --- | --- | --- | --- | --- | --- |
| 10 | 8.8 | 8.6 | 8.7 | 9.0 | 8.7 | 8.9 | --- | --- | --- | --- | --- | --- |
| 11 | 8.9 | 8.5 | 8.7 | 9.0 | 8.6 | 8.8 | --- | --- | --- | --- | --- | --- |
| 12 | 8.9 | 8.6 | 8.7 | 9.1 | 8.5 | 8.8 | --- | --- | --- | --- | --- | --- |
| 13 | 8.8 | 8.4 | 8.6 | 8.9 | 8.6 | 8.8 | --- | --- | --- | --- | --- | --- |
| 14 | 9.0 | 8.6 | 8.8 | 8.8 | 8.3 | 8.5 | --- | --- | --- | --- | --- | --- |
| 15 | 9.1 | 8.8 | 8.9 | 8.9 | 8.3 | 8.6 | --- | --- | --- | --- | --- | --- |
| 16 | 8.9 | 8.7 | 8.8 | 9.0 | 8.5 | 8.8 | --- | --- | --- | --- | --- | --- |
| 17 | 8.9 | 8.5 | 8.7 | 9.2 | 8.7 | 9.0 | --- | --- | --- | --- | --- | --- |
| 18 | 8.9 | 8.5 | 8.7 | 9.2 | 8.9 | 9.0 | --- | --- | --- | --- | --- | --- |
| 19 | 9.0 | 8.7 | 8.8 | 9.0 | 8.8 | 8.9 | --- | --- | --- | --- | --- | --- |
| 20 | 9.1 | 8.7 | 8.9 | 8.8 | 8.0 | 8.5 | --- | --- | --- | --- | --- | --- |
| 21 | 9.1 | 8.7 | 8.9 | 7.9 | 7.6 | 7.8 | --- | --- | --- | --- | --- | --- |
| 22 | 9.1 | 8.7 | 8.9 | 7.6 | 7.4 | 7.6 | --- | --- | --- | --- | --- | --- |
| 23 | 9.1 | 8.7 | 8.9 | 7.7 | 7.6 | 7.6 | --- | --- | --- | --- | --- | --- |
| 24 | 9.1 | 8.8 | 8.9 | 8.0 | 7.7 | 7.8 | --- | --- | --- | --- | --- | --- |
| 25 | 9.0 | 8.7 | 8.9 | 7.8 | 7.6 | 7.7 | --- | --- | --- | --- | --- | --- |
| 26 | 9.0 | 8.5 | 8.8 | 7.7 | 7.6 | 7.7 | --- | --- | --- | --- | --- | --- |
| 27 | 9.0 | 8.6 | 8.8 | 8.0 | 7.7 | 7.8 | --- | --- | --- | --- | --- | --- |
| 28 | 9.1 | 8.7 | 8.9 | 8.4 | 7.8 | 8.0 | --- | --- | --- | --- | --- | --- |
| 29 | 8.9 | 8.6 | 8.8 | 8.5 | 8.0 | 8.2 | 7.9 | 7.8 | 7.7 | --- | --- | --- |
| 30 | 8.8 | 8.4 | 8.6 | 8.7 | 8.3 | 8.5 | 7.8 | 7.3 | 7.6 | --- | --- | --- |
| 31 | --- | --- | --- | 8.8 | 8.6 | 8.6 | 7.8 | 7.6 | 7.7 | --- | --- | --- |
| MONTH | 9.1 | 8.1 | 8.7 | 9.2 | 7.4 | 8.4 | 7.9 | 7.3 | 7.7 | 7.9 | 7.7 | 7.8 |

YEAR MAXIMUM 9.3 MINIMUM 7.3 MEAN 8.1

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

SCIOTO RIVER BASIN

127

03231500 SCIOTO RIVER AT CHILLICOTHE OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|------|------|------|----------|------|------|----------|------|------|---------|------|------|
| OCTOBER | | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
| 1 | 19.0 | 16.5 | 17.5 | 14.5 | 12.5 | 13.5 | 9.5 | 7.5 | 8.5 | 3.5 | 2.5 | 3.0 |
| 2 | 17.0 | 15.0 | 16.5 | 15.5 | 14.0 | 14.5 | 7.5 | 6.5 | 7.0 | 2.5 | 2.0 | 2.0 |
| 3 | 15.0 | 13.5 | 14.5 | 17.0 | 15.0 | 16.0 | 6.5 | 5.5 | 6.0 | 2.0 | 1.0 | 1.5 |
| 4 | 15.0 | 12.0 | 13.5 | 17.0 | 15.0 | 16.0 | 5.5 | 4.5 | 5.0 | 1.5 | .5 | 1.0 |
| 5 | 15.0 | 12.5 | 13.5 | 16.0 | 13.0 | 14.5 | 5.0 | 4.5 | 4.5 | .0 | .0 | .0 |
| 6 | 15.5 | 14.5 | 15.0 | 13.0 | 11.5 | 12.0 | 5.0 | 4.0 | 4.5 | --- | --- | --- |
| 7 | 14.5 | 13.0 | 14.0 | 11.5 | 11.0 | 11.5 | 6.0 | 5.0 | 5.5 | --- | --- | --- |
| 8 | 14.0 | 12.5 | 13.0 | 12.5 | 11.0 | 12.0 | 7.5 | 5.5 | 6.5 | --- | --- | --- |
| 9 | 13.5 | 12.0 | 13.0 | 12.5 | 11.0 | 12.5 | 9.0 | 7.0 | 8.0 | --- | --- | --- |
| 10 | 14.5 | 13.5 | 14.0 | 11.0 | 8.5 | 10.0 | 8.5 | 7.5 | 8.0 | --- | --- | --- |
| 11 | 14.0 | 13.0 | 13.5 | 8.5 | 7.0 | 7.5 | 7.0 | 6.5 | 7.0 | --- | --- | --- |
| 12 | 13.5 | 12.5 | 13.0 | 8.0 | 6.0 | 7.0 | 7.5 | 6.5 | 6.5 | --- | --- | --- |
| 13 | 13.5 | 11.5 | 12.5 | 9.0 | 6.5 | 8.0 | 7.0 | 6.5 | 6.5 | --- | --- | --- |
| 14 | 13.5 | 11.5 | 12.5 | 9.5 | 7.5 | 8.5 | 6.5 | 6.0 | 6.5 | --- | --- | --- |
| 15 | 14.0 | 12.0 | 13.0 | 9.5 | 7.5 | 8.5 | 7.0 | 5.5 | 6.5 | --- | --- | --- |
| 16 | 14.5 | 12.0 | 13.0 | 10.5 | 8.5 | 9.5 | 5.5 | 3.5 | 4.5 | --- | --- | --- |
| 17 | 14.0 | 13.0 | 13.5 | 12.0 | 10.5 | 11.0 | 3.5 | 3.0 | 3.0 | --- | --- | --- |
| 18 | 14.0 | 12.5 | 13.0 | 11.0 | 9.5 | 10.5 | 4.0 | 3.0 | 3.5 | --- | --- | --- |
| 19 | 14.5 | 12.5 | 13.5 | 9.5 | 8.0 | 9.0 | 4.5 | 3.5 | 4.0 | --- | --- | --- |
| 20 | 14.5 | 13.0 | 14.0 | 9.0 | 6.0 | 7.5 | 6.5 | 4.5 | 5.5 | --- | --- | --- |
| 21 | 13.0 | 11.0 | 12.0 | 5.5 | 4.5 | 5.0 | 6.0 | 5.0 | 5.5 | 2.5 | 2.5 | 2.5 |
| 22 | 11.5 | 10.0 | 10.5 | 5.5 | 4.0 | 4.5 | 5.0 | 4.0 | 4.5 | 3.0 | 2.5 | 2.5 |
| 23 | 12.0 | 11.0 | 11.5 | 6.0 | 4.5 | 5.0 | 5.5 | 4.5 | 5.0 | 3.0 | 2.0 | 2.5 |
| 24 | 12.5 | 11.0 | 12.0 | 7.5 | 6.0 | 6.5 | 5.5 | 4.5 | 5.0 | 3.0 | 2.5 | 3.0 |
| 25 | 12.0 | 10.5 | 11.0 | 9.5 | 7.5 | 8.5 | 6.5 | 5.5 | 6.5 | 3.0 | 1.0 | 2.5 |
| 26 | 11.5 | 9.5 | 10.5 | 9.5 | 9.5 | 9.5 | 6.5 | 6.0 | 6.5 | 1.0 | .0 | .5 |
| 27 | 11.5 | 11.0 | 11.5 | 10.0 | 9.5 | 10.0 | 6.5 | 6.0 | 6.0 | .5 | .0 | .0 |
| 28 | 11.0 | 9.5 | 10.5 | 12.0 | 10.0 | 11.0 | 6.0 | 5.0 | 5.5 | 1.0 | .0 | .5 |
| 29 | 11.0 | 10.5 | 10.5 | 12.0 | 10.5 | 11.5 | 5.0 | 3.5 | 4.5 | 3.0 | .5 | 1.5 |
| 30 | 12.5 | 10.0 | 11.0 | 10.5 | 9.5 | 10.0 | 3.5 | 2.5 | 3.0 | 5.0 | 3.0 | 4.0 |
| 31 | 13.5 | 11.5 | 12.5 | --- | --- | --- | 3.5 | 3.0 | 3.0 | 7.0 | 5.0 | 6.0 |
| MONTH | 19.0 | 9.5 | 13.0 | 17.0 | 4.0 | 10.0 | 9.5 | 2.5 | 5.5 | 7.0 | .0 | 2.0 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| FEBRUARY | | | | MARCH | | | APRIL | | | MAY | | |
| 1 | 9.0 | 7.5 | 8.0 | 6.0 | 4.0 | 5.0 | 13.0 | 12.0 | 12.5 | 18.5 | 14.5 | 16.5 |
| 2 | 9.0 | 6.5 | 8.0 | 5.5 | 5.0 | 5.5 | 14.0 | 13.0 | 13.5 | 19.5 | 15.5 | 17.5 |
| 3 | 6.5 | 4.0 | 5.0 | 6.0 | 5.0 | 5.5 | 14.0 | 13.5 | 14.0 | 20.0 | 16.5 | 18.5 |
| 4 | 4.0 | 2.0 | 3.0 | 5.0 | 2.5 | 3.5 | 14.0 | 13.0 | 13.5 | 19.0 | 17.5 | 18.0 |
| 5 | 2.0 | .5 | 1.5 | 3.0 | 2.0 | 2.5 | 14.0 | 13.0 | 13.5 | 17.5 | 15.5 | 16.5 |
| 6 | .5 | .0 | .5 | 4.0 | 2.5 | 3.5 | 13.5 | 13.5 | 13.5 | 18.5 | 15.0 | 16.5 |
| 7 | 1.0 | .5 | .5 | 5.0 | 4.0 | 4.5 | 13.5 | 11.5 | 13.0 | 20.0 | 16.5 | 18.0 |
| 8 | .5 | .0 | .5 | 7.0 | 5.0 | 6.0 | 12.5 | 11.0 | 11.5 | 21.0 | 17.5 | 19.5 |
| 9 | .5 | .5 | .5 | 7.5 | 7.0 | 7.5 | 12.5 | 11.0 | 12.0 | 22.0 | 19.5 | 20.5 |
| 10 | --- | --- | --- | 7.5 | 6.5 | 7.0 | 13.5 | 11.5 | 12.5 | 22.5 | 20.0 | 21.0 |
| 11 | --- | --- | --- | 6.5 | 5.5 | 6.5 | 14.5 | 12.5 | 13.5 | 22.5 | 20.0 | 21.0 |
| 12 | --- | --- | --- | 6.5 | 6.0 | 6.5 | 15.0 | 12.5 | 14.0 | 23.5 | 19.5 | 21.5 |
| 13 | --- | --- | --- | 6.5 | 5.5 | 6.0 | 16.0 | 13.5 | 15.0 | 24.0 | 20.5 | 22.0 |
| 14 | --- | --- | --- | 5.5 | 4.5 | 5.0 | 16.0 | 14.5 | 15.0 | 24.5 | 21.5 | 23.0 |
| 15 | --- | --- | --- | 4.5 | 3.5 | 4.0 | 15.0 | 13.5 | 14.5 | 25.5 | 22.0 | 24.0 |
| 16 | --- | --- | --- | 4.5 | 3.5 | 4.0 | 13.5 | 12.5 | 13.0 | 25.7 | 23.7 | 24.5 |
| 17 | 3.5 | 3.0 | 3.0 | 5.5 | 4.0 | 4.5 | 15.0 | 12.0 | 13.5 | 24.0 | 22.5 | 23.0 |
| 18 | 5.0 | 3.5 | 4.0 | 5.5 | 5.0 | 5.5 | 14.5 | 13.5 | 14.0 | 22.5 | 20.5 | 21.0 |
| 19 | 4.5 | 4.5 | 4.5 | 6.0 | 4.5 | 5.5 | 14.5 | 12.5 | 13.5 | 20.5 | 19.0 | 19.5 |
| 20 | 4.5 | 3.5 | 4.0 | 7.0 | 5.5 | 6.0 | 14.5 | 12.0 | 13.0 | 20.5 | 18.5 | 19.5 |
| 21 | 3.0 | 1.5 | 2.5 | 7.5 | 5.5 | 6.5 | 15.0 | 12.5 | 14.0 | 22.5 | 19.0 | 20.5 |
| 22 | 3.0 | 1.0 | 2.0 | 8.5 | 5.5 | 7.0 | 15.0 | 13.5 | 14.0 | 23.5 | 20.5 | 22.0 |
| 23 | 3.5 | 3.0 | 3.0 | 11.0 | 7.5 | 9.0 | 17.0 | 13.5 | 15.0 | 24.5 | 22.0 | 23.0 |
| 24 | 3.0 | 2.0 | 2.5 | 13.0 | 10.0 | 11.5 | 15.5 | 14.0 | 14.5 | 23.5 | 22.0 | 22.5 |
| 25 | 2.0 | 1.5 | 2.0 | 12.5 | 12.0 | 12.5 | 16.5 | 13.5 | 14.5 | 22.0 | 19.5 | 21.0 |
| 26 | 2.0 | .5 | 1.5 | 13.0 | 11.5 | 12.0 | 18.0 | 14.0 | 16.0 | 22.5 | 19.0 | 20.5 |
| 27 | 3.0 | 2.0 | 2.5 | 11.5 | 9.5 | 10.5 | 16.5 | 15.0 | 16.0 | 23.5 | 19.5 | 21.5 |
| 28 | 4.0 | 2.0 | 3.0 | 10.5 | 8.0 | 9.5 | 14.5 | 13.0 | 13.5 | 24.5 | 20.5 | 22.5 |
| 29 | 5.0 | 3.5 | 4.0 | 12.0 | 9.0 | 10.5 | 15.5 | 12.0 | 13.5 | 25.5 | 22.0 | 23.5 |
| 30 | --- | --- | --- | 12.5 | 11.0 | 12.0 | 17.0 | 13.5 | 15.0 | 26.5 | 23.0 | 24.5 |
| 31 | --- | --- | --- | 12.0 | 11.5 | 12.0 | --- | --- | --- | 27.5 | 24.0 | 25.5 |
| MONTH | 9.0 | .0 | 3.0 | 13.0 | 2.0 | 7.0 | 18.0 | 11.0 | 14.0 | 27.5 | 14.5 | 21.0 |

SCIOTO RIVER BASIN

03231500 SCIOTO RIVER AT CHILLICOTHE OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----------------------------------|------|------|------|------|------|--------|------|------|-----------|------|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 27.5 | 25.5 | 26.5 | 27.0 | 22.0 | 24.0 | --- | --- | --- | 25.0 | 22.5 | 23.5 |
| 2 | 26.0 | 23.5 | 25.5 | --- | --- | --- | --- | --- | --- | 25.5 | 23.0 | 24.0 |
| 3 | 23.0 | 21.5 | 22.5 | --- | --- | --- | --- | --- | --- | 25.0 | 23.5 | 24.0 |
| 4 | 23.0 | 20.0 | 21.5 | --- | --- | --- | --- | --- | --- | 24.0 | 23.0 | 23.5 |
| 5 | 24.0 | 20.0 | 22.0 | --- | --- | --- | --- | --- | --- | 22.5 | 21.0 | 21.5 |
| 6 | 26.0 | 22.0 | 23.5 | --- | --- | --- | 30.0 | 28.5 | 29.5 | 21.5 | 19.5 | 20.5 |
| 7 | 27.0 | 23.5 | 25.0 | --- | --- | --- | 30.5 | 27.5 | 29.0 | 21.0 | 19.0 | 20.0 |
| 8 | 27.5 | 24.5 | 26.0 | 30.9 | 28.2 | 29.2 | 30.5 | 28.0 | 29.5 | 21.5 | 19.0 | 20.0 |
| 9 | 25.5 | 23.0 | 24.0 | 32.0 | 28.0 | 29.5 | 31.0 | 28.5 | 29.5 | 21.5 | 19.5 | 20.5 |
| 10 | 23.0 | 21.5 | 22.5 | 30.5 | 28.0 | 29.5 | 31.0 | 28.0 | 29.5 | 22.5 | 20.5 | 21.5 |
| 11 | 24.0 | 20.5 | 22.5 | 29.0 | 27.5 | 28.0 | 31.0 | 28.5 | 30.0 | 23.0 | 21.0 | 22.0 |
| 12 | 25.0 | 22.0 | 23.5 | 28.5 | 26.5 | 27.5 | 30.0 | 29.0 | 29.5 | 24.0 | 22.5 | 23.0 |
| 13 | 26.5 | 22.5 | 24.5 | 27.5 | 26.0 | 27.0 | 30.0 | 28.5 | 29.5 | 24.0 | 23.0 | 23.5 |
| 14 | 27.5 | 23.5 | 25.5 | 28.5 | 26.0 | 27.0 | 31.5 | 28.5 | 30.0 | 23.5 | 22.5 | 23.0 |
| 15 | 28.0 | 25.0 | 26.5 | 30.5 | 26.5 | 28.5 | 31.5 | 29.5 | 30.0 | 23.5 | 21.5 | 22.5 |
| 16 | 27.5 | 25.5 | 26.5 | 31.5 | 27.5 | 29.5 | 31.5 | 29.0 | 30.0 | 22.5 | 21.0 | 22.0 |
| 17 | 28.0 | 25.0 | 26.5 | 32.5 | 28.5 | 30.0 | 32.0 | 29.0 | 30.0 | 22.5 | 22.0 | 22.5 |
| 18 | 27.5 | 24.5 | 26.0 | 32.0 | 29.0 | 30.0 | 32.5 | 29.5 | 31.0 | 23.5 | 22.0 | 23.0 |
| 19 | 28.0 | 25.0 | 26.5 | 29.5 | 28.0 | 28.5 | 30.5 | 28.5 | 29.5 | 23.5 | 23.0 | 23.5 |
| 20 | 29.0 | 26.0 | 27.5 | 28.0 | 27.0 | 27.5 | 29.0 | 28.0 | 28.5 | 24.0 | 22.5 | 23.5 |
| 21 | 29.5 | 27.0 | 28.0 | 27.0 | 25.5 | 26.0 | 28.5 | 26.5 | 27.5 | 23.5 | 21.5 | 22.5 |
| 22 | 30.0 | 27.5 | 28.5 | 25.5 | 24.0 | 25.0 | 27.5 | 25.0 | 26.5 | 22.5 | 20.5 | 21.5 |
| 23 | 30.0 | 27.5 | 28.5 | 26.0 | 24.0 | 25.5 | 26.5 | 25.0 | 26.0 | 23.0 | 22.0 | 22.5 |
| 24 | 29.5 | 26.5 | 27.5 | 28.0 | 25.0 | 26.5 | 26.0 | 24.0 | 25.0 | 22.0 | 20.5 | 21.0 |
| 25 | 30.0 | 26.0 | 28.0 | 27.0 | 25.5 | 26.5 | 26.5 | 23.5 | 25.0 | 21.5 | 19.5 | 20.5 |
| 26 | 30.0 | 27.0 | 28.5 | 27.5 | 25.0 | 26.0 | 26.5 | 24.5 | 25.5 | 21.5 | 20.0 | 20.5 |
| 27 | 28.5 | 25.5 | 27.0 | 28.5 | 26.0 | 27.0 | 26.0 | 24.0 | 25.0 | 21.5 | 20.0 | 20.5 |
| 28 | 28.0 | 24.5 | 26.0 | 30.0 | 26.5 | 28.0 | 25.5 | 24.5 | 25.0 | 22.0 | 20.5 | 21.0 |
| 29 | 26.0 | 24.0 | 25.0 | 30.5 | 27.5 | 29.0 | 24.0 | 22.5 | 23.5 | 22.5 | 20.5 | 21.5 |
| 30 | 26.5 | 22.5 | 24.0 | 30.5 | 28.5 | 29.0 | 24.0 | 21.5 | 22.5 | 23.0 | 21.5 | 22.0 |
| 31 | --- | --- | --- | 28.9 | 28.6 | 28.7 | 24.0 | 21.5 | 23.0 | --- | --- | --- |
| MONTH | 30.0 | 20.0 | 25.5 | 32.5 | 22.0 | 27.5 | 32.5 | 21.5 | 27.5 | 25.5 | 19.0 | 22.0 |
| YEAR | MAXIMUM 32.5 MINIMUM .0 MEAN 15.5 | | | | | | | | | | | |

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|---------|-----|------|----------|-----|------|----------|------|------|---------|------|------|
| | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
| 1 | 8.1 | 6.5 | 7.1 | 10.1 | 7.0 | 8.4 | 8.0 | 7.5 | 7.7 | 12.0 | 10.9 | 11.5 |
| 2 | 7.3 | 6.2 | 6.7 | 8.2 | 5.5 | 6.7 | 8.0 | 7.2 | 7.6 | 12.0 | 11.2 | 11.6 |
| 3 | 7.4 | 6.1 | 6.6 | 8.4 | 5.3 | 6.4 | 9.1 | 8.1 | 8.6 | 12.6 | 11.6 | 12.1 |
| 4 | 7.7 | 6.2 | 6.8 | 7.9 | 4.8 | 6.1 | 9.3 | 8.5 | 8.8 | 12.8 | 11.9 | 12.4 |
| 5 | 8.1 | 6.6 | 7.2 | 7.6 | 5.1 | 6.1 | 8.8 | 8.3 | 8.5 | 12.5 | 12.2 | 12.4 |
| 6 | 7.8 | 6.3 | 6.8 | 6.8 | 5.1 | 5.7 | 9.5 | 8.3 | 8.8 | --- | --- | --- |
| 7 | 7.6 | 6.1 | 6.6 | 6.2 | 4.9 | 5.5 | 8.7 | 7.9 | 8.3 | --- | --- | --- |
| 8 | 7.7 | 6.3 | 6.8 | 7.3 | 4.9 | 6.0 | 9.3 | 8.0 | 8.6 | --- | --- | --- |
| 9 | 7.4 | 6.3 | 6.7 | 5.6 | 4.4 | 5.0 | 8.8 | 7.5 | 8.3 | --- | --- | --- |
| 10 | 7.1 | 6.0 | 6.4 | 7.8 | 4.5 | 6.2 | 9.8 | 7.3 | 8.2 | --- | --- | --- |
| 11 | 6.9 | 5.8 | 6.2 | 9.2 | 7.0 | 8.0 | 9.0 | 7.9 | 8.3 | --- | --- | --- |
| 12 | 6.7 | 5.7 | 6.2 | 9.7 | 8.0 | 8.7 | 9.3 | 7.6 | 8.3 | --- | --- | --- |
| 13 | 7.3 | 6.2 | 6.6 | 9.3 | 8.0 | 8.5 | 9.4 | 8.0 | 8.7 | --- | --- | --- |
| 14 | 8.4 | 6.3 | 7.1 | 9.0 | 7.6 | 8.3 | 8.2 | 7.4 | 7.9 | --- | --- | --- |
| 15 | 8.1 | 6.1 | 6.8 | 8.2 | 6.7 | 7.4 | 9.5 | 7.8 | 8.6 | --- | --- | --- |
| 16 | 9.8 | 6.7 | 8.1 | 9.9 | 7.0 | 8.4 | 10.6 | 9.1 | 9.8 | --- | --- | --- |
| 17 | 10.6 | 8.3 | 9.0 | 8.7 | 7.3 | 8.0 | 11.2 | 10.4 | 10.7 | --- | --- | --- |
| 18 | 10.0 | 7.7 | 8.6 | 9.1 | 7.6 | 8.2 | 11.3 | 10.2 | 10.6 | --- | --- | --- |
| 19 | 10.4 | 7.4 | 8.5 | 9.2 | 7.3 | 8.0 | 10.5 | 9.8 | 10.2 | --- | --- | --- |
| 20 | 8.6 | 6.5 | 7.5 | 10.5 | 8.0 | 9.5 | 10.9 | 9.8 | 10.4 | --- | --- | --- |
| 21 | 9.3 | 6.3 | 7.4 | 11.5 | 9.9 | 10.5 | 9.7 | 9.0 | 9.4 | 11.7 | 11.4 | 11.4 |
| 22 | 9.5 | 7.0 | 7.9 | 10.6 | 9.0 | 9.9 | 9.9 | 9.3 | 9.5 | 11.7 | 11.5 | 11.6 |
| 23 | 9.3 | 7.1 | 7.9 | 9.9 | 8.5 | 9.1 | 10.1 | 9.1 | 9.6 | 11.8 | 11.6 | 11.7 |
| 24 | 10.2 | 7.3 | 8.4 | 9.2 | 7.8 | 8.5 | 10.9 | 10.0 | 10.4 | 11.9 | 11.6 | 11.8 |
| 25 | 10.1 | 6.9 | 8.2 | 8.4 | 7.2 | 7.7 | 10.5 | 9.6 | 10.0 | 12.2 | 11.8 | 12.0 |
| 26 | 10.6 | 7.6 | 8.5 | 7.5 | 6.4 | 7.1 | 9.8 | 9.4 | 9.6 | 12.4 | 11.7 | 12.1 |
| 27 | 9.2 | 6.5 | 7.6 | 7.5 | 6.3 | 6.8 | 9.8 | 9.1 | 9.5 | 12.7 | 12.1 | 12.4 |
| 28 | 10.7 | 7.7 | 9.0 | 7.4 | 6.3 | 6.8 | 10.7 | 9.8 | 10.3 | 13.1 | 12.4 | 12.7 |
| 29 | 10.1 | 7.2 | 8.2 | 7.1 | 6.1 | 6.5 | 11.4 | 10.4 | 10.9 | 12.9 | 12.2 | 12.6 |
| 30 | 9.3 | 6.9 | 7.7 | 7.8 | 6.3 | 7.2 | 11.4 | 10.9 | 11.2 | 12.5 | 11.8 | 12.1 |
| 31 | 9.3 | 7.2 | 7.9 | --- | --- | --- | 11.5 | 11.0 | 11.2 | 11.8 | 10.8 | 11.4 |
| MONTH | 10.7 | 5.7 | 7.5 | 11.5 | 4.4 | 7.5 | 11.5 | 7.2 | 9.3 | 13.1 | 10.8 | 12.0 |

SCIOTO RIVER BASIN

03231500 SCIOTO RIVER AT CHILLICOTHE OH--Continued

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|---------|------|---------|-------|------|------|--------|------|------|-----------|------|------|
| FEBRUARY | | | | MARCH | | | APRIL | | | MAY | | |
| 1 | 10.7 | 9.7 | 10.1 | 11.8 | 11.2 | 11.6 | 10.3 | 9.1 | 9.6 | 20.0 | 13.4 | 17.6 |
| 2 | 10.0 | 9.4 | 9.8 | 11.3 | 11.2 | 11.3 | 10.6 | 9.1 | 9.8 | 20.0 | 13.9 | 17.8 |
| 3 | 12.0 | 10.1 | 11.3 | 11.6 | 11.0 | 11.3 | 9.8 | 9.1 | 9.4 | 20.0 | 12.4 | 16.8 |
| 4 | 12.9 | 12.0 | 12.5 | 12.6 | 11.7 | 12.2 | 8.9 | 7.5 | 8.2 | 17.5 | 11.5 | 14.0 |
| 5 | 13.4 | 12.9 | 13.1 | 12.8 | 12.5 | 12.6 | 8.6 | 7.8 | 8.3 | 11.1 | 8.3 | 9.2 |
| 6 | 13.7 | 13.4 | 13.6 | 12.6 | 12.1 | 12.4 | 8.9 | 8.6 | 8.7 | 13.0 | 7.1 | 9.4 |
| 7 | 13.6 | 13.2 | 13.5 | 12.1 | 11.7 | 12.0 | 9.2 | 8.7 | 8.9 | 11.9 | 6.8 | 8.8 |
| 8 | 13.2 | 12.8 | 13.0 | 12.0 | 11.3 | 11.7 | 9.5 | 9.0 | 9.3 | 13.6 | 6.5 | 9.6 |
| 9 | 12.8 | 12.8 | 12.8 | 11.4 | 11.0 | 11.2 | 9.7 | 9.4 | 9.6 | 14.0 | 7.0 | 10.4 |
| 10 | --- | --- | --- | 11.6 | 11.3 | 11.4 | 9.5 | 9.3 | 9.4 | 15.6 | 7.9 | 11.4 |
| 11 | --- | --- | --- | 12.2 | 11.6 | 12.0 | 9.3 | 8.8 | 8.9 | 16.6 | 6.7 | 11.7 |
| 12 | --- | --- | --- | 12.0 | 11.6 | 11.9 | 8.9 | 8.5 | 8.7 | 16.9 | 9.0 | 12.5 |
| 13 | --- | --- | --- | 11.6 | 11.4 | 11.5 | 8.7 | 8.2 | 8.5 | 14.8 | 8.2 | 11.0 |
| 14 | --- | --- | --- | 11.7 | 11.3 | 11.5 | 9.7 | 8.2 | 9.0 | 17.3 | 7.7 | 12.0 |
| 15 | --- | --- | --- | 11.9 | 11.7 | 11.8 | 9.8 | 9.1 | 9.4 | 15.4 | 8.0 | 11.6 |
| 16 | --- | --- | --- | 12.2 | 11.8 | 12.0 | 10.7 | 9.3 | 10.0 | 16.5 | 7.1 | 11.4 |
| 17 | 12.2 | 12.0 | 12.2 | 12.0 | 11.5 | 11.8 | 11.2 | 9.9 | 10.5 | 16.1 | 12.6 | 13.5 |
| 18 | 12.1 | 11.9 | 12.0 | 11.6 | 11.4 | 11.5 | 11.1 | 9.8 | 10.4 | 13.9 | 8.6 | 10.8 |
| 19 | 12.3 | 12.1 | 12.2 | 11.4 | 11.2 | 11.3 | 12.9 | 10.0 | 11.3 | 10.1 | 7.8 | 8.9 |
| 20 | 12.4 | 12.1 | 12.2 | 11.3 | 11.0 | 11.1 | 14.9 | 10.7 | 12.6 | 11.1 | 7.0 | 8.9 |
| 21 | 13.3 | 12.3 | 12.9 | 11.3 | 10.9 | 11.1 | 16.0 | 11.1 | 13.4 | 14.2 | 7.9 | 10.5 |
| 22 | 13.6 | 13.1 | 13.4 | 11.4 | 11.0 | 11.2 | 15.9 | 11.3 | 13.4 | 15.3 | 8.2 | 11.5 |
| 23 | 13.2 | 13.0 | 13.1 | 11.1 | 10.5 | 10.9 | 15.9 | 11.4 | 13.4 | 12.2 | 7.4 | 9.9 |
| 24 | 13.1 | 13.0 | 13.0 | 10.6 | 9.8 | 10.3 | 15.8 | 10.6 | 12.9 | 11.0 | 7.5 | 9.2 |
| 25 | 13.4 | 13.1 | 13.3 | 9.7 | 9.0 | 9.4 | 17.6 | 11.0 | 14.2 | 11.9 | 7.0 | 9.0 |
| 26 | 13.5 | 13.1 | 13.3 | 9.7 | 9.0 | 9.3 | 19.5 | 11.4 | 15.6 | 12.0 | 7.3 | 9.1 |
| 27 | 13.0 | 12.4 | 12.7 | 9.4 | 8.2 | 8.8 | 18.7 | 12.0 | 16.0 | 12.2 | 7.0 | 9.2 |
| 28 | 12.5 | 12.0 | 12.4 | 10.2 | 9.4 | 10.0 | 16.0 | 11.3 | 13.8 | 13.4 | 7.3 | 9.7 |
| 29 | 12.0 | 11.8 | 11.9 | 10.6 | 10.1 | 10.4 | 19.3 | 11.3 | 15.4 | 14.6 | 8.1 | 10.7 |
| 30 | --- | --- | --- | 10.4 | 9.6 | 10.0 | 20.0 | 12.5 | 17.1 | 16.5 | 8.2 | 12.0 |
| 31 | --- | --- | --- | 10.2 | 9.3 | 9.7 | --- | --- | --- | 17.5 | 9.8 | 14.0 |
| MONTH | 13.7 | 9.4 | 12.5 | 12.8 | 8.2 | 11.1 | 20.0 | 7.5 | 11.2 | 20.0 | 6.5 | 11.4 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| JUNE | | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | --- | --- | --- | 8.7 | 4.1 | 6.5 | --- | --- | --- | 8.5 | 6.3 | 7.3 |
| 2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10.0 | 6.8 | 8.2 |
| 3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 8.8 | 6.7 | 7.5 |
| 4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 6.7 | 4.4 | 5.9 |
| 5 | --- | --- | --- | --- | --- | --- | 17.3 | 9.1 | 11.5 | 5.8 | 4.3 | 5.2 |
| 6 | --- | --- | --- | --- | --- | --- | 14.4 | 7.2 | 9.3 | 6.9 | 5.8 | 6.4 |
| 7 | --- | --- | --- | --- | --- | --- | 17.2 | 6.3 | 9.7 | 7.7 | 6.7 | 7.1 |
| 8 | --- | --- | --- | --- | --- | --- | 15.9 | 6.7 | 10.2 | 9.2 | 7.2 | 8.0 |
| 9 | --- | --- | --- | --- | --- | --- | 16.9 | 7.6 | 11.8 | 9.8 | 7.7 | 8.6 |
| 10 | --- | --- | --- | --- | --- | --- | 19.8 | 7.9 | 12.4 | 10.5 | 7.9 | 9.0 |
| 11 | --- | --- | --- | --- | --- | --- | 20.0 | 7.9 | 13.1 | 11.2 | 8.0 | 9.4 |
| 12 | --- | --- | --- | --- | --- | --- | 16.2 | 9.0 | 11.8 | 11.1 | 8.2 | 9.5 |
| 13 | --- | --- | --- | --- | --- | --- | 12.6 | 5.9 | 8.3 | 8.7 | 5.4 | 6.8 |
| 14 | --- | --- | --- | --- | --- | --- | 16.1 | 6.0 | 9.6 | 5.9 | 5.3 | 5.6 |
| 15 | --- | --- | --- | --- | --- | --- | 17.6 | 7.5 | 11.0 | 6.7 | 5.9 | 6.2 |
| 16 | --- | --- | --- | --- | --- | --- | 18.9 | 7.8 | 12.2 | 7.5 | 6.3 | 6.8 |
| 17 | --- | --- | --- | --- | --- | --- | 18.9 | 7.9 | 12.2 | 7.1 | 6.3 | 6.6 |
| 18 | --- | --- | --- | --- | --- | --- | 15.9 | 7.6 | 10.4 | 6.8 | 6.0 | 6.4 |
| 19 | --- | --- | --- | --- | --- | --- | 13.3 | 5.9 | 7.8 | 6.0 | 5.5 | 5.8 |
| 20 | --- | --- | --- | --- | --- | --- | 13.2 | 5.2 | 7.3 | 6.6 | 5.1 | 5.7 |
| 21 | 13.9 | 6.9 | 10.2 | --- | --- | --- | 7.3 | 5.6 | 6.5 | 7.1 | 5.1 | 6.1 |
| 22 | 14.1 | 7.1 | 11.3 | 4.7 | 3.5 | 4.0 | 8.1 | 4.9 | 6.1 | 7.5 | 5.7 | 6.5 |
| 23 | 11.4 | 5.9 | 8.7 | 5.7 | 4.6 | 5.2 | 6.8 | 5.3 | 5.9 | 8.9 | 5.7 | 7.6 |
| 24 | 12.3 | 5.0 | 8.2 | 7.4 | 5.3 | 6.1 | 8.2 | 5.2 | 6.6 | 8.1 | 7.2 | 7.6 |
| 25 | 11.8 | 5.9 | 9.1 | 6.0 | 5.1 | 5.7 | 8.2 | 5.8 | 6.8 | 10.1 | 7.2 | 8.3 |
| 26 | 11.1 | 4.9 | 8.1 | 6.1 | 5.0 | 5.5 | 8.3 | 5.8 | 6.7 | 10.6 | 8.1 | 9.1 |
| 27 | 11.0 | 5.4 | 8.4 | 8.2 | 5.3 | 6.5 | 14.4 | 6.1 | 7.5 | 10.7 | 8.2 | 9.3 |
| 28 | 11.0 | 5.8 | 8.6 | 10.9 | 6.1 | 8.1 | 10.1 | 6.3 | 7.0 | 11.2 | 8.4 | 9.6 |
| 29 | 8.7 | 4.7 | 6.3 | 15.7 | 6.9 | 9.7 | 7.3 | 5.9 | 6.5 | 11.1 | 8.4 | 9.5 |
| 30 | 8.8 | 3.9 | 6.3 | 16.3 | 8.0 | 11.5 | 7.8 | 6.1 | 6.7 | 10.3 | 8.0 | 9.1 |
| 31 | --- | --- | --- | 12.5 | 9.0 | 9.5 | 8.1 | 5.8 | 6.6 | --- | --- | --- |
| MONTH | 14.1 | 3.9 | 8.5 | 16.3 | 3.5 | 7.1 | 20.0 | 4.9 | 8.9 | 11.2 | 4.3 | 7.5 |
| YEAR | MAXIMUM | 20.0 | MINIMUM | 3.5 | MEAN | 9.6 | | | | | | |

SCIOTO RIVER BASIN

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

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

DRAINAGE AREA.--570 mi².

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

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

REMARKS.--Estimated daily discharges; Mar. 2-9. Records good except for period of estimated record, which is fair. Flow regulated by Paint Creek Lake. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--21 years, 547 ft³/s.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,910 ft³/s Feb. 22, gage height, 6.17 ft; minimum daily, 12 ft³/s Dec. 4-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|------|------|-------|-------|-------|------|------|------|------|------|
| 1 | 37 | 350 | 46 | 38 | 71 | 977 | 110 | 206 | 56 | 43 | 38 | 42 |
| 2 | 37 | 26 | 25 | 35 | 682 | 1180 | 20 | 175 | 44 | 42 | 45 | 42 |
| 3 | 37 | 30 | 14 | 32 | 2480 | 1220 | 21 | 109 | 43 | 42 | 45 | 42 |
| 4 | 36 | 30 | 12 | 27 | 2530 | 1700 | 1220 | 60 | 44 | 42 | 45 | 42 |
| 5 | 36 | 30 | 12 | 21 | 2500 | 2000 | 2340 | 62 | 44 | 42 | 45 | 42 |
| 6 | 36 | 30 | 12 | 19 | 2440 | 2500 | 2090 | 62 | 44 | 42 | 45 | 28 |
| 7 | 33 | 30 | 15 | 19 | 2360 | 2350 | 1720 | 295 | 43 | 42 | 45 | 23 |
| 8 | 32 | 30 | 19 | 19 | 1860 | 2200 | 1720 | 336 | 42 | 43 | 45 | 30 |
| 9 | 31 | 25 | 19 | 19 | 1630 | 2080 | 1420 | 69 | 42 | 43 | 45 | 31 |
| 10 | 29 | 20 | 20 | 19 | 1400 | 1760 | 914 | 70 | 42 | 42 | 45 | 36 |
| 11 | 29 | 20 | 20 | 19 | 1420 | 1130 | 733 | 53 | 42 | 42 | 45 | 36 |
| 12 | 28 | 20 | 19 | 18 | 1310 | 536 | 632 | 70 | 42 | 42 | 45 | 35 |
| 13 | 28 | 20 | 19 | 19 | 1200 | 510 | 462 | 88 | 42 | 42 | 46 | 34 |
| 14 | 28 | 20 | 20 | 19 | 898 | 632 | 462 | 80 | 42 | 42 | 46 | 34 |
| 15 | 28 | 353 | 20 | 19 | 801 | 659 | 462 | 332 | 42 | 42 | 47 | 35 |
| 16 | 28 | 19 | 18 | 18 | 1260 | 567 | 330 | 49 | 42 | 43 | 49 | 35 |
| 17 | 29 | 19 | 14 | 18 | 2230 | 355 | 253 | 49 | 43 | 45 | 49 | 34 |
| 18 | 30 | 19 | 18 | 18 | 2350 | 240 | 338 | 50 | 43 | 45 | 49 | 34 |
| 19 | 31 | 19 | 21 | 19 | 1320 | 200 | 388 | 50 | 42 | 45 | 49 | 38 |
| 20 | 32 | 21 | 20 | 244 | 1850 | 412 | 388 | 50 | 42 | 30 | 49 | 42 |
| 21 | 32 | 24 | 21 | 893 | 2190 | 209 | 270 | 50 | 42 | 17 | 49 | 41 |
| 22 | 33 | 24 | 21 | 1050 | 2800 | 275 | 200 | 50 | 42 | 17 | 48 | 41 |
| 23 | 35 | 24 | 20 | 500 | 2120 | 354 | 201 | 149 | 42 | 17 | 47 | 41 |
| 24 | 35 | 24 | 20 | 306 | 1740 | 368 | 203 | 203 | 42 | 17 | 47 | 41 |
| 25 | 36 | 48 | 20 | 164 | 1660 | 308 | 203 | 161 | 43 | 22 | 47 | 41 |
| 26 | 34 | 100 | 20 | 86 | 1480 | 341 | 203 | 80 | 43 | 36 | 48 | 40 |
| 27 | 33 | 100 | 20 | 54 | 1340 | 489 | 203 | 80 | 43 | 36 | 47 | 40 |
| 28 | 32 | 100 | 54 | 54 | 1310 | 627 | 204 | 82 | 43 | 36 | 47 | 41 |
| 29 | 32 | 100 | 75 | 53 | 1140 | 661 | 204 | 82 | 43 | 36 | 44 | 42 |
| 30 | 32 | 78 | 96 | 52 | --- | 430 | 205 | 81 | 44 | 36 | 41 | 40 |
| 31 | 373 | --- | 93 | 54 | --- | 257 | --- | 80 | --- | 36 | 42 | --- |
| TOTAL | 1342 | 1753 | 843 | 3925 | 48372 | 27527 | 18119 | 3413 | 1293 | 1147 | 1424 | 1123 |
| MEAN | 43.3 | 58.4 | 27.2 | 127 | 1668 | 888 | 604 | 110 | 43.1 | 37.0 | 45.9 | 37.4 |
| MAX | 373 | 353 | 96 | 1050 | 2800 | 2500 | 2340 | 336 | 56 | 45 | 49 | 42 |
| MIN | 28 | 19 | 12 | 18 | 71 | 200 | 20 | 49 | 42 | 17 | 38 | 23 |
| CAL YR 1987 | TOTAL | 68313 | MEAN | 187 | MAX | 2220 | MIN | 12 | | | | |
| WTR YR 1988 | TOTAL | 110281 | MEAN | 301 | MAX | 2800 | MIN | 12 | | | | |

SCIOTO RIVER BASIN

131

03232500 ROCKY FORK NEAR BARRETTS MILLS, OH

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

DRAINAGE AREA.--140 mi².

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

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 770.8 ft above National Geodetic Vertical Datum of 1929, (levels by U.S. Army Corps of Engineers). Prior to Feb. 15, 1940, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 8-14 and Feb. 8, 9. Records fair. Some diurnal fluctuation caused by mill 6 mi upstream from station. Flow regulated by Rocky Fork Lake 6 mi upstream, since 1952, capacity, 34,100 acre-ft. Water-quality data collected at this site 1965 to 1977. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--49 years, 150 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,400 ft³/s Mar. 10, 1964 from rating curve extended above 8,800 ft³/s on basis of velocity-area studies; maximum gage height, 15.56 ft Mar. 6, 1945; minimum daily discharge, 0.90 ft³/s Sept. 10, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,410 ft³/s Mar. 4, gage height, 6.97 ft; minimum daily, 3.4 ft³/s Dec. 11 and Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|---------|-------|--------|------|------|------|------|-------|-------|-------|--------|
| 1 | 5.9 | 7.1 | 28 | 7.5 | 147 | 55 | 116 | 82 | 16 | 4.8 | 6.5 | 6.4 |
| 2 | 4.9 | 7.1 | 13 | 6.4 | 971 | 59 | 131 | 75 | 15 | 4.5 | 5.5 | 5.5 |
| 3 | 5.5 | 7.1 | 17 | 5.8 | 957 | 129 | 628 | 69 | 11 | 4.6 | 5.0 | 21 |
| 4 | 5.8 | 7.1 | 8.1 | 5.7 | 560 | 1730 | 1730 | 64 | 9.2 | 4.4 | 4.6 | 266 |
| 5 | 6.0 | 6.6 | 7.0 | 4.9 | 250 | 1550 | 925 | 69 | 6.7 | 4.2 | 4.3 | 185 |
| 6 | 6.4 | 5.7 | 6.1 | 4.3 | 103 | 1040 | 624 | 70 | 5.9 | 4.2 | 12 | 119 |
| 7 | 7.6 | 5.7 | 5.7 | 3.9 | 90 | 489 | 514 | 63 | 5.2 | 4.2 | 15 | 80 |
| 8 | 7.0 | 6.3 | 6.6 | 4.0 | 70 | 367 | 448 | 60 | 5.1 | 3.9 | 11 | 57 |
| 9 | 5.9 | 8.0 | 4.9 | 4.3 | 63 | 184 | 383 | 63 | 5.6 | 3.9 | 8.6 | 42 |
| 10 | 6.3 | 8.7 | 3.8 | 4.4 | 59 | 231 | 273 | 64 | 5.1 | 3.9 | 7.4 | 34 |
| 11 | 8.4 | 8.3 | 3.4 | 4.3 | 56 | 94 | 228 | 56 | 5.0 | 3.9 | 6.1 | 26 |
| 12 | 7.1 | 6.9 | 3.9 | 4.1 | 64 | 91 | 201 | 49 | 4.8 | 4.5 | 5.2 | 25 |
| 13 | 6.8 | 6.7 | 7.2 | 4.1 | 63 | 108 | 179 | 47 | 4.7 | 5.1 | 5.0 | 40 |
| 14 | 7.3 | 6.5 | 5.1 | 4.2 | 78 | 106 | 112 | 52 | 4.3 | 5.1 | 4.4 | 29 |
| 15 | 5.5 | 6.4 | 8.3 | 4.3 | 132 | 100 | 47 | 47 | 3.7 | 5.1 | 4.5 | 21 |
| 16 | 4.2 | 6.4 | 9.9 | 4.5 | 198 | 91 | 54 | 44 | 4.3 | 5.0 | 8.1 | 15 |
| 17 | 4.2 | 7.3 | 6.1 | 4.9 | 176 | 83 | 64 | 38 | 4.7 | 4.5 | 4.9 | 13 |
| 18 | 4.7 | 9.1 | 5.4 | 18 | 161 | 82 | 88 | 33 | 5.4 | 4.2 | 4.1 | 12 |
| 19 | 5.1 | 11 | 5.3 | 170 | 153 | 84 | 103 | 28 | 5.9 | 7.3 | 7.0 | 11 |
| 20 | 5.4 | 8.9 | 6.6 | 792 | 170 | 79 | 92 | 27 | 6.0 | 41 | 14 | 9.2 |
| 21 | 6.2 | 6.3 | 6.6 | 327 | 163 | 70 | 88 | 26 | 7.5 | 27 | 9.8 | 8.5 |
| 22 | 6.0 | 5.8 | 5.7 | 132 | 141 | 65 | 140 | 31 | 5.6 | 16 | 7.2 | 6.7 |
| 23 | 6.4 | 7.0 | 5.7 | 77 | 144 | 64 | 199 | 34 | 6.2 | 17 | 8.4 | 5.2 |
| 24 | 6.9 | 15 | 5.5 | 70 | 160 | 78 | 205 | 40 | 5.0 | 14 | 12 | 5.4 |
| 25 | 7.3 | 19 | 6.3 | 65 | 170 | 71 | 174 | 38 | 4.8 | 11 | 9.7 | 5.7 |
| 26 | 7.5 | 22 | 15 | 61 | 149 | 112 | 152 | 30 | 4.6 | 9.7 | 7.2 | 5.0 |
| 27 | 8.1 | 23 | 12 | 54 | 111 | 148 | 138 | 27 | 4.2 | 13 | 5.5 | 4.2 |
| 28 | 8.6 | 21 | 11 | 38 | 105 | 125 | 117 | 24 | 4.6 | 11 | 5.1 | 3.9 |
| 29 | 7.8 | 25 | 12 | 39 | 90 | 105 | 102 | 22 | 4.8 | 9.5 | 10 | 3.8 |
| 30 | 7.5 | 28 | 8.6 | 35 | --- | 124 | 88 | 20 | 5.6 | 7.8 | 9.8 | 3.4 |
| 31 | 7.2 | --- | 7.3 | 35 | --- | 118 | --- | 18 | --- | 7.1 | 8.1 | --- |
| TOTAL | 199.5 | 319.0 | 257.1 | 1994.6 | 5754 | 7832 | 8343 | 1410 | 186.5 | 271.4 | 236.0 | 1068.9 |
| MEAN | 6.44 | 10.6 | 8.29 | 64.3 | 198 | 253 | 278 | 45.5 | 6.22 | 8.75 | 7.61 | 35.6 |
| MAX | 8.6 | 28 | 28 | 792 | 971 | 1730 | 1730 | 82 | 16 | 41 | 15 | 266 |
| MIN | 4.2 | 5.7 | 3.4 | 3.9 | 56 | 55 | 47 | 18 | 3.7 | 3.9 | 4.1 | 3.4 |
| CAL YR 1987 | TOTAL | 20693.4 | MEAN | 56.7 | MAX | 1110 | MIN | 3.4 | | | | |
| WTR YR 1988 | TOTAL | 27872.0 | MEAN | 76.2 | MAX | 1730 | MIN | 3.4 | | | | |

SCIOTO RIVER BASIN

03234000 PAINT CREEK NEAR BOURNEVILLE, OH

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

DRAINAGE AREA.--807 mi².

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

REVISED RECORDS.--WRD Ohio 1972: 1971.

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

REMARKS.--Estimated daily discharges: Jan. 4-19, Feb. 5-15. Records good except for periods of estimated records which are fair. Flow regulated by Paint Creek Lake 17 mi upstream since 1971, capacity 145,000 acre-ft and Rocky Fork Lake 23 mi upstream since 1952, capacity, 34,100 acre-ft. Water-quality data collected at this site 1965 to 1977. Sediment data 1956 to 1962. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--65 years (1921-36, 1939-88), 795 ft³/s.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,440 ft³/s Feb. 3, gage height, 7.68 ft; minimum daily, 25 ft³/s Jan. 12-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|------|------|-------|-------|-------|------|------|------|------|------|
| 1 | 46 | 410 | 84 | 89 | 116 | 358 | 393 | 357 | 112 | 52 | 43 | 49 |
| 2 | 38 | 233 | 61 | 59 | 1910 | 341 | 217 | 335 | 84 | 51 | 44 | 47 |
| 3 | 36 | 52 | 43 | 51 | 4990 | 364 | 1030 | 289 | 77 | 50 | 51 | 52 |
| 4 | 35 | 46 | 37 | 43 | 4420 | 1370 | 4260 | 195 | 70 | 49 | 50 | 237 |
| 5 | 35 | 42 | 32 | 35 | 3790 | 3980 | 4480 | 185 | 68 | 49 | 50 | 315 |
| 6 | 35 | 40 | 29 | 33 | 3410 | 4880 | 3790 | 197 | 65 | 49 | 56 | 215 |
| 7 | 38 | 39 | 28 | 30 | 3220 | 4200 | 3270 | 330 | 63 | 49 | 65 | 132 |
| 8 | 36 | 39 | 27 | 28 | 2420 | 3930 | 3080 | 485 | 61 | 49 | 61 | 104 |
| 9 | 34 | 40 | 32 | 28 | 1050 | 3510 | 2570 | 257 | 60 | 49 | 57 | 82 |
| 10 | 34 | 39 | 33 | 27 | 624 | 3110 | 1830 | 178 | 58 | 49 | 55 | 74 |
| 11 | 36 | 33 | 32 | 26 | 480 | 1880 | 1350 | 167 | 57 | 50 | 53 | 67 |
| 12 | 34 | 32 | 33 | 25 | 400 | 1040 | 1210 | 129 | 56 | 50 | 52 | 66 |
| 13 | 33 | 32 | 32 | 25 | 340 | 792 | 839 | 170 | 56 | 49 | 61 | 74 |
| 14 | 32 | 32 | 32 | 25 | 290 | 924 | 789 | 165 | 55 | 51 | 53 | 84 |
| 15 | 32 | 199 | 35 | 25 | 270 | 972 | 663 | 396 | 54 | 50 | 51 | 64 |
| 16 | 31 | 231 | 36 | 25 | 540 | 876 | 573 | 190 | 54 | 49 | 55 | 54 |
| 17 | 31 | 47 | 33 | 26 | 1180 | 677 | 429 | 125 | 54 | 47 | 56 | 48 |
| 18 | 31 | 39 | 28 | 27 | 1770 | 483 | 523 | 113 | 54 | 47 | 52 | 46 |
| 19 | 31 | 36 | 27 | 33 | 702 | 402 | 645 | 109 | 54 | 58 | 53 | 43 |
| 20 | 31 | 34 | 31 | 1540 | 979 | 613 | 615 | 104 | 54 | 141 | 61 | 45 |
| 21 | 32 | 33 | 32 | 1810 | 1270 | 401 | 528 | 101 | 59 | 157 | 62 | 45 |
| 22 | 32 | 35 | 30 | 1640 | 1870 | 390 | 451 | 100 | 57 | 64 | 57 | 45 |
| 23 | 31 | 35 | 30 | 691 | 1540 | 495 | 541 | 129 | 54 | 47 | 57 | 44 |
| 24 | 31 | 35 | 29 | 479 | 1030 | 529 | 606 | 274 | 52 | 44 | 61 | 44 |
| 25 | 32 | 39 | 31 | 284 | 878 | 510 | 528 | 278 | 52 | 38 | 59 | 45 |
| 26 | 32 | 68 | 39 | 203 | 783 | 560 | 485 | 163 | 52 | 39 | 57 | 43 |
| 27 | 33 | 109 | 45 | 135 | 624 | 696 | 451 | 132 | 51 | 46 | 54 | 42 |
| 28 | 33 | 111 | 42 | 114 | 594 | 849 | 427 | 127 | 51 | 48 | 52 | 42 |
| 29 | 30 | 118 | 76 | 103 | 507 | 920 | 396 | 122 | 51 | 46 | 64 | 42 |
| 30 | 30 | 114 | 86 | 102 | --- | 778 | 374 | 119 | 53 | 45 | 59 | 44 |
| 31 | 236 | --- | 135 | 98 | --- | 445 | --- | 115 | --- | 44 | 51 | --- |
| TOTAL | 1241 | 2392 | 1300 | 7859 | 41997 | 41275 | 37343 | 6136 | 1798 | 1706 | 1712 | 2334 |
| MEAN | 40.0 | 79.7 | 41.9 | 254 | 1448 | 1331 | 1245 | 198 | 59.9 | 55.0 | 55.2 | 77.8 |
| MAX | 236 | 410 | 135 | 1810 | 4990 | 4880 | 4480 | 485 | 112 | 157 | 65 | 315 |
| MIN | 30 | 32 | 27 | 25 | 116 | 341 | 217 | 100 | 51 | 38 | 43 | 42 |
| CAL YR 1987 | TOTAL | 119030 | MEAN | 326 | MAX | 4970 | MIN | 27 | | | | |
| WTR YR 1988 | TOTAL | 147093 | MEAN | 402 | MAX | 4990 | MIN | 25 | | | | |

SCIOTO RIVER BASIN

133

03234300 PAINT CREEK AT CHILLICOTHE, OH

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

DRAINAGE AREA.--1,136 mi².

WATER DISCHARGE RECORDS

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

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

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Paint Creek Lake, 35 mi upstream, capacity 145,000 acre-ft and Rocky Fork Lake 41 mi upstream, capacity 34,100 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,700 ft³/s Nov. 28, 1985, gage height 17.66 ft; minimum daily, 43 ft³/s Oct. 22-25, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,100 ft³/s Mar. 4, gage height, 16.40 ft; minimum daily, 43 ft³/s Oct. 22-25.

REVISIONS.--The maximum discharges for water years 1986, 1987 have been revised, as shown in the following table. They superseded figures published in WRD-OH-86-1 and WRD-OH-87-1.

| Water Year | Date | (ft ³ /s) | (ft) |
|------------|---------------|----------------------|-------|
| 1986 | Nov. 28, 1985 | 11,700 | 17.66 |
| 1987 | Apr. 7, 1987 | 8,240 | 14.87 |

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|------|------|-------|-------|-------|------|------|------|------|------|
| 1 | 64 | 309 | 111 | 149 | 217 | 433 | 539 | 395 | 144 | 71 | 70 | 66 |
| 2 | 58 | 347 | 91 | 97 | 5080 | 436 | 397 | 377 | 134 | 71 | 67 | 65 |
| 3 | 52 | 102 | 72 | 96 | 5580 | 557 | 1650 | 333 | 121 | 70 | 68 | 68 |
| 4 | 50 | 72 | 66 | 84 | 4680 | 7710 | 6240 | 272 | 115 | 68 | 70 | 264 |
| 5 | 48 | 65 | 56 | 81 | 3760 | 5020 | 4660 | 242 | 110 | 68 | 71 | 301 |
| 6 | 48 | 59 | 51 | 80 | 3060 | 5130 | 3850 | 300 | 108 | 66 | 82 | 225 |
| 7 | 51 | 57 | 48 | 62 | 2790 | 4310 | 3790 | 264 | 105 | 66 | 85 | 174 |
| 8 | 51 | 57 | 46 | 53 | 2080 | 3790 | 3500 | 445 | 101 | 65 | 85 | 136 |
| 9 | 51 | 57 | 45 | 51 | 1040 | 3400 | 2740 | 457 | 100 | 65 | 79 | 120 |
| 10 | 50 | 57 | 47 | 50 | 696 | 3160 | 2030 | 236 | 97 | 65 | 76 | 105 |
| 11 | 50 | 54 | 47 | 48 | 696 | 2140 | 1450 | 219 | 94 | 68 | 74 | 99 |
| 12 | 50 | 49 | 47 | 49 | 628 | 1370 | 1310 | 198 | 94 | 68 | 73 | 99 |
| 13 | 50 | 48 | 51 | 53 | 591 | 972 | 1010 | 195 | 94 | 68 | 74 | 526 |
| 14 | 47 | 47 | 49 | 49 | 517 | 1030 | 909 | 214 | 92 | 68 | 78 | 219 |
| 15 | 47 | 47 | 54 | 49 | 531 | 1060 | 783 | 241 | 90 | 68 | 72 | 163 |
| 16 | 47 | 289 | 52 | 48 | 800 | 1000 | 710 | 376 | 89 | 65 | 71 | 127 |
| 17 | 46 | 93 | 54 | 51 | 1230 | 844 | 540 | 182 | 89 | 63 | 73 | 108 |
| 18 | 45 | 64 | 50 | 59 | 1490 | 634 | 597 | 165 | 89 | 63 | 71 | 96 |
| 19 | 46 | 55 | 46 | 77 | 851 | 575 | 769 | 159 | 89 | 76 | 70 | 88 |
| 20 | 46 | 51 | 48 | 1780 | 1450 | 600 | 696 | 156 | 89 | 154 | 76 | 82 |
| 21 | 44 | 47 | 47 | 1630 | 1470 | 636 | 648 | 152 | 89 | 220 | 77 | 80 |
| 22 | 43 | 46 | 47 | 1540 | 1710 | 489 | 520 | 151 | 93 | 145 | 76 | 76 |
| 23 | 43 | 47 | 47 | 820 | 1320 | 547 | 600 | 157 | 91 | 134 | 72 | 79 |
| 24 | 43 | 48 | 47 | 562 | 1080 | 593 | 677 | 246 | 85 | 104 | 74 | 78 |
| 25 | 43 | 54 | 49 | 376 | 946 | 599 | 605 | 263 | 73 | 87 | 75 | 78 |
| 26 | 44 | 54 | 77 | 284 | 799 | 705 | 548 | 225 | 73 | 81 | 72 | 74 |
| 27 | 47 | 95 | 84 | 218 | 688 | 791 | 508 | 171 | 70 | 78 | 67 | 71 |
| 28 | 48 | 109 | 85 | 245 | 642 | 871 | 479 | 162 | 70 | 82 | 66 | 69 |
| 29 | 47 | 121 | 90 | 184 | 559 | 934 | 450 | 155 | 71 | 79 | 79 | 66 |
| 30 | 47 | 121 | 112 | 166 | --- | 900 | 421 | 152 | 73 | 75 | 80 | 65 |
| 31 | 47 | --- | 131 | 155 | --- | 567 | --- | 148 | --- | 73 | 71 | --- |
| TOTAL | 1493 | 2721 | 1947 | 9246 | 46981 | 51803 | 43626 | 7408 | 2832 | 2594 | 2294 | 3867 |
| MEAN | 48.2 | 90.7 | 62.8 | 298 | 1620 | 1671 | 1454 | 239 | 94.4 | 83.7 | 74.0 | 129 |
| MAX | 64 | 347 | 131 | 1780 | 5580 | 7710 | 6240 | 457 | 144 | 220 | 85 | 526 |
| MIN | 43 | 46 | 45 | 48 | 217 | 433 | 397 | 148 | 70 | 63 | 66 | 65 |
| CAL YR 1987 | TOTAL | 158317 | | MEAN | 434 | MAX | 8060 | MIN | 43 | | | |
| WTR YR 1988 | TOTAL | 176812 | | MEAN | 483 | MAX | 7710 | MIN | 43 | | | |

SCIOTO RIVER BASIN

03234300 PAINT CREEK AT CHILLICOTHE, OH

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1985 to current year.

pH: October 1985 to current year.

WATER TEMPERATURES: October 1985 to current year.

DISSOLVED OXYGEN: October 1985 to current year.

INSTRUMENTATION.--Water-quality monitor.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 822 microsiemens Jan. 11, 1988; minimum, 188 microsiemens May 21, June 22, 1987.

pH: Maximum, 9.0 units May 24, 1986; minimum, 7.4 units on several days in water year 1988.

WATER TEMPERATURES: Maximum, 31.5°C July 17, Aug. 18, 1988; minimum 0.0°C on many days during winter in water year 1988.

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

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 822 microsiemens Jan. 11; minimum, 236 microsiemens April 4.

pH: Maximum, 8.6 units Apr. 30; minimum 7.4 units on several days.

WATER TEMPERATURE: Maximum, 31.5°C July 17, Aug. 18; minimum, 0.0°C on many days during winter.

DISSOLVED OXYGEN: Maximum recorded, 16.5 mg/L Nov. 14, but may have been higher during instrument malfunctions; minimum, 4.8 mg/L June 15.

SCIOTO RIVER BASIN

135

03234300 PAINT CREEK AT CHILLICOTHE, OH--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|-----|-----|----------|-----|-----|----------|-----|-----|---------|-----|-----|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | 588 | 533 | 554 | 620 | 510 | 573 | 635 | 612 | 621 | 624 | 604 | 612 |
| 2 | 596 | 541 | 568 | 549 | 486 | 519 | 651 | 635 | 644 | 668 | 628 | 646 |
| 3 | 596 | 549 | 573 | 533 | 502 | 517 | 667 | 643 | 655 | 690 | 654 | 670 |
| 4 | 627 | 580 | 600 | 580 | 533 | 549 | 674 | 643 | 658 | 696 | 660 | 669 |
| 5 | 635 | 580 | 608 | 604 | 549 | 573 | 690 | 667 | 678 | 772 | 704 | 745 |
| 6 | 635 | 573 | 596 | 651 | 604 | 627 | 722 | 690 | 703 | 808 | 752 | 780 |
| 7 | 612 | 580 | 597 | 651 | 620 | 633 | 706 | 674 | 693 | 816 | 786 | 800 |
| 8 | 635 | 604 | 619 | 643 | 588 | 616 | 690 | 651 | 675 | 794 | 766 | 782 |
| 9 | 651 | 596 | 622 | 635 | 596 | 609 | 659 | 635 | 651 | 806 | 768 | 784 |
| 10 | 612 | 588 | 602 | 674 | 627 | 648 | 674 | 636 | 648 | 802 | 752 | 778 |
| 11 | 627 | 604 | 616 | 690 | 659 | 673 | 708 | 678 | 693 | 822 | 746 | 786 |
| 12 | 635 | 596 | 620 | 690 | 635 | 668 | 694 | 674 | 684 | 760 | 698 | 738 |
| 13 | 651 | 596 | 628 | 674 | 612 | 641 | 706 | 686 | 696 | 732 | 692 | 711 |
| 14 | 659 | 596 | 623 | 659 | 612 | 634 | 706 | 696 | 702 | 780 | 736 | 761 |
| 15 | 659 | 588 | 625 | 690 | 620 | 652 | 696 | 674 | 684 | 788 | 712 | 753 |
| 16 | 651 | 588 | 621 | 659 | 533 | 597 | 706 | 642 | 684 | 750 | 680 | 717 |
| 17 | --- | --- | --- | 573 | 549 | 553 | 716 | 700 | 711 | 698 | 662 | 685 |
| 18 | 651 | 612 | 633 | 620 | 565 | 593 | 720 | 692 | 709 | 662 | 636 | 646 |
| 19 | 659 | 604 | 631 | 659 | 620 | 632 | 704 | 682 | 694 | 674 | 574 | 652 |
| 20 | 659 | 620 | 634 | 667 | 620 | 640 | 686 | 656 | 671 | 530 | 312 | 373 |
| 21 | 674 | 651 | 662 | 698 | 667 | 685 | 698 | 630 | 667 | 532 | 322 | 454 |
| 22 | 698 | 643 | 668 | 729 | 667 | 697 | 688 | 666 | 676 | 592 | 534 | 569 |
| 23 | 659 | 612 | 639 | 698 | 651 | 675 | 678 | 640 | 662 | 598 | 570 | 588 |
| 24 | 659 | 627 | 640 | 667 | 643 | 655 | 674 | 640 | 660 | 572 | 558 | 564 |
| 25 | 682 | 635 | 655 | 651 | 620 | 641 | 636 | 612 | 624 | 598 | 548 | 575 |
| 26 | 690 | 627 | 658 | 659 | 627 | 642 | 640 | 628 | 633 | 624 | 542 | 590 |
| 27 | 659 | 627 | 639 | 667 | 627 | 645 | 718 | 650 | 694 | 654 | 618 | 633 |
| 28 | 682 | 643 | 664 | 627 | 573 | 606 | 692 | 656 | 674 | 646 | 598 | 626 |
| 29 | 674 | 651 | 665 | 604 | 573 | 582 | 710 | 662 | 678 | 634 | 562 | 601 |
| 30 | 674 | 604 | 642 | 620 | 596 | 611 | 714 | 658 | 689 | 580 | 564 | 572 |
| 31 | 659 | 596 | 637 | --- | --- | --- | 668 | 608 | 643 | 574 | 554 | 566 |
| MONTH | 698 | 533 | 625 | 729 | 486 | 620 | 722 | 608 | 673 | 822 | 312 | 659 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 600 | 542 | 558 | 662 | 606 | 631 | 600 | 560 | 580 | 538 | 460 | 504 |
| 2 | 618 | 312 | 422 | 660 | 622 | 642 | 592 | 554 | 576 | 552 | 466 | 507 |
| 3 | 476 | 380 | 440 | 640 | 620 | 627 | 572 | 242 | 485 | 566 | 486 | 520 |
| 4 | 480 | 466 | 474 | 520 | 296 | 393 | 384 | 236 | 266 | 578 | 508 | 548 |
| 5 | 486 | 466 | 478 | 490 | 374 | 440 | 474 | 420 | 453 | 596 | 570 | 579 |
| 6 | 512 | 484 | 496 | 514 | 428 | 476 | 444 | 424 | 435 | 598 | 506 | 559 |
| 7 | 534 | 512 | 524 | 456 | 404 | 437 | 432 | 392 | 416 | 552 | 490 | 522 |
| 8 | 544 | 526 | 534 | 472 | 414 | 442 | 426 | 392 | 407 | 516 | 462 | 492 |
| 9 | 572 | 548 | 560 | 470 | 422 | 438 | 476 | 428 | 449 | 526 | 476 | 507 |
| 10 | 590 | 570 | 579 | 520 | 472 | 493 | 484 | 446 | 464 | 552 | 516 | 535 |
| 11 | 592 | 568 | 582 | 554 | 492 | 522 | 504 | 470 | 487 | 568 | 518 | 546 |
| 12 | 640 | 574 | 605 | 546 | 512 | 530 | 516 | 482 | 501 | 580 | 502 | 545 |
| 13 | 670 | 630 | 642 | 576 | 546 | 564 | 532 | 480 | 509 | 556 | 494 | 526 |
| 14 | 686 | 626 | 662 | 598 | 578 | 589 | 544 | 484 | 516 | 532 | 472 | 508 |
| 15 | 648 | 630 | 639 | 616 | 594 | 602 | 556 | 520 | 544 | 528 | 446 | 494 |
| 16 | 632 | 580 | 610 | 628 | 592 | 607 | 582 | 544 | 564 | 482 | 454 | 469 |
| 17 | 624 | 588 | 602 | 646 | 602 | 624 | 596 | 526 | 564 | 552 | 488 | 526 |
| 18 | 632 | 598 | 615 | 656 | 626 | 639 | 546 | 526 | 534 | 596 | 536 | 564 |
| 19 | 626 | 608 | 620 | 662 | 622 | 641 | 552 | 508 | 532 | 594 | 574 | 586 |
| 20 | 622 | 594 | 604 | 646 | 596 | 626 | 578 | 512 | 544 | 620 | 560 | 585 |
| 21 | 636 | 606 | 619 | 656 | 610 | 632 | 534 | 504 | 518 | 578 | 530 | 558 |
| 22 | 636 | 576 | 611 | 672 | 590 | 641 | 550 | 508 | 530 | 558 | 512 | 539 |
| 23 | 622 | 576 | 598 | 612 | 558 | 586 | 518 | 454 | 489 | 542 | 514 | 529 |
| 24 | 650 | 624 | 636 | 590 | 560 | 575 | 506 | 462 | 487 | 552 | 502 | 526 |
| 25 | 648 | 618 | 635 | 594 | 568 | 583 | 502 | 444 | 478 | 548 | 514 | 531 |
| 26 | 656 | 606 | 633 | 600 | 570 | 587 | 522 | 446 | 483 | 606 | 528 | 558 |
| 27 | 622 | 602 | 609 | 610 | 592 | 601 | 518 | 464 | 496 | 584 | 524 | 556 |
| 28 | 648 | 598 | 624 | 624 | 566 | 597 | 538 | 514 | 530 | 578 | 514 | 549 |
| 29 | 638 | 598 | 618 | 604 | 556 | 582 | 562 | 500 | 535 | 568 | 510 | 540 |
| 30 | --- | --- | --- | 600 | 574 | 584 | 544 | 462 | 510 | 556 | 500 | 530 |
| 31 | --- | --- | --- | 626 | 594 | 608 | --- | --- | --- | 546 | 494 | 522 |
| MONTH | 686 | 312 | 580 | 672 | 296 | 566 | 600 | 236 | 496 | 620 | 446 | 534 |

SCIOTO RIVER BASIN

03234300 PAINT CREEK AT CHILLICOTHE, OH--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-------------|-------------|----------|-----|------|------|-----|--------|------|-----|-----------|------|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 538 | 500 | 519 | 580 | 536 | 557 | 566 | 526 | 549 | 570 | 520 | 547 |
| 2 | 558 | 516 | 534 | 582 | 530 | 558 | 558 | 524 | 542 | 560 | 524 | 542 |
| 3 | 588 | 562 | 575 | 566 | 518 | 546 | 556 | 532 | 544 | 554 | 496 | 540 |
| 4 | 606 | 564 | 586 | 562 | 510 | 539 | 564 | 540 | 552 | 560 | 364 | 447 |
| 5 | 606 | 552 | 580 | 552 | 502 | 529 | 570 | 550 | 560 | 490 | 454 | 480 |
| 6 | 584 | 534 | 562 | 550 | 496 | 520 | 586 | 564 | 577 | 508 | 456 | 486 |
| 7 | 574 | 528 | 554 | 538 | 488 | 516 | 590 | 560 | 578 | 496 | 452 | 476 |
| 8 | 576 | 532 | 555 | 612 | 504 | 553 | 588 | 550 | 572 | 522 | 464 | 486 |
| 9 | 600 | 554 | 582 | 610 | 570 | 592 | 586 | 548 | 570 | 692 | 480 | 584 |
| 10 | 618 | 578 | 599 | 604 | 574 | 590 | 586 | 550 | 568 | 694 | 654 | 675 |
| 11 | 622 | 560 | 595 | 608 | 586 | 598 | 582 | 542 | 565 | 700 | 658 | 680 |
| 12 | 608 | 550 | 581 | 618 | 596 | 607 | 576 | 550 | 563 | 690 | 616 | 669 |
| 13 | 592 | 540 | 569 | 620 | 602 | 611 | 580 | 552 | 566 | 666 | 366 | 486 |
| 14 | 580 | 532 | 559 | 616 | 590 | 605 | 564 | 526 | 550 | 700 | 500 | 608 |
| 15 | 574 | 532 | 553 | 610 | 572 | 595 | 562 | 536 | 550 | 728 | 680 | 708 |
| 16 | 568 | 540 | 553 | 606 | 572 | 590 | 564 | 530 | 550 | 716 | 690 | 705 |
| 17 | 570 | 542 | 557 | 594 | 568 | 583 | 566 | 520 | 545 | 734 | 712 | 721 |
| 18 | 580 | 538 | 560 | 602 | 570 | 587 | 554 | 526 | 541 | 756 | 732 | 743 |
| 19 | 578 | 534 | 557 | 588 | 552 | 574 | 558 | 532 | 547 | 760 | 742 | 749 |
| 20 | 558 | 520 | 542 | 620 | 502 | 553 | 554 | 546 | 550 | 768 | 742 | 758 |
| 21 | 546 | 516 | 531 | 500 | 468 | 490 | 580 | 554 | 567 | 792 | 764 | 776 |
| 22 | 538 | 512 | 526 | 532 | 474 | 511 | 590 | 554 | 574 | 800 | 756 | 781 |
| 23 | 540 | 520 | 531 | 598 | 490 | 537 | 580 | 558 | 570 | 770 | 532 | 668 |
| 24 | 556 | 518 | 540 | 580 | 516 | 556 | 578 | 550 | 567 | 580 | 550 | 565 |
| 25 | 550 | 508 | 532 | 586 | 566 | 577 | 586 | 556 | 572 | 592 | 552 | 576 |
| 26 | 540 | 520 | 527 | --- | --- | --- | 584 | 556 | 571 | 610 | 564 | 588 |
| 27 | 566 | 528 | 549 | --- | --- | --- | 594 | 554 | 576 | 610 | 562 | 587 |
| 28 | 570 | 516 | 544 | --- | --- | --- | 570 | 560 | 564 | 596 | 554 | 577 |
| 29 | 546 | 526 | 538 | --- | --- | --- | 576 | 534 | 555 | 596 | 554 | 576 |
| 30 | 574 | 528 | 553 | 570 | 540 | 555 | 578 | 536 | 559 | 584 | 552 | 568 |
| 31 | --- | --- | --- | 566 | 534 | 551 | 572 | 528 | 553 | --- | --- | --- |
| MONTH | 622 | 500 | 555 | 620 | 468 | 562 | 594 | 520 | 560 | 800 | 364 | 612 |
| YEAR | MAXIMUM 822 | MINIMUM 236 | MEAN 587 | | | | | | | | | |

PH (STANDARD UNITS), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

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

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PH (STANDARD UNITS), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

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

SCIOTO RIVER BASIN

03234300 PAINT CREEK AT CHILLICOTHE, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|------|------|----------|------|------|----------|------|------|---------|------|------|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | 19.0 | 15.5 | 17.5 | 13.5 | 11.5 | 12.5 | 8.5 | 7.0 | 7.5 | 2.5 | 1.5 | 2.0 |
| 2 | 18.0 | 14.5 | 16.0 | 15.0 | 12.5 | 13.5 | 6.5 | 5.0 | 6.0 | 1.0 | .0 | .5 |
| 3 | 16.0 | 13.5 | 14.5 | 16.0 | 13.5 | 15.0 | 5.0 | 4.5 | 4.5 | .5 | .0 | .0 |
| 4 | 13.5 | 10.5 | 12.5 | 16.0 | 13.0 | 14.5 | 4.5 | 3.5 | 4.5 | 1.0 | .0 | .5 |
| 5 | 14.0 | 10.0 | 12.5 | 15.5 | 12.5 | 14.0 | 4.0 | 3.5 | 3.5 | .0 | .0 | .0 |
| 6 | 14.5 | 11.0 | 13.5 | 12.0 | 9.0 | 10.5 | 4.0 | 2.0 | 3.0 | .0 | .0 | .0 |
| 7 | 14.5 | 13.0 | 14.0 | 10.0 | 9.0 | 9.5 | 5.0 | 3.5 | 4.0 | .0 | .0 | .0 |
| 8 | 13.5 | 11.5 | 12.5 | 12.0 | 9.0 | 10.5 | 7.5 | 4.5 | 6.0 | .0 | .0 | .0 |
| 9 | 13.0 | 10.5 | 12.0 | 12.0 | 10.0 | 11.5 | 9.0 | 7.0 | 8.0 | .0 | .0 | .0 |
| 10 | 13.5 | 12.5 | 13.0 | 10.0 | 7.0 | 8.5 | 8.0 | 6.5 | 7.5 | .0 | .0 | .0 |
| 11 | 13.0 | 12.0 | 12.5 | 7.0 | 5.5 | 6.5 | 6.0 | 5.0 | 5.5 | .0 | .0 | .0 |
| 12 | 13.5 | 11.0 | 12.0 | 7.0 | 4.5 | 5.5 | 6.0 | 5.0 | 5.5 | .5 | .0 | .0 |
| 13 | 13.0 | 10.0 | 11.5 | 8.0 | 5.0 | 6.5 | 6.0 | 5.0 | 5.5 | .0 | .0 | .0 |
| 14 | 12.5 | 9.5 | 11.0 | 9.0 | 6.5 | 7.5 | 5.5 | 5.0 | 5.0 | .0 | .0 | .0 |
| 15 | 13.0 | 10.0 | 11.5 | 8.0 | 6.0 | 7.0 | 6.5 | 5.0 | 5.5 | .5 | .0 | .0 |
| 16 | 13.5 | 10.5 | 12.0 | 9.0 | 6.5 | 8.0 | 4.5 | 2.5 | 3.5 | .5 | .0 | .0 |
| 17 | --- | --- | --- | 10.5 | 9.0 | 10.0 | 2.5 | 2.0 | 2.5 | .5 | .0 | .0 |
| 18 | --- | --- | --- | 10.5 | 8.5 | 9.5 | 3.5 | 2.0 | 2.5 | .5 | .5 | .5 |
| 19 | 13.5 | 11.0 | 12.5 | 8.5 | 6.5 | 7.5 | 4.5 | 3.0 | 3.5 | 1.5 | .5 | .5 |
| 20 | 13.5 | 12.0 | 13.0 | 8.0 | 5.5 | 7.0 | 6.5 | 4.5 | 5.5 | 3.0 | .5 | 1.5 |
| 21 | 12.0 | 9.5 | 11.0 | 5.5 | 3.5 | 4.0 | 5.5 | 3.5 | 5.0 | 3.5 | 2.5 | 3.0 |
| 22 | 10.5 | 8.0 | 9.5 | 4.0 | 2.0 | 3.0 | 3.5 | 2.0 | 3.0 | 2.5 | 2.5 | 2.5 |
| 23 | 12.0 | 9.5 | 10.5 | 5.5 | 2.5 | 3.5 | 4.0 | 2.5 | 3.5 | 2.5 | 2.0 | 2.5 |
| 24 | 12.0 | 10.5 | 11.0 | 6.5 | 5.0 | 5.5 | 4.5 | 3.0 | 3.5 | 3.0 | 2.0 | 2.5 |
| 25 | 12.0 | 9.5 | 10.5 | 9.5 | 6.5 | 8.0 | 6.0 | 5.0 | 5.5 | 2.5 | .5 | 1.5 |
| 26 | 11.0 | 8.0 | 10.0 | 9.5 | 9.0 | 9.0 | 5.5 | 5.0 | 5.5 | .5 | .0 | .0 |
| 27 | 11.5 | 10.0 | 11.0 | 9.5 | 8.5 | 9.0 | 5.0 | 4.5 | 5.0 | 1.0 | .0 | .0 |
| 28 | 10.5 | 8.5 | 9.5 | 11.5 | 9.0 | 10.0 | 5.0 | 4.5 | 5.0 | .5 | .0 | .0 |
| 29 | 10.0 | 9.0 | 9.5 | 11.0 | 9.5 | 10.5 | 4.5 | 2.5 | 3.5 | 2.0 | .0 | 1.0 |
| 30 | 12.0 | 8.5 | 10.5 | 9.5 | 8.5 | 9.0 | 2.0 | .5 | 1.5 | 3.5 | 1.5 | 2.5 |
| 31 | 13.0 | 10.0 | 11.5 | --- | --- | --- | 2.0 | 1.0 | 1.5 | 6.5 | 3.5 | 5.0 |
| MONTH | 19.0 | 8.0 | 12.0 | 16.0 | 2.0 | 9.0 | 9.0 | .5 | 4.5 | 6.5 | .0 | 1.0 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 9.0 | 6.5 | 7.5 | 20.5 | 11.0 | 15.5 | 17.5 | 14.5 | 16.0 | 20.5 | 13.5 | 16.0 |
| 2 | 9.5 | 5.5 | 8.0 | 17.5 | 12.5 | 15.0 | 18.5 | 14.0 | 16.5 | 22.0 | 14.0 | 17.0 |
| 3 | 9.0 | 4.5 | 6.5 | 17.5 | 14.0 | 16.0 | 16.5 | 13.0 | 15.0 | 18.5 | 14.5 | 16.5 |
| 4 | 8.5 | 5.5 | 6.5 | 10.5 | 3.0 | 6.0 | 13.0 | 11.5 | 12.5 | 16.5 | 15.5 | 16.0 |
| 5 | 8.0 | 4.5 | 6.0 | 15.0 | 4.0 | 9.0 | 14.5 | 12.0 | 13.0 | 15.5 | 13.5 | 14.5 |
| 6 | 6.0 | 4.5 | 5.0 | 17.5 | 6.0 | 12.5 | 14.5 | 12.5 | 13.5 | 17.0 | 13.0 | 14.5 |
| 7 | 9.5 | 5.0 | 7.0 | 19.5 | 10.0 | 14.5 | 12.5 | 10.0 | 11.0 | 22.0 | 14.5 | 17.5 |
| 8 | 10.5 | 8.0 | 9.5 | 22.0 | 11.5 | 16.5 | 12.5 | 10.0 | 11.0 | 23.0 | 16.5 | 19.0 |
| 9 | 13.5 | 9.0 | 10.5 | 19.5 | 14.5 | 17.5 | 14.0 | 10.5 | 12.5 | 20.0 | 18.0 | 19.0 |
| 10 | 13.5 | 10.0 | 11.5 | 16.0 | 6.0 | 11.5 | 14.5 | 12.5 | 13.5 | 24.5 | 17.5 | 20.0 |
| 11 | 13.0 | 11.5 | 12.0 | 13.0 | 6.0 | 8.5 | 14.5 | 12.5 | 13.5 | 23.5 | 17.5 | 20.0 |
| 12 | 12.0 | 7.0 | 10.0 | 13.0 | 7.0 | 11.0 | 15.0 | 12.0 | 13.5 | 24.5 | 16.5 | 20.0 |
| 13 | 10.0 | 6.0 | 7.5 | 12.0 | 9.5 | 10.5 | 16.5 | 12.5 | 14.5 | 22.5 | 18.0 | 20.5 |
| 14 | 5.0 | 2.0 | 3.5 | 12.0 | 8.5 | 10.5 | 15.0 | 12.5 | 14.0 | 25.5 | 19.5 | 21.5 |
| 15 | 8.0 | 5.5 | 7.0 | 11.0 | 9.5 | 10.0 | 14.0 | 12.0 | 13.0 | 27.0 | 19.5 | 22.5 |
| 16 | 6.5 | 2.5 | 5.0 | 11.0 | 4.0 | 7.0 | 13.0 | 11.0 | 12.0 | 24.5 | 21.5 | 23.0 |
| 17 | 6.5 | 2.5 | 4.0 | 6.0 | 4.0 | 5.0 | 15.5 | 11.0 | 13.0 | 23.0 | 19.5 | 21.5 |
| 18 | 17.5 | 7.0 | 13.0 | 6.0 | 5.0 | 5.5 | 15.0 | 12.5 | 14.0 | 21.0 | 18.5 | 19.5 |
| 19 | 16.5 | 14.5 | 15.5 | 6.5 | 4.5 | 5.5 | 13.0 | 10.5 | 12.0 | 18.5 | 17.0 | 17.5 |
| 20 | 16.0 | 11.0 | 14.0 | 8.0 | 5.5 | 6.5 | 13.0 | 10.5 | 12.0 | 18.0 | 16.0 | 17.0 |
| 21 | 14.5 | 9.0 | 11.5 | 9.5 | 6.0 | 7.5 | 15.0 | 12.5 | 13.5 | 20.5 | 17.0 | 18.5 |
| 22 | 19.0 | 10.5 | 14.5 | 10.0 | 6.5 | 8.0 | 16.5 | 13.5 | 14.5 | 23.0 | 19.0 | 21.0 |
| 23 | 18.0 | 13.0 | 15.5 | 11.5 | 7.5 | 9.5 | 18.5 | 13.5 | 15.0 | 24.0 | 21.0 | 22.5 |
| 24 | 13.0 | 10.5 | 12.0 | 14.0 | 11.0 | 12.5 | 15.0 | 13.5 | 14.5 | 22.5 | 20.5 | 21.0 |
| 25 | 13.5 | 10.0 | 11.5 | 13.5 | 12.5 | 13.0 | 16.0 | 12.0 | 13.5 | 21.0 | 17.5 | 19.5 |
| 26 | 15.0 | 8.5 | 12.0 | 13.5 | 11.5 | 12.5 | 23.0 | 13.0 | 16.5 | 21.0 | 16.5 | 18.5 |
| 27 | 15.5 | 11.5 | 14.0 | 12.5 | 9.5 | 11.5 | 17.0 | 14.5 | 15.5 | 22.0 | 17.0 | 19.5 |
| 28 | 17.5 | 9.5 | 13.0 | 15.0 | 9.5 | 11.5 | 13.5 | 11.5 | 13.0 | 23.0 | 18.0 | 21.0 |
| 29 | 20.0 | 12.0 | 15.5 | 13.5 | 10.5 | 12.0 | 17.5 | 10.5 | 13.0 | 24.0 | 19.5 | 22.0 |
| 30 | --- | --- | --- | 16.0 | 13.0 | 14.5 | 18.5 | 12.5 | 14.0 | 25.5 | 21.0 | 23.0 |
| 31 | --- | --- | --- | 17.0 | 13.0 | 16.0 | --- | --- | --- | 26.5 | 22.0 | 24.5 |
| MONTH | 20.0 | 2.0 | 10.0 | 22.0 | 3.0 | 11.0 | 23.0 | 10.0 | 13.5 | 27.0 | 13.0 | 19.5 |

03234300 PAINT CREEK AT CHILLICOTHE, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|---------|------|---------|------|------|------|------|--------|------|------|-----------|------|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 26.5 | 23.0 | 25.0 | 24.0 | 19.5 | 22.0 | 30.5 | 26.0 | 28.0 | 23.5 | 19.5 | 21.5 |
| 2 | 25.5 | 22.0 | 24.0 | 24.5 | 19.5 | 22.0 | 31.0 | 27.0 | 29.0 | 24.5 | 20.5 | 22.5 |
| 3 | 21.5 | 19.5 | 21.0 | 26.0 | 21.0 | 23.5 | 31.0 | 27.5 | 29.5 | 23.5 | 22.0 | 22.5 |
| 4 | 21.0 | 17.5 | 19.5 | 27.0 | 22.0 | 24.5 | 31.0 | 27.5 | 29.5 | 22.0 | 20.0 | 21.0 |
| 5 | 23.0 | 18.0 | 20.5 | 27.5 | 23.0 | 25.5 | 31.0 | 28.0 | 29.5 | 21.5 | 19.5 | 20.5 |
| 6 | 25.0 | 20.0 | 22.5 | 28.5 | 24.0 | 26.5 | 29.0 | 26.5 | 27.5 | 20.0 | 17.5 | 19.0 |
| 7 | 26.5 | 22.0 | 24.0 | 29.0 | 24.5 | 27.0 | 29.5 | 25.5 | 27.5 | 20.5 | 16.0 | 18.5 |
| 8 | 27.5 | 22.5 | 25.0 | 29.0 | 25.5 | 27.5 | 29.0 | 25.5 | 27.5 | 20.5 | 16.5 | 18.5 |
| 9 | 25.0 | 21.5 | 23.0 | 29.5 | 26.0 | 28.0 | 30.0 | 25.5 | 27.5 | 20.5 | 18.0 | 19.0 |
| 10 | 22.0 | 18.5 | 20.5 | 28.5 | 26.0 | 27.5 | 30.0 | 26.0 | 28.0 | 22.0 | 19.0 | 20.0 |
| 11 | 22.5 | 17.5 | 20.0 | 27.5 | 25.5 | 26.5 | 30.5 | 26.5 | 28.5 | 22.5 | 19.5 | 21.0 |
| 12 | 24.0 | 19.0 | 21.5 | 26.5 | 24.5 | 25.5 | 30.0 | 27.0 | 28.5 | 23.0 | 21.0 | 22.0 |
| 13 | 25.5 | 20.5 | 23.0 | 26.0 | 24.0 | 25.0 | 29.0 | 26.5 | 28.0 | 23.0 | 21.0 | 22.0 |
| 14 | 27.0 | 22.0 | 24.5 | 27.0 | 24.5 | 25.5 | 30.5 | 26.5 | 28.5 | 23.5 | 21.0 | 22.0 |
| 15 | 27.0 | 23.0 | 25.0 | 29.5 | 25.0 | 27.0 | 30.0 | 27.0 | 28.5 | 22.0 | 19.5 | 21.0 |
| 16 | 26.0 | 23.5 | 25.0 | 30.0 | 26.0 | 28.0 | 31.0 | 26.5 | 28.5 | 20.5 | 19.0 | 20.0 |
| 17 | 26.5 | 23.0 | 24.5 | 31.5 | 27.0 | 29.0 | 31.0 | 26.5 | 29.0 | 21.0 | 20.5 | 20.5 |
| 18 | 26.0 | 22.0 | 24.5 | 30.0 | 27.0 | 29.0 | 31.5 | 27.5 | 29.5 | 22.5 | 20.0 | 21.5 |
| 19 | 27.0 | 22.0 | 24.5 | 28.5 | 26.5 | 27.0 | 30.0 | 27.0 | 28.0 | 22.5 | 21.5 | 22.0 |
| 20 | 28.0 | 24.0 | 26.0 | 26.0 | 24.0 | 25.0 | 27.5 | 25.5 | 26.5 | 23.5 | 21.0 | 22.0 |
| 21 | 29.0 | 25.0 | 27.0 | 24.5 | 23.0 | 23.5 | 26.5 | 24.0 | 25.5 | 22.0 | 19.5 | 20.5 |
| 22 | 29.0 | 25.5 | 27.5 | 26.0 | 22.5 | 24.0 | 26.5 | 23.0 | 24.5 | 21.5 | 18.0 | 19.5 |
| 23 | 29.0 | 26.0 | 27.5 | 25.5 | 23.0 | 24.5 | 25.0 | 23.5 | 24.0 | 22.0 | 20.0 | 21.0 |
| 24 | 28.0 | 24.0 | 26.0 | 27.0 | 23.0 | 25.0 | 26.0 | 22.0 | 24.0 | 21.0 | 18.0 | 19.5 |
| 25 | 28.5 | 23.5 | 26.0 | 26.5 | 24.0 | 25.5 | 26.0 | 22.5 | 24.5 | 20.5 | 17.5 | 18.5 |
| 26 | 29.0 | 25.5 | 27.0 | --- | --- | --- | 26.5 | 22.5 | 24.5 | 20.5 | 17.0 | 18.5 |
| 27 | 26.5 | 22.5 | 25.0 | --- | --- | --- | 25.0 | 22.0 | 23.5 | 20.5 | 17.0 | 19.0 |
| 28 | 26.5 | 21.5 | 24.0 | --- | --- | --- | 24.5 | 23.5 | 24.0 | 21.0 | 18.0 | 19.5 |
| 29 | 25.0 | 22.0 | 23.0 | --- | --- | --- | 23.5 | 21.5 | 22.0 | 21.0 | 18.0 | 19.5 |
| 30 | 24.5 | 20.0 | 22.0 | --- | --- | --- | 23.0 | 19.0 | 21.0 | 21.5 | 19.0 | 20.5 |
| 31 | --- | --- | --- | 28.0 | 25.5 | 27.0 | 23.5 | 19.0 | 21.0 | --- | --- | --- |
| MONTH | 29.0 | 17.5 | 24.0 | 31.5 | 19.5 | 26.0 | 31.5 | 19.0 | 26.5 | 24.5 | 16.0 | 20.5 |
| YEAR | MAXIMUM | 31.5 | MINIMUM | .0 | MEAN | 14.5 | | | | | | |

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|---------|------|------|----------|------|------|----------|------|------|---------|------|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 10.2 | 8.4 | 9.2 | --- | --- | --- | 12.8 | 11.2 | 11.9 | 14.8 | 13.7 | 14.2 |
| 2 | 11.2 | 9.0 | 10.0 | --- | --- | --- | 13.6 | 11.9 | 12.6 | 15.1 | 14.0 | 14.5 |
| 3 | 11.0 | 9.3 | 10.2 | --- | --- | --- | 13.3 | 12.5 | 12.9 | 15.0 | 14.3 | 14.6 |
| 4 | 11.7 | 9.8 | 10.8 | --- | --- | --- | 14.0 | 12.5 | 13.1 | 14.9 | 14.0 | 14.4 |
| 5 | 12.4 | 10.2 | 11.2 | --- | --- | --- | 14.5 | 12.9 | 13.6 | 15.0 | 14.5 | 14.7 |
| 6 | 12.3 | 9.6 | 11.0 | --- | --- | --- | 14.8 | 13.3 | 13.9 | 15.0 | 14.4 | 14.7 |
| 7 | 11.7 | 9.5 | 10.4 | --- | --- | --- | 14.7 | 13.3 | 13.9 | 14.8 | 14.3 | 14.5 |
| 8 | 11.8 | 9.5 | 10.7 | --- | --- | --- | 14.0 | 12.8 | 13.4 | 14.2 | 13.7 | 13.8 |
| 9 | 12.8 | 10.0 | 11.3 | --- | --- | --- | 12.6 | 11.6 | 12.2 | 13.9 | 13.4 | 13.7 |
| 10 | 11.8 | 9.9 | 10.7 | --- | --- | --- | 13.4 | 11.3 | 12.5 | 14.1 | 13.5 | 13.8 |
| 11 | 11.7 | 9.6 | 10.7 | 13.4 | 13.1 | 13.3 | 13.6 | 12.2 | 12.8 | 14.1 | 13.6 | 13.8 |
| 12 | 12.6 | 10.1 | 11.3 | 13.7 | 13.3 | 13.5 | 13.8 | 12.2 | 12.9 | 13.9 | 13.4 | 13.7 |
| 13 | 13.1 | 10.4 | 11.6 | 16.1 | 13.4 | 14.2 | 14.2 | 12.4 | 13.2 | 14.1 | 13.2 | 13.7 |
| 14 | 13.3 | 10.6 | 11.7 | 16.5 | 11.8 | 14.0 | 13.8 | 12.7 | 13.2 | 14.6 | 13.7 | 14.1 |
| 15 | 13.3 | 10.5 | 11.7 | 16.2 | 12.2 | 14.1 | 13.6 | 12.4 | 12.9 | 14.5 | 13.8 | 14.2 |
| 16 | 13.2 | 10.4 | 11.5 | 14.2 | 11.7 | 13.0 | 14.3 | 12.7 | 13.4 | 14.3 | 13.7 | 14.0 |
| 17 | --- | --- | --- | 12.3 | 10.7 | 11.4 | 14.7 | 13.6 | 14.1 | 13.9 | 13.4 | 13.6 |
| 18 | 13.0 | 10.0 | 11.3 | 13.3 | 10.4 | 11.7 | 15.2 | 13.7 | 14.3 | 13.7 | 13.1 | 13.4 |
| 19 | 12.9 | 10.0 | 11.3 | 15.0 | 11.6 | 13.0 | 14.7 | 13.6 | 14.1 | 13.6 | 12.9 | 13.3 |
| 20 | 11.0 | 9.6 | 10.1 | 14.4 | 11.8 | 13.1 | 13.5 | 12.5 | 13.1 | 13.3 | 12.7 | 13.1 |
| 21 | 12.2 | 9.5 | 10.8 | 15.7 | 13.0 | 14.2 | 13.8 | 12.2 | 12.9 | 13.5 | 13.1 | 13.3 |
| 22 | 12.8 | 10.6 | 11.6 | 16.0 | 14.0 | 14.9 | 14.2 | 13.1 | 13.6 | 13.9 | 13.5 | 13.7 |
| 23 | 12.4 | 10.4 | 11.2 | 15.8 | 13.9 | 14.7 | 14.9 | 13.3 | 14.0 | 13.9 | 13.6 | 13.7 |
| 24 | 11.8 | 10.1 | 10.8 | 14.5 | 13.0 | 13.8 | 14.2 | 13.3 | 13.7 | 13.7 | 13.5 | 13.6 |
| 25 | 12.2 | 10.0 | 11.0 | 14.4 | 12.0 | 13.0 | 13.2 | 12.2 | 12.7 | 14.0 | 13.5 | 13.7 |
| 26 | 12.7 | 10.4 | 11.4 | 12.5 | 11.0 | 11.5 | 12.7 | 11.9 | 12.3 | 14.3 | 13.3 | 14.1 |
| 27 | 11.5 | 9.9 | 10.5 | 12.6 | 10.9 | 11.6 | 13.7 | 12.3 | 12.9 | 14.6 | 13.8 | 14.4 |
| 28 | --- | --- | --- | 12.6 | 10.7 | 11.6 | 13.1 | 12.4 | 12.8 | 14.4 | 14.3 | 14.4 |
| 29 | --- | --- | --- | 11.5 | 10.2 | 10.9 | 14.2 | 12.5 | 13.2 | 14.4 | 13.5 | 14.1 |
| 30 | --- | --- | --- | 12.5 | 10.7 | 11.4 | 15.0 | 13.7 | 14.2 | 14.1 | 13.4 | 13.9 |
| 31 | --- | --- | --- | --- | --- | --- | 14.3 | 13.9 | 14.1 | 13.3 | 12.3 | 13.0 |
| MONTH | 13.3 | 8.4 | 10.9 | 16.5 | 10.2 | 12.9 | 15.2 | 11.2 | 13.2 | 15.1 | 12.3 | 13.9 |

SCIOTO RIVER BASIN

03234300 PAINT CREEK AT CHILLICOTHE, OH--Continued

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|---------|------|---------|-------|------|------|--------|------|------|-----------|------|------|
| FEBRUARY | | | | MARCH | | | APRIL | | | MAY | | |
| 1 | 12.2 | 11.3 | 11.8 | --- | --- | --- | 10.2 | 8.1 | 9.0 | 14.7 | 10.1 | 12.4 |
| 2 | 11.8 | 11.0 | 11.4 | --- | --- | --- | 10.3 | 7.6 | 8.9 | 15.0 | 11.5 | 12.6 |
| 3 | --- | --- | --- | --- | --- | --- | 11.1 | 8.0 | 9.2 | 16.0 | 10.7 | 13.2 |
| 4 | --- | --- | --- | --- | --- | --- | 11.6 | 10.9 | 11.4 | 13.5 | 10.6 | 11.9 |
| 5 | --- | --- | --- | --- | --- | --- | 11.9 | 11.3 | 11.6 | 11.7 | 9.8 | 10.9 |
| 6 | --- | --- | --- | --- | --- | --- | 11.3 | 11.2 | 11.2 | 14.9 | 10.4 | 12.3 |
| 7 | --- | --- | --- | --- | --- | --- | 12.2 | 11.3 | 11.8 | 13.3 | 10.1 | 11.7 |
| 8 | --- | --- | --- | --- | --- | --- | 12.3 | 11.7 | 12.1 | 12.7 | 9.9 | 11.3 |
| 9 | --- | --- | --- | --- | --- | --- | 12.1 | 9.6 | 11.4 | 12.8 | 9.3 | 10.7 |
| 10 | --- | --- | --- | --- | --- | --- | 10.6 | 9.5 | 10.0 | 11.4 | 7.6 | 9.0 |
| 11 | --- | --- | --- | --- | --- | --- | 10.2 | 9.6 | 9.9 | 11.9 | 7.4 | 9.1 |
| 12 | --- | --- | --- | --- | --- | --- | 10.1 | 9.1 | 9.7 | 11.2 | 8.4 | 9.6 |
| 13 | --- | --- | --- | --- | --- | --- | 9.3 | 8.6 | 9.0 | 12.9 | 8.2 | 10.0 |
| 14 | --- | --- | --- | --- | --- | --- | 10.6 | 8.4 | 9.5 | 11.7 | 7.2 | 8.8 |
| 15 | --- | --- | --- | --- | --- | --- | 10.3 | 9.3 | 9.8 | 11.2 | 7.2 | 8.5 |
| 16 | --- | --- | --- | --- | --- | --- | 11.2 | 9.6 | 10.3 | 11.0 | 6.7 | 8.6 |
| 17 | --- | --- | --- | 12.8 | 12.3 | 12.6 | 10.9 | 9.7 | 10.3 | 10.9 | 6.9 | 8.8 |
| 18 | --- | --- | --- | 12.5 | 11.8 | 12.2 | 10.4 | 8.6 | 9.4 | 11.2 | 7.0 | 9.0 |
| 19 | --- | --- | --- | 12.7 | 11.4 | 12.2 | 11.9 | 9.4 | 10.7 | 10.4 | 8.1 | 9.2 |
| 20 | --- | --- | --- | 12.5 | 11.4 | 11.8 | 12.5 | 10.0 | 11.1 | 12.7 | 8.5 | 10.2 |
| 21 | --- | --- | --- | 11.8 | 10.4 | 10.9 | 11.9 | 9.6 | 10.6 | 13.1 | 8.5 | 10.5 |
| 22 | --- | --- | --- | 12.8 | 10.1 | 10.9 | 11.4 | 8.8 | 10.0 | 12.5 | 7.7 | 10.0 |
| 23 | --- | --- | --- | 12.4 | 10.8 | 11.5 | 13.3 | 8.9 | 10.5 | 10.7 | 7.1 | 8.7 |
| 24 | --- | --- | --- | 11.4 | 9.9 | 10.5 | 12.0 | 9.3 | 10.5 | 9.9 | 6.9 | 8.3 |
| 25 | --- | --- | --- | 11.3 | 9.2 | 10.0 | 13.4 | 9.7 | 11.3 | 11.8 | 7.9 | 9.5 |
| 26 | --- | --- | --- | 11.2 | 9.1 | 10.0 | 11.8 | 9.1 | 10.0 | 12.5 | 8.5 | 10.0 |
| 27 | --- | --- | --- | 10.6 | 8.8 | 9.5 | 13.2 | 10.0 | 11.4 | 13.0 | 8.0 | 9.9 |
| 28 | --- | --- | --- | 10.6 | 9.3 | 9.8 | 12.3 | 9.4 | 10.7 | 12.4 | 7.5 | 9.5 |
| 29 | --- | --- | --- | 13.0 | 9.8 | 11.0 | 15.4 | 9.9 | 11.7 | 12.6 | 7.1 | 9.3 |
| 30 | --- | --- | --- | 11.0 | 8.5 | 9.9 | 15.9 | 10.4 | 12.7 | 12.6 | 6.8 | 9.2 |
| 31 | --- | --- | --- | 10.3 | 7.4 | 8.7 | --- | --- | --- | 11.6 | 6.4 | 8.7 |
| MONTH | 12.2 | 11.0 | 11.6 | 13.0 | 7.4 | 10.8 | 15.9 | 7.6 | 10.5 | 16.0 | 6.4 | 10.0 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| JUNE | | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 10.6 | 6.1 | 8.2 | 11.9 | 7.6 | 9.4 | 11.1 | 6.6 | 8.5 | 10.9 | 8.4 | 9.5 |
| 2 | 9.4 | 6.0 | 7.6 | 9.3 | 7.4 | 8.2 | 10.9 | 6.4 | 8.3 | 10.8 | 8.2 | 9.4 |
| 3 | 9.4 | 6.8 | 8.0 | 8.9 | 7.1 | 7.8 | 10.4 | 6.2 | 7.9 | 9.1 | 7.7 | 8.4 |
| 4 | 9.9 | 7.3 | 8.5 | 9.0 | 6.8 | 7.7 | 10.3 | 6.1 | 7.9 | 8.1 | 7.3 | 7.7 |
| 5 | 9.8 | 7.3 | 8.4 | 9.0 | 6.6 | 7.6 | 10.2 | 6.1 | 7.8 | 9.1 | 8.1 | 8.5 |
| 6 | 9.5 | 6.6 | 7.9 | 9.6 | 6.3 | 7.9 | 8.3 | 6.2 | 7.1 | 10.0 | 8.6 | 9.3 |
| 7 | 8.6 | 5.9 | 7.1 | 9.9 | 6.6 | 8.0 | 9.5 | 6.6 | 7.7 | 11.9 | 9.2 | 10.3 |
| 8 | 7.6 | 5.1 | 6.2 | 10.0 | 6.4 | 8.0 | 9.6 | 6.5 | 7.8 | 11.9 | 9.0 | 10.2 |
| 9 | 7.4 | 5.0 | 6.0 | 10.2 | 6.3 | 8.1 | 10.0 | 6.5 | 8.0 | 11.7 | 8.9 | 10.1 |
| 10 | 7.7 | 5.6 | 6.5 | 9.7 | 6.2 | 7.7 | 10.2 | 6.4 | 8.0 | 12.0 | 8.8 | 10.1 |
| 11 | 7.9 | 6.0 | 6.8 | 8.4 | 6.1 | 7.1 | 10.1 | 6.3 | 7.9 | 11.9 | 8.6 | 10.0 |
| 12 | 7.7 | 5.8 | 6.6 | 8.7 | 6.2 | 7.3 | 9.4 | 6.3 | 7.6 | 10.8 | 8.3 | 9.3 |
| 13 | 7.0 | 5.1 | 6.0 | 8.4 | 6.3 | 7.2 | 9.2 | 6.4 | 7.7 | 8.5 | 7.2 | 7.8 |
| 14 | 7.4 | 5.2 | 6.1 | 8.7 | 6.3 | 7.3 | 10.0 | 6.5 | 7.9 | 8.5 | 7.9 | 8.2 |
| 15 | 7.4 | 4.8 | 5.9 | 9.2 | 6.3 | 7.5 | 9.8 | 6.3 | 7.7 | 9.8 | 8.3 | 8.9 |
| 16 | 7.6 | 5.2 | 6.3 | 9.1 | 6.3 | 7.6 | 11.0 | 6.2 | 8.2 | 10.0 | 8.5 | 9.1 |
| 17 | 7.7 | 5.3 | 6.3 | 9.4 | 6.1 | 7.5 | 11.5 | 6.5 | 8.5 | 9.3 | 8.4 | 8.8 |
| 18 | 8.0 | 5.6 | 6.6 | 9.1 | 6.1 | 7.4 | 10.6 | 6.2 | 8.1 | 10.5 | 8.5 | 9.2 |
| 19 | 7.9 | 5.8 | 6.7 | 7.7 | 6.2 | 6.9 | 8.0 | 5.9 | 6.8 | 9.6 | 8.3 | 8.9 |
| 20 | 7.6 | 5.5 | 6.4 | 7.6 | 6.9 | 7.2 | 8.3 | 6.2 | 7.0 | 10.4 | 8.2 | 9.0 |
| 21 | 7.5 | 5.4 | 6.3 | 8.2 | 7.3 | 7.7 | 9.2 | 6.7 | 7.8 | 9.9 | 8.0 | 8.8 |
| 22 | 7.3 | 5.2 | 6.1 | 8.8 | 7.3 | 8.0 | 9.8 | 7.0 | 8.1 | 10.4 | 8.4 | 9.2 |
| 23 | 7.2 | 5.2 | 6.0 | 8.3 | 6.9 | 7.4 | 8.6 | 7.0 | 7.8 | 10.1 | 8.0 | 8.9 |
| 24 | 7.5 | 5.5 | 6.3 | 9.0 | 6.8 | 7.6 | 9.3 | 7.0 | 8.0 | 9.5 | 8.3 | 8.9 |
| 25 | 7.1 | 5.6 | 6.2 | 8.8 | 6.7 | 7.6 | 9.2 | 6.8 | 7.8 | 11.5 | 9.0 | 10.0 |
| 26 | 6.9 | 5.0 | 5.9 | --- | --- | --- | 9.4 | 6.8 | 7.8 | 12.3 | 9.2 | 10.4 |
| 27 | 7.9 | 5.8 | 6.7 | --- | --- | --- | 9.5 | 7.2 | 8.2 | 12.1 | 9.4 | 10.6 |
| 28 | 9.4 | 6.3 | 7.6 | --- | --- | --- | 8.4 | 7.4 | 7.9 | 13.2 | 9.2 | 10.8 |
| 29 | 9.3 | 6.7 | 7.8 | --- | --- | --- | 9.2 | 7.7 | 8.3 | 14.3 | 9.1 | 10.7 |
| 30 | 11.4 | 7.5 | 9.2 | 12.6 | 6.8 | 1.1 | 11.1 | 8.3 | 9.4 | 11.9 | 8.7 | 10.1 |
| 31 | --- | --- | --- | 11.2 | 6.6 | 8.7 | 10.7 | 8.4 | 9.4 | --- | --- | --- |
| MONTH | 11.4 | 4.8 | 6.9 | 12.6 | 6.1 | 7.4 | 11.5 | 5.9 | 8.0 | 14.3 | 7.2 | 9.4 |
| YEAR | MAXIMUM | 16.5 | MINIMUM | 4.8 | MEAN | 10.3 | | | | | | |

SCIOTO RIVER BASIN

141

03234500 SCIOTO RIVER AT HIGBY, OH
(National Stream Quality Accounting Network Station)

LOCATION.--Lat 39°12'44", long 82°51'50", in sec. 6, T.7 N., R.20 W., Ross County, Hydrologic Unit 05060002, on left bank at downstream side of highway bridge, 0.8 mi downstream from Walnut Creek, 1.2 mi north of Higby, 3 mi northwest of Richmondale and 5.0 mi upstream from Salt Creek.

DRAINAGE AREA.--5,131 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 893: 1937(M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 567.28 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 7, 1930, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Oct. 1-10, Oct. 15-31, June 28, 29, and July 1-14. Records fair. Flow slightly regulated by 8 reservoirs 45 mi to 105 mi upstream from station. U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--58 years, 4,551 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 177,000 ft³/s Jan. 23, 1937, from rating curve extended above 112,000 ft³/s; maximum gage height, 26.4 ft Jan. 23, 1937, from floodmarks, and Jan. 23, 1959; minimum daily discharge, 244 ft³/s Oct. 23, 1930.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 27,500 ft³/s Feb. 4, gage height, 13.77 ft; minimum daily, 430 ft³/s July 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|---------|-------|-------|--------|--------|--------|-------|-------|-------|-------|-------|
| 1 | 560 | 947 | 1280 | 1670 | 1320 | 2690 | 3190 | 1760 | 885 | 560 | 787 | 752 |
| 2 | 580 | 1010 | 973 | 1620 | 11600 | 2480 | 2930 | 1680 | 862 | 580 | 1060 | 607 |
| 3 | 590 | 798 | 901 | 1300 | 24000 | 2690 | 3980 | 1600 | 827 | 560 | 839 | 554 |
| 4 | 610 | 784 | 876 | 1210 | 26600 | 18100 | 17100 | 1500 | 820 | 530 | 812 | 2080 |
| 5 | 610 | 784 | 1040 | 1260 | 24300 | 18800 | 20200 | 1460 | 879 | 550 | 830 | 5250 |
| 6 | 620 | 784 | 1050 | 977 | 17000 | 12800 | 17000 | 1610 | 813 | 540 | 741 | 2370 |
| 7 | 640 | 784 | 845 | 736 | 9590 | 10200 | 12900 | 1970 | 762 | 540 | 790 | 1650 |
| 8 | 680 | 784 | 767 | 845 | 6590 | 9170 | 12200 | 1800 | 748 | 540 | 850 | 1240 |
| 9 | 740 | 817 | 737 | 757 | 4850 | 9060 | 11300 | 1700 | 731 | 530 | 740 | 1020 |
| 10 | 780 | 831 | 737 | 751 | 3890 | 10500 | 8900 | 1460 | 865 | 530 | 636 | 918 |
| 11 | 768 | 879 | 725 | 697 | 3540 | 10800 | 7040 | 1680 | 1030 | 540 | 581 | 843 |
| 12 | 838 | 878 | 715 | 699 | 3300 | 8990 | 5740 | 1510 | 818 | 560 | 816 | 816 |
| 13 | 926 | 901 | 784 | 682 | 3230 | 6940 | 4840 | 1420 | 737 | 530 | 791 | 2300 |
| 14 | 774 | 945 | 873 | 597 | 2670 | 6060 | 4040 | 1390 | 689 | 493 | 630 | 4090 |
| 15 | 730 | 906 | 812 | 663 | 2760 | 5300 | 3550 | 1350 | 666 | 456 | 626 | 2530 |
| 16 | 680 | 1100 | 812 | 636 | 4280 | 4350 | 3360 | 1520 | 670 | 445 | 589 | 1780 |
| 17 | 660 | 1040 | 931 | 651 | 4690 | 3760 | 2960 | 1260 | 665 | 436 | 545 | 1350 |
| 18 | 660 | 819 | 834 | 684 | 5270 | 3180 | 2850 | 1280 | 683 | 430 | 543 | 1890 |
| 19 | 680 | 775 | 874 | 940 | 4910 | 2950 | 3000 | 1190 | 736 | 455 | 568 | 1560 |
| 20 | 700 | 789 | 956 | 3970 | 7820 | 2860 | 2670 | 1090 | 687 | 1410 | 708 | 1060 |
| 21 | 750 | 772 | 994 | 6490 | 11900 | 2940 | 2530 | 1080 | 637 | 3080 | 1330 | 945 |
| 22 | 800 | 772 | 1090 | 4340 | 10400 | 2690 | 2300 | 1140 | 663 | 5660 | 1440 | 882 |
| 23 | 980 | 791 | 961 | 3130 | 8680 | 2680 | 2370 | 1110 | 682 | 2420 | 834 | 902 |
| 24 | 860 | 788 | 983 | 2370 | 9760 | 2640 | 2400 | 1320 | 648 | 2130 | 754 | 900 |
| 25 | 800 | 831 | 1050 | 1860 | 8730 | 2550 | 2540 | 1620 | 619 | 2560 | 1480 | 880 |
| 26 | 780 | 862 | 1340 | 1580 | 7300 | 3270 | 2150 | 1530 | 589 | 1580 | 888 | 772 |
| 27 | 720 | 1050 | 1780 | 1380 | 4730 | 5690 | 1970 | 1270 | 565 | 1190 | 679 | 697 |
| 28 | 680 | 1210 | 1570 | 1340 | 3680 | 5580 | 1890 | 1090 | 543 | 1110 | 584 | 687 |
| 29 | 740 | 1110 | 1330 | 1190 | 3180 | 5030 | 1830 | 995 | 540 | 926 | 589 | 674 |
| 30 | 800 | 1270 | 1750 | 1130 | --- | 4020 | 1790 | 922 | 530 | 819 | 856 | 650 |
| 31 | 760 | --- | 1710 | 1110 | --- | 3460 | --- | 901 | --- | 756 | 1200 | --- |
| TOTAL | 22496 | 26811 | 32080 | 47265 | 240570 | 192230 | 171520 | 43208 | 21589 | 33446 | 25116 | 42649 |
| MEAN | 726 | 894 | 1035 | 1525 | 8296 | 6201 | 5717 | 1394 | 720 | 1079 | 810 | 1422 |
| MAX | 980 | 1270 | 1780 | 6490 | 26600 | 18800 | 20200 | 1970 | 1030 | 5660 | 1480 | 5250 |
| MIN | 560 | 772 | 715 | 597 | 1320 | 2480 | 1790 | 901 | 530 | 430 | 543 | 554 |
| CAL YR 1987 | TOTAL | 1044329 | | MEAN | 2861 | MAX | 25600 | MIN | 490 | | | |
| WTR YR 1988 | TOTAL | 898980 | | MEAN | 2456 | MAX | 26600 | MIN | 430 | | | |

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1967 to current year.

pH: March 1967 to current year.

WATER TEMPERATURES: March 1967 to current year.

DISSOLVED OXYGEN: March 1967 to current year.

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

REMARKS.--Samples were collected each month as part of the National Stream Quality Accounting Network.

Interruptions in the water-quality record were due to malfunction of the instrument. Daily Sediment data collected 1954-1974, 1979-1982.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,070 microsiemens Sept. 29, 1984; minimum, 113 microsiemens Sept. 16, 1975.

pH: Maximum, 9.3 units July 21, 1982, July 19, Aug. 21, 1984; minimum, 5.9 units Mar. 8, 1980.

WATER TEMPERATURES: Maximum, 34.0°C June 29, 1966; minimum, 0.0°C on many days during winter.

DISSOLVED OXYGEN: Maximum, ≥20.0 mg/L on several days from 1982 to 1988; minimum, 0.0 mg/L on many days during 1968, Sept. 13, 1969.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1060 microsiemens Nov. 1; minimum, 228 microsiemens Mar. 4.

pH: Maximum, 9.0 units on several days; minimum, 7.1 units Nov. 4.

WATER TEMPERATURES: Maximum, 31.5°C Aug. 18; minimum recorded, 0.5°C Jan. 5, 6, but may have been lower during instrument malfunction Feb. 6 to Mar. 2.

DISSOLVED OXYGEN: Maximum, ≥20.0 mg/L June 12, 13; minimum, 2.4 mg/L July 22.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DATE | TIME | STREAM- FLOW, INSTAN- TANEOUS (CFS) | SPE- CIFIC CON- DUCT- ANCE (US/CM) | PH (STAND- ARD UNITS) | TEMPER- ATURE AIR (DEG C) | TEMPER- ATURE WATER (DEG C) | TUR- BID- ITY (FTU) | OXYGEN, DIS- SOLVED (MG/L) | OXYGEN, DIS- SOLVED CENT SATUR- ATION | COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) | STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) |
|--------------|------|---|---|--------------------------------|------------------------------------|--------------------------------------|------------------------------|-------------------------------------|--|--|--|
| DEC 21... | 1030 | 948 | 840 | 7.8 | 15.0 | 6.0 | 3.1 | 10.4 | 86 | K11000 | 120 |
| MAR 15... | 0945 | 5380 | 630 | 8.3 | 0.5 | 2.5 | 31 | 13.0 | 99 | 700 | 320 |
| JUN 08... | 0915 | 749 | 915 | 8.4 | 29.0 | 24.0 | 11 | 8.7 | 109 | >50 | 55 |
| AUG 11... | 1015 | 588 | 900 | 8.7 | 31.0 | 28.0 | 9.3 | 5.7 | 75 | 6000 | 2300 |

| DATE | HARD- NESS TOTAL (MG/L AS CACO3) | HARD- NESS NONCARB WE WAT TOT FLD MG/L AS CACO3 | CALCIUM DIS- SOLVED (MG/L AS CA) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) | SODIUM, DIS- SOLVED (MG/L AS NA) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) | BICAR- BONATE IT-FLD (MG/L AS HCO3) | CAR- BONATE IT-FLD (MG/L AS CO3) | ALKA- LINITY WAT WH TOT FET MG/L AS CACO3 | SULFATE DIS- SOLVED (MG/L AS SO4) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) |
|--------------|---|---|--|--|--|---|--|---|--|---|---|
| DEC 21... | 310 | 120 | 81 | 26 | 61 | 6.5 | 232 | 0 | 189 | 120 | 95 |
| MAR 15... | 280 | 130 | 71 | 24 | 22 | 3.0 | 181 | 0 | 149 | 86 | 39 |
| JUN 08... | 330 | 88 | 82 | 30 | 67 | 6.4 | 286 | 5.0 | 242 | 140 | 72 |
| AUG 11... | 320 | 58 | 82 | 28 | 68 | 6.3 | 322 | -- | 362 | 150 | 88 |

| DATE | PLUO- RIDE, DIS- SOLVED (MG/L AS F) | SILICA, DIS- SOLVED (MG/L AS SiO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) | PHOS- PHOROUS TOTAL (MG/L AS P) | PHOS- PHOROUS DIS- SOLVED (MG/L AS P) | PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P) |
|--------------|--|---|--|---|---|--|---|--|---|--|--|
| DEC 21... | 0.5 | 4.3 | 514 | 0.04 | 2.5 | 0.16 | 0.16 | <0.20 | 0.95 | 0.91 | 0.79 |
| MAR 15... | 0.3 | 6.2 | 360 | 0.04 | 5.9 | 0.08 | 0.09 | 0.90 | 0.17 | 0.14 | 0.15 |
| JUN 08... | 0.8 | 4.6 | 563 | 0.02 | 1.5 | 0.01 | 0.02 | 0.90 | 0.62 | 0.53 | 0.41 |
| AUG 11... | 0.4 | 4.0 | 560 | 0.02 | 2.0 | <0.01 | 0.02 | 1.4 | 0.60 | 0.39 | 0.35 |

SCIOTO RIVER BASIN

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03234500 SCIOTO RIVER AT HIGBY, OH--Continued

| DATE | ALUM- INUM, DIS- SOLVED (UG/L AS AL) | ARSENIC DIS- SOLVED (UG/L AS AS) | BARIUM, DIS- SOLVED (UG/L AS BA) | BERYL- LIUM, DIS- SOLVED (UG/L AS BE) | CADMIUM DIS- SOLVED (UG/L AS CD) | CHRO- MIUM, DIS- SOLVED (UG/L AS CR) | COBALT, DIS- SOLVED (UG/L AS CO) | COPPER, DIS- SOLVED (UG/L AS CU) | IRON, DIS- SOLVED (UG/L AS FE) | LEAD, DIS- SOLVED (UG/L AS PB) | LITHIUM DIS- SOLVED (UG/L AS LI) |
|--------------|---|--|--|--|--|---|--|--|--|--|--|
| DEC 21... | 30 | 1 | 64 | <0.5 | <1 | 1 | <3 | 5 | 49 | <5 | 31 |
| MAR 15... | 20 | 1 | 52 | <0.5 | <1 | <1 | <3 | 15 | 43 | <5 | 9 |
| JUN 08... | 30 | 2 | 79 | <0.5 | 1 | <1 | <3 | 3 | 20 | <5 | 15 |
| AUG 11... | 30 | 3 | 89 | <0.5 | <1 | <1 | <3 | 5 | 31 | <5 | 17 |

| DATE | MANGA- NESE, DIS- SOLVED (UG/L AS MN) | MERCURY DIS- SOLVED (UG/L AS HG) | MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) | NICKEL, DIS- SOLVED (UG/L AS NI) | SELE- NIUM, DIS- SOLVED (UG/L AS SE) | SILVER, DIS- SOLVED (UG/L AS AG) | STRON- TIUM, DIS- SOLVED (UG/L AS SR) | VANA- DIUM, DIS- SOLVED (UG/L AS V) | ZINC, DIS- SOLVED (UG/L AS ZN) | SEDI- MENT, SUS- PENDE (MG/L) |
|--------------|--|--|---|--|---|--|--|--|--|---|
| DEC 21... | 50 | <0.1 | <10 | 5 | 1 | <1.0 | 1600 | <6 | 21 | 15 |
| MAR 15... | 10 | 0.1 | <10 | <1 | <1 | <1.0 | 1200 | <6 | 32 | 40 |
| JUN 08... | 19 | <0.1 | 20 | 4 | <1 | <1.0 | 1600 | <6 | 9 | 30 |
| AUG 11... | 12 | <0.1 | 20 | 5 | <1 | <1.0 | 1400 | <6 | 14 | -- |

X Results based on colony count outside the acceptable range

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|-----|-----|----------|------|-----|----------|-----|-----|---------|------|-----|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | 900 | 868 | 882 | 1060 | 860 | 955 | 772 | 764 | 768 | 766 | 750 | 758 |
| 2 | 956 | 900 | 930 | 920 | 812 | 859 | 786 | 770 | 778 | 794 | 766 | 779 |
| 3 | 980 | 962 | 969 | 896 | 822 | 864 | 800 | 790 | 795 | 824 | 796 | 805 |
| 4 | 996 | 976 | 984 | 924 | 898 | 913 | 790 | 768 | 775 | 836 | 812 | 819 |
| 5 | 992 | 982 | 987 | 948 | 920 | 933 | 794 | 772 | 782 | 850 | 812 | 818 |
| 6 | 986 | 938 | 959 | 960 | 948 | 954 | 836 | 794 | 818 | 908 | 862 | 886 |
| 7 | 940 | 924 | 930 | 960 | 944 | 953 | 836 | 830 | 834 | 910 | 898 | 905 |
| 8 | 938 | 924 | 931 | 966 | 946 | 958 | 868 | 840 | 858 | 912 | 900 | 906 |
| 9 | 934 | 906 | 921 | 962 | 948 | 954 | 864 | 846 | 854 | 936 | 902 | 920 |
| 10 | 908 | 882 | 899 | 948 | 936 | 943 | 882 | 862 | 874 | 958 | 930 | 944 |
| 11 | 888 | 872 | 879 | 942 | 910 | 932 | 894 | 880 | 887 | 968 | 944 | 953 |
| 12 | 882 | 872 | 878 | 910 | 832 | 868 | 908 | 886 | 900 | 1000 | 968 | 984 |
| 13 | 872 | 842 | 861 | 834 | 816 | 825 | 910 | 898 | 901 | 998 | 978 | 984 |
| 14 | 882 | 846 | 861 | 820 | 808 | 817 | 912 | 894 | 900 | 978 | 968 | 972 |
| 15 | 950 | 884 | 917 | 812 | 796 | 801 | 932 | 914 | 923 | 994 | 964 | 978 |
| 16 | 982 | 944 | 962 | 934 | 768 | 832 | 926 | 912 | 917 | 992 | 978 | 985 |
| 17 | 942 | 860 | 903 | 794 | 766 | 774 | 924 | 894 | 910 | 980 | 960 | 967 |
| 18 | 864 | 826 | 844 | 826 | 798 | 815 | 894 | 884 | 888 | 968 | 948 | 960 |
| 19 | 860 | 824 | 840 | 846 | 824 | 832 | 892 | 884 | 888 | 950 | 908 | 938 |
| 20 | 894 | 860 | 879 | 874 | 846 | 862 | 882 | 850 | 875 | 870 | 562 | 643 |
| 21 | 910 | 888 | 897 | 870 | 844 | 858 | 856 | 828 | 844 | 656 | 538 | 582 |
| 22 | 942 | 910 | 932 | 846 | 838 | 841 | 864 | 844 | 856 | 574 | 528 | 546 |
| 23 | 972 | 934 | 949 | 874 | 846 | 862 | 858 | 844 | 849 | 658 | 576 | 613 |
| 24 | 984 | 972 | 977 | 874 | 838 | 858 | 872 | 852 | 864 | 700 | 662 | 686 |
| 25 | 984 | 960 | 974 | 850 | 828 | 840 | 850 | 810 | 832 | 728 | 696 | 710 |
| 26 | 970 | 948 | 960 | 858 | 828 | 843 | 826 | 788 | 808 | 746 | 730 | 736 |
| 27 | 956 | 932 | 946 | 878 | 844 | 858 | 798 | 790 | 793 | 810 | 750 | 771 |
| 28 | 932 | 924 | 930 | 852 | 824 | 832 | 800 | 788 | 795 | 842 | 802 | 819 |
| 29 | 948 | 922 | 933 | 838 | 814 | 828 | 784 | 756 | 769 | 878 | 834 | 847 |
| 30 | 954 | 946 | 949 | 816 | 774 | 805 | 760 | 740 | 747 | 880 | 858 | 865 |
| 31 | 978 | 954 | 968 | --- | --- | --- | 782 | 764 | 775 | 862 | 850 | 856 |
| MONTH | 996 | 824 | 924 | 1060 | 766 | 869 | 932 | 740 | 841 | 1000 | 528 | 837 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 872 | 706 | 849 | --- | --- | --- | 700 | 690 | 696 | 704 | 694 | 700 |
| 2 | 698 | 414 | 533 | --- | --- | --- | 704 | 690 | 699 | 712 | 702 | 707 |
| 3 | 478 | 440 | 454 | 680 | 638 | 675 | 692 | 342 | 640 | 720 | 708 | 715 |
| 4 | 504 | 448 | 474 | 608 | 228 | 300 | 454 | 276 | 373 | 736 | 726 | 731 |
| 5 | 508 | 482 | 492 | 424 | 346 | 395 | 482 | 446 | 468 | 750 | 736 | 744 |
| 6 | --- | --- | --- | --- | --- | --- | 518 | 484 | 502 | 750 | 734 | 742 |
| 7 | --- | --- | --- | 508 | 484 | 499 | 516 | 438 | 500 | 752 | 736 | 746 |
| 8 | --- | --- | --- | 554 | 468 | 532 | 506 | 440 | 472 | 764 | 704 | 735 |
| 9 | --- | --- | --- | 574 | 556 | 563 | 526 | 506 | 514 | 742 | 682 | 706 |
| 10 | --- | --- | --- | 590 | 574 | 582 | 538 | 516 | 530 | 729 | 722 | 728 |
| 11 | --- | --- | --- | 622 | 578 | 599 | 564 | 536 | 551 | 757 | 745 | 746 |
| 12 | --- | --- | --- | 624 | 602 | 611 | 584 | 560 | 569 | 784 | 761 | 771 |
| 13 | --- | --- | --- | 616 | 606 | 609 | 616 | 584 | 603 | 776 | 733 | 760 |
| 14 | --- | --- | --- | --- | --- | --- | 628 | 610 | 618 | 745 | 714 | 728 |
| 15 | --- | --- | --- | --- | --- | --- | 632 | 620 | 624 | 764 | 729 | 737 |
| 16 | --- | --- | --- | --- | --- | --- | 650 | 632 | 644 | 728 | 708 | 725 |
| 17 | --- | --- | --- | --- | --- | --- | 682 | 648 | 665 | 776 | 734 | 761 |
| 18 | --- | --- | --- | --- | --- | --- | 680 | 626 | 665 | 814 | 778 | 795 |
| 19 | --- | --- | --- | --- | --- | --- | 632 | 614 | 625 | 838 | 814 | 828 |
| 20 | --- | --- | --- | --- | --- | --- | 646 | 632 | 642 | 840 | 824 | 836 |
| 21 | --- | --- | --- | --- | --- | --- | 664 | 644 | 656 | 822 | 804 | 816 |
| 22 | --- | --- | --- | 702 | 698 | 701 | 680 | 656 | 669 | 820 | 764 | 788 |
| 23 | --- | --- | --- | 700 | 692 | 695 | 672 | 648 | 662 | 786 | 770 | 779 |
| 24 | --- | --- | --- | 702 | 696 | 699 | --- | --- | --- | 774 | 752 | 765 |
| 25 | --- | --- | --- | 706 | 630 | 696 | 672 | 600 | 645 | 762 | 746 | 751 |
| 26 | --- | --- | --- | 666 | 530 | 593 | 672 | 656 | 665 | 778 | 762 | 771 |
| 27 | --- | --- | --- | 688 | 636 | 668 | 672 | 648 | 661 | 780 | 750 | 768 |
| 28 | --- | --- | --- | 636 | 628 | 633 | 664 | 652 | 656 | 750 | 744 | 747 |
| 29 | --- | --- | --- | 650 | 622 | 634 | 678 | 666 | 675 | 772 | 746 | 759 |
| 30 | --- | --- | --- | 654 | 646 | 651 | 692 | 678 | 686 | 794 | 772 | 785 |
| 31 | --- | --- | --- | 688 | 656 | 672 | --- | --- | --- | 806 | 792 | 802 |
| MONTH | 872 | 414 | 560 | 706 | 228 | 600 | 704 | 276 | 606 | 840 | 682 | 757 |

SCIOTO RIVER BASIN

145

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|--------------|-----|------|-------------|-----|------|----------|-----|------|-----------|-----|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 810 | 786 | 800 | 950 | 944 | 947 | 796 | 786 | 792 | 882 | 834 | 858 |
| 2 | 806 | 784 | 794 | 954 | 948 | 950 | 816 | 794 | 802 | 886 | 842 | 871 |
| 3 | 836 | 790 | 811 | 956 | 946 | 951 | 864 | 820 | 840 | 840 | 780 | 813 |
| 4 | 864 | 832 | 851 | 960 | 952 | 956 | 882 | 866 | 876 | 788 | 648 | 739 |
| 5 | 864 | 850 | 857 | 968 | 958 | 961 | 864 | 804 | 825 | 694 | 432 | 518 |
| 6 | 862 | 852 | 858 | 972 | 958 | 966 | 864 | 806 | 825 | 514 | 436 | 472 |
| 7 | 868 | 852 | 862 | 986 | 956 | 968 | 884 | 868 | 877 | 572 | 516 | 539 |
| 8 | 928 | 846 | 888 | 990 | 978 | 983 | 876 | 850 | 867 | 638 | 574 | 607 |
| 9 | 934 | 908 | 922 | 986 | 980 | 983 | 860 | 848 | 853 | 688 | 640 | 661 |
| 10 | 916 | 892 | 911 | 988 | 970 | 978 | 892 | 864 | 881 | 734 | 690 | 712 |
| 11 | 892 | 876 | 883 | 980 | 968 | 975 | 908 | 890 | 897 | 764 | 738 | 755 |
| 12 | 904 | 890 | 897 | 978 | 962 | 969 | 896 | 834 | 878 | 832 | 766 | 793 |
| 13 | 910 | 896 | 904 | 976 | 964 | 971 | 876 | 830 | 846 | 858 | 536 | 736 |
| 14 | 920 | 882 | 907 | 982 | 972 | 977 | 936 | 876 | 912 | 614 | 424 | 541 |
| 15 | 880 | 846 | 866 | 982 | 972 | 978 | 936 | 924 | 931 | 534 | 424 | 481 |
| 16 | 850 | 824 | 838 | 974 | 952 | 964 | 934 | 874 | 911 | 572 | 536 | 559 |
| 17 | 852 | 826 | 836 | 970 | 956 | 964 | 870 | 822 | 844 | 610 | 572 | 584 |
| 18 | 890 | 856 | 877 | 962 | 888 | 934 | 844 | 826 | 834 | 666 | 612 | 627 |
| 19 | 904 | 892 | 898 | 912 | 898 | 902 | 876 | 848 | 863 | 776 | 674 | 729 |
| 20 | 898 | 876 | 889 | 900 | 592 | 800 | 870 | 804 | 842 | 782 | 740 | 763 |
| 21 | 908 | 886 | 899 | 804 | 662 | 763 | 862 | 810 | 835 | 760 | 740 | 750 |
| 22 | 922 | 910 | 914 | 656 | 406 | 504 | 866 | 816 | 844 | 780 | 760 | 770 |
| 23 | 930 | 896 | 916 | 494 | 416 | 446 | 814 | 756 | 785 | 800 | 780 | 792 |
| 24 | 902 | 876 | 894 | 568 | 470 | 517 | 760 | 754 | 757 | 806 | 790 | 797 |
| 25 | 906 | 884 | 895 | 634 | 576 | 612 | 758 | 678 | 703 | 818 | 794 | 807 |
| 26 | 926 | 904 | 919 | 616 | 592 | 606 | 806 | 720 | 764 | 844 | 816 | 834 |
| 27 | 936 | 916 | 927 | 608 | 584 | 592 | 816 | 772 | 801 | 854 | 842 | 847 |
| 28 | 944 | 920 | 935 | 652 | 612 | 631 | 770 | 720 | 752 | 842 | 806 | 822 |
| 29 | 968 | 946 | 953 | 736 | 656 | 693 | 736 | 692 | 718 | 848 | 812 | 829 |
| 30 | 950 | 944 | 948 | 782 | 740 | 767 | 734 | 708 | 719 | 878 | 848 | 862 |
| 31 | --- | --- | --- | 796 | 772 | 782 | 830 | 722 | 775 | --- | --- | --- |
| MONTH | 968 | 784 | 885 | 990 | 406 | 838 | 936 | 678 | 827 | 886 | 424 | 716 |
| YEAR | MAXIMUM 1060 | | | MINIMUM 228 | | | MEAN 795 | | | | | |

PH (STANDARD UNITS), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
| | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
| 1 | 8.0 | 7.8 | 7.9 | 7.8 | 7.3 | 7.6 | 7.8 | 7.7 | 7.8 | 7.9 | 7.8 | 7.9 |
| 2 | 7.9 | 7.9 | 7.9 | 7.8 | 7.7 | 7.7 | 7.8 | 7.7 | 7.8 | 7.9 | 7.9 | 7.9 |
| 3 | 7.9 | 7.7 | 7.8 | 7.7 | 7.2 | 7.5 | 7.8 | 7.8 | 7.8 | 7.9 | 7.9 | 7.9 |
| 4 | 7.9 | 7.8 | 7.8 | 7.7 | 7.1 | 7.4 | 7.8 | 7.8 | 7.8 | 8.0 | 7.9 | 8.0 |
| 5 | 7.9 | 7.8 | 7.8 | 7.8 | 7.3 | 7.6 | 7.8 | 7.8 | 7.8 | 8.0 | 8.0 | 8.0 |
| 6 | 7.8 | 7.8 | 7.8 | 8.0 | 7.7 | 7.8 | 7.8 | 7.8 | 7.8 | 8.0 | 7.9 | 8.0 |
| 7 | 7.8 | 7.7 | 7.8 | 7.8 | 7.6 | 7.7 | 7.8 | 7.8 | 7.8 | 8.0 | 7.9 | 7.9 |
| 8 | 7.8 | 7.7 | 7.8 | 8.1 | 7.6 | 7.8 | 7.8 | 7.7 | 7.7 | 7.9 | 7.9 | 7.9 |
| 9 | 7.8 | 7.8 | 7.8 | 7.9 | 7.8 | 7.8 | 7.8 | 7.7 | 7.7 | 7.9 | 7.9 | 7.9 |
| 10 | 7.7 | 7.7 | 7.7 | 7.8 | 7.6 | 7.7 | 7.8 | 7.7 | 7.8 | 7.9 | 7.9 | 7.9 |
| 11 | 7.7 | 7.7 | 7.7 | 7.6 | 7.6 | 7.6 | 7.8 | 7.8 | 7.8 | 7.9 | 7.8 | 7.9 |
| 12 | 7.7 | 7.7 | 7.7 | 7.8 | 7.5 | 7.6 | 7.8 | 7.7 | 7.7 | 7.9 | 7.8 | 7.8 |
| 13 | 7.7 | 7.7 | 7.7 | 7.8 | 7.7 | 7.7 | 7.8 | 7.7 | 7.7 | 7.8 | 7.8 | 7.8 |
| 14 | 7.8 | 7.7 | 7.7 | 7.8 | 7.7 | 7.7 | 7.7 | 7.7 | 7.7 | 7.9 | 7.8 | 7.8 |
| 15 | 7.8 | 7.7 | 7.8 | 7.8 | 7.7 | 7.7 | 7.7 | 7.7 | 7.7 | 7.9 | 7.8 | 7.9 |
| 16 | 7.8 | 7.7 | 7.7 | 7.8 | 7.6 | 7.7 | 7.8 | 7.7 | 7.7 | 7.9 | 7.8 | 7.8 |
| 17 | 7.9 | 7.7 | 7.8 | 7.8 | 7.6 | 7.7 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 |
| 18 | 8.0 | 7.8 | 7.9 | 7.7 | 7.6 | 7.6 | 7.8 | 7.8 | 7.8 | 7.8 | 7.7 | 7.7 |
| 19 | 8.0 | 7.8 | 7.9 | 7.9 | 7.7 | 7.8 | 7.9 | 7.8 | 7.8 | 7.8 | 7.7 | 7.8 |
| 20 | 7.9 | 7.7 | 7.8 | 7.8 | 7.7 | 7.7 | 7.8 | 7.7 | 7.8 | 7.8 | 7.7 | 7.8 |
| 21 | 7.8 | 7.7 | 7.7 | 7.9 | 7.8 | 7.9 | 7.8 | 7.8 | 7.8 | 7.8 | 7.6 | 7.7 |
| 22 | 7.9 | 7.8 | 7.8 | 8.0 | 7.9 | 8.0 | 7.8 | 7.8 | 7.8 | 8.0 | 7.9 | 7.9 |
| 23 | 7.8 | 7.7 | 7.8 | 7.9 | 7.8 | 7.9 | 7.8 | 7.8 | 7.8 | 8.0 | 7.9 | 7.9 |
| 24 | 7.7 | 7.6 | 7.7 | 7.8 | 7.7 | 7.7 | 7.8 | 7.8 | 7.8 | 7.9 | 7.9 | 7.9 |
| 25 | 7.8 | 7.6 | 7.7 | 7.8 | 7.7 | 7.7 | 7.8 | 7.8 | 7.8 | 7.9 | 7.9 | 7.9 |
| 26 | 8.0 | 7.7 | 7.9 | 7.7 | 7.6 | 7.7 | 7.8 | 7.7 | 7.8 | 8.0 | 7.9 | 7.9 |
| 27 | 7.9 | 7.8 | 7.9 | 7.7 | 7.7 | 7.7 | 7.8 | 7.8 | 7.8 | 8.0 | 7.9 | 7.9 |
| 28 | 7.8 | 7.5 | 7.6 | 7.8 | 7.7 | 7.7 | 7.8 | 7.8 | 7.8 | 8.0 | 7.9 | 8.0 |
| 29 | 7.8 | 7.7 | 7.8 | 7.7 | 7.6 | 7.7 | 7.9 | 7.8 | 7.9 | 8.0 | 7.7 | 7.9 |
| 30 | 7.9 | 7.7 | 7.8 | 7.7 | 7.6 | 7.7 | 8.0 | 7.9 | 7.9 | 7.8 | 7.7 | 7.8 |
| 31 | 7.8 | 7.7 | 7.7 | --- | --- | --- | 7.9 | 7.9 | 7.9 | 8.0 | 7.7 | 7.9 |
| MONTH | 8.0 | 7.5 | 7.8 | 8.1 | 7.1 | 7.7 | 8.0 | 7.7 | 7.8 | 8.0 | 7.6 | 7.9 |

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|---------|-----|---------|-------|------|------|--------|-----|------|-----------|-----|------|
| FEBRUARY | | | | MARCH | | | APRIL | | | MAY | | |
| 1 | 7.9 | 7.9 | 7.9 | --- | --- | --- | 7.9 | 7.8 | 7.9 | 8.9 | 8.7 | 8.8 |
| 2 | 7.9 | 7.6 | 7.7 | --- | --- | --- | 8.0 | 7.9 | 7.9 | 9.0 | 8.7 | 8.8 |
| 3 | 7.8 | 7.6 | 7.7 | 7.9 | 7.8 | 7.9 | 7.9 | 7.7 | 7.9 | 8.9 | 8.7 | 8.8 |
| 4 | 7.9 | 7.7 | 7.8 | 7.9 | 7.5 | 7.6 | --- | --- | --- | 8.8 | 8.6 | 8.7 |
| 5 | 7.9 | 7.8 | 7.8 | 7.7 | 7.6 | 7.7 | --- | --- | --- | 8.6 | 8.2 | 8.4 |
| 6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 8.4 | 8.0 | 8.2 |
| 7 | --- | --- | --- | 7.8 | 7.5 | 7.7 | --- | --- | --- | 8.5 | 8.1 | 8.3 |
| 8 | --- | --- | --- | 7.7 | 7.4 | 7.6 | --- | --- | --- | 8.4 | 8.0 | 8.2 |
| 9 | --- | --- | --- | 7.8 | 7.7 | 7.8 | --- | --- | --- | 8.5 | 8.1 | 8.3 |
| 10 | --- | --- | --- | 7.8 | 7.8 | 7.8 | --- | --- | --- | 8.6 | 8.3 | 8.4 |
| 11 | --- | --- | --- | 7.8 | 7.8 | 7.8 | --- | --- | --- | 8.7 | 8.5 | 8.7 |
| 12 | --- | --- | --- | 7.9 | 7.8 | 7.9 | --- | --- | --- | 8.7 | 8.3 | 8.5 |
| 13 | --- | --- | --- | 7.9 | 7.8 | 7.8 | --- | --- | --- | 8.6 | 8.3 | 8.5 |
| 14 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 8.6 | 8.1 | 8.4 |
| 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 8.7 | 8.3 | 8.5 |
| 16 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 8.7 | 8.3 | 8.5 |
| 17 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 8.7 | 8.3 | 8.5 |
| 18 | --- | --- | --- | --- | --- | --- | 8.0 | 7.9 | 8.0 | 8.6 | 8.3 | 8.4 |
| 19 | --- | --- | --- | --- | --- | --- | 8.2 | 7.9 | 8.0 | 8.3 | 8.1 | 8.2 |
| 20 | --- | --- | --- | --- | --- | --- | 8.3 | 8.0 | 8.1 | 8.1 | 8.0 | 8.0 |
| 21 | --- | --- | --- | --- | --- | --- | 8.4 | 8.1 | 8.2 | 8.3 | 8.0 | 8.2 |
| 22 | --- | --- | --- | 7.9 | 7.8 | 7.8 | 8.4 | 8.1 | 8.2 | 8.6 | 8.1 | 8.3 |
| 23 | --- | --- | --- | 7.9 | 7.8 | 7.8 | 8.3 | 8.0 | 8.1 | 8.6 | 8.2 | 8.4 |
| 24 | --- | --- | --- | 7.9 | 7.8 | 7.9 | 8.3 | 7.9 | 8.1 | 8.4 | 8.0 | 8.2 |
| 25 | --- | --- | --- | 7.9 | 7.9 | 7.9 | 8.6 | 8.0 | 8.2 | 8.5 | 8.0 | 8.2 |
| 26 | --- | --- | --- | 7.9 | 7.8 | 7.9 | 8.7 | 8.3 | 8.5 | 8.5 | 8.1 | 8.2 |
| 27 | --- | --- | --- | 7.9 | 7.7 | 7.8 | 8.8 | 8.5 | 8.6 | 8.4 | 8.0 | 8.2 |
| 28 | --- | --- | --- | 7.9 | 7.8 | 7.9 | 8.7 | 8.6 | 8.6 | 8.4 | 8.0 | 8.2 |
| 29 | --- | --- | --- | 7.9 | 7.9 | 7.9 | 8.8 | 8.5 | 8.6 | 8.4 | 8.1 | 8.2 |
| 30 | --- | --- | --- | 8.0 | 7.9 | 7.9 | 8.9 | 8.6 | 8.7 | 8.6 | 8.2 | 8.4 |
| 31 | --- | --- | --- | 8.0 | 7.9 | 7.9 | --- | --- | --- | 8.7 | 8.3 | 8.5 |
| MONTH | 7.9 | 7.6 | 7.8 | 8.0 | 7.4 | 7.8 | 8.9 | 7.7 | 8.2 | 9.0 | 8.0 | 8.4 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| JUNE | | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 8.9 | 8.5 | 8.6 | 8.5 | 8.3 | 8.4 | 8.9 | 8.4 | 8.6 | 8.0 | 7.8 | 7.9 |
| 2 | 8.8 | 8.4 | 8.5 | 8.6 | 8.3 | 8.5 | 8.8 | 8.6 | 8.7 | 8.0 | 7.8 | 7.9 |
| 3 | 8.3 | 8.1 | 8.2 | 8.7 | 8.4 | 8.5 | 8.7 | 8.4 | 8.5 | 8.0 | 7.9 | 8.0 |
| 4 | 8.3 | 8.0 | 8.1 | 8.7 | 8.4 | 8.5 | 8.8 | 8.4 | 8.6 | 8.0 | 7.8 | 7.9 |
| 5 | 8.4 | 8.0 | 8.2 | 8.6 | 8.4 | 8.5 | 8.8 | 8.5 | 8.7 | 7.7 | 7.5 | 7.6 |
| 6 | 8.5 | 8.2 | 8.3 | 8.7 | 8.4 | 8.5 | 8.7 | 8.2 | 8.4 | 7.7 | 7.6 | 7.7 |
| 7 | 8.5 | 8.2 | 8.3 | 8.7 | 8.4 | 8.6 | 8.6 | 8.1 | 8.3 | 7.8 | 7.7 | 7.8 |
| 8 | 8.6 | 8.1 | 8.4 | 8.6 | 8.4 | 8.5 | 8.5 | 8.2 | 8.3 | 7.9 | 7.8 | 7.8 |
| 9 | 8.5 | 8.4 | 8.4 | 8.7 | 8.4 | 8.5 | 8.4 | 8.0 | 8.2 | 8.1 | 7.9 | 8.0 |
| 10 | 8.6 | 8.4 | 8.5 | 8.7 | 8.4 | 8.5 | 8.6 | 8.1 | 8.4 | 8.2 | 8.0 | 8.1 |
| 11 | 8.7 | 8.5 | 8.6 | 8.6 | 8.4 | 8.5 | 8.8 | 8.2 | 8.5 | 8.3 | 8.0 | 8.2 |
| 12 | 8.9 | 8.5 | 8.7 | 8.4 | 8.2 | 8.3 | 8.6 | 8.4 | 8.5 | 8.3 | 8.2 | 8.2 |
| 13 | 9.0 | 8.6 | 8.8 | 8.5 | 8.3 | 8.4 | 8.6 | 8.2 | 8.4 | 8.3 | 7.9 | 8.2 |
| 14 | 8.9 | 8.6 | 8.8 | 8.5 | 8.3 | 8.4 | 8.2 | 7.9 | 8.0 | 7.9 | 7.7 | 7.7 |
| 15 | 9.0 | 8.6 | 8.8 | 8.6 | 8.1 | 8.3 | 8.2 | 7.8 | 8.0 | 7.9 | 7.7 | 7.7 |
| 16 | 9.0 | 8.7 | 8.8 | 8.7 | 8.2 | 8.5 | 8.4 | 7.9 | 8.1 | 7.9 | 7.9 | 7.9 |
| 17 | 8.8 | 8.5 | 8.7 | 8.7 | 8.3 | 8.5 | 8.6 | 8.2 | 8.3 | 7.9 | 7.9 | 7.9 |
| 18 | 8.7 | 8.4 | 8.5 | 8.7 | 8.4 | 8.6 | 8.7 | 8.2 | 8.4 | 8.1 | 7.9 | 8.0 |
| 19 | 8.8 | 8.5 | 8.6 | 8.6 | 8.4 | 8.5 | 8.5 | 8.2 | 8.3 | 8.0 | 7.8 | 7.9 |
| 20 | 8.9 | 8.6 | 8.8 | 8.5 | 8.1 | 8.3 | 8.2 | 7.9 | 8.0 | 7.9 | 7.7 | 7.8 |
| 21 | 8.9 | 8.6 | 8.8 | 8.1 | 7.6 | 7.7 | 8.3 | 8.0 | 8.1 | 8.0 | 7.8 | 7.9 |
| 22 | 8.9 | 8.6 | 8.8 | 7.5 | 7.3 | 7.4 | 8.1 | 7.7 | 7.9 | 8.1 | 7.9 | 8.0 |
| 23 | 9.0 | 8.6 | 8.8 | 7.6 | 7.5 | 7.5 | 7.8 | 7.6 | 7.7 | 8.1 | 8.0 | 8.0 |
| 24 | 9.0 | 8.5 | 8.8 | 7.8 | 7.5 | 7.6 | 7.9 | 7.6 | 7.7 | 8.0 | 7.9 | 7.9 |
| 25 | 8.9 | 8.6 | 8.8 | 7.8 | 7.7 | 7.8 | 8.1 | 7.8 | 7.9 | 8.0 | 7.8 | 7.9 |
| 26 | 8.8 | 8.5 | 8.7 | 7.7 | 7.6 | 7.6 | 8.0 | 7.7 | 7.9 | 8.2 | 7.9 | 8.0 |
| 27 | 8.8 | 8.4 | 8.6 | 7.8 | 7.6 | 7.6 | 7.8 | 7.7 | 7.8 | 8.3 | 8.1 | 8.2 |
| 28 | 8.7 | 8.4 | 8.5 | 8.0 | 7.7 | 7.8 | 7.7 | 7.7 | 7.7 | 8.3 | 8.1 | 8.2 |
| 29 | 8.5 | 8.3 | 8.4 | 8.2 | 7.8 | 8.0 | 7.8 | 7.6 | 7.7 | 8.4 | 8.1 | 8.2 |
| 30 | 8.5 | 8.2 | 8.4 | 8.2 | 8.1 | 8.2 | 8.1 | 7.7 | 7.8 | 8.3 | 8.1 | 8.2 |
| 31 | --- | --- | --- | 8.5 | 8.2 | 8.3 | 8.1 | 7.9 | 8.0 | --- | --- | --- |
| MONTH | 9.0 | 8.0 | 8.6 | 8.7 | 7.3 | 8.2 | 8.9 | 7.6 | 8.2 | 8.4 | 7.5 | 8.0 |
| YEAR | MAXIMUM | 9.0 | MINIMUM | 7.1 | MEAN | 8.0 | | | | | | |

SCIOTO RIVER BASIN

147

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

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

SCIOTO RIVER BASIN

03234500 SCIOTO RIVER AT HIGBY, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

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

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|---------|------|------|----------|------|------|----------|------|------|---------|------|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 9.1 | 7.3 | 8.0 | 6.8 | 5.2 | 6.3 | 9.4 | 8.9 | 9.0 | 10.9 | 10.3 | 10.7 |
| 2 | 8.6 | 7.9 | 8.2 | 6.8 | 4.7 | 6.0 | 9.7 | 9.3 | 9.5 | 19.3 | 10.4 | 12.9 |
| 3 | 8.7 | 7.6 | 8.0 | 7.7 | 6.3 | 7.0 | 9.9 | 9.6 | 9.7 | 14.2 | 10.0 | 11.6 |
| 4 | 9.0 | 8.0 | 8.4 | 7.9 | 7.1 | 7.4 | 10.4 | 9.9 | 10.2 | 12.7 | 11.5 | 12.0 |
| 5 | 9.2 | 8.1 | 8.6 | 7.8 | 7.0 | 7.3 | 10.6 | 10.4 | 10.5 | 11.2 | 10.7 | 10.9 |
| 6 | 8.8 | 8.1 | 8.4 | 8.4 | 7.4 | 7.8 | 10.5 | 10.1 | 10.3 | 10.8 | 10.2 | 10.5 |
| 7 | 8.5 | 7.8 | 8.1 | 8.5 | 7.9 | 8.3 | 10.8 | 10.4 | 10.6 | 10.7 | 9.7 | 10.3 |
| 8 | 9.6 | 8.0 | 8.7 | 8.3 | 8.0 | 8.1 | 10.6 | 9.9 | 10.2 | 10.6 | 9.8 | 10.3 |
| 9 | 9.7 | 8.8 | 9.1 | 8.2 | 7.5 | 7.8 | 10.1 | 9.9 | 10.0 | 11.5 | 10.4 | 10.8 |
| 10 | 9.0 | 8.2 | 8.6 | 7.7 | 7.3 | 7.5 | 10.0 | 9.6 | 9.8 | 11.6 | 10.3 | 11.0 |
| 11 | 8.5 | 8.0 | 8.2 | 8.8 | 7.7 | 8.3 | 9.7 | 9.4 | 9.6 | 11.2 | 10.1 | 10.5 |
| 12 | 9.0 | 8.2 | 8.5 | 10.2 | 8.8 | 9.5 | 9.7 | 9.2 | 9.4 | 11.0 | 10.5 | 10.8 |
| 13 | 8.8 | 8.2 | 8.5 | 10.3 | 9.6 | 9.9 | 9.9 | 9.4 | 9.6 | 10.5 | 9.8 | 10.1 |
| 14 | 9.7 | 8.6 | 9.0 | 10.0 | 9.4 | 9.8 | 9.8 | 9.1 | 9.5 | 10.1 | 9.6 | 9.8 |
| 15 | 9.9 | 8.9 | 9.3 | 9.9 | 9.4 | 9.7 | 9.5 | 8.9 | 9.2 | 9.9 | 9.6 | 9.8 |
| 16 | 9.6 | 8.4 | 9.0 | 10.0 | 8.8 | 9.3 | 9.9 | 9.5 | 9.8 | 10.5 | 9.6 | 10.1 |
| 17 | 10.1 | 8.9 | 9.3 | 9.9 | 8.7 | 9.2 | 10.5 | 10.0 | 10.2 | 10.2 | 9.4 | 9.8 |
| 18 | 10.8 | 9.2 | 9.8 | 8.8 | 8.2 | 8.6 | 11.1 | 10.6 | 10.8 | 9.4 | 9.0 | 9.3 |
| 19 | 10.8 | 9.4 | 9.9 | 10.0 | 8.8 | 9.3 | 11.0 | 10.7 | 10.9 | 9.9 | 8.9 | 9.4 |
| 20 | 9.6 | 8.5 | 9.2 | 9.7 | 9.0 | 9.4 | 10.8 | 10.1 | 10.4 | 10.3 | 9.2 | 9.9 |
| 21 | 9.3 | 8.3 | 8.8 | 11.1 | 9.6 | 10.4 | 10.4 | 10.1 | 10.2 | 10.2 | 8.8 | 9.4 |
| 22 | 10.3 | 9.1 | 9.6 | 11.8 | 10.9 | 11.3 | 10.1 | 9.6 | 9.8 | 10.8 | 10.3 | 10.5 |
| 23 | 9.9 | 8.4 | 9.3 | 11.3 | 10.5 | 10.9 | 10.5 | 9.9 | 10.2 | 10.8 | 10.3 | 10.5 |
| 24 | 10.8 | 7.9 | 8.8 | 10.4 | 9.8 | 10.0 | 10.4 | 10.0 | 10.1 | 11.1 | 10.5 | 10.8 |
| 25 | 9.7 | 8.1 | 9.0 | 9.9 | 8.9 | 9.6 | 10.3 | 10.1 | 10.2 | 10.5 | 10.1 | 10.4 |
| 26 | 11.9 | 9.1 | 9.9 | 9.3 | 8.5 | 8.8 | 10.2 | 9.8 | 9.9 | 10.6 | 9.9 | 10.2 |
| 27 | 9.3 | 7.8 | 8.6 | 8.5 | 8.3 | 8.4 | 10.0 | 9.8 | 9.9 | 11.1 | 10.5 | 10.8 |
| 28 | 9.5 | 7.5 | 8.3 | 9.0 | 8.3 | 8.6 | 10.2 | 9.7 | 9.9 | 11.5 | 10.6 | 10.9 |
| 29 | 8.6 | 7.9 | 8.3 | 8.9 | 8.1 | 8.3 | 10.4 | 9.5 | 10.1 | 11.3 | 7.7 | 10.1 |
| 30 | 8.2 | 7.6 | 7.9 | 8.8 | 8.0 | 8.3 | 18.3 | 10.3 | 13.4 | 8.8 | 7.8 | 8.3 |
| 31 | 7.8 | 6.4 | 7.5 | --- | --- | --- | 15.4 | 10.6 | 13.7 | 10.9 | 7.3 | 9.8 |
| MONTH | 11.9 | 6.4 | 8.7 | 11.8 | 4.7 | 8.7 | 18.3 | 8.9 | 10.2 | 19.3 | 7.3 | 10.4 |

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OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|--------------|-------------|----------|-------|------|------|--------|------|------|-----------|------|------|
| FEBRUARY | | | | MARCH | | | APRIL | | | MAY | | |
| 1 | 10.5 | 9.7 | 10.0 | --- | --- | --- | 10.1 | 9.3 | 9.6 | 18.8 | 12.2 | 15.1 |
| 2 | 9.9 | 8.9 | 9.5 | --- | --- | --- | 10.3 | 9.2 | 9.7 | 19.2 | 12.0 | 15.1 |
| 3 | 14.0 | 9.5 | 11.4 | 11.0 | 10.6 | 10.8 | 9.8 | 9.1 | 9.4 | 18.5 | 11.5 | 14.7 |
| 4 | 16.8 | 11.1 | 13.0 | 11.7 | 10.8 | 11.5 | 13.5 | 8.3 | 10.8 | 14.2 | 10.8 | 12.6 |
| 5 | 17.0 | 12.2 | 15.4 | 11.5 | 9.0 | 10.0 | 12.6 | 7.8 | 9.3 | 11.8 | 9.5 | 10.3 |
| 6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 13.4 | 8.6 | 10.6 |
| 7 | --- | --- | --- | 10.6 | 9.7 | 10.1 | --- | --- | --- | 14.4 | 9.6 | 11.6 |
| 8 | --- | --- | --- | 9.2 | 7.2 | 8.7 | --- | --- | --- | 13.5 | 8.9 | 11.0 |
| 9 | --- | --- | --- | 9.4 | 7.1 | 8.4 | --- | --- | --- | 12.9 | 8.4 | 10.9 |
| 10 | --- | --- | --- | 9.0 | 8.4 | 8.6 | --- | --- | --- | 14.3 | 9.1 | 11.5 |
| 11 | --- | --- | --- | 9.2 | 8.5 | 8.9 | --- | --- | --- | 15.4 | 12.5 | 15.2 |
| 12 | --- | --- | --- | 9.2 | 8.6 | 8.9 | --- | --- | --- | 16.3 | 9.0 | 12.1 |
| 13 | --- | --- | --- | 9.7 | 7.6 | 8.3 | --- | --- | --- | 14.4 | 9.1 | 11.3 |
| 14 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 12.6 | 6.7 | 9.5 |
| 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 13.6 | 7.6 | 10.4 |
| 16 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 13.7 | 8.3 | 10.4 |
| 17 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 14.5 | 8.0 | 10.9 |
| 18 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11.4 | 8.2 | 9.5 |
| 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.0 | 7.4 | 7.9 |
| 20 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.5 | 7.1 | 8.0 |
| 21 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11.9 | 8.0 | 9.6 |
| 22 | --- | --- | --- | 11.3 | 10.8 | 11.1 | --- | --- | --- | 14.9 | 8.2 | 11.0 |
| 23 | --- | --- | --- | 10.7 | 10.3 | 10.6 | --- | --- | --- | 13.7 | 8.3 | 11.1 |
| 24 | --- | --- | --- | 10.3 | 9.8 | 10.1 | --- | --- | --- | 10.5 | 7.3 | 8.7 |
| 25 | --- | --- | --- | 9.8 | 9.4 | 9.5 | --- | --- | --- | 13.5 | 7.5 | 9.8 |
| 26 | --- | --- | --- | 10.0 | 9.3 | 9.7 | 17.7 | 14.8 | 17.0 | 13.0 | 8.0 | 10.1 |
| 27 | --- | --- | --- | 9.5 | 9.0 | 9.2 | 16.2 | 11.4 | 13.8 | 12.3 | 7.9 | 9.8 |
| 28 | --- | --- | --- | 10.4 | 9.3 | 9.9 | 14.2 | 11.2 | 12.8 | 11.8 | 7.6 | 9.4 |
| 29 | --- | --- | --- | 10.7 | 10.0 | 10.3 | 17.1 | 11.2 | 13.8 | 12.2 | 7.6 | 9.6 |
| 30 | --- | --- | --- | 10.3 | 9.6 | 10.0 | 18.0 | 11.9 | 14.7 | 13.8 | 7.9 | 10.4 |
| 31 | --- | --- | --- | 10.0 | 9.4 | 9.7 | --- | --- | --- | 13.1 | 8.0 | 9.9 |
| MONTH | 17.0 | 8.9 | 11.9 | 11.7 | 7.1 | 9.7 | 18.0 | 7.8 | 12.1 | 19.2 | 6.7 | 10.9 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| JUNE | | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | --- | --- | --- | 9.0 | 5.8 | 7.3 | 14.6 | 6.3 | 9.7 | 8.0 | 6.0 | 6.9 |
| 2 | --- | --- | --- | 10.5 | 6.3 | 8.1 | 13.2 | 6.9 | 9.9 | 7.5 | 6.1 | 6.8 |
| 3 | --- | --- | --- | 10.5 | 6.2 | 8.2 | 10.8 | 6.0 | 8.7 | 6.6 | 5.5 | 6.0 |
| 4 | --- | --- | --- | 8.8 | 6.2 | 7.5 | 12.9 | 5.8 | 9.0 | 5.8 | 4.6 | 5.1 |
| 5 | --- | --- | --- | 10.8 | 6.1 | 8.0 | 12.4 | 6.1 | 9.2 | 4.8 | 3.9 | 4.3 |
| 6 | --- | --- | --- | 12.1 | 10.5 | 11.1 | 9.0 | 4.8 | 6.2 | 5.8 | 5.2 | 5.6 |
| 7 | --- | --- | --- | 11.0 | 6.7 | 9.5 | 11.5 | 4.6 | 7.2 | 6.4 | 5.6 | 5.9 |
| 8 | 13.3 | 8.6 | 10.1 | 8.4 | 6.5 | 7.6 | 11.2 | 5.7 | 8.1 | 6.6 | 5.6 | 6.0 |
| 9 | 12.2 | 6.9 | 8.9 | 12.5 | 8.7 | 10.8 | 10.3 | 5.2 | 7.6 | 9.1 | 5.7 | 7.2 |
| 10 | 11.3 | 7.4 | 9.5 | 12.1 | 10.5 | 11.3 | 10.8 | 5.2 | 7.6 | 9.6 | 7.4 | 8.4 |
| 11 | 16.3 | 8.6 | 11.5 | 10.8 | 6.3 | 9.1 | 11.7 | 5.2 | 8.3 | 10.6 | 7.2 | 8.7 |
| 12 | 20.0 | 9.3 | 13.7 | 11.9 | 7.6 | 10.5 | 9.0 | 5.5 | 7.4 | 9.0 | 7.0 | 7.8 |
| 13 | 20.0 | 10.2 | 14.6 | 10.6 | 6.5 | 8.0 | 7.2 | 5.0 | 6.3 | 7.1 | 5.7 | 6.4 |
| 14 | 16.2 | 8.4 | 12.6 | 8.0 | 5.4 | 6.7 | 5.7 | 3.5 | 4.2 | 5.7 | 5.3 | 5.4 |
| 15 | 16.3 | 7.8 | 11.9 | 9.0 | 5.4 | 7.0 | 5.9 | 3.2 | 4.2 | 6.4 | 5.5 | 5.9 |
| 16 | 14.7 | 7.7 | 11.1 | 9.0 | 5.9 | 7.2 | 7.0 | 3.9 | 5.1 | 6.9 | 6.1 | 6.4 |
| 17 | 12.3 | 6.3 | 9.3 | 7.6 | 4.9 | 6.1 | 7.8 | 4.2 | 5.6 | 6.7 | 6.0 | 6.3 |
| 18 | 11.8 | 6.2 | 8.8 | 6.7 | 5.1 | 5.7 | 8.4 | 4.2 | 5.9 | 7.2 | 6.2 | 6.6 |
| 19 | 14.7 | 7.1 | 10.4 | 6.1 | 4.9 | 5.3 | 5.9 | 4.1 | 4.9 | 6.4 | 5.8 | 6.0 |
| 20 | 14.4 | 7.7 | 10.9 | 5.3 | 3.5 | 4.4 | 5.8 | 3.4 | 4.5 | 7.0 | 5.3 | 6.0 |
| 21 | 12.5 | 6.6 | 9.7 | 4.6 | 3.8 | 4.1 | 8.1 | 4.5 | 6.0 | 8.0 | 5.8 | 6.7 |
| 22 | 12.0 | 6.1 | 9.2 | 3.8 | 2.4 | 2.9 | 6.9 | 4.3 | 5.5 | 8.8 | 6.4 | 7.3 |
| 23 | 12.3 | 5.7 | 9.0 | 4.6 | 3.5 | 4.1 | 5.4 | 4.5 | 4.9 | 8.0 | 6.6 | 7.3 |
| 24 | 12.9 | 5.8 | 9.2 | 5.8 | 4.3 | 4.9 | 6.4 | 4.4 | 5.2 | 7.1 | 6.0 | 6.3 |
| 25 | 12.1 | 6.2 | 9.2 | 5.6 | 4.8 | 5.3 | 7.4 | 4.9 | 5.9 | 7.8 | 5.9 | 6.6 |
| 26 | 10.5 | 4.8 | 7.6 | 5.3 | 4.6 | 4.9 | 6.8 | 4.6 | 5.6 | 10.2 | 6.6 | 8.2 |
| 27 | 11.0 | 5.0 | 7.9 | 5.5 | 4.5 | 4.9 | 5.8 | 4.7 | 5.3 | 11.0 | 8.0 | 9.3 |
| 28 | 9.6 | 5.3 | 7.4 | 6.9 | 4.8 | 5.5 | 5.1 | 4.2 | 4.6 | 11.4 | 8.2 | 9.6 |
| 29 | 6.6 | 4.4 | 5.1 | 7.3 | 4.7 | 5.9 | 5.3 | 4.4 | 4.8 | 11.3 | 8.3 | 9.7 |
| 30 | 8.8 | 4.2 | 6.0 | 7.1 | 5.6 | 6.4 | 8.6 | 4.8 | 6.3 | 10.4 | 8.0 | 9.1 |
| 31 | --- | --- | --- | 9.0 | 5.7 | 7.3 | 8.5 | 6.3 | 7.3 | --- | --- | --- |
| MONTH | 20.0 | 4.2 | 9.7 | 12.5 | 2.4 | 7.0 | 14.6 | 3.2 | 6.5 | 11.4 | 3.9 | 6.9 |
| YEAR | MAXIMUM 20.0 | MINIMUM 2.4 | MEAN 9.0 | | | | | | | | | |

SCIOTO RIVER BASIN

RESERVOIRS IN SCIOTO RIVER BASIN

03220500 O'SHAUGHNESSY RESERVOIR NEAR DUBLIN.--Lat 40°09'14", long 83°07'33", Delaware County, Hydrologic Unit 05060001, in gate house of dam on Scioto River, 4.0 mi north of Dublin. DRAINAGE AREA, 979 mi². PERIOD OF RECORD, October 1924 to current year. GAGE, water-stage recorder. Monthend contents only for some periods published in WSP 1305. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by city of Columbus). Prior to Dec. 2, 1940, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by concrete dam; dam completed and storage began in 1924. Usable capacity, 14,500 acre-ft, between elevations, 789.5 ft (sill of outlet gate), and 845 ft (crest of spillway), based on survey made in 1942. Flashboards installed May 8, 1945, additional capacity, 2,480 acre-ft, between elevations 845 ft (crest of spillway), and 847.9 ft (crest of flashboards). Dead storage below elevation 789.5 ft, 55 acre-ft. Figures given herein represent usable contents. Water used for municipal supply of city of Columbus and recreational purposes. Capacity table computed from data furnished by city of Columbus.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 24,240 acre-ft Jan. 22, 1959, elevation, 854.40 ft; minimum, 43 acre-ft Feb. 11, 1945, elevation, 791.97 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 18,680 acre-ft Feb. 2, elevation, 849.60 ft; minimum, 12,470 acre-ft July 19, elevation, 842.22 ft.

03221500 GRIGGS RESERVOIR NEAR COLUMBUS.--Lat 40°00'54", long 83°05'38", Franklin County, Hydrologic Unit 05060001, on left abutment of dam on Scioto River, 6.2 mi northwest of State Capitol building in Columbus, and 6.5 mi upstream from Olentangy River. DRAINAGE AREA, 1,044 mi². PERIOD OF RECORD, January 1921 to current year. GAGE, water-stage recorder. Monthend contents only for some periods, published in WSP 1305. Daily readings have been obtained by city of Columbus, Division of Water, since 1908. Datum of gage is 680.38 ft National Geodetic Vertical Datum, adjustment of 1929 (levels by city of Columbus). Prior to Oct. 4, 1940 nonrecording gage at same site and datum.

REMARKS.--Reservoir formed by concrete dam; dam completed and storage began in 1905. Usable capacity, 3,700 acre-ft between elevations, 735.4 ft (lowest outlets), and 753.4 ft (crest of spillway), based on survey made in 1935. Flashboards installed July 28, 1945, additional capacity, 750 acre-ft, between elevations, 753.4 ft (crest of spillway) and 755.6 ft (crest of flashboards). Dead storage below elevation, 735.4 ft, 239 acre-ft. Figures given herein represent usable contents. Water is used for municipal supply of city of Columbus and recreational purposes. Capacity table computed from data furnished by city of Columbus.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 7,490 acre-ft Jan. 22, 1959, elevation, 763.91 ft; minimum, 38 acre-ft Jan. 24, 1945, elevation, 735.78 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 5,200 acre-ft Feb. 2, elevation, 757.74 ft; minimum, 3,800 acre-ft Oct. 21, elevation, 753.70 ft.

03228400 HOOVER RESERVOIR AT CENTRAL COLLEGE.--Lat 40°06'30", long 82°52'59", in T.2 N., R.17 W., Franklin County, Hydrologic Unit 05060001, in gate house of dam on Big Walnut Creek, 0.5 mi northeast of Central College, and 12 mi northeast of Columbus. DRAINAGE AREA, 190 mi². PERIOD OF RECORD, March 1955 to current year. REVISED RECORDS, WRD OH-78-1: 1975 (M). GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Sept. 10, 1956, nonrecording gage at same site and datum.

REMARKS.--Reservoir formed by earthfill dam with concrete spillway; dam completed in 1954 and storage began in March 1955. Usable capacity, 60,130 acre-ft between elevations 830.0 ft (lowest outlet), and 890.0 ft (crest of spillway). Additional flood-control storage above elevation 890.0 ft by bascule gates installed in May 1970, 25,750 acre-ft. Dead storage below elevation 830.0 ft, 214 acre-ft. Figures given herein represent usable contents. Reservoir is used for municipal supply of city of Columbus and for recreational purposes. Outflow is controlled mostly by operation of valves in tunnel through dam, but above spillway level bascule gates can be used. Capacity table computed from data furnished by city of Columbus.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 83,260 acre-ft, revised, Feb. 24, 1975, elevation, 897.26 ft; minimum, 19,010 acre-ft Mar. 1, 1964, elevation, 868.58 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 73,350 acre-ft Apr. 4, elevation, 894.43 ft; minimum, 19,270 acre-ft Jan. 14, elevation, 868.82 ft.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| Date | Elevation (feet) | Contents (acre- feet) | Change in contents (acre-feet) | Elevation (feet) | Contents (acre- feet) | Change in contents (acre-feet) | Elevation (feet) | Contents (acre- feet) | Change in contents (acre-feet) |
|----------------------------------|---------------------|-----------------------------|--------------------------------------|---------------------------|-----------------------------|--------------------------------------|---------------------------|-----------------------------|--------------------------------------|
| 03220500 O'SHAUGHNESSY RESERVOIR | | | | 03221500 GRIGGS RESERVOIR | | | 03228400 HOOVER RESERVOIR | | |
| Sept. 30..... | 845.97 | 15,260 | -- | 755.31 | 4,350 | -- | 880.60 | 37,330 | -- |
| Oct. 31..... | 845.25 | 14,690 | -570 | 755.08 | 4,270 | -80 | 875.83 | 28,710 | -8,620 |
| Nov. 30..... | 845.27 | 14,710 | +20 | 755.31 | 4,350 | +80 | 871.70 | 22,630 | -6,080 |
| Dec. 31..... | 848.05 | 17,110 | +2,400 | 755.67 | 4,470 | +120 | 869.94 | 20,530 | -2,100 |
| CAL YR 1987 | - | - | -170 | - | - | -10 | - | - | -39,460 |
| Jan. 31..... | 847.60 | 16,700 | -410 | 755.46 | 4,400 | -70 | 870.75 | 21,470 | +940 |
| Feb. 29..... | 848.15 | 17,210 | +510 | 755.71 | 4,480 | +80 | 888.65 | 56,510 | +35,040 |
| Mar. 31..... | 848.30 | 17,360 | +150 | 755.75 | 4,500 | +20 | 892.60 | 67,460 | +10,950 |
| Apr. 30..... | 848.00 | 17,060 | -300 | 755.48 | 4,400 | -100 | 892.72 | 67,820 | +360 |
| May. 31..... | 847.16 | 16,290 | -770 | 755.37 | 4,370 | -30 | 890.18 | 60,620 | -7,200 |
| June 30..... | 844.92 | 14,440 | -1,850 | 754.29 | 4,000 | -370 | 886.40 | 50,640 | -9,980 |
| July 31..... | 847.44 | 16,550 | +2,110 | 755.37 | 4,370 | +370 | 885.10 | 47,350 | -3,290 |
| Aug. 31..... | 846.03 | 15,310 | -1,240 | 755.29 | 4,340 | -30 | 883.47 | 43,450 | -3,900 |
| Sept. 30..... | 845.68 | 15,030 | -280 | 755.32 | 4,350 | +10 | 883.45 | 43,410 | -40 |
| WTR YR 1988.. | -- | -- | -230 | | | 0 | | | +6,080 |

UPPER TWIN CREEK BASIN

151

03237280 UPPER TWIN CREEK AT MCGAW, OH

(HYDROLOGIC BENCH-MARK STATION)

LOCATION.--Lat 38°38'37", long 83°12'57", Scioto County, Hydrologic Unit 05090201, on right bank, 0.3 mi downstream from Brown Run, 0.3 mi upstream from Tucker Run, 0.7 mi upstream from bridge on U.S. Highway 52 at McGaw, 2.7 mi northeast of Buena Vista, and 3.2 mi upstream from mouth.

DRAINAGE AREA.--12.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 538.41 ft above National Geodetic Vertical Datum of 1929 (revised). Ohio Department of Highways bench mark. Prior to July 21, 1972 at site 0.7 mi downstream at datum 18.41 ft lower. July 21, 1972 to September 30, 1984 at same site at datum 5.00 ft higher.

REMARKS.--Estimated daily discharges: Nov. 21-25, Dec. 6-8, 20-23, 31, Jan. 1-19, 25-31, Feb. 8-15, and Sept. 1-5. Records poor.

AVERAGE DISCHARGE.--25 years, 13.3 ft³/s., 14.80 in./yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,500 ft³/s Mar. 4, 1964, gage height, 9.7 ft, in gage well, 10.2 ft, from outside highwater mark from rating curve extended above 300 ft³/s on basis of slope-area measurement of peak flow; no flow for many days most years.

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

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|---|------|-----------------------------------|---------------------|
| Feb. 2 | 0700 | *1,250 | *8.49 | No other peaks greater than base discharge. | | | |

Minimum daily discharge, 0.00 ft³/s Oct. 12-Nov. 9, 14-16, June 16-July 10, 12-19, Sept. 21-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|---------|--------|--------|-------|-------|-------|--------|------|------|------|------|------|
| 1 | .17 | .00 | .33 | 2.1 | 5.8 | 4.5 | 13 | 5.7 | .21 | .00 | .05 | .07 | |
| 2 | .20 | .00 | .36 | 1.8 | 317 | 3.8 | 23 | 5.1 | .21 | .00 | .03 | .07 | |
| 3 | .16 | .00 | .38 | 1.5 | 48 | 4.5 | 80 | 4.4 | .12 | .00 | .01 | .07 | |
| 4 | .13 | .00 | .62 | 1.2 | 38 | 124 | 188 | 4.3 | .11 | .00 | .01 | .07 | |
| 5 | .13 | .00 | .77 | 1.0 | 23 | 57 | 52 | 5.8 | .10 | .00 | .01 | .10 | |
| 6 | .13 | .00 | .68 | .84 | 14 | 23 | 36 | 9.1 | .07 | .00 | .08 | .11 | |
| 7 | .18 | .00 | .54 | .70 | 9.3 | 16 | 95 | 8.5 | .06 | .00 | .21 | .16 | |
| 8 | .09 | .00 | .48 | .62 | 7.0 | 12 | 99 | 7.2 | .06 | .00 | .29 | .21 | |
| 9 | .06 | .00 | .45 | .54 | 5.4 | 11 | 35 | 7.2 | .06 | .00 | .29 | .21 | |
| 10 | .06 | .19 | .45 | .48 | 4.5 | 9.5 | 22 | 7.5 | .05 | .00 | .26 | .19 | |
| 11 | .03 | .22 | .45 | .43 | 3.8 | 8.0 | 18 | 6.3 | .05 | .03 | .21 | .07 | |
| 12 | .00 | .11 | .45 | .40 | 3.5 | 7.6 | 15 | 4.5 | .05 | .00 | .21 | .06 | |
| 13 | .00 | .05 | .39 | .36 | 3.2 | 10 | 11 | 4.3 | .05 | .00 | .11 | .06 | |
| 14 | .00 | .00 | .38 | .32 | 3.1 | 10 | 9.3 | 4.3 | .05 | .00 | .09 | .06 | |
| 15 | .00 | .00 | 1.9 | .29 | 5.0 | 9.8 | 7.8 | 4.0 | .04 | .00 | .06 | .03 | |
| 16 | .00 | .00 | 4.5 | .26 | 6.1 | 8.1 | 6.4 | 2.9 | .00 | .00 | .06 | .03 | |
| 17 | .00 | .17 | 2.9 | .24 | 5.5 | 7.5 | 5.4 | 2.4 | .00 | .00 | .03 | .03 | |
| 18 | .00 | .24 | 1.5 | .22 | 5.3 | 6.5 | 6.6 | 1.8 | .00 | .00 | .03 | .03 | |
| 19 | .00 | .20 | .93 | 45 | 5.3 | 6.5 | 9.3 | 1.5 | .00 | .00 | .09 | .03 | |
| 20 | .00 | .15 | .68 | 118 | 6.0 | 6.5 | 8.6 | 1.4 | .00 | 1.6 | .14 | .03 | |
| 21 | .00 | .12 | .45 | 31 | 6.1 | 6.2 | 8.6 | 1.0 | .00 | 4.4 | .06 | .00 | |
| 22 | .00 | .11 | .38 | 16 | 5.7 | 5.0 | 30 | .91 | .00 | 1.4 | .03 | .00 | |
| 23 | .00 | .10 | .37 | 10 | 6.1 | 5.0 | 31 | .77 | .00 | .54 | .07 | .00 | |
| 24 | .00 | .09 | .36 | 7.6 | 6.1 | 5.0 | 22 | 1.0 | .00 | .32 | .07 | .00 | |
| 25 | .00 | .17 | 4.8 | 3.5 | 6.0 | 5.2 | 17 | .71 | .00 | .23 | .03 | .00 | |
| 26 | .00 | .13 | 70 | 2.5 | 5.4 | 8.5 | 15 | .57 | .00 | .20 | .03 | .00 | |
| 27 | .00 | .13 | 15 | 1.8 | 6.1 | 8.5 | 12 | .41 | .00 | .10 | .03 | .00 | |
| 28 | .00 | .13 | 8.5 | 1.4 | 5.9 | 6.6 | 9.8 | .32 | .00 | .06 | .03 | .00 | |
| 29 | .00 | .26 | 5.6 | 1.2 | 5.3 | 6.5 | 7.7 | .29 | .00 | .06 | .10 | .00 | |
| 30 | .00 | .20 | 4.0 | 1.5 | --- | 6.5 | 6.9 | .29 | .00 | .06 | .06 | .00 | |
| 31 | .00 | --- | 2.6 | 2.5 | --- | 7.5 | --- | .21 | --- | .06 | .07 | --- | |
| TOTAL | 1.34 | 2.77 | 131.20 | 255.30 | 571.5 | 416.3 | 900.4 | 104.68 | 1.29 | 9.06 | 2.85 | 1.69 | |
| MEAN | .04 | .09 | 4.23 | 8.24 | 19.7 | 13.4 | 30.0 | 3.38 | .04 | .29 | .09 | .06 | |
| MAX | .20 | .26 | 70 | 118 | 317 | 124 | 188 | 9.1 | .21 | 4.4 | .29 | .21 | |
| MIN | .00 | .00 | .33 | .22 | 3.1 | 3.8 | 5.4 | .21 | .00 | .00 | .01 | .00 | |
| CFSM | .00 | .01 | .35 | .68 | 1.61 | 1.10 | 2.46 | .28 | .00 | .02 | .01 | .00 | |
| IN. | .00 | .01 | .40 | .78 | 1.74 | 1.27 | 2.75 | .32 | .00 | .03 | .01 | .01 | |
| CAL YR 1987 | TOTAL | 2995.67 | | MEAN | 8.21 | MAX | 179 | MIN | .00 | CFSM | .67 | IN. | 9.13 |
| WTR YR 1988 | TOTAL | 2398.38 | | MEAN | 6.55 | MAX | 317 | MIN | .00 | CFSM | .54 | IN. | 7.31 |

UPPER TWIN CREEK BASIN

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

WATER-QUALITY RECORDS

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

PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: March 1985 to current year.

pH: March 1985 to current year.

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

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

INSTRUMENTATION.--Water temperature recorder since July 1972.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 278 microsiemens Nov. 29, 1987; minimum, 40 microsiemens July 1, 1986.

pH: Maximum recorded, 8.18, units Oct. 2, 1986; minimum recorded, 5.5 units Sept. 3, 1988.

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

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 278 microsiemens Nov. 29; minimum recorded, 51 microsiemens Feb. 2.

pH: Maximum recorded, 8.3 units Apr. 22; minimum recorded, 5.5 units Sept. 3.

WATER TEMPERATURE: Maximum recorded, 34.0°C Aug. 16; minimum recorded 0.0°C Jan. 9.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DATE | TIME | STREAM- FLOW, INSTAN- TANEOUS (CFS) | SPE- CIFIC CON- DUCT- ANCE (US/CM) | PH (STAND- ARD UNITS) | TEMPER- ATURE AIR (DEG C) | TEMPER- ATURE WATER (DEG C) | TUR- BID- ITY (FTU) | OXYGEN, DIS- SOLVED (MG/L) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) | COLI- FORM, FECAL, UM-MF (COLS./ 100 ML) | STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) |
|-------|------|---|---|--------------------------------|------------------------------------|--------------------------------------|------------------------------|-------------------------------------|--|---|--|
| OCT | | | | | | | | | | | |
| 22... | 1100 | 0.0 | -- | -- | 2.0 | -- | -- | -- | -- | -- | -- |
| NOV | | | | | | | | | | | |
| 23... | 1045 | 0.10 | 187 | 7.00 | 3.5 | 7.0 | 1.4 | 11.7 | 99 | K19 | 120 |
| DEC | | | | | | | | | | | |
| 15... | 1045 | 0.71 | 145 | 7.20 | 4.0 | 7.5 | 0.30 | 12.2 | 106 | K36 | 620 |
| JAN | | | | | | | | | | | |
| 11... | 1100 | 0.44 | 125 | 6.70 | 4.0 | 1.5 | 0.30 | 13.9 | 102 | K7 | 32 |
| FEB | | | | | | | | | | | |
| 22... | 1100 | 5.6 | 100 | 7.20 | 6.0 | 3.0 | 1.4 | 13.2 | 102 | K8 | K10 |
| MAR | | | | | | | | | | | |
| 29... | 1100 | 6.6 | 90 | 7.70 | 7.0 | 11.5 | 0.60 | 11.1 | 105 | K4 | 67 |
| APR | | | | | | | | | | | |
| 19... | 1100 | 9.1 | 105 | 7.10 | 10.5 | 9.0 | 0.60 | 10.4 | 93 | 62 | 64 |
| MAY | | | | | | | | | | | |
| 16... | 1115 | 2.8 | 120 | 7.00 | 29.0 | 18.5 | 0.60 | 9.1 | 101 | 320 | 73 |
| JUN | | | | | | | | | | | |
| 14... | 1045 | 0.06 | 139 | 6.70 | 29.0 | 21.5 | 0.80 | 7.8 | 90 | 100 | 110 |
| JUL | | | | | | | | | | | |
| 26... | 1100 | 0.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG | | | | | | | | | | | |
| 25... | 1040 | 0.03 | 169 | 7.10 | 20.0 | 22.5 | 1.5 | 8.1 | 97 | K9 | 80 |
| SEP | | | | | | | | | | | |
| 06... | 1130 | 0.09 | 165 | 6.90 | 21.5 | 20.0 | 0.50 | 8.2 | 93 | M | 30 |

UPPER TWIN CREEK BASIN

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

| DATE | HARD- NESS TOTAL (MG/L AS CACO3) | HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 | CALCIUM DIS- SOLVED (MG/L AS CA) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) | SODIUM, DIS- SOLVED (MG/L AS NA) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) | BICAR- BONATE IT-FLD (MG/L AS HCO3) | ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3 | SULFATE DIS- SOLVED (MG/L AS SO4) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) |
|-----------|---|---|--|--|--|---|--|---|---|---|--|
| OCT 22... | -- | 0 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV 23... | 62 | 47 | 10 | 9.0 | 6.2 | 2.1 | -- | 15 | 55 | 6.1 | 0.1 |
| DEC 15... | 47 | 36 | 7.9 | 6.7 | 4.3 | 2.1 | 14 | 12 | 40 | 5.9 | 0.1 |
| JAN 11... | 46 | 34 | 7.6 | 6.5 | 4.1 | 2.0 | 15 | 12 | 34 | 5.1 | 0.1 |
| FEB 22... | 35 | 26 | 5.9 | 5.0 | 2.7 | 2.2 | 12 | 11 | 28 | 2.4 | 0.1 |
| MAR 29... | 30 | 21 | 5.2 | 4.1 | 2.5 | 1.6 | 11 | 10 | 29 | 1.2 | 0.1 |
| APR 19... | 31 | 22 | 5.1 | 4.5 | 2.3 | 1.6 | 11 | 10 | 30 | 1.6 | 0.1 |
| MAY 16... | 37 | 26 | 6.1 | 5.3 | 3.3 | 2.0 | 14 | 13 | 31 | 2.4 | 0.2 |
| JUN 14... | 49 | 33 | 8.0 | 7.0 | 4.3 | 2.3 | 19 | 16 | 39 | 3.0 | 0.1 |
| JUL 26... | -- | 0 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG 25... | 56 | 35 | 9.8 | 7.6 | 4.1 | 2.6 | 25 | 21 | 49 | 3.5 | 0.1 |
| SEP 06... | 61 | 46 | 10 | 8.8 | 5.1 | 2.5 | 19 | 15 | 47 | 5.7 | <0.1 |

| DATE | SILICA, DIS- SOLVED (MG/L AS SiO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) | PHOS- PHOROUS TOTAL (MG/L AS P) | PHOS- PHOROUS DIS- SOLVED (MG/L AS P) | PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P) | ALUM- INUM, DIS- SOLVED (UG/L AS AL) |
|-----------|---|--|---|---|--|---|--|---|--|--|---|
| OCT 22... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV 23... | 7.8 | 107 | <0.01 | 0.25 | 0.01 | 0.02 | 0.20 | <0.01 | <0.01 | <0.01 | -- |
| DEC 15... | 8.2 | 93 | <0.01 | 0.10 | <0.01 | 0.01 | <0.20 | <0.01 | 0.02 | <0.01 | -- |
| JAN 11... | 8.9 | 77 | 0.01 | 0.71 | <0.01 | 0.03 | <0.20 | 0.01 | <0.01 | 0.02 | <10 |
| FEB 22... | 8.1 | 59 | 0.01 | 0.44 | <0.01 | 0.02 | 0.20 | <0.01 | <0.01 | <0.01 | -- |
| MAR 29... | 8.4 | 57 | <0.01 | 0.14 | 0.01 | <0.01 | <0.20 | <0.01 | <0.01 | <0.01 | -- |
| APR 19... | 9.6 | 56 | <0.01 | 0.19 | 0.03 | <0.01 | <0.20 | 0.01 | 0.01 | 0.02 | <10 |
| MAY 16... | 10 | 64 | <0.01 | 0.11 | 0.01 | <0.01 | <0.20 | <0.01 | <0.01 | <0.01 | -- |
| JUN 14... | 11 | 87 | <0.01 | 0.29 | 0.02 | 0.03 | 0.30 | 0.38 | -- | 0.09 | -- |
| JUL 26... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG 25... | 10 | 105 | <0.01 | 0.17 | 0.03 | 0.03 | <0.20 | 0.01 | 0.01 | <0.01 | -- |
| SEP 06... | 9.9 | 126 | <0.010 | 0.220 | <0.01 | 0.02 | <0.20 | 0.01 | 0.01 | <0.01 | -- |

UPPER TWIN CREEK BASIN

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

| DATE | ARSENIC DIS- SOLVED (UG/L AS AS) | BARIUM, DIS- SOLVED (UG/L AS BA) | BERYL- LIUM, DIS- SOLVED (UG/L AS BE) | CADMIUM DIS- SOLVED (UG/L AS CD) | CHRO- MIUM, DIS- SOLVED (UG/L AS CR) | COBALT, DIS- SOLVED (UG/L AS CO) | COPPER, DIS- SOLVED (UG/L AS CU) | IRON, DIS- SOLVED (UG/L AS FE) | LEAD, DIS- SOLVED (UG/L AS PB) | LITHIUM DIS- SOLVED (UG/L AS LI) |
|-----------|--|--|--|--|---|--|--|--|--|--|
| OCT 22... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV 23... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| DEC 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JAN 11... | <1 | 20 | <0.5 | <1 | <1 | <3 | 2 | 8 | 7 | <4 |
| FEB 22... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAR 29... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| APR 19... | <1 | 15 | <0.5 | <1 | <1 | <3 | 5 | 16 | <5 | 5 |
| MAY 16... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUN 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| JUL 26... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG 25... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP 06... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | MANGA- NESE, DIS- SOLVED (UG/L AS MN) | MERCURY DIS- SOLVED (UG/L AS HG) | MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) | NICKEL, DIS- SOLVED (UG/L AS NI) | SELE- NIUM, DIS- SOLVED (UG/L AS SE) | SILVER, DIS- SOLVED (UG/L AS AG) | STRON- TIUM, DIS- SOLVED (UG/L AS SR) | VANA- DIUM, DIS- SOLVED (UG/L AS V) | ZINC, DIS- SOLVED (UG/L AS ZN) | SEDI- MENT, SUS- PENDE (MG/L) |
|-----------|--|--|---|--|---|--|--|--|--|---|
| OCT 22... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| NOV 23... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 |
| DEC 15... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 |
| JAN 11... | 1 | <0.1 | <10 | <1 | <1 | <1.0 | 59 | <6 | 9 | 1 |
| FEB 22... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2 |
| MAR 29... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 |
| APR 19... | <1 | <0.1 | <10 | 2 | <1 | <1.0 | 37 | <6 | 18 | 1 |
| MAY 16... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2 |
| JUN 14... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 |
| JUL 26... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| AUG 25... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 |
| SEP 06... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 1 |

K Results based on colony count outside the acceptable range

M Presence of material verified but not quantified

UPPER TWIN CREEK BASIN

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03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|-----|-----|----------|-----|-----|----------|-----|-----|---------|-----|-----|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | --- | --- | --- | --- | --- | --- | 162 | 151 | 157 | 106 | 103 | 104 |
| 2 | --- | --- | --- | --- | --- | --- | 150 | 142 | 146 | 106 | 103 | 104 |
| 3 | --- | --- | --- | --- | --- | --- | 144 | 137 | 140 | 108 | 105 | 107 |
| 4 | --- | --- | --- | --- | --- | --- | 138 | 135 | 136 | 108 | 101 | 107 |
| 5 | --- | --- | --- | --- | --- | --- | 139 | 136 | 137 | 115 | 108 | 112 |
| 6 | --- | --- | --- | --- | --- | --- | 136 | 131 | 133 | 121 | 116 | 118 |
| 7 | --- | --- | --- | --- | --- | --- | 132 | 129 | 131 | 121 | 117 | 120 |
| 8 | --- | --- | --- | --- | --- | --- | 132 | 128 | 130 | 118 | 114 | 116 |
| 9 | --- | --- | --- | --- | --- | --- | 131 | 128 | 129 | 115 | 113 | 114 |
| 10 | --- | --- | --- | --- | --- | --- | 132 | 129 | 131 | --- | --- | --- |
| 11 | --- | --- | --- | --- | --- | --- | 138 | 126 | 129 | --- | --- | --- |
| 12 | --- | --- | --- | 259 | 220 | 243 | 129 | 128 | 128 | 119 | 113 | 117 |
| 13 | --- | --- | --- | --- | --- | --- | 130 | 128 | 129 | 115 | 112 | 113 |
| 14 | --- | --- | --- | --- | --- | --- | 129 | 125 | 127 | 120 | 115 | 117 |
| 15 | --- | --- | --- | --- | --- | --- | 142 | 126 | 134 | 120 | 113 | 117 |
| 16 | --- | --- | --- | --- | --- | --- | 138 | 128 | 132 | 120 | 113 | 116 |
| 17 | --- | --- | --- | 248 | 205 | 216 | 128 | 125 | 127 | 117 | 108 | 114 |
| 18 | --- | --- | --- | 270 | 202 | 235 | 126 | 124 | 125 | 112 | 105 | 108 |
| 19 | --- | --- | --- | 202 | 192 | 197 | 126 | 123 | 124 | 106 | 68 | 99 |
| 20 | --- | --- | --- | 193 | 183 | 188 | 125 | 122 | 124 | 102 | 69 | 80 |
| 21 | --- | --- | --- | 184 | 178 | 181 | 125 | 123 | 124 | 107 | 86 | 96 |
| 22 | --- | --- | --- | 180 | 170 | 176 | 125 | 122 | 123 | 119 | 97 | 106 |
| 23 | --- | --- | --- | 170 | 163 | 167 | 126 | 122 | 124 | 116 | 96 | 104 |
| 24 | --- | --- | --- | 234 | 163 | 177 | 124 | 121 | 123 | 124 | 96 | 106 |
| 25 | --- | --- | --- | 247 | 167 | 197 | 125 | 116 | 120 | 120 | 99 | 109 |
| 26 | --- | --- | --- | 256 | 166 | 198 | 109 | 80 | 89 | 125 | 100 | 108 |
| 27 | --- | --- | --- | 169 | 161 | 164 | 103 | 94 | 99 | 125 | 98 | 107 |
| 28 | --- | --- | --- | 166 | 157 | 163 | 106 | 103 | 104 | 120 | 100 | 107 |
| 29 | --- | --- | --- | 278 | 159 | 202 | 106 | 101 | 105 | 121 | 98 | 114 |
| 30 | --- | --- | --- | 220 | 163 | 185 | 107 | 106 | 107 | 116 | 100 | 110 |
| 31 | --- | --- | --- | --- | --- | --- | 109 | 105 | 107 | 122 | 100 | 112 |
| MONTH | --- | --- | --- | 278 | 157 | 193 | 162 | 80 | 125 | 125 | 68 | 109 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 122 | 100 | 111 | 91 | 89 | 90 | 87 | 77 | 81 | 81 | 79 | 80 |
| 2 | 119 | 51 | 70 | 93 | 88 | 89 | 83 | 72 | 76 | 83 | 80 | 82 |
| 3 | 76 | 69 | 72 | 90 | 86 | 88 | 73 | 58 | 69 | 85 | 82 | 83 |
| 4 | 76 | 68 | 72 | 91 | 59 | 74 | 70 | 58 | 65 | 86 | 82 | 84 |
| 5 | 76 | 72 | 74 | 73 | 66 | 69 | 74 | 70 | 72 | 85 | 82 | 83 |
| 6 | 82 | 75 | 78 | 76 | 72 | 73 | 76 | 71 | 74 | 86 | 83 | 85 |
| 7 | 86 | 78 | 82 | 76 | 73 | 74 | 72 | 64 | 69 | 88 | 86 | 87 |
| 8 | 81 | 79 | 80 | 78 | 74 | 75 | 70 | 65 | 67 | 89 | 86 | 87 |
| 9 | 84 | 81 | 82 | 76 | 75 | 75 | 74 | 70 | 71 | 88 | 85 | 86 |
| 10 | 85 | 83 | 84 | 78 | 76 | 77 | 75 | 73 | 74 | 87 | 85 | 86 |
| 11 | 86 | 84 | 85 | 80 | 77 | 78 | 77 | 74 | 75 | 90 | 86 | 87 |
| 12 | 85 | 83 | 84 | 86 | 77 | 79 | 79 | 76 | 77 | 89 | 86 | 88 |
| 13 | 89 | 84 | 86 | 84 | 76 | 78 | 81 | 77 | 79 | 94 | 87 | 89 |
| 14 | 91 | 87 | 89 | 79 | 78 | 79 | 83 | 78 | 80 | 91 | 87 | 89 |
| 15 | 88 | 84 | 86 | 81 | 78 | 79 | 83 | 79 | 81 | 95 | 91 | 92 |
| 16 | 87 | 83 | 85 | 84 | 79 | 80 | 84 | 80 | 82 | --- | --- | --- |
| 17 | 88 | 87 | 88 | 83 | 78 | 79 | 85 | 81 | 83 | --- | --- | --- |
| 18 | 91 | 88 | 89 | 81 | 79 | 80 | 86 | 82 | 85 | --- | --- | --- |
| 19 | 90 | 87 | 88 | 85 | 80 | 82 | 82 | 76 | 79 | --- | --- | --- |
| 20 | 89 | 84 | 86 | 86 | 81 | 82 | 79 | 77 | 78 | --- | --- | --- |
| 21 | 88 | 84 | 86 | 88 | 82 | 83 | 79 | 77 | 78 | --- | --- | --- |
| 22 | 93 | 85 | 89 | 84 | 80 | 82 | 79 | 72 | 75 | --- | --- | --- |
| 23 | 90 | 84 | 86 | 87 | 82 | 84 | 74 | 71 | 72 | --- | --- | --- |
| 24 | 89 | 84 | 86 | 86 | 83 | 84 | 75 | 73 | 74 | --- | --- | --- |
| 25 | 90 | 85 | 87 | 87 | 82 | 85 | 75 | 74 | 75 | --- | --- | --- |
| 26 | 92 | 86 | 88 | 86 | 79 | 81 | 77 | 74 | 75 | --- | --- | --- |
| 27 | 90 | 87 | 88 | 84 | 79 | 81 | 77 | 76 | 77 | --- | --- | --- |
| 28 | 92 | 87 | 88 | 87 | 79 | 80 | 79 | 76 | 77 | --- | --- | --- |
| 29 | 91 | 88 | 89 | 86 | 80 | 81 | 79 | 77 | 78 | --- | --- | --- |
| 30 | --- | --- | --- | 93 | 80 | 83 | 80 | 78 | 79 | --- | --- | --- |
| 31 | --- | --- | --- | 92 | 78 | 83 | --- | --- | --- | --- | --- | --- |
| MONTH | 122 | 51 | 85 | 93 | 59 | 80 | 87 | 58 | 76 | 95 | 79 | 86 |

UPPER TWIN CREEK BASIN

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-------------|-----|------|------------|-----|------|----------|-----|------|-----------|-----|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | --- | --- | --- | --- | --- | --- | 133 | 129 | 131 | 146 | 142 | 143 |
| 2 | --- | --- | --- | --- | --- | --- | 135 | 131 | 132 | 146 | 143 | 145 |
| 3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 152 | 142 | 146 |
| 4 | 112 | 110 | 111 | --- | --- | --- | --- | --- | --- | 155 | 145 | 149 |
| 5 | 113 | 111 | 112 | --- | --- | --- | --- | --- | --- | 186 | 147 | 151 |
| 6 | 115 | 113 | 113 | --- | --- | --- | 152 | 134 | 141 | 156 | 149 | 151 |
| 7 | 125 | 114 | 116 | --- | --- | --- | 149 | 138 | 142 | 158 | 155 | 156 |
| 8 | 119 | 117 | 117 | --- | --- | --- | 139 | 126 | 132 | 155 | 147 | 151 |
| 9 | 122 | 117 | 120 | --- | --- | --- | 129 | 122 | 125 | 148 | 141 | 145 |
| 10 | 122 | 119 | 121 | --- | --- | --- | 124 | 120 | 122 | 144 | 137 | 141 |
| 11 | 123 | 120 | 121 | --- | --- | --- | 125 | 121 | 122 | 143 | 136 | 140 |
| 12 | 124 | 121 | 122 | --- | --- | --- | 125 | 122 | 123 | 141 | 139 | 140 |
| 13 | 126 | 123 | 124 | --- | --- | --- | 126 | 124 | 124 | 145 | 139 | 141 |
| 14 | 128 | 124 | 126 | --- | --- | --- | 127 | 124 | 126 | 144 | 140 | 142 |
| 15 | --- | --- | --- | --- | --- | --- | 130 | 126 | 128 | 159 | 140 | 143 |
| 16 | --- | --- | --- | --- | --- | --- | 132 | 128 | 130 | 143 | 141 | 142 |
| 17 | --- | --- | --- | --- | --- | --- | 133 | 129 | 131 | 244 | 143 | 150 |
| 18 | --- | --- | --- | --- | --- | --- | 134 | 131 | 132 | 257 | 142 | 182 |
| 19 | --- | --- | --- | --- | --- | --- | 157 | 133 | 140 | 146 | 143 | 145 |
| 20 | --- | --- | --- | --- | --- | --- | 161 | 130 | 137 | --- | --- | --- |
| 21 | --- | --- | --- | 127 | 119 | 121 | 137 | 134 | 135 | --- | --- | --- |
| 22 | --- | --- | --- | 124 | 121 | 123 | 139 | 136 | 137 | --- | --- | --- |
| 23 | --- | --- | --- | 124 | 122 | 123 | 141 | 126 | 139 | --- | --- | --- |
| 24 | --- | --- | --- | 124 | 122 | 123 | 147 | 141 | 144 | --- | --- | --- |
| 25 | --- | --- | --- | 123 | 121 | 123 | 146 | 144 | 145 | --- | --- | --- |
| 26 | --- | --- | --- | 124 | 122 | 123 | 148 | 145 | 146 | --- | --- | --- |
| 27 | --- | --- | --- | 129 | 123 | 124 | 148 | 144 | 147 | --- | --- | --- |
| 28 | --- | --- | --- | 126 | 124 | 125 | 148 | 144 | 146 | --- | --- | --- |
| 29 | --- | --- | --- | 127 | 124 | 126 | 148 | 128 | 145 | --- | --- | --- |
| 30 | --- | --- | --- | 129 | 125 | 127 | 244 | 143 | 177 | --- | --- | --- |
| 31 | --- | --- | --- | 135 | 127 | 129 | 144 | 141 | 143 | --- | --- | --- |
| MONTH | 128 | 110 | 118 | 135 | 119 | 124 | 244 | 120 | 136 | 257 | 136 | 148 |
| YEAR | MAXIMUM 278 | | | MINIMUM 51 | | | MEAN 111 | | | | | |

PH (STANDARD UNITS), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
| | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
| 1 | --- | --- | --- | --- | --- | --- | 7.0 | 6.8 | 6.9 | 6.9 | 6.8 | 6.9 |
| 2 | --- | --- | --- | --- | --- | --- | 7.1 | 6.9 | 6.9 | 6.9 | 6.8 | 6.8 |
| 3 | --- | --- | --- | --- | --- | --- | 7.0 | 6.9 | 6.9 | 6.9 | 6.8 | 6.8 |
| 4 | --- | --- | --- | --- | --- | --- | 7.0 | 6.9 | 6.9 | 7.0 | 6.8 | 6.9 |
| 5 | --- | --- | --- | --- | --- | --- | 7.0 | 6.8 | 6.9 | 6.9 | 6.8 | 6.9 |
| 6 | --- | --- | --- | --- | --- | --- | 7.1 | 6.9 | 6.9 | 6.9 | 6.8 | 6.9 |
| 7 | --- | --- | --- | --- | --- | --- | 7.0 | 6.9 | 6.9 | 7.0 | 6.9 | 6.9 |
| 8 | --- | --- | --- | --- | --- | --- | 7.0 | 6.8 | 6.9 | 7.0 | 6.8 | 6.9 |
| 9 | --- | --- | --- | --- | --- | --- | 7.0 | 6.8 | 6.9 | 6.9 | 6.8 | 6.8 |
| 10 | --- | --- | --- | --- | --- | --- | 7.1 | 6.9 | 6.9 | --- | --- | --- |
| 11 | --- | --- | --- | --- | --- | --- | 7.0 | 6.9 | 6.9 | --- | --- | --- |
| 12 | --- | --- | --- | --- | --- | --- | 7.1 | 6.9 | 7.0 | 6.8 | 6.7 | 6.7 |
| 13 | --- | --- | --- | --- | --- | --- | 7.0 | 6.9 | 6.9 | 6.8 | 6.7 | 6.7 |
| 14 | --- | --- | --- | --- | --- | --- | 6.9 | 6.8 | 6.9 | 6.7 | 6.6 | 6.7 |
| 15 | --- | --- | --- | --- | --- | --- | 7.1 | 6.8 | 6.9 | 6.8 | 6.7 | 6.8 |
| 16 | --- | --- | --- | --- | --- | --- | 7.2 | 7.0 | 7.1 | 6.9 | 6.7 | 6.8 |
| 17 | --- | --- | --- | 7.0 | 6.8 | 6.9 | 7.1 | 7.0 | 7.0 | 6.9 | 6.8 | 6.8 |
| 18 | --- | --- | --- | 7.1 | 6.8 | 7.0 | 7.1 | 6.9 | 7.0 | 6.9 | 6.8 | 6.9 |
| 19 | --- | --- | --- | 7.1 | 7.0 | 7.0 | 7.1 | 6.9 | 7.0 | 6.9 | 6.8 | 6.9 |
| 20 | --- | --- | --- | 7.2 | 7.0 | 7.1 | 7.0 | 6.8 | 6.9 | 6.8 | 6.6 | 6.7 |
| 21 | --- | --- | --- | 7.1 | 7.0 | 7.1 | 6.9 | 6.8 | 6.9 | 6.8 | 6.7 | 6.7 |
| 22 | --- | --- | --- | 7.1 | 7.0 | 7.1 | 6.9 | 6.8 | 6.9 | 6.7 | 6.7 | 6.7 |
| 23 | --- | --- | --- | 7.2 | 7.0 | 7.0 | 6.9 | 6.7 | 6.8 | 6.8 | 6.7 | 6.7 |
| 24 | --- | --- | --- | 7.0 | 6.6 | 6.9 | 6.8 | 6.7 | 6.8 | 6.8 | 6.8 | 6.8 |
| 25 | --- | --- | --- | 6.9 | 6.4 | 6.7 | 6.9 | 6.6 | 6.8 | 6.9 | 6.8 | 6.9 |
| 26 | --- | --- | --- | 6.9 | 6.6 | 6.8 | 7.2 | 6.8 | 6.9 | 6.9 | 6.8 | 6.8 |
| 27 | --- | --- | --- | 7.0 | 6.9 | 7.0 | 7.0 | 6.8 | 6.9 | 6.9 | 6.8 | 6.9 |
| 28 | --- | --- | --- | 7.1 | 6.9 | 7.0 | 7.0 | 6.9 | 6.9 | 6.9 | 6.9 | 6.9 |
| 29 | --- | --- | --- | 7.0 | 6.6 | 6.8 | 7.0 | 6.8 | 6.9 | 6.9 | 6.8 | 6.9 |
| 30 | --- | --- | --- | 7.0 | 6.8 | 6.9 | 6.9 | 6.8 | 6.9 | 6.9 | 6.8 | 6.8 |
| 31 | --- | --- | --- | --- | --- | --- | 6.9 | 6.5 | 6.8 | 6.9 | 6.8 | 6.9 |
| MONTH | --- | --- | --- | 7.2 | 6.4 | 6.9 | 7.2 | 6.5 | 6.9 | 7.0 | 6.6 | 6.8 |

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PH (STANDARD UNITS), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|---------|-----|---------|-------|------|------|--------|-----|------|-----------|-----|------|
| FEBRUARY | | | | MARCH | | | APRIL | | | MAY | | |
| 1 | 6.9 | 6.8 | 6.8 | 7.5 | 7.5 | 7.5 | 7.5 | 7.3 | 7.4 | 7.5 | 7.2 | 7.3 |
| 2 | 7.8 | 6.8 | 7.3 | 7.6 | 7.5 | 7.5 | 7.3 | 7.0 | 7.2 | 7.5 | 7.3 | 7.4 |
| 3 | 7.1 | 6.9 | 7.0 | 7.6 | 7.5 | 7.6 | 7.3 | 7.1 | 7.2 | 7.3 | 7.0 | 7.2 |
| 4 | 6.9 | 6.9 | 6.9 | --- | --- | --- | 7.2 | 7.0 | 7.1 | 7.2 | 7.0 | 7.1 |
| 5 | 7.0 | 6.9 | 6.9 | 7.2 | 7.1 | 7.1 | 7.5 | 7.0 | 7.2 | 7.6 | 7.5 | 7.6 |
| 6 | 6.9 | 6.9 | 6.9 | 7.1 | 7.1 | 7.1 | 7.5 | 7.1 | 7.3 | 7.7 | 7.5 | 7.6 |
| 7 | 6.9 | 6.9 | 6.9 | 7.1 | 7.1 | 7.1 | 7.5 | 7.2 | 7.4 | 7.6 | 7.3 | 7.5 |
| 8 | 6.9 | 6.9 | 6.9 | 7.2 | 7.1 | 7.2 | 7.4 | 7.2 | 7.3 | 7.6 | 7.3 | 7.4 |
| 9 | 6.9 | 6.9 | 6.9 | 7.2 | 7.2 | 7.2 | 7.2 | 7.1 | 7.1 | 7.3 | 7.2 | 7.3 |
| 10 | 6.9 | 6.9 | 6.9 | 7.2 | 7.2 | 7.2 | 7.1 | 7.0 | 7.1 | 7.2 | 7.0 | 7.1 |
| 11 | 6.9 | 6.9 | 6.9 | 7.4 | 7.2 | 7.2 | 7.2 | 7.1 | 7.2 | 7.1 | 6.9 | 7.0 |
| 12 | 6.9 | 6.9 | 6.9 | 7.2 | 7.2 | 7.2 | 7.2 | 7.2 | 7.2 | 7.0 | 6.8 | 6.9 |
| 13 | 7.0 | 6.9 | 7.0 | 7.2 | 7.2 | 7.2 | 7.2 | 7.0 | 7.1 | 6.9 | 6.8 | 6.9 |
| 14 | 7.0 | 7.0 | 7.0 | 7.2 | 7.2 | 7.2 | 7.2 | 7.0 | 7.1 | 6.9 | 6.7 | 6.8 |
| 15 | 7.0 | 7.0 | 7.0 | 7.2 | 7.2 | 7.2 | 7.4 | 7.0 | 7.2 | 7.0 | 6.8 | 6.9 |
| 16 | 7.0 | 7.0 | 7.0 | 7.2 | 7.2 | 7.2 | 7.6 | 6.9 | 7.2 | --- | --- | --- |
| 17 | 7.1 | 7.0 | 7.1 | 7.2 | 7.1 | 7.2 | 7.4 | 7.0 | 7.1 | --- | --- | --- |
| 18 | 7.1 | 7.1 | 7.1 | 7.1 | 7.1 | 7.1 | 7.2 | 7.2 | 7.2 | --- | --- | --- |
| 19 | 7.1 | 7.1 | 7.1 | 7.1 | 7.1 | 7.1 | 7.7 | 7.0 | 7.3 | --- | --- | --- |
| 20 | 7.1 | 7.1 | 7.1 | 7.1 | 7.0 | 7.1 | 7.9 | 7.5 | 7.7 | --- | --- | --- |
| 21 | 7.1 | 7.1 | 7.1 | 7.1 | 7.0 | 7.0 | 8.0 | 7.8 | 7.9 | --- | --- | --- |
| 22 | 7.5 | 7.1 | 7.2 | 7.0 | 6.9 | 7.0 | 8.3 | 7.9 | 8.2 | --- | --- | --- |
| 23 | 7.6 | 7.5 | 7.6 | 7.0 | 6.9 | 7.0 | 8.2 | 8.1 | 8.2 | --- | --- | --- |
| 24 | 7.6 | 7.5 | 7.6 | 7.0 | 6.9 | 6.9 | 8.2 | 7.9 | 8.0 | --- | --- | --- |
| 25 | 7.6 | 7.5 | 7.5 | 7.0 | 6.9 | 7.0 | 7.9 | 7.7 | 7.8 | --- | --- | --- |
| 26 | 7.6 | 7.5 | 7.5 | 7.0 | 7.0 | 7.0 | 7.8 | 7.5 | 7.7 | --- | --- | --- |
| 27 | 7.6 | 7.5 | 7.6 | 7.0 | 7.0 | 7.0 | 7.6 | 7.4 | 7.6 | --- | --- | --- |
| 28 | 7.6 | 7.5 | 7.5 | 7.0 | 6.9 | 7.0 | 7.6 | 7.4 | 7.5 | --- | --- | --- |
| 29 | 7.6 | 7.5 | 7.5 | 7.0 | 6.9 | 7.0 | 7.6 | 7.3 | 7.4 | --- | --- | --- |
| 30 | --- | --- | --- | 7.3 | 7.0 | 7.2 | 7.4 | 7.2 | 7.3 | --- | --- | --- |
| 31 | --- | --- | --- | 7.3 | 7.2 | 7.3 | --- | --- | --- | --- | --- | --- |
| MONTH | 7.8 | 6.8 | 7.1 | 7.6 | 6.9 | 7.2 | 8.3 | 6.9 | 7.4 | 7.7 | 6.7 | 7.2 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| JUNE | | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | --- | --- | --- | --- | --- | --- | 7.6 | 6.3 | 6.6 | 7.2 | 6.7 | 6.9 |
| 2 | --- | --- | --- | --- | --- | --- | 7.5 | 6.2 | 6.6 | 7.2 | 6.7 | 6.9 |
| 3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 6.9 | 5.5 | 6.6 |
| 4 | 6.8 | 6.7 | 6.8 | --- | --- | --- | --- | --- | --- | 7.1 | 6.4 | 6.8 |
| 5 | 6.8 | 6.7 | 6.8 | --- | --- | --- | --- | --- | --- | 7.0 | 6.8 | 6.9 |
| 6 | 6.9 | 6.7 | 6.8 | --- | --- | --- | 6.4 | 6.1 | 6.2 | 7.3 | 6.9 | 7.0 |
| 7 | 6.9 | 6.7 | 6.8 | --- | --- | --- | 6.9 | 6.3 | 6.5 | 7.4 | 6.9 | 7.1 |
| 8 | 6.9 | 6.7 | 6.8 | --- | --- | --- | 7.4 | 6.4 | 6.7 | 7.2 | 6.8 | 7.0 |
| 9 | 6.9 | 6.6 | 6.8 | --- | --- | --- | 7.7 | 6.4 | 6.8 | 7.0 | 6.8 | 6.9 |
| 10 | 6.9 | 6.7 | 6.8 | --- | --- | --- | 7.7 | 6.3 | 6.7 | 7.1 | 6.8 | 6.9 |
| 11 | 6.9 | 6.7 | 6.8 | --- | --- | --- | 7.9 | 6.3 | 6.8 | 7.0 | 6.8 | 6.9 |
| 12 | 6.8 | 6.6 | 6.7 | --- | --- | --- | 7.8 | 6.2 | 6.7 | 7.0 | 6.7 | 6.8 |
| 13 | 6.8 | 6.6 | 6.7 | --- | --- | --- | 7.8 | 6.2 | 6.7 | 6.9 | 6.7 | 6.8 |
| 14 | 6.8 | 6.6 | 6.7 | --- | --- | --- | 7.9 | 6.3 | 6.8 | 7.3 | 6.8 | 7.0 |
| 15 | --- | --- | --- | --- | --- | --- | 7.7 | 6.2 | 6.7 | 7.6 | 6.9 | 7.2 |
| 16 | --- | --- | --- | --- | --- | --- | 7.8 | 6.2 | 6.7 | 7.2 | 6.9 | 7.0 |
| 17 | --- | --- | --- | --- | --- | --- | 8.0 | 6.3 | 6.9 | 6.9 | 6.8 | 6.9 |
| 18 | --- | --- | --- | --- | --- | --- | 7.9 | 6.2 | 6.8 | 7.3 | 6.9 | 7.0 |
| 19 | --- | --- | --- | --- | --- | --- | 7.2 | 5.6 | 6.2 | 7.1 | 6.9 | 6.9 |
| 20 | --- | --- | --- | --- | --- | --- | 7.3 | 5.8 | 6.4 | --- | --- | --- |
| 21 | --- | --- | --- | 6.6 | 6.3 | 6.4 | 8.1 | 6.3 | 6.9 | --- | --- | --- |
| 22 | --- | --- | --- | 6.7 | 6.1 | 6.4 | 8.1 | 6.3 | 6.9 | --- | --- | --- |
| 23 | --- | --- | --- | 6.5 | 6.0 | 6.2 | 7.2 | 5.6 | 6.3 | --- | --- | --- |
| 24 | --- | --- | --- | 6.8 | 6.1 | 6.4 | 7.8 | 6.2 | 6.7 | --- | --- | --- |
| 25 | --- | --- | --- | 7.0 | 6.2 | 6.5 | 7.2 | 6.3 | 6.8 | --- | --- | --- |
| 26 | --- | --- | --- | 7.1 | 6.3 | 6.5 | 7.1 | 6.8 | 6.9 | --- | --- | --- |
| 27 | --- | --- | --- | 7.3 | 6.3 | 6.6 | 7.1 | 6.7 | 6.9 | --- | --- | --- |
| 28 | --- | --- | --- | 7.5 | 6.3 | 6.7 | 6.8 | 6.7 | 6.7 | --- | --- | --- |
| 29 | --- | --- | --- | 7.5 | 6.3 | 6.7 | 6.9 | 6.1 | 6.7 | --- | --- | --- |
| 30 | --- | --- | --- | 7.6 | 6.3 | 6.6 | 7.1 | 6.7 | 6.9 | --- | --- | --- |
| 31 | --- | --- | --- | 7.3 | 6.3 | 6.5 | 7.2 | 6.7 | 6.9 | --- | --- | --- |
| MONTH | 6.9 | 6.6 | 6.8 | 7.6 | 6.0 | 6.5 | 8.1 | 5.6 | 6.7 | 7.6 | 5.5 | 6.9 |
| YEAR | MAXIMUM | 8.3 | MINIMUM | 5.5 | MEAN | 7.0 | | | | | | |

UPPER TWIN CREEK BASIN

03237280 UPPER TWIN CREEK AT MCGAW, OH--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|-----|-----|----------|------|------|----------|------|------|---------|------|------|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | --- | --- | --- | --- | --- | --- | 8.0 | 6.5 | 7.0 | 5.5 | 3.0 | 4.5 |
| 2 | --- | --- | --- | --- | --- | --- | 7.0 | 4.5 | 6.0 | 3.5 | 1.5 | 2.5 |
| 3 | --- | --- | --- | --- | --- | --- | 6.5 | 4.5 | 5.5 | 3.5 | 1.5 | 2.5 |
| 4 | --- | --- | --- | --- | --- | --- | 5.5 | 4.5 | 5.0 | 4.5 | 1.5 | 3.0 |
| 5 | --- | --- | --- | --- | --- | --- | 6.0 | 4.0 | 5.0 | 2.0 | 1.0 | 1.5 |
| 6 | --- | --- | --- | --- | --- | --- | 6.0 | 3.0 | 4.5 | 2.0 | 1.0 | 1.5 |
| 7 | --- | --- | --- | --- | --- | --- | 7.5 | 5.0 | 6.0 | 2.0 | 1.0 | 1.5 |
| 8 | --- | --- | --- | --- | --- | --- | 9.0 | 5.5 | 7.0 | 1.5 | 1.0 | 1.5 |
| 9 | --- | --- | --- | --- | --- | --- | 10.5 | 7.0 | 8.5 | 2.0 | .0 | 1.0 |
| 10 | --- | --- | --- | --- | --- | --- | 9.0 | 5.5 | 6.5 | --- | --- | --- |
| 11 | --- | --- | --- | 7.5 | 4.5 | 6.0 | 7.5 | 4.0 | 5.5 | --- | --- | --- |
| 12 | --- | --- | --- | 5.5 | 2.5 | 4.0 | 8.0 | 4.5 | 6.0 | 2.0 | 1.0 | 1.5 |
| 13 | --- | --- | --- | --- | --- | --- | 6.5 | 4.0 | 5.0 | 2.5 | 1.0 | 1.5 |
| 14 | --- | --- | --- | --- | --- | --- | 6.0 | 4.5 | 5.5 | 2.0 | .5 | 1.0 |
| 15 | --- | --- | --- | --- | --- | --- | 8.0 | 5.0 | 6.0 | 1.5 | .5 | 1.0 |
| 16 | --- | --- | --- | --- | --- | --- | 5.0 | 3.5 | 4.5 | 2.0 | .5 | 1.0 |
| 17 | --- | --- | --- | 11.0 | 8.5 | 9.5 | 4.5 | 3.5 | 4.0 | 2.0 | 1.0 | 1.5 |
| 18 | --- | --- | --- | 10.0 | 7.5 | 9.0 | 5.0 | 3.5 | 4.0 | 2.5 | 1.5 | 2.0 |
| 19 | --- | --- | --- | 10.0 | 5.5 | 7.5 | 7.0 | 4.0 | 5.5 | 3.5 | 1.5 | 2.0 |
| 20 | --- | --- | --- | 8.0 | 4.5 | 6.5 | 8.5 | 6.0 | 7.5 | 6.0 | 3.5 | 5.0 |
| 21 | --- | --- | --- | 5.0 | 3.5 | 4.0 | 7.0 | 4.0 | 5.5 | 5.5 | 4.5 | 5.0 |
| 22 | --- | --- | --- | 5.0 | 2.5 | 3.5 | 5.0 | 3.0 | 4.5 | 5.0 | 4.0 | 4.5 |
| 23 | --- | --- | --- | 6.5 | 3.0 | 4.5 | 6.5 | 3.5 | 4.5 | 4.0 | 3.5 | 4.0 |
| 24 | --- | --- | --- | 8.0 | 6.5 | 7.0 | 6.5 | 3.5 | 5.0 | 4.5 | 3.5 | 4.0 |
| 25 | --- | --- | --- | 10.0 | 7.0 | 8.5 | 8.5 | 6.5 | 7.5 | 5.5 | 2.0 | 3.5 |
| 26 | --- | --- | --- | 11.5 | 8.5 | 9.5 | 7.5 | 7.0 | 7.5 | 2.0 | 1.0 | 1.5 |
| 27 | --- | --- | --- | 11.5 | 9.0 | 9.5 | 7.5 | 7.0 | 7.0 | 2.5 | 1.0 | 1.5 |
| 28 | --- | --- | --- | 12.0 | 8.0 | 10.0 | 8.0 | 6.5 | 7.0 | 3.5 | 1.0 | 2.0 |
| 29 | --- | --- | --- | 11.5 | 8.5 | 10.0 | 6.0 | 4.0 | 5.5 | 5.0 | 1.0 | 2.5 |
| 30 | --- | --- | --- | 9.0 | 8.0 | 8.5 | 5.0 | 2.5 | 3.5 | 6.5 | 2.5 | 4.5 |
| 31 | --- | --- | --- | --- | --- | --- | 5.5 | 3.0 | 4.5 | 7.5 | 4.5 | 6.0 |
| MONTH | --- | --- | --- | 12.0 | 2.5 | 7.5 | 10.5 | 2.5 | 5.5 | 7.5 | .0 | 2.5 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 9.0 | 6.5 | 7.5 | 6.5 | 2.5 | 4.5 | 12.0 | 10.0 | 11.0 | 15.5 | 9.5 | 12.5 |
| 2 | 8.0 | 6.0 | 7.0 | 4.5 | 3.0 | 4.0 | 13.0 | 10.5 | 11.5 | 17.5 | 10.0 | 13.5 |
| 3 | 7.0 | 5.5 | 6.5 | 5.5 | 4.5 | 5.0 | 12.0 | 10.5 | 11.5 | 18.0 | 11.0 | 14.0 |
| 4 | 7.0 | 4.0 | 5.5 | 5.0 | 4.0 | 4.5 | 13.0 | 9.5 | 11.0 | 14.0 | 12.5 | 13.0 |
| 5 | 4.0 | 1.5 | 3.5 | 6.0 | 3.0 | 4.5 | 14.5 | 9.0 | 11.5 | 13.0 | 11.5 | 12.0 |
| 6 | 2.0 | .5 | 1.0 | 6.5 | 3.0 | 4.5 | 12.0 | 9.5 | 11.0 | 16.0 | 11.0 | 13.0 |
| 7 | 1.5 | .5 | 1.0 | 8.0 | 4.0 | 6.0 | 9.5 | 9.0 | 9.0 | 18.0 | 11.5 | 14.5 |
| 8 | 3.5 | 1.5 | 2.5 | 9.0 | 4.5 | 6.5 | 12.5 | 8.5 | 10.0 | 18.5 | 12.0 | 15.0 |
| 9 | 3.0 | 1.0 | 2.0 | 7.5 | 7.0 | 7.5 | 12.5 | 7.5 | 9.5 | 18.5 | 14.5 | 16.0 |
| 10 | 5.0 | 2.5 | 3.5 | 9.5 | 6.0 | 7.0 | 13.0 | 8.0 | 10.0 | 19.5 | 14.0 | 16.5 |
| 11 | 4.0 | 2.5 | 3.5 | 9.5 | 4.0 | 6.5 | 12.5 | 9.0 | 10.5 | 19.0 | 14.0 | 16.0 |
| 12 | 3.5 | 1.0 | 2.0 | 6.5 | 5.0 | 6.0 | 13.5 | 9.5 | 11.0 | 19.5 | 12.5 | 15.5 |
| 13 | 1.5 | .5 | 1.0 | 6.0 | 4.5 | 5.5 | 15.0 | 9.0 | 12.0 | 21.0 | 13.5 | 17.0 |
| 14 | 2.5 | .5 | 1.5 | 5.0 | 3.0 | 4.0 | 13.5 | 9.5 | 11.5 | 21.5 | 16.0 | 18.5 |
| 15 | 3.0 | 2.0 | 3.0 | 4.0 | 2.0 | 3.0 | 14.0 | 9.0 | 11.0 | 22.0 | 16.0 | 19.0 |
| 16 | 4.0 | 1.5 | 2.5 | 4.5 | 2.0 | 3.0 | 13.5 | 8.0 | 10.5 | --- | --- | --- |
| 17 | 5.0 | 1.5 | 3.0 | 7.0 | 3.0 | 4.5 | 15.0 | 8.0 | 11.0 | --- | --- | --- |
| 18 | 5.0 | 3.0 | 4.0 | 5.0 | 4.0 | 4.5 | 12.0 | 9.5 | 11.0 | --- | --- | --- |
| 19 | 5.0 | 4.0 | 4.5 | 6.5 | 3.0 | 4.5 | 13.0 | 8.0 | 10.0 | --- | --- | --- |
| 20 | 5.0 | 3.5 | 4.5 | 8.5 | 4.0 | 6.0 | 12.5 | 7.0 | 9.5 | --- | --- | --- |
| 21 | 4.0 | 1.5 | 2.5 | 9.5 | 4.5 | 6.5 | 15.0 | 9.5 | 12.0 | --- | --- | --- |
| 22 | 6.0 | 1.5 | 3.5 | 10.0 | 4.0 | 6.5 | 13.5 | 10.5 | 12.0 | --- | --- | --- |
| 23 | 5.5 | 3.5 | 4.5 | 12.0 | 5.0 | 8.5 | 15.5 | 11.0 | 13.0 | --- | --- | --- |
| 24 | 4.0 | 2.0 | 3.0 | 11.5 | 7.5 | 9.5 | 13.0 | 10.5 | 11.5 | --- | --- | --- |
| 25 | 3.0 | 1.0 | 2.0 | 10.5 | 9.0 | 9.5 | 12.5 | 8.5 | 10.5 | --- | --- | --- |
| 26 | 4.0 | 1.0 | 2.0 | 11.0 | 8.0 | 9.0 | 15.0 | 8.5 | 11.5 | --- | --- | --- |
| 27 | 5.5 | 2.5 | 3.5 | 11.0 | 6.5 | 8.5 | 14.0 | 10.5 | 12.0 | --- | --- | --- |
| 28 | 6.0 | 2.0 | 4.0 | 12.5 | 5.5 | 8.5 | 11.0 | 9.0 | 10.0 | --- | --- | --- |
| 29 | 7.0 | 3.0 | 4.5 | 14.0 | 7.0 | 10.0 | 14.0 | 7.5 | 10.5 | --- | --- | --- |
| 30 | --- | --- | --- | 14.5 | 10.0 | 12.0 | 14.5 | 8.5 | 11.5 | --- | --- | --- |
| 31 | --- | --- | --- | 11.5 | 10.0 | 10.5 | --- | --- | --- | --- | --- | --- |
| MONTH | 9.0 | .5 | 3.5 | 14.5 | 2.0 | 6.5 | 15.5 | 7.0 | 10.9 | 22.0 | 9.5 | 15.0 |

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WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|---------|------|---------|------|------|------|------|--------|------|------|-----------|------|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | --- | --- | --- | --- | --- | --- | 32.5 | 23.0 | 26.5 | 26.0 | 17.5 | 21.0 |
| 2 | --- | --- | --- | --- | --- | --- | 32.5 | 23.0 | 26.5 | 26.0 | 18.5 | 22.0 |
| 3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.0 | 20.5 | 22.0 |
| 4 | 23.0 | 15.5 | 18.5 | --- | --- | --- | --- | --- | --- | 25.5 | 20.5 | 22.5 |
| 5 | 25.0 | 15.0 | 19.0 | --- | --- | --- | --- | --- | --- | 21.5 | 19.0 | 20.0 |
| 6 | 26.5 | 16.0 | 20.5 | --- | --- | --- | 28.0 | 23.5 | 25.0 | 23.0 | 17.0 | 19.0 |
| 7 | 28.0 | 17.5 | 21.5 | --- | --- | --- | 30.5 | 23.5 | 26.5 | 23.5 | 15.0 | 18.0 |
| 8 | 28.0 | 17.5 | 22.0 | --- | --- | --- | 30.0 | 23.5 | 26.0 | 24.0 | 15.0 | 18.0 |
| 9 | 25.5 | 17.0 | 20.0 | --- | --- | --- | 30.5 | 23.5 | 26.5 | 23.5 | 16.0 | 18.5 |
| 10 | 23.5 | 14.0 | 18.0 | --- | --- | --- | 30.5 | 23.5 | 26.5 | 23.5 | 17.0 | 19.5 |
| 11 | 26.0 | 14.0 | 19.0 | --- | --- | --- | 31.0 | 24.5 | 27.0 | 21.5 | 18.0 | 19.5 |
| 12 | 26.5 | 15.0 | 19.5 | --- | --- | --- | 31.5 | 25.0 | 27.5 | 23.0 | 19.5 | 21.0 |
| 13 | 28.0 | 16.0 | 21.0 | --- | --- | --- | 33.0 | 25.5 | 28.0 | 23.0 | 21.0 | 22.0 |
| 14 | 28.5 | 17.0 | 21.5 | --- | --- | --- | 33.0 | 24.5 | 27.5 | 25.0 | 19.5 | 22.0 |
| 15 | --- | --- | --- | --- | --- | --- | 33.0 | 24.5 | 28.0 | 22.5 | 16.5 | 19.0 |
| 16 | --- | --- | --- | --- | --- | --- | 34.0 | 25.0 | 28.0 | 21.0 | 17.0 | 19.0 |
| 17 | --- | --- | --- | --- | --- | --- | 33.5 | 23.5 | 27.5 | 22.0 | 20.0 | 21.0 |
| 18 | --- | --- | --- | --- | --- | --- | 33.0 | 24.5 | 28.0 | 25.0 | 20.0 | 22.0 |
| 19 | --- | --- | --- | --- | --- | --- | 28.5 | 24.5 | 26.5 | 23.0 | 20.0 | 21.5 |
| 20 | --- | --- | --- | --- | --- | --- | 29.5 | 24.5 | 26.5 | --- | --- | --- |
| 21 | --- | --- | --- | 23.0 | 22.0 | 22.5 | 30.0 | 22.5 | 25.5 | --- | --- | --- |
| 22 | --- | --- | --- | 26.0 | 21.0 | 23.0 | 28.5 | 20.5 | 24.0 | --- | --- | --- |
| 23 | --- | --- | --- | 25.5 | 21.0 | 22.5 | 24.5 | 21.5 | 23.0 | --- | --- | --- |
| 24 | --- | --- | --- | 25.5 | 21.0 | 23.0 | 29.5 | 22.5 | 25.0 | --- | --- | --- |
| 25 | --- | --- | --- | 27.0 | 21.0 | 23.5 | 29.0 | 19.5 | 23.5 | --- | --- | --- |
| 26 | --- | --- | --- | 27.0 | 22.5 | 24.0 | 28.5 | 20.0 | 23.5 | --- | --- | --- |
| 27 | --- | --- | --- | 28.0 | 22.0 | 24.5 | 27.5 | 19.5 | 22.5 | --- | --- | --- |
| 28 | --- | --- | --- | 30.5 | 21.0 | 24.5 | 24.5 | 21.5 | 23.0 | --- | --- | --- |
| 29 | --- | --- | --- | 31.0 | 22.0 | 25.0 | 23.0 | 20.5 | 22.0 | --- | --- | --- |
| 30 | --- | --- | --- | 30.0 | 23.0 | 25.5 | 25.0 | 18.0 | 20.5 | --- | --- | --- |
| 31 | --- | --- | --- | 29.5 | 23.0 | 25.5 | 25.5 | 17.0 | 20.5 | --- | --- | --- |
| MONTH | 28.5 | 14.0 | 20.0 | 31.0 | 21.0 | 24.0 | 34.0 | 17.0 | 25.5 | 26.0 | 15.0 | 20.4 |
| YEAR | MAXIMUM | 34.0 | MINIMUM | .0 | MEAN | 11.0 | | | | | | |

OHIO BRUSH CREEK BASIN

03237500 OHIO BRUSH CREEK NEAR WEST UNION, OH

LOCATION.--Lat 38°48'13", long 83°25'16", Adams County, Hydrologic Unit 05090201, on right bank at downstream side of bridge on State Highway 348, 0.3 mi downstream from Cedar Run, 7.0 mi east of West Union, and 7.1 mi upstream from Beasley Fork.

DRAINAGE AREA.--387 mi².

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

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 510.6 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 22, 1940, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Feb. 15-Mar. 2, Aug. 9. Records good except those for periods of estimated record, which are poor. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1969 to 1974.

AVERAGE DISCHARGE.--57 years, 447 ft³/s, 15.69 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 59,200 ft³/s Mar. 10, 1964; gage height, 27.91 ft, from rating curve extended above 22,000 ft³/s on basis of slope-area measurement at gage heights 22.70 ft, 26.5 ft, and 27.91 ft; no flow Sept. 13-23, 27, 28, 1955 and for part of each day Sept. 17, 18, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 11,000 ft³/s, and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|--------|------|-----------------------------------|---------------------|
| Jan. 20 | 0430 | 11,400 | 13.84 | Mar. 4 | 1800 | *20,000 | *18.00 |
| Feb. 2 | 1500 | 12,600 | 14.63 | Apr. 3 | 2400 | 13,300 | 15.05 |
| Feb. 18 | -- | 19,000 | -- | | | | |

Minimum daily discharge, 0.22 ft³/s July 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|----------|-------|--------|-------|-------|-------|------|-------|-------|-------|-------|------|
| 1 | 1.3 | 1.2 | 4.6 | 60 | 268 | 120 | 145 | 93 | 11 | .65 | 1.0 | .99 | |
| 2 | 1.2 | 1.2 | 5.5 | 61 | 7550 | 120 | 235 | 85 | 9.5 | .53 | .89 | .95 | |
| 3 | 1.1 | 1.3 | 5.3 | 43 | 2050 | 158 | 3770 | 78 | 8.0 | .50 | .84 | .99 | |
| 4 | 1.1 | 1.2 | 5.4 | 34 | 1260 | 11900 | 6480 | 74 | 6.3 | .45 | .86 | 1.0 | |
| 5 | 1.4 | 1.2 | 5.9 | 23 | 721 | 2680 | 1450 | 77 | 5.6 | .42 | .87 | .98 | |
| 6 | 1.4 | 1.2 | 6.6 | 18 | 376 | 1150 | 1230 | 83 | 5.1 | .39 | 2.4 | 1.1 | |
| 7 | 1.5 | 1.2 | 6.6 | 13 | 255 | 663 | 1970 | 86 | 4.6 | .35 | 2.5 | 1.3 | |
| 8 | 1.5 | 1.2 | 5.9 | 9.8 | 201 | 456 | 2120 | 76 | 4.0 | .33 | 1.3 | 1.4 | |
| 9 | 1.3 | 1.6 | 6.4 | 8.6 | 159 | 366 | 864 | 70 | 3.8 | .31 | 1.3 | 1.4 | |
| 10 | 1.3 | 3.4 | 6.5 | 7.3 | 143 | 359 | 528 | 70 | 3.5 | .27 | 1.3 | 3.1 | |
| 11 | 1.4 | 3.2 | 6.1 | 6.1 | 137 | 291 | 389 | 64 | 3.2 | .30 | 1.2 | 4.6 | |
| 12 | 1.4 | 2.5 | 6.3 | 5.7 | 135 | 239 | 303 | 57 | 3.0 | .31 | 1.1 | 4.1 | |
| 13 | 1.3 | 3.1 | 5.7 | 6.5 | 133 | 359 | 243 | 49 | 2.9 | .27 | .97 | 4.0 | |
| 14 | 1.2 | 3.3 | 6.1 | 6.3 | 133 | 321 | 202 | 47 | 2.7 | .27 | .91 | 3.5 | |
| 15 | 1.2 | 2.9 | 10 | 5.8 | 800 | 246 | 175 | 40 | 2.7 | .25 | .88 | 2.8 | |
| 16 | 1.2 | 2.5 | 9.6 | 5.6 | 2500 | 199 | 150 | 36 | 2.4 | .23 | .84 | 2.5 | |
| 17 | 1.2 | 2.8 | 12 | 8.0 | 8000 | 172 | 133 | 34 | 2.3 | .23 | .84 | 2.9 | |
| 18 | 1.2 | 3.1 | 9.7 | 32 | 11000 | 160 | 226 | 29 | 2.0 | .22 | .82 | 11 | |
| 19 | 1.2 | 3.0 | 13 | 627 | 4000 | 170 | 352 | 26 | 1.7 | .23 | .77 | 8.0 | |
| 20 | 1.2 | 2.9 | 18 | 5580 | 1100 | 166 | 227 | 24 | 1.5 | 6.6 | .79 | 6.2 | |
| 21 | 1.2 | 2.8 | 14 | 924 | 350 | 144 | 169 | 24 | 1.3 | 7.0 | .75 | 4.3 | |
| 22 | 1.1 | 2.6 | 17 | 417 | 220 | 124 | 183 | 24 | 1.2 | 1.9 | .75 | 3.1 | |
| 23 | 1.1 | 2.4 | 13 | 182 | 250 | 113 | 304 | 33 | 1.2 | 1.6 | .85 | 2.7 | |
| 24 | 1.1 | 2.8 | 8.9 | 160 | 280 | 109 | 260 | 45 | 1.1 | 2.7 | .89 | 3.2 | |
| 25 | 1.1 | 3.3 | 18 | 139 | 180 | 116 | 199 | 39 | .99 | 3.5 | .82 | 3.2 | |
| 26 | 1.1 | 3.3 | 182 | 124 | 140 | 541 | 158 | 32 | .90 | 4.7 | .79 | 2.6 | |
| 27 | 1.2 | 3.3 | 155 | 111 | 130 | 352 | 138 | 27 | .85 | 3.5 | .75 | 2.1 | |
| 28 | 1.2 | 3.5 | 106 | 104 | 125 | 226 | 123 | 23 | .79 | 2.7 | .75 | 1.7 | |
| 29 | 1.2 | 5.3 | 86 | 99 | 120 | 176 | 113 | 20 | .70 | 1.9 | 1.2 | 1.4 | |
| 30 | 1.2 | 4.8 | 74 | 93 | --- | 154 | 103 | 16 | .71 | 1.5 | 1.2 | 1.1 | |
| 31 | 1.2 | --- | 62 | 89 | --- | 136 | --- | 13 | --- | 1.2 | 1.1 | --- | |
| TOTAL | 38.3 | 78.1 | 891.1 | 9002.7 | 42716 | 22486 | 22942 | 1494 | 95.54 | 45.31 | 32.23 | 88.21 | |
| MEAN | 1.24 | 2.60 | 28.7 | 290 | 1473 | 725 | 765 | 48.2 | 3.18 | 1.46 | 1.04 | 2.94 | |
| MAX | 1.5 | 5.3 | 182 | 5580 | 11000 | 11900 | 6480 | 93 | 11 | 7.0 | 2.5 | 11 | |
| MIN | 1.1 | 1.2 | 4.6 | 5.6 | 120 | 109 | 103 | 13 | .70 | .22 | .75 | .95 | |
| CFSM | .00 | .01 | .07 | .75 | 3.81 | 1.87 | 1.98 | .12 | .01 | .00 | .00 | .01 | |
| IN. | .00 | .01 | .09 | .87 | 4.11 | 2.16 | 2.21 | .14 | .01 | .00 | .00 | .01 | |
| CAL YR 1987 | TOTAL | 69654.62 | | MEAN | 191 | MAX | 5460 | MIN | .84 | CFSM | .49 | IN. | 6.70 |
| WTR YR 1988 | TOTAL | 99909.49 | | MEAN | 273 | MAX | 11900 | MIN | .22 | CFSM | .71 | IN. | 9.60 |

WHITEOAK CREEK BASIN

161

03238500 WHITEOAK CREEK NEAR GEORGETOWN, OH

LOCATION.--Lat 38°51'29", long 83°55'43", Brown County, Hydrologic Unit 05090201, on left bank 150 ft upstream from diversion dam for Georgetown water treatment plant, 0.7 mi upstream from Town Run, 1.4 mi southwest of Georgetown, and 7.2 mi upstream from mouth.

DRAINAGE AREA.--218 mi².

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

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

GAGE.--Water-stage recorder. Datum of gage is 604.20 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 12, 1972 nonrecording gage at a site 1.0 mi downstream at datum 35.24 ft lower. See WSP 2108 for history of changes prior to Dec. 8, 1940.

REMARKS.--Estimated daily discharges: Feb. 1-24, Apr. 7-21. Records good except those below 30 ft³/s and for periods of estimated daily discharges, which are poor. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1970 to 1974. Water supply for city of Georgetown is pumped from gage pool to nearby reservoir. Pumpage from reservoir to water treatment plant during water year 1988. Satellite telemeter at this station.

AVERAGE DISCHARGE.--61 years, 255 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,400 ft³/s Mar. 10, 1964; maximum gage height, 20.87 ft May 14, 1933, site and datum then in use; no flow at times in 1930, 1940-41, 1943, 1948, 1951-53, 1959, 1969, 1970, 1976-1978, 1983-1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,500 ft³/s, and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|--------|------|-----------------------------------|---------------------|
| Feb. 18 | -- | 7,700 | -- | Apr. 4 | 0330 | 7,520 | 6.79 |
| Mar. 4 | 1100 | *8,790 | *7.17 | | | | |

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|----------|--------|---------|-------|-------|-------|------|--------|--------|--------|--------|
| 1 | .00 | .00 | 5.8 | 10 | 300 | 35 | 51 | 31 | 15 | 9.7 | 5.6 | 2.6 |
| 2 | .00 | .00 | 5.7 | 5.0 | 3300 | 34 | 129 | 29 | 15 | 8.4 | 4.6 | .02 |
| 3 | .00 | .00 | 4.7 | 6.2 | 1000 | 164 | 2220 | 28 | 13 | 3.8 | 4.4 | 25 |
| 4 | .00 | .00 | 4.7 | 4.1 | 300 | 6900 | 4660 | 28 | 12 | .00 | 12 | 411 |
| 5 | .00 | .00 | 3.8 | .78 | 100 | 2080 | 487 | 27 | 12 | .00 | 5.8 | 112 |
| 6 | .00 | .06 | 2.2 | 1.3 | 58 | 425 | 331 | 26 | 10 | .00 | 3.2 | 34 |
| 7 | .00 | .03 | 2.2 | .31 | 40 | 270 | 908 | 26 | 8.1 | .00 | 59 | 16 |
| 8 | .00 | .00 | 1.3 | .03 | 33 | 185 | 1000 | 26 | 1.5 | .00 | 26 | 10 |
| 9 | .00 | .43 | 1.6 | .00 | 26 | 148 | 150 | 26 | .00 | .00 | 12 | 8.0 |
| 10 | .00 | 3.1 | 1.2 | .00 | 23 | 183 | 60 | 25 | .44 | .00 | 4.4 | 5.4 |
| 11 | .00 | 2.3 | 1.2 | .01 | 22 | 136 | 40 | 21 | .00 | .00 | 3.1 | 4.1 |
| 12 | .00 | .77 | 1.7 | .46 | 21 | 95 | 30 | 21 | .00 | .00 | .92 | 2.7 |
| 13 | .00 | .60 | .79 | .07 | 21 | 101 | 26 | 21 | .00 | .00 | .09 | 21 |
| 14 | .00 | .36 | .84 | .00 | 21 | 143 | 22 | 18 | .00 | .00 | .00 | 10 |
| 15 | .00 | .40 | 3.6 | .02 | 50 | 95 | 19 | 18 | .00 | .00 | .00 | 6.9 |
| 16 | .00 | .75 | 2.7 | .06 | 350 | 72 | 17 | 17 | .00 | .00 | .00 | 6.3 |
| 17 | .00 | 2.3 | 1.9 | 1.4 | 2000 | 59 | 16 | 16 | .00 | .00 | .00 | 5.1 |
| 18 | .00 | 3.3 | 1.9 | 5.7 | 4800 | 54 | 40 | 15 | .00 | .00 | .00 | 1.3 |
| 19 | .00 | 2.0 | 3.7 | 929 | 700 | 55 | 130 | 15 | .00 | .00 | .00 | .12 |
| 20 | .00 | .99 | 4.4 | 2640 | 170 | 60 | 60 | 15 | .00 | .00 | .00 | .07 |
| 21 | .00 | .54 | 3.2 | 230 | 70 | 54 | 56 | 15 | .00 | 29 | .00 | .01 |
| 22 | .00 | .21 | 1.3 | 97 | 66 | 40 | 62 | 15 | .00 | 124 | .00 | .00 |
| 23 | .13 | .48 | 1.2 | 60 | 150 | 34 | 69 | 16 | .00 | 44 | .00 | .00 |
| 24 | 1.9 | 2.1 | 1.7 | 38 | 290 | 34 | 88 | 18 | .63 | 24 | .00 | .00 |
| 25 | 1.1 | 4.9 | 7.5 | 29 | 143 | 46 | 91 | 18 | 8.9 | 14 | .00 | .00 |
| 26 | 1.3 | 5.3 | 16 | 22 | 78 | 325 | 66 | 18 | 8.1 | 14 | .00 | .00 |
| 27 | 2.2 | 4.7 | 27 | 24 | 63 | 194 | 50 | 18 | 7.8 | 8.6 | .00 | .00 |
| 28 | .41 | 3.8 | 28 | 23 | 54 | 105 | 38 | 17 | 7.7 | 9.8 | .00 | .00 |
| 29 | .00 | 7.7 | 18 | 16 | 44 | 76 | 34 | 16 | 6.7 | 15 | 2.0 | .00 |
| 30 | .00 | 7.2 | 21 | 16 | --- | 62 | 32 | 16 | 9.7 | 9.7 | 5.3 | .00 |
| 31 | .00 | --- | 14 | 17 | --- | 54 | --- | 16 | --- | 7.3 | 5.3 | --- |
| TOTAL | 7.04 | 54.32 | 194.83 | 4176.44 | 14293 | 12318 | 10982 | 632 | 136.57 | 321.30 | 153.71 | 681.62 |
| MEAN | .23 | 1.81 | 6.28 | 135 | 493 | 397 | 366 | 20.4 | 4.55 | 10.4 | 4.96 | 22.7 |
| MAX | 2.2 | 7.7 | 28 | 2640 | 4800 | 6900 | 4660 | 31 | 15 | 124 | 59 | 411 |
| MIN | .00 | .00 | .79 | .00 | 21 | 34 | 16 | 15 | .00 | .00 | .00 | .00 |
| CAL YR 1987 | TOTAL | 39593.42 | | MEAN | 108 | MAX | 3630 | MIN | .00 | | | |
| WTR YR 1988 | TOTAL | 43950.83 | | MEAN | 120 | MAX | 6900 | MIN | .00 | | | |

LITTLE MIAMI RIVER BASIN

03240000 LITTLE MIAMI RIVER NEAR OLDTOWN, OH

LOCATION.--Lat 39°44'54", LONG 83°55'53", in sec.. 34, R.7, T.4, Greene County, Hydrologic Unit 05090202, on right bank at downstream side of bridge on U.S. Highway 68, 0.8 mi downstream from Conner Branch, 0.9 mi upstream from Massies Creek, 1.3 mi northeast of Oldtown, and at mile 82.25.

DRAINAGE AREA.--129 mi².

PERIOD OF RECORD.--July 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 816.56 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 5-18, 26-31 and Mar. 31 to May 4. Records good except for periods of estimated daily discharges, which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1952 to 1958.

AVERAGE DISCHARGE.--36 years, 115 ft³/s, 12.11 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,800 ft³/s Jan. 21, 1959, gage height, 12.20 ft, from rating curve extended above 4,400 ft³/s on basis of slope area measurements of peak flow; minimum, 5.1 ft³/s Sept. 20-22, 1985.

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--|------|--------------------------------|------------------|--|------|--------------------------------|------------------|
| Feb. 2 | 0545 | *1,130 | *5.07 | No other peak greater than base discharge. | | | |
| Minimum discharge, 2.8 ft ³ /s Sept. 2. | | | | | | | |

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|---------|------|------|------|------|------|------|------|-------|-------|--------|
| 1 | 9.5 | 16 | 20 | 28 | 119 | 80 | 89 | 53 | 30 | 14 | 17 | 8.2 |
| 2 | 11 | 16 | 19 | 26 | 981 | 78 | 86 | 52 | 30 | 14 | 16 | 3.5 |
| 3 | 12 | 19 | 20 | 31 | 598 | 106 | 210 | 53 | 32 | 12 | 14 | 15 |
| 4 | 11 | 17 | 23 | 22 | 407 | 238 | 600 | 54 | 32 | 11 | 15 | 28 |
| 5 | 12 | 16 | 23 | 21 | 288 | 181 | 420 | 54 | 30 | 11 | 13 | 23 |
| 6 | 16 | 16 | 20 | 20 | 197 | 204 | 260 | 54 | 29 | 12 | 17 | 17 |
| 7 | 15 | 18 | 19 | 19 | 181 | 200 | 270 | 51 | 27 | 9.6 | 27 | 14 |
| 8 | 12 | 15 | 18 | 18 | 138 | 172 | 220 | 49 | 26 | 9.0 | 26 | 12 |
| 9 | 15 | 16 | 18 | 18 | 111 | 159 | 170 | 53 | 25 | 10 | 19 | 12 |
| 10 | 14 | 20 | 18 | 17 | 92 | 145 | 150 | 58 | 24 | 9.0 | 16 | 11 |
| 11 | 17 | 15 | 16 | 23 | 83 | 124 | 135 | 52 | 25 | 8.7 | 15 | 10 |
| 12 | 16 | 14 | 16 | 27 | 82 | 116 | 120 | 47 | 23 | 9.3 | 14 | 20 |
| 13 | 21 | 17 | 16 | 25 | 82 | 116 | 115 | 47 | 23 | 9.0 | 12 | 302 |
| 14 | 18 | 17 | 17 | 23 | 88 | 106 | 110 | 50 | 22 | 10 | 9.6 | 177 |
| 15 | 15 | 16 | 26 | 20 | 113 | 98 | 100 | 51 | 19 | 12 | 8.1 | 91 |
| 16 | 14 | 15 | 24 | 19 | 135 | 89 | 96 | 46 | 20 | 9.9 | 8.5 | 64 |
| 17 | 14 | 13 | 24 | 18 | 114 | 84 | 90 | 43 | 23 | 8.6 | 9.0 | 57 |
| 18 | 14 | 19 | 21 | 23 | 123 | 83 | 105 | 41 | 22 | 7.6 | 11 | 47 |
| 19 | 14 | 16 | 20 | 55 | 168 | 84 | 88 | 40 | 20 | 17 | 15 | 40 |
| 20 | 15 | 14 | 22 | 216 | 354 | 81 | 80 | 40 | 20 | 25 | 13 | 37 |
| 21 | 18 | 14 | 22 | 91 | 235 | 75 | 78 | 40 | 23 | 58 | 9.5 | 33 |
| 22 | 15 | 12 | 23 | 54 | 164 | 69 | 85 | 39 | 19 | 37 | 8.4 | 31 |
| 23 | 16 | 14 | 22 | 41 | 158 | 69 | 79 | 44 | 16 | 25 | 13 | 28 |
| 24 | 20 | 16 | 19 | 36 | 164 | 68 | 74 | 46 | 16 | 26 | 13 | 25 |
| 25 | 21 | 20 | 24 | 31 | 134 | 85 | 67 | 42 | 15 | 22 | 11 | 25 |
| 26 | 17 | 30 | 49 | 28 | 111 | 190 | 66 | 37 | 13 | 23 | 11 | 22 |
| 27 | 23 | 25 | 40 | 25 | 104 | 151 | 62 | 35 | 13 | 26 | 10 | 19 |
| 28 | 25 | 22 | 35 | 24 | 91 | 119 | 59 | 33 | 15 | 25 | 8.9 | 19 |
| 29 | 21 | 25 | 33 | 23 | 86 | 105 | 58 | 33 | 15 | 20 | 13 | 19 |
| 30 | 19 | 22 | 28 | 22 | --- | 97 | 55 | 33 | 16 | 17 | 12 | 17 |
| 31 | 18 | --- | 27 | 21 | --- | 90 | --- | 31 | --- | 19 | 12 | --- |
| TOTAL | 498.5 | 525 | 722 | 1065 | 5701 | 3662 | 4197 | 1401 | 663 | 526.7 | 417.0 | 1226.7 |
| MEAN | 16.1 | 17.5 | 23.3 | 34.4 | 197 | 118 | 140 | 45.2 | 22.1 | 17.0 | 13.5 | 40.9 |
| MAX | 25 | 30 | 49 | 216 | 981 | 238 | 600 | 58 | 32 | 58 | 27 | 302 |
| MIN | 9.5 | 12 | 16 | 17 | 82 | 68 | 55 | 31 | 13 | 7.6 | 8.1 | 3.5 |
| CFSM | .12 | .14 | .18 | .27 | 1.53 | .91 | 1.09 | .35 | .17 | .13 | .10 | .32 |
| IN. | .14 | .15 | .21 | .31 | 1.64 | 1.06 | 1.21 | .40 | .19 | .15 | .12 | .35 |
| CAL YR 1987 | TOTAL | 24381.1 | MEAN | 66.8 | MAX | 1500 | MIN | 9.5 | CFSM | .52 | IN. | 7.03 |
| WTR YR 1988 | TOTAL | 20604.9 | MEAN | 56.3 | MAX | 981 | MIN | 3.5 | CFSM | .44 | IN. | 5.94 |

LITTLE MIAMI RIVER BASIN

163

03241500 MASSIES CREEK AT WILBERFORCE, OH

LOCATION.--Lat 39°43'22", long 83°52'58", Greene County, Hydrologic Unit 05090202, on left bank at bridge on Wilberforce-Clifton Road, 0.5 mi northwest of Wilberforce, 0.6 mi downstream from unnamed right bank tributary and 1.7 mi upstream from Clark Run.

DRAINAGE AREA.--63.2 mi².

PERIOD OF RECORD.--September 1952 to current year. Prior to October 1962, published as Massie Creek at Wilberforce.

REVISIONS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 865.15 ft above National Geodetic Vertical Datum of 1929. Aug. 4, 1972 to Sept. 30, 1979 at site 150 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Jan. 3-18, 26-31. Records good except for estimated daily discharges, which are fair. Water-quality data collected at this site 1965 to 1977. Sediment data collected 1952 to 1958. Satellite telemeter at station.

AVERAGE DISCHARGE.--36 years, 61.9 ft³/s, 13.30 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,300 ft³/s Jan. 21, 1959, Mar. 4, 1963, gage height, 11.25 ft, from rating curve extended above 3,100 ft³/s; minimum, 0.3 ft³/s Sept. 3-7, 1954.

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|--------|------|-----------------------------------|---------------------|
| Jan. 19 | 2130 | 601 | 4.86 | Feb. 2 | 0330 | *660 | *5.00 |

Minimum, 1.3 ft³/s Aug. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|----------|-------|-------|------|------|------|------|-------|-------|-------|-------|------|
| 1 | 1.6 | 4.7 | 5.5 | 9.1 | 76 | 36 | 44 | 22 | 10 | 4.2 | 4.1 | 2.4 | |
| 2 | 1.4 | 4.8 | 5.5 | 8.3 | 586 | 34 | 44 | 21 | 10 | 3.2 | 3.5 | 2.2 | |
| 3 | 1.4 | 5.0 | 6.7 | 6.0 | 435 | 64 | 208 | 22 | 11 | 2.6 | 2.6 | 6.6 | |
| 4 | 1.5 | 5.1 | 8.0 | 5.2 | 303 | 195 | 421 | 21 | 11 | 2.4 | 2.2 | 7.9 | |
| 5 | 1.8 | 5.1 | 6.3 | 4.7 | 204 | 159 | 249 | 21 | 9.8 | 2.4 | 1.9 | 4.9 | |
| 6 | 2.3 | 4.7 | 5.3 | 4.5 | 138 | 189 | 178 | 21 | 9.1 | 2.4 | 5.8 | 4.0 | |
| 7 | 3.2 | 5.2 | 5.2 | 4.3 | 111 | 164 | 191 | 21 | 10 | 1.9 | 4.6 | 3.1 | |
| 8 | 3.2 | 5.5 | 5.0 | 4.2 | 85 | 128 | 159 | 20 | 8.3 | 1.8 | 6.5 | 2.7 | |
| 9 | 3.3 | 5.8 | 4.8 | 4.1 | 72 | 113 | 122 | 22 | 8.1 | 1.8 | 6.1 | 2.4 | |
| 10 | 3.9 | 5.4 | 4.8 | 4.0 | 48 | 99 | 100 | 24 | 8.1 | 1.9 | 4.1 | 2.2 | |
| 11 | 5.6 | 4.9 | 4.8 | 4.5 | 42 | 80 | 87 | 21 | 7.6 | 1.9 | 3.5 | 2.3 | |
| 12 | 4.2 | 4.4 | 5.1 | 5.1 | 38 | 72 | 74 | 19 | 7.1 | 1.9 | 2.9 | 6.8 | |
| 13 | 3.8 | 4.4 | 4.7 | 4.7 | 63 | 71 | 64 | 20 | 6.1 | 1.8 | 2.6 | 85 | |
| 14 | 3.9 | 4.4 | 4.4 | 4.5 | 56 | 63 | 58 | 23 | 7.2 | 2.1 | 2.4 | 106 | |
| 15 | 4.0 | 4.4 | 8.7 | 4.3 | 75 | 55 | 50 | 23 | 6.1 | 2.3 | 2.2 | 56 | |
| 16 | 3.7 | 4.4 | 7.3 | 4.1 | 90 | 46 | 44 | 21 | 7.9 | 1.8 | 1.9 | 36 | |
| 17 | 3.4 | 5.0 | 6.0 | 3.9 | 73 | 42 | 40 | 20 | 9.1 | 1.6 | 1.8 | 31 | |
| 18 | 4.3 | 5.4 | 5.5 | 5.0 | 79 | 39 | 44 | 17 | 7.7 | 2.0 | 1.3 | 25 | |
| 19 | 4.1 | 5.1 | 5.6 | 95 | 116 | 40 | 39 | 17 | 7.3 | 5.9 | 2.4 | 21 | |
| 20 | 4.1 | 4.9 | 7.4 | 135 | 240 | 39 | 35 | 17 | 5.4 | 7.9 | 3.4 | 20 | |
| 21 | 4.3 | 4.5 | 6.9 | 55 | 146 | 33 | 33 | 17 | 5.8 | 11 | 2.5 | 15 | |
| 22 | 4.2 | 4.1 | 5.6 | 32 | 101 | 29 | 36 | 16 | 4.5 | 7.4 | 1.7 | 13 | |
| 23 | 4.4 | 4.3 | 5.3 | 24 | 94 | 29 | 33 | 21 | 4.2 | 6.1 | 5.8 | 12 | |
| 24 | 4.6 | 4.8 | 5.0 | 21 | 91 | 29 | 32 | 20 | 4.0 | 4.9 | 5.6 | 10 | |
| 25 | 5.1 | 6.8 | 8.3 | 18 | 74 | 47 | 28 | 21 | 3.9 | 5.7 | 2.8 | 10 | |
| 26 | 5.2 | 10 | 16 | 16 | 57 | 135 | 28 | 15 | 3.6 | 12 | 2.6 | 8.0 | |
| 27 | 6.2 | 7.7 | 13 | 14 | 53 | 99 | 26 | 14 | 3.1 | 6.4 | 2.7 | 6.5 | |
| 28 | 5.8 | 6.6 | 12 | 13 | 43 | 75 | 25 | 12 | 2.9 | 5.3 | 2.7 | 6.0 | |
| 29 | 5.5 | 7.7 | 11 | 12 | 40 | 64 | 25 | 12 | 3.7 | 4.6 | 5.6 | 5.6 | |
| 30 | 5.4 | 6.2 | 8.7 | 11 | --- | 57 | 23 | 12 | 4.3 | 4.0 | 3.7 | 6.3 | |
| 31 | 4.7 | --- | 9.8 | 11 | --- | 45 | --- | 11 | --- | 5.2 | 2.6 | --- | |
| TOTAL | 120.1 | 161.3 | 218.2 | 547.5 | 3629 | 2370 | 2540 | 584 | 206.9 | 126.4 | 104.1 | 519.9 | |
| MEAN | 3.87 | 5.38 | 7.04 | 17.7 | 125 | 76.5 | 84.7 | 18.8 | 6.90 | 4.08 | 3.36 | 17.3 | |
| MAX | 6.2 | 10 | 16 | 135 | 586 | 195 | 421 | 24 | 11 | 12 | 6.5 | 106 | |
| MIN | 1.4 | 4.1 | 4.4 | 3.9 | 38 | 29 | 23 | 11 | 2.9 | 1.6 | 1.3 | 2.2 | |
| CFSM | .06 | .09 | .11 | .28 | 1.98 | 1.21 | 1.34 | .30 | .11 | .06 | .05 | .27 | |
| IN. | .07 | .09 | .13 | .32 | 2.14 | 1.39 | 1.50 | .34 | .12 | .07 | .06 | .31 | |
| CAL YR 1987 | TOTAL | 11787.63 | | MEAN | 32.3 | MAX | 888 | MIN | .89 | CFSM | .51 | IN. | 6.94 |
| WTR YR 1988 | TOTAL | 11127.4 | | MEAN | 30.4 | MAX | 586 | MIN | 1.3 | CFSM | .48 | IN. | 6.55 |

LITTLE MIAMI RIVER BASIN

03245500 LITTLE MIAMI RIVER AT MILFORD, OH
National Stream-Quality Accounting Network Station

LOCATION.--Lat 39°10'17", long 84°17'53", Clermont County, Hydrologic Unit 05090202, on right bank 500 ft downstream from Wooster Pike Bridge on U.S. Highway 50 in Milford, 1.2 mi upstream from East Fork, 6.4 mi downstream from North Branch Creek, and at mile 12.9.

DRAINAGE AREA.--1,203 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1915 to September 1917, October 1917 to May 1920 (gage heights only), March 1925 to September 1936, October 1938 to current year. Monthly discharge only for some periods, published in WSP 1305, published as "at Miamiville" 1915-20.

REVISED RECORDS.--WSP 728: 1931. WSP 743: 1932. WSP 873: 1925-36. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 494.35 ft above National Geodetic Vertical Datum of 1929. June 22, 1915 to May 14, 1920, nonrecording gage at site 4 mi upstream at different datum. Mar. 11, 1925 to Aug. 16, 1928, nonrecording gage at bridge 500 ft upstream at datum 5.72 ft higher. Aug. 17, 1928 to Sept. 30, 1977 water-stage recorder at same site at datum 5.00 ft higher.

REMARKS.--Estimated daily discharges: Jan. 1-18, 24-Feb. 21, Mar. 10, 28-31, Apr. 1-3 and Aug. 11-Sept. 8. Records fair except for periods of estimated daily discharges which are poor. Some regulation since 1948 by Cowan Lake, capacity 12,000 acre-ft, 45 mi upstream on Cowan Creek, tributary to Todd Fork, and Caesar Creek Lake capacity 242,200 acre-ft 41.3 mi upstream on Caesar Creek. National Weather Service gage height telemeter and U.S. Army Corps of Engineers satellite telemeter at station.

AVERAGE DISCHARGE.--63 years, (1915-17, 1925-36, 1938-88), 1,236 ft³/s, 13.95 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 84,100 ft³/s Jan. 22, 1959, gage height, 27.30 ft present datum, from rating curve extended above 60,000 ft³/s on basis of slope-area measurement of peak flow; minimum observed, 27 ft³/s, Sept. 18, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 30.5 ft, present datum, from information by U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 15,000 ft³/s and maximum (*).

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Mar. 4 | 0338 | *13,700 | *12.49 | | | | |

Minimum daily discharge, 52 ft³/s Aug. 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|--------------|----------|-----------|--------|----------|----------|-------|------|------|------|------|------|
| 1 | 110 | 315 | 248 | 250 | 2500 | 577 | 1100 | 357 | 200 | 102 | 204 | 132 |
| 2 | 104 | 320 | 223 | 210 | 9000 | 501 | 1080 | 348 | 193 | 112 | 191 | 132 |
| 3 | 97 | 460 | 219 | 180 | 6400 | 2250 | 1040 | 334 | 181 | 104 | 152 | 203 |
| 4 | 94 | 619 | 248 | 170 | 4700 | 11900 | 6440 | 322 | 177 | 99 | 140 | 328 |
| 5 | 95 | 636 | 221 | 160 | 3600 | 4580 | 4710 | 314 | 174 | 98 | 136 | 290 |
| 6 | 106 | 640 | 202 | 150 | 2800 | 3170 | 3620 | 312 | 171 | 92 | 220 | 230 |
| 7 | 133 | 640 | 177 | 145 | 2100 | 2220 | 4290 | 310 | 167 | 89 | 243 | 200 |
| 8 | 114 | 640 | 162 | 150 | 1600 | 1600 | 2910 | 299 | 161 | 89 | 225 | 180 |
| 9 | 110 | 652 | 177 | 145 | 1250 | 1380 | 1930 | 296 | 161 | 89 | 154 | 156 |
| 10 | 112 | 652 | 185 | 140 | 1000 | 1250 | 1550 | 298 | 152 | 83 | 139 | 144 |
| 11 | 239 | 652 | 184 | 140 | 880 | 1100 | 1340 | 348 | 148 | 85 | 128 | 136 |
| 12 | 313 | 652 | 163 | 140 | 740 | 945 | 1180 | 297 | 145 | 97 | 143 | 206 |
| 13 | 170 | 652 | 155 | 150 | 740 | 1040 | 918 | 284 | 142 | 93 | 166 | 853 |
| 14 | 137 | 423 | 156 | 150 | 750 | 973 | 830 | 379 | 138 | 89 | 115 | 676 |
| 15 | 126 | 332 | 254 | 145 | 1000 | 1230 | 705 | 491 | 133 | 89 | 96 | 519 |
| 16 | 119 | 240 | 271 | 140 | 1400 | 912 | 615 | 348 | 128 | 89 | 83 | 331 |
| 17 | 116 | 212 | 250 | 145 | 1100 | 844 | 563 | 294 | 137 | 104 | 73 | 1160 |
| 18 | 196 | 196 | 210 | 160 | 1300 | 817 | 713 | 267 | 150 | 88 | 72 | 750 |
| 19 | 281 | 185 | 184 | 885 | 2100 | 850 | 777 | 259 | 142 | 119 | 52 | 354 |
| 20 | 139 | 178 | 204 | 5510 | 3000 | 836 | 632 | 252 | 127 | 467 | 560 | 280 |
| 21 | 114 | 178 | 195 | 1530 | 2000 | 779 | 553 | 247 | 131 | 1010 | 370 | 268 |
| 22 | 111 | 174 | 205 | 894 | 1370 | 729 | 1070 | 243 | 128 | 663 | 77 | 238 |
| 23 | 129 | 171 | 189 | 684 | 1980 | 697 | 987 | 315 | 122 | 282 | 69 | 210 |
| 24 | 222 | 174 | 186 | 500 | 2340 | 678 | 682 | 324 | 116 | 258 | 108 | 200 |
| 25 | 315 | 206 | 231 | 250 | 2070 | 1430 | 552 | 349 | 112 | 186 | 200 | 215 |
| 26 | 292 | 235 | 689 | 230 | 1770 | 2560 | 490 | 299 | 109 | 199 | 131 | 200 |
| 27 | 162 | 307 | 580 | 220 | 1330 | 1570 | 447 | 260 | 108 | 553 | 81 | 183 |
| 28 | 141 | 274 | 469 | 200 | 1300 | 1300 | 420 | 241 | 103 | 385 | 79 | 169 |
| 29 | 149 | 355 | 413 | 190 | 1210 | 1260 | 410 | 226 | 100 | 228 | 96 | 160 |
| 30 | 184 | 272 | 355 | 180 | --- | 1240 | 386 | 217 | 102 | 187 | 112 | 153 |
| 31 | 210 | --- | 299 | 450 | --- | 1180 | --- | 210 | --- | 187 | 143 | --- |
| TOTAL | 4940 | 11642 | 7904 | 14593 | 63330 | 52398 | 42940 | 9340 | 4258 | 6415 | 4758 | 9256 |
| MEAN | 159 | 388 | 255 | 471 | 2184 | 1690 | 1431 | 301 | 142 | 207 | 153 | 309 |
| MAX | 315 | 652 | 689 | 5510 | 9000 | 11900 | 6440 | 491 | 200 | 1010 | 560 | 1160 |
| MIN | 94 | 171 | 155 | 140 | 740 | 501 | 386 | 210 | 100 | 83 | 52 | 132 |
| CFSM | .13 | .32 | .21 | .39 | 1.82 | 1.41 | 1.19 | .25 | .12 | .17 | .13 | .26 |
| IN. | .15 | .36 | .24 | .45 | 1.96 | 1.62 | 1.33 | .29 | .13 | .20 | .15 | .29 |
| CAL YR 1987 | TOTAL 227990 | MEAN 625 | MAX 7650 | MIN 94 | CFSM .52 | IN. 7.04 | | | | | | |
| WTR YR 1988 | TOTAL 231774 | MEAN 633 | MAX 11900 | MIN 52 | CFSM .53 | IN. 7.17 | | | | | | |

LITTLE MIAMI RIVER BASIN

165

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: January 1979 to current year.

REMARKS.--Samples collected as part of the National Stream Quality Accounting Network. Water-quality monitor data collected from May 1975 to September 1986.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 4,850 mg/L Aug. 8, 1984 minimum daily mean 1 mg/L several days in 1979, 1980, 1982-84.

SEDIMENT LOADS: Maximum daily 185,000 tons Sept. 14, 1979; minimum daily, 0.85 tons Dec. 15, 1982.

EXTREMES FOR CURRENT YEAR.--Sediment discharge not available - will be published in 1989 WDR.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DATE | TIME | STREAM- FLOW, INSTAN- TANEOUS (CFS) | SPE- CIFIC CON- DUCT- ANCE (US/CM) | PH (STAND- ARD UNITS) | TEMPER- ATURE AIR (DEG C) | TEMPER- ATURE WATER (DEG C) | TUR- BID- ITY (FTU) | OXYGEN, DIS- SOLVED (MG/L) | OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) | COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) | STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) |
|-----------|------|---|---|--------------------------------|------------------------------------|--------------------------------------|------------------------------|-------------------------------------|--|--|--|
| OCT 20... | 1130 | 132 | 835 | 8.3 | 15.0 | 13.0 | 3.9 | 9.2 | 90 | 450 | 150 |
| JAN 12... | 1130 | 172 | 999 | 8.0 | 3.0 | 1.0 | 1.2 | 13.6 | 99 | K15000 | 4300 |
| FEB 17... | 1130 | 1100 | 670 | 8.0 | 7.5 | 2.0 | 17 | 12.9 | 96 | 3000 | 1600 |
| MAY 17... | 1115 | 297 | 705 | 8.2 | 19.0 | 20.5 | 2.3 | 9.4 | 108 | 200 | 50 |
| JUL 27... | 1215 | 728 | 610 | 8.1 | 28.0 | 27.0 | 46 | 7.3 | 94 | 1200 | 1400 |
| AUG 31... | 1130 | 85 | 680 | 8.2 | 25.5 | 15.0 | 12 | 9.8 | 100 | 750 | 330 |

| DATE | HARD- NESS TOTAL (MG/L AS CACO3) | HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 | CALCIUM DIS- SOLVED (MG/L AS CA) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) | SODIUM, DIS- SOLVED (MG/L AS NA) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) | BICAR- BONATE IT-FLD (MG/L AS HCO3) | CAR- BONATE IT-FLD (MG/L AS CO3) | ALKA- LINITY WAT WH TOT FLD MG/L AS CACO3 | SULFATE DIS- SOLVED (MG/L AS SO4) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) |
|-----------|---|---|--|--|--|---|--|---|--|---|---|
| OCT 20... | 330 | 73 | 82 | 31 | 52 | 4.9 | 268 | 24 | 259 | 58 | 76 |
| JAN 12... | 400 | 50 | 100 | 36 | 62 | 5.2 | 425 | 0 | 341 | 75 | 100 |
| FEB 17... | 240 | 70 | 59 | 22 | 41 | 3.4 | 205 | 0 | 166 | 44 | 77 |
| MAY 17... | 280 | 82 | 70 | 26 | 38 | 3.7 | 244 | 0 | 200 | 57 | 57 |
| JUL 27... | 230 | 51 | 58 | 20 | 36 | 4.8 | 215 | 0 | 175 | 55 | 55 |
| AUG 31... | 220 | 16 | 57 | 20 | 49 | 4.8 | 225 | 0 | 182 | 56 | 74 |

| DATE | FLUO- RIDE, DIS- SOLVED (MG/L AS F) | SILICA, DIS- SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) | PHOS- PHOROUS TOTAL (MG/L AS P) | PHOS- PHOROUS DIS- SOLVED (MG/L AS P) | PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P) |
|-----------|--|---|--|---|---|--|---|--|---|--|--|
| OCT 20... | 0.3 | 0.92 | 453 | 0.05 | 3.0 | 0.18 | 0.19 | 0.70 | 0.98 | 0.92 | 0.90 |
| JAN 12... | 0.4 | 7.9 | 592 | 0.06 | 3.9 | 0.90 | 0.87 | 1.6 | 1.10 | 1.10 | 0.96 |
| FEB 17... | 0.3 | 4.4 | 377 | 0.02 | 2.8 | 0.31 | 0.30 | 1.3 | 0.23 | 0.15 | 0.13 |
| MAY 17... | 0.4 | 1.2 | 375 | 0.16 | 2.0 | 0.13 | 0.16 | 0.60 | 0.46 | 0.44 | 0.37 |
| JUL 27... | 0.3 | 8.8 | 356 | 0.08 | 2.3 | 0.12 | 0.15 | 0.60 | 0.65 | 0.51 | 0.47 |
| AUG 31... | 0.4 | 7.0 | 388 | 0.07 | 2.5 | 0.15 | 0.16 | 0.80 | 0.84 | 0.73 | 0.66 |

LITTLE MIAMI RIVER BASIN

03245500 LITTLE MIAMI RIVER AT MILFORD, OH--Continued

| DATE | ALUM- INUM, DIS- SOLVED (UG/L AS AL) | ARSENIC DIS- SOLVED (UG/L AS AS) | BARIUM, DIS- SOLVED (UG/L AS BA) | BERYL- LIUM, DIS- SOLVED (UG/L AS BE) | CADMIUM DIS- SOLVED (UG/L AS CD) | CHRO- MIUM, DIS- SOLVED (UG/L AS CR) | COBALT, DIS- SOLVED (UG/L AS CO) | COPPER, DIS- SOLVED (UG/L AS CU) | IRON, DIS- SOLVED (UG/L AS FE) | LEAD, DIS- SOLVED (UG/L AS PB) | LITHIUM DIS- SOLVED (UG/L AS LI) |
|-----------|---|--|--|--|--|---|--|--|--|--|--|
| OCT 20... | 20 | 2 | 64 | <0.5 | <1 | <1 | <3 | 4 | 4 | <5 | 5 |
| JAN 12... | <10 | 1 | 77 | <0.5 | <1 | <1 | <3 | 4 | 14 | <5 | <4 |
| FEB 17... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAY 17... | <10 | 2 | 68 | <0.5 | <1 | <1 | <3 | 5 | 8 | <5 | 4 |
| JUL 27... | 10 | 2 | 61 | <0.5 | <1 | <1 | <3 | 2 | 24 | <5 | 6 |
| AUG 31... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| DATE | MANGA- NESE, DIS- SOLVED (UG/L AS MN) | MERCURY DIS- SOLVED (UG/L AS HG) | MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) | NICKEL, DIS- SOLVED (UG/L AS NI) | SELE- NIUM, DIS- SOLVED (UG/L AS SE) | SILVER, DIS- SOLVED (UG/L AS AG) | STRON- TIUM, DIS- SOLVED (UG/L AS SR) | VANA- DIUM, DIS- SOLVED (UG/L AS V) | ZINC, DIS- SOLVED (UG/L AS ZN) | SEDI- MENT, SUS- PENDEDED (MG/L) |
|-----------|--|--|---|--|---|--|--|--|--|--|
| OCT 20... | 10 | <0.1 | <10 | 1 | <1 | 1.0 | 360 | <6 | 7 | 36 |
| JAN 12... | 27 | <0.1 | <10 | 1 | <1 | <1.0 | 450 | <6 | 21 | 10 |
| FEB 17... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 30 |
| MAY 17... | 30 | <0.1 | <10 | 5 | <1 | <1.0 | 360 | <6 | 6 | 15 |
| JUL 27... | 8 | <0.1 | 10 | 3 | <1 | <1.0 | 260 | <6 | 9 | 90 |
| AUG 31... | -- | -- | -- | -- | -- | -- | -- | -- | -- | 35 |

K Results based on colony count outside the acceptable range

LITTLE MIAMI RIVER BASIN

167

03247050 EAST FORK LITTLE MIAMI RIVER NEAR BATAVIA, OH

LOCATION.--Lat 39°03'36", long 84°10'32", Clermont County, Hydrologic Unit 05090202, on right bank on Elk Lick Road, 230 ft upstream from unnamed right bank tributary, 1,400 ft upstream from Lucy Run, 1.3 mi south of Batavia, and at mile 15.7.

DRAINAGE AREA.--352 mi², includes that of unnamed tributary.

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

GAGE.--Water-stage recorder. Datum of gage is 571.68 ft above National Geodetic Vertical Datum of 1929. Prior to July 17, 1968, nonrecording gage 1,100 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by William H. Harsha reservoir, formerly East Fork Lake, since 1977. Water-quality data collected at this site 1965 to 1977. Satellite telemeter at station operated for U.S. Army Corps of Engineers.

AVERAGE DISCHARGE.--11 years (water years 1966-76), 432 ft³/s, 12 years (water years 1977-88) 396 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,700 ft³/s Apr. 2, 1970, gage height, 20.31 ft; minimum daily, 0.14 ft³/s Sept. 23, 27, 1967. Maximum discharge since start of construction of East Fork Dam 31,000 ft³/s Aug. 30, 1974, gage height, 20.80 ft in gage well, 21.8 ft from floodmarks, result of failure of cofferdam.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1964 reached a stage of 21.46 ft at site 1,100 ft downstream from information by local resident, discharge, about 32,000 ft³/s, from flood study.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,150 ft³/s Feb. 5, gage height, 11.40 ft; minimum daily, 31 ft³/s Sept. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|-------|------|------|-------|-------|-------|------|------|------|------|------|
| 1 | 33 | 40 | 86 | 67 | 433 | 97 | 84 | 35 | 33 | 32 | 33 | 33 |
| 2 | 33 | 40 | 86 | 58 | 512 | 105 | 118 | 35 | 33 | 32 | 33 | 33 |
| 3 | 32 | 40 | 68 | 35 | 582 | 180 | 428 | 35 | 33 | 32 | 33 | 48 |
| 4 | 32 | 40 | 36 | 35 | 1880 | 672 | 1070 | 35 | 33 | 32 | 33 | 38 |
| 5 | 32 | 40 | 35 | 35 | 2830 | 1640 | 2390 | 35 | 33 | 32 | 33 | 35 |
| 6 | 33 | 40 | 35 | 35 | 3070 | 2010 | 2710 | 34 | 33 | 32 | 36 | 35 |
| 7 | 34 | 40 | 35 | 35 | 3010 | 1990 | 2690 | 34 | 33 | 32 | 34 | 31 |
| 8 | 33 | 40 | 35 | 35 | 2960 | 2380 | 2650 | 33 | 33 | 32 | 33 | 34 |
| 9 | 33 | 40 | 35 | 35 | 2460 | 2710 | 2610 | 33 | 33 | 32 | 32 | 34 |
| 10 | 33 | 41 | 35 | 35 | 1330 | 2300 | 1420 | 33 | 33 | 34 | 32 | 34 |
| 11 | 34 | 43 | 35 | 35 | 600 | 1270 | 401 | 33 | 33 | 34 | 32 | 33 |
| 12 | 34 | 43 | 35 | 34 | 315 | 274 | 396 | 33 | 33 | 34 | 32 | 34 |
| 13 | 34 | 44 | 35 | 33 | 221 | 138 | 379 | 33 | 33 | 34 | 32 | 34 |
| 14 | 34 | 49 | 35 | 33 | 116 | 214 | 274 | 33 | 33 | 34 | 32 | 33 |
| 15 | 34 | 49 | 37 | 33 | 154 | 254 | 43 | 33 | 33 | 34 | 32 | 33 |
| 16 | 34 | 49 | 36 | 33 | 233 | 196 | 37 | 33 | 33 | 34 | 32 | 33 |
| 17 | 34 | 50 | 35 | 33 | 306 | 115 | 36 | 33 | 33 | 34 | 32 | 33 |
| 18 | 35 | 49 | 35 | 34 | 306 | 114 | 41 | 33 | 32 | 34 | 32 | 33 |
| 19 | 35 | 49 | 35 | 97 | 390 | 114 | 39 | 33 | 32 | 36 | 33 | 33 |
| 20 | 35 | 49 | 35 | 153 | 479 | 114 | 37 | 33 | 32 | 58 | 33 | 33 |
| 21 | 35 | 49 | 35 | 756 | 477 | 114 | 37 | 33 | 34 | 50 | 33 | 33 |
| 22 | 36 | 49 | 35 | 728 | 474 | 92 | 39 | 33 | 33 | 39 | 33 | 33 |
| 23 | 38 | 49 | 35 | 195 | 629 | 59 | 69 | 35 | 33 | 37 | 34 | 33 |
| 24 | 39 | 49 | 35 | 152 | 824 | 59 | 142 | 34 | 33 | 36 | 34 | 34 |
| 25 | 39 | 68 | 38 | 223 | 542 | 71 | 185 | 33 | 33 | 35 | 33 | 34 |
| 26 | 39 | 92 | 54 | 483 | 200 | 84 | 149 | 33 | 32 | 35 | 33 | 34 |
| 27 | 40 | 81 | 40 | 483 | 99 | 122 | 42 | 33 | 32 | 34 | 33 | 33 |
| 28 | 40 | 53 | 51 | 483 | 99 | 148 | 35 | 33 | 32 | 34 | 33 | 33 |
| 29 | 40 | 71 | 69 | 483 | 97 | 148 | 35 | 33 | 32 | 34 | 37 | 32 |
| 30 | 40 | 73 | 67 | 404 | --- | 148 | 35 | 33 | 33 | 34 | 33 | 32 |
| 31 | 40 | --- | 67 | 301 | --- | 134 | --- | 33 | --- | 33 | 33 | --- |
| TOTAL | 1097 | 1509 | 1365 | 5614 | 25628 | 18066 | 18621 | 1038 | 984 | 1089 | 1023 | 1018 |
| MEAN | 35.4 | 50.3 | 44.0 | 181 | 884 | 583 | 621 | 33.5 | 32.8 | 35.1 | 33.0 | 33.9 |
| MAX | 40 | 92 | 86 | 756 | 3070 | 2710 | 2710 | 35 | 34 | 58 | 37 | 48 |
| MIN | 32 | 40 | 35 | 33 | 97 | 59 | 35 | 33 | 32 | 32 | 32 | 31 |
| CAL YR 1987 | TOTAL | 60461 | MEAN | 166 | MAX | 2300 | MIN | 25 | | | | |
| WTR YR 1988 | TOTAL | 77052 | MEAN | 211 | MAX | 3070 | MIN | 31 | | | | |

LITTLE MIAMI RIVER BASIN

03247500 EAST FORK LITTLE MIAMI RIVER AT PERINTOWN, OH

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

DRAINAGE AREA.--476 mi².

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

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

REMARKS.--Estimated daily discharges: Apr. 8-20. Records fair except those for period of estimated record, which are poor. Occasional regulation by Stonelick Lake 14 mi upstream. Surface area at spillway level, 171 acres. Flow regulated by William H. Harsha Reservoir, formerly East Fork Lake, since 1977. Water-quality data collected at this site 1964 to 1977. U.S. Army Corps of Engineers Satellite telemeter at station.

AVERAGE DISCHARGE.--65 years (1915-17, 1925-88), 545 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,400 ft³/s Mar. 10, 1964, gage height, 23.84 ft; minimum daily, 0.4 ft³/s July 24, 1930, Sept. 11, 12, 23, 1939; minimum gage height, -0.18 ft Oct. 3-7, 1917. Maximum discharge since start of construction of East Fork Dam 23,200 ft³/s Aug. 30, 1974, gage height, 19.52 ft, result of failure of cofferdam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,940 ft³/s Apr. 3, gage height, 10.98 ft; minimum daily, 31 ft³/s July 4-10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|------|------|-------|-------|-------|------|------|------|------|------|
| 1 | 34 | 39 | 81 | 73 | 2160 | 122 | 142 | 62 | 38 | 33 | 35 | 38 |
| 2 | 36 | 39 | 82 | 68 | 5060 | 122 | 226 | 61 | 37 | 32 | 34 | 37 |
| 3 | 34 | 39 | 89 | 47 | 1220 | 644 | 3350 | 60 | 37 | 32 | 33 | 214 |
| 4 | 34 | 40 | 48 | 44 | 2450 | 3430 | 2190 | 58 | 37 | 31 | 33 | 361 |
| 5 | 36 | 36 | 40 | 38 | 2900 | 2290 | 2630 | 56 | 37 | 31 | 45 | 91 |
| 6 | 35 | 37 | 38 | 35 | 3060 | 2440 | 3000 | 55 | 37 | 31 | 89 | 54 |
| 7 | 36 | 38 | 43 | 39 | 3000 | 2320 | 3180 | 54 | 37 | 31 | 75 | 43 |
| 8 | 35 | 40 | 42 | 43 | 3000 | 2540 | 2900 | 53 | 37 | 31 | 49 | 34 |
| 9 | 33 | 37 | 44 | 38 | 2670 | 2880 | 2600 | 52 | 38 | 31 | 42 | 36 |
| 10 | 36 | 34 | 38 | 41 | 1700 | 2610 | 1500 | 51 | 36 | 31 | 39 | 35 |
| 11 | 36 | 40 | 39 | 42 | 874 | 1670 | 620 | 50 | 36 | 33 | 37 | 33 |
| 12 | 35 | 42 | 41 | 46 | 380 | 424 | 600 | 49 | 35 | 34 | 37 | 33 |
| 13 | 34 | 43 | 38 | 38 | 309 | 266 | 580 | 47 | 36 | 34 | 37 | 37 |
| 14 | 35 | 46 | 37 | 37 | 149 | 293 | 150 | 47 | 36 | 34 | 36 | 35 |
| 15 | 36 | 48 | 49 | 42 | 427 | 318 | 94 | 46 | 36 | 33 | 36 | 33 |
| 16 | 35 | 49 | 50 | 37 | 371 | 270 | 90 | 45 | 36 | 32 | 36 | 34 |
| 17 | 36 | 55 | 42 | 41 | 439 | 159 | 94 | 44 | 37 | 32 | 36 | 64 |
| 18 | 35 | 46 | 40 | 52 | 438 | 148 | 100 | 44 | 35 | 32 | 36 | 49 |
| 19 | 37 | 48 | 43 | 611 | 589 | 157 | 100 | 43 | 36 | 43 | 41 | 43 |
| 20 | 35 | 47 | 49 | 1310 | 1010 | 152 | 94 | 46 | 36 | 240 | 63 | 45 |
| 21 | 34 | 46 | 46 | 784 | 700 | 141 | 84 | 44 | 38 | 355 | 74 | 39 |
| 22 | 35 | 46 | 40 | 1080 | 651 | 131 | 102 | 43 | 35 | 84 | 49 | 37 |
| 23 | 39 | 48 | 41 | 239 | 758 | 91 | 150 | 51 | 34 | 54 | 44 | 36 |
| 24 | 38 | 46 | 40 | 215 | 1150 | 88 | 191 | 50 | 34 | 46 | 44 | 36 |
| 25 | 38 | 60 | 56 | 153 | 798 | 289 | 235 | 45 | 33 | 41 | 39 | 40 |
| 26 | 37 | 86 | 160 | 506 | 293 | 408 | 220 | 43 | 33 | 38 | 39 | 35 |
| 27 | 40 | 88 | 80 | 529 | 145 | 218 | 91 | 42 | 33 | 38 | 38 | 35 |
| 28 | 38 | 64 | 74 | 544 | 130 | 212 | 71 | 41 | 32 | 41 | 35 | 35 |
| 29 | 37 | 82 | 87 | 542 | 127 | 198 | 67 | 40 | 32 | 37 | 70 | 34 |
| 30 | 40 | 70 | 77 | 494 | --- | 185 | 64 | 40 | 33 | 37 | 47 | 34 |
| 31 | 38 | --- | 82 | 333 | --- | 174 | --- | 39 | --- | 37 | 40 | --- |
| TOTAL | 1117 | 1479 | 1756 | 8141 | 36958 | 25390 | 25515 | 1501 | 1067 | 1669 | 1388 | 1710 |
| MEAN | 36.0 | 49.3 | 56.6 | 263 | 1274 | 819 | 851 | 48.4 | 35.6 | 53.8 | 44.8 | 57.0 |
| MAX | 40 | 88 | 160 | 1310 | 5060 | 3430 | 3350 | 62 | 38 | 355 | 89 | 361 |
| MIN | 33 | 34 | 37 | 35 | 127 | 88 | 64 | 39 | 32 | 31 | 33 | 33 |
| CAL YR 1987 | TOTAL | 84759 | MEAN | 232 | MAX | 3030 | MIN | 27 | | | | |
| WTR YR 1988 | TOTAL | 107691 | MEAN | 294 | MAX | 5060 | MIN | 31 | | | | |

MILL CREEK BASIN

169

03255500 MILL CREEK AT READING, OH

LOCATION.--Lat 39°13'14", long 84°26'49", in sec. 32, R.1, T.4, Hamilton County, Hydrologic Unit 05090203, on right bank at upstream side of Koehler Street Bridge at Reading, 1.0 mi upstream from West Fork Mill Creek, and 13.0 mi upstream from mouth.

DRAINAGE AREA.--73.0 mi².

PERIOD OF RECORD.--October 1938 to April 1939, June 1939 to current year.

REVISED RECORDS.--WSP 1908: Drainage area. WRD OH-83-1: 1980-82 (P).

GAGE.--Water-stage recorder. Datum of gage is 527.00 ft above Ohio River datum. Prior to Oct. 1, 1951, water-stage recorder or nonrecording gage at same site at datum 4.00 ft higher. Oct. 1, 1951, to Apr. 25, 1954, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Jan. 3-16, 26-30. Records fair except for periods of estimated record, which are poor. Some diversion and ground water pumpage from Mill Creek and Great Miami River basin by industrial plants of the greater Cincinnati area upstream from station. Water-quality data collected at this site 1965 to 1977.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,780 ft³/s Mar. 6, 1945, gage height, 20.00 ft present datum; no flow for many days in 1940-41, 1944, 1951.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|---------|------|-----------------------------------|---------------------|--------|------|-----------------------------------|---------------------|
| Jan. 19 | 2000 | 2,070 | 10.57 | Feb. 2 | 0400 | *2,870 | *12.58 |
| Feb. 1 | 1830 | 2,000 | 10.39 | Mar. 3 | 2130 | 2,290 | 11.13 |

Minimum daily 6.3 ft³/s June 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|---------|--------|--------|------|------|------|-------|-------|--------|-------|--------|
| 1 | 13 | 14 | 19 | 44 | 1380 | 30 | 85 | 21 | 10 | 9.2 | 14 | 12 |
| 2 | 12 | 17 | 15 | 20 | 2210 | 49 | 67 | 21 | 10 | 7.6 | 13 | 12 |
| 3 | 10 | 20 | 53 | 14 | 544 | 698 | 457 | 21 | 10 | 6.9 | 12 | 381 |
| 4 | 9.2 | 21 | 58 | 12 | 485 | 1310 | 281 | 21 | 7.2 | 7.0 | 13 | 76 |
| 5 | 11 | 20 | 18 | 11 | 230 | 281 | 131 | 19 | 6.3 | 7.5 | 17 | 26 |
| 6 | 25 | 20 | 12 | 9.6 | 91 | 208 | 262 | 18 | 7.8 | 9.6 | 13 | 24 |
| 7 | 36 | 18 | 12 | 8.8 | 60 | 148 | 298 | 16 | 11 | 9.3 | 8.9 | 23 |
| 8 | 13 | 17 | 12 | 8.6 | 55 | 119 | 155 | 13 | 13 | 9.4 | 9.8 | 17 |
| 9 | 12 | 21 | 17 | 8.0 | 49 | 123 | 105 | 39 | 21 | 9.3 | 10 | 14 |
| 10 | 27 | 22 | 14 | 7.6 | 43 | 86 | 83 | 21 | 10 | 9.2 | 11 | 10 |
| 11 | 66 | 21 | 14 | 7.5 | 53 | 65 | 67 | 16 | 7.7 | 30 | 12 | 9.2 |
| 12 | 16 | 22 | 17 | 7.4 | 57 | 86 | 50 | 16 | 6.9 | 14 | 107 | 84 |
| 13 | 13 | 20 | 9.9 | 7.3 | 36 | 91 | 44 | 14 | 8.6 | 9.0 | 30 | 74 |
| 14 | 13 | 19 | 33 | 7.2 | 66 | 60 | 40 | 16 | 9.8 | 12 | 16 | 24 |
| 15 | 13 | 16 | 203 | 7.0 | 272 | 51 | 36 | 12 | 9.9 | 12 | 12 | 17 |
| 16 | 13 | 19 | 32 | 6.8 | 96 | 46 | 32 | 13 | 39 | 12 | 17 | 27 |
| 17 | 16 | 35 | 16 | 48 | 72 | 42 | 29 | 11 | 19 | 13 | 13 | 34 |
| 18 | 14 | 24 | 13 | 41 | 67 | 60 | 145 | 13 | 9.1 | 16 | 13 | 17 |
| 19 | 13 | 20 | 13 | 520 | 197 | 49 | 49 | 12 | 7.1 | 61 | 123 | 17 |
| 20 | 14 | 21 | 55 | 412 | 188 | 39 | 33 | 11 | 8.4 | 496 | 108 | 33 |
| 21 | 15 | 16 | 19 | 80 | 73 | 36 | 33 | 8.8 | 51 | 229 | 18 | 19 |
| 22 | 15 | 14 | 13 | 41 | 61 | 34 | 174 | 7.7 | 16 | 38 | 12 | 13 |
| 23 | 15 | 25 | 12 | 33 | 114 | 34 | 68 | 122 | 11 | 26 | 51 | 16 |
| 24 | 19 | 48 | 16 | 26 | 71 | 36 | 39 | 63 | 9.2 | 22 | 26 | 36 |
| 25 | 30 | 55 | 177 | 21 | 50 | 237 | 33 | 27 | 7.8 | 25 | 14 | 34 |
| 26 | 15 | 138 | 342 | 15 | 42 | 120 | 30 | 14 | 6.9 | 16 | 12 | 18 |
| 27 | 34 | 40 | 40 | 14 | 39 | 71 | 28 | 12 | 7.9 | 12 | 9.2 | 14 |
| 28 | 21 | 116 | 196 | 13 | 31 | 51 | 28 | 9.9 | 8.8 | 11 | 13 | 14 |
| 29 | 16 | 120 | 59 | 13 | 32 | 44 | 25 | 8.4 | 13 | 12 | 66 | 14 |
| 30 | 16 | 21 | 25 | 14 | --- | 39 | 22 | 7.8 | 13 | 9.8 | 21 | 16 |
| 31 | 14 | --- | 67 | 83 | --- | 48 | --- | 8.6 | --- | 45 | 14 | --- |
| TOTAL | 569.2 | 1000 | 1601.9 | 1560.8 | 6764 | 4391 | 2929 | 633.2 | 376.4 | 1205.8 | 828.9 | 1125.2 |
| MEAN | 18.4 | 33.3 | 51.7 | 50.3 | 233 | 142 | 97.6 | 20.4 | 12.5 | 38.9 | 26.7 | 37.5 |
| MAX | 66 | 138 | 342 | 520 | 2210 | 1310 | 457 | 122 | 51 | 496 | 123 | 381 |
| MIN | 9.2 | 14 | 9.9 | 6.8 | 31 | 30 | 22 | 7.7 | 6.3 | 6.9 | 8.9 | 9.2 |
| CAL YR 1987 | TOTAL | 21449.1 | | MEAN | 58.8 | MAX | 990 | MIN | 8.6 | | | |
| WTR YR 1988 | TOTAL | 22985.4 | | MEAN | 62.8 | MAX | 2210 | MIN | 6.3 | | | |

MILL CREEK BASIN

03259000 MILL CREEK AT CARTHAGE, OH

LOCATION.--Lat 39°12'07", long 84°28'16", in SW 1/4 sec. 1, R.1, T.3, Hamilton County, Hydrologic Unit 05090203, on right bank at Anthony Wayne Avenue Bridge in Carthage, 1.0 mi downstream from West Fork Mill Creek, and 11.0 mi upstream from mouth.

DRAINAGE AREA.--115 mi².

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

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 507.00 ft above Ohio River datum. Prior to Oct. 1, 1954 at same site at datum 512.00 ft above Ohio River Datum. Oct. 1, 1954 to Sept. 30, 1977 at site 100 ft downstream at datum 512.00 ft above Ohio River Datum. Oct. 1, 1977 to Oct. 16, 1984 at site 100 ft upstream at present datum.

REMARKS.--Estimated daily discharges: Oct. 14-22, Jan. 6-12, June 17, Aug. 30-Sept. 8. Records fair except those for periods of estimated record, which are poor. Some inter-basin transfers of water between Mill Creek and Great Miami River basins by industrial and municipal operations. Flow regulated by West Fork Mill Creek Reservoir, 6.9 mi upstream, beginning 1953. Water-quality data collected at this site 1965 to 1977.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,030 ft³/s Sept. 14, 1979, gage height, 21.82 ft present datum, from rating curve extended above 4,000 ft³/s on basis of slope-area measurement of peak flow; no flow many days in 1947-48.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,550 ft³/s Feb. 2, gage height 12.73 ft; minimum daily, 2.6 ft³/s June 26 and July 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|---------|------|------|------|------|------|-------|-------|--------|--------|--------|
| 1 | 13 | 14 | 43 | 67 | 1180 | 41 | 89 | 20 | 20 | 4.7 | 17 | 15 |
| 2 | 11 | 12 | 43 | 51 | 1650 | 60 | 77 | 19 | 11 | 3.2 | 14 | 10 |
| 3 | 10 | 17 | 61 | 45 | 701 | 607 | 504 | 20 | 11 | 2.9 | 12 | 400 |
| 4 | 8.6 | 17 | 69 | 42 | 930 | 983 | 454 | 19 | 4.7 | 2.8 | 13 | 500 |
| 5 | 8.2 | 16 | 64 | 35 | 670 | 660 | 334 | 19 | 4.0 | 2.6 | 17 | 150 |
| 6 | 18 | 15 | 47 | 30 | 240 | 506 | 341 | 17 | 7.4 | 4.5 | 13 | 50 |
| 7 | 49 | 14 | 24 | 27 | 99 | 152 | 465 | 14 | 20 | 4.7 | 6.9 | 30 |
| 8 | 19 | 12 | 15 | 24 | 71 | 124 | 261 | 10 | 27 | 4.9 | 7.5 | 20 |
| 9 | 12 | 14 | 42 | 22 | 67 | 153 | 221 | 49 | 46 | 4.9 | 7.9 | 15 |
| 10 | 20 | 16 | 42 | 20 | 59 | 114 | 95 | 43 | 21 | 5.1 | 10 | 8.9 |
| 11 | 112 | 14 | 40 | 18 | 66 | 92 | 85 | 52 | 14 | 33 | 14 | 6.8 |
| 12 | 99 | 14 | 36 | 17 | 75 | 94 | 89 | 20 | 11 | 16 | 155 | 84 |
| 13 | 28 | 13 | 12 | 16 | 58 | 118 | 63 | 19 | 14 | 6.2 | 224 | 93 |
| 14 | 11 | 14 | 24 | 13 | 71 | 98 | 58 | 16 | 16 | 5.1 | 179 | 33 |
| 15 | 10 | 12 | 144 | 12 | 257 | 72 | 51 | 9.3 | 16 | 4.6 | 18 | 18 |
| 16 | 11 | 14 | 54 | 12 | 105 | 47 | 46 | 10 | 56 | 3.6 | 20 | 29 |
| 17 | 13 | 27 | 42 | 39 | 84 | 44 | 31 | 8.2 | 18 | 3.1 | 24 | 98 |
| 18 | 12 | 23 | 40 | 44 | 79 | 62 | 180 | 10 | 5.9 | 3.7 | 28 | 49 |
| 19 | 11 | 17 | 39 | 380 | 190 | 64 | 98 | 9.1 | 3.4 | 63 | 145 | 40 |
| 20 | 11 | 17 | 65 | 330 | 218 | 73 | 64 | 7.4 | 3.7 | 624 | 211 | 35 |
| 21 | 12 | 13 | 39 | 88 | 115 | 47 | 53 | 6.0 | 58 | 533 | 67 | 19 |
| 22 | 12 | 10 | 18 | 64 | 101 | 46 | 217 | 4.5 | 13 | 184 | 36 | 11 |
| 23 | 13 | 16 | 15 | 59 | 153 | 46 | 170 | 151 | 6.6 | 34 | 79 | 13 |
| 24 | 15 | 26 | 18 | 56 | 115 | 46 | 53 | 79 | 4.6 | 24 | 48 | 33 |
| 25 | 27 | 45 | 119 | 53 | 94 | 269 | 44 | 39 | 3.5 | 25 | 23 | 62 |
| 26 | 14 | 85 | 294 | 80 | 74 | 194 | 33 | 62 | 2.6 | 16 | 34 | 19 |
| 27 | 27 | 38 | 77 | 67 | 51 | 114 | 31 | 93 | 2.7 | 10 | 24 | 13 |
| 28 | 23 | 87 | 165 | 49 | 48 | 81 | 34 | 13 | 4.2 | 8.1 | 26 | 12 |
| 29 | 22 | 95 | 78 | 50 | 48 | 67 | 29 | 14 | 8.2 | 9.9 | 168 | 11 |
| 30 | 22 | 27 | 55 | 46 | --- | 44 | 23 | 15 | 9.5 | 7.7 | 80 | 15 |
| 31 | 21 | --- | 75 | 57 | --- | 48 | --- | 11 | --- | 54 | 35 | --- |
| TOTAL | 694.8 | 754 | 1899 | 1913 | 7669 | 5166 | 4293 | 878.5 | 443.0 | 1708.3 | 1756.3 | 1892.7 |
| MEAN | 22.4 | 25.1 | 61.3 | 61.7 | 264 | 167 | 143 | 28.3 | 14.8 | 55.1 | 56.7 | 63.1 |
| MAX | 112 | 95 | 294 | 380 | 1650 | 983 | 504 | 151 | 58 | 624 | 224 | 500 |
| MIN | 8.2 | 10 | 12 | 12 | 48 | 41 | 23 | 4.5 | 2.6 | 2.6 | 6.9 | 6.8 |
| CAL YR 1987 | TOTAL | 26555.5 | | MEAN | 72.8 | MAX | 1070 | MIN | 6.2 | | | |
| WTR YR 1988 | TOTAL | 29067.6 | | MEAN | 79.4 | MAX | 1650 | MIN | 2.6 | | | |

GREAT MIAMI RIVER BASIN

171

03260700 BOKENGEHALAS CREEK NEAR DE GRAFF, OH

LOCATION.--Lat 40°20'50", long 83°53'28", in E. 1/2 sec. 3, R.14, T.2, Logan County, Hydrologic Unit 05080001, on right bank at downstream side of county road bridge, 2 mi downstream from Bluejacket Creek, 2.8 mi northeast of De Graff, and 4 mi upstream from mouth.

DRAINAGE AREA.--36.3 mi².

PERIOD OF RECORD.--October 1957 to current year. Prior to October 1962, published as Buckongahelas Creek near Degraff.

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,008.76 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 6-9, Feb. 5-9, 12-15, and June 18-July 5. Records fair except those for periods of estimated record, which are poor. Diurnal fluctuation caused by municipal plant operation in Bellefontaine, 9.8 mi upstream. Since storage capacity is small, daily flows are not affected appreciably. Water-quality data collected at this site 1965 to 1973.

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

AVERAGE DISCHARGE.--31 years, 33.1 ft³/s, 12.38 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,780 ft³/s Jan. 21, 1959, gage height, 6.83 ft; minimum daily, 2.2 ft³/s Sept. 29, 30, Oct. 7, 1963.

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 2 | 0945 | *255 | *3.02 | | | | |

Minimum daily discharge, 3.1 ft³/s Sept. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|---------|------|-------|------|------|------|-------|-------|-------|-------|-------|-------|
| 1 | 8.7 | 7.7 | 12 | 14 | 72 | 20 | 24 | 16 | 8.9 | 5.2 | 13 | 6.0 | |
| 2 | 7.9 | 8.1 | 12 | 24 | 179 | 21 | 24 | 16 | 11 | 4.8 | 9.2 | 6.0 | |
| 3 | 7.6 | 8.9 | 13 | 12 | 77 | 22 | 37 | 16 | 12 | 4.6 | 8.6 | 11 | |
| 4 | 6.9 | 8.7 | 19 | 13 | 61 | 22 | 36 | 16 | 9.3 | 4.5 | 8.3 | 8.3 | |
| 5 | 7.3 | 8.5 | 15 | 27 | 45 | 23 | 29 | 16 | 8.6 | 4.6 | 8.0 | 5.9 | |
| 6 | 8.3 | 8.3 | 11 | 15 | 44 | 23 | 40 | 16 | 8.6 | 4.6 | 8.1 | 6.3 | |
| 7 | 11 | 8.1 | 12 | 12 | 40 | 37 | 75 | 15 | 8.7 | 4.6 | 6.3 | 6.4 | |
| 8 | 11 | 7.7 | 13 | 10 | 35 | 72 | 63 | 13 | 8.4 | 4.6 | 6.7 | 6.1 | |
| 9 | 8.9 | 11 | 12 | 9.4 | 26 | 78 | 45 | 17 | 11 | 4.1 | 7.1 | 6.1 | |
| 10 | 8.4 | 9.3 | 12 | 9.0 | 23 | 59 | 35 | 17 | 8.4 | 3.8 | 7.9 | 5.8 | |
| 11 | 11 | 8.9 | 12 | 8.8 | 18 | 43 | 31 | 16 | 8.0 | 3.9 | 8.6 | 4.9 | |
| 12 | 9.0 | 8.8 | 16 | 8.4 | 18 | 39 | 27 | 15 | 7.2 | 4.2 | 7.2 | 5.7 | |
| 13 | 8.8 | 9.0 | 13 | 9.0 | 18 | 35 | 25 | 14 | 7.2 | 4.0 | 6.4 | 14 | |
| 14 | 8.7 | 8.3 | 12 | 9.4 | 21 | 27 | 23 | 13 | 7.6 | 4.2 | 5.9 | 6.9 | |
| 15 | 8.6 | 7.5 | 20 | 8.4 | 23 | 24 | 22 | 12 | 7.4 | 4.0 | 6.5 | 6.1 | |
| 16 | 8.4 | 8.1 | 17 | 8.4 | 24 | 23 | 20 | 12 | 14 | 3.6 | 6.9 | 5.9 | |
| 17 | 7.7 | 8.9 | 16 | 9.2 | 26 | 22 | 19 | 12 | 10 | 3.1 | 6.4 | 7.4 | |
| 18 | 7.4 | 8.7 | 15 | 11 | 39 | 24 | 19 | 12 | 9.4 | 5.0 | 8.3 | 5.6 | |
| 19 | 8.2 | 8.4 | 13 | 13 | 65 | 23 | 19 | 12 | 8.8 | 10 | 9.4 | 5.8 | |
| 20 | 8.5 | 8.4 | 18 | 51 | 135 | 22 | 18 | 12 | 8.0 | 39 | 6.9 | 6.1 | |
| 21 | 8.4 | 8.0 | 18 | 19 | 65 | 21 | 18 | 11 | 7.4 | 54 | 5.3 | 5.8 | |
| 22 | 8.4 | 7.2 | 16 | 16 | 48 | 20 | 18 | 10 | 6.8 | 18 | 5.5 | 5.9 | |
| 23 | 8.4 | 7.9 | 15 | 14 | 68 | 20 | 17 | 18 | 6.4 | 23 | 7.5 | 5.7 | |
| 24 | 8.4 | 8.3 | 14 | 12 | 50 | 20 | 17 | 25 | 6.2 | 16 | 7.1 | 5.1 | |
| 25 | 11 | 10 | 22 | 12 | 35 | 55 | 17 | 15 | 5.8 | 13 | 6.0 | 4.5 | |
| 26 | 8.4 | 13 | 21 | 18 | 28 | 69 | 17 | 13 | 5.4 | 12 | 6.7 | 4.7 | |
| 27 | 14 | 8.9 | 18 | 17 | 25 | 45 | 17 | 11 | 5.2 | 11 | 5.7 | 5.2 | |
| 28 | 10 | 8.9 | 17 | 12 | 21 | 34 | 17 | 10 | 5.2 | 10 | 15 | 5.0 | |
| 29 | 9.1 | 16 | 17 | 12 | 21 | 30 | 17 | 9.7 | 5.2 | 9.7 | 9.9 | 5.1 | |
| 30 | 8.8 | 11 | 17 | 15 | --- | 27 | 16 | 8.9 | 5.0 | 11 | 6.9 | 5.2 | |
| 31 | 8.3 | --- | 15 | 17 | --- | 25 | --- | 9.0 | --- | 21 | 6.3 | --- | |
| TOTAL | 275.5 | 270.5 | 473 | 446.0 | 1350 | 1025 | 802 | 428.6 | 241.1 | 325.1 | 237.6 | 188.5 | |
| MEAN | 8.89 | 9.02 | 15.3 | 14.4 | 46.6 | 33.1 | 26.7 | 13.8 | 8.04 | 10.5 | 7.66 | 6.28 | |
| MAX | 14 | 16 | 22 | 51 | 179 | 78 | 75 | 25 | 14 | 54 | 15 | 14 | |
| MIN | 6.9 | 7.2 | 11 | 8.4 | 18 | 20 | 16 | 8.9 | 5.0 | 3.1 | 5.3 | 4.5 | |
| CFSM | .24 | .25 | .42 | .40 | 1.28 | .91 | .74 | .38 | .22 | .29 | .21 | .17 | |
| IN. | .28 | .28 | .48 | .46 | 1.38 | 1.05 | .82 | .44 | .25 | .33 | .24 | .19 | |
| CAL YR 1987 | TOTAL | 10384.5 | | MEAN | 28.5 | MAX | 641 | MIN | 6.2 | CFSM | .79 | IN. | 10.64 |
| WTR YR 1988 | TOTAL | 6062.9 | | MEAN | 16.6 | MAX | 179 | MIN | 3.1 | CFSM | .46 | IN. | 6.21 |

GREAT MIAMI RIVER BASIN

03261500 GREAT MIAMI RIVER AT SIDNEY, OH

LOCATION.--Lat 40°17'13", long 84°09'00", Shelby County, Hydrologic Unit 05080001, on right bank 50 ft upstream from North Street Bridge in Sidney, and 0.5 mi downstream from Tawawa Creek.

DRAINAGE AREA.--541 mi².

PERIOD OF RECORD.--February 1914 to current year. Prior to October 1962, published as Miami River at Sidney.

REVISED RECORDS.--WSP 1305: 1914(M), 1922(M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 924.70 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 18, 1919, nonrecording gage at site 50 ft downstream at datum 1.76 ft higher. September 18, 1919 to August, 1925, nonrecording gage at site 50 ft downstream at present datum.

REMARKS.--No estimated daily discharges. Records fair. Water supply for city of Sidney is pumped from the Great Miami River 1,200 ft upstream and from wells adjacent to Great Miami River upstream from station. The pumpage averaged 4.58 ft³/s in 1988 and is returned as sewage 1.2 mi downstream from the station. Some regulation by Indian Lake, 28 mi upstream, capacity, 45,900 acre-ft; water diverted into Miami and Erie Canal at Port Jefferson, 2.8 mi upstream, prior to 1926; amount of diversion not published. Sediment data collected at this site 1967 to 1975.

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

AVERAGE DISCHARGE.--63 years, (1925-88) 477 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,700 ft³/s Mar. 20, 1927, gage height 14.4 ft, from rating curve extended above 8,700 ft³/s on basis of velocity-area studies; maximum gage height, 15.91 ft Jan. 21, 1959; minimum discharge, 1.5 ft³/s Aug. 13, 1963, result of temporary storage behind dam upstream; minimum daily discharge, 8.0 ft³/s Sept. 23, 1935.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 25, 1913 reached a stage of 19.6 ft, present datum, discharge, 44,000 ft³/s, computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s and maximum (*).

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 2 | 1200 | *2,620 | *5.85 | | | | |

Minimum daily discharge 14 ft³/s July 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|------|------|-------|-------|------|------|------|------|------|------|
| 1 | 49 | 59 | 79 | 148 | 589 | 262 | 265 | 111 | 40 | 24 | 60 | 33 |
| 2 | 60 | 57 | 76 | 124 | 2360 | 251 | 255 | 97 | 42 | 25 | 51 | 50 |
| 3 | 50 | 58 | 81 | 115 | 2110 | 270 | 342 | 96 | 47 | 26 | 40 | 53 |
| 4 | 57 | 58 | 98 | 116 | 1590 | 331 | 798 | 97 | 52 | 25 | 36 | 54 |
| 5 | 57 | 57 | 125 | 140 | 1070 | 314 | 689 | 105 | 50 | 23 | 36 | 50 |
| 6 | 49 | 62 | 103 | 112 | 498 | 294 | 521 | 107 | 41 | 22 | 36 | 38 |
| 7 | 51 | 70 | 88 | 86 | 496 | 446 | 764 | 96 | 45 | 17 | 36 | 36 |
| 8 | 53 | 58 | 85 | 75 | 440 | 1040 | 1020 | 88 | 38 | 14 | 32 | 35 |
| 9 | 57 | 60 | 86 | 74 | 353 | 1620 | 649 | 96 | 39 | 15 | 30 | 33 |
| 10 | 56 | 63 | 83 | 71 | 282 | 1600 | 469 | 122 | 42 | 21 | 29 | 31 |
| 11 | 58 | 81 | 83 | 67 | 237 | 1210 | 403 | 108 | 45 | 22 | 36 | 30 |
| 12 | 62 | 80 | 86 | 65 | 202 | 813 | 385 | 101 | 37 | 18 | 44 | 31 |
| 13 | 58 | 62 | 90 | 69 | 240 | 699 | 293 | 84 | 34 | 17 | 38 | 31 |
| 14 | 56 | 58 | 88 | 71 | 237 | 620 | 222 | 56 | 34 | 18 | 34 | 43 |
| 15 | 54 | 56 | 103 | 63 | 298 | 484 | 243 | 69 | 31 | 19 | 33 | 36 |
| 16 | 53 | 56 | 182 | 63 | 472 | 418 | 241 | 66 | 33 | 19 | 31 | 34 |
| 17 | 54 | 138 | 176 | 70 | 439 | 341 | 196 | 64 | 43 | 18 | 29 | 33 |
| 18 | 53 | 233 | 119 | 82 | 672 | 309 | 170 | 68 | 45 | 23 | 29 | 34 |
| 19 | 52 | 226 | 100 | 90 | 1030 | 336 | 203 | 70 | 39 | 26 | 36 | 33 |
| 20 | 53 | 226 | 108 | 127 | 2250 | 355 | 167 | 70 | 36 | 76 | 43 | 33 |
| 21 | 52 | 228 | 174 | 185 | 1780 | 335 | 139 | 63 | 32 | 394 | 41 | 33 |
| 22 | 52 | 227 | 168 | 158 | 1260 | 268 | 140 | 59 | 33 | 241 | 34 | 29 |
| 23 | 52 | 227 | 129 | 116 | 1290 | 231 | 131 | 69 | 29 | 139 | 31 | 28 |
| 24 | 56 | 149 | 112 | 102 | 1190 | 217 | 144 | 83 | 28 | 105 | 31 | 27 |
| 25 | 59 | 81 | 127 | 106 | 737 | 300 | 154 | 75 | 27 | 73 | 31 | 26 |
| 26 | 66 | 79 | 204 | 95 | 491 | 709 | 113 | 77 | 26 | 60 | 28 | 25 |
| 27 | 75 | 84 | 217 | 115 | 409 | 573 | 108 | 61 | 24 | 53 | 29 | 24 |
| 28 | 76 | 79 | 185 | 91 | 338 | 422 | 113 | 52 | 24 | 48 | 37 | 24 |
| 29 | 71 | 83 | 298 | 83 | 287 | 329 | 135 | 46 | 24 | 40 | 46 | 24 |
| 30 | 66 | 82 | 323 | 91 | --- | 290 | 136 | 48 | 24 | 38 | 42 | 24 |
| 31 | 61 | --- | 193 | 116 | --- | 286 | --- | 43 | --- | 57 | 37 | --- |
| TOTAL | 1778 | 3137 | 4169 | 3086 | 23647 | 15973 | 9608 | 2447 | 1084 | 1716 | 1126 | 1015 |
| MEAN | 57.4 | 105 | 134 | 99.5 | 815 | 515 | 320 | 78.9 | 36.1 | 55.4 | 36.3 | 33.8 |
| MAX | 76 | 233 | 323 | 185 | 2360 | 1620 | 1020 | 122 | 52 | 394 | 60 | 54 |
| MIN | 49 | 56 | 76 | 63 | 202 | 217 | 108 | 43 | 24 | 14 | 28 | 24 |
| CAL YR 1987 | TOTAL | 123551 | | MEAN | 338 | MAX | 5810 | MIN | 45 | | | |
| WTR YR 1988 | TOTAL | 68786 | | MEAN | 188 | MAX | 2360 | MIN | 14 | | | |

GREAT MIAMI RIVER BASIN

173

03261950 LORAMIE CREEK NEAR NEWPORT, OH

LOCATION.--Lat 40°18'25", long 84°23'02", in SE 1/4 sec, 24, T.11 N., R.4 E., Shelby County, Hydrologic Unit 05080001, right bank at downstream side of bridge on Cardo Roman Road, 1.1 mi northwest of Newport, 3 mi south of Port Loramie, 3 mi downstream from Mile Creek, and at mile 16.5.

DRAINAGE AREA.--152 mi².

PERIOD OF RECORD.--October 1964 to current year.

REVISED RECORDS.--WRD Ohio 1971: 1966(M). WRD Ohio 1985-1: 1984 (M).

GAGE.--Water-stage recorder. Datum of gage is 926.57 ft above National Geodetic Vertical Datum of 1929. October 1, 1964 to September 30, 1980 water-stage recorder at same site at datum 0.43 ft higher.

REMARKS.--No estimated daily discharges. Records fair. Some regulation by Lake Loramie 5 mi upstream, capacity, 13,000 acre-ft. Sediment data collected at this site 1967 to 1975.

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

AVERAGE DISCHARGE.--24 years, 129 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,600 ft³/s June 14, 1981, maximum gage height, 14.08 ft Feb. 24, 1975; minimum daily, 0.10 ft³/s Aug. 15, 16, 1965, Sept. 10-12, 14, 15, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 25, 1913 reached a stage of 17.0 ft and flood of Jan. 21, 1959 a stage of 14.2 ft, from flood profile furnished by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1500 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 20 | 0630 | *1,010 | *8.87 | | | | |
| Minimum daily discharge 0.57 ft ³ /s Sept. 16 | | | | | | | |

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|----------|--------|-------|------|------|--------|-------|-------|--------|--------|-------|
| 1 | 1.5 | 7.2 | 6.8 | 37 | 187 | 44 | 34 | 6.5 | 1.5 | 1.5 | 28 | .90 |
| 2 | 1.4 | 6.1 | 6.5 | 23 | 835 | 42 | 44 | 7.6 | 2.3 | 1.4 | 18 | .70 |
| 3 | 1.7 | 6.3 | 6.6 | 17 | 551 | 53 | 81 | 7.7 | 3.1 | 1.4 | 9.5 | 1.0 |
| 4 | 1.5 | 6.0 | 13 | 13 | 292 | 64 | 236 | 6.5 | 2.3 | 1.0 | 4.6 | 2.0 |
| 5 | 1.2 | 5.9 | 9.2 | 6.1 | 158 | 50 | 201 | 5.8 | 1.6 | .90 | 2.5 | 1.5 |
| 6 | 1.8 | 5.1 | 5.6 | 3.8 | 106 | 48 | 150 | 5.2 | 1.7 | .67 | 3.1 | 1.2 |
| 7 | 2.2 | 4.6 | 4.8 | 2.6 | 84 | 74 | 208 | 4.5 | 1.4 | .61 | 3.0 | .86 |
| 8 | 3.1 | 4.3 | 4.8 | 2.4 | 52 | 440 | 206 | 3.6 | 1.4 | .65 | 2.4 | .84 |
| 9 | 3.1 | 7.2 | 4.8 | 2.2 | 39 | 775 | 140 | 4.2 | 2.6 | .71 | 1.7 | .81 |
| 10 | 3.6 | 8.1 | 5.2 | 2.0 | 30 | 506 | 101 | 5.2 | 2.4 | .73 | 1.1 | .75 |
| 11 | 5.3 | 7.2 | 3.9 | 1.5 | 23 | 258 | 82 | 4.1 | 1.9 | 1.4 | .95 | .68 |
| 12 | 4.8 | 6.2 | 5.4 | 1.5 | 27 | 180 | 61 | 2.7 | 1.8 | 1.9 | .83 | .61 |
| 13 | 3.6 | 5.9 | 5.1 | 1.9 | 22 | 174 | 44 | 2.6 | 1.5 | 1.3 | 1.1 | 2.8 |
| 14 | 2.7 | 6.4 | 4.1 | 1.6 | 18 | 125 | 37 | 2.6 | 1.3 | 1.5 | 1.3 | 1.5 |
| 15 | 2.8 | 6.3 | 74 | 1.4 | 127 | 96 | 32 | 2.3 | 1.0 | 1.8 | 1.2 | .75 |
| 16 | 2.7 | 5.6 | 76 | 1.5 | 174 | 71 | 24 | 2.7 | 1.0 | 2.0 | 1.1 | .57 |
| 17 | 2.7 | 5.3 | 14 | 2.2 | 160 | 60 | 18 | 2.6 | 1.4 | 2.5 | .86 | .67 |
| 18 | 2.9 | 6.6 | 6.7 | 5.2 | 255 | 58 | 22 | 2.7 | 1.2 | 3.5 | 1.0 | .68 |
| 19 | 2.5 | 6.2 | 4.1 | 5.1 | 376 | 60 | 19 | 2.6 | .94 | 7.8 | 3.0 | .63 |
| 20 | 2.7 | 6.1 | 41 | 36 | 928 | 58 | 14 | 2.6 | .79 | 19 | 1.9 | 1.5 |
| 21 | 3.5 | 6.0 | 63 | 43 | 524 | 52 | 14 | 2.5 | .70 | 96 | 1.1 | 1.6 |
| 22 | 3.5 | 5.4 | 35 | 19 | 281 | 40 | 14 | 2.5 | .68 | 44 | .81 | .94 |
| 23 | 3.9 | 4.7 | 21 | 11 | 434 | 34 | 14 | 23 | 1.0 | 21 | .71 | .65 |
| 24 | 4.5 | 5.3 | 14 | 8.3 | 294 | 36 | 11 | 79 | 1.2 | 20 | .78 | .91 |
| 25 | 5.8 | 7.6 | 93 | 5.0 | 160 | 49 | 9.3 | 16 | 1.3 | 9.4 | .84 | 1.3 |
| 26 | 5.4 | 12 | 123 | 3.4 | 104 | 78 | 9.0 | 4.9 | 1.5 | 4.3 | .99 | 1.5 |
| 27 | 8.4 | 11 | 83 | 2.9 | 85 | 64 | 8.9 | 2.7 | 1.0 | 4.4 | 1.2 | 1.3 |
| 28 | 12 | 9.6 | 81 | 2.4 | 56 | 51 | 8.5 | 2.1 | 1.1 | 4.0 | 2.2 | 1.2 |
| 29 | 10 | 12 | 169 | 2.4 | 52 | 43 | 8.2 | 1.6 | 1.2 | 2.4 | 2.9 | 1.0 |
| 30 | 9.8 | 8.5 | 99 | 3.4 | --- | 40 | 7.0 | 1.4 | 1.3 | 1.4 | 1.7 | 1.0 |
| 31 | 8.9 | --- | 67 | 7.0 | --- | 36 | --- | 1.4 | --- | 14 | 1.2 | --- |
| TOTAL | 129.5 | 204.7 | 1149.6 | 274.8 | 6434 | 3759 | 1857.9 | 221.4 | 44.11 | 273.17 | 101.57 | 32.35 |
| MEAN | 4.18 | 6.82 | 37.1 | 8.86 | 222 | 121 | 61.9 | 7.14 | 1.47 | 8.81 | 3.28 | 1.08 |
| MAX | 12 | 12 | 169 | 43 | 928 | 775 | 236 | 79 | 3.1 | 96 | 28 | 2.8 |
| MIN | 1.2 | 4.3 | 3.9 | 1.4 | 18 | 34 | 7.0 | 1.4 | .68 | .61 | .71 | .57 |
| CAL YR 1987 | TOTAL | 28897.04 | | MEAN | 79.2 | MAX | 2780 | MIN | .86 | | | |
| WTR YR 1988 | TOTAL | 14482.10 | | MEAN | 39.6 | MAX | 928 | MIN | .57 | | | |

GREAT MIAMI RIVER BASIN

03262000 LORAMIE CREEK AT LOCKINGTON, OH

LOCATION.--Lat 40°12'35", long 84°14'32", in NE 1/4 sec. 30, T.7 N., R.6 E., Shelby County, Hydrologic Unit 05080001, on left bank at downstream side of county road bridge, 1,300 ft downstream from Lockington Dam, 0.5 mi northwest of Lockington, and at mile 1.9.

DRAINAGE AREA.--257 mi².

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

REVISED RECORDS.--WSP 923: 1916. WSP 1908: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 800.03 ft above National Geodetic Vertical Datum of 1929. Prior to July 3, 1924, nonrecording gage at same site at datum 75.96 ft higher. July 3, 1924, to Aug. 17, 1926, nonrecording gage, and Aug. 18 to Sept. 30, 1926, water-stage recorder, at same site at datum 74.96 ft higher.

REMARKS.--No estimated daily discharges. Records good except those for discharges greater than 200 ft³/s which are fair. Slight regulation by Lake Loramie 18 mi upstream, capacity, 13,000 acre-ft. Flood flow regulated by Lockington retarding basin beginning in 1921.

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

AVERAGE DISCHARGE.--73 years, 208 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft³/s May 7, 1916, gage height, 86.4 ft, present datum, from rating curve extended above 5,400 ft³/s; minimum daily, 1.4 ft³/s Sept. 20, 1983.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 25, 1913 reached a stage of 91.6 ft, present datum, discharge, 25,600 ft³/s, at site upstream from Turtle Creek, drainage area, 211 mi², computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,920 ft³/s Feb. 2, gage height, 80.65 ft; minimum daily, 3.4 ft³/s Oct. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|------|------|-------|------|------|------|-------|-------|-------|-------|
| 1 | 7.8 | 11 | 17 | 98 | 409 | 101 | 70 | 22 | 8.5 | 7.4 | 35 | 7.0 |
| 2 | 8.4 | 11 | 15 | 57 | 1590 | 104 | 93 | 21 | 12 | 7.2 | 39 | 6.4 |
| 3 | 8.8 | 10 | 16 | 67 | 919 | 120 | 309 | 21 | 12 | 7.5 | 28 | 8.1 |
| 4 | 9.2 | 9.7 | 19 | 49 | 496 | 136 | 655 | 21 | 14 | 7.4 | 19 | 8.4 |
| 5 | 9.1 | 9.3 | 22 | 27 | 279 | 125 | 379 | 25 | 13 | 7.3 | 14 | 7.6 |
| 6 | 8.8 | 9.3 | 19 | 30 | 126 | 128 | 279 | 23 | 11 | 6.9 | 12 | 8.4 |
| 7 | 8.9 | 9.2 | 16 | 21 | 135 | 283 | 396 | 20 | 10 | 6.6 | 11 | 7.5 |
| 8 | 9.4 | 9.4 | 15 | 19 | 112 | 910 | 373 | 19 | 9.7 | 6.5 | 11 | 6.6 |
| 9 | 9.8 | 9.9 | 15 | 17 | 83 | 1180 | 254 | 20 | 10 | 6.2 | 9.8 | 5.9 |
| 10 | 9.9 | 9.6 | 14 | 16 | 66 | 830 | 186 | 23 | 9.8 | 6.0 | 8.6 | 5.7 |
| 11 | 10 | 9.3 | 15 | 15 | 47 | 427 | 152 | 22 | 11 | 5.7 | 7.8 | 5.5 |
| 12 | 10 | 9.9 | 15 | 15 | 40 | 296 | 128 | 20 | 10 | 6.0 | 7.2 | 5.8 |
| 13 | 11 | 10 | 15 | 17 | 50 | 327 | 102 | 22 | 9.4 | 6.5 | 6.9 | 6.5 |
| 14 | 9.8 | 9.9 | 15 | 16 | 40 | 234 | 85 | 16 | 9.7 | 7.3 | 6.7 | 7.7 |
| 15 | 9.5 | 9.9 | 18 | 15 | 159 | 177 | 77 | 17 | 12 | 6.6 | 6.6 | 9.0 |
| 16 | 9.2 | 9.4 | 152 | 15 | 279 | 140 | 68 | 14 | 10 | 6.2 | 7.0 | 7.1 |
| 17 | 8.9 | 8.8 | 68 | 19 | 272 | 118 | 59 | 15 | 9.4 | 5.9 | 6.8 | 6.3 |
| 18 | 8.7 | 9.2 | 39 | 23 | 476 | 115 | 51 | 15 | 9.2 | 6.9 | 6.4 | 5.9 |
| 19 | 8.5 | 9.8 | 31 | 28 | 738 | 122 | 56 | 15 | 8.9 | 11 | 6.3 | 5.6 |
| 20 | 8.6 | 9.8 | 36 | 67 | 1550 | 114 | 48 | 15 | 3.7 | 20 | 8.2 | 6.1 |
| 21 | 8.5 | 10 | 117 | 95 | 868 | 105 | 43 | 15 | 4.9 | 97 | 9.6 | 6.2 |
| 22 | 7.7 | 10 | 85 | 65 | 491 | 88 | 38 | 14 | 8.3 | 82 | 6.7 | 7.4 |
| 23 | 7.2 | 9.4 | 65 | 45 | 825 | 79 | 41 | 16 | 7.8 | 43 | 7.1 | 7.1 |
| 24 | 5.0 | 10 | 46 | 38 | 548 | 75 | 39 | 142 | 7.6 | 36 | 6.7 | 6.2 |
| 25 | 3.4 | 11 | 96 | 29 | 309 | 83 | 36 | 64 | 7.6 | 28 | 6.1 | 5.7 |
| 26 | 3.6 | 15 | 196 | 20 | 207 | 138 | 33 | 32 | 7.6 | 20 | 6.0 | 5.5 |
| 27 | 6.0 | 20 | 154 | 24 | 176 | 123 | 32 | 21 | 7.3 | 16 | 5.8 | 5.6 |
| 28 | 6.7 | 18 | 122 | 20 | 129 | 100 | 32 | 17 | 7.4 | 15 | 6.4 | 5.7 |
| 29 | 6.6 | 19 | 256 | 20 | 111 | 87 | 29 | 15 | 7.6 | 13 | 7.5 | 5.6 |
| 30 | 6.8 | 19 | 174 | 23 | --- | 80 | 24 | 13 | 7.6 | 11 | 9.6 | 5.5 |
| 31 | 6.9 | --- | 130 | 29 | --- | 74 | --- | 12 | --- | 12 | 8.4 | --- |
| TOTAL | 252.7 | 335.8 | 2013 | 1039 | 11530 | 7019 | 4167 | 747 | 277.0 | 524.1 | 337.2 | 197.6 |
| MEAN | 8.15 | 11.2 | 64.9 | 33.5 | 398 | 226 | 139 | 24.1 | 9.23 | 16.9 | 10.9 | 6.59 |
| MAX | 11 | 20 | 256 | 98 | 1590 | 1180 | 655 | 142 | 14 | 97 | 39 | 9.0 |
| MIN | 3.4 | 8.8 | 14 | 15 | 40 | 74 | 24 | 12 | 3.7 | 5.7 | 5.8 | 5.5 |

CAL YR 1987 TOTAL 52360.3 MEAN 143 MAX 4660 MIN 3.4
WTR YR 1988 TOTAL 28439.4 MEAN 77.7 MAX 1590 MIN 3.4

GREAT MIAMI RIVER BASIN

175

03262700 GREAT MIAMI RIVER AT TROY, OH

LOCATION.--Lat 40°02'25", long 84°11'52", Miami County, Hydrologic Unit 05080001, 400 ft downstream from B & O Railroad bridge, 1,300 ft downstream from bridge on State Highway 55 at Troy, 1.2 mi upstream from small left bank tributary, 2.3 mi downstream from Spring Creek, and at mile 105.

DRAINAGE AREA.--926 mi².

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1961, 1962 (published as Miami River at Troy). October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 810.67 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good except those for Nov. 18 to Dec. 18 which are fair. Flood flow regulated by retarding basin on Loramie Creek, 18 mi upstream. Low and medium flow slightly regulated by Indian Lake; capacity, 45,900 acre-ft, 54 mi upstream. Water supply for city of Troy is pumped from wells adjacent to the Great Miami River upstream from the station. The pumpage averaged 5.4 ft³/s in 1988 and is returned as sewage 1 mi downstream from the station. Water quality data collected at this site 1965 to 1974. Sediment data collected 1970 to 1974.

COOPERATION.--Gage-height tapes and 13 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--26 years, 801 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,300 ft³/s Mar. 6, 1963, gage height, 14.66 ft; minimum, 0.50 ft³/s July 12, 13, 1963, result of temporary storage during repair of dam upstream; minimum daily discharge, 4.3 ft³/s July 17, 1977 result of dam closure upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 11, 1958 reached a stage of 16.4 ft, discharge, 21,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,030 ft³/s Feb. 2, gage height, 7.69 ft; minimum daily, 21 ft³/s July 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|------|------|-------|-------|-------|------|------|------|------|------|
| 1 | 67 | 78 | 119 | 265 | 578 | 382 | 368 | 191 | 81 | 44 | 75 | 66 |
| 2 | 67 | 79 | 119 | 153 | 4110 | 360 | 362 | 156 | 75 | 43 | 101 | 62 |
| 3 | 67 | 82 | 123 | 155 | 3530 | 405 | 532 | 156 | 78 | 41 | 94 | 90 |
| 4 | 67 | 80 | 135 | 172 | 2480 | 505 | 1630 | 168 | 80 | 38 | 84 | 86 |
| 5 | 67 | 80 | 139 | 94 | 1660 | 519 | 1400 | 180 | 81 | 38 | 78 | 76 |
| 6 | 71 | 78 | 154 | 95 | 735 | 528 | 1050 | 192 | 83 | 37 | 77 | 71 |
| 7 | 72 | 80 | 141 | 104 | 606 | 724 | 1180 | 182 | 75 | 39 | 75 | 69 |
| 8 | 70 | 90 | 120 | 105 | 674 | 1830 | 1620 | 169 | 69 | 40 | 71 | 62 |
| 9 | 69 | 88 | 115 | 101 | 558 | 2790 | 1220 | 164 | 71 | 40 | 66 | 61 |
| 10 | 69 | 86 | 116 | 99 | 431 | 2670 | 877 | 185 | 71 | 29 | 62 | 60 |
| 11 | 78 | 77 | 122 | 97 | 322 | 1930 | 703 | 174 | 72 | 21 | 61 | 55 |
| 12 | 79 | 79 | 130 | 98 | 222 | 1380 | 644 | 156 | 76 | 27 | 59 | 50 |
| 13 | 77 | 90 | 128 | 100 | 221 | 1160 | 537 | 157 | 78 | 30 | 57 | 53 |
| 14 | 78 | 88 | 129 | 102 | 239 | 1060 | 391 | 141 | 78 | 30 | 57 | 57 |
| 15 | 78 | 87 | 163 | 103 | 388 | 821 | 330 | 116 | 77 | 31 | 55 | 61 |
| 16 | 80 | 85 | 219 | 102 | 822 | 691 | 340 | 119 | 75 | 33 | 54 | 63 |
| 17 | 79 | 85 | 316 | 107 | 849 | 537 | 317 | 115 | 71 | 31 | 56 | 69 |
| 18 | 78 | 190 | 198 | 120 | 1180 | 481 | 260 | 116 | 71 | 28 | 59 | 59 |
| 19 | 77 | 230 | 160 | 137 | 1620 | 479 | 266 | 120 | 71 | 35 | 60 | 57 |
| 20 | 76 | 230 | 156 | 183 | 4100 | 512 | 261 | 123 | 72 | 49 | 62 | 56 |
| 21 | 75 | 229 | 197 | 258 | 3070 | 520 | 231 | 115 | 69 | 247 | 64 | 54 |
| 22 | 76 | 227 | 301 | 279 | 2030 | 387 | 207 | 102 | 62 | 479 | 65 | 53 |
| 23 | 77 | 237 | 229 | 211 | 2120 | 337 | 193 | 109 | 58 | 201 | 66 | 52 |
| 24 | 77 | 234 | 176 | 175 | 2020 | 298 | 187 | 170 | 43 | 148 | 62 | 49 |
| 25 | 78 | 163 | 199 | 146 | 1330 | 384 | 212 | 166 | 36 | 116 | 58 | 48 |
| 26 | 78 | 137 | 342 | 120 | 877 | 887 | 193 | 116 | 39 | 95 | 53 | 48 |
| 27 | 79 | 122 | 408 | 117 | 712 | 891 | 168 | 112 | 39 | 86 | 51 | 47 |
| 28 | 81 | 121 | 324 | 143 | 564 | 699 | 165 | 100 | 40 | 79 | 48 | 45 |
| 29 | 80 | 127 | 425 | 141 | 441 | 519 | 175 | 93 | 41 | 74 | 51 | 44 |
| 30 | 77 | 121 | 647 | 137 | --- | 433 | 188 | 87 | 44 | 66 | 58 | 41 |
| 31 | 77 | --- | 387 | 155 | --- | 396 | --- | 86 | --- | 66 | 66 | --- |
| TOTAL | 2321 | 3780 | 6637 | 4374 | 38489 | 25515 | 16207 | 4336 | 1976 | 2361 | 2005 | 1764 |
| MEAN | 74.9 | 126 | 214 | 141 | 1327 | 823 | 540 | 140 | 65.9 | 76.2 | 64.7 | 58.8 |
| MAX | 81 | 237 | 647 | 279 | 4110 | 2790 | 1630 | 192 | 83 | 479 | 101 | 90 |
| MIN | 67 | 77 | 115 | 94 | 221 | 298 | 165 | 86 | 36 | 21 | 48 | 41 |
| CAL YR 1987 | TOTAL | 204730 | | MEAN | 561 | MAX | 11800 | MIN | 66 | | | |
| WTR YR 1988 | TOTAL | 109765 | | MEAN | 300 | MAX | 4110 | MIN | 21 | | | |

GREAT MIAMI RIVER BASIN

03263000 GREAT MIAMI RIVER AT TAYLORSVILLE, OH

LOCATION.--Lat 39°52'27", long 84°09'45", in SW 1/4 sec. 36, R.8, T.2, Montgomery County, Hydrologic Unit 05080001, on right upstream face of Taylorsville Dam, 0.8 mi north of Taylorsville, 2.1 mi east of Vandalia, 9.5 mi upstream from Stillwater River, and at mile 90.9.

DRAINAGE AREA.--1,149 mi².

PERIOD OF RECORD.--January 1914 to September 1917 (published as Miami River at Tadmor), October 1921 to current year (published as Miami River at Taylorsville). Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at site at Tadmor, January 1914 to July 1920, are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 743: 1924(M). WSP 853: 1930, 1937. WSP 923: 1922-24. WSP 1385: 1916. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 760.11 ft above National Geodetic Vertical Datum of 1929, levels by Miami Conservancy District. Prior to October 1921, nonrecording gage at site 1.7 mi upstream at different datum. Jan. 1, 1922, to Nov. 11, 1925, nonrecording gage at site 50 ft downstream at outlet works of Taylorsville Dam at datum 60.03 ft lower, October 1921 to September 1978 at site 650 ft downstream at datum 60.03 ft lower.

REMARKS.--Estimated daily discharges Feb. 13-15, Aug. 18-31. Records good except those for periods of estimated record which are fair. Flood flow regulated by retarding basins on Great Miami River, just downstream from station and on Loramie Creek 28 mi upstream from station beginning in 1921. Low and medium flow slightly regulated by Indian Lake 64 mi upstream from station, and by Lake Loramie 47 mi upstream from station on Loramie Creek; combined capacity, 58,900 acre-ft.

COOPERATION.--Base data furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--70 years, 997 ft³/s, 11.78 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,400 ft³/s Jan. 22, 1959, gage height, 75.44 ft at site and datum then in use; minimum daily, 25 ft³/s July 18, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 25.4 ft at site at Tadmor, discharge, 127,000 ft³/s computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,320 ft³/s Feb. 2, gage height, 10.43 ft; minimum daily, 38 ft³/s July 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|--------|------|------|-------|-------|-------|------|------|------|------|------|------|
| 1 | 83 | 120 | 149 | 341 | 424 | 554 | 598 | 314 | 129 | 61 | 95 | 69 | |
| 2 | 85 | 127 | 146 | 281 | 4760 | 530 | 586 | 291 | 121 | 59 | 109 | 62 | |
| 3 | 83 | 133 | 148 | 335 | 4700 | 620 | 683 | 254 | 117 | 56 | 118 | 103 | |
| 4 | 85 | 126 | 173 | 271 | 3260 | 885 | 1760 | 263 | 123 | 51 | 103 | 131 | |
| 5 | 87 | 128 | 164 | 421 | 2240 | 808 | 1720 | 256 | 121 | 47 | 93 | 91 | |
| 6 | 90 | 119 | 185 | 266 | 1220 | 900 | 1290 | 269 | 124 | 49 | 90 | 85 | |
| 7 | 96 | 120 | 179 | 253 | 865 | 1040 | 1320 | 264 | 116 | 52 | 87 | 77 | |
| 8 | 92 | 131 | 152 | 243 | 894 | 1850 | 1870 | 244 | 103 | 53 | 80 | 70 | |
| 9 | 86 | 136 | 140 | 221 | 778 | 2830 | 1540 | 245 | 108 | 53 | 72 | 65 | |
| 10 | 86 | 130 | 139 | 220 | 631 | 2950 | 1090 | 275 | 102 | 52 | 66 | 63 | |
| 11 | 102 | 119 | 141 | 210 | 512 | 2240 | 885 | 266 | 101 | 43 | 61 | 58 | |
| 12 | 109 | 108 | 153 | 208 | 472 | 1660 | 813 | 244 | 102 | 38 | 63 | 80 | |
| 13 | 102 | 127 | 153 | 202 | 460 | 1340 | 736 | 239 | 104 | 44 | 62 | 212 | |
| 14 | 105 | 125 | 147 | 201 | 420 | 1230 | 604 | 225 | 101 | 46 | 57 | 102 | |
| 15 | 104 | 122 | 205 | 202 | 560 | 993 | 521 | 208 | 96 | 48 | 54 | 84 | |
| 16 | 106 | 117 | 217 | 182 | 886 | 845 | 521 | 190 | 92 | 51 | 50 | 93 | |
| 17 | 104 | 117 | 351 | 168 | 970 | 721 | 502 | 191 | 93 | 43 | 52 | 120 | |
| 18 | 103 | 161 | 272 | 176 | 1190 | 651 | 447 | 183 | 87 | 45 | 53 | 87 | |
| 19 | 103 | 273 | 207 | 189 | 1680 | 638 | 411 | 177 | 89 | 58 | 80 | 74 | |
| 20 | 102 | 262 | 205 | 248 | 4430 | 664 | 416 | 180 | 92 | 74 | 100 | 77 | |
| 21 | 99 | 273 | 200 | 280 | 3680 | 655 | 380 | 181 | 91 | 186 | 70 | 72 | |
| 22 | 102 | 268 | 317 | 327 | 2410 | 571 | 371 | 166 | 77 | 503 | 54 | 68 | |
| 23 | 103 | 275 | 288 | 278 | 2230 | 519 | 347 | 191 | 72 | 338 | 70 | 71 | |
| 24 | 104 | 273 | 231 | 226 | 2330 | 478 | 327 | 289 | 62 | 224 | 86 | 65 | |
| 25 | 109 | 230 | 243 | 194 | 1600 | 657 | 322 | 376 | 48 | 170 | 70 | 62 | |
| 26 | 110 | 179 | 342 | 172 | 1070 | 1270 | 337 | 234 | 50 | 136 | 58 | 62 | |
| 27 | 117 | 153 | 445 | 160 | 876 | 1230 | 299 | 204 | 50 | 126 | 54 | 62 | |
| 28 | 119 | 159 | 408 | 192 | 729 | 969 | 291 | 186 | 51 | 107 | 60 | 62 | |
| 29 | 120 | 164 | 402 | 195 | 615 | 788 | 306 | 159 | 54 | 97 | 80 | 62 | |
| 30 | 115 | 154 | 623 | 162 | --- | 680 | 317 | 145 | 61 | 88 | 84 | 60 | |
| 31 | 115 | --- | 481 | 166 | --- | 608 | --- | 130 | --- | 111 | 74 | --- | |
| TOTAL | 3126 | 4929 | 7606 | 7190 | 46892 | 32374 | 21610 | 7039 | 2737 | 3109 | 2305 | 2449 | |
| MEAN | 101 | 164 | 245 | 232 | 1617 | 1044 | 720 | 227 | 91.2 | 100 | 74.4 | 81.6 | |
| MAX | 120 | 275 | 623 | 421 | 4760 | 2950 | 1870 | 376 | 129 | 503 | 118 | 212 | |
| MIN | 83 | 108 | 139 | 160 | 420 | 478 | 291 | 130 | 48 | 38 | 50 | 58 | |
| CFSM | .09 | .14 | .21 | .20 | 1.41 | .91 | .63 | .20 | .08 | .09 | .06 | .07 | |
| IN. | .10 | .16 | .25 | .23 | 1.52 | 1.05 | .70 | .23 | .09 | .10 | .07 | .08 | |
| CAL YR 1987 | TOTAL | 240957 | | MEAN | 660 | MAX | 10700 | MIN | 83 | CFSM | .57 | IN. | 7.80 |
| WTR YR 1988 | TOTAL | 141366 | | MEAN | 386 | MAX | 4760 | MIN | 38 | CFSM | .34 | IN. | 4.50 |

GREAT MIAMI RIVER BASIN

177

03264000 GREENVILLE CREEK NEAR BRADFORD, OH

LOCATION.--Lat 40°06'08", LONG 84°25'48", in NW 1/4 sec. 34, T.9 N., R.4 E., Miami County, Hydrologic Unit 05080001, on left bank at downstream side of bridge on State Highway 721, 0.8 mi downstream from small left bank tributary, 1.8 mi south of Bradford, and 6 mi upstream from mouth.

DRAINAGE AREA.--193 mi².

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

REVISED RECORDS.--WSP 803: 1933(M). WSP 1235: 1936, 1937(M). WSP 1908: Drainage area. WRD-OH-82-1: 1980.

GAGE.--Water-stage recorder. Datum of gage is 948.9 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1942, nonrecording gage at same site and datum. Apr. 6, 1962 to Nov. 13, 1963, water-stage recorder at site 200 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Jan. 5-19. Records good except for estimated daily discharges which are poor. Some diurnal fluctuation caused by mill 8 mi up-stream from station; daily flows are not affected appreciably. Sediment data collected at this site 1970 to 1974.

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

AVERAGE DISCHARGE.--58 years, 172 ft³/s, 12.10 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,320 ft³/s May 14, 1933, gage height, 9.2 ft; maximum gage height, 10.31 ft Mar. 5, 1963, from high-water mark in well (ice jam); minimum discharge, 4.8 ft³/s Sept. 17, 1963.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 12.1 ft, discharge, 18,200 ft³/s, at site with drainage area of 213 mi², computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1500 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 2 | 1730 | *1,130 | *4.24 | | | | |

Minimum daily discharge 5.9 ft³/s Aug. 18, 26, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|---------|------|------|------|------|------|------|------|------|-------|-------|------|
| 1 | 21 | 36 | 52 | 85 | 176 | 115 | 99 | 66 | 34 | 15 | 14 | 6.9 | |
| 2 | 21 | 38 | 49 | 72 | 991 | 110 | 117 | 64 | 32 | 16 | 13 | 6.9 | |
| 3 | 20 | 33 | 42 | 94 | 725 | 116 | 129 | 63 | 30 | 17 | 13 | 12 | |
| 4 | 21 | 35 | 50 | 62 | 426 | 150 | 216 | 62 | 33 | 16 | 12 | 12 | |
| 5 | 20 | 35 | 50 | 56 | 290 | 148 | 190 | 62 | 32 | 14 | 12 | 11 | |
| 6 | 23 | 35 | 44 | 50 | 168 | 192 | 180 | 59 | 31 | 14 | 12 | 11 | |
| 7 | 23 | 34 | 42 | 45 | 234 | 405 | 234 | 58 | 31 | 14 | 13 | 8.9 | |
| 8 | 27 | 37 | 44 | 44 | 182 | 549 | 306 | 56 | 29 | 13 | 9.8 | 8.2 | |
| 9 | 29 | 39 | 45 | 41 | 159 | 460 | 222 | 59 | 36 | 12 | 7.7 | 8.0 | |
| 10 | 29 | 40 | 44 | 40 | 130 | 344 | 177 | 79 | 29 | 12 | 8.5 | 8.0 | |
| 11 | 38 | 37 | 43 | 40 | 123 | 252 | 155 | 63 | 28 | 12 | 9.5 | 7.4 | |
| 12 | 34 | 36 | 43 | 42 | 88 | 222 | 137 | 58 | 25 | 11 | 8.6 | 9.3 | |
| 13 | 32 | 35 | 40 | 45 | 100 | 265 | 125 | 53 | 22 | 11 | 8.5 | 23 | |
| 14 | 29 | 34 | 37 | 41 | 101 | 232 | 116 | 50 | 22 | 11 | 10 | 29 | |
| 15 | 27 | 33 | 63 | 38 | 175 | 182 | 106 | 48 | 22 | 12 | 10 | 20 | |
| 16 | 28 | 33 | 117 | 42 | 238 | 150 | 99 | 48 | 21 | 10 | 7.1 | 17 | |
| 17 | 29 | 37 | 83 | 45 | 209 | 132 | 95 | 47 | 29 | 10 | 6.4 | 21 | |
| 18 | 29 | 39 | 61 | 46 | 262 | 125 | 94 | 45 | 28 | 13 | 5.9 | 19 | |
| 19 | 29 | 35 | 52 | 47 | 377 | 125 | 92 | 43 | 26 | 12 | 6.0 | 15 | |
| 20 | 31 | 34 | 59 | 73 | 905 | 119 | 86 | 43 | 23 | 18 | 8.8 | 13 | |
| 21 | 31 | 32 | 75 | 71 | 494 | 108 | 86 | 45 | 22 | 58 | 12 | 12 | |
| 22 | 32 | 30 | 77 | 60 | 317 | 99 | 89 | 41 | 22 | 37 | 9.3 | 12 | |
| 23 | 34 | 31 | 63 | 51 | 396 | 96 | 89 | 62 | 19 | 23 | 7.4 | 16 | |
| 24 | 35 | 32 | 54 | 46 | 362 | 96 | 81 | 68 | 17 | 21 | 7.1 | 14 | |
| 25 | 38 | 47 | 73 | 42 | 236 | 108 | 76 | 50 | 16 | 17 | 6.0 | 14 | |
| 26 | 37 | 55 | 141 | 48 | 177 | 150 | 75 | 44 | 18 | 14 | 5.9 | 10 | |
| 27 | 46 | 57 | 150 | 61 | 157 | 142 | 66 | 42 | 16 | 13 | 5.9 | 9.3 | |
| 28 | 48 | 60 | 124 | 54 | 134 | 119 | 71 | 40 | 15 | 12 | 6.5 | 9.1 | |
| 29 | 45 | 63 | 136 | 51 | 124 | 111 | 69 | 38 | 15 | 12 | 6.9 | 10 | |
| 30 | 43 | 60 | 123 | 48 | --- | 106 | 67 | 35 | 15 | 12 | 6.9 | 12 | |
| 31 | 39 | --- | 100 | 43 | --- | 99 | --- | 35 | --- | 17 | 6.9 | --- | |
| TOTAL | 968 | 1182 | 2176 | 1623 | 8456 | 5627 | 3744 | 1626 | 738 | 499 | 276.6 | 385.0 | |
| MEAN | 31.2 | 39.4 | 70.2 | 52.4 | 292 | 182 | 125 | 52.5 | 24.6 | 16.1 | 8.92 | 12.8 | |
| MAX | 48 | 63 | 150 | 94 | 991 | 549 | 306 | 79 | 36 | 58 | 14 | 29 | |
| MIN | 20 | 30 | 37 | 38 | 88 | 96 | 66 | 35 | 15 | 10 | 5.9 | 6.9 | |
| CFSM | .16 | .20 | .36 | .27 | 1.51 | .94 | .65 | .27 | .13 | .08 | .05 | .07 | |
| IN. | .19 | .23 | .42 | .31 | 1.63 | 1.08 | .72 | .31 | .14 | .10 | .05 | .07 | |
| CAL YR 1987 | TOTAL | 48897 | | MEAN | 134 | MAX | 3100 | MIN | 19 | CFSM | .69 | IN. | 9.42 |
| WTR YR 1988 | TOTAL | 27300.6 | | MEAN | 74.6 | MAX | 991 | MIN | 5.9 | CFSM | .39 | IN. | 5.26 |

GREAT MIAMI RIVER BASIN

03265000 STILLWATER RIVER AT PLEASANT HILL, OH

LOCATION.--Lat 40°03'28", long 84°21'22", in SW 1/4 sec. 18, T.7 N., R.5 E., Miami County, Hydrologic Unit 05080001, on left bank at downstream side of bridge on Laurer Road, 0.8 mi northwest of Pleasant Hill, 2 mi downstream from Painter Creek, 2 mi upstream from Canyon Run, and at mile 28.35.

DRAINAGE AREA.--503 mi².

PERIOD OF RECORD.--October 1916 to September 1928, October 1934 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at same site March 1922 to December 1963 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 523: 1917. WSP 1305: 1920(M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 846.73 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 23, 1934, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: July 31-Aug. 19. Records good except for periods of estimated record and winter periods, which are fair. Sediment data collected at this site 1963 to 1975.

COOPERATION.--Gage-height tapes and 6 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--66 years, 442 ft³/s, 11.93 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,400 ft³/s Jan. 14, 1937, from rating curve extended above 14,500 ft³/s on basis of velocity-area study; maximum gage height, 18.46 ft June 29, 1980; minimum discharge observed, 4 ft³/s Oct. 17, 1920, July 12, 22, Aug. 30, 1921.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 25, 1913 reached a stage of 17.5 ft. Discharge, at site about 3 mi upstream, 51,400 ft³/s, computed by Miami Conservancy District. This stage is not comparable with present gage heights because of failure of levee in 1913.

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

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 2 | 1300 | *3,850 | *7.27 | | | | |

Minimum daily discharge 7.4 ft³/s Aug. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|---------|------|------|-------|-------|------|------|------|-------|-------|------|------|
| 1 | 28 | 48 | 78 | 147 | 314 | 225 | 184 | 116 | 47 | 18 | 22 | 15 | |
| 2 | 29 | 46 | 70 | 97 | 3220 | 222 | 219 | 115 | 48 | 16 | 20 | 15 | |
| 3 | 31 | 50 | 68 | 108 | 1950 | 254 | 370 | 111 | 48 | 18 | 18 | 22 | |
| 4 | 31 | 46 | 73 | 97 | 1050 | 359 | 856 | 108 | 46 | 20 | 17 | 26 | |
| 5 | 29 | 44 | 74 | 49 | 667 | 327 | 591 | 108 | 48 | 17 | 16 | 23 | |
| 6 | 31 | 41 | 69 | 71 | 375 | 479 | 455 | 107 | 45 | 16 | 15 | 23 | |
| 7 | 36 | 45 | 67 | 64 | 409 | 867 | 712 | 101 | 42 | 15 | 15 | 20 | |
| 8 | 37 | 43 | 64 | 59 | 324 | 1790 | 796 | 96 | 40 | 13 | 14 | 17 | |
| 9 | 44 | 50 | 64 | 59 | 252 | 1710 | 536 | 106 | 47 | 14 | 14 | 16 | |
| 10 | 45 | 51 | 64 | 57 | 208 | 1070 | 406 | 131 | 51 | 12 | 13 | 15 | |
| 11 | 51 | 48 | 62 | 53 | 175 | 664 | 340 | 109 | 42 | 12 | 11 | 13 | |
| 12 | 55 | 45 | 63 | 56 | 143 | 531 | 292 | 95 | 38 | 12 | 11 | 18 | |
| 13 | 48 | 47 | 60 | 63 | 131 | 649 | 256 | 87 | 33 | 11 | 10 | 48 | |
| 14 | 44 | 48 | 56 | 60 | 152 | 536 | 231 | 82 | 30 | 10 | 10 | 63 | |
| 15 | 39 | 45 | 73 | 53 | 278 | 404 | 209 | 80 | 30 | 11 | 9.0 | 47 | |
| 16 | 40 | 43 | 288 | 55 | 567 | 324 | 189 | 77 | 30 | 12 | 8.0 | 42 | |
| 17 | 41 | 45 | 174 | 65 | 466 | 276 | 177 | 76 | 33 | 11 | 8.0 | 34 | |
| 18 | 39 | 51 | 110 | 76 | 761 | 263 | 175 | 74 | 35 | 9.8 | 8.0 | 39 | |
| 19 | 41 | 44 | 89 | 77 | 1090 | 270 | 170 | 70 | 37 | 20 | 7.4 | 32 | |
| 20 | 40 | 41 | 94 | 106 | 3050 | 257 | 156 | 69 | 31 | 27 | 9.9 | 27 | |
| 21 | 41 | 41 | 167 | 144 | 1410 | 223 | 150 | 71 | 28 | 80 | 21 | 24 | |
| 22 | 40 | 38 | 157 | 115 | 782 | 199 | 155 | 69 | 25 | 83 | 22 | 26 | |
| 23 | 40 | 38 | 115 | 85 | 1230 | 193 | 156 | 81 | 24 | 61 | 21 | 29 | |
| 24 | 40 | 40 | 96 | 76 | 992 | 191 | 144 | 143 | 21 | 39 | 17 | 29 | |
| 25 | 45 | 54 | 145 | 63 | 558 | 209 | 135 | 100 | 21 | 29 | 12 | 27 | |
| 26 | 48 | 77 | 409 | 39 | 403 | 316 | 131 | 78 | 19 | 24 | 11 | 21 | |
| 27 | 57 | 76 | 344 | 60 | 342 | 308 | 125 | 69 | 18 | 22 | 10 | 18 | |
| 28 | 69 | 90 | 231 | 64 | 275 | 243 | 131 | 64 | 17 | 19 | 17 | 15 | |
| 29 | 61 | 91 | 326 | 61 | 245 | 221 | 125 | 60 | 18 | 17 | 17 | 14 | |
| 30 | 60 | 91 | 267 | 68 | --- | 212 | 121 | 56 | 20 | 16 | 16 | 19 | |
| 31 | 53 | --- | 183 | 76 | --- | 189 | --- | 53 | --- | 26 | 16 | --- | |
| TOTAL | 1333 | 1557 | 4200 | 2323 | 21819 | 13981 | 8693 | 2762 | 1012 | 710.8 | 436.3 | 777 | |
| MEAN | 43.0 | 51.9 | 135 | 74.9 | 752 | 451 | 290 | 89.1 | 33.7 | 22.9 | 14.1 | 25.9 | |
| MAX | 69 | 91 | 409 | 147 | 3220 | 1790 | 856 | 143 | 51 | 83 | 22 | 63 | |
| MIN | 28 | 38 | 56 | 39 | 131 | 189 | 121 | 53 | 17 | 9.8 | 7.4 | 13 | |
| CFSM | .09 | .10 | .27 | .15 | 1.50 | .90 | .58 | .18 | .07 | .05 | .03 | .05 | |
| IN. | .10 | .12 | .31 | .17 | 1.61 | 1.03 | .64 | .20 | .07 | .05 | .03 | .06 | |
| CAL YR 1987 | TOTAL | 113085 | | MEAN | 310 | MAX | 9910 | MIN | 24 | CFSM | .62 | IN. | 8.36 |
| WTR YR 1988 | TOTAL | 59604.1 | | MEAN | 163 | MAX | 3220 | MIN | 7.4 | CFSM | .32 | IN. | 4.41 |

GREAT MIAMI RIVER BASIN

179

03266000 STILLWATER RIVER AT ENGLEWOOD, OH

LOCATION.--Lat 39°52'10", long 84°16'57", in NW 1/4 sec. 23, T.5 N., R.5 E., Montgomery County, Hydrologic Unit 05080001, on right bank 1,000 ft downstream from Englewood Dam, 1 mi southeast of Englewood, and at mile 8.9.

DRAINAGE AREA.--650 mi².

PERIOD OF RECORD.--October 1925 to current year (monthly discharge only, October 1925, published in WSP 1305).

REVISED RECORDS.--WSP 1908: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 699.97 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Flood flow regulated by Englewood retarding basin.

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

AVERAGE DISCHARGE.--63 years, 577 ft³/s, 12.05 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,980 ft³/s June 15, 1958, gage height, 80.88 ft; minimum, 3.7 ft³/s Sept. 30, Oct. 1, 1944, gage height, 71.36 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a discharge of 85,400 ft³/s at site 1 mi downstream, computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,920 ft³/s Feb. 2, gage height, 76.62 ft; minimum daily, 11 ft³/s Aug. 19, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|--------|------|------|-------|-------|-------|------|------|------|------|------|------|
| 1 | 30 | 54 | 104 | 204 | 209 | 275 | 254 | 153 | 80 | 27 | 33 | 16 | |
| 2 | 30 | 53 | 97 | 157 | 2590 | 259 | 264 | 148 | 75 | 26 | 31 | 16 | |
| 3 | 30 | 50 | 94 | 131 | 3500 | 309 | 401 | 145 | 76 | 25 | 28 | 34 | |
| 4 | 31 | 51 | 98 | 153 | 1770 | 633 | 1160 | 139 | 74 | 24 | 26 | 41 | |
| 5 | 30 | 52 | 91 | 123 | 1100 | 537 | 940 | 137 | 71 | 27 | 24 | 28 | |
| 6 | 31 | 49 | 91 | 90 | 508 | 725 | 675 | 138 | 70 | 26 | 23 | 26 | |
| 7 | 32 | 48 | 93 | 93 | 378 | 1000 | 809 | 133 | 68 | 23 | 22 | 24 | |
| 8 | 33 | 48 | 91 | 86 | 435 | 1690 | 1070 | 126 | 64 | 22 | 21 | 23 | |
| 9 | 34 | 53 | 89 | 83 | 353 | 1950 | 807 | 128 | 69 | 20 | 21 | 21 | |
| 10 | 38 | 53 | 84 | 84 | 308 | 1450 | 572 | 142 | 68 | 18 | 20 | 19 | |
| 11 | 48 | 55 | 84 | 84 | 261 | 941 | 458 | 151 | 70 | 18 | 17 | 17 | |
| 12 | 46 | 54 | 86 | 79 | 229 | 686 | 389 | 131 | 62 | 17 | 16 | 23 | |
| 13 | 50 | 53 | 81 | 82 | 232 | 708 | 338 | 119 | 59 | 16 | 15 | 59 | |
| 14 | 46 | 51 | 80 | 84 | 240 | 717 | 301 | 111 | 53 | 18 | 15 | 49 | |
| 15 | 45 | 51 | 102 | 80 | 317 | 528 | 274 | 106 | 48 | 16 | 14 | 46 | |
| 16 | 42 | 52 | 127 | 77 | 511 | 413 | 249 | 100 | 49 | 14 | 12 | 60 | |
| 17 | 41 | 53 | 253 | 86 | 526 | 341 | 230 | 94 | 53 | 13 | 12 | 84 | |
| 18 | 40 | 55 | 170 | 101 | 734 | 313 | 228 | 93 | 49 | 14 | 12 | 58 | |
| 19 | 41 | 54 | 137 | 113 | 1050 | 311 | 222 | 93 | 50 | 23 | 11 | 44 | |
| 20 | 41 | 55 | 132 | 140 | 2720 | 307 | 208 | 94 | 51 | 25 | 17 | 41 | |
| 21 | 41 | 52 | 128 | 155 | 2370 | 279 | 196 | 94 | 49 | 46 | 15 | 35 | |
| 22 | 41 | 53 | 191 | 175 | 1140 | 250 | 207 | 94 | 43 | 70 | 11 | 32 | |
| 23 | 40 | 53 | 165 | 144 | 1160 | 235 | 204 | 122 | 38 | 79 | 22 | 32 | |
| 24 | 41 | 55 | 142 | 119 | 1390 | 233 | 191 | 224 | 35 | 63 | 27 | 31 | |
| 25 | 42 | 65 | 145 | 99 | 820 | 300 | 178 | 242 | 33 | 47 | 20 | 34 | |
| 26 | 43 | 76 | 279 | 85 | 519 | 466 | 170 | 160 | 30 | 44 | 17 | 31 | |
| 27 | 51 | 84 | 373 | 72 | 433 | 459 | 165 | 126 | 26 | 43 | 14 | 27 | |
| 28 | 53 | 94 | 301 | 89 | 349 | 355 | 162 | 109 | 25 | 32 | 35 | 25 | |
| 29 | 59 | 117 | 262 | 91 | 300 | 304 | 164 | 99 | 27 | 28 | 24 | 23 | |
| 30 | 61 | 104 | 326 | 92 | --- | 288 | 157 | 92 | 30 | 25 | 19 | 22 | |
| 31 | 58 | --- | 250 | 104 | --- | 265 | --- | 85 | --- | 42 | 17 | --- | |
| TOTAL | 1289 | 1797 | 4746 | 3355 | 26452 | 17527 | 11643 | 3928 | 1595 | 931 | 611 | 1021 | |
| MEAN | 41.6 | 59.9 | 153 | 108 | 912 | 565 | 388 | 127 | 53.2 | 30.0 | 19.7 | 34.0 | |
| MAX | 61 | 117 | 373 | 204 | 3500 | 1950 | 1160 | 242 | 80 | 79 | 35 | 84 | |
| MIN | 30 | 48 | 80 | 72 | 209 | 233 | 157 | 85 | 25 | 13 | 11 | 16 | |
| CFSM | .06 | .09 | .24 | .17 | 1.40 | .87 | .60 | .20 | .08 | .05 | .03 | .05 | |
| IN. | .07 | .10 | .27 | .19 | 1.51 | 1.00 | .67 | .22 | .09 | .05 | .03 | .06 | |
| CAL YR 1987 | TOTAL | 137663 | | MEAN | 377 | MAX | 6280 | MIN | 30 | CFSM | .58 | IN. | 7.88 |
| WTR YR 1988 | TOTAL | 74895 | | MEAN | 205 | MAX | 3500 | MIN | 11 | CFSM | .32 | IN. | 4.28 |

GREAT MIAMI RIVER BASIN

03267000 MAD RIVER NEAR URBANA, OH

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

DRAINAGE AREA.--162 mi².

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

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

GAGE.--Water-stage recorder. Datum of gage is 985.22 ft above National Geodetic Vertical Datum of 1929. Prior to May 18, 1930, nonrecording gage at same site and datum. May 18, 1930 to Sept. 30, 1931, nonrecording gage at site 600 ft downstream at datum 0.36 ft lower. Aug. 1 to Sept. 25, 1939, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Dec. 14-Feb. 16 and Apr. 26-May 8. Records fair except for periods of missing record which are poor. Sediment data collected at this site 1970 to 1974.

COOPERATION.--Gage-height tapes, and 6 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--55 years, 146 ft³/s, 12.24 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,000 ft³/s Jan. 22, 1959, gage height 12.05 ft, from rating curve extended above 4,000 ft³/s on basis of estimate of peak flow based on contracted-opening measurement at site 3 mi downstream with drainage area of 235 mi² adjusted to gage site by 0.8 power of the drainage-area ratio; minimum discharge, 2.1 ft³/s Jan. 21, 1963, gage height, 2.33 ft, result of freezeup; minimum daily, 24 ft³/s Feb. 2, 3, 1945, Jan. 13, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft³/s and maximum (*).

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 2 | -- | *1,300 | -- | | | | |
| Minimum daily discharge 35 ft ³ /s July 13. | | | | | | | |

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|-------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | 80 | 73 | 81 | 78 | 250 | 117 | 120 | 96 | 68 | 51 | 62 | 43 | |
| 2 | 79 | 73 | 78 | 76 | 900 | 115 | 120 | 94 | 68 | 50 | 61 | 44 | |
| 3 | 78 | 78 | 77 | 76 | 500 | 116 | 160 | 92 | 67 | 49 | 58 | 56 | |
| 4 | 78 | 78 | 81 | 72 | 340 | 118 | 202 | 90 | 67 | 48 | 57 | 61 | |
| 5 | 78 | 77 | 82 | 60 | 250 | 112 | 153 | 90 | 67 | 48 | 56 | 53 | |
| 6 | 78 | 75 | 82 | 64 | 200 | 114 | 146 | 90 | 68 | 45 | 58 | 51 | |
| 7 | 79 | 75 | 80 | 64 | 170 | 150 | 201 | 100 | 68 | 42 | 56 | 49 | |
| 8 | 78 | 75 | 75 | 66 | 160 | 199 | 198 | 110 | 65 | 41 | 53 | 49 | |
| 9 | 77 | 78 | 71 | 64 | 150 | 219 | 160 | 108 | 65 | 40 | 51 | 48 | |
| 10 | 75 | 78 | 70 | 62 | 150 | 187 | 144 | 132 | 64 | 39 | 52 | 47 | |
| 11 | 75 | 78 | 73 | 60 | 140 | 155 | 133 | 112 | 63 | 37 | 52 | 45 | |
| 12 | 75 | 77 | 74 | 60 | 140 | 147 | 123 | 110 | 64 | 36 | 51 | 46 | |
| 13 | 74 | 76 | 72 | 60 | 130 | 145 | 118 | 107 | 64 | 35 | 48 | 54 | |
| 14 | 72 | 73 | 78 | 60 | 130 | 138 | 114 | 95 | 62 | 36 | 46 | 51 | |
| 15 | 71 | 73 | 110 | 60 | 120 | 132 | 118 | 79 | 59 | 37 | 48 | 47 | |
| 16 | 71 | 74 | 90 | 58 | 110 | 129 | 118 | 78 | 57 | 36 | 47 | 46 | |
| 17 | 71 | 78 | 80 | 62 | 109 | 127 | 115 | 75 | 62 | 36 | 47 | 51 | |
| 18 | 71 | 78 | 78 | 64 | 128 | 126 | 114 | 74 | 60 | 36 | 46 | 51 | |
| 19 | 71 | 78 | 80 | 90 | 162 | 122 | 109 | 74 | 59 | 63 | 49 | 50 | |
| 20 | 71 | 78 | 86 | 120 | 353 | 120 | 107 | 75 | 59 | 64 | 46 | 47 | |
| 21 | 71 | 78 | 80 | 90 | 185 | 114 | 106 | 74 | 57 | 76 | 45 | 43 | |
| 22 | 71 | 76 | 78 | 78 | 161 | 112 | 104 | 73 | 57 | 66 | 44 | 43 | |
| 23 | 73 | 77 | 78 | 74 | 177 | 112 | 106 | 78 | 55 | 68 | 44 | 43 | |
| 24 | 73 | 80 | 78 | 72 | 161 | 112 | 106 | 83 | 57 | 61 | 45 | 43 | |
| 25 | 73 | 80 | 88 | 70 | 138 | 150 | 103 | 76 | 56 | 61 | 45 | 45 | |
| 26 | 73 | 82 | 94 | 68 | 130 | 238 | 110 | 75 | 53 | 61 | 45 | 44 | |
| 27 | 76 | 82 | 82 | 68 | 128 | 167 | 110 | 73 | 53 | 59 | 45 | 43 | |
| 28 | 75 | 82 | 86 | 68 | 121 | 145 | 110 | 72 | 52 | 59 | 47 | 43 | |
| 29 | 75 | 83 | 82 | 68 | 121 | 138 | 100 | 72 | 52 | 59 | 48 | 43 | |
| 30 | 73 | 82 | 80 | 70 | --- | 132 | 96 | 71 | 55 | 60 | 46 | 43 | |
| 31 | 73 | --- | 80 | 80 | --- | 123 | --- | 70 | --- | 62 | 44 | --- | |
| TOTAL | 2308 | 2325 | 2504 | 2182 | 5914 | 4331 | 3824 | 2698 | 1823 | 1561 | 1542 | 1422 | |
| MEAN | 74.5 | 77.5 | 80.8 | 70.4 | 204 | 140 | 127 | 87.0 | 60.8 | 50.4 | 49.7 | 47.4 | |
| MAX | 80 | 83 | 110 | 120 | 900 | 238 | 202 | 132 | 68 | 76 | 62 | 61 | |
| MIN | 71 | 73 | 70 | 58 | 109 | 112 | 96 | 70 | 52 | 35 | 44 | 43 | |
| CFSM | .46 | .48 | .50 | .43 | 1.26 | .86 | .78 | .54 | .38 | .31 | .31 | .29 | |
| IN. | .53 | .53 | .57 | .50 | 1.36 | .99 | .88 | .62 | .42 | .36 | .35 | .33 | |
| CAL YR 1987 | TOTAL | 49306 | | MEAN | 135 | MAX | 1580 | MIN | 70 | CFSM | .83 | IN. | 11.32 |
| WTR YR 1988 | TOTAL | 32434 | | MEAN | 88.6 | MAX | 900 | MIN | 35 | CFSM | .55 | IN. | 7.45 |

GREAT MIAMI RIVER BASIN

181

03267900 MAD RIVER AT ST. PARIS PIKE AT EAGLE CITY, OH

LOCATION.--Lat 39°57'51", long 83°49'54", in W 1/2 sec. 1, R. 10, T.4, Clark County, Hydrologic Unit 05080001, on left bank at downstream side of bridge on St. Paris Pike, 0.8 mi southeast of Eagle City, 1.1 mi downstream from Moore Run, 3.1 mi upstream from Buck Creek, 3.3 mi south of Tremont City, and at mile 29.5.

DRAINAGE AREA.--310 mi².

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

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

REMARKS.--No estimated daily discharges. Records good except those for May 4 to Sept. 30 and those above 2,000 ft³/s, which are fair. Water supply for city of Springfield is pumped from wells, adjacent to Mad River, just upstream from station. Recharge to the well field is largely by induced infiltration from Mad River and Moore Run. Pumpage, averaging 25.8 ft³/s in 1988, is returned as sewage 1.4 mi upstream from gaging station near Springfield (station 03269500). Water-quality data collected at this site 1966 to 1977. Satellite telemeter at station operated for U.S. Army Corps of Engineers.

AVERAGE DISCHARGE.--23 years, 307 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,700 ft³/s June 26, 1971, gage height, 16.00 ft, from rating curve extended above 3,060 ft³/s; minimum daily, 60 ft³/s Jan. 27, 28, 1977 (result of freezeup).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 19.8 ft, from data furnished by Miami Conservancy District. Flood of Jan. 21, 1959 reached a stage of 15.7 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2500 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|------|------|-----------------------------------|---------------------|
| Feb. 2 | 1030 | 2,110 | 9.04 | | | | |

Minimum daily discharge, 73 ft³/s July 17.

REVISIONS.--The maximum discharges reported for water year 1987 have been revised to 7,100 ft³/s, Oct. 4, 1986, gage height 14.97 ft, and 4,280 ft³/s, Nov. 26, 1987, gage height 11.98 ft, superceding figures published in the report for 1987.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 130 | 127 | 127 | 144 | 228 | 203 | 217 | 167 | 133 | 89 | 94 | 78 |
| 2 | 129 | 129 | 126 | 137 | 974 | 201 | 212 | 164 | 143 | 88 | 92 | 78 |
| 3 | 126 | 130 | 139 | 140 | 718 | 239 | 362 | 164 | 152 | 87 | 91 | 148 |
| 4 | 127 | 132 | 146 | 139 | 591 | 286 | 418 | 164 | 144 | 86 | 88 | 111 |
| 5 | 129 | 131 | 135 | 202 | 414 | 248 | 304 | 164 | 148 | 90 | 88 | 93 |
| 6 | 130 | 131 | 129 | 601 | 319 | 307 | 305 | 160 | 151 | 89 | 92 | 89 |
| 7 | 131 | 131 | 129 | 696 | 273 | 400 | 406 | 154 | 154 | 87 | 88 | 87 |
| 8 | 130 | 131 | 129 | 629 | 251 | 387 | 400 | 149 | 157 | 86 | 87 | 84 |
| 9 | 130 | 138 | 130 | 481 | 234 | 392 | 314 | 156 | 173 | 84 | 86 | 81 |
| 10 | 131 | 133 | 128 | 257 | 217 | 359 | 281 | 175 | 158 | 83 | 86 | 79 |
| 11 | 139 | 132 | 129 | 183 | 209 | 292 | 263 | 157 | 158 | 81 | 86 | 76 |
| 12 | 130 | 130 | 132 | 138 | 204 | 271 | 247 | 149 | 159 | 81 | 85 | 127 |
| 13 | 128 | 130 | 125 | 135 | 188 | 269 | 233 | 144 | 159 | 81 | 82 | 150 |
| 14 | 127 | 129 | 127 | 132 | 186 | 248 | 226 | 139 | 157 | 80 | 81 | 95 |
| 15 | 126 | 128 | 165 | 131 | 248 | 234 | 219 | 136 | 153 | 78 | 82 | 88 |
| 16 | 125 | 128 | 153 | 128 | 234 | 222 | 213 | 135 | 153 | 75 | 81 | 86 |
| 17 | 126 | 129 | 141 | 131 | 220 | 213 | 207 | 134 | 154 | 73 | 80 | 91 |
| 18 | 124 | 127 | 136 | 136 | 254 | 212 | 207 | 130 | 137 | 78 | 87 | 82 |
| 19 | 126 | 124 | 135 | 152 | 398 | 211 | 200 | 132 | 123 | 114 | 109 | 81 |
| 20 | 126 | 122 | 151 | 223 | 780 | 208 | 196 | 131 | 116 | 117 | 90 | 83 |
| 21 | 126 | 121 | 144 | 173 | 8413 | 198 | 194 | 127 | 112 | 169 | 86 | 80 |
| 22 | 128 | 121 | 141 | 153 | 335 | 191 | 196 | 124 | 108 | 109 | 84 | 80 |
| 23 | 129 | 121 | 137 | 145 | 381 | 188 | 189 | 151 | 101 | 116 | 101 | 79 |
| 24 | 130 | 121 | 133 | 143 | 346 | 183 | 183 | 159 | 100 | 100 | 87 | 77 |
| 25 | 133 | 129 | 145 | 139 | 279 | 366 | 180 | 149 | 97 | 98 | 84 | 77 |
| 26 | 130 | 134 | 158 | 136 | 249 | 516 | 178 | 138 | 94 | 102 | 85 | 76 |
| 27 | 140 | 124 | 155 | 140 | 239 | 335 | 178 | 135 | 92 | 98 | 82 | 77 |
| 28 | 133 | 123 | 157 | 135 | 219 | 276 | 179 | 132 | 91 | 93 | 99 | 77 |
| 29 | 131 | 135 | 154 | 132 | 213 | 250 | 176 | 131 | 92 | 91 | 100 | 77 |
| 30 | 130 | 129 | 148 | 132 | --- | 233 | 169 | 132 | 92 | 93 | 87 | 77 |
| 31 | 128 | --- | 151 | 137 | --- | 219 | --- | 133 | --- | 97 | 81 | --- |
| TOTAL | 4008 | 3850 | 4335 | 6480 | 9814 | 8357 | 7252 | 4515 | 3961 | 2893 | 2731 | 2664 |
| MEAN | 129 | 128 | 140 | 209 | 338 | 270 | 242 | 146 | 132 | 93.3 | 88.1 | 88.8 |
| MAX | 140 | 138 | 165 | 696 | 974 | 516 | 418 | 175 | 173 | 169 | 109 | 150 |
| MIN | 124 | 121 | 125 | 128 | 186 | 183 | 169 | 124 | 91 | 73 | 80 | 76 |

CAL YR 1987 TOTAL 82211 MEAN 225 MAX 2320 MIN 121
WTR YR 1988 TOTAL 60860 MEAN 166 MAX 974 MIN 73

GREAT MIAMI RIVER BASIN

03269500 MAD RIVER NEAR SPRINGFIELD, OH

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

DRAINAGE AREA.--490 mi².

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

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

GAGE.--Water-stage recorder. Datum of gage is 881.42 ft above National Geodetic Vertical Datum of 1929. Jan. 1, 1904 to Mar. 31, 1906, nonrecording gage at site 0.3 mi downstream at different datum. Feb. 1, 1914, to Feb. 29, 1924, nonrecording gage at site 1.8 mi upstream at datum 6.39 ft higher. Mar. 1, 1924, to July 31, 1925, nonrecording gage at site 300 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records excellent. Some regulation by C.J. Brown Reservoir, 8.3 mi upstream on Buck Creek, since 1972. Occasional low-flow regulation by powerplant 2.3 mi upstream; daily flows are not affected appreciably. Water-quality data collected at this site 1965 to 1973.

COOPERATION.--Gage height charts, tapes, and 6 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--75 years, (1904-05, 1914-88), 489 ft³/s, 13.56 in/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,500 ft³/s Jan. 21, 1959, gage height, 15.76 ft, from rating curve extended above 14,000 ft³/s on basis of slope-area and contracted opening measurements of peak flow; minimum daily discharge, 30 ft³/s Sept. 15, 1904.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 25, 1913 reached a stage of 16.9 ft, present datum, discharge, 55,400 ft³/s computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,690 ft³/s Sept. 12 gage height, 6.14 ft; minimum daily, 130 ft³/s July 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|------|------|-------|-------|-------|------|------|------|------|------|
| 1 | 225 | 239 | 306 | 234 | 693 | 338 | 339 | 266 | 184 | 159 | 166 | 140 |
| 2 | 225 | 241 | 303 | 225 | 2790 | 344 | 331 | 265 | 206 | 156 | 159 | 154 |
| 3 | 222 | 243 | 338 | 226 | 1250 | 448 | 723 | 264 | 196 | 153 | 157 | 365 |
| 4 | 222 | 243 | 335 | 223 | 1030 | 513 | 820 | 262 | 184 | 152 | 158 | 258 |
| 5 | 226 | 240 | 316 | 177 | 741 | 433 | 538 | 263 | 178 | 157 | 155 | 217 |
| 6 | 229 | 239 | 305 | 194 | 581 | 494 | 513 | 260 | 178 | 156 | 163 | 230 |
| 7 | 233 | 239 | 309 | 187 | 526 | 585 | 616 | 251 | 175 | 154 | 148 | 179 |
| 8 | 226 | 238 | 305 | 198 | 492 | 553 | 606 | 248 | 172 | 152 | 147 | 168 |
| 9 | 227 | 266 | 312 | 192 | 462 | 551 | 485 | 261 | 208 | 147 | 154 | 172 |
| 10 | 244 | 245 | 292 | 185 | 440 | 517 | 433 | 277 | 177 | 144 | 148 | 166 |
| 11 | 258 | 243 | 235 | 178 | 431 | 445 | 405 | 257 | 173 | 144 | 151 | 159 |
| 12 | 232 | 243 | 227 | 183 | 421 | 425 | 381 | 248 | 170 | 144 | 148 | 599 |
| 13 | 227 | 243 | 217 | 180 | 394 | 421 | 364 | 262 | 170 | 145 | 144 | 763 |
| 14 | 227 | 242 | 224 | 175 | 398 | 396 | 351 | 241 | 170 | 142 | 140 | 302 |
| 15 | 227 | 238 | 340 | 177 | 529 | 376 | 340 | 248 | 169 | 137 | 149 | 236 |
| 16 | 227 | 239 | 251 | 174 | 475 | 361 | 324 | 289 | 192 | 134 | 146 | 232 |
| 17 | 228 | 248 | 237 | 189 | 423 | 351 | 316 | 228 | 184 | 130 | 140 | 224 |
| 18 | 222 | 242 | 230 | 191 | 414 | 346 | 318 | 225 | 173 | 170 | 258 | 194 |
| 19 | 226 | 239 | 235 | 281 | 567 | 328 | 308 | 223 | 166 | 330 | 269 | 190 |
| 20 | 227 | 237 | 259 | 372 | 1110 | 322 | 304 | 222 | 167 | 390 | 159 | 198 |
| 21 | 230 | 236 | 239 | 254 | 638 | 309 | 302 | 216 | 166 | 434 | 147 | 181 |
| 22 | 235 | 233 | 235 | 231 | 517 | 301 | 322 | 209 | 165 | 246 | 147 | 179 |
| 23 | 239 | 239 | 229 | 218 | 570 | 298 | 306 | 301 | 163 | 225 | 214 | 173 |
| 24 | 249 | 246 | 225 | 213 | 535 | 292 | 291 | 251 | 162 | 180 | 157 | 171 |
| 25 | 247 | 272 | 274 | 208 | 447 | 509 | 287 | 229 | 162 | 172 | 142 | 170 |
| 26 | 244 | 269 | 281 | 198 | 402 | 738 | 286 | 212 | 160 | 274 | 142 | 167 |
| 27 | 267 | 236 | 251 | 201 | 387 | 499 | 283 | 205 | 160 | 217 | 142 | 167 |
| 28 | 248 | 298 | 261 | 199 | 360 | 420 | 286 | 196 | 161 | 177 | 172 | 166 |
| 29 | 246 | 332 | 249 | 200 | 352 | 385 | 280 | 191 | 165 | 166 | 210 | 165 |
| 30 | 246 | 305 | 238 | 208 | --- | 363 | 272 | 187 | 164 | 178 | 154 | 179 |
| 31 | 240 | --- | 247 | 231 | --- | 341 | --- | 186 | --- | 189 | 143 | --- |
| TOTAL | 7271 | 7513 | 8305 | 6502 | 18375 | 13002 | 11730 | 7443 | 5220 | 5854 | 5029 | 6864 |
| MEAN | 235 | 250 | 268 | 210 | 634 | 419 | 391 | 240 | 174 | 189 | 162 | 229 |
| MAX | 267 | 332 | 340 | 372 | 2790 | 738 | 820 | 301 | 208 | 434 | 269 | 763 |
| MIN | 222 | 233 | 217 | 174 | 352 | 292 | 272 | 186 | 160 | 130 | 140 | 140 |
| CFSM | .48 | .51 | .55 | .43 | 1.29 | .86 | .80 | .49 | .36 | .39 | .33 | .47 |
| IN. | .55 | .57 | .63 | .49 | 1.39 | .99 | .89 | .57 | .40 | .44 | .38 | .52 |
| CAL YR 1987 | TOTAL | 130414 | MEAN | 357 | MAX | 3310 | MIN | 184 | CFSM | .73 | IN. | 9.90 |
| WTR YR 1988 | TOTAL | 103108 | MEAN | 282 | MAX | 2790 | MIN | 130 | CFSM | .58 | IN. | 7.83 |

GREAT MIAMI RIVER BASIN

183

03270000 MAD RIVER NEAR DAYTON, OH

LOCATION.--Lat 39°47'50", long 84°05'19", in SW 1/4 sec. 7, R. 8, T.2, Green County, Hydrologic Unit 05080001, on left bank in retarding basin 300 ft upstream from Huffman Dam, 2.3 mi downstream from Mud Run, 6.2 mi northeast of Dayton and at mile 6.1. Water-quality sampling site was on left bank 900 ft downstream.

DRAINAGE AREA.--635 mi².

PERIOD OF RECORD.--October 1914 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 453: 1915. WSP 743: 1929-32. WSP 1305: 1916(M), 1925(M) 1930-32(M). drainage area. WRD-OH-82-1: 1980.

GAGE.--Water-stage recorder. Datum of gage is 777.06 ft above National Geodetic Vertical Datum of 1929. Jan. 21, 1959 to Dec. 14, 1967, at site 900 ft downstream, at datum 77.01 ft lower. See WSP 1725 for history of changes prior to Jan. 21, 1959. Water-quality data collected at this site 1947-1948, 1962-1963, 1966-1980.

REMARKS.--No estimated daily discharges. Records fair. Flood flows affected by backwater from Huffman retarding dam beginning in 1921, some regulation by C. J. Brown Reservoir 26 mi upstream on Buck Creek since 1972. Also see REMARKS for station 03269500.

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

AVERAGE DISCHARGE.--74 years, 628 ft³/s, 13.43 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,200 ft³/s Jan. 22, 1959 (based on Huffman retarding basin outflow records); maximum gage height, 87.9 ft Feb. 26, 1929 at site and datum then in use; minimum daily discharge, 94 ft³/s Aug. 6, 1934, but may have been less during period 1921-24.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 25, 1913 reached a stage of 14.0 ft, original site and datum, discharge 75,700 ft³/s, computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,480 ft³/s Feb. 2, gage height, 10.20 ft; minimum daily, 112 ft³/s July 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|--------|-------|------|-------|-------|-------|------|------|------|------|------|------|
| 1 | 217 | 221 | 335 | 309 | 703 | 441 | 417 | 323 | 219 | 153 | 183 | 146 | |
| 2 | 219 | 217 | 335 | 281 | 3650 | 428 | 409 | 317 | 216 | 145 | 172 | 143 | |
| 3 | 220 | 216 | 367 | 281 | 2090 | 557 | 667 | 316 | 252 | 142 | 163 | 327 | |
| 4 | 220 | 216 | 394 | 274 | 1580 | 807 | 1140 | 316 | 228 | 138 | 161 | 487 | |
| 5 | 219 | 216 | 352 | 241 | 1120 | 631 | 733 | 311 | 221 | 135 | 155 | 248 | |
| 6 | 218 | 214 | 336 | 267 | 800 | 688 | 652 | 306 | 214 | 137 | 189 | 274 | |
| 7 | 233 | 208 | 331 | 290 | 747 | 744 | 754 | 295 | 212 | 137 | 161 | 231 | |
| 8 | 229 | 212 | 331 | 224 | 660 | 695 | 774 | 286 | 209 | 134 | 151 | 200 | |
| 9 | 222 | 242 | 337 | 253 | 607 | 684 | 628 | 295 | 238 | 130 | 145 | 183 | |
| 10 | 235 | 229 | 338 | 241 | 576 | 663 | 550 | 300 | 218 | 127 | 155 | 182 | |
| 11 | 294 | 223 | 281 | 258 | 555 | 579 | 504 | 292 | 206 | 127 | 152 | 176 | |
| 12 | 245 | 223 | 267 | 205 | 546 | 536 | 471 | 268 | 199 | 127 | 148 | 328 | |
| 13 | 233 | 221 | 244 | 204 | 509 | 541 | 441 | 259 | 194 | 127 | 142 | 1540 | |
| 14 | 227 | 216 | 242 | 202 | 508 | 507 | 417 | 272 | 193 | 128 | 137 | 600 | |
| 15 | 227 | 216 | 488 | 195 | 673 | 483 | 403 | 245 | 191 | 127 | 134 | 403 | |
| 16 | 227 | 216 | 335 | 187 | 649 | 456 | 383 | 295 | 189 | 117 | 137 | 357 | |
| 17 | 222 | 218 | 301 | 191 | 589 | 436 | 366 | 238 | 221 | 112 | 135 | 376 | |
| 18 | 221 | 223 | 281 | 216 | 563 | 426 | 361 | 225 | 194 | 127 | 138 | 294 | |
| 19 | 220 | 218 | 271 | 269 | 700 | 411 | 361 | 221 | 184 | 495 | 444 | 270 | |
| 20 | 223 | 216 | 328 | 473 | 1500 | 394 | 352 | 220 | 177 | 390 | 200 | 266 | |
| 21 | 220 | 216 | 292 | 316 | 949 | 377 | 347 | 218 | 174 | 806 | 162 | 241 | |
| 22 | 213 | 213 | 282 | 260 | 713 | 365 | 386 | 210 | 170 | 295 | 145 | 230 | |
| 23 | 212 | 208 | 275 | 237 | 725 | 355 | 362 | 306 | 167 | 313 | 195 | 224 | |
| 24 | 218 | 217 | 267 | 226 | 736 | 347 | 353 | 311 | 163 | 216 | 237 | 213 | |
| 25 | 239 | 263 | 373 | 218 | 612 | 535 | 339 | 281 | 158 | 190 | 153 | 208 | |
| 26 | 221 | 337 | 435 | 207 | 540 | 1010 | 338 | 250 | 152 | 196 | 139 | 202 | |
| 27 | 242 | 248 | 361 | 203 | 518 | 691 | 335 | 239 | 147 | 413 | 137 | 197 | |
| 28 | 239 | 296 | 359 | 209 | 476 | 554 | 339 | 228 | 151 | 216 | 164 | 196 | |
| 29 | 229 | 373 | 350 | 206 | 459 | 494 | 340 | 225 | 154 | 183 | 265 | 194 | |
| 30 | 227 | 336 | 313 | 205 | --- | 458 | 332 | 223 | 159 | 171 | 189 | 196 | |
| 31 | 225 | --- | 320 | 222 | --- | 424 | --- | 222 | --- | 280 | 156 | --- | |
| TOTAL | 7056 | 7088 | 10121 | 7570 | 25053 | 16717 | 14254 | 8313 | 5770 | 6534 | 5344 | 9132 | |
| MEAN | 228 | 236 | 326 | 244 | 864 | 539 | 475 | 268 | 192 | 211 | 172 | 304 | |
| MAX | 294 | 373 | 488 | 473 | 3650 | 1010 | 1140 | 323 | 252 | 806 | 444 | 1540 | |
| MIN | 212 | 208 | 242 | 187 | 459 | 347 | 332 | 210 | 147 | 112 | 134 | 143 | |
| CFSM | .36 | .37 | .51 | .38 | 1.36 | .85 | .75 | .42 | .30 | .33 | .27 | .48 | |
| IN. | .41 | .42 | .59 | .44 | 1.47 | .98 | .84 | .49 | .34 | .38 | .31 | .53 | |
| CAL YR 1987 | TOTAL | 166990 | | MEAN | 458 | MAX | 3210 | MIN | 197 | CFSM | .72 | IN. | 9.78 |
| WTR YR 1988 | TOTAL | 122952 | | MEAN | 336 | MAX | 3650 | MIN | 112 | CFSM | .53 | IN. | 7.20 |

GREAT MIAMI RIVER BASIN

03270500 GREAT MIAMI RIVER AT DAYTON, OH

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

DRAINAGE AREA.--2,511 mi².

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

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

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft above National Geodetic Vertical Datum of 1929 as requested by cooperator (699.71 ft adjustment of 1929). Prior to Oct. 1, 1921, nonrecording gage at Main Street Bridge at datum 23.73 ft higher. Oct. 1, 1921, to July 24, 1931, nonrecording gage at Main Street Bridge at datum 21.00 ft higher.

REMARKS.--No estimated daily discharge. Records good. Flood flow regulated by four retarding basins upstream from station beginning in 1920 on Mad River 6.5 mi upstream, on Stillwater River 10.5 mi upstream, on Great Miami River 11.5 mi upstream, and on Loramie Creek 40 mi upstream. Also see REMARKS for stations 03261500, 03261950 and 03269500. Water is diverted 6 mi upstream from station for use in Dayton; most of return flow from diversions bypasses station in Dayton sewer systems. Sediment data collected at this site 1951 to 1953. U.S. Army Corps of Engineers satellite telemeter at station.

COOPERATION.--Gage-height charts, tapes, and 11 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--59 years (1929-88). 2,156 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 60,900 ft³/s Jan. 22, 1959, gage height, 35.45 ft in gage well, from graph based on gage readings; 36.0 ft, from outside floodmarks; minimum daily, 109 ft³/s Aug. 8, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913 reached a stage of 29.0 ft, site and datum then in use, discharge, 250,000 ft³/s, computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,800 ft³/s Feb. 2, gage height 28.96 ft; minimum daily, 111 ft³/s July 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|-------|-------|--------|-------|-------|-------|------|-------|------|-------|
| 1 | 288 | 354 | 487 | 789 | 1210 | 1430 | 1360 | 876 | 334 | 163 | 321 | 146 |
| 2 | 275 | 354 | 477 | 575 | 9590 | 1320 | 1340 | 840 | 310 | 159 | 253 | 137 |
| 3 | 262 | 360 | 515 | 457 | 10600 | 1700 | 1910 | 769 | 321 | 155 | 260 | 454 |
| 4 | 262 | 360 | 580 | 496 | 7100 | 2500 | 3970 | 739 | 331 | 149 | 238 | 525 |
| 5 | 275 | 342 | 498 | 307 | 4750 | 2240 | 3670 | 707 | 318 | 154 | 216 | 284 |
| 6 | 275 | 338 | 487 | 329 | 2660 | 2430 | 2920 | 686 | 319 | 155 | 332 | 234 |
| 7 | 281 | 327 | 510 | 365 | 1750 | 2820 | 2980 | 667 | 323 | 151 | 250 | 212 |
| 8 | 288 | 327 | 496 | 377 | 1980 | 4070 | 3710 | 624 | 298 | 152 | 202 | 184 |
| 9 | 288 | 362 | 466 | 351 | 1810 | 5570 | 3210 | 648 | 300 | 137 | 177 | 181 |
| 10 | 321 | 336 | 446 | 347 | 1610 | 5430 | 2450 | 644 | 298 | 135 | 159 | 176 |
| 11 | 394 | 327 | 423 | 352 | 1400 | 4130 | 2070 | 666 | 287 | 129 | 158 | 159 |
| 12 | 357 | 327 | 410 | 331 | 1180 | 3190 | 1860 | 616 | 281 | 120 | 149 | 442 |
| 13 | 344 | 327 | 368 | 304 | 946 | 2760 | 1710 | 574 | 290 | 119 | 150 | 1750 |
| 14 | 327 | 327 | 382 | 294 | 1020 | 2640 | 1500 | 555 | 280 | 139 | 133 | 682 |
| 15 | 327 | 327 | 707 | 288 | 1580 | 2230 | 1340 | 510 | 259 | 135 | 129 | 475 |
| 16 | 327 | 327 | 525 | 288 | 2000 | 1910 | 1280 | 545 | 274 | 125 | 127 | 539 |
| 17 | 322 | 336 | 755 | 303 | 2240 | 1690 | 1230 | 466 | 293 | 111 | 119 | 675 |
| 18 | 314 | 339 | 683 | 348 | 2350 | 1550 | 1180 | 437 | 270 | 170 | 114 | 419 |
| 19 | 316 | 449 | 550 | 531 | 3280 | 1480 | 1120 | 429 | 254 | 1000 | 322 | 335 |
| 20 | 335 | 441 | 607 | 875 | 7950 | 1490 | 1100 | 415 | 262 | 712 | 213 | 304 |
| 21 | 321 | 446 | 520 | 685 | 7750 | 1420 | 1040 | 422 | 244 | 1110 | 156 | 277 |
| 22 | 300 | 445 | 620 | 647 | 4780 | 1320 | 1130 | 398 | 214 | 793 | 130 | 253 |
| 23 | 313 | 477 | 670 | 616 | 4180 | 1220 | 1090 | 567 | 195 | 740 | 247 | 242 |
| 24 | 339 | 512 | 559 | 509 | 4860 | 1160 | 1000 | 644 | 192 | 478 | 270 | 236 |
| 25 | 351 | 557 | 680 | 430 | 3530 | 1900 | 951 | 882 | 185 | 381 | 179 | 232 |
| 26 | 327 | 574 | 888 | 312 | 2490 | 2890 | 976 | 632 | 159 | 433 | 138 | 226 |
| 27 | 386 | 421 | 1040 | 295 | 2090 | 2720 | 935 | 512 | 159 | 532 | 129 | 226 |
| 28 | 374 | 465 | 1030 | 298 | 1800 | 2180 | 877 | 458 | 165 | 359 | 179 | 226 |
| 29 | 354 | 592 | 871 | 306 | 1590 | 1820 | 860 | 402 | 175 | 272 | 257 | 226 |
| 30 | 354 | 507 | 1090 | 287 | --- | 1580 | 882 | 375 | 185 | 257 | 211 | 226 |
| 31 | 354 | --- | 1050 | 275 | --- | 1380 | --- | 366 | --- | 511 | 164 | --- |
| TOTAL | 9951 | 11983 | 19390 | 12967 | 100076 | 72170 | 51651 | 18071 | 7775 | 10136 | 6082 | 10683 |
| MEAN | 321 | 399 | 625 | 418 | 3451 | 2328 | 1722 | 583 | 259 | 327 | 196 | 356 |
| MAX | 394 | 592 | 1090 | 875 | 10600 | 5570 | 3970 | 882 | 334 | 1110 | 332 | 1750 |
| MIN | 262 | 327 | 368 | 275 | 946 | 1160 | 860 | 366 | 159 | 111 | 114 | 137 |
| CAL YR 1987 | TOTAL | 539426 | | MEAN | 1478 | MAX | 17600 | MIN | 262 | | | |
| WTR YR 1988 | TOTAL | 330935 | | MEAN | 904 | MAX | 10600 | MIN | 111 | | | |

GREAT MIAMI RIVER BASIN

185

03271000 WOLF CREEK AT DAYTON, OH

LOCATION.--Lat 39°46'00", long 84°14'10", Montgomery County, Hydrologic Unit 05080002, on right bank, at West Riverview Avenue Bridge, in Dayton, 1.8 mi upstream from mouth.

DRAINAGE AREA.--68.7 mi².

PERIOD OF RECORD.--September 1938 to September 1950, October 1953 to September 1973 (low flow partial records site), October 1986 to current year.

GAGE.--Water-stage recorder. Datum of gage is 739.83 ft above National Geodetic Vertical Datum of 1929. Prior to 1950, recording gage at same location at datum 39.83 ft lower.

REMARKS.--No estimated daily discharges. Records are fair.

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

AVERAGE DISCHARGE.--14 years, 55.3 ft³/s, 10.93 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,950 ft³/s Mar. 19, 1943, gage height, 53.5 ft (at datum then in use), minimum 0.8 ft³/s, Sept. 18, 1948.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge during flood in January 1959, about 12,800 ft³/s gage height, 13.1 ft, computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|---|------|-----------------------------------|---------------------|
| Feb. 2 | 0345 | *2,680 | *6.50 | No other peaks greater than base discharge. | | | |

Minimum daily discharge, 3.9 ft³/s July 5,6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|---------|------|-------|------|------|------|-------|-------|-------|-------|-------|
| 1 | 5.8 | 14 | 12 | 18 | 526 | 28 | 49 | 16 | 11 | 5.7 | 12 | 5.4 |
| 2 | 6.0 | 15 | 12 | 13 | 1320 | 30 | 46 | 16 | 11 | 5.2 | 8.5 | 5.4 |
| 3 | 6.1 | 17 | 30 | 12 | 357 | 203 | 228 | 14 | 11 | 4.6 | 7.4 | 84 |
| 4 | 6.2 | 16 | 25 | 12 | 337 | 254 | 212 | 15 | 11 | 4.4 | 6.8 | 24 |
| 5 | 6.8 | 15 | 14 | 10 | 158 | 119 | 105 | 16 | 10 | 3.9 | 7.1 | 13 |
| 6 | 6.7 | 15 | 10 | 8.7 | 114 | 134 | 144 | 15 | 10 | 3.9 | 22 | 8.8 |
| 7 | 6.4 | 16 | 12 | 8.5 | 76 | 102 | 228 | 13 | 9.8 | 4.5 | 8.8 | 7.6 |
| 8 | 6.0 | 16 | 12 | 9.2 | 49 | 79 | 147 | 13 | 9.0 | 4.8 | 7.4 | 6.6 |
| 9 | 6.8 | 20 | 15 | 9.4 | 35 | 80 | 88 | 22 | 10 | 4.6 | 6.4 | 6.3 |
| 10 | 18 | 17 | 12 | 8.9 | 30 | 67 | 67 | 16 | 9.5 | 4.6 | 6.0 | 6.0 |
| 11 | 24 | 16 | 17 | 8.8 | 30 | 49 | 54 | 13 | 8.9 | 4.9 | 5.8 | 5.8 |
| 12 | 12 | 15 | 15 | 9.7 | 28 | 53 | 43 | 12 | 8.7 | 5.1 | 5.8 | 70 |
| 13 | 10 | 17 | 12 | 10 | 27 | 57 | 37 | 11 | 8.2 | 6.0 | 7.7 | 36 |
| 14 | 9.5 | 17 | 17 | 8.8 | 32 | 44 | 34 | 11 | 7.9 | 6.2 | 5.5 | 10 |
| 15 | 9.9 | 17 | 77 | 8.6 | 185 | 38 | 30 | 10 | 7.4 | 5.3 | 5.6 | 8.0 |
| 16 | 11 | 18 | 23 | 9.7 | 84 | 33 | 28 | 13 | 11 | 4.6 | 5.7 | 138 |
| 17 | 13 | 19 | 15 | 14 | 83 | 31 | 27 | 9.9 | 8.7 | 4.6 | 5.4 | 80 |
| 18 | 12 | 17 | 13 | 17 | 105 | 32 | 29 | 9.1 | 8.1 | 40 | 5.2 | 15 |
| 19 | 12 | 17 | 16 | 76 | 290 | 31 | 24 | 9.5 | 6.9 | 122 | 9.8 | 10 |
| 20 | 13 | 17 | 35 | 78 | 303 | 29 | 22 | 9.5 | 8.7 | 136 | 6.6 | 12 |
| 21 | 14 | 16 | 21 | 29 | 122 | 25 | 22 | 9.2 | 6.9 | 54 | 5.1 | 8.0 |
| 22 | 15 | 16 | 16 | 20 | 77 | 23 | 41 | 9.0 | 6.5 | 16 | 5.0 | 7.8 |
| 23 | 17 | 19 | 13 | 16 | 102 | 23 | 27 | 87 | 6.7 | 13 | 26 | 7.7 |
| 24 | 20 | 28 | 16 | 16 | 72 | 22 | 22 | 55 | 5.6 | 12 | 7.2 | 8.4 |
| 25 | 14 | 42 | 76 | 13 | 51 | 344 | 20 | 27 | 5.6 | 12 | 5.8 | 7.9 |
| 26 | 17 | 43 | 88 | 11 | 41 | 224 | 20 | 20 | 5.1 | 25 | 5.2 | 7.5 |
| 27 | 23 | 17 | 33 | 11 | 38 | 104 | 19 | 17 | 4.8 | 17 | 5.0 | 7.1 |
| 28 | 15 | 31 | 30 | 11 | 31 | 68 | 19 | 15 | 4.9 | 9.6 | 17 | 6.6 |
| 29 | 13 | 34 | 25 | 11 | 30 | 54 | 17 | 15 | 6.7 | 8.0 | 14 | 6.2 |
| 30 | 13 | 13 | 18 | 13 | --- | 44 | 16 | 13 | 5.8 | 8.6 | 7.3 | 7.7 |
| 31 | 14 | --- | 21 | 23 | --- | 40 | --- | 13 | --- | 54 | 6.1 | --- |
| TOTAL | 376.2 | 590 | 751 | 524.3 | 4733 | 2464 | 1865 | 544.2 | 245.4 | 610.1 | 259.2 | 626.8 |
| MEAN | 12.1 | 19.7 | 24.2 | 16.9 | 163 | 79.5 | 62.2 | 17.6 | 8.18 | 19.7 | 8.36 | 20.9 |
| MAX | 24 | 43 | 88 | 78 | 1320 | 344 | 228 | 87 | 11 | 136 | 26 | 138 |
| MIN | 5.8 | 13 | 10 | 8.5 | 27 | 22 | 16 | 9.0 | 4.8 | 3.9 | 5.0 | 5.4 |
| CAL YR 1987 | TOTAL | 16896.0 | | MEAN | 46.3 | MAX | 909 | MIN | 4.6 | | | |
| WTR YR 1988 | TOTAL | 13589.2 | | MEAN | 37.1 | MAX | 1320 | MIN | 3.9 | | | |

GREAT MIAMI RIVER BASIN

03271500 GREAT MIAMI RIVER AT MIAMISBURG, OH

LOCATION.--Lat 39°38'40", long 84°17'23", in sec. 31, R.6, T.1, Montgomery County, Hydrologic Unit 05080002, on left bank 600 ft downstream from bridge on State Highway 725 at Miamisburg, 0.3 mi downstream from Bear Creek, 3.2 mi upstream from Crains Run, and at mile 66.4.

DRAINAGE AREA.--2,711 mi².

PERIOD OF RECORD.--March 1916 to September 1920 (published as Miami River at Franklin 1916-17), August 1924 to September 1935 (published as Miami River near Miamisburg), October 1952 to current year (published as Miami River at Miamisburg 1952-62). Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 743: 1929(M). WSP 1385: 1926. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 678.60 ft above National Geodetic Vertical Datum of 1929. Mar. 16, 1916 to Sept. 30, 1920, nonrecording gage at site 6.7 mi downstream at different datum. Aug. 29 to Sept. 16, 1924, nonrecording gage, and Sept. 17, 1924 to Sept. 30, 1935, water-stage recorder, at site 2.2 mi downstream at datum 677.06 ft above National Geodetic Vertical Datum.

REMARKS.--No estimated daily discharges. Records good. Diurnal fluctuation caused by powerplant 0.4 mi upstream from station. Flood flow regulated by retarding dams beginning in 1920 on Mad River 19 mi upstream, on Stillwater River 23 mi upstream, on Great Miami River 23 mi upstream and on Loramie Creek 52 mi upstream. Also see REMARKS for stations 03261500 and 03269500.

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

AVERAGE DISCHARGE.--51 years, 2,427 ft³/s, 12.16 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61,800 ft³/s Jan. 21, 22, 1959, gage height, 20.65 ft in gage well, from graph based on gage readings; 21.3 ft, from outside floodmarks; minimum daily, 148 ft³/s Sept. 7, 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 26, 1913 reached a discharge of 257,000 ft³/s, computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,300 ft³/s Feb. 2, gage height, 9.36 ft; minimum daily, 209 ft³/s July 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 402 | 459 | 646 | 973 | 2510 | 1620 | 1590 | 1090 | 561 | 266 | 424 | 282 |
| 2 | 394 | 472 | 650 | 740 | 11900 | 1490 | 1550 | 1040 | 525 | 255 | 364 | 278 |
| 3 | 371 | 489 | 702 | 579 | 11700 | 2200 | 2330 | 943 | 494 | 241 | 355 | 762 |
| 4 | 364 | 480 | 831 | 632 | 8030 | 3210 | 4130 | 863 | 487 | 233 | 351 | 755 |
| 5 | 396 | 465 | 685 | 526 | 5340 | 2670 | 4080 | 812 | 450 | 228 | 339 | 432 |
| 6 | 395 | 459 | 633 | 492 | 3290 | 2710 | 3440 | 798 | 486 | 238 | 513 | 363 |
| 7 | 418 | 449 | 670 | 427 | 2520 | 3030 | 3440 | 776 | 512 | 250 | 370 | 368 |
| 8 | 423 | 446 | 677 | 448 | 2350 | 3930 | 3980 | 726 | 476 | 251 | 326 | 328 |
| 9 | 418 | 477 | 647 | 420 | 2150 | 5430 | 3630 | 863 | 443 | 237 | 309 | 321 |
| 10 | 427 | 479 | 600 | 402 | 1910 | 5480 | 2800 | 794 | 439 | 225 | 306 | 310 |
| 11 | 589 | 456 | 609 | 397 | 1710 | 4370 | 2350 | 778 | 409 | 236 | 299 | 296 |
| 12 | 482 | 458 | 634 | 420 | 1480 | 3450 | 2090 | 732 | 384 | 238 | 304 | 348 |
| 13 | 463 | 459 | 533 | 421 | 1190 | 3000 | 1940 | 693 | 392 | 239 | 292 | 2020 |
| 14 | 447 | 460 | 514 | 396 | 1270 | 2850 | 1710 | 773 | 414 | 227 | 292 | 835 |
| 15 | 450 | 442 | 961 | 407 | 2210 | 2460 | 1520 | 624 | 380 | 250 | 275 | 557 |
| 16 | 446 | 464 | 854 | 401 | 2380 | 2110 | 1420 | 627 | 415 | 221 | 278 | 719 |
| 17 | 438 | 487 | 780 | 432 | 2640 | 1870 | 1370 | 585 | 428 | 209 | 274 | 1480 |
| 18 | 421 | 454 | 966 | 494 | 2680 | 1720 | 1320 | 548 | 384 | 218 | 268 | 533 |
| 19 | 408 | 530 | 751 | 732 | 3850 | 1600 | 1190 | 541 | 346 | 1090 | 489 | 448 |
| 20 | 442 | 586 | 804 | 1400 | 7810 | 1620 | 1210 | 572 | 361 | 985 | 468 | 447 |
| 21 | 448 | 569 | 790 | 899 | 8170 | 1560 | 1180 | 585 | 386 | 2040 | 301 | 389 |
| 22 | 430 | 570 | 484 | 798 | 5150 | 1480 | 1320 | 553 | 331 | 760 | 280 | 380 |
| 23 | 446 | 604 | 638 | 755 | 4330 | 1340 | 1300 | 835 | 304 | 802 | 549 | 377 |
| 24 | 444 | 635 | 666 | 634 | 4970 | 1270 | 1180 | 1010 | 287 | 535 | 435 | 344 |
| 25 | 477 | 792 | 921 | 561 | 3780 | 2390 | 1140 | 1090 | 279 | 449 | 336 | 344 |
| 26 | 457 | 935 | 1280 | 469 | 2780 | 3330 | 1200 | 890 | 258 | 586 | 289 | 336 |
| 27 | 526 | 676 | 1270 | 460 | 2290 | 3050 | 1180 | 717 | 259 | 643 | 262 | 334 |
| 28 | 516 | 589 | 1310 | 469 | 2000 | 2460 | 1130 | 658 | 255 | 445 | 287 | 337 |
| 29 | 488 | 881 | 1080 | 508 | 1770 | 2090 | 1080 | 603 | 273 | 370 | 433 | 330 |
| 30 | 483 | 687 | 1240 | 513 | --- | 1820 | 1090 | 576 | 290 | 336 | 358 | 354 |
| 31 | 471 | --- | 1330 | 507 | --- | 1590 | --- | 568 | --- | 637 | 304 | --- |
| TOTAL | 13780 | 16409 | 25156 | 17712 | 114160 | 79200 | 58890 | 23263 | 11708 | 13940 | 10730 | 15407 |
| MEAN | 445 | 547 | 811 | 571 | 3937 | 2555 | 1963 | 750 | 390 | 450 | 346 | 514 |
| MAX | 589 | 935 | 1330 | 1400 | 11900 | 5480 | 4130 | 1090 | 561 | 2040 | 549 | 2020 |
| MIN | 364 | 442 | 484 | 396 | 1190 | 1270 | 1080 | 541 | 255 | 209 | 262 | 278 |
| CFSM | .16 | .20 | .30 | .21 | 1.45 | .94 | .72 | .28 | .14 | .17 | .13 | .19 |
| IN. | .19 | .23 | .35 | .24 | 1.57 | 1.09 | .81 | .32 | .16 | .19 | .15 | .21 |
| CAL YR 1987 | TOTAL | 641529 | MEAN | 1758 | MAX | 17900 | MIN | 364 | CFSM | .65 | IN. | 8.80 |
| WTR YR 1988 | TOTAL | 400355 | MEAN | 1094 | MAX | 11900 | MIN | 209 | CFSM | .40 | IN. | 5.49 |

GREAT MIAMI RIVER BASIN

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03271510 GREAT MIAMI RIVER NEAR LINDEN AVENUE AT MIAMISBURG, OH

LOCATION.--Lat 39°38'14", long 84°17'33", Montgomery County, Hydrologic Unit 05080002, on left bank at Miamisburg, 1.0 mi downstream from Bear Creek, 0.6 mi downstream from discharge station at Miamisburg, 0.65 mi downstream from discharge station at Miamisburg, and at mile 65.75.

DRAINAGE AREA.--2,713 mi².

PERIOD OF RECORD.--June 1978 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1978 to current year.

pH: June 1978 to current year.

WATER TEMPERATURES: June 1978 to current year.

DISSOLVED OXYGEN: June 1978 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Interruptions in the water-quality record were due to malfunction of the instrument. Prior to June 1978, records published as 03271600, Great Miami River near Miamisburg, Ohio. See records of discharge for gaging station at Miamisburg (station 03271500).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,410 microsiemens Feb. 12, 1985; minimum 206 microsiemens Feb. 18, 1982.

pH: Maximum, 9.7 units July 5, 1988; minimum, 7.0 units July 30, Aug. 30, 1979.

WATER TEMPERATURES: Maximum, 33.0°C July 20, 22, 1978; minimum, 0.0°C on several days during the period 1979-88.

DISSOLVED OXYGEN: Maximum, ≥ 20.0 mg/L on several days in water year 1988; minimum, 0.4 mg/L Aug. 27, 1981, Aug. 2, 1982.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum 1,240 microsiemens Feb. 15; minimum, 480 microsiemens Feb. 21.

pH: Maximum, 9.7 units July 5; minimum, 7.4 units Mar. 6.

WATER TEMPERATURES: Maximum recorded, 31.5°C May 31, July 9, Aug. 16-18, but may have been higher during instrument malfunction July 14 to Aug. 15; minimum, 0.0°C on several days during winter period.

DISSOLVED OXYGEN: Maximum ≥ 20.0 mg/L on several days; minimum, 1.4 mg/L May 31.

GREAT MIAMI RIVER BASIN

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

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|------|------|----------|------|------|----------|------|-----|---------|------|------|------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | | |
| 1 | 1120 | 1020 | 1070 | 1040 | 1010 | 1020 | 906 | 838 | 886 | 830 | 804 | 823 |
| 2 | 1140 | 1080 | 1110 | 1040 | 996 | 1020 | 918 | 878 | 904 | 856 | 810 | 830 |
| 3 | 1140 | 1100 | 1130 | 1060 | 1010 | 1040 | 930 | 874 | 906 | 902 | 840 | 861 |
| 4 | 1140 | 1090 | 1100 | 1060 | 1020 | 1050 | 892 | 820 | 856 | 926 | 872 | 895 |
| 5 | 1090 | 1040 | 1060 | 1070 | 1030 | 1050 | 896 | 838 | 880 | 950 | 910 | 923 |
| 6 | 1070 | 1030 | 1050 | 1080 | 1030 | 1060 | 926 | 876 | 905 | 1020 | 956 | 980 |
| 7 | 1080 | 1040 | 1060 | 1080 | 1030 | 1060 | 932 | 878 | 910 | 1020 | 988 | 1000 |
| 8 | 1070 | 1040 | 1050 | 1060 | 1020 | 1040 | 962 | 912 | 947 | 1030 | 992 | 1010 |
| 9 | 1090 | 1040 | 1060 | 1050 | 1000 | 1030 | 972 | 928 | 954 | 1040 | 1010 | 1020 |
| 10 | 1100 | 1050 | 1070 | 1070 | 1020 | 1050 | 928 | 908 | 921 | 1050 | 1020 | 1030 |
| 11 | 1030 | 918 | 987 | 1070 | 1010 | 1040 | 936 | 904 | 921 | 1050 | 1030 | 1040 |
| 12 | 984 | 900 | 934 | 1060 | 1020 | 1050 | 920 | 896 | 911 | 1050 | 1030 | 1040 |
| 13 | 1040 | 968 | 1010 | 1090 | 1040 | 1060 | 966 | 890 | 933 | 1070 | 1040 | 1050 |
| 14 | 1070 | 1000 | 1040 | 1080 | 1040 | 1060 | 996 | 904 | 975 | 1080 | 1040 | 1050 |
| 15 | 1050 | 1020 | 1040 | 1070 | 1030 | 1050 | 944 | 760 | 870 | 1060 | 1040 | 1050 |
| 16 | 1070 | 1020 | 1050 | 1070 | 1030 | 1040 | 874 | 766 | 814 | 1090 | 1060 | 1080 |
| 17 | 1070 | 1040 | 1060 | 1070 | 1020 | 1050 | 940 | 872 | 910 | 1090 | 1050 | 1070 |
| 18 | 1080 | 1030 | 1050 | 1080 | 1040 | 1060 | 916 | 876 | 904 | 1060 | 1020 | 1040 |
| 19 | 1100 | 1020 | 1050 | 1060 | 1000 | 1040 | 972 | 922 | 956 | 1050 | 820 | 990 |
| 20 | 1120 | 1070 | 1090 | 1010 | 984 | 998 | 968 | 896 | 937 | 962 | 740 | 832 |
| 21 | 1060 | 1020 | 1040 | 1030 | 978 | 1010 | 960 | 900 | 936 | 848 | 746 | 802 |
| 22 | 1040 | 1000 | 1020 | 1040 | 986 | 1010 | 1000 | 956 | 987 | 840 | 794 | 818 |
| 23 | 1090 | 1010 | 1060 | 1020 | 970 | 994 | 1120 | 964 | 1010 | 900 | 832 | 868 |
| 24 | 1060 | 1020 | 1040 | 1020 | 952 | 997 | 988 | 894 | 963 | 934 | 880 | 901 |
| 25 | 1050 | 1010 | 1040 | 984 | 788 | 913 | 910 | 770 | 871 | 938 | 896 | 916 |
| 26 | 1040 | 980 | 1010 | 864 | 738 | 806 | 772 | 718 | 750 | 980 | 926 | 943 |
| 27 | 1050 | 992 | 1030 | 834 | 736 | 781 | 810 | 718 | 765 | 1010 | 976 | 985 |
| 28 | 1030 | 1000 | 1020 | 918 | 804 | 866 | 846 | 808 | 830 | 1040 | 1010 | 1020 |
| 29 | 1040 | 984 | 1020 | 882 | 772 | 823 | 850 | 834 | 843 | 1050 | 1000 | 1030 |
| 30 | 1050 | 1000 | 1030 | 850 | 764 | 821 | 876 | 788 | 837 | 1040 | 976 | 1000 |
| 31 | 1050 | 1010 | 1030 | --- | --- | --- | 814 | 786 | 803 | 1100 | 962 | 1020 |
| MONTH | 1140 | 900 | 1050 | 1090 | 736 | 996 | 1120 | 718 | 897 | 1100 | 740 | 965 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| FEBRUARY | | | MARCH | | | APRIL | | | MAY | | | |
| 1 | 1070 | 510 | 870 | 810 | 772 | 799 | 810 | 774 | 793 | 874 | 842 | 855 |
| 2 | 562 | 480 | 527 | 828 | 800 | 817 | 814 | 784 | 799 | 866 | 846 | 858 |
| 3 | 586 | 494 | 524 | 832 | 768 | 815 | 806 | 680 | 752 | 890 | 850 | 869 |
| 4 | 734 | 568 | 654 | 846 | 738 | 783 | 714 | 672 | 687 | 906 | 860 | 883 |
| 5 | 698 | 670 | 683 | 904 | 830 | 862 | 690 | 650 | 670 | 888 | 868 | 881 |
| 6 | 730 | 680 | 698 | 856 | 820 | 841 | 696 | 632 | 676 | 902 | 874 | 886 |
| 7 | 766 | 730 | 743 | 828 | 756 | 799 | 702 | 680 | 690 | 890 | 878 | 885 |
| 8 | 776 | 752 | 764 | 754 | 684 | 733 | 702 | 680 | 690 | 890 | 874 | 881 |
| 9 | 796 | 768 | 778 | 706 | 616 | 655 | 706 | 682 | 692 | 886 | 828 | 860 |
| 10 | 802 | 792 | 797 | 614 | 590 | 599 | 724 | 680 | 698 | 850 | 826 | 837 |
| 11 | 830 | 802 | 813 | 626 | 592 | 602 | 752 | 696 | 721 | 900 | 826 | 867 |
| 12 | 968 | 816 | 882 | 660 | 624 | 637 | 774 | 742 | 752 | 914 | 878 | 896 |
| 13 | 1050 | 880 | 967 | 688 | 660 | 669 | 788 | 752 | 771 | 920 | 884 | 901 |
| 14 | 1020 | 898 | 959 | 710 | 680 | 691 | 798 | 760 | 782 | 912 | 840 | 877 |
| 15 | 1240 | 968 | 1110 | 732 | 698 | 713 | 796 | 764 | 780 | 914 | 870 | 886 |
| 16 | 1040 | 874 | 953 | 742 | 734 | 738 | 806 | 778 | 793 | 928 | 890 | 908 |
| 17 | 870 | 816 | 840 | 760 | 744 | 752 | 812 | 764 | 788 | 952 | 896 | 919 |
| 18 | 834 | 774 | 799 | 778 | 750 | 770 | 804 | 768 | 790 | 960 | 930 | 944 |
| 19 | 770 | 686 | 728 | 810 | 772 | 788 | 826 | 792 | 810 | 968 | 940 | 955 |
| 20 | 692 | 520 | 626 | 792 | 772 | 782 | 844 | 798 | 826 | 976 | 944 | 957 |
| 21 | 522 | 480 | 498 | 800 | 774 | 787 | 848 | 812 | 833 | 970 | 928 | 948 |
| 22 | 604 | 524 | 558 | 812 | 792 | 802 | 840 | 784 | 816 | 970 | 944 | 952 |
| 23 | 664 | 602 | 634 | 832 | 800 | 820 | 802 | 772 | 786 | 970 | 812 | 913 |
| 24 | 662 | 624 | 651 | 834 | 804 | 820 | 824 | 796 | 812 | 884 | 796 | 841 |
| 25 | 640 | 616 | 625 | 820 | 644 | 759 | 832 | 798 | 816 | 836 | 776 | 808 |
| 26 | 688 | 638 | 657 | 704 | 634 | 674 | 866 | 826 | 846 | 836 | 792 | 817 |
| 27 | 712 | 680 | 693 | 726 | 680 | 694 | 858 | 822 | 843 | 868 | 816 | 834 |
| 28 | 742 | 696 | 731 | 752 | 724 | 732 | 862 | 846 | 855 | 908 | 838 | 854 |
| 29 | 776 | 742 | 762 | 778 | 752 | 759 | 876 | 844 | 860 | 908 | 850 | 875 |
| 30 | --- | --- | --- | 780 | 756 | 770 | 862 | 844 | 852 | 902 | 850 | 879 |
| 31 | --- | --- | --- | 796 | 778 | 786 | --- | --- | --- | 920 | 624 | 874 |
| MONTH | 1240 | 480 | 742 | 904 | 590 | 750 | 876 | 632 | 776 | 976 | 624 | 884 |

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

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----------------------------------|------|------|------|------|------|--------|------|------|-----------|------|------|
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 962 | 920 | 938 | 1150 | 1110 | 1130 | --- | --- | --- | 1040 | 986 | 999 |
| 2 | 998 | 960 | 978 | 1150 | 1080 | 1110 | --- | --- | --- | 1090 | 1050 | 1060 |
| 3 | 1040 | 992 | 1000 | 1150 | 1090 | 1110 | --- | --- | --- | 1090 | 810 | 963 |
| 4 | 1030 | 1000 | 1010 | 1150 | 1090 | 1110 | --- | --- | --- | 800 | 616 | 677 |
| 5 | 1030 | 992 | 1010 | 1140 | 1090 | 1120 | --- | --- | --- | 776 | 630 | 684 |
| 6 | 1070 | 968 | 1000 | 1140 | 1110 | 1120 | --- | --- | --- | 908 | 786 | 843 |
| 7 | 1010 | 956 | 983 | 1160 | 1110 | 1130 | --- | --- | --- | 894 | 838 | 874 |
| 8 | 1030 | 986 | 1010 | 1170 | 1120 | 1140 | --- | --- | --- | 948 | 886 | 914 |
| 9 | 1060 | 1010 | 1030 | 1200 | 1160 | 1170 | --- | --- | --- | 990 | 950 | 966 |
| 10 | 1050 | 1020 | 1040 | 1210 | 1180 | 1200 | --- | --- | --- | 1000 | 972 | 992 |
| 11 | 1030 | 1010 | 1020 | 1210 | 1170 | 1190 | --- | --- | --- | 1030 | 988 | 1000 |
| 12 | 1050 | 1020 | 1030 | 1200 | 1170 | 1180 | --- | --- | --- | 1040 | 936 | 1010 |
| 13 | 1050 | 1020 | 1040 | 1190 | 1100 | 1160 | --- | --- | --- | 968 | 534 | 695 |
| 14 | 1020 | 966 | 996 | --- | --- | --- | --- | --- | --- | 602 | 496 | 540 |
| 15 | 1060 | 1030 | 1040 | --- | --- | --- | --- | --- | --- | 746 | 604 | 669 |
| 16 | 1070 | 986 | 1050 | --- | --- | --- | 1130 | 1080 | 1110 | 810 | 502 | 749 |
| 17 | 1070 | 1020 | 1050 | --- | --- | --- | 1120 | 1080 | 1100 | 650 | 504 | 557 |
| 18 | 1040 | 1020 | 1030 | --- | --- | --- | 1140 | 1130 | 1130 | 724 | 576 | 638 |
| 19 | 1050 | 1020 | 1030 | --- | --- | --- | 1150 | 896 | 1090 | 850 | 730 | 796 |
| 20 | 1080 | 1050 | 1060 | --- | --- | --- | 986 | 780 | 910 | 898 | 802 | 869 |
| 21 | 1050 | 1010 | 1030 | --- | --- | --- | 982 | 918 | 962 | 956 | 902 | 925 |
| 22 | 1070 | 1050 | 1050 | --- | --- | --- | 976 | 914 | 940 | 996 | 958 | 984 |
| 23 | 1080 | 1040 | 1060 | --- | --- | --- | 996 | 692 | 926 | 1000 | 980 | 990 |
| 24 | 1090 | 1050 | 1060 | --- | --- | --- | 956 | 814 | 898 | 1000 | 984 | 991 |
| 25 | 1090 | 1050 | 1080 | --- | --- | --- | 908 | 892 | 898 | 1020 | 1000 | 1010 |
| 26 | 1130 | 1080 | 1100 | --- | --- | --- | 998 | 894 | 920 | 1050 | 1010 | 1030 |
| 27 | 1130 | 1070 | 1100 | --- | --- | --- | 1120 | 1000 | 1050 | 1050 | 1020 | 1030 |
| 28 | 1120 | 1050 | 1070 | --- | --- | --- | 1120 | 1080 | 1100 | 1070 | 1040 | 1050 |
| 29 | 1120 | 1050 | 1090 | --- | --- | --- | 1110 | 1020 | 1060 | 1130 | 1070 | 1090 |
| 30 | 1130 | 1080 | 1100 | --- | --- | --- | 1010 | 956 | 975 | 1120 | 1010 | 1080 |
| 31 | --- | --- | --- | --- | --- | --- | 994 | 956 | 968 | --- | --- | --- |
| MONTH | 1130 | 920 | 1040 | 1210 | 1080 | 1140 | 1150 | 692 | 1000 | 1130 | 496 | 889 |
| YEAR | MAXIMUM 1240 MINIMUM 480 MEAN 913 | | | | | | | | | | | |

PH (STANDARD UNITS), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

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

GREAT MIAMI RIVER BASIN

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

PH (STANDARD UNITS), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|---------|-----|---------|-------|------|------|--------|-----|------|-----------|-----|------|
| FEBRUARY | | | | MARCH | | | APRIL | | | MAY | | |
| 1 | 8.2 | 7.9 | 8.1 | 7.7 | 7.7 | 7.7 | 8.2 | 8.0 | 8.1 | 9.1 | 8.7 | 8.9 |
| 2 | 8.0 | 7.9 | 8.0 | 7.7 | 7.6 | 7.7 | 8.6 | 8.0 | 8.3 | 9.1 | 8.7 | 8.9 |
| 3 | 8.1 | 8.0 | 8.0 | 7.8 | 7.6 | 7.7 | 8.5 | 8.1 | 8.3 | 9.0 | 8.6 | 8.8 |
| 4 | 8.2 | 8.1 | 8.1 | 7.9 | 7.8 | 7.9 | 8.3 | 8.1 | 8.2 | 8.9 | 8.5 | 8.6 |
| 5 | 8.2 | 8.1 | 8.2 | 7.8 | 7.6 | 7.7 | 8.2 | 8.0 | 8.1 | 8.6 | 8.5 | 8.5 |
| 6 | 8.3 | 8.2 | 8.3 | 7.6 | 7.4 | 7.5 | 8.1 | 8.0 | 8.0 | 8.7 | 8.4 | 8.5 |
| 7 | 8.3 | 8.3 | 8.3 | 7.8 | 7.6 | 7.7 | 8.1 | 8.0 | 8.1 | 8.8 | 8.2 | 8.5 |
| 8 | 8.3 | 8.3 | 8.3 | 8.2 | 7.8 | 7.9 | 8.4 | 8.1 | 8.2 | 8.8 | 8.5 | 8.7 |
| 9 | 8.3 | 8.2 | 8.3 | 8.2 | 8.2 | 8.2 | 8.4 | 8.2 | 8.3 | 8.8 | 8.5 | 8.6 |
| 10 | 8.4 | 8.2 | 8.3 | 8.2 | 8.1 | 8.2 | 8.5 | 8.3 | 8.3 | 8.7 | 8.2 | 8.4 |
| 11 | 8.3 | 8.3 | 8.3 | 8.3 | 8.2 | 8.3 | 8.6 | 8.2 | 8.4 | 8.6 | 8.2 | 8.4 |
| 12 | 8.3 | 8.2 | 8.3 | 8.4 | 8.3 | 8.3 | 8.6 | 8.2 | 8.4 | 8.7 | 8.3 | 8.5 |
| 13 | 8.3 | 8.3 | 8.3 | 8.4 | 8.3 | 8.3 | 8.7 | 8.3 | 8.5 | 8.6 | 8.4 | 8.5 |
| 14 | 8.4 | 8.3 | 8.3 | 8.5 | 8.4 | 8.5 | 8.8 | 8.3 | 8.6 | 8.5 | 8.1 | 8.3 |
| 15 | 8.3 | 8.3 | 8.3 | 8.4 | 8.3 | 8.4 | 8.8 | 8.4 | 8.6 | 8.4 | 8.2 | 8.4 |
| 16 | 8.3 | 8.2 | 8.2 | 8.4 | 8.3 | 8.3 | 8.9 | 8.5 | 8.7 | 8.4 | 8.2 | 8.3 |
| 17 | 8.3 | 8.3 | 8.3 | 8.4 | 8.3 | 8.3 | 9.0 | 8.5 | 8.8 | 8.2 | 8.1 | 8.2 |
| 18 | 8.3 | 8.2 | 8.3 | 8.4 | 8.1 | 8.2 | 9.0 | 8.5 | 8.7 | 8.2 | 8.0 | 8.1 |
| 19 | 8.3 | 8.2 | 8.2 | 8.6 | 8.2 | 8.4 | 9.0 | 8.5 | 8.8 | 8.2 | 8.0 | 8.1 |
| 20 | 8.2 | 8.1 | 8.2 | 8.8 | 8.5 | 8.6 | 9.0 | 8.6 | 8.8 | 8.2 | 7.9 | 8.1 |
| 21 | 8.1 | 8.1 | 8.1 | 9.0 | 8.6 | 8.8 | 9.0 | 8.6 | 8.8 | 8.0 | 7.9 | 8.0 |
| 22 | 8.2 | 8.1 | 8.2 | 9.0 | 8.7 | 8.9 | 9.0 | 8.6 | 8.8 | 8.2 | 7.9 | 8.0 |
| 23 | 8.2 | 8.2 | 8.2 | 9.0 | 8.6 | 8.8 | 8.9 | 8.4 | 8.7 | 8.2 | 7.9 | 8.0 |
| 24 | 8.2 | 8.2 | 8.2 | 8.9 | 8.4 | 8.7 | 9.0 | 8.5 | 8.7 | 8.1 | 7.8 | 7.9 |
| 25 | 8.2 | 8.2 | 8.2 | 8.5 | 8.1 | 8.4 | 9.1 | 8.6 | 8.8 | 8.8 | 7.8 | 8.2 |
| 26 | 8.2 | 8.1 | 8.2 | 8.2 | 8.1 | 8.1 | 9.0 | 8.5 | 8.8 | 9.3 | 8.4 | 8.9 |
| 27 | 8.1 | 7.7 | 7.9 | 8.4 | 8.2 | 8.3 | 8.9 | 8.6 | 8.8 | 9.1 | 8.6 | 8.9 |
| 28 | 7.7 | 7.6 | 7.6 | 8.6 | 8.3 | 8.4 | 8.9 | 8.5 | 8.7 | 8.9 | 8.4 | 8.6 |
| 29 | 7.7 | 7.6 | 7.6 | 8.5 | 8.3 | 8.4 | 9.0 | 8.5 | 8.7 | 9.2 | 8.5 | 8.9 |
| 30 | --- | --- | --- | 8.4 | 8.1 | 8.3 | 9.1 | 8.6 | 8.8 | 9.2 | 8.7 | 9.0 |
| 31 | --- | --- | --- | 8.4 | 8.1 | 8.2 | --- | --- | --- | 9.2 | 8.2 | 8.8 |
| MONTH | 8.4 | 7.6 | 8.2 | 9.0 | 7.4 | 8.2 | 9.1 | 8.0 | 8.5 | 9.3 | 7.8 | 8.5 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| JUNE | | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 9.0 | 8.4 | 8.7 | 9.2 | 8.5 | 8.9 | --- | --- | --- | 9.0 | 8.6 | 8.8 |
| 2 | 8.6 | 8.2 | 8.4 | 9.4 | 8.7 | 9.1 | --- | --- | --- | 9.2 | 8.7 | 8.9 |
| 3 | 8.3 | 8.0 | 8.2 | 9.5 | 8.9 | 9.2 | --- | --- | --- | 8.9 | 8.4 | 8.7 |
| 4 | 8.4 | 8.1 | 8.2 | 9.6 | 9.0 | 9.3 | --- | --- | --- | 8.4 | 8.1 | 8.3 |
| 5 | 8.4 | 8.0 | 8.2 | 9.7 | 9.1 | 9.3 | --- | --- | --- | 8.7 | 8.0 | 8.4 |
| 6 | 9.0 | 8.1 | 8.5 | 9.6 | 9.1 | 9.3 | --- | --- | --- | 8.9 | 8.2 | 8.6 |
| 7 | 9.2 | 8.4 | 8.8 | 9.4 | 8.8 | 9.1 | --- | --- | --- | 9.1 | 8.8 | 9.0 |
| 8 | 9.1 | 8.5 | 8.8 | 9.2 | 8.6 | 8.9 | --- | --- | --- | 9.1 | 8.9 | 9.0 |
| 9 | 8.8 | 8.3 | 8.6 | 9.2 | 8.6 | 8.9 | --- | --- | --- | 9.3 | 8.8 | 9.1 |
| 10 | 8.6 | 8.1 | 8.4 | 9.0 | 8.5 | 8.7 | --- | --- | --- | 9.4 | 9.0 | 9.2 |
| 11 | 8.6 | 8.2 | 8.4 | 8.8 | 8.5 | 8.6 | --- | --- | --- | 9.4 | 9.1 | 9.2 |
| 12 | 8.6 | 8.0 | 8.3 | 9.0 | 8.4 | 8.7 | --- | --- | --- | 9.2 | 8.9 | 9.1 |
| 13 | 8.8 | 8.0 | 8.4 | 8.8 | 8.4 | 8.6 | --- | --- | --- | 8.9 | 7.9 | 8.4 |
| 14 | 9.2 | 8.2 | 8.7 | --- | --- | --- | --- | --- | --- | 8.1 | 7.8 | 7.9 |
| 15 | 9.0 | 8.5 | 8.8 | --- | --- | --- | --- | --- | --- | 8.3 | 7.9 | 8.1 |
| 16 | 8.6 | 7.9 | 8.2 | --- | --- | --- | 9.0 | 8.5 | 8.7 | 8.5 | 8.0 | 8.2 |
| 17 | 8.2 | 7.8 | 8.0 | --- | --- | --- | 8.8 | 8.6 | 8.7 | 8.2 | 7.9 | 8.1 |
| 18 | 8.1 | 7.7 | 7.8 | --- | --- | --- | 8.8 | 8.4 | 8.6 | 8.1 | 7.9 | 8.0 |
| 19 | 8.4 | 7.6 | 7.9 | --- | --- | --- | 9.0 | 8.6 | 8.7 | 8.3 | 8.0 | 8.1 |
| 20 | 8.6 | 7.7 | 8.1 | --- | --- | --- | 8.6 | 8.0 | 8.3 | 8.5 | 8.1 | 8.2 |
| 21 | 8.8 | 7.8 | 8.3 | --- | --- | --- | 8.5 | 8.0 | 8.3 | 8.5 | 8.1 | 8.3 |
| 22 | 8.9 | 8.0 | 8.5 | --- | --- | --- | 8.7 | 8.0 | 8.3 | 8.4 | 8.2 | 8.3 |
| 23 | 8.9 | 7.9 | 8.4 | --- | --- | --- | 8.2 | 8.0 | 8.1 | 8.6 | 8.3 | 8.4 |
| 24 | 9.0 | 8.0 | 8.5 | --- | --- | --- | 8.4 | 8.0 | 8.1 | 8.4 | 8.3 | 8.4 |
| 25 | 9.0 | 8.2 | 8.6 | --- | --- | --- | 8.5 | 7.9 | 8.2 | 8.5 | 8.2 | 8.4 |
| 26 | 9.1 | 8.0 | 8.6 | --- | --- | --- | 8.6 | 8.0 | 8.3 | 8.7 | 8.4 | 8.5 |
| 27 | 9.3 | 8.6 | 8.9 | --- | --- | --- | 9.0 | 8.3 | 8.6 | 8.7 | 8.5 | 8.6 |
| 28 | 9.4 | 8.8 | 9.1 | --- | --- | --- | 8.5 | 8.3 | 8.4 | 8.9 | 8.4 | 8.6 |
| 29 | 9.1 | 8.6 | 8.9 | --- | --- | --- | 8.8 | 8.2 | 8.5 | 8.8 | 8.4 | 8.6 |
| 30 | 9.2 | 8.2 | 8.8 | --- | --- | --- | 8.8 | 8.4 | 8.6 | 8.7 | 8.3 | 8.5 |
| 31 | --- | --- | --- | --- | --- | --- | 8.9 | 8.4 | 8.6 | --- | --- | --- |
| MONTH | 9.4 | 7.6 | 8.5 | 9.7 | 8.4 | 9.0 | 9.0 | 7.9 | 8.4 | 9.4 | 7.8 | 8.5 |
| YEAR | MAXIMUM | 9.7 | MINIMUM | 7.4 | MEAN | 8.3 | | | | | | |

GREAT MIAMI RIVER BASIN

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

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|------|------|------|----------|------|------|----------|------|------|---------|------|------|
| OCTOBER | | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
| 1 | 18.5 | 16.5 | 17.5 | 16.0 | 13.5 | 14.5 | 8.0 | 7.5 | 8.0 | 3.5 | 2.5 | 3.0 |
| 2 | 17.5 | 16.0 | 16.5 | 16.5 | 15.0 | 16.0 | 7.0 | 6.0 | 6.5 | 2.5 | 1.5 | 2.0 |
| 3 | 16.0 | 14.0 | 15.0 | 17.5 | 16.0 | 16.5 | 6.5 | 5.5 | 6.0 | 2.5 | 1.0 | 2.0 |
| 4 | 16.0 | 13.0 | 14.5 | 17.5 | 16.0 | 16.5 | 6.0 | 5.5 | 6.0 | 2.5 | .5 | 2.0 |
| 5 | 15.5 | 13.5 | 14.5 | 16.5 | 13.5 | 15.5 | 6.0 | 5.0 | 5.5 | .5 | .0 | .5 |
| 6 | 16.0 | 14.5 | 15.0 | 13.5 | 12.0 | 13.0 | 5.5 | 5.0 | 5.0 | .5 | .0 | .0 |
| 7 | 15.0 | 13.5 | 14.0 | 12.5 | 11.5 | 12.0 | 6.5 | 5.5 | 6.0 | .5 | .0 | .5 |
| 8 | 14.5 | 12.5 | 13.5 | 12.5 | 11.5 | 12.0 | 8.0 | 6.5 | 7.0 | 1.5 | .5 | 1.0 |
| 9 | 14.5 | 13.0 | 14.0 | 12.5 | 11.0 | 12.0 | 9.5 | 8.0 | 9.0 | 1.5 | .5 | 1.0 |
| 10 | 14.5 | 14.0 | 14.0 | 10.5 | 8.5 | 9.5 | 9.0 | 8.5 | 9.0 | 2.0 | .5 | 1.5 |
| 11 | 14.0 | 13.0 | 13.5 | 9.0 | 7.0 | 8.0 | 8.0 | 7.5 | 8.0 | 2.0 | .5 | 1.5 |
| 12 | 14.0 | 12.0 | 13.0 | 9.0 | 6.5 | 8.0 | 7.5 | 6.5 | 7.5 | 3.5 | 1.5 | 2.5 |
| 13 | 14.5 | 12.5 | 13.5 | 10.0 | 7.5 | 8.5 | 6.5 | 6.0 | 6.5 | 3.5 | 1.5 | 2.5 |
| 14 | 14.5 | 12.5 | 13.5 | 10.5 | 8.5 | 9.5 | 6.5 | 6.0 | 6.0 | 2.0 | 1.0 | 1.5 |
| 15 | 15.0 | 13.0 | 14.0 | 11.0 | 9.0 | 10.0 | 7.0 | 4.5 | 6.0 | 3.0 | 1.0 | 2.0 |
| 16 | 15.5 | 13.5 | 14.5 | 12.0 | 10.0 | 11.0 | 4.5 | 3.5 | 4.0 | 4.0 | 2.0 | 3.0 |
| 17 | 16.0 | 14.5 | 15.0 | 13.5 | 12.0 | 12.5 | 4.0 | 3.5 | 3.5 | 4.5 | 3.5 | 4.0 |
| 18 | 16.0 | 14.0 | 15.0 | 12.5 | 10.5 | 11.5 | 4.0 | 3.0 | 3.5 | 4.5 | 4.0 | 4.5 |
| 19 | 16.0 | 14.0 | 15.0 | 10.5 | 9.5 | 10.0 | 5.0 | 3.5 | 4.5 | 4.5 | 3.5 | 4.0 |
| 20 | 15.5 | 14.0 | 15.0 | 9.5 | 7.0 | 8.5 | 6.5 | 5.0 | 6.0 | 5.5 | 4.0 | 4.5 |
| 21 | 13.5 | 11.5 | 12.5 | 7.0 | 5.5 | 6.5 | 6.5 | 5.5 | 6.0 | 5.5 | 4.5 | 5.0 |
| 22 | 11.5 | 10.5 | 11.0 | 6.5 | 5.0 | 6.0 | 5.5 | 5.0 | 5.0 | 5.0 | 3.5 | 4.5 |
| 23 | 13.0 | 10.5 | 11.5 | 7.5 | 6.0 | 7.0 | 7.0 | 4.5 | 5.5 | 3.5 | 3.0 | 3.5 |
| 24 | 13.0 | 12.0 | 12.5 | 9.0 | 7.5 | 8.0 | 6.5 | 4.5 | 5.5 | 3.5 | 2.5 | 3.0 |
| 25 | 13.0 | 11.5 | 12.0 | 11.0 | 9.0 | 10.0 | 7.0 | 6.5 | 6.5 | 3.5 | 2.0 | 2.5 |
| 26 | 12.5 | 11.0 | 12.0 | 11.0 | 10.0 | 10.5 | 6.5 | 6.0 | 6.5 | 1.5 | .5 | 1.0 |
| 27 | 14.0 | 12.5 | 13.0 | 10.5 | 9.5 | 10.0 | 6.0 | 5.5 | 5.5 | 2.0 | .5 | 1.0 |
| 28 | 13.0 | 11.5 | 12.0 | 11.5 | 10.0 | 11.0 | 5.5 | 4.5 | 5.0 | 3.5 | 1.5 | 2.5 |
| 29 | 12.0 | 11.0 | 11.5 | 11.5 | 10.0 | 11.0 | 5.0 | 3.5 | 4.5 | 5.0 | 2.0 | 3.5 |
| 30 | 13.0 | 10.5 | 11.5 | 10.0 | 8.5 | 9.0 | 4.0 | 2.5 | 3.5 | 6.0 | 4.0 | 5.0 |
| 31 | 14.5 | 12.0 | 13.0 | --- | --- | --- | 3.5 | 2.5 | 3.0 | 7.5 | 5.5 | 6.5 |
| MONTH | 18.5 | 10.5 | 13.5 | 17.5 | 5.0 | 11.0 | 9.5 | 2.5 | 6.0 | 7.5 | .0 | 2.5 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| FEBRUARY | | | | MARCH | | | APRIL | | | MAY | | |
| 1 | 9.5 | 7.0 | 8.0 | 13.5 | 11.0 | 12.0 | 14.5 | 12.0 | 13.0 | 18.5 | 13.0 | 15.5 |
| 2 | 9.0 | 4.0 | 6.5 | 12.5 | 11.5 | 12.0 | 15.0 | 13.5 | 14.0 | 19.5 | 14.5 | 17.0 |
| 3 | 3.5 | 3.0 | 3.5 | 11.5 | 9.0 | 10.5 | 15.0 | 14.0 | 14.5 | 19.5 | 15.5 | 17.5 |
| 4 | 2.5 | 2.0 | 2.0 | 10.5 | 8.5 | 9.0 | 15.0 | 14.5 | 15.0 | 17.5 | 15.5 | 16.0 |
| 5 | 2.0 | .5 | 1.5 | 13.5 | 10.5 | 12.0 | 15.0 | 14.0 | 14.5 | 15.5 | 14.5 | 15.0 |
| 6 | .5 | .0 | .5 | 14.5 | 11.5 | 13.0 | 15.0 | 13.5 | 14.5 | 17.0 | 13.5 | 15.5 |
| 7 | .5 | .0 | .5 | 14.5 | 10.5 | 12.5 | 13.5 | 11.5 | 12.5 | 19.5 | 14.5 | 17.0 |
| 8 | 1.0 | .0 | .5 | 11.5 | 9.0 | 10.5 | 12.0 | 10.5 | 11.5 | 20.0 | 16.0 | 18.0 |
| 9 | 1.0 | .5 | 1.0 | 9.5 | 7.5 | 8.0 | 12.5 | 11.5 | 12.0 | 20.5 | 17.5 | 19.0 |
| 10 | 2.0 | 1.5 | 1.5 | 7.5 | 7.0 | 7.5 | 13.5 | 12.0 | 12.5 | 20.0 | 17.5 | 18.5 |
| 11 | 2.5 | 1.5 | 2.0 | 8.5 | 7.0 | 7.5 | 14.0 | 12.0 | 13.0 | 21.0 | 17.5 | 19.0 |
| 12 | 2.5 | .5 | 1.5 | 9.5 | 8.5 | 9.0 | 14.5 | 12.5 | 13.0 | 21.5 | 17.5 | 19.5 |
| 13 | 2.0 | .5 | 1.0 | 9.5 | 8.0 | 9.0 | 16.0 | 13.5 | 14.5 | 21.5 | 18.5 | 20.0 |
| 14 | 2.5 | .5 | 1.5 | 8.0 | 7.0 | 8.0 | 17.0 | 14.5 | 15.5 | 22.0 | 19.0 | 20.5 |
| 15 | 3.0 | 2.0 | 2.5 | 8.0 | 7.0 | 7.5 | 15.0 | 13.0 | 14.5 | 23.0 | 19.5 | 21.5 |
| 16 | 3.0 | 2.0 | 2.5 | 8.5 | 7.0 | 8.0 | 14.5 | 12.0 | 13.5 | 23.5 | 21.0 | 22.0 |
| 17 | 3.0 | 2.0 | 2.5 | 10.0 | 8.0 | 9.0 | 16.5 | 12.0 | 14.0 | 23.0 | 20.5 | 21.5 |
| 18 | 4.0 | 2.5 | 3.5 | 9.5 | 8.5 | 9.0 | 15.5 | 13.5 | 14.5 | 21.0 | 19.0 | 20.0 |
| 19 | 4.0 | 3.5 | 3.5 | 9.5 | 8.0 | 9.0 | 15.0 | 12.5 | 13.5 | 20.0 | 18.5 | 19.0 |
| 20 | 3.5 | 2.0 | 2.5 | 10.0 | 8.0 | 9.0 | 14.0 | 12.0 | 12.5 | 20.0 | 18.0 | 19.0 |
| 21 | 2.0 | 1.0 | 1.5 | 11.0 | 9.0 | 10.0 | 15.5 | 11.5 | 13.0 | 21.5 | 17.5 | 19.5 |
| 22 | 5.0 | 1.5 | 2.5 | 12.5 | 9.5 | 10.5 | 15.0 | 12.0 | 13.5 | 22.5 | 19.5 | 21.0 |
| 23 | 4.5 | 4.5 | 4.5 | 14.0 | 10.5 | 12.0 | 17.5 | 12.0 | 14.5 | 23.0 | 20.5 | 22.0 |
| 24 | 5.0 | 4.0 | 4.5 | 15.0 | 11.5 | 12.5 | 15.5 | 13.5 | 14.5 | 21.5 | 20.5 | 21.0 |
| 25 | 4.5 | 4.0 | 4.5 | 13.5 | 12.0 | 13.0 | 16.5 | 12.0 | 14.0 | 21.0 | 18.0 | 19.5 |
| 26 | 7.0 | 4.0 | 5.0 | 13.0 | 11.5 | 12.0 | 18.0 | 13.0 | 15.5 | 21.5 | 17.5 | 19.5 |
| 27 | 11.0 | 7.0 | 9.0 | 11.0 | 9.5 | 10.0 | 15.5 | 13.5 | 14.5 | 22.5 | 18.0 | 20.5 |
| 28 | 14.0 | 11.0 | 13.0 | 10.5 | 9.0 | 9.5 | 13.5 | 11.5 | 12.5 | 23.5 | 19.5 | 21.0 |
| 29 | 14.0 | 11.0 | 12.5 | 12.0 | 10.0 | 11.0 | 15.5 | 10.5 | 12.5 | 24.5 | 20.0 | 22.5 |
| 30 | --- | --- | --- | 15.5 | 11.5 | 13.0 | 16.5 | 11.5 | 14.0 | 25.5 | 21.5 | 24.0 |
| 31 | --- | --- | --- | 13.5 | 12.0 | 13.0 | --- | --- | --- | 31.5 | 22.5 | 25.5 |
| MONTH | 14.0 | .0 | 3.5 | 15.5 | 7.0 | 10.5 | 18.0 | 10.5 | 13.5 | 31.5 | 13.0 | 19.5 |

GREAT MIAMI RIVER BASIN

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

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----------------------------------|------|------|------|------|------|------|--------|------|------|-----------|------|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 27.0 | 23.5 | 25.0 | 25.5 | 21.5 | 23.5 | --- | --- | --- | 25.0 | 21.0 | 23.0 |
| 2 | 25.5 | 23.0 | 24.5 | 27.0 | 22.0 | 24.0 | --- | --- | --- | 25.0 | 23.0 | 23.5 |
| 3 | 22.5 | 20.5 | 21.5 | 28.5 | 23.0 | 25.5 | --- | --- | --- | 23.5 | 22.0 | 23.0 |
| 4 | 23.0 | 19.0 | 21.0 | 29.5 | 23.5 | 26.0 | --- | --- | --- | 23.0 | 21.5 | 22.5 |
| 5 | 23.0 | 19.0 | 21.0 | 30.5 | 24.5 | 27.0 | --- | --- | --- | 22.0 | 20.5 | 21.0 |
| 6 | 25.0 | 20.0 | 22.5 | 31.0 | 25.5 | 27.5 | --- | --- | --- | 21.5 | 18.5 | 20.0 |
| 7 | 26.0 | 21.5 | 24.0 | 30.5 | 26.0 | 27.5 | --- | --- | --- | 22.0 | 18.5 | 20.0 |
| 8 | 26.5 | 22.5 | 24.5 | 30.5 | 26.5 | 28.0 | --- | --- | --- | 22.0 | 19.0 | 20.5 |
| 9 | 24.0 | 20.5 | 22.0 | 31.5 | 27.0 | 29.0 | --- | --- | --- | 23.0 | 19.5 | 21.0 |
| 10 | 22.5 | 19.5 | 21.0 | 29.0 | 27.0 | 28.0 | --- | --- | --- | 24.5 | 20.5 | 22.5 |
| 11 | 23.5 | 19.0 | 21.5 | 27.0 | 26.0 | 27.0 | --- | --- | --- | 25.0 | 21.5 | 23.0 |
| 12 | 24.5 | 19.5 | 22.0 | 28.0 | 25.5 | 26.5 | --- | --- | --- | 23.5 | 22.5 | 23.0 |
| 13 | 26.0 | 21.0 | 23.5 | 27.0 | 25.5 | 26.0 | --- | --- | --- | 23.0 | 21.5 | 22.5 |
| 14 | 27.0 | 22.5 | 25.0 | --- | --- | --- | --- | --- | --- | 23.5 | 21.0 | 22.0 |
| 15 | 27.5 | 23.5 | 25.5 | --- | --- | --- | --- | --- | --- | 23.0 | 20.0 | 21.5 |
| 16 | 25.5 | 23.5 | 24.5 | --- | --- | --- | 31.5 | 28.0 | 29.5 | 22.5 | 20.0 | 21.5 |
| 17 | 26.0 | 22.5 | 24.0 | --- | --- | --- | 31.5 | 28.0 | 29.5 | 22.5 | 21.0 | 21.5 |
| 18 | 26.5 | 23.0 | 24.5 | --- | --- | --- | 31.5 | 28.0 | 29.5 | 23.5 | 21.0 | 22.0 |
| 19 | 27.0 | 23.5 | 25.0 | --- | --- | --- | 29.0 | 26.5 | 28.0 | 22.5 | 22.0 | 22.5 |
| 20 | 27.0 | 24.0 | 25.5 | --- | --- | --- | 28.0 | 25.5 | 26.5 | 23.0 | 21.0 | 22.0 |
| 21 | 28.5 | 24.0 | 26.5 | --- | --- | --- | 27.5 | 25.0 | 26.0 | 22.0 | 20.0 | 21.0 |
| 22 | 28.5 | 25.0 | 26.5 | --- | --- | --- | 27.0 | 24.0 | 25.5 | 21.5 | 19.5 | 20.5 |
| 23 | 28.5 | 25.5 | 26.5 | --- | --- | --- | 24.5 | 23.0 | 24.0 | 21.5 | 20.5 | 21.0 |
| 24 | 28.5 | 24.0 | 26.0 | --- | --- | --- | 25.5 | 22.5 | 24.0 | 20.5 | 19.0 | 19.5 |
| 25 | 29.0 | 25.0 | 27.0 | --- | --- | --- | 25.5 | 22.0 | 23.5 | 21.5 | 18.5 | 20.0 |
| 26 | 28.5 | 25.0 | 26.5 | --- | --- | --- | 26.5 | 22.5 | 24.5 | 22.0 | 18.5 | 20.0 |
| 27 | 27.5 | 23.5 | 25.0 | --- | --- | --- | 25.0 | 23.0 | 24.0 | 21.5 | 19.0 | 20.5 |
| 28 | 28.0 | 23.0 | 25.0 | --- | --- | --- | 23.5 | 22.5 | 23.5 | 22.0 | 19.0 | 20.5 |
| 29 | 24.5 | 22.5 | 23.5 | --- | --- | --- | 24.5 | 22.0 | 23.0 | 22.5 | 20.5 | 21.5 |
| 30 | 25.5 | 21.5 | 23.5 | --- | --- | --- | 24.0 | 20.5 | 22.5 | 22.5 | 20.5 | 21.5 |
| 31 | --- | --- | --- | --- | --- | --- | 24.5 | 21.0 | 22.5 | --- | --- | --- |
| MONTH | 29.0 | 19.0 | 24.0 | 31.5 | 21.5 | 26.5 | 31.5 | 20.5 | 25.5 | 25.0 | 18.5 | 21.5 |
| YEAR | MAXIMUM 31.5 MINIMUM .0 MEAN 13.5 | | | | | | | | | | | |

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|---------|------|------|----------|------|------|----------|------|------|---------|------|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 8.8 | 5.0 | 6.6 | 8.3 | 5.9 | 6.7 | 9.5 | 8.1 | 8.8 | 13.2 | 12.3 | 12.6 |
| 2 | 8.1 | 6.0 | 7.0 | 8.3 | 5.6 | 6.5 | 10.1 | 8.6 | 9.4 | 13.7 | 12.1 | 12.9 |
| 3 | 8.8 | 6.2 | 7.4 | 7.5 | 4.8 | 5.6 | 10.3 | 9.2 | 9.8 | 13.8 | 12.4 | 12.9 |
| 4 | 9.6 | 7.4 | 8.3 | 7.5 | 4.6 | 5.6 | 10.7 | 9.7 | 10.2 | 13.5 | 12.1 | 12.7 |
| 5 | 10.4 | 7.4 | 8.6 | 7.6 | 4.4 | 5.8 | 11.5 | 9.9 | 10.7 | 14.0 | 12.0 | 13.0 |
| 6 | 8.1 | 5.7 | 6.9 | 8.7 | 5.8 | 6.8 | 11.6 | 10.2 | 11.0 | 13.9 | 12.7 | 13.2 |
| 7 | 7.0 | 5.6 | 6.2 | 7.6 | 6.1 | 6.8 | 12.0 | 10.4 | 11.2 | 13.5 | 12.2 | 12.9 |
| 8 | 7.6 | 5.9 | 6.8 | 8.8 | 6.3 | 7.2 | 10.7 | 9.3 | 9.8 | 13.7 | 12.0 | 12.7 |
| 9 | 7.9 | 6.1 | 6.9 | 6.9 | 6.1 | 6.6 | 9.5 | 8.2 | 8.8 | 13.4 | 11.7 | 12.5 |
| 10 | 6.9 | 5.6 | 6.2 | 7.6 | 6.5 | 7.0 | 9.5 | 7.7 | 8.5 | 13.6 | 11.5 | 12.5 |
| 11 | 7.5 | 6.0 | 6.7 | 10.0 | 7.5 | 8.6 | 9.8 | 8.0 | 8.8 | 13.3 | 11.8 | 12.6 |
| 12 | 8.5 | 6.5 | 7.5 | 10.4 | 8.3 | 9.0 | 9.9 | 8.2 | 9.1 | 12.7 | 10.7 | 11.7 |
| 13 | 7.9 | 6.6 | 7.4 | 10.3 | 8.3 | 9.0 | 10.8 | 8.9 | 9.7 | 12.6 | 9.6 | 11.6 |
| 14 | 7.8 | 6.3 | 7.1 | 9.7 | 7.6 | 8.5 | 10.7 | 10.0 | 10.3 | 12.6 | 11.1 | 11.9 |
| 15 | 8.4 | 6.3 | 7.3 | 10.5 | 7.7 | 8.6 | 10.7 | 9.6 | 10.2 | 12.8 | 10.8 | 11.9 |
| 16 | 8.4 | 6.1 | 7.2 | 10.7 | 7.7 | 8.7 | 11.6 | 10.6 | 11.1 | 12.9 | 10.7 | 11.7 |
| 17 | 8.1 | 5.6 | 6.8 | 8.4 | 6.4 | 7.3 | 12.1 | 11.0 | 11.5 | 11.7 | 10.2 | 11.0 |
| 18 | 8.5 | 6.1 | 7.0 | 7.5 | 6.0 | 6.6 | 12.6 | 11.8 | 12.2 | 12.3 | 10.1 | 11.0 |
| 19 | 9.1 | 6.0 | 7.2 | 9.1 | 6.7 | 7.8 | 12.0 | 11.3 | 11.6 | 11.2 | 9.9 | 10.7 |
| 20 | 6.7 | 5.1 | 5.8 | 10.0 | 8.0 | 9.1 | 11.4 | 10.3 | 10.6 | 11.2 | 10.7 | 10.9 |
| 21 | 7.7 | 5.5 | 6.5 | 11.5 | 9.1 | 10.3 | 11.2 | 9.8 | 10.5 | 11.1 | 10.5 | 10.8 |
| 22 | 9.1 | 6.6 | 7.8 | 12.4 | 10.4 | 11.5 | 10.9 | 9.0 | 10.3 | 11.4 | 10.4 | 10.8 |
| 23 | 8.9 | 6.9 | 7.8 | 12.0 | 10.5 | 11.2 | 11.2 | 7.0 | 10.0 | 12.1 | 10.7 | 11.3 |
| 24 | 8.2 | 6.3 | 7.1 | 10.7 | 8.9 | 9.8 | 11.2 | 10.4 | 10.9 | 12.6 | 10.8 | 11.4 |
| 25 | 8.6 | 5.8 | 7.2 | 9.9 | 8.3 | 9.0 | 10.5 | 10.1 | 10.3 | 12.6 | 10.6 | 11.4 |
| 26 | 9.0 | 6.6 | 7.6 | 8.3 | 7.3 | 7.9 | 11.0 | 10.4 | 10.7 | 13.0 | 10.5 | 11.6 |
| 27 | 7.5 | 6.5 | 7.1 | 9.5 | 8.0 | 8.6 | 11.6 | 10.7 | 11.1 | 13.1 | 10.8 | 11.9 |
| 28 | 7.5 | 6.3 | 6.8 | 9.2 | 7.5 | 8.2 | 11.7 | 11.1 | 11.4 | 13.1 | 10.7 | 11.8 |
| 29 | 7.7 | 6.5 | 7.0 | 8.7 | 7.1 | 8.0 | 12.1 | 11.1 | 11.6 | 12.7 | 10.3 | 11.4 |
| 30 | 8.7 | 6.9 | 7.6 | 9.0 | 8.0 | 8.5 | 12.8 | 11.7 | 12.3 | 14.1 | 11.2 | 12.4 |
| 31 | 8.3 | 6.4 | 7.2 | --- | --- | --- | 12.6 | 12.3 | 12.5 | 13.0 | 10.4 | 11.5 |
| MONTH | 10.4 | 5.0 | 7.1 | 12.4 | 4.4 | 8.0 | 12.8 | 7.0 | 10.5 | 14.1 | 9.6 | 11.9 |

GREAT MIAMI RIVER BASIN

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

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|----------|---------|------|---------|-------|------|------|--------|------|------|-----------|------|------|
| FEBRUARY | | | | MARCH | | | APRIL | | | MAY | | |
| 1 | 11.0 | 10.1 | 10.6 | --- | --- | --- | 11.3 | 10.4 | 10.7 | 14.2 | 8.2 | 11.2 |
| 2 | 12.7 | 11.0 | 11.6 | --- | --- | --- | 12.1 | 8.6 | 10.9 | 13.6 | 7.5 | 10.7 |
| 3 | 13.1 | 12.7 | 12.9 | --- | --- | --- | 9.4 | 7.3 | 8.3 | 13.4 | 7.2 | 10.3 |
| 4 | 13.1 | 13.0 | 13.0 | --- | --- | --- | 9.4 | 7.1 | 8.1 | 10.1 | 6.6 | 8.4 |
| 5 | 13.6 | 13.1 | 13.4 | --- | --- | --- | 9.2 | 8.3 | 8.7 | 10.1 | 6.3 | 8.1 |
| 6 | 14.0 | 12.7 | 13.7 | --- | --- | --- | 8.6 | 7.9 | 8.2 | 12.2 | 6.8 | 9.2 |
| 7 | 13.8 | 13.7 | 13.7 | --- | --- | --- | 9.3 | 8.1 | 8.7 | 12.7 | 6.6 | 9.5 |
| 8 | 13.8 | 13.6 | 13.7 | --- | --- | --- | 10.5 | 9.1 | 9.7 | 13.0 | 6.4 | 9.6 |
| 9 | 13.7 | 13.3 | 13.5 | --- | --- | --- | 10.5 | 9.1 | 9.7 | 10.1 | 5.4 | 7.9 |
| 10 | 13.4 | 13.2 | 13.3 | 11.4 | 11.2 | 11.3 | 10.9 | 9.0 | 9.7 | 10.1 | 5.4 | 7.6 |
| 11 | 13.2 | 13.0 | 13.1 | 11.4 | 10.5 | 11.1 | 11.1 | 8.8 | 9.7 | 11.4 | 5.4 | 8.1 |
| 12 | 13.3 | 12.9 | 13.1 | --- | --- | --- | 11.6 | 8.6 | 9.7 | 12.2 | 5.1 | 8.8 |
| 13 | 13.3 | 13.0 | 13.2 | --- | --- | --- | 12.0 | 8.3 | 9.8 | 11.8 | 5.4 | 8.7 |
| 14 | 13.4 | 12.9 | 13.2 | --- | --- | --- | 12.0 | 7.9 | 9.3 | 7.3 | 5.5 | 6.6 |
| 15 | 12.8 | 12.5 | 12.6 | --- | --- | --- | 11.8 | 7.9 | 9.6 | 9.9 | 5.1 | 7.4 |
| 16 | 12.9 | 12.6 | 12.7 | --- | --- | --- | 12.7 | 8.2 | 10.2 | 9.0 | 4.5 | 6.8 |
| 17 | 13.3 | 12.8 | 13.0 | --- | --- | --- | 12.9 | 6.8 | 9.6 | 7.9 | 4.5 | 6.2 |
| 18 | 12.9 | 12.5 | 12.7 | --- | --- | --- | 11.9 | 6.7 | 8.7 | 8.2 | 5.0 | 6.5 |
| 19 | 12.5 | 12.0 | 12.3 | --- | --- | --- | 12.5 | 7.7 | 9.8 | 7.3 | 5.5 | 6.5 |
| 20 | 12.9 | 12.2 | 12.5 | --- | --- | --- | 13.0 | 8.2 | 10.3 | 8.7 | 5.8 | 7.1 |
| 21 | 13.1 | 12.9 | 13.0 | --- | --- | --- | 13.3 | 8.1 | 10.1 | 9.5 | 6.1 | 7.8 |
| 22 | 13.0 | 11.1 | 12.5 | --- | --- | --- | 13.0 | 8.0 | 10.0 | 12.2 | 6.3 | 9.0 |
| 23 | 12.4 | 12.0 | 12.3 | --- | --- | --- | 12.4 | 7.7 | 9.4 | 11.3 | 6.8 | 9.0 |
| 24 | 12.5 | 11.8 | 12.2 | --- | --- | --- | 12.8 | 7.1 | 9.5 | 10.2 | 7.5 | 8.5 |
| 25 | 12.0 | 11.5 | 11.8 | 9.5 | 8.5 | 8.9 | 13.8 | 7.9 | 10.7 | 15.8 | 7.7 | 11.2 |
| 26 | --- | --- | --- | 10.4 | 8.7 | 9.5 | 13.7 | 7.7 | 10.6 | 20.0 | 10.2 | 14.3 |
| 27 | --- | --- | --- | 12.4 | 10.3 | 11.2 | 11.1 | 7.1 | 9.1 | 18.1 | 6.9 | 12.2 |
| 28 | --- | --- | --- | 13.9 | 11.8 | 12.6 | 12.4 | 7.0 | 9.2 | 17.2 | 5.9 | 11.2 |
| 29 | --- | --- | --- | 13.7 | 11.6 | 12.6 | 13.8 | 8.2 | 10.6 | 20.0 | 5.6 | 13.0 |
| 30 | --- | --- | --- | 12.0 | 10.3 | 11.1 | 14.2 | 8.3 | 11.0 | 19.8 | 5.8 | 13.1 |
| 31 | --- | --- | --- | 11.2 | 10.3 | 10.7 | --- | --- | --- | 17.7 | 1.4 | 9.0 |
| MONTH | 14.0 | 10.1 | 12.8 | 13.9 | 8.5 | 11.0 | 14.2 | 6.7 | 9.7 | 20.0 | 1.4 | 9.1 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| JUNE | | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 16.2 | 5.0 | 10.3 | 19.8 | 7.0 | 13.6 | --- | --- | --- | 9.8 | 6.6 | 8.0 |
| 2 | 9.0 | 3.6 | 5.6 | 19.8 | 8.8 | 14.6 | --- | --- | --- | 9.4 | 7.0 | 7.9 |
| 3 | 6.7 | 2.9 | 5.0 | 20.0 | 10.2 | 15.7 | --- | --- | --- | 7.8 | 7.5 | 7.6 |
| 4 | 9.0 | 3.5 | 6.2 | 20.0 | 10.5 | 15.4 | --- | --- | --- | 9.1 | 7.7 | 8.2 |
| 5 | 10.5 | 3.9 | 6.9 | 19.0 | 9.4 | 13.6 | --- | --- | --- | 8.8 | 7.7 | 8.1 |
| 6 | 16.5 | 4.7 | 9.5 | 13.0 | 6.1 | 9.3 | --- | --- | --- | 10.9 | 7.4 | 8.7 |
| 7 | 19.3 | 4.1 | 11.7 | 8.8 | 5.5 | 7.0 | --- | --- | --- | 13.0 | 6.9 | 9.4 |
| 8 | 17.0 | 4.8 | 10.6 | 11.6 | 5.9 | 8.6 | --- | --- | --- | 12.5 | 6.7 | 8.9 |
| 9 | 12.3 | 3.6 | 7.6 | 12.1 | 5.8 | 9.0 | --- | --- | --- | 12.0 | 6.7 | 8.9 |
| 10 | 10.4 | 3.7 | 7.1 | 11.8 | 5.9 | 8.5 | --- | --- | --- | 12.9 | 6.5 | 9.1 |
| 11 | 12.0 | 4.2 | 7.5 | 10.4 | 5.7 | 7.7 | --- | --- | --- | 11.7 | 6.6 | 8.9 |
| 12 | 13.0 | 4.6 | 8.2 | 12.5 | 5.8 | 9.1 | --- | --- | --- | 10.1 | 7.7 | 8.8 |
| 13 | 14.4 | 4.5 | 9.0 | 11.0 | 5.9 | 8.0 | --- | --- | --- | 11.0 | 7.6 | 8.9 |
| 14 | 19.3 | 4.6 | 11.7 | --- | --- | --- | --- | --- | --- | 11.4 | 6.7 | 8.8 |
| 15 | 14.8 | 5.3 | 10.5 | --- | --- | --- | --- | --- | --- | 11.2 | 6.3 | 8.1 |
| 16 | 8.0 | 3.5 | 5.0 | --- | --- | --- | --- | --- | --- | 10.4 | 6.5 | 7.9 |
| 17 | 8.1 | 3.1 | 5.1 | --- | --- | --- | --- | --- | --- | 11.5 | 7.3 | 8.6 |
| 18 | 9.7 | 3.0 | 5.9 | --- | --- | --- | 8.1 | 5.2 | 6.3 | 10.9 | 7.2 | 8.4 |
| 19 | 12.7 | 3.3 | 7.5 | --- | --- | --- | 7.3 | 4.7 | 5.4 | 8.7 | 7.4 | 7.9 |
| 20 | 13.9 | 3.9 | 8.4 | --- | --- | --- | 7.3 | 4.7 | 5.5 | 9.5 | 6.9 | 7.9 |
| 21 | 17.9 | 3.8 | 10.3 | --- | --- | --- | 7.1 | 4.6 | 5.6 | --- | --- | --- |
| 22 | 16.3 | 4.8 | 10.5 | --- | --- | --- | 7.6 | 4.8 | 5.8 | --- | --- | --- |
| 23 | 17.3 | 4.5 | 10.2 | --- | --- | --- | 7.4 | 5.0 | 5.7 | --- | --- | --- |
| 24 | 17.9 | 4.6 | 10.8 | --- | --- | --- | 7.3 | 5.0 | 6.1 | --- | --- | --- |
| 25 | 18.3 | 5.6 | 10.5 | --- | --- | --- | 7.5 | 5.1 | 6.3 | --- | --- | --- |
| 26 | 20.0 | 5.1 | 12.8 | --- | --- | --- | 8.3 | 5.5 | 6.7 | --- | --- | --- |
| 27 | 20.0 | 7.6 | 14.5 | --- | --- | --- | 7.9 | 5.4 | 6.6 | --- | --- | --- |
| 28 | 20.0 | 9.5 | 15.3 | --- | --- | --- | 6.8 | 6.2 | 6.4 | 14.4 | 7.5 | 11.2 |
| 29 | 13.3 | 5.9 | 10.1 | --- | --- | --- | 8.0 | 6.1 | 6.8 | 13.6 | 7.5 | 11.1 |
| 30 | 18.7 | 5.1 | 12.0 | --- | --- | --- | 8.5 | 6.1 | 7.1 | 13.0 | 6.7 | 9.9 |
| 31 | --- | --- | --- | --- | --- | --- | 8.9 | 6.3 | 7.4 | --- | --- | --- |
| MONTH | 20.0 | 2.9 | 9.2 | 20.0 | 5.5 | 10.8 | 8.9 | 4.6 | 6.3 | 14.4 | 6.3 | 8.7 |
| YEAR | MAXIMUM | 20.0 | MINIMUM | 1.4 | MEAN | 9.6 | | | | | | |

GREAT MIAMI RIVER BASIN

03271800 TWIN CREEK NEAR INGOMAR, OH

LOCATION.--Lat 39°42'28", long 84°31'30", in sec. 15, T.5 N., R.3 E., Preble County, Hydrologic Unit 05080002, on left bank at downstream side of bridge on Halderman Road, 0.5 mi downstream from Bantas Fork, 1.4 mi west of Ingomar, and 4.8 mi upstream from Aukerman Creek.

DRAINAGE AREA.--197 mi².

PERIOD OF RECORD.--Occasional low-flow measurements water years 1959, 1961-62, October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 815.42 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 5-15, 26-28, May 25-June 7. Records good except those for periods of estimated record which are fair. Sediment data collected at this site 1970 to 1974.

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

AVERAGE DISCHARGE.--26 years, 194 ft³/s, 13.37 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,300 ft³/s Mar. 4, 1963, gage height, 14.40 ft, from rating curve extended above 7,000 ft³/s on basis of contracted-opening measurement at gage height 18.8 ft; minimum daily, 2.5 ft³/s Sept. 12-14, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959 reached a stage of 18.8 ft, discharge, 30,300 ft³/s, computed by Miami Conservancy District. Flood of Mar. 25, 1913 reached a stage of 28.0 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4700 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|--|------|-----------------------------------|---------------------|
| Feb. 2 | 0600 | *6,030 | *8.07 | No other peak greater than base discharge. | | | |

Minimum daily discharge, 2.6 ft³/s Aug. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|---------|------|------|-------|------|------|------|-------|-------|-------|-------|------|
| 1 | 6.9 | 11 | 18 | 47 | 861 | 82 | 95 | 54 | 18 | 5.9 | 7.1 | 3.3 | |
| 2 | 6.3 | 11 | 16 | 40 | 4150 | 83 | 124 | 52 | 16 | 5.8 | 5.9 | 3.3 | |
| 3 | 6.0 | 11 | 16 | 45 | 1190 | 213 | 465 | 52 | 16 | 5.3 | 5.1 | 6.2 | |
| 4 | 6.0 | 11 | 19 | 30 | 856 | 564 | 565 | 51 | 15 | 5.3 | 6.8 | 5.6 | |
| 5 | 6.3 | 11 | 19 | 25 | 468 | 274 | 315 | 52 | 15 | 4.7 | 7.3 | 4.6 | |
| 6 | 6.6 | 11 | 17 | 22 | 260 | 445 | 320 | 51 | 14 | 4.1 | 6.1 | 3.9 | |
| 7 | 7.5 | 11 | 15 | 20 | 205 | 425 | 583 | 48 | 14 | 3.8 | 5.1 | 3.4 | |
| 8 | 7.3 | 11 | 15 | 19 | 151 | 304 | 423 | 46 | 14 | 3.5 | 4.5 | 3.3 | |
| 9 | 7.6 | 11 | 15 | 17 | 115 | 253 | 276 | 49 | 14 | 3.4 | 4.1 | 3.4 | |
| 10 | 8.5 | 11 | 15 | 16 | 92 | 209 | 217 | 54 | 14 | 3.8 | 3.7 | 3.3 | |
| 11 | 11 | 11 | 15 | 16 | 79 | 159 | 185 | 57 | 14 | 3.6 | 3.7 | 3.2 | |
| 12 | 11 | 11 | 16 | 15 | 74 | 150 | 158 | 46 | 12 | 4.1 | 3.5 | 3.3 | |
| 13 | 9.4 | 11 | 15 | 16 | 76 | 178 | 137 | 42 | 12 | 4.2 | 3.4 | 3.9 | |
| 14 | 8.8 | 12 | 14 | 17 | 80 | 151 | 122 | 40 | 11 | 4.3 | 3.3 | 4.0 | |
| 15 | 8.8 | 11 | 25 | 16 | 268 | 124 | 108 | 38 | 10 | 4.3 | 3.1 | 4.0 | |
| 16 | 9.6 | 11 | 26 | 15 | 230 | 101 | 97 | 37 | 11 | 3.6 | 3.1 | 4.3 | |
| 17 | 9.4 | 11 | 28 | 18 | 216 | 89 | 91 | 34 | 12 | 3.1 | 2.9 | 13 | |
| 18 | 8.7 | 12 | 23 | 22 | 324 | 88 | 93 | 33 | 12 | 3.4 | 2.6 | 11 | |
| 19 | 8.4 | 11 | 21 | 27 | 717 | 90 | 87 | 32 | 10 | 6.5 | 3.2 | 6.6 | |
| 20 | 8.7 | 11 | 23 | 81 | 1110 | 85 | 78 | 33 | 9.3 | 8.8 | 3.6 | 5.8 | |
| 21 | 8.8 | 11 | 25 | 61 | 452 | 73 | 75 | 33 | 8.9 | 11 | 3.2 | 4.4 | |
| 22 | 8.8 | 10 | 25 | 42 | 270 | 66 | 79 | 32 | 7.7 | 8.7 | 2.7 | 3.9 | |
| 23 | 8.5 | 9.9 | 23 | 33 | 302 | 66 | 78 | 37 | 6.7 | 6.9 | 4.1 | 4.1 | |
| 24 | 9.0 | 11 | 22 | 29 | 275 | 65 | 71 | 49 | 6.1 | 6.0 | 4.1 | 4.0 | |
| 25 | 9.7 | 15 | 29 | 25 | 183 | 226 | 65 | 46 | 5.6 | 5.4 | 3.3 | 3.8 | |
| 26 | 11 | 22 | 118 | 23 | 139 | 307 | 63 | 34 | 5.4 | 5.3 | 2.9 | 3.4 | |
| 27 | 12 | 20 | 113 | 22 | 126 | 182 | 63 | 28 | 5.2 | 5.0 | 3.1 | 3.2 | |
| 28 | 12 | 20 | 72 | 20 | 98 | 134 | 63 | 25 | 5.3 | 5.0 | 5.2 | 3.3 | |
| 29 | 13 | 23 | 87 | 20 | 91 | 117 | 60 | 21 | 6.1 | 4.6 | 4.5 | 3.5 | |
| 30 | 12 | 21 | 71 | 23 | --- | 105 | 56 | 20 | 6.5 | 4.6 | 3.4 | 3.6 | |
| 31 | 12 | --- | 56 | 26 | --- | 89 | --- | 19 | --- | 7.1 | 3.3 | --- | |
| TOTAL | 279.6 | 384.9 | 1012 | 848 | 13458 | 5497 | 5212 | 1245 | 326.8 | 161.1 | 127.9 | 136.6 | |
| MEAN | 9.02 | 12.8 | 32.6 | 27.4 | 464 | 177 | 174 | 40.2 | 10.9 | 5.20 | 4.13 | 4.55 | |
| MAX | 13 | 23 | 118 | 81 | 4150 | 564 | 583 | 57 | 18 | 11 | 7.3 | 13 | |
| MIN | 6.0 | 9.9 | 14 | 15 | 74 | 65 | 56 | 19 | 5.2 | 3.1 | 2.6 | 3.2 | |
| CFSM | .05 | .06 | .17 | .14 | 2.36 | .90 | .88 | .20 | .06 | .03 | .02 | .02 | |
| IN. | .05 | .07 | .19 | .16 | 2.54 | 1.04 | .98 | .24 | .06 | .03 | .02 | .03 | |
| CAL YR 1987 | TOTAL | 44708.2 | | MEAN | 122 | MAX | 2540 | MIN | 6.0 | CFSM | .62 | IN. | 8.44 |
| WTR YR 1988 | TOTAL | 28688.9 | | MEAN | 78.4 | MAX | 4150 | MIN | 2.6 | CFSM | .40 | IN. | 5.42 |

GREAT MIAMI RIVER BASIN

195

03272000 TWIN CREEK NEAR GERMANTOWN, OH

LOCATION.--Lat 39°38'10", long 84°23'48", in NW 1/4 sec. 11, T.3 N., R.4 E., Montgomery County, Hydrologic Unit 05080002, on right bank 0.3 mi downstream from Germantown Dam, 1.5 mi northwest of Germantown, and 3 mi upstream from Little Twin Creek.

DRAINAGE AREA.--275 mi².

PERIOD OF RECORD.--April 1914 to December 1923, December 1926 to current year.

REVISED RECORDS.--WSP 403: 1914(M). WSP 1385: 1915(M).

GAGE.--Water-stage recorder. Datum of gage is 700.24 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 18, 1926, nonrecording gage at site 1 mi downstream at datum 12.49 ft higher.

REMARKS.--Estimated daily discharge: Jan. 3-19 and 23-31. Records fair except for estimated periods which are poor. Flood flow regulated by Germantown retarding basin, 0.3 mi upstream beginning in 1920.

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

AVERAGE DISCHARGE.--70 years (1914-23, 1927-88), 264 ft³/s, 13.04 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,390 ft³/s July 8, 1915, gage height 11.7 ft, from graph based on gage readings, site and datum then in use; maximum gage height, 29.19 ft Jan. 22, 1959; minimum discharge, 1.5 ft³/s Sept. 25, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 25, 1913 reached a stage of 18.3 ft, original site and datum, discharge, 66,000 ft³/s, computed by Miami Conservancy District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,260 ft³/s Feb. 2, gage height 25.70 ft; minimum daily, 3.4 ft³/s Sept. 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | |
|-------------|-------|---------|------|------|-------|------|------|------|-------|-------|-------|-------|------|
| 1 | 6.6 | 18 | 25 | 52 | 858 | 143 | 158 | 72 | 28 | 11 | 9.8 | 4.3 | |
| 2 | 5.9 | 17 | 23 | 62 | 4770 | 139 | 182 | 69 | 26 | 10 | 9.0 | 3.7 | |
| 3 | 5.9 | 17 | 22 | 40 | 2450 | 270 | 514 | 67 | 25 | 9.4 | 8.4 | 7.0 | |
| 4 | 6.4 | 17 | 23 | 30 | 1440 | 986 | 923 | 65 | 25 | 9.0 | 7.0 | 11 | |
| 5 | 6.9 | 16 | 24 | 27 | 815 | 485 | 519 | 64 | 24 | 7.9 | 6.7 | 8.7 | |
| 6 | 6.8 | 16 | 23 | 25 | 507 | 602 | 487 | 63 | 22 | 8.0 | 8.7 | 5.9 | |
| 7 | 5.1 | 17 | 22 | 23 | 503 | 611 | 984 | 60 | 21 | 6.7 | 8.7 | 4.9 | |
| 8 | 6.0 | 17 | 21 | 21 | 411 | 461 | 720 | 57 | 20 | 6.1 | 7.3 | 4.1 | |
| 9 | 6.6 | 17 | 21 | 20 | 205 | 387 | 447 | 64 | 19 | 5.8 | 6.3 | 3.6 | |
| 10 | 7.3 | 17 | 21 | 19 | 161 | 330 | 337 | 67 | 19 | 5.0 | 6.2 | 3.4 | |
| 11 | 9.7 | 17 | 21 | 17 | 146 | 261 | 278 | 66 | 18 | 4.6 | 5.3 | 3.4 | |
| 12 | 10 | 17 | 21 | 17 | 135 | 235 | 234 | 58 | 18 | 5.0 | 5.0 | 3.7 | |
| 13 | 9.6 | 17 | 21 | 18 | 404 | 265 | 201 | 54 | 17 | 5.4 | 4.7 | 5.1 | |
| 14 | 9.0 | 18 | 20 | 20 | 445 | 240 | 175 | 50 | 17 | 5.7 | 4.7 | 4.5 | |
| 15 | 8.8 | 18 | 27 | 19 | 388 | 203 | 156 | 47 | 15 | 5.9 | 4.5 | 3.8 | |
| 16 | 9.1 | 18 | 32 | 17 | 409 | 170 | 142 | 45 | 16 | 5.6 | 4.1 | 4.7 | |
| 17 | 9.6 | 18 | 32 | 22 | 328 | 152 | 132 | 42 | 17 | 5.3 | 3.7 | 10 | |
| 18 | 10 | 19 | 31 | 27 | 472 | 147 | 134 | 40 | 16 | 6.1 | 3.5 | 12 | |
| 19 | 10 | 19 | 28 | 35 | 847 | 148 | 127 | 39 | 15 | 12 | 4.6 | 12 | |
| 20 | 10 | 18 | 29 | 182 | 1750 | 142 | 115 | 39 | 13 | 20 | 4.8 | 9.6 | |
| 21 | 10 | 18 | 29 | 86 | 771 | 129 | 107 | 39 | 14 | 44 | 4.5 | 7.6 | |
| 22 | 11 | 18 | 30 | 55 | 446 | 117 | 110 | 39 | 12 | 16 | 4.0 | 6.3 | |
| 23 | 14 | 18 | 30 | 36 | 427 | 113 | 110 | 56 | 11 | 13 | 6.1 | 5.5 | |
| 24 | 14 | 19 | 28 | 32 | 430 | 112 | 101 | 78 | 9.8 | 11 | 6.3 | 5.2 | |
| 25 | 16 | 22 | 32 | 29 | 295 | 341 | 93 | 73 | 9.9 | 9.4 | 5.1 | 5.3 | |
| 26 | 16 | 27 | 104 | 25 | 223 | 626 | 88 | 58 | 14 | 8.9 | 4.5 | 5.0 | |
| 27 | 18 | 27 | 136 | 24 | 205 | 352 | 86 | 44 | 12 | 9.4 | 3.6 | 4.5 | |
| 28 | 18 | 25 | 90 | 23 | 169 | 247 | 85 | 38 | 11 | 8.5 | 4.4 | 4.1 | |
| 29 | 18 | 28 | 79 | 23 | 154 | 207 | 81 | 35 | 10 | 7.3 | 6.0 | 3.9 | |
| 30 | 19 | 28 | 84 | 24 | --- | 183 | 76 | 32 | 11 | 7.0 | 6.4 | 4.5 | |
| 31 | 18 | --- | 62 | 25 | --- | 159 | --- | 30 | --- | 9.1 | 5.0 | --- | |
| TOTAL | 331.3 | 578 | 1191 | 1075 | 20564 | 8963 | 7902 | 1650 | 505.7 | 298.1 | 178.9 | 177.3 | |
| MEAN | 10.7 | 19.3 | 38.4 | 34.7 | 709 | 289 | 263 | 53.2 | 16.9 | 9.62 | 5.77 | 5.91 | |
| MAX | 19 | 28 | 136 | 182 | 4770 | 986 | 984 | 78 | 28 | 44 | 9.8 | 12 | |
| MIN | 5.1 | 16 | 20 | 17 | 135 | 112 | 76 | 30 | 9.8 | 4.6 | 3.5 | 3.4 | |
| CFSM | .04 | .07 | .14 | .13 | 2.58 | 1.05 | .96 | .19 | .06 | .03 | .02 | .02 | |
| IN. | .04 | .08 | .16 | .15 | 2.78 | 1.21 | 1.07 | .22 | .07 | .04 | .02 | .02 | |
| CAL YR 1987 | TOTAL | 55717.1 | | MEAN | 153 | MAX | 3560 | MIN | 5.1 | CFSM | .56 | IN. | 7.54 |
| WTR YR 1988 | TOTAL | 43414.3 | | MEAN | 119 | MAX | 4770 | MIN | 3.4 | CFSM | .43 | IN. | 5.87 |

GREAT MIAMI RIVER BASIN

03272700 SEVENMILE CREEK AT CAMDEN, OH

LOCATION.--Lat 39°37'45", long 84°38'40", Preble County, Hydrologic Unit 05080002, on right bank at downstream side of bridge on State Highway 725 in Camden, 0.3 mi downstream from Beasley Run and at mile 16.2.

DRAINAGE AREA.--69.0 mi².

PERIOD OF RECORD.--December 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 818.57 ft above National Geodetic Vertical Datum of 1929. (Levels by Miami Conservancy District). Prior to Oct. 1, 1975, at same site at datum 3.02 ft higher.

REMARKS.--No estimated daily discharges. Records fair. Water-quality data collected at this site 1972 to 1974.

COOPERATION.--Gage-height tapes, and 6 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--17 years (1972-88), 69.8 ft³/s, 13.74 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,210 ft³/s June 22, 1974, gage height 13.25 ft, present datum, from rating curve extended above 2,200 ft³/s; minimum daily, 1.5 ft³/s Sept. 28, 29, 1987.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1500 ft³/s and maximum (*).

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|----------------------------|------|-----------------------------------|---------------------|
| Feb. 2 | 0400 | *1,750 | *8.10 | No other peaks above base. | | | |

Minimum daily discharge, 1.2 ft³/s July 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|---------|-------|-------|------|------|------|-------|-------|-------|------|-------|
| 1 | 2.1 | 5.2 | 2.3 | 7.2 | 318 | 30 | 39 | 17 | 6.3 | 2.5 | 4.1 | 1.9 |
| 2 | 1.8 | 4.8 | 2.1 | 4.1 | 1170 | 31 | 49 | 16 | 6.3 | 2.3 | 3.5 | 1.7 |
| 3 | 1.7 | 4.7 | 1.9 | 4.2 | 443 | 107 | 186 | 16 | 5.8 | 2.3 | 3.3 | 3.1 |
| 4 | 1.6 | 5.0 | 4.0 | 3.3 | 325 | 220 | 223 | 16 | 5.3 | 2.0 | 9.8 | 11 |
| 5 | 1.7 | 4.8 | 2.5 | 1.9 | 197 | 103 | 114 | 16 | 5.1 | 1.8 | 4.9 | 3.7 |
| 6 | 1.7 | 4.5 | 2.0 | 1.9 | 111 | 117 | 191 | 16 | 5.0 | 1.6 | 3.8 | 2.4 |
| 7 | 2.1 | 4.8 | 1.7 | 1.5 | 79 | 117 | 267 | 16 | 4.6 | 1.6 | 2.6 | 2.2 |
| 8 | 2.1 | 4.8 | 2.0 | 1.5 | 63 | 99 | 162 | 15 | 4.5 | 1.6 | 2.2 | 1.9 |
| 9 | 2.1 | 6.0 | 1.9 | 1.7 | 48 | 89 | 102 | 17 | 4.6 | 1.7 | 2.1 | 1.7 |
| 10 | 2.4 | 5.2 | 2.0 | 1.7 | 38 | 72 | 79 | 17 | 4.6 | 1.6 | 2.0 | 1.7 |
| 11 | 4.1 | 4.5 | 1.7 | 1.4 | 35 | 55 | 67 | 15 | 4.4 | 1.8 | 1.9 | 1.6 |
| 12 | 2.9 | 4.3 | 2.3 | 1.6 | 30 | 54 | 56 | 13 | 4.2 | 1.7 | 1.8 | 1.6 |
| 13 | 2.6 | 4.2 | 2.0 | 2.0 | 25 | 58 | 47 | 12 | 4.1 | 1.8 | 1.8 | 2.4 |
| 14 | 2.3 | 4.2 | 1.7 | 1.7 | 27 | 52 | 42 | 12 | 4.0 | 1.8 | 1.7 | 2.7 |
| 15 | 2.4 | 4.0 | 6.2 | 1.5 | 141 | 45 | 37 | 11 | 3.6 | 1.7 | 1.6 | 2.3 |
| 16 | 2.4 | 3.5 | 4.7 | 1.5 | 90 | 37 | 33 | 11 | 3.7 | 1.6 | 1.6 | 2.6 |
| 17 | 2.4 | 4.3 | 3.1 | 2.0 | 82 | 33 | 32 | 10 | 4.2 | 1.2 | 1.8 | 25 |
| 18 | 2.5 | 4.8 | 2.6 | 3.0 | 109 | 33 | 34 | 9.8 | 3.9 | 1.7 | 1.6 | 7.1 |
| 19 | 2.4 | 3.8 | 2.5 | 18 | 262 | 34 | 30 | 9.7 | 3.5 | 5.8 | 1.7 | 4.2 |
| 20 | 2.8 | 3.3 | 4.3 | 48 | 358 | 31 | 26 | 9.6 | 3.1 | 8.5 | 5.5 | 3.6 |
| 21 | 3.8 | 3.2 | 4.5 | 16 | 161 | 27 | 26 | 9.7 | 3.0 | 15 | 2.4 | 2.9 |
| 22 | 3.8 | 3.2 | 3.2 | 8.3 | 107 | 25 | 28 | 9.2 | 2.7 | 36 | 1.8 | 2.7 |
| 23 | 4.5 | 3.2 | 3.2 | 6.0 | 100 | 25 | 28 | 16 | 2.5 | 57 | 2.3 | 2.6 |
| 24 | 5.2 | 3.6 | 3.0 | 5.2 | 89 | 24 | 24 | 15 | 2.3 | 13 | 4.6 | 2.5 |
| 25 | 6.2 | 6.2 | 9.5 | 3.6 | 64 | 145 | 21 | 11 | 2.2 | 12 | 2.3 | 2.6 |
| 26 | 6.0 | 7.1 | 43 | 2.5 | 51 | 139 | 20 | 9.5 | 2.3 | 8.7 | 1.8 | 2.2 |
| 27 | 7.3 | 4.7 | 25 | 2.5 | 47 | 73 | 20 | 8.4 | 2.3 | 3.1 | 1.5 | 2.0 |
| 28 | 7.7 | 4.0 | 16 | 2.3 | 36 | 54 | 21 | 7.9 | 2.1 | 2.7 | 4.3 | 1.9 |
| 29 | 6.1 | 6.9 | 13 | 2.4 | 33 | 48 | 20 | 7.5 | 2.4 | 2.5 | 5.9 | 1.9 |
| 30 | 5.6 | 3.1 | 9.6 | 3.1 | --- | 42 | 18 | 7.2 | 2.7 | 1.9 | 5.3 | 1.7 |
| 31 | 5.4 | --- | 8.5 | 3.7 | --- | 35 | --- | 6.7 | --- | 4.1 | 2.5 | --- |
| TOTAL | 107.7 | 135.9 | 192.0 | 165.3 | 4639 | 2054 | 2042 | 383.2 | 115.3 | 202.6 | 94.0 | 107.4 |
| MEAN | 3.47 | 4.53 | 6.19 | 5.33 | 160 | 66.3 | 68.1 | 12.4 | 3.84 | 6.54 | 3.03 | 3.58 |
| MAX | 7.7 | 7.1 | 43 | 48 | 1170 | 220 | 267 | 17 | 6.3 | 57 | 9.8 | 25 |
| MIN | 1.6 | 3.1 | 1.7 | 1.4 | 25 | 24 | 18 | 6.7 | 2.1 | 1.2 | 1.5 | 1.6 |
| CFSM | .05 | .07 | .09 | .08 | 2.32 | .96 | .99 | .18 | .06 | .09 | .04 | .05 |
| IN. | .06 | .07 | .10 | .09 | 2.50 | 1.11 | 1.10 | .21 | .06 | .11 | .05 | .06 |
| CAL YR 1987 | TOTAL | 9868.7 | MEAN | 27.0 | MAX | 492 | MIN | 1.5 | CFSM | .39 | IN. | 5.32 |
| WTR YR 1988 | TOTAL | 10238.4 | MEAN | 28.0 | MAX | 1170 | MIN | 1.2 | CFSM | .41 | IN. | 5.52 |

GREAT MIAMI RIVER BASIN

197

03274000 GREAT MIAMI RIVER AT HAMILTON, OH

LOCATION.--Lat 39°23'28", long 84°34'20", in NE 1/4 sec. 6, T.1 N., R.3 E., Butler County, Hydrologic Unit 05080002, on right bank 1,000 ft downstream from Columbia Bridge at Hamilton, 3 mi downstream from Four Mile Creek, 4.3 mi upstream from Pleasant Run, and at mile 34.8.

DRAINAGE AREA.--3,630 mi².

PERIOD OF RECORD.--January 1907 to June 1909 (fragmentary), January 1910 to September 1918, April 1927 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at site 0.7 mi upstream since 1911 are contained in reports of National Weather Service. Prior to October 1962, published as Miami River at Hamilton.

REVISED RECORDS.--WSP 803: 1936. WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 499.98 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 12, 1927, nonrecording gage at site 0.7 mi upstream at datum 64.65 ft higher.

REMARKS.--No estimated daily discharges. Records good prior to Apr. 28, fair thereafter. Some regulation at low flow by industrial plants upstream from station. Flood flow regulated by five retarding basins upstream from station beginning in 1920 (see REMARKS for station numbers 03271500 and 03272000). The Miami and Erie Canal diverted water from the basin 1.7 mi upstream from station until Nov. 1, 1930, when the canal was abandoned; amount of diversion not known. Water-quality data collected at this site for water years 1950, 1951, 1973. Water temperature data collected at this site October 1950 to September 1951, October 1957 to September 1976.

COOPERATION.--Gage-height charts, tapes and 12 discharge measurements furnished by Miami Conservancy District.

AVERAGE DISCHARGE.--57 years (1931-88), 3,273 ft³/s, 12.25 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 352,000 ft³/s Mar. 26, 1913, gage height, 38.5 ft, site and datum then in use, computed by Miami Conservancy District; maximum discharge since construction of five retarding basins upstream in 1922, 108,000 ft³/s Jan. 21, 1959, gage height 79.47 ft; minimum daily discharge, 155 ft³/s Sept 27, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 26,200 ft³/s Feb. 2, gage height, 66.99 ft; minimum daily, 265 ft³/s July 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-------|--------|-------|-------|--------|--------|-------|-------|-------|-------|-------|-------|
| 1 | 486 | 515 | 745 | 1310 | 3570 | 2170 | 2150 | 1410 | 782 | 348 | 648 | 354 |
| 2 | 455 | 499 | 713 | 978 | 23100 | 1980 | 2180 | 1340 | 732 | 348 | 459 | 328 |
| 3 | 435 | 507 | 729 | 800 | 18400 | 3210 | 3590 | 1140 | 707 | 342 | 424 | 391 |
| 4 | 439 | 521 | 890 | 743 | 12800 | 7080 | 6450 | 1100 | 674 | 324 | 410 | 1000 |
| 5 | 442 | 510 | 864 | 711 | 8560 | 4760 | 5830 | 1070 | 668 | 304 | 411 | 658 |
| 6 | 443 | 496 | 775 | 607 | 5320 | 4240 | 5080 | 1010 | 635 | 296 | 402 | 484 |
| 7 | 434 | 497 | 748 | 552 | 3490 | 4430 | 6130 | 992 | 559 | 291 | 525 | 434 |
| 8 | 462 | 494 | 738 | 554 | 3220 | 4830 | 5870 | 955 | 507 | 291 | 424 | 428 |
| 9 | 485 | 481 | 716 | 567 | 3040 | 6190 | 5210 | 948 | 511 | 299 | 387 | 407 |
| 10 | 487 | 523 | 691 | 538 | 2680 | 6720 | 4050 | 1110 | 494 | 294 | 359 | 386 |
| 11 | 553 | 552 | 664 | 526 | 2400 | 5650 | 3370 | 980 | 489 | 280 | 342 | 380 |
| 12 | 599 | 521 | 680 | 521 | 2180 | 4470 | 2900 | 962 | 476 | 277 | 343 | 374 |
| 13 | 530 | 519 | 659 | 531 | 1810 | 4020 | 2650 | 917 | 459 | 280 | 335 | 1140 |
| 14 | 479 | 520 | 600 | 537 | 1660 | 3710 | 2370 | 949 | 453 | 284 | 333 | 1400 |
| 15 | 501 | 519 | 760 | 528 | 3210 | 3360 | 2110 | 896 | 463 | 286 | 325 | 725 |
| 16 | 485 | 516 | 1030 | 537 | 3620 | 2830 | 1930 | 839 | 457 | 286 | 316 | 594 |
| 17 | 488 | 523 | 815 | 537 | 3610 | 2710 | 1810 | 841 | 480 | 281 | 309 | 2060 |
| 18 | 481 | 555 | 896 | 583 | 3670 | 2500 | 1850 | 791 | 497 | 265 | 301 | 849 |
| 19 | 471 | 532 | 902 | 826 | 5110 | 2270 | 1740 | 781 | 472 | 464 | 300 | 610 |
| 20 | 460 | 574 | 810 | 2730 | 10100 | 2160 | 1610 | 778 | 442 | 1050 | 538 | 570 |
| 21 | 483 | 631 | 828 | 1510 | 11000 | 2100 | 1570 | 786 | 453 | 2840 | 422 | 533 |
| 22 | 482 | 627 | 802 | 1130 | 7170 | 1950 | 2130 | 779 | 454 | 1070 | 347 | 453 |
| 23 | 467 | 636 | 588 | 1020 | 5680 | 1760 | 1820 | 891 | 429 | 872 | 350 | 439 |
| 24 | 481 | 679 | 696 | 904 | 6160 | 1690 | 1620 | 1440 | 403 | 759 | 550 | 445 |
| 25 | 494 | 794 | 914 | 810 | 5230 | 2340 | 1500 | 1550 | 380 | 591 | 434 | 437 |
| 26 | 540 | 917 | 1640 | 726 | 3870 | 5020 | 1440 | 1520 | 380 | 613 | 383 | 419 |
| 27 | 512 | 871 | 1470 | 626 | 3440 | 4220 | 1440 | 1250 | 349 | 757 | 341 | 407 |
| 28 | 550 | 722 | 1490 | 627 | 3060 | 3360 | 1440 | 1070 | 310 | 676 | 322 | 399 |
| 29 | 559 | 823 | 1430 | 632 | 2660 | 2880 | 1480 | 1000 | 329 | 560 | 333 | 396 |
| 30 | 533 | 839 | 1200 | 665 | --- | 2480 | 1480 | 941 | 333 | 507 | 426 | 393 |
| 31 | 472 | --- | 1470 | 679 | --- | 2230 | --- | 884 | --- | 546 | 397 | --- |
| TOTAL | 15188 | 17913 | 27953 | 24545 | 169820 | 109320 | 84800 | 31920 | 14777 | 16681 | 12196 | 17893 |
| MEAN | 490 | 597 | 902 | 792 | 5856 | 3526 | 2827 | 1030 | 493 | 538 | 393 | 596 |
| MAX | 599 | 917 | 1640 | 2730 | 23100 | 7080 | 6450 | 1550 | 782 | 2840 | 648 | 2060 |
| MIN | 434 | 481 | 588 | 521 | 1660 | 1690 | 1440 | 778 | 310 | 265 | 300 | 328 |
| CFSM | .13 | .16 | .25 | .22 | 1.61 | .97 | .78 | .28 | .14 | .15 | .11 | .16 |
| IN. | .16 | .18 | .29 | .25 | 1.74 | 1.12 | .87 | .33 | .15 | .17 | .12 | .18 |
| CAL YR 1987 | TOTAL | 750305 | MEAN | 2056 | MAX | 17300 | MIN | 434 | CFSM | .57 | IN. | 7.69 |
| WTR YR 1988 | TOTAL | 543006 | MEAN | 1484 | MAX | 23100 | MIN | 265 | CFSM | .41 | IN. | 5.56 |

GREAT MIAMI RIVER BASIN

03274600 GREAT MIAMI RIVER AT NEW BALTIMORE, OH
(National stream-quality accounting network station)

LOCATION.--Lat 39 15'47", long 84 40'04", in N 1/2 sec. 34, R.1, T.2, Hamilton County, Hydrologic Unit 05080002, at Blue Rock Road bridge at New Baltimore, 6.4 mi downstream from Indian Creek, and 14.3 mi downstream from discharge station at Hamilton.

DRAINAGE AREA.--3,814 mi .

PERIOD OF RECORD.--July 1966 to current year.

REMARKS.--Four parameter (Specific conductance, pH, Water temperature, and Dissolved oxygen) water quality monitor at sitae from July 1966 to September 1981. See records of daily discharge for station at Hamilton (station 032740000).

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DATE | TIME | STREAM- FLOW, INSTAN- TANEOUS (CFS) | SPE- CIFIC CON- DUCT- ANCE (US/CM) | PH (STAND- ARD UNITS) | TEMPER- ATURE AIR (DEG C) | TEMPER- ATURE WATER (DEG C) | TUR- BID- ITY (FTU) | OXYGEN, DIS- SOLVED (MG/L) | OXYGEN, DIS- SOLVED CENT SATUR- ATION | COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) | STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) |
|-------|------|---|---|--------------------------------|------------------------------------|--------------------------------------|------------------------------|-------------------------------------|--|--|--|
| OCT | | | | | | | | | | | |
| 20... | 1000 | 550 | 1040 | 8.5 | 13.0 | 15.0 | 6.4 | 8.3 | 85 | 240 | 200 |
| JAN | | | | | | | | | | | |
| 12... | 1000 | 519 | 1130 | 8.0 | 3.0 | 2.5 | 0.60 | 13.6 | 103 | 600 | 140 |
| FEB | | | | | | | | | | | |
| 17... | 1000 | 3620 | 904 | 7.8 | 8.5 | 2.5 | 5.8 | 13.0 | 97 | 1400 | 810 |
| MAY | | | | | | | | | | | |
| 17... | 0930 | 855 | 885 | 9.0 | 18.0 | 19.0 | 6.9 | 9.2 | 103 | 110 | 240 |
| JUL | | | | | | | | | | | |
| 27... | 1045 | 818 | 710 | 9.3 | 28.0 | 27.5 | 49 | 8.3 | 108 | 300 | 360 |
| AUG | | | | | | | | | | | |
| 31... | 1030 | 402 | 980 | 8.7 | 24.0 | 15.5 | 18 | 10.0 | 103 | 180 | 260 |

| DATE | HARD- NESS TOTAL (MG/L AS CACO3) | HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 | CALCIUM DIS- SOLVED (MG/L AS CA) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) | SODIUM, DIS- SOLVED (MG/L AS NA) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) | BICAR- BONATE IT-FLD (MG/L AS HCO3) | CAR- BONATE IT-FLD (MG/L AS CO3) | ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3 | SULFATE DIS- SOLVED (MG/L AS SO4) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) |
|-------|---|---|--|--|--|---|--|---|---|---|---|
| OCT | | | | | | | | | | | |
| 20... | 360 | 110 | 87 | 35 | 79 | 6.4 | 207 | 48 | 244 | 120 | 120 |
| JAN | | | | | | | | | | | |
| 12... | 390 | 120 | 96 | 36 | 71 | 6.9 | 329 | 0 | 269 | 110 | 120 |
| FEB | | | | | | | | | | | |
| 17... | 310 | 98 | 78 | 28 | 69 | 3.8 | 259 | 0 | 215 | 68 | 120 |
| MAY | | | | | | | | | | | |
| 17... | 350 | 96 | 82 | 35 | 57 | 4.3 | 251 | 29 | 250 | 96 | 88 |
| JUL | | | | | | | | | | | |
| 27... | 250 | 59 | 59 | 24 | 54 | 5.1 | 176 | 26 | 184 | 78 | 83 |
| AUG | | | | | | | | | | | |
| 31... | 310 | 91 | 72 | 31 | 81 | 6.7 | 215 | 24 | 217 | 110 | 120 |

| DATE | FLUO- RIDE, DIS- SOLVED (MG/L AS F) | SILICA, DIS- SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) | NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) | NITRO- GEN, AMMONIA TOTAL (MG/L AS N) | NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) | NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) | PHOS- PHOROUS TOTAL (MG/L AS P) | PHOS- PHOROUS DIS- SOLVED (MG/L AS P) | PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P) |
|-------|--|---|--|---|---|--|---|--|---|--|--|
| OCT | | | | | | | | | | | |
| 20... | 0.7 | 3.5 | 609 | 0.04 | 3.50 | 0.03 | 0.02 | 0.90 | 0.88 | 0.72 | 0.67 |
| JAN | | | | | | | | | | | |
| 12... | 0.6 | 5.1 | 620 | 0.20 | 4.80 | 0.79 | 0.82 | 2.0 | 0.85 | 0.78 | 0.66 |
| FEB | | | | | | | | | | | |
| 17... | 0.3 | 6.7 | 515 | 0.05 | 4.40 | 0.50 | 0.48 | 1.5 | 0.35 | 0.29 | 0.23 |
| MAY | | | | | | | | | | | |
| 17... | 0.6 | 0.07 | 546 | 0.09 | 1.40 | 0.02 | 0.03 | 1.4 | 0.56 | 0.45 | 0.36 |
| JUL | | | | | | | | | | | |
| 27... | 0.5 | 0.20 | 421 | 0.02 | 0.920 | 0.02 | 0.03 | 1.1 | 0.47 | 0.21 | 0.18 |
| AUG | | | | | | | | | | | |
| 31... | 0.6 | 5.1 | 578 | 0.03 | 2.90 | 0.02 | 0.02 | 1.4 | 0.66 | 0.49 | 0.41 |

[illegible][illegible]

GROUND-WATER RECORDS

ASHLAND COUNTY

405303082170700. Local number, AS-2.

LOCATION.--Lat 40°53'03", long 82°17'07", Hydrologic Unit 05040002, Jerome Fork well field 2 mi northeast of Ashland.

Owner: Ashland Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 6 in., depth 64 ft, cased.

INSTRUMENTATION.--Digital recorder-- 60 minute punch.

DATUM.--Elevation of land-surface datum is 980 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 2.00 ft above land-surface datum.

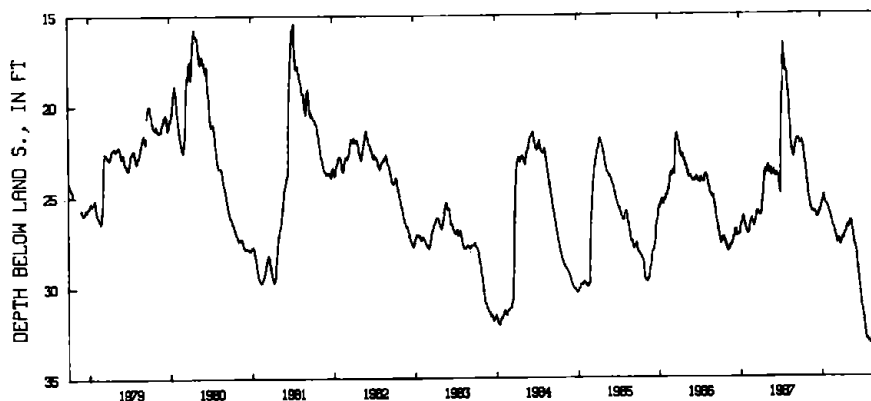
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--March 1964 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 34.36 ft below land-surface datum, Sept. 10, 1988; minimum daily low, 13.20 ft below land-surface datum, May 15, 18, 1967.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 22.18 | 24.54 | 25.94 | 25.55 | 25.77 | 27.05 | 27.54 | 26.84 | 27.78 | 31.21 | 33.03 | 34.06 |
| 2 | 22.17 | 24.74 | 25.95 | 25.52 | 25.84 | 27.17 | 27.48 | 26.78 | 27.87 | 31.25 | 33.10 | 34.10 |
| 3 | 22.19 | 24.89 | 25.95 | 25.47 | 25.84 | 27.21 | 27.36 | 26.71 | 27.98 | 31.30 | 33.10 | 34.12 |
| 4 | 22.17 | 24.99 | 25.97 | 25.40 | 25.89 | 27.25 | 27.34 | 26.63 | 28.08 | 31.35 | 33.12 | 34.13 |
| 5 | 22.10 | 25.09 | 25.98 | 25.37 | 25.93 | 27.25 | 27.35 | 26.59 | 28.18 | 31.45 | 33.16 | 34.16 |
| 6 | 22.02 | 25.16 | 25.99 | 25.33 | 25.97 | 27.25 | 27.35 | 26.56 | 28.30 | 31.52 | 33.17 | 34.24 |
| 7 | 22.11 | 25.23 | 25.99 | 25.30 | 26.01 | 27.28 | 27.42 | 26.53 | 28.43 | 31.61 | 33.15 | 34.25 |
| 8 | 22.19 | 25.30 | 26.09 | 25.20 | 26.07 | 27.40 | 27.43 | 26.48 | 28.57 | 31.73 | 33.11 | 34.28 |
| 9 | 22.19 | 25.40 | 26.20 | 25.16 | 26.13 | 27.53 | 27.43 | 26.44 | 28.70 | 31.88 | 33.07 | 34.35 |
| 10 | 22.21 | 25.46 | 26.19 | 25.12 | 26.18 | 27.66 | 27.35 | 26.42 | 28.82 | 32.02 | 33.09 | 34.36 |
| 11 | 22.19 | 25.50 | 26.20 | 25.06 | 26.19 | 27.66 | 27.27 | 26.42 | 28.94 | 32.08 | 33.16 | 34.31 |
| 12 | 22.29 | 25.56 | 26.24 | 25.01 | 26.25 | 27.61 | 27.22 | 26.41 | 29.08 | 32.21 | 33.20 | 34.27 |
| 13 | 22.42 | 25.62 | 26.25 | 25.13 | 26.32 | 27.61 | 27.19 | 26.43 | 29.16 | 32.31 | 33.24 | 34.26 |
| 14 | 22.53 | 25.70 | 26.25 | 25.25 | 26.33 | 27.60 | 27.10 | 26.51 | 29.31 | 32.44 | 33.28 | 34.30 |
| 15 | 22.65 | 25.76 | 26.19 | 25.34 | 26.41 | 27.59 | 27.07 | 26.61 | 29.46 | 32.52 | 33.35 | 34.32 |
| 16 | 22.74 | 25.79 | 26.14 | 25.41 | 26.51 | 27.58 | 27.08 | 26.68 | 29.55 | 32.65 | 33.42 | 34.33 |
| 17 | 22.88 | 25.84 | 26.14 | 25.38 | 26.57 | 27.54 | 27.07 | 26.78 | 29.64 | 32.76 | 33.48 | 34.33 |
| 18 | 22.98 | 25.92 | 26.12 | 25.45 | 26.60 | 27.47 | 27.09 | 26.85 | 29.75 | 32.84 | 33.53 | 34.29 |
| 19 | 23.05 | 25.92 | 26.03 | 25.49 | 26.61 | 27.40 | 27.06 | 26.95 | 29.86 | 32.91 | 33.58 | 34.23 |
| 20 | 23.14 | 25.89 | 25.97 | 25.49 | 26.72 | 27.49 | 27.02 | 27.04 | 30.04 | 32.93 | 33.62 | 34.16 |
| 21 | 23.26 | 25.91 | 25.96 | 25.53 | 26.73 | 27.57 | 26.96 | 27.12 | 30.16 | 32.95 | 33.61 | 34.22 |
| 22 | 23.34 | 25.90 | 25.89 | 25.53 | 26.73 | 27.61 | 26.91 | 27.20 | 30.27 | 32.98 | 33.58 | 34.23 |
| 23 | 23.45 | 25.86 | 25.84 | 25.52 | 26.77 | 27.68 | 26.84 | 27.30 | 30.39 | 32.95 | 33.62 | 34.15 |
| 24 | 23.60 | 25.88 | 25.86 | 25.55 | 26.78 | 27.73 | 26.79 | 27.42 | 30.50 | 32.92 | 33.67 | 34.11 |
| 25 | 23.69 | 25.86 | 25.95 | 25.55 | 26.80 | 27.79 | 26.73 | 27.50 | 30.63 | 32.98 | 33.73 | 34.05 |
| 26 | 23.77 | 25.89 | 25.85 | 25.60 | 26.80 | 27.76 | 26.68 | 27.59 | 30.74 | 33.03 | 33.77 | 34.00 |
| 27 | 23.94 | 25.93 | 25.80 | 25.63 | 26.85 | 27.63 | 26.70 | 27.68 | 30.84 | 33.07 | 33.82 | 33.93 |
| 28 | 24.13 | 25.98 | 25.74 | 25.66 | 26.99 | 27.59 | 26.74 | 27.76 | 30.93 | 33.10 | 33.86 | 33.87 |
| 29 | 24.30 | 25.96 | 25.70 | 25.67 | 27.08 | 27.51 | 26.77 | 27.81 | 31.05 | 33.08 | 33.90 | 33.81 |
| 30 | 24.36 | 25.94 | 25.67 | 25.70 | --- | 27.61 | 26.83 | 27.79 | 31.17 | 33.04 | 33.96 | 33.81 |
| 31 | 24.46 | --- | 25.59 | 25.74 | --- | 27.60 | --- | 27.78 | --- | 33.02 | 34.01 | --- |
| MAX | 24.46 | 25.98 | 26.25 | 25.74 | 27.08 | 27.79 | 27.54 | 27.81 | 31.17 | 33.10 | 34.01 | 34.36 |
| CAL YR 1987 | LOW 27.14 | | | | | | | | | | | |
| WTR YR 1988 | LOW 34.36 | | | | | | | | | | | |



405303082170700 AS-2 ASHLAND WTR DEPT AT WELL FLD ASHLAND OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

201

ASHLAND COUNTY--Continued

405425082173000. Local number. AS-3.

LOCATION.--Lat 40°54'25", long 82°17'30", Hydrologic Unit 05040002, Ashland Bates well field along Jerome Fork near Ashland.

Owner: Ashland Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in, depth 78 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 990 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 5.00 ft above land-surface datum.

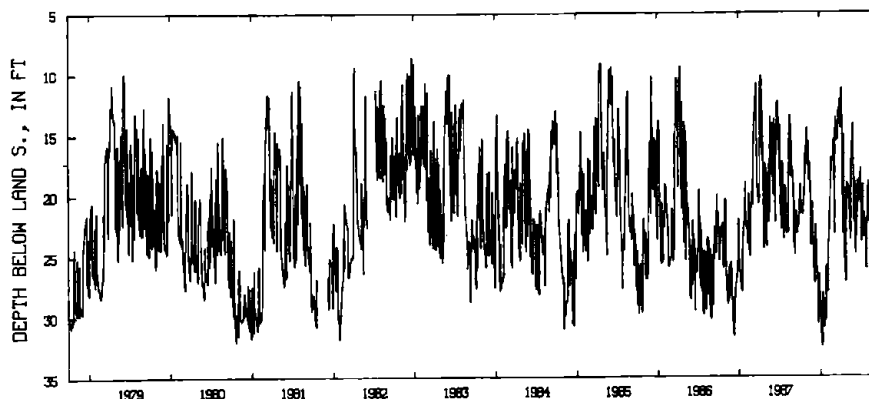
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--August 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 32.51 ft below land-surface datum, Jan. 9, 1988; minimum daily low, 3.10 ft, above land-surface, Feb. 23, 1978.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 21.33 | 15.30 | 24.45 | 30.14 | 27.98 | 16.41 | 12.86 | 19.09 | 18.83 | 18.35 | 22.32 | 16.61 |
| 2 | 20.63 | 14.96 | 25.07 | 30.15 | 28.06 | 16.02 | 14.13 | 19.22 | 21.60 | 17.92 | 21.89 | 16.66 |
| 3 | 20.14 | 14.59 | 25.55 | 28.87 | 27.99 | 15.52 | 14.54 | 19.24 | 22.26 | 22.05 | 21.29 | 16.63 |
| 4 | 19.45 | 15.22 | 26.06 | 30.09 | 28.03 | 18.09 | 14.02 | 19.24 | 19.03 | 22.54 | 20.68 | 15.95 |
| 5 | 19.23 | 16.88 | 26.54 | 30.82 | 28.02 | 22.45 | 12.41 | 19.30 | 18.95 | 23.28 | 20.05 | 15.44 |
| 6 | 19.60 | 17.60 | 26.93 | 31.35 | 25.31 | 23.27 | 11.61 | 19.39 | 19.51 | 23.89 | 19.44 | 15.35 |
| 7 | 21.01 | 17.50 | 27.27 | 31.80 | 24.49 | 18.17 | 11.48 | 19.42 | 22.88 | 21.38 | 19.00 | 15.13 |
| 8 | 21.62 | 16.31 | 27.29 | 32.24 | 23.94 | 16.17 | 11.43 | 19.40 | 24.37 | 21.80 | 19.74 | 14.90 |
| 9 | 21.35 | 15.68 | 23.91 | 32.51 | 23.40 | 14.78 | 11.30 | 19.37 | 24.90 | 21.98 | 20.76 | 14.69 |
| 10 | 21.18 | 17.18 | 23.26 | 32.34 | 22.99 | 14.17 | 11.43 | 20.02 | 24.71 | 21.36 | 21.35 | 14.66 |
| 11 | 21.22 | 17.90 | 22.59 | 31.96 | 22.54 | 13.89 | 19.68 | 20.43 | 21.85 | 20.65 | 21.78 | 14.58 |
| 12 | 21.34 | 18.45 | 22.90 | 29.00 | 22.02 | 13.73 | 20.85 | 20.63 | 22.80 | 19.89 | 22.16 | 14.42 |
| 13 | 21.45 | 18.86 | 23.37 | 28.20 | 21.61 | 14.41 | 22.41 | 22.39 | 23.29 | 19.22 | 22.35 | 17.40 |
| 14 | 21.53 | 18.56 | 23.86 | 28.49 | 21.21 | 14.76 | 23.14 | 21.12 | 23.42 | 22.84 | 21.87 | 18.86 |
| 15 | 21.62 | 17.72 | 24.62 | 28.83 | 20.51 | 15.18 | 23.28 | 21.14 | 21.77 | 23.20 | 21.17 | 19.65 |
| 16 | 21.69 | 17.44 | 25.08 | 29.09 | 20.17 | 15.46 | 16.88 | 23.76 | 21.37 | 23.49 | 20.55 | 20.21 |
| 17 | 21.49 | 18.32 | 25.70 | 30.94 | 19.57 | 15.56 | 15.16 | 22.67 | 20.55 | 23.51 | 19.90 | 20.77 |
| 18 | 20.94 | 19.07 | 26.21 | 28.69 | 18.99 | 15.49 | 20.45 | 23.16 | 19.69 | 21.60 | 19.34 | 21.16 |
| 19 | 20.27 | 20.68 | 26.47 | 30.43 | 18.25 | 15.50 | 22.42 | 23.17 | 18.94 | 21.96 | 18.89 | 21.42 |
| 20 | 19.59 | 21.50 | 26.75 | 30.85 | 17.47 | 15.12 | 23.99 | 18.80 | 20.19 | 22.22 | 18.12 | 21.86 |
| 21 | 19.98 | 24.24 | 26.91 | 30.96 | 17.04 | 14.70 | 25.16 | 17.95 | 20.68 | 22.56 | 18.24 | 22.14 |
| 22 | 20.13 | 21.98 | 29.33 | 30.14 | 17.08 | 14.21 | 25.69 | 17.26 | 20.29 | 22.80 | 18.26 | 22.36 |
| 23 | 19.61 | 21.58 | 30.39 | 30.33 | 17.22 | 13.50 | 26.21 | 16.63 | 19.68 | 23.04 | 17.72 | 22.72 |
| 24 | 18.90 | 22.11 | 30.65 | 30.40 | 17.19 | 13.11 | 26.74 | 16.06 | 19.42 | 23.24 | 17.25 | 22.99 |
| 25 | 18.35 | 22.30 | 27.45 | 30.36 | 17.17 | 13.51 | 27.17 | 15.76 | 19.07 | 23.45 | 16.89 | 23.25 |
| 26 | 17.67 | 21.50 | 28.58 | 30.26 | 17.16 | 13.23 | 27.22 | 15.37 | 18.84 | 23.63 | 16.66 | 23.45 |
| 27 | 16.94 | 20.67 | 28.84 | 30.20 | 17.27 | 13.42 | 22.36 | 14.96 | 19.23 | 25.97 | 16.48 | 23.67 |
| 28 | 16.70 | 22.70 | 28.82 | 27.34 | 17.18 | 12.90 | 21.60 | 14.59 | 18.73 | 26.13 | 16.20 | 23.89 |
| 29 | 16.25 | 23.24 | 26.66 | 26.55 | 16.14 | 12.94 | 20.79 | 14.28 | 18.53 | 23.29 | 15.95 | 24.10 |
| 30 | 15.89 | 23.63 | 29.80 | 25.96 | --- | 12.40 | 19.76 | 14.71 | 18.40 | 22.58 | 15.94 | 24.29 |
| 31 | 15.63 | --- | 30.12 | 27.56 | --- | 12.22 | --- | 17.19 | --- | 22.03 | 16.65 | --- |
| MAX | 21.69 | 24.24 | 30.65 | 32.51 | 28.06 | 23.27 | 27.22 | 23.76 | 24.90 | 26.13 | 22.35 | 24.29 |

CAL YR 1987 LOW 30.65
WTR YR 1988 LOW 32.51405425082173000 AS-3 ASHLAND W D ASHLAND BATES WLLFLD NR ASHLAND OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

ATHENS COUNTY

392004082071600. Local number, AT-2A.

LOCATION.--Lat 39°20'04", long 82°07'16", Hydrologic Unit 05030204, 1.1 mi west of city hall in Athens.

Owner: City of Athens.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled unused water table well, diameter 12 in., depth 48 ft, cased.

INSTRUMENTATION.--Biyearly measurement with chalked tape by ODNR personnel.

DATUM.--Elevation of land-surface datum is 641.81 ft above National Geodetic Vertical Datum of 1929.

Measuring point: Floor of instrument shelter, 5.80 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water. Prior to water year 1978, well depth reported as 43 ft.

PERIOD OF RECORD.--March 1954 to September 1982 continuous, periodic thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum measured low, 21.13 ft below land-surface datum, Oct. 16, 1987; minimum daily low, 1.05 ft below land-surface datum, May 25, 28, 1968.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

| DATE | WATER LEVEL | DATE | WATER LEVEL |
|---------------|----------------|---------------|----------------|
| Oct. 16, 1987 | 21.13 | Apr. 18, 1988 | 18.40 |
| Jan. 15, 1988 | 20.94 | July 14, 1988 | 20.27 |

203

392009082072200. Local number, AT-5
LOCATION.--Lat 39°20'09", long 82°07'22", Hydrologic Unit 05030204, in Athens well field along Hocking River.
Owner: Athens Water Department.
AQUIFER.--Sand and gravel of Quaternary Age.
WELL CHARACTERISTICS.--Drilled unused water table well, diameter 12 in., depth 48 ft, cased.
INSTRUMENTATION.--Digital recorder -- 60-minute punch.
DATUM.--Elevation of land surface datum is 640 ft above National Geodetic Vertical Datum on 1929, from topographic map. Measuring point: Floor of instrument shelter, 4.75 ft above land-surface datum.
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.
PERIOD OF RECORD.--July 1982 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 22.35 ft below land-surface datum, Oct. 19, 20, 1986; Minimum daily low 12.07 ft below land-surface datum, May 5, 1983.
CORRECTIONS.--Table of ground-water levels for 1987 was omitted from last year's report. Below is the 1987 table.

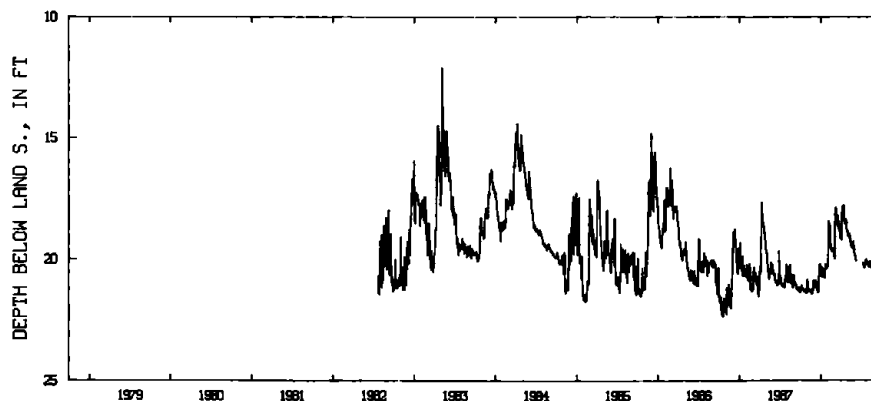
| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 21.62 | 22.12 | 20.33 | 20.29 | 20.72 | 21.30 | 20.67 | 19.63 | 20.45 | 20.97 | 20.64 | 21.05 |
| 2 | 21.64 | 22.15 | 20.39 | 20.38 | 20.73 | 20.51 | 20.51 | 19.75 | 20.52 | 20.99 | 20.83 | 20.93 |
| 3 | 21.65 | 22.20 | 19.59 | 20.39 | 20.24 | 20.63 | 20.55 | 19.74 | 20.58 | 20.72 | 20.84 | 20.64 |
| 4 | 21.73 | 22.26 | 18.99 | 19.30 | 20.49 | 20.50 | 20.59 | 19.82 | 20.64 | 20.66 | 20.86 | 20.92 |
| 5 | 21.73 | 21.17 | 18.87 | 19.83 | 20.62 | 20.68 | 20.52 | 19.97 | 20.64 | 20.78 | 20.88 | 20.94 |
| 6 | 21.51 | 21.75 | 18.98 | 20.03 | 20.63 | 20.59 | 20.45 | 20.06 | 20.65 | 20.88 | 20.95 | 20.99 |
| 7 | 21.64 | 21.93 | 19.14 | 20.21 | 20.55 | 20.80 | 19.42 | 20.17 | 20.74 | 20.95 | 20.95 | 21.02 |
| 8 | 21.55 | 21.95 | 19.32 | 20.28 | 20.68 | 20.33 | 19.14 | 20.27 | 20.58 | 20.96 | 20.85 | 20.95 |
| 9 | 21.84 | 21.87 | 19.32 | 20.10 | 20.80 | 20.61 | 18.12 | 20.36 | 20.72 | 20.98 | 20.92 | 20.95 |
| 10 | 21.98 | 21.36 | 19.20 | 20.33 | 20.89 | 20.77 | 17.89 | 20.47 | 20.85 | 20.96 | 20.55 | 21.04 |
| 11 | 22.09 | 21.47 | 19.20 | 20.37 | 20.52 | 20.84 | 18.04 | 20.53 | 20.93 | 21.06 | 20.36 | 21.05 |
| 12 | 21.96 | 21.50 | 18.77 | 20.47 | 20.79 | 20.71 | 17.66 | 20.60 | 20.86 | 21.08 | 20.31 | 21.03 |
| 13 | 22.12 | 21.05 | 19.15 | 20.60 | 20.84 | 20.90 | 17.88 | 20.72 | 20.90 | 21.11 | 20.30 | 21.09 |
| 14 | 22.16 | 21.04 | 19.20 | 19.87 | 20.83 | 20.91 | 18.21 | 20.81 | 20.95 | 21.13 | 20.30 | 21.11 |
| 15 | 22.19 | 21.09 | 19.40 | 20.43 | 20.17 | 20.57 | 18.44 | 20.59 | 20.94 | 21.12 | 20.29 | 21.18 |
| 16 | 22.28 | 21.35 | 19.60 | 20.69 | 20.39 | 20.84 | 18.47 | 20.42 | 20.88 | 20.99 | 20.23 | 21.22 |
| 17 | 22.32 | 21.51 | 19.83 | 20.70 | 20.62 | 20.92 | 18.51 | 20.53 | 20.98 | 21.06 | 20.73 | 21.26 |
| 18 | 22.33 | 21.66 | 20.04 | 20.69 | 20.86 | 20.79 | 18.60 | 20.57 | 21.03 | 21.07 | 20.83 | 21.27 |
| 19 | 22.35 | 21.77 | 20.02 | 20.32 | 21.08 | 20.99 | 18.64 | 20.56 | 21.06 | 20.98 | 20.87 | 21.28 |
| 20 | 22.35 | 21.87 | 20.18 | 20.33 | 21.24 | 21.08 | 18.61 | 20.59 | 21.08 | 21.01 | 20.95 | 21.29 |
| 21 | 21.91 | 21.94 | 20.34 | 20.38 | 21.17 | 20.92 | 18.74 | 20.61 | 20.99 | 21.13 | 20.99 | 21.29 |
| 22 | 21.72 | 21.99 | 20.44 | 20.26 | 21.26 | 21.00 | 18.91 | 20.49 | 21.03 | 21.17 | 20.92 | 21.16 |
| 23 | 21.83 | 22.03 | 20.50 | 20.53 | 21.30 | 21.07 | 18.89 | 20.12 | 20.88 | 20.93 | 20.63 | 21.27 |
| 24 | 21.85 | 21.99 | 20.59 | 20.59 | 21.32 | 20.72 | 18.88 | 20.20 | 20.88 | 20.95 | 20.75 | 21.29 |
| 25 | 21.60 | 21.77 | 20.17 | 20.47 | 21.32 | 21.12 | 19.08 | 20.27 | 20.93 | 20.87 | 20.94 | 21.30 |
| 26 | 21.84 | 21.79 | 19.55 | 20.46 | 21.16 | 21.33 | 19.23 | 20.20 | 20.93 | 20.80 | 21.07 | 21.30 |
| 27 | 21.95 | 21.45 | 19.60 | 20.56 | 21.18 | 21.44 | 19.27 | 20.18 | 19.65 | 20.81 | 21.11 | 21.28 |
| 28 | 22.04 | 20.84 | 19.70 | 20.60 | 21.30 | 21.53 | 19.43 | 20.19 | 20.05 | 20.35 | 21.15 | 21.32 |
| 29 | 21.86 | 20.84 | 19.90 | 20.66 | --- | 21.53 | 19.55 | 20.24 | 20.37 | 20.55 | 21.17 | 21.35 |
| 30 | 21.89 | 19.56 | 20.04 | 20.70 | --- | 21.24 | 19.62 | 20.35 | 20.75 | 20.32 | 21.11 | 21.36 |
| 31 | 22.04 | --- | 20.18 | 20.72 | --- | 21.23 | --- | 20.44 | --- | 20.22 | 21.10 | |

GROUND WATER RECORDS
ATHENS COUNTY--Continued

392009082072200. Local number, AT-5--Continued

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 21.35 | 20.92 | 21.20 | 20.66 | 20.33 | 19.82 | 19.11 | 18.83 | 19.77 | --- | 20.22 | 20.00 |
| 2 | 21.32 | 20.83 | 21.06 | 20.69 | 20.27 | 19.95 | 19.17 | 18.87 | 19.83 | --- | 20.25 | 20.06 |
| 3 | 21.27 | 21.11 | 21.01 | 20.31 | 19.43 | 19.98 | 19.20 | 18.97 | 19.87 | --- | 20.26 | 20.08 |
| 4 | 21.15 | 21.23 | 21.13 | 20.68 | 18.57 | 19.87 | 18.80 | 19.07 | 19.85 | --- | 20.32 | 20.06 |
| 5 | 21.16 | 21.27 | 21.13 | 20.72 | 18.43 | 18.75 | 18.26 | 19.07 | 19.85 | --- | 20.32 | 19.99 |
| 6 | 21.14 | 21.27 | 21.12 | 20.39 | 18.55 | 17.90 | 17.96 | 19.08 | 19.97 | --- | 20.33 | 19.89 |
| 7 | 21.07 | 21.30 | 21.15 | 20.33 | 18.64 | 17.89 | 17.89 | 19.08 | 19.99 | 20.17 | 20.20 | 19.96 |
| 8 | 21.18 | 21.31 | 21.12 | 20.35 | 18.72 | 17.87 | 17.83 | 19.08 | 20.07 | 20.17 | 20.18 | 19.98 |
| 9 | 21.20 | 21.23 | 21.12 | 20.43 | 18.54 | 17.91 | 17.99 | 18.96 | --- | 20.19 | 20.08 | 19.99 |
| 10 | 21.24 | 21.25 | 20.87 | 20.45 | 18.92 | 18.01 | 18.11 | 18.96 | --- | 20.18 | 20.16 | 19.99 |
| 11 | 21.25 | 21.25 | 21.06 | 20.49 | 19.11 | 18.14 | 18.14 | 19.10 | --- | 20.21 | 20.15 | 19.96 |
| 12 | 21.18 | 21.28 | 21.07 | 20.50 | 19.25 | 18.21 | 17.76 | 19.15 | --- | 20.26 | 20.28 | 20.08 |
| 13 | 21.24 | 21.31 | 21.09 | 20.60 | 19.35 | 18.22 | 17.91 | 19.20 | --- | 20.30 | 20.29 | 20.10 |
| 14 | 21.25 | 21.24 | 21.07 | 20.67 | 19.39 | 18.21 | 17.97 | 19.25 | --- | 20.35 | 20.33 | 20.11 |
| 15 | 21.25 | 21.27 | 21.20 | 20.73 | 19.50 | 18.40 | 18.39 | 19.30 | --- | 20.35 | 20.34 | 19.93 |
| 16 | 21.30 | 21.25 | 21.24 | 20.72 | 19.55 | 18.46 | 18.42 | 19.34 | --- | 20.21 | 20.35 | 19.91 |
| 17 | 21.33 | 21.29 | 21.26 | 20.66 | 19.58 | 18.21 | 18.44 | 19.46 | --- | 20.16 | 20.39 | 19.89 |
| 18 | 21.33 | 21.35 | 21.34 | 20.72 | 19.62 | 18.56 | 18.52 | 19.46 | --- | 20.19 | 20.32 | 20.00 |
| 19 | 21.33 | 21.39 | 21.36 | 20.74 | 19.68 | 18.67 | 18.33 | 19.38 | --- | 20.21 | 20.38 | 20.05 |
| 20 | 21.33 | 21.39 | 21.36 | 20.72 | 19.69 | 18.71 | 18.42 | 19.46 | --- | 20.21 | 20.38 | 20.12 |
| 21 | 21.23 | 21.39 | 21.36 | 20.34 | 19.56 | 18.74 | 18.42 | 19.50 | --- | 20.21 | 20.31 | 20.18 |
| 22 | 21.32 | 21.43 | 21.07 | 20.20 | 19.56 | 18.43 | 18.42 | 19.52 | --- | 20.03 | 20.16 | 20.20 |
| 23 | 21.33 | 21.39 | 20.85 | 20.20 | 19.54 | 18.51 | 18.38 | 19.56 | --- | 20.05 | 20.13 | 20.24 |
| 24 | 21.35 | 21.33 | 20.71 | 20.24 | 19.53 | 18.56 | 18.38 | 19.56 | --- | 20.00 | 20.12 | 20.27 |
| 25 | 21.34 | 21.36 | 20.62 | 20.27 | 19.55 | 18.87 | 18.48 | 19.30 | --- | 20.09 | 20.08 | 20.28 |
| 26 | 21.36 | 21.28 | 20.54 | 20.27 | 19.58 | 18.61 | 18.62 | 19.27 | --- | 20.15 | 20.09 | 20.24 |
| 27 | 21.37 | 21.21 | 20.40 | 20.36 | 19.63 | 18.79 | 18.76 | 19.35 | --- | 20.20 | 20.12 | 20.25 |
| 28 | 21.38 | 21.11 | 20.24 | 20.39 | 19.62 | 18.94 | 18.77 | 19.44 | --- | 20.14 | 20.16 | 20.29 |
| 29 | 21.37 | 20.86 | 20.19 | 20.36 | 19.65 | 19.09 | 18.87 | 19.50 | --- | 20.14 | 20.19 | 20.34 |
| 30 | 21.38 | 21.11 | 20.51 | 20.34 | --- | 19.15 | 18.83 | 19.58 | --- | 20.20 | 20.19 | 20.35 |
| 31 | 21.38 | --- | 20.60 | 20.33 | --- | 19.05 | --- | 19.66 | --- | 20.26 | 20.10 | --- |
| MAX | 21.38 | 21.43 | 21.36 | 20.74 | 20.33 | 19.98 | 19.20 | 19.66 | 20.07 | 20.35 | 20.39 | 20.35 |
| CAL YR 1987 | LOW 21.53 | | | | | | | | | | | |
| WTR YR 1988 | LOW 21.43 | | | | | | | | | | | |



— 392009082072200 AT-5 ATHENS WELL FIELD ATHENS OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND WATER RECORDS

205

AUGLAIZE COUNTY

403233083574500. Local number, AU-3.

LOCATION.--Lat 40°32'33", long 83°57'45", Hydrologic Unit 05080001, 1.0 mi Southwest of New Hampshire.

Owner: State of Ohio.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in., depth 380 ft., cased to 52 ft.

INSTRUMENTATION.--Biyearly measurement with chalked tape by ODNR personnel.

DATUM.--Elevation of land-surface datum is 1,020 ft above National Geodetic Vertical Datum of 1929, from topographic

map. Measuring point: Floor of instrument shelter, 3.00 ft. above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--December 1974 to September 1982 continuous, periodic thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 11.87 ft below land-surface datum, Feb. 7-8, 1977; minimum measured low, 4.86 ft below land-surface datum, Oct. 29, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

| DATE | WATER LEVEL | DATE | WATER LEVEL |
|---------------|----------------|---------------|----------------|
| Oct. 1, 1987 | 6.36 | May 2, 1988 | 5.26 |
| Jan. 22, 1988 | 6.35 | June 21, 1988 | 6.43 |

GROUND-WATER RECORDS

BELMONT COUNTY

400118081082200. Local number, B-3.

LOCATION.--Lat 40°01'18", long 81°08'22", Hydrologic Unit 05040001, Mt. Olivett Public Square, Mt. Olivett, Oh.

Owner: Village of Mt. Olivett.

AQUIFER.--Shale of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 119 ft.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 1,265 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter, 1.5 ft. above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

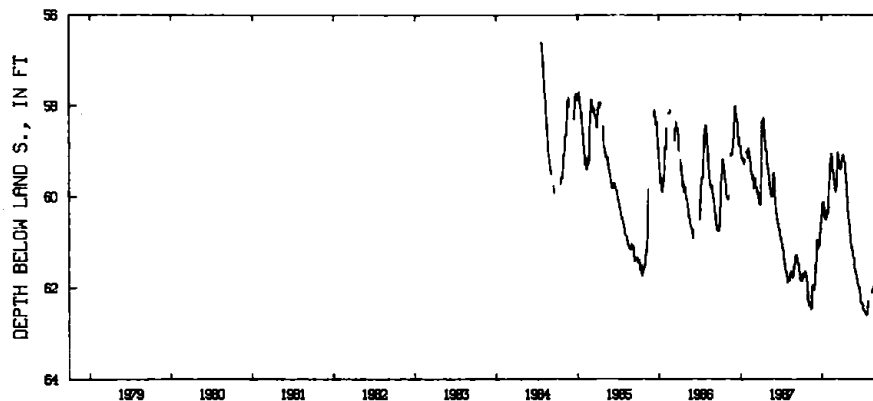
PERIOD OF RECORD.--July 19, 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 62.60 ft below land-surface datum, July 20, 1988;

minimum daily low, 56.61 ft below land-surface datum, July 19-20, 1984.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 61.83 | 62.31 | 61.86 | 60.37 | 60.22 | 59.86 | 59.20 | 60.51 | 61.65 | 62.37 | --- | 62.09 |
| 2 | 61.83 | 62.32 | 61.80 | 60.37 | 60.12 | 59.86 | 59.20 | 60.57 | 61.65 | 62.39 | --- | 62.09 |
| 3 | 61.86 | 62.32 | 61.75 | 60.36 | 59.72 | 59.88 | 59.13 | 60.60 | 61.71 | 62.39 | --- | 62.09 |
| 4 | 61.86 | 62.32 | 61.49 | 60.23 | 59.70 | 59.87 | 59.10 | 60.60 | 61.78 | 62.45 | --- | 61.95 |
| 5 | 61.85 | 62.30 | 61.49 | 60.12 | 59.60 | 59.81 | 59.10 | 60.63 | 61.79 | 62.50 | --- | 61.90 |
| 6 | 61.70 | 62.40 | 61.49 | 60.15 | 59.55 | 59.80 | 59.08 | 60.73 | 61.80 | 62.51 | --- | 61.97 |
| 7 | 61.70 | 62.40 | 61.48 | 60.15 | 59.43 | 59.79 | 59.07 | 60.84 | 61.80 | 62.51 | --- | 61.99 |
| 8 | 61.76 | 62.40 | 61.41 | 60.14 | 59.30 | 59.76 | 59.16 | 60.85 | 61.80 | 62.51 | --- | 61.99 |
| 9 | 61.79 | 62.38 | 61.29 | 60.12 | 59.20 | 59.58 | 59.19 | 60.86 | 61.80 | 62.51 | --- | 61.99 |
| 10 | 61.78 | 62.38 | 61.16 | 60.18 | 59.16 | 59.19 | --- | 60.95 | 61.94 | 62.51 | --- | 61.99 |
| 11 | 61.78 | 62.37 | 61.06 | 60.22 | 59.16 | 59.20 | --- | 61.07 | 61.94 | 62.51 | 62.10 | 61.99 |
| 12 | 61.76 | 62.37 | 60.95 | 60.22 | 59.05 | 59.15 | --- | 61.11 | 61.94 | 62.53 | 62.10 | 62.04 |
| 13 | 61.73 | 62.37 | 61.09 | 60.36 | 59.09 | 59.04 | 59.22 | 61.10 | 61.97 | 62.55 | 62.10 | 61.99 |
| 14 | 61.76 | 62.45 | 61.15 | 60.46 | 59.13 | 59.02 | 59.26 | 61.13 | 61.98 | 62.55 | 62.10 | 62.00 |
| 15 | 61.76 | 62.47 | 61.13 | 60.46 | 59.11 | 59.07 | 59.37 | 61.13 | 61.98 | 62.57 | 62.04 | 62.09 |
| 16 | 61.76 | 62.44 | 60.99 | 60.44 | 59.26 | 59.18 | 59.47 | 61.09 | 61.98 | 62.58 | 62.04 | 62.10 |
| 17 | 61.70 | 62.32 | 61.10 | 60.44 | 59.37 | 59.22 | 59.49 | 61.17 | 62.00 | 62.58 | 62.03 | 62.09 |
| 18 | 61.65 | 62.06 | 61.12 | 60.51 | 59.42 | 59.22 | 59.48 | 61.20 | 62.07 | 62.59 | 62.02 | 62.07 |
| 19 | 61.65 | 62.06 | 61.11 | 60.52 | 59.42 | 59.20 | 59.58 | 61.23 | 62.11 | 62.59 | 62.00 | 62.02 |
| 20 | 61.65 | 61.97 | 61.10 | 60.45 | 59.40 | 59.28 | 59.66 | 61.26 | 62.14 | 62.60 | 61.98 | 61.97 |
| 21 | 61.66 | 61.95 | 61.05 | 60.46 | 59.47 | 59.39 | 59.75 | 61.30 | 62.15 | 62.57 | 61.95 | 62.03 |
| 22 | 61.72 | 61.95 | 61.01 | 60.47 | 59.47 | 59.39 | 59.84 | 61.33 | 62.16 | 62.57 | 62.01 | 62.03 |
| 23 | 61.72 | 61.99 | 60.95 | 60.46 | 59.50 | 59.39 | 59.84 | 61.33 | 62.26 | 62.52 | 62.01 | 62.02 |
| 24 | 61.73 | 62.02 | 60.88 | 60.37 | 59.56 | 59.39 | 59.99 | 61.34 | 62.32 | 62.43 | 61.94 | 62.06 |
| 25 | 61.80 | 62.02 | 60.80 | 60.32 | 59.60 | 59.38 | 60.06 | 61.48 | 62.33 | 62.35 | 61.93 | 62.15 |
| 26 | 61.80 | 62.02 | 60.76 | 60.30 | 59.61 | 59.37 | 60.08 | 61.55 | 62.32 | 62.30 | 61.96 | 62.22 |
| 27 | 61.77 | 62.04 | 60.76 | 60.36 | 59.66 | 59.33 | 60.14 | 61.57 | 62.35 | --- | 61.97 | 62.24 |
| 28 | 61.92 | 62.04 | 60.70 | 60.37 | 59.70 | 59.29 | 60.24 | 61.57 | 62.35 | --- | 62.01 | 62.30 |
| 29 | 62.06 | 62.03 | 60.58 | 60.37 | 59.79 | 59.25 | 60.33 | 61.58 | 62.35 | --- | 62.02 | 62.35 |
| 30 | 62.12 | 61.96 | 60.59 | 60.29 | --- | 59.21 | 60.46 | 61.62 | 62.35 | --- | 62.03 | 62.39 |
| 31 | 62.26 | --- | 60.49 | 60.25 | --- | 59.21 | --- | 61.65 | --- | --- | 62.06 | --- |
| MAX | 62.26 | 62.47 | 61.86 | 60.52 | 60.22 | 59.88 | 60.46 | 61.65 | 62.35 | 62.60 | 62.10 | 62.39 |
| CAL YR 1987 | LOW 62.47 | | | | | | | | | | | |
| WTR YR 1988 | LOW 62.60 | | | | | | | | | | | |



400118081082200 B-3 VILLAGE OF MT OLIVETT AT MT OLIVETT OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

207

BUTLER COUNTY

391805084261800. Local number, BU-9.

LOCATION.--Lat 39°18'05", long 84°26'18", Hydrologic Unit 05090203, 2.5 mi northwest of Sharonville.

Owner: Olinkraft, Inc.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., depth 85 ft.

INSTRUMENTATION.--Biyearly measurement with chalked tape by ODNR personnel.

DATUM.--Elevation of land-surface datum is 586.89 ft above National Geodetic Vertical Datum of 1929. Measuring point: Floor of instrument shelter, 4.66 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water. Prior to water year 1978, well diameter reported as 26 in.

PERIOD OF RECORD.--July 1938 to September 1982 continuous, periodic thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 24.40 ft below land-surface datum, Mar. 16, 1954; minimum daily low, 4.40 ft below land-surface datum, Aug. 3, 1958.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATION

| DATE | WATER LEVEL | DATE | WATER LEVEL |
|---------------|----------------|---------------|----------------|
| Oct. 30, 1987 | 11.03 | Apr. 11, 1988 | 11.14 |

393202084241500. Local number, BU-15.

LOCATION.--Lat 39°32'02", long 84°24'15", Hydrologic Unit 05080002, at Hook Field (municipal airport) at Middletown.

Owner: City of Middletown.

AQUIFER.--Sand and gravel of Pleistocene Age.

INSTRUMENTATION.--Periodic measurement with chalked tape by ODNR personnel.

WELL CHARACTERISTICS.--Drilled observation water table well, diameter 6 in., depth 23 ft cased.

DATUM.--Elevation of land-surface datum is 641 ft, from topographic map. Measuring point: Floor of instrument shelter 3.50 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water. Water level affected by pumping wells nearby in Middletown well field.

PERIOD OF RECORD.--June 1972 to September 1982 continuous, periodic thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 14.60 ft below land-surface datum, Jan. 26, 1981; minimum daily low, 0.06 ft below land-surface datum, Feb. 25, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

| DATE | WATER LEVEL | DATE | WATER LEVEL |
|--------------|----------------|---------------|----------------|
| Oct. 1, 1987 | 13.40 | Apr. 11, 1988 | 10.57 |
| Dec. 1, 1987 | 13.99 | July 18, 1988 | 13.92 |

GROUND-WATER RECORDS

BUTLER COUNTY--Continued

391904084371800. Local number, BU-12.

LOCATION.--Lat 39°19'04", long 84°37'18", Hydrologic Unit 05080002. Cincinnati well field 1.5 mi east of Ross.

Owner: City of Cincinnati.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 6 in., depth 157 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 547.73 ft above National Geodetic Vertical Datum of 1929. Measuring

point: Floor of instrument shelter 7.80 ft above land-surface datum.

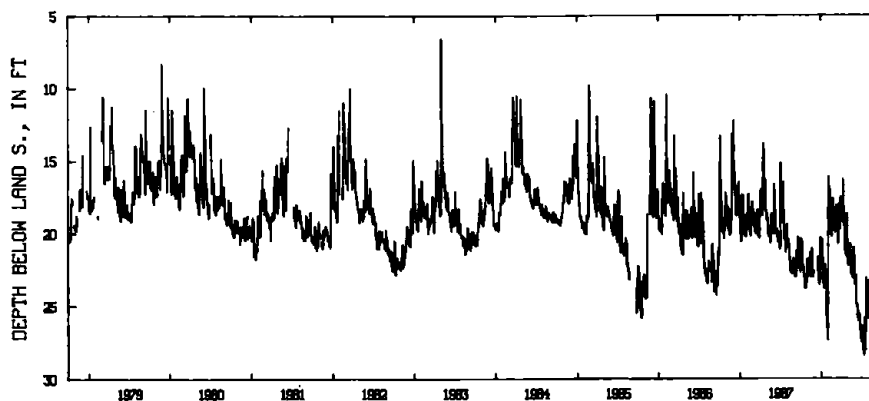
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 28.40 ft below land-surface datum, July 11, 1988; minimum daily low, 2.00 ft above land surface, May 24, 25, 1968.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 21.60 | 22.35 | --- | 21.45 | 27.35 | 19.70 | 18.10 | 22.30 | 23.45 | 26.70 | 23.85 | 23.90 |
| 2 | 20.80 | 21.80 | --- | 21.85 | 24.55 | 19.90 | 18.15 | 21.50 | 23.50 | 26.45 | 23.55 | 24.15 |
| 3 | 20.40 | 22.30 | --- | 21.95 | 18.50 | 19.95 | 18.15 | 21.80 | 23.45 | 26.75 | 23.35 | 24.45 |
| 4 | 21.75 | 22.50 | --- | 21.60 | 16.15 | 18.70 | 18.50 | 20.85 | 22.90 | 27.10 | 23.65 | 24.40 |
| 5 | 21.90 | 22.60 | --- | 21.90 | 16.85 | 18.75 | 19.15 | 21.20 | 23.65 | 27.45 | 24.00 | 24.00 |
| 6 | 22.10 | 22.65 | --- | 20.45 | 17.55 | 18.55 | 19.25 | 21.20 | 23.75 | 27.70 | 23.25 | 22.45 |
| 7 | 20.60 | 22.70 | --- | 22.05 | 18.10 | 18.85 | 18.40 | 21.30 | 24.40 | 27.85 | 23.55 | 24.55 |
| 8 | 21.80 | 22.40 | --- | 22.10 | 18.10 | 18.90 | 18.25 | 21.50 | 24.85 | 28.00 | 24.80 | 23.90 |
| 9 | 22.25 | 22.55 | --- | 23.00 | 16.95 | 18.95 | 16.35 | 21.30 | 25.10 | 28.15 | 25.45 | 23.35 |
| 10 | 22.30 | 22.25 | --- | 23.30 | 17.15 | 18.35 | 17.95 | 20.85 | 24.95 | 28.35 | 25.15 | 21.85 |
| 11 | 22.20 | 22.05 | --- | 23.45 | 19.95 | 18.10 | 19.00 | 20.75 | 24.95 | 28.40 | 25.30 | 24.40 |
| 12 | 22.30 | 21.95 | --- | 23.50 | 19.45 | 18.95 | 18.20 | 22.05 | 25.35 | 27.45 | 26.00 | 24.80 |
| 13 | 22.45 | 21.40 | --- | 23.65 | 19.20 | 19.20 | 19.50 | 22.25 | 25.80 | 26.65 | 25.95 | 24.70 |
| 14 | 22.55 | 22.90 | --- | 23.75 | 20.05 | 18.15 | 19.15 | 22.85 | 25.80 | 25.85 | 25.15 | 24.75 |
| 15 | 22.70 | 23.05 | --- | 23.80 | 20.15 | 18.40 | 19.70 | 22.25 | 25.95 | 27.45 | 25.65 | 24.65 |
| 16 | 23.00 | 23.05 | --- | 23.85 | 20.25 | 20.05 | 19.95 | 22.75 | 26.05 | 27.85 | 25.55 | 25.60 |
| 17 | 23.10 | 22.65 | 21.70 | 23.85 | 20.20 | 20.75 | 20.00 | 22.15 | 25.45 | 28.00 | 25.45 | 25.70 |
| 18 | 23.10 | 22.65 | 22.65 | 22.20 | 19.90 | 19.10 | 21.15 | 22.90 | 25.55 | 28.05 | 25.35 | 23.50 |
| 19 | 23.25 | 22.55 | 21.85 | 23.00 | 19.45 | 19.10 | 21.50 | 22.20 | 25.70 | 26.75 | 23.60 | 24.25 |
| 20 | 23.55 | 22.10 | 23.30 | 22.85 | 18.90 | 18.05 | 21.55 | 23.10 | 25.65 | 26.30 | 23.05 | 23.40 |
| 21 | 23.75 | 21.10 | 23.35 | 22.75 | 17.75 | 19.50 | 20.10 | 22.30 | 25.65 | 24.30 | 22.60 | 21.95 |
| 22 | 23.85 | 22.40 | 23.35 | 22.95 | 17.95 | 19.65 | 20.05 | 22.05 | 26.00 | 23.10 | 25.30 | 22.30 |
| 23 | 23.75 | 22.95 | 23.50 | 22.55 | 17.65 | 19.75 | 19.65 | 23.10 | 26.25 | 23.60 | 25.35 | 22.75 |
| 24 | 23.45 | 23.05 | 23.55 | 22.95 | 17.70 | 19.75 | 19.65 | 21.80 | 26.55 | 24.50 | 24.45 | 23.05 |
| 25 | 23.55 | 23.05 | 23.40 | 24.70 | 18.55 | 19.75 | 18.75 | 21.05 | 26.60 | 24.55 | 24.35 | 23.30 |
| 26 | 23.55 | 22.95 | 23.10 | 25.60 | 18.30 | 19.55 | 18.70 | 21.00 | 27.00 | 24.75 | 24.65 | 23.40 |
| 27 | 23.50 | 22.65 | 22.55 | 26.25 | 19.05 | 18.90 | 19.00 | 21.10 | 27.30 | 25.10 | 24.80 | 23.35 |
| 28 | 23.00 | 22.65 | 22.30 | 26.65 | 19.65 | 17.55 | 20.20 | 22.60 | 27.30 | 25.65 | 24.85 | 23.80 |
| 29 | 23.15 | --- | 20.55 | 27.05 | 19.75 | 18.75 | 20.50 | 21.55 | 27.50 | 25.90 | 23.75 | 24.15 |
| 30 | 22.75 | --- | 20.35 | 27.30 | --- | 18.90 | 21.80 | 23.40 | 26.75 | 24.85 | 23.95 | 24.25 |
| 31 | 22.40 | --- | 21.40 | 27.35 | --- | 17.95 | --- | 23.50 | --- | 24.25 | 23.95 | --- |
| MAX | 23.85 | 23.05 | 23.55 | 27.35 | 27.35 | 20.75 | 21.80 | 23.50 | 27.50 | 28.40 | 26.00 | 25.70 |

CAL YR 1987 LOW 23.85
WTR YR 1988 LOW 28.40391904084371800 BU-12 CITY OF CINCINNATI GTMIAMI WFLD NR ROSS OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

209

BUTLER COUNTY--Continued

392017084345200. Local number, BU-7.

LOCATION.--Lat 39°20'17", long 84°34'52", Hydrologic Unit 05080002, 5584 East River Road in Fairfield.

Owner: C. E. Schiering.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water table well, diameter 6 in., depth 176 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 572.54 ft above National Geodetic Vertical Datum of 1929.

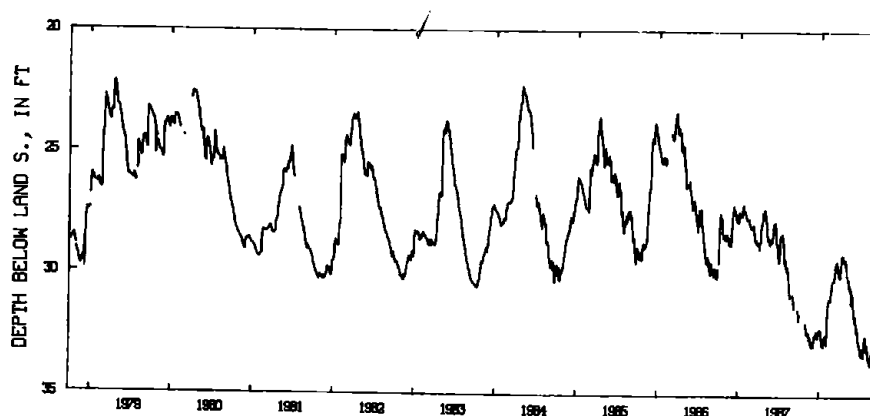
Measuring point: Floor of instrument shelter 1.93 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--August 1943 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 33.70 ft below land-surface datum, Aug. 19, 1988;
minimum daily low, 11.45 ft below land-surface datum, June 6, 1947.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 31.60 | 32.18 | 32.72 | 32.24 | 32.85 | 30.27 | 30.12 | 29.88 | 31.39 | 32.89 | 32.80 | 33.16 |
| 2 | --- | 32.25 | 32.70 | 32.23 | 32.83 | 30.27 | 30.05 | 30.06 | 31.42 | 33.00 | 32.95 | 33.28 |
| 3 | --- | 32.29 | 32.70 | 32.24 | 32.43 | 30.27 | 30.08 | 30.04 | 31.40 | 33.01 | 33.07 | 33.28 |
| 4 | --- | 32.38 | 32.84 | 32.27 | 31.95 | 30.19 | 30.04 | 30.06 | 31.55 | 33.05 | 33.10 | 33.22 |
| 5 | --- | 32.42 | 32.93 | 32.26 | 31.68 | 30.14 | 29.79 | 30.07 | 31.64 | 33.12 | 33.16 | 33.12 |
| 6 | --- | 32.43 | 32.89 | 32.27 | 31.45 | 30.19 | 29.59 | 30.13 | 31.75 | 33.18 | 33.18 | 33.00 |
| 7 | --- | 32.42 | 32.70 | 32.29 | 31.26 | 30.12 | 29.45 | 30.20 | 31.80 | 33.23 | 33.05 | 33.04 |
| 8 | --- | 32.33 | 32.60 | 32.33 | 31.19 | 30.02 | 29.35 | 30.28 | 31.90 | 33.26 | 33.24 | 32.97 |
| 9 | --- | 32.43 | 32.51 | 32.51 | 31.23 | 29.92 | 29.27 | 30.22 | 31.93 | 33.32 | 33.34 | 32.96 |
| 10 | --- | 32.42 | 32.46 | 32.61 | 31.09 | 29.81 | 29.22 | 30.18 | 31.84 | 33.32 | 33.40 | 33.00 |
| 11 | --- | 32.47 | 32.45 | 32.70 | 31.02 | 29.70 | 29.22 | 30.26 | 31.70 | 33.28 | 33.47 | 33.04 |
| 12 | --- | 32.47 | 32.44 | 32.69 | 30.99 | 29.62 | 29.21 | 30.25 | 31.88 | 33.15 | 33.52 | 33.14 |
| 13 | --- | 32.35 | 32.44 | 32.77 | 31.00 | 29.59 | 29.22 | 30.52 | 32.02 | 33.00 | 33.52 | 33.15 |
| 14 | --- | 32.45 | 32.44 | 32.83 | 31.00 | 29.55 | 29.22 | 30.60 | 32.12 | 33.00 | 33.45 | 33.15 |
| 15 | --- | 32.53 | 32.53 | 32.88 | 31.01 | 29.53 | 29.26 | 30.46 | 32.21 | 33.16 | 33.56 | 33.18 |
| 16 | --- | 32.65 | 32.51 | 32.90 | 31.03 | 29.52 | 29.42 | 30.44 | 32.33 | 33.29 | 33.62 | 33.12 |
| 17 | --- | 32.68 | 32.36 | 32.93 | 31.07 | 29.50 | 29.43 | 30.51 | 32.33 | 33.34 | 33.66 | 33.04 |
| 18 | --- | 32.66 | 32.32 | 32.90 | 31.06 | 29.47 | 29.46 | 30.56 | 32.12 | 33.35 | 33.68 | 33.05 |
| 19 | --- | 32.66 | 32.32 | 32.77 | 30.95 | 29.48 | 29.37 | 30.55 | 32.22 | 33.33 | 33.70 | 33.04 |
| 20 | --- | 32.57 | 32.36 | 32.77 | 30.86 | 29.60 | 29.45 | 30.55 | 32.29 | 33.13 | 33.65 | 33.05 |
| 21 | --- | 32.62 | 32.38 | 32.65 | 30.75 | 29.68 | 29.50 | 30.75 | 32.44 | 32.99 | 33.37 | 33.12 |
| 22 | --- | 32.72 | 32.55 | 32.57 | 30.67 | 29.75 | 29.54 | 31.00 | 32.54 | 32.81 | 33.33 | 32.90 |
| 23 | --- | 32.80 | 32.57 | 32.53 | 30.56 | 29.84 | 29.50 | 31.17 | 32.57 | 32.77 | 33.24 | 33.00 |
| 24 | --- | 32.85 | 32.51 | 32.48 | 30.47 | 29.85 | 29.40 | 31.19 | 32.65 | 32.58 | 33.23 | 33.10 |
| 25 | --- | 32.87 | 32.49 | 32.48 | 30.43 | 29.97 | 29.40 | 30.93 | 32.71 | 32.52 | 33.12 | 33.10 |
| 26 | --- | 32.90 | 32.42 | 32.47 | 30.36 | 30.02 | 29.52 | 30.74 | 32.75 | 32.64 | 33.22 | 33.10 |
| 27 | --- | 32.95 | 32.37 | 32.47 | 30.27 | 30.02 | 29.63 | 30.88 | 32.78 | 32.80 | 33.28 | 33.15 |
| 28 | --- | 32.94 | 32.31 | 32.46 | 30.28 | 30.07 | 29.56 | 31.00 | 32.85 | 32.84 | 33.19 | 33.17 |
| 29 | 31.99 | 32.75 | 32.28 | 32.48 | 30.29 | 30.07 | 29.51 | 30.93 | 32.90 | 32.97 | 33.20 | 33.12 |
| 30 | 32.00 | 32.78 | 32.27 | 32.70 | --- | 30.10 | 29.73 | 30.87 | 32.82 | 32.98 | 33.24 | 33.07 |
| 31 | 32.09 | --- | 32.25 | 32.79 | --- | 30.10 | --- | 31.22 | --- | 32.84 | 33.15 | --- |
| MAX | 32.09 | 32.95 | 32.93 | 32.93 | 32.85 | 30.27 | 30.12 | 31.22 | 32.90 | 33.35 | 33.70 | 33.28 |
| CAL YR 1987 | LOW 32.95 | | | | | | | | | | | |
| WTR YR 1988 | LOW 33.70 | | | | | | | | | | | |



392017084345200 BU-7 C E SCHIERING EAST RIVER RD FAIRFIELD OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

BUTLER COUNTY--Continued

392021084340300. Local number, BU-56.

LOCATION.--Lat 39°20'21", long 84°34'03", Hydrologic Unit 05080002, 1.3 mi east of the Great Miami River in Fairfield.

Owner: Hamilton Water Department.

WELL CHARACTERISTICS.--Drilled unused water table well, diameter 5 in., depth 58 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 583.62 ft above National Geodetic Vertical Datum of 1929. (Levels by Miami Conservancy District.) Measuring point: Floor of instrument shelter, 3.00 ft above land-surface datum.

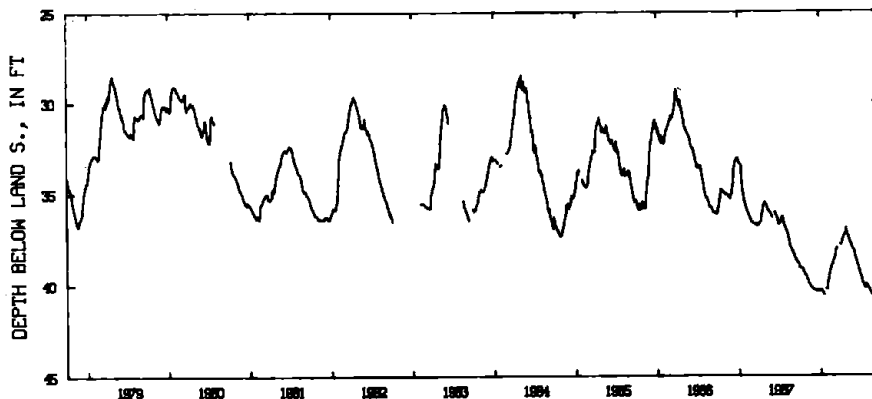
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--November 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 40.70 ft below land-surface datum, Sept. 30, 1988; minimum daily low, 26.81 ft below land-surface datum, Apr. 10, 1975.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 39.10 | 39.62 | 40.31 | 40.35 | 40.30 | 38.71 | 37.84 | 37.19 | 38.19 | 39.55 | 40.16 | 40.63 |
| 2 | 39.10 | 39.65 | 40.31 | 40.35 | 40.27 | 38.70 | 37.85 | 37.24 | 38.23 | 39.59 | 40.19 | 40.64 |
| 3 | 39.10 | 39.69 | 40.31 | 40.35 | 40.17 | 38.69 | 37.87 | 37.26 | 38.28 | 39.65 | 40.23 | 40.65 |
| 4 | 39.10 | 39.73 | 40.31 | 40.36 | 40.04 | 38.65 | 37.85 | 37.30 | 38.34 | 39.70 | 40.25 | 40.65 |
| 5 | 39.13 | 39.76 | 40.32 | 40.37 | 39.95 | 38.64 | 37.84 | 37.36 | 38.38 | 39.74 | 40.27 | 40.63 |
| 6 | 39.14 | 39.80 | 40.32 | 40.37 | 39.87 | 38.57 | 37.80 | 37.41 | 38.44 | 39.78 | 40.29 | 40.59 |
| 7 | 39.14 | 39.83 | 40.35 | 40.37 | 39.79 | 38.52 | 37.75 | 37.45 | 38.50 | 39.83 | 40.30 | 40.55 |
| 8 | 39.13 | 39.85 | 40.35 | 40.40 | 39.72 | 38.47 | 37.71 | 37.49 | 38.56 | 39.88 | 40.33 | 40.55 |
| 9 | 39.13 | 39.89 | 40.35 | 40.40 | 39.65 | 38.40 | 37.67 | 37.51 | 38.62 | 39.93 | 40.35 | 40.50 |
| 10 | 39.16 | 39.93 | 40.35 | 40.42 | 39.58 | 38.32 | 37.60 | 37.53 | 38.66 | 39.95 | 40.39 | 40.55 |
| 11 | 39.17 | 39.95 | 40.35 | 40.45 | 39.50 | 38.25 | 37.56 | 37.59 | 38.70 | 39.98 | 40.41 | 40.55 |
| 12 | 39.18 | 39.97 | 40.35 | 40.48 | 39.42 | 38.17 | 37.53 | 37.62 | 38.74 | 40.02 | 40.44 | 40.59 |
| 13 | 39.17 | 39.97 | 40.35 | 40.50 | 39.38 | 38.13 | 37.50 | 37.66 | 38.79 | 40.02 | 40.47 | 40.63 |
| 14 | 39.16 | 39.99 | 40.35 | 40.51 | 39.31 | 38.07 | 37.45 | 37.70 | 38.84 | 40.04 | 40.49 | 40.63 |
| 15 | 39.17 | 40.02 | 40.36 | 40.53 | 39.25 | 38.05 | 37.42 | 37.72 | 38.89 | 40.06 | 40.51 | 40.63 |
| 16 | 39.21 | 40.05 | 40.36 | 40.55 | 39.25 | --- | 37.40 | 37.75 | 38.93 | 40.10 | 40.54 | 40.64 |
| 17 | 39.25 | 40.10 | 40.37 | 40.57 | 39.22 | --- | 37.39 | 37.76 | 38.96 | 40.14 | 40.57 | 40.64 |
| 18 | 39.27 | 40.12 | 40.40 | 40.60 | 39.17 | --- | 37.37 | 37.80 | 38.99 | 40.18 | 40.60 | 40.64 |
| 19 | 39.32 | 40.15 | 40.43 | 40.61 | 39.13 | --- | 37.37 | 37.82 | 39.03 | 40.21 | 40.62 | 40.64 |
| 20 | 39.35 | 40.18 | 40.43 | --- | 39.11 | --- | 37.33 | 37.85 | 39.09 | 40.21 | 40.62 | 40.65 |
| 21 | 39.37 | 40.19 | 40.43 | --- | 39.08 | --- | 37.27 | 37.89 | 39.13 | 40.19 | 40.61 | 40.65 |
| 22 | 39.40 | 40.19 | 40.43 | --- | 39.03 | --- | 37.25 | 37.95 | 39.18 | 40.05 | 40.57 | 40.65 |
| 23 | 39.43 | 40.19 | 40.44 | --- | 39.00 | --- | 37.25 | 37.99 | 39.22 | 40.06 | 40.58 | 40.65 |
| 24 | 39.45 | 40.19 | 40.45 | --- | 38.98 | --- | 37.25 | 38.02 | 39.27 | 40.06 | 40.61 | 40.65 |
| 25 | 39.47 | 40.20 | 40.45 | --- | 38.92 | --- | 37.25 | 38.04 | 39.32 | 40.06 | 40.61 | 40.66 |
| 26 | 39.50 | 40.22 | 40.44 | --- | 38.89 | --- | 37.25 | 38.05 | 39.36 | 40.05 | 40.60 | 40.66 |
| 27 | 39.52 | 40.24 | 40.43 | --- | 38.83 | --- | 36.95 | 38.09 | 39.41 | 40.05 | 40.63 | 40.67 |
| 28 | 39.54 | 40.28 | 40.40 | --- | 38.78 | --- | 37.05 | 38.11 | 39.47 | 40.06 | 40.63 | 40.68 |
| 29 | 39.57 | 40.29 | 40.38 | 40.29 | 38.75 | --- | 37.07 | 38.12 | 39.50 | 40.10 | 40.63 | 40.69 |
| 30 | 39.57 | 40.31 | 40.37 | 40.29 | --- | --- | 37.13 | 38.12 | 39.50 | 40.15 | 40.64 | 40.70 |
| 31 | 39.59 | --- | 40.35 | 40.26 | --- | 37.84 | --- | 38.15 | --- | 40.16 | 40.64 | --- |
| MAX | 39.59 | 40.31 | 40.45 | 40.61 | 40.30 | 38.71 | 37.87 | 38.15 | 39.50 | 40.21 | 40.64 | 40.70 |
| CAL YR 1987 | LOW 40.45 | | | | | | | | | | | |
| WTR YR 1988 | LOW 40.70 | | | | | | | | | | | |



— 392021084340300 BU-56 HAMILTON WATER WKS AT FAIRFIELD OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

211

BUTLER COUNTY--Continued

392048084311400. Local number, BU-8.

LOCATION.--Lat 39°20'48", long 84°31'14", Hydrologic Unit 05080002, Symmes and Gilmore Road, east of Hamilton.

Owner: Hamilton Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 6 in., depth 200 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 630 ft above National Geodetic Vertical Datum of 1929, from topographic

map. Measuring point: Floor of instrument shelter 4.13 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--April 1944 to current year.

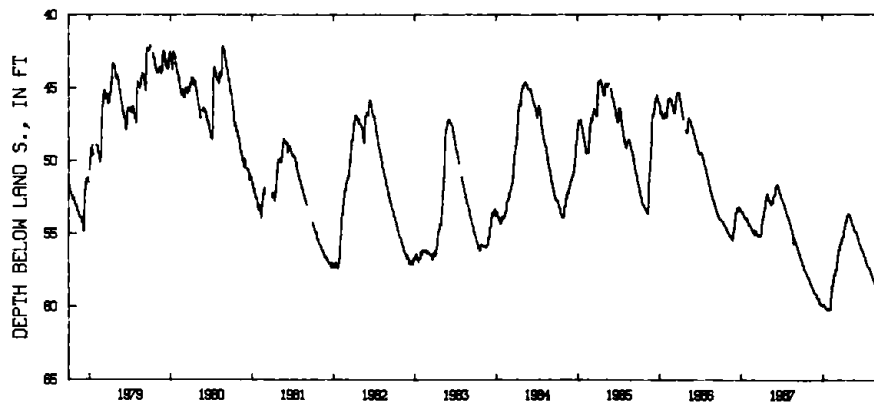
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 71.70 ft below land-surface datum, Oct. 24, 1944; minimum daily low, 38.24 ft below land-surface datum, June 8, 1947.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 56.94 | 58.17 | 59.12 | 59.90 | 60.17 | 57.50 | 55.26 | 53.70 | 54.91 | 56.30 | 57.52 | 58.76 |
| 2 | 57.00 | 58.20 | 59.18 | 59.92 | 60.17 | 57.48 | 55.21 | 53.76 | 54.95 | 56.34 | 57.57 | 58.79 |
| 3 | 57.11 | 58.21 | 59.20 | 59.92 | 60.17 | 57.38 | 55.04 | 53.80 | 55.02 | 56.38 | 57.62 | 58.80 |
| 4 | 57.15 | 58.23 | 59.30 | 59.84 | 59.87 | 57.22 | 54.88 | 53.84 | 55.12 | 56.43 | 57.65 | 58.80 |
| 5 | 57.15 | 58.30 | 59.36 | 59.87 | 59.85 | 57.24 | 54.88 | 53.90 | 55.20 | 56.50 | 57.69 | 58.81 |
| 6 | 57.16 | 58.36 | 59.41 | 59.90 | 59.75 | 57.14 | 54.78 | 53.98 | 55.24 | 56.55 | 57.74 | 58.85 |
| 7 | 57.22 | 58.39 | 59.43 | 59.92 | 59.43 | 56.92 | 54.57 | 54.04 | 55.26 | 56.59 | 57.79 | 58.89 |
| 8 | 57.31 | 58.40 | 59.45 | 59.92 | 59.07 | 56.84 | 54.62 | 54.06 | 55.29 | 56.62 | 57.83 | 58.91 |
| 9 | 57.37 | 58.45 | 59.46 | 59.93 | 58.95 | 56.45 | 54.63 | 54.07 | 55.36 | 56.64 | 57.87 | 58.93 |
| 10 | 57.41 | 58.51 | 59.47 | 59.96 | 58.89 | 56.42 | 54.61 | 54.14 | 55.47 | 56.68 | 57.92 | 58.96 |
| 11 | 57.44 | 58.54 | 59.47 | 59.98 | 58.75 | 56.42 | 54.36 | 54.25 | 55.53 | 56.74 | 57.99 | 58.99 |
| 12 | 57.46 | 58.56 | 59.47 | 59.99 | 58.55 | 56.20 | 54.27 | 54.30 | 55.57 | 56.79 | 58.05 | 59.01 |
| 13 | 57.50 | 58.59 | 59.57 | 60.05 | 58.54 | 56.10 | 54.21 | 54.34 | 55.62 | 56.85 | 58.10 | 59.04 |
| 14 | 57.53 | 58.63 | 59.61 | 60.12 | 58.54 | 56.10 | 54.21 | 54.38 | 55.68 | 56.91 | 58.14 | 59.08 |
| 15 | 57.57 | 58.67 | 59.44 | 60.13 | 58.18 | 56.09 | 54.18 | 54.40 | 55.70 | 56.98 | 58.17 | 59.12 |
| 16 | 57.60 | 58.70 | 59.68 | 60.14 | 58.26 | 56.11 | 54.20 | 54.41 | 55.73 | 57.04 | 58.21 | 59.16 |
| 17 | 57.63 | 58.73 | 59.79 | 60.14 | 58.30 | 56.11 | 54.16 | 54.46 | 55.76 | 57.08 | 58.25 | 59.19 |
| 18 | 57.65 | 58.83 | 59.82 | 60.16 | 58.31 | 55.88 | 53.76 | 54.53 | 55.80 | 57.12 | 58.29 | 59.21 |
| 19 | 57.67 | 58.85 | 59.82 | 60.18 | 58.20 | 55.76 | 53.81 | 54.59 | 55.85 | 57.17 | 58.33 | 59.23 |
| 20 | 57.72 | 58.90 | 59.71 | 60.13 | 57.84 | 55.68 | 53.83 | 54.64 | 55.88 | 57.20 | 58.36 | 59.26 |
| 21 | 57.78 | 58.94 | 59.75 | 60.17 | 57.88 | 55.73 | 53.80 | 54.70 | 55.92 | 57.24 | 58.40 | 59.32 |
| 22 | 57.82 | 58.96 | 59.77 | 60.21 | 57.88 | 55.73 | 53.80 | 54.75 | 55.95 | 57.27 | 58.45 | 59.34 |
| 23 | 57.87 | 59.00 | 59.82 | 60.22 | 57.76 | 55.66 | 53.72 | 54.80 | 56.00 | 57.29 | 58.47 | 59.37 |
| 24 | 57.91 | 59.03 | 59.84 | 60.22 | 57.80 | 55.59 | 53.71 | 54.82 | 56.04 | 57.30 | 58.49 | 59.41 |
| 25 | 57.94 | 59.07 | 59.86 | 60.15 | 57.81 | 55.40 | 53.72 | 54.87 | 56.07 | 57.31 | 58.51 | 59.47 |
| 26 | 57.95 | 59.10 | 59.90 | 60.13 | 57.81 | 55.37 | 53.72 | 54.88 | 56.11 | 57.32 | 58.54 | 59.51 |
| 27 | 57.96 | 59.11 | 59.92 | 60.18 | 57.49 | 55.41 | 53.62 | 54.88 | 56.16 | 57.34 | 58.57 | 59.56 |
| 28 | 58.00 | 59.11 | 59.92 | 60.22 | 57.50 | 55.41 | 53.64 | 54.88 | 56.20 | 57.37 | 58.61 | 59.60 |
| 29 | 58.01 | 59.11 | 59.91 | 60.23 | 57.48 | 55.34 | 53.65 | 54.86 | 56.22 | 57.41 | 58.65 | 59.65 |
| 30 | 58.05 | 59.11 | 59.93 | 60.20 | --- | 55.24 | 53.68 | 54.86 | 56.26 | 57.44 | 58.70 | 59.68 |
| 31 | 58.12 | --- | 59.93 | 60.18 | --- | 55.26 | --- | 54.89 | --- | 57.47 | 58.74 | --- |
| MAX | 58.12 | 59.11 | 59.93 | 60.23 | 60.17 | 57.50 | 55.26 | 54.89 | 56.26 | 57.47 | 58.74 | 59.68 |

CAL YR 1987 LOW 59.93

WTR YR 1988 LOW 60.23



— 392048084311400 BU-8 HAMILTON WTR DPT SYMMES RD E OF HAMILTON OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

BUTLER COUNTY--Continued

392445084333000. Local number BU-36.

LOCATION.--Lat 39°24'45", long 84°33'30", Hydrologic Unit 05080002, on right bank of Great Miami River 300 ft downstream from Twomile Creek in Hamilton.

Owner: Champion Paper Company.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled industrial supply water-table well, diameter 30 in, depth 168 ft cased.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DATE | TIME | SPE- CIFIC CON- DUCT- ANCE (US/CM) | PH (STAND- ARD UNITS) | TEMPER- ATURE AIR (DEG C) | TEMPER- ATURE WATER (DEG C) | OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) | CALCIUM DIS- SOLVED (MG/L AS CA) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) | SODIUM, DIS- SOLVED (MG/L AS NA) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) | BICAR- BONATE WATER WH FET FIELD MG/L AS HCO3 |
|--------------|------|---|--------------------------------|------------------------------------|--------------------------------------|---|--|--|--|---|---|
| NOV 05... | 1020 | 920 | 7.2 | 7.0 | 15.5 | 29 | 120 | 35 | 31 | 3.8 | 390 |
| APR 15... | 1245 | 945 | 7.3 | 7.0 | 15.5 | 41 | 110 | 33 | 30 | 3.5 | 390 |
| AUG 15... | 1345 | 880 | 7.3 | 37.0 | 19.5 | <10 | 110 | 34 | 30 | 3.4 | 390 |

| DATE | ALKA- LITY WAT WH TOT FET FIELD MG/L AS CACO3 | SULFATE DIS- SOLVED (MG/L AS SO4) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) | SILICA, DIS- SOLVED (MG/L AS SiO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | NITRO- GEN, NITRITE TOTAL (MG/L AS N) | NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) | ARSENIC TOTAL (UG/L AS AS) | ARSENIC DIS- SOLVED (UG/L AS AS) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) |
|--------------|---|---|---|--|---|--|--|--|-------------------------------------|--|--|
| NOV 05... | 317 | 97 | 52 | 0.2 | 11 | 545 | <0.01 | 1.3 | <1 | <1 | 11 |
| APR 15... | 321 | 95 | 52 | 0.2 | 11 | 548 | <0.01 | 1.2 | -- | -- | -- |
| AUG 15... | 315 | 95 | 58 | 0.2 | 11 | 541 | <0.01 | 1.1 | <1 | <1 | 10 |

| DATE | CHRO- MIUM, DIS- SOLVED (UG/L AS CR) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) | COPPER, DIS- SOLVED (UG/L AS CU) | IRON, DIS- SOLVED (UG/L AS FE) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) | LEAD, DIS- SOLVED (UG/L AS PB) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) | ZINC, DIS- SOLVED (UG/L AS ZN) | CARBON, ORGANIC TOTAL (MG/L AS C) |
|--------------|---|---|--|--|---|--|--|---|--|---|
| NOV 05... | 30 | 6 | 4 | 6 | <5 | <5 | 2 | <10 | 22 | 1.0 |
| APR 15... | -- | -- | -- | 6 | -- | -- | 4 | -- | -- | 0.7 |
| AUG 15... | 9 | 4 | 8 | 10 | 8 | <5 | 3 | <10 | 10 | 0.9 |

GROUND-WATER RECORDS

213

BUTLER COUNTY--Continued

392515084322000. Local number, BU-5.

LOCATION.--Lat 39°25'15", long 84°32'20", Hydrologic Unit 05080002, 2.0 mi north of courthouse in Hamilton.

Owner: Hamilton Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water table well, diameter 18 in., depth 110 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 590 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 5.71 ft above land-surface datum.

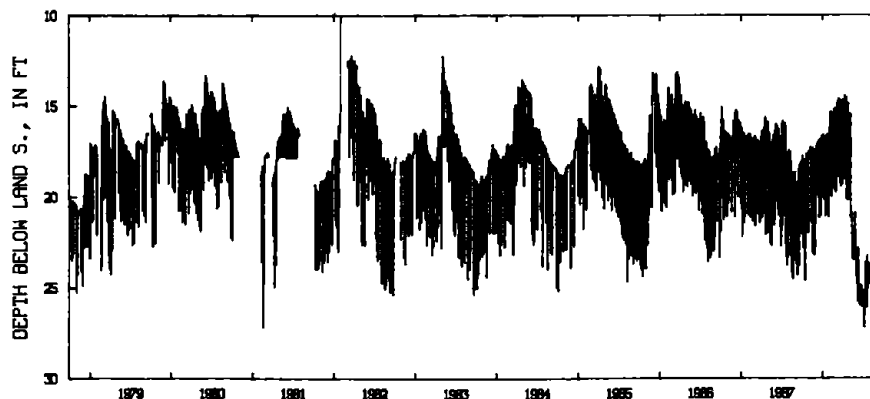
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water. Water level affected by pumping of nearby North Hamilton well field and by stage of the Great Miami River.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 42.05 ft below land-surface datum, Sept. 16-17, 1954; minimum daily low, 4.10 ft below land-surface datum, Jan. 23, 1959.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 18.04 | 17.56 | 21.47 | 16.64 | 16.60 | 15.41 | 14.96 | 15.47 | 23.81 | 25.23 | 24.22 | 24.22 |
| 2 | 22.07 | 17.50 | 17.79 | 16.63 | 16.24 | 15.30 | 14.84 | 19.74 | 23.82 | 25.32 | 24.33 | 24.32 |
| 3 | 17.91 | 17.50 | 17.46 | 16.63 | 19.81 | 15.26 | 14.77 | 19.74 | 24.36 | 25.21 | 23.99 | 24.04 |
| 4 | 17.84 | 17.47 | 17.36 | 16.63 | 15.45 | 15.13 | 19.02 | 15.71 | 24.42 | 25.20 | 24.18 | 23.05 |
| 5 | 17.77 | 17.46 | 17.26 | 20.04 | 15.37 | 15.03 | 14.67 | 19.75 | 24.40 | 25.69 | 24.66 | 23.97 |
| 6 | 21.94 | 17.40 | 17.23 | 16.78 | 15.33 | 14.96 | 18.90 | 15.45 | 24.75 | 26.88 | 24.83 | 23.29 |
| 7 | 22.19 | 17.34 | 17.19 | 16.69 | 15.39 | 14.93 | 18.99 | 21.11 | 25.73 | 27.18 | 23.68 | 23.67 |
| 8 | 22.79 | 17.31 | 17.15 | 20.15 | 19.52 | 14.85 | 19.01 | 21.13 | 25.24 | 26.50 | 24.10 | 24.35 |
| 9 | 22.55 | 17.29 | 17.08 | 16.79 | 15.57 | 18.87 | 14.62 | 20.94 | 24.85 | 25.96 | 24.16 | 23.78 |
| 10 | 18.48 | 17.34 | 17.06 | 16.73 | 15.87 | 14.89 | 14.45 | 20.93 | 22.82 | 25.43 | 24.33 | 24.30 |
| 11 | 18.12 | 17.32 | 19.89 | 16.70 | 20.00 | 14.75 | 18.61 | 20.88 | 24.77 | 25.35 | 25.25 | 23.56 |
| 12 | 22.09 | 21.42 | 17.14 | 16.70 | 16.09 | 14.64 | 14.63 | 20.97 | 24.84 | 23.60 | 26.24 | 23.40 |
| 13 | 23.76 | 17.56 | 17.10 | 16.77 | 16.25 | 14.66 | 18.68 | 22.00 | 25.41 | 23.92 | 25.56 | 23.19 |
| 14 | 24.29 | 17.44 | 17.09 | 21.06 | 16.28 | 14.62 | 18.79 | 22.24 | 25.69 | 25.74 | 25.01 | 23.19 |
| 15 | 24.63 | 17.39 | 16.99 | 16.85 | 16.56 | 14.67 | 14.89 | 22.49 | 25.71 | 26.06 | 25.56 | 23.75 |
| 16 | 18.63 | 17.40 | 16.90 | 16.75 | 16.37 | 18.91 | 14.68 | 22.87 | 25.94 | 24.47 | 25.89 | 23.17 |
| 17 | 18.37 | 17.33 | 21.15 | 16.78 | 16.41 | 14.89 | 14.54 | 23.41 | 25.27 | 24.94 | 26.39 | 19.25 |
| 18 | 18.16 | 17.41 | 17.07 | 20.58 | 16.38 | 14.73 | 14.54 | 23.39 | 25.25 | 25.99 | 25.15 | 22.81 |
| 19 | 18.00 | 22.89 | 16.90 | 16.90 | 19.51 | 14.70 | 19.75 | 23.44 | 25.14 | 26.09 | 25.01 | 19.62 |
| 20 | 17.87 | 23.14 | 16.89 | 16.67 | 15.73 | 14.74 | 20.16 | 23.15 | 25.16 | 23.25 | 25.81 | 18.74 |
| 21 | 17.76 | 17.99 | 16.87 | 16.61 | 15.40 | 19.27 | 19.99 | 23.26 | 25.28 | 25.08 | 25.08 | 23.51 |
| 22 | 17.69 | 17.70 | 16.85 | 16.58 | 15.22 | 14.95 | 15.11 | 23.42 | 24.89 | 24.20 | 25.10 | 23.57 |
| 23 | 17.65 | 17.56 | 16.89 | 16.57 | 18.70 | 19.31 | 19.28 | 23.16 | 25.01 | 24.30 | 24.38 | 23.67 |
| 24 | 22.01 | 17.50 | 21.05 | 16.55 | 15.23 | 15.04 | 15.00 | 22.79 | 25.03 | 24.55 | 24.35 | 23.17 |
| 25 | 17.81 | 17.44 | 17.01 | 16.56 | 15.17 | 19.42 | 14.85 | 21.80 | 25.59 | 24.73 | 24.26 | 19.25 |
| 26 | 17.62 | 17.41 | 16.87 | 20.86 | 19.60 | 14.99 | 19.75 | 20.86 | 26.05 | 23.61 | 24.11 | 18.65 |
| 27 | 17.64 | 23.21 | 16.81 | 16.75 | 15.30 | 14.88 | 20.07 | 22.22 | 25.98 | 23.74 | 25.08 | 18.54 |
| 28 | 17.63 | 22.56 | 16.72 | 16.69 | 15.27 | 14.76 | 15.78 | 22.15 | 25.80 | 23.87 | 24.27 | 23.00 |
| 29 | 21.99 | 17.84 | 16.72 | 21.10 | 19.75 | 14.72 | 19.66 | 22.07 | 25.82 | 24.35 | 23.72 | 23.15 |
| 30 | 17.78 | 17.57 | 16.72 | 16.85 | --- | 19.24 | 20.16 | 22.67 | 25.26 | 24.31 | 23.97 | 23.21 |
| 31 | 17.63 | --- | 16.66 | 16.71 | --- | 19.28 | --- | 23.40 | --- | 24.34 | 24.29 | --- |
| MAX | 24.63 | 23.21 | 21.47 | 21.10 | 20.00 | 19.42 | 20.16 | 23.44 | 26.05 | 27.18 | 26.39 | 24.35 |

CAL YR 1987 LOW 24.63
WTR YR 1988 LOW 27.18392515084322000 BU-5 HAMILTON WTR OPT N PLANT N OF HAMILTON OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

BUTLER COUNTY--Continued

392939084231700. Local number, BU-3.

LOCATION.--Lat 39°29'39", long 84°23'17", Hydrologic Unit 05080002, Armco Steel Corp. Rt. 122 in Middletown.

Owner: Armco Steel Corp.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 24 in., depth 250 ft, cased.

INSTRUMENTATION.--Type P continuous recorder.

DATUM.--Elevation of land-surface datum is 668 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 1.08 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

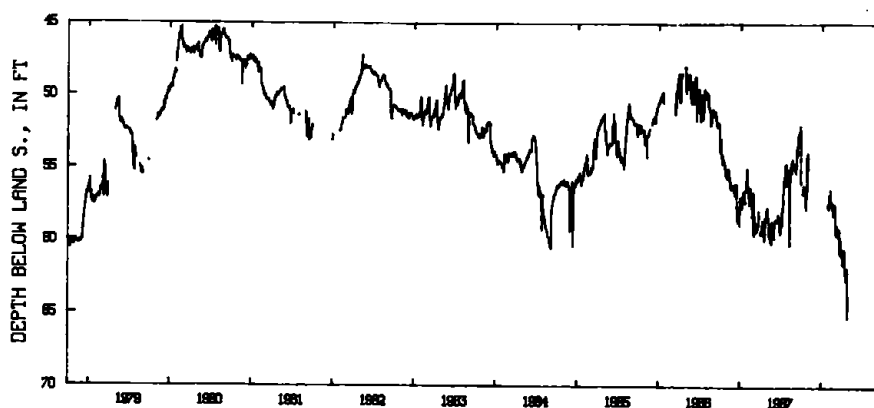
PERIOD OF RECORD.--July 1938 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 147.27 ft below land-surface datum, Apr. 4, 1955; minimum daily low, 45.27 ft below land-surface datum, July 21, 1980.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-----|-------|-------|-------|-------|-----|-----|-----|-----|-------|
| 1 | 52.35 | 53.95 | --- | --- | 57.63 | 57.68 | 61.02 | --- | --- | --- | --- | --- |
| 2 | 56.02 | 55.07 | --- | --- | 57.76 | 58.85 | 61.02 | --- | --- | --- | --- | --- |
| 3 | --- | 54.83 | --- | --- | 57.76 | 58.87 | 61.06 | --- | --- | --- | --- | --- |
| 4 | --- | 54.28 | --- | --- | 56.83 | 59.15 | 61.59 | --- | --- | --- | --- | --- |
| 5 | --- | --- | --- | --- | --- | 59.17 | 61.50 | --- | --- | --- | --- | --- |
| 6 | --- | --- | --- | --- | --- | 59.38 | 61.22 | --- | --- | --- | --- | --- |
| 7 | --- | --- | --- | --- | --- | 59.60 | 60.59 | --- | --- | --- | --- | --- |
| 8 | --- | --- | --- | --- | --- | 58.90 | 61.03 | --- | --- | --- | --- | --- |
| 9 | 56.74 | --- | --- | --- | 56.49 | 59.05 | 60.87 | --- | --- | --- | --- | --- |
| 10 | 56.75 | --- | --- | --- | 57.16 | 59.17 | 60.58 | --- | --- | --- | --- | --- |
| 11 | 56.35 | --- | --- | --- | 57.19 | 59.14 | 60.88 | --- | --- | --- | --- | --- |
| 12 | 56.66 | --- | --- | --- | 57.29 | 59.06 | 60.86 | --- | --- | --- | --- | --- |
| 13 | 56.17 | --- | --- | --- | 57.28 | 59.16 | 61.58 | --- | --- | --- | --- | --- |
| 14 | 56.62 | --- | --- | --- | 57.27 | 59.31 | 61.86 | --- | --- | --- | --- | --- |
| 15 | 56.67 | --- | --- | --- | 57.25 | 59.67 | 62.20 | --- | --- | --- | --- | --- |
| 16 | 56.70 | --- | --- | --- | 57.29 | 59.67 | 61.95 | --- | --- | --- | --- | --- |
| 17 | 56.54 | --- | --- | --- | 57.37 | 59.25 | 62.00 | --- | --- | --- | --- | --- |
| 18 | 56.52 | --- | --- | --- | 57.59 | 59.19 | 62.22 | --- | --- | --- | --- | --- |
| 19 | 56.31 | --- | --- | --- | 57.49 | 59.15 | 62.70 | --- | --- | --- | --- | --- |
| 20 | 56.24 | --- | --- | --- | 57.70 | 59.36 | 62.58 | --- | --- | --- | --- | --- |
| 21 | 57.35 | --- | --- | --- | 57.86 | 59.68 | 62.00 | --- | --- | --- | --- | --- |
| 22 | 57.59 | --- | --- | --- | 57.80 | 59.85 | 61.82 | --- | --- | --- | --- | 64.29 |
| 23 | 57.42 | --- | --- | --- | 58.22 | 60.72 | 61.86 | --- | --- | --- | --- | 63.80 |
| 24 | 57.80 | --- | --- | --- | --- | 60.90 | 62.07 | --- | --- | --- | --- | 63.64 |
| 25 | 57.25 | --- | --- | --- | 57.52 | 60.73 | 62.29 | --- | --- | --- | --- | 63.55 |
| 26 | 56.84 | --- | --- | --- | 57.75 | 59.92 | 62.27 | --- | --- | --- | --- | 63.58 |
| 27 | 56.88 | --- | --- | --- | 57.46 | 60.17 | 65.24 | --- | --- | --- | --- | 63.45 |
| 28 | 56.15 | --- | --- | --- | 57.46 | 60.50 | 64.55 | --- | --- | --- | --- | 63.35 |
| 29 | 54.60 | --- | --- | 57.54 | 57.50 | 60.43 | 63.76 | --- | --- | --- | --- | 63.32 |
| 30 | 54.13 | --- | --- | 57.61 | --- | 60.75 | --- | --- | --- | --- | --- | 63.31 |
| 31 | 54.07 | --- | --- | 57.62 | --- | 61.03 | --- | --- | --- | --- | --- | --- |
| MAX | 57.80 | 55.07 | --- | 57.62 | 58.22 | 61.03 | 65.24 | --- | --- | --- | --- | 64.29 |

WTR YR 1988 LOW 65.24



— 392939084231700 BU-3 ARMCO STEEL CORP MIDDLETOWN OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

215

BUTLER COUNTY--Continued

393103084240900. Local number, BU-2

LOCATION.--Lat 39°31'03", long 84°24'09", Hydrologic Unit 05080002, in basement of YMCA in Middletown.

Owner: Middletown YMCA.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in., depth 88 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 636.27 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of platform 14.77 ft below land-surface datum.

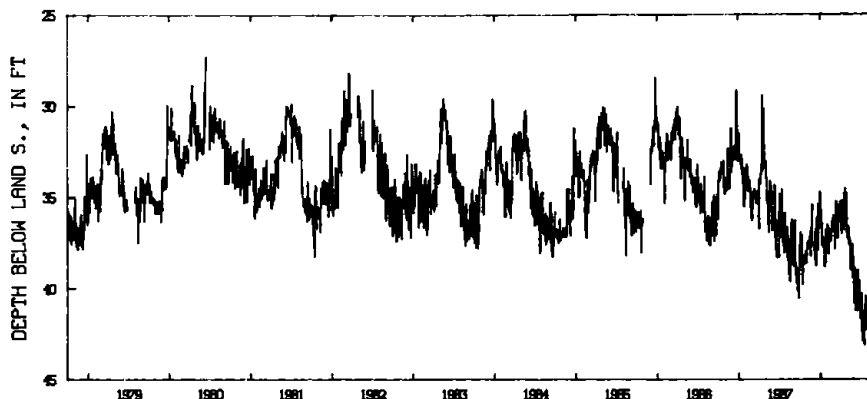
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--October 1942 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 52.15 ft below land-surface datum, Sept. 28, Nov. 5, 1953 and Jan. 22, 1954; minimum daily low, 27.30 ft below land-surface datum, June 17, 1980.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 38.90 | 38.40 | 37.65 | 35.20 | 37.05 | 36.05 | 36.15 | 36.25 | 39.80 | 41.70 | 40.60 | 41.70 |
| 2 | 38.85 | 38.65 | 37.50 | 34.75 | 38.00 | 36.75 | 35.25 | 37.20 | 39.95 | 40.60 | 41.70 | 41.20 |
| 3 | 38.20 | 38.40 | 37.60 | 35.50 | 36.60 | 36.15 | 35.30 | 37.10 | 39.45 | 40.30 | 41.40 | 41.55 |
| 4 | 37.65 | 38.20 | 37.60 | 35.90 | 36.60 | 36.30 | 35.80 | 37.30 | 38.90 | 41.20 | 40.85 | 41.60 |
| 5 | 37.55 | 37.85 | 37.75 | 35.90 | 36.55 | 36.60 | 36.45 | 36.60 | 39.40 | 41.70 | 41.10 | 40.75 |
| 6 | 37.40 | 37.80 | 37.80 | 35.75 | 36.85 | 36.25 | 36.30 | 36.60 | 40.65 | 42.15 | 41.05 | 40.50 |
| 7 | 37.00 | 37.50 | 37.95 | 36.70 | 36.70 | 37.85 | 36.15 | 37.25 | 40.65 | 42.30 | 40.60 | 41.00 |
| 8 | 37.25 | 37.65 | 37.85 | 36.75 | 36.95 | 37.55 | 37.00 | 36.65 | 41.25 | 42.40 | 41.75 | 41.00 |
| 9 | 37.30 | 37.55 | 37.90 | 36.50 | 38.15 | 37.50 | 35.75 | 37.25 | 39.60 | 42.90 | 41.75 | 39.65 |
| 10 | 37.10 | 37.45 | 38.50 | 36.45 | 37.55 | 36.55 | 35.40 | 37.30 | 39.30 | 41.90 | 42.10 | 39.90 |
| 11 | 37.35 | 37.80 | 37.25 | 36.55 | 37.25 | 37.05 | 36.00 | 37.60 | 40.40 | 41.65 | 42.55 | 40.30 |
| 12 | 37.80 | 37.70 | 36.95 | 37.70 | 37.30 | 35.50 | 35.20 | 37.25 | 40.90 | 41.40 | 42.15 | 40.80 |
| 13 | 37.70 | 37.80 | 36.80 | 37.45 | 37.40 | 35.25 | 35.45 | 37.45 | 40.85 | 42.40 | 41.05 | 40.10 |
| 14 | 39.80 | 37.50 | 38.35 | 37.65 | 37.25 | 36.15 | 36.00 | 37.40 | 41.20 | 41.60 | 42.05 | 39.85 |
| 15 | 39.50 | 37.75 | 38.80 | 37.30 | 37.20 | 36.20 | 36.30 | 37.60 | 41.25 | 42.50 | 42.90 | 39.95 |
| 16 | 38.90 | 37.30 | 37.15 | 37.60 | 37.20 | 36.30 | 35.85 | 39.00 | 40.80 | 42.90 | 42.45 | 41.30 |
| 17 | 39.40 | 37.30 | 36.85 | 37.80 | 37.45 | 36.20 | 35.85 | 38.95 | 39.00 | 42.85 | 42.35 | 39.80 |
| 18 | 38.45 | 37.10 | 36.15 | 37.50 | 37.10 | 37.25 | 36.80 | 39.00 | 39.60 | 43.10 | 41.70 | 40.05 |
| 19 | 38.65 | 36.90 | 36.35 | 37.25 | 37.40 | 35.70 | 36.55 | 38.40 | 40.05 | 41.25 | 41.65 | 39.70 |
| 20 | 38.70 | 37.25 | 36.50 | 37.45 | 36.90 | 36.30 | 34.80 | 37.60 | 40.60 | 41.45 | 41.80 | 40.75 |
| 21 | 38.30 | 38.25 | 37.10 | 38.40 | 37.25 | 37.30 | 34.95 | 37.75 | 40.75 | 40.90 | 41.80 | 39.40 |
| 22 | 38.25 | 37.00 | 37.95 | 38.85 | 36.95 | 36.00 | 35.30 | 38.50 | 40.55 | 41.55 | 42.70 | 40.40 |
| 23 | 38.45 | 37.05 | 37.00 | 38.00 | 36.70 | 36.35 | 34.90 | 38.75 | 41.00 | 41.35 | 41.65 | 38.80 |
| 24 | 38.45 | 36.70 | 37.00 | 38.50 | 36.50 | 36.20 | 34.55 | 39.00 | 40.80 | 40.45 | 41.45 | 38.70 |
| 25 | 38.70 | 37.45 | 35.40 | 37.40 | 36.40 | 35.45 | 35.40 | 37.60 | 41.05 | 40.55 | 41.65 | 39.10 |
| 26 | 38.40 | 37.15 | 35.50 | 38.65 | 36.70 | 35.95 | 35.50 | 38.55 | 39.60 | 41.00 | 42.00 | 40.60 |
| 27 | 38.45 | 35.45 | 35.55 | 38.40 | 36.65 | 36.05 | 35.35 | 39.45 | 40.75 | 41.40 | 41.20 | 39.55 |
| 28 | 38.15 | 35.75 | 36.75 | 36.80 | 36.30 | 36.20 | 35.30 | 38.30 | 41.15 | 41.55 | 41.05 | 40.85 |
| 29 | 38.00 | 35.50 | 36.25 | 36.95 | 36.15 | 36.10 | 34.80 | 38.35 | 40.90 | 41.65 | 41.40 | 39.75 |
| 30 | 38.45 | --- | 36.40 | 37.15 | --- | 36.15 | 35.20 | 38.50 | 40.35 | 42.30 | 40.90 | 40.00 |
| 31 | 38.30 | --- | 36.50 | 37.30 | --- | 35.80 | --- | 40.80 | --- | 41.50 | 41.75 | --- |
| MAX | 39.80 | 38.65 | 38.80 | 38.85 | 38.15 | 37.85 | 37.00 | 40.80 | 41.25 | 43.10 | 42.90 | 41.70 |
| CAL YR 1987 | LOW 40.55 | | | | | | | | | | | |
| WTR YR 1988 | LOW 43.10 | | | | | | | | | | | |



393103084240900 BU-2 YMCA IN MIDDLETOWN OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

CARROLL COUNTY

403709081052800. Local number, C-1.

LOCATION.--Lat 40°37'09", long 81°05'28", Hydrologic Unit 05040001, Carrollton well field, State Route 171, 3 mi north of Carrollton.

Owner: Carrollton Water Department.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in., depth 70 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 1050 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of platform 3.0 ft above land-surface datum.

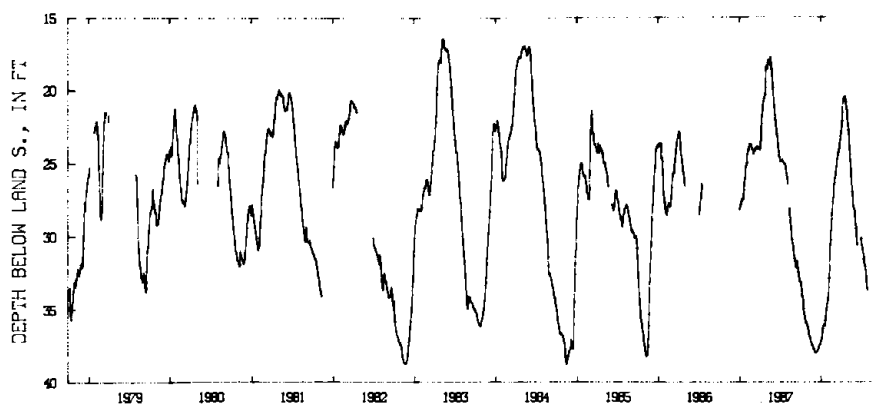
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--August 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 40.70 ft below land-surface datum, Nov. 19, 1957; minimum daily low, 7.20 ft below land-surface datum, Jan. 10, 1971.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|
| 1 | 33.20 | 36.14 | 37.78 | 37.16 | 34.37 | 26.42 | 22.69 | 22.52 | 28.37 | 30.36 | --- | --- |
| 2 | 33.14 | 36.23 | 37.85 | 37.10 | 34.31 | 26.14 | 22.61 | 22.73 | 28.52 | 30.56 | --- | --- |
| 3 | 33.43 | 36.37 | 37.90 | 37.04 | 34.07 | 26.10 | 22.61 | 22.81 | 28.84 | 30.74 | --- | --- |
| 4 | 33.41 | 36.26 | 37.98 | 36.96 | 33.99 | 25.97 | 22.20 | 22.93 | 29.08 | 30.89 | --- | --- |
| 5 | 33.28 | 36.43 | 37.96 | 36.87 | 33.55 | 25.95 | 22.20 | 23.14 | 29.19 | 30.81 | --- | --- |
| 6 | 33.65 | 36.53 | 38.00 | 36.74 | 33.14 | 25.68 | 21.60 | 23.47 | 29.37 | 30.80 | --- | --- |
| 7 | 33.93 | 36.70 | 38.00 | 36.63 | 32.89 | 25.67 | 20.93 | 23.78 | 29.39 | 30.90 | --- | --- |
| 8 | 34.13 | 36.80 | 38.00 | 36.46 | 32.30 | 25.53 | 20.93 | 23.93 | 29.61 | 31.06 | --- | --- |
| 9 | 34.24 | 36.79 | 37.99 | 36.35 | 31.66 | 25.33 | 20.92 | 24.11 | 30.03 | 31.28 | --- | --- |
| 10 | 34.25 | 36.87 | 37.95 | 36.26 | 31.42 | 25.33 | 20.82 | 24.52 | 30.25 | 31.40 | --- | --- |
| 11 | 34.23 | 36.86 | 37.91 | 36.11 | 31.05 | 25.31 | 20.67 | 24.86 | 30.55 | 31.53 | --- | --- |
| 12 | 34.34 | 36.95 | 37.92 | 36.12 | 30.63 | 24.92 | 20.61 | 24.88 | 30.63 | 31.73 | --- | --- |
| 13 | 34.51 | 36.97 | 37.88 | 36.10 | 30.33 | 24.78 | 20.60 | 25.25 | --- | 31.87 | --- | --- |
| 14 | 34.78 | 37.06 | 37.86 | 36.08 | 30.11 | 24.62 | 20.50 | 25.45 | --- | 31.96 | --- | --- |
| 15 | 35.01 | 37.11 | 37.87 | 36.08 | 29.66 | 24.66 | 20.50 | 25.60 | --- | 32.02 | --- | --- |
| 16 | 35.19 | 37.19 | 37.83 | 36.06 | 29.59 | 24.63 | 20.50 | 25.90 | --- | 32.00 | --- | --- |
| 17 | 35.34 | 37.26 | 37.84 | 36.18 | 29.33 | 24.51 | 20.50 | 26.23 | --- | 32.08 | --- | --- |
| 18 | 35.47 | 37.31 | 37.78 | 36.17 | 29.01 | 24.35 | 20.54 | 26.48 | --- | 32.13 | --- | --- |
| 19 | 35.43 | 37.31 | 37.76 | 36.01 | 28.54 | 24.15 | 20.63 | 26.70 | --- | 32.35 | --- | --- |
| 20 | 35.64 | 37.39 | 37.75 | 35.77 | 28.42 | 24.34 | 20.67 | 26.84 | --- | 32.37 | --- | --- |
| 21 | 35.73 | 37.46 | 37.70 | 35.58 | 28.44 | 24.19 | 20.81 | 27.03 | --- | 32.63 | --- | --- |
| 22 | 35.72 | 37.47 | 37.61 | 35.34 | 28.02 | 24.11 | 20.84 | 27.20 | --- | 32.81 | --- | --- |
| 23 | 35.73 | 37.56 | 37.61 | 35.21 | 27.80 | 23.91 | 20.96 | 27.31 | --- | 32.99 | --- | --- |
| 24 | 35.89 | 37.47 | 37.46 | 35.11 | 27.63 | 23.79 | 21.20 | 27.64 | --- | 33.17 | --- | --- |
| 25 | 35.92 | 37.51 | 37.46 | 35.06 | 27.43 | 23.58 | 21.29 | 27.99 | --- | 33.36 | --- | --- |
| 26 | 35.93 | 37.55 | 37.47 | 34.93 | 27.15 | 23.50 | 21.47 | 28.01 | --- | 33.57 | --- | --- |
| 27 | 36.02 | 37.66 | 37.46 | 34.86 | 26.90 | 23.47 | 21.67 | 28.17 | --- | 33.72 | --- | --- |
| 28 | 36.05 | 37.75 | 37.42 | 34.76 | 26.74 | 23.46 | 21.85 | 28.17 | --- | --- | --- | --- |
| 29 | 36.06 | 37.75 | 37.42 | 34.58 | 26.53 | 23.06 | 22.07 | 28.17 | --- | --- | --- | --- |
| 30 | 36.12 | 37.74 | 37.29 | 34.55 | --- | 23.07 | 22.27 | 28.26 | 30.16 | --- | --- | --- |
| 31 | 36.18 | --- | 37.23 | 34.41 | --- | 22.87 | --- | 28.37 | --- | --- | --- | --- |
| MAX | 36.18 | 37.75 | 38.00 | 37.16 | 34.37 | 26.42 | 22.69 | 28.37 | 30.63 | 33.72 | --- | --- |
| CAL YR 1987 | LOW 38.00 | | | | | | | | | | | |
| WTR YR 1988 | LOW 38.00 | | | | | | | | | | | |



403709081052800 C-1 MUNICIPAL WELL FIELD CARROLLTON OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

217

CHAMPAIGN COUNTY

400638083453900. Local number, CH-3.

LOCATION.--Lat 40°06'38", long 83°45'39", Hydrologic Unit 05080001, in Urbana.

Owner: Howard Paper Company.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 8 in., depth 40 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 1030 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 4.50 ft above land-surface datum.

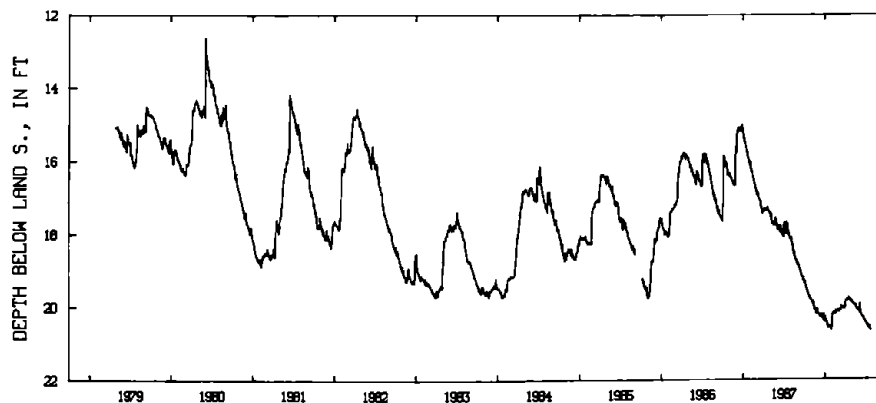
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--May 1957 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 24.80 ft below land-surface datum, Feb. 26-29, Mar. 13, 1964; minimum daily low, 12.45 ft below land-surface datum, Mar. 24, 1975.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------|
| 1 | 19.33 | 19.82 | 20.19 | 20.35 | 20.58 | 20.15 | 20.03 | 19.89 | 20.13 | 20.46 | --- | --- |
| 2 | 19.34 | 19.84 | 20.21 | 20.30 | 20.35 | 20.16 | 19.92 | 19.88 | 20.15 | 20.45 | --- | --- |
| 3 | 19.38 | 19.85 | 20.23 | 20.29 | 20.27 | 20.17 | 19.85 | 19.90 | 20.16 | 20.46 | --- | --- |
| 4 | 19.35 | 19.86 | 20.22 | 20.38 | 20.23 | 20.14 | 19.85 | 19.90 | 20.18 | 20.45 | --- | --- |
| 5 | 19.34 | 19.87 | 20.22 | 20.39 | 20.24 | 20.13 | 19.86 | 19.92 | 20.18 | 20.47 | --- | --- |
| 6 | 19.42 | 19.90 | 20.22 | 20.39 | 20.23 | 20.12 | 19.85 | 19.93 | 19.94 | 20.50 | --- | --- |
| 7 | 19.42 | 19.91 | 20.26 | 20.43 | 20.18 | 20.11 | 19.86 | 19.94 | 20.04 | 20.52 | --- | --- |
| 8 | 19.48 | 19.88 | 20.28 | 20.42 | 20.19 | 20.12 | 19.86 | 19.96 | 20.15 | 20.50 | --- | --- |
| 9 | 19.52 | 19.87 | 20.28 | 20.43 | 20.18 | 20.10 | 19.83 | 19.96 | 20.20 | 20.52 | --- | --- |
| 10 | 19.51 | 19.89 | 20.29 | 20.44 | 20.20 | 20.11 | 19.84 | 19.96 | 20.22 | 20.54 | --- | --- |
| 11 | 19.52 | 19.95 | 20.30 | 20.49 | 20.21 | 20.10 | 19.82 | 19.98 | 20.24 | 20.55 | --- | --- |
| 12 | 19.52 | 20.01 | 20.29 | 20.51 | 20.21 | 20.11 | 19.82 | 19.97 | 20.24 | 20.56 | --- | --- |
| 13 | 19.57 | 20.03 | 20.24 | 20.54 | 20.21 | 20.01 | 19.83 | 19.95 | 20.25 | 20.57 | --- | --- |
| 14 | 19.57 | 20.09 | 20.24 | 20.55 | 20.20 | 20.07 | 19.83 | 20.00 | 20.26 | 20.60 | --- | --- |
| 15 | 19.58 | 20.02 | 20.22 | 20.57 | 20.15 | 20.07 | 19.83 | 19.98 | 20.28 | 20.57 | --- | --- |
| 16 | 19.62 | 20.06 | 20.25 | 20.59 | 20.21 | 20.06 | 19.80 | 19.96 | 20.29 | 20.56 | --- | --- |
| 17 | 19.64 | 20.06 | 20.27 | 20.59 | 20.21 | 20.07 | 19.81 | 19.96 | 20.29 | 20.56 | --- | --- |
| 18 | 19.65 | 20.06 | 20.28 | 20.58 | 20.22 | 20.04 | 19.78 | 19.99 | 20.30 | 20.54 | --- | --- |
| 19 | 19.65 | 20.09 | 20.30 | 20.57 | 20.22 | 20.04 | 19.81 | 20.04 | 20.30 | 20.60 | --- | --- |
| 20 | 19.70 | 20.11 | 20.29 | 20.55 | 20.21 | 20.04 | 19.82 | 20.04 | 20.31 | 20.62 | --- | --- |
| 21 | 19.71 | 20.17 | 20.30 | 20.57 | 20.12 | 20.07 | 19.83 | 20.07 | 20.34 | 20.63 | --- | --- |
| 22 | 19.74 | 20.19 | 20.34 | 20.58 | 20.14 | 20.05 | 19.84 | 20.05 | 20.37 | 20.65 | --- | 20.92 |
| 23 | 19.76 | 20.21 | 20.36 | 20.60 | 20.13 | 20.05 | 19.85 | 20.07 | 20.36 | 20.65 | --- | 20.95 |
| 24 | 19.78 | 20.22 | 20.38 | 20.56 | 20.14 | 20.08 | 19.87 | 20.09 | 20.37 | 20.66 | --- | 20.95 |
| 25 | 19.73 | 20.22 | 20.26 | 20.60 | 20.14 | 20.07 | 19.84 | 20.10 | 20.37 | 20.67 | --- | 20.95 |
| 26 | 19.73 | 20.22 | 20.22 | 20.59 | 20.13 | 20.04 | 19.84 | 20.10 | 20.38 | --- | --- | 20.96 |
| 27 | 19.74 | 20.15 | 20.23 | 20.61 | 20.12 | 20.08 | 19.84 | 20.11 | 20.40 | --- | --- | 20.97 |
| 28 | 19.79 | 20.12 | 20.32 | 20.61 | 20.11 | 20.07 | 19.85 | 20.12 | 20.40 | --- | --- | 21.02 |
| 29 | 19.83 | 20.09 | 20.34 | 20.64 | 20.15 | 20.09 | 19.88 | 20.13 | 20.42 | --- | --- | 21.04 |
| 30 | 19.81 | 20.19 | 20.39 | 20.65 | --- | 20.03 | 19.91 | 20.14 | 20.44 | --- | --- | 21.08 |
| 31 | 19.83 | --- | 20.42 | 20.65 | --- | 20.04 | --- | 20.15 | --- | --- | --- | --- |
| MAX | 19.83 | 20.22 | 20.42 | 20.65 | 20.58 | 20.17 | 20.03 | 20.15 | 20.44 | 20.67 | --- | 21.08 |
| CAL YR 1987 | LOW 20.42 | | | | | | | | | | | |
| WTR YR 1988 | LOW 21.08 | | | | | | | | | | | |



400638083453900 CH-3 HOWARD PAPER CO URBANA OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

CLARK COUNTY

395639084012200. Local number, CL-9.

LOCATION.--Lat 39°56'39", long 84°01'22", Hydrologic Unit 05080001, at north edge of New Carlisle.

Owner: New Carlisle Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in., depth 113 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 900 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of platform 2.50 ft above land-surface datum.

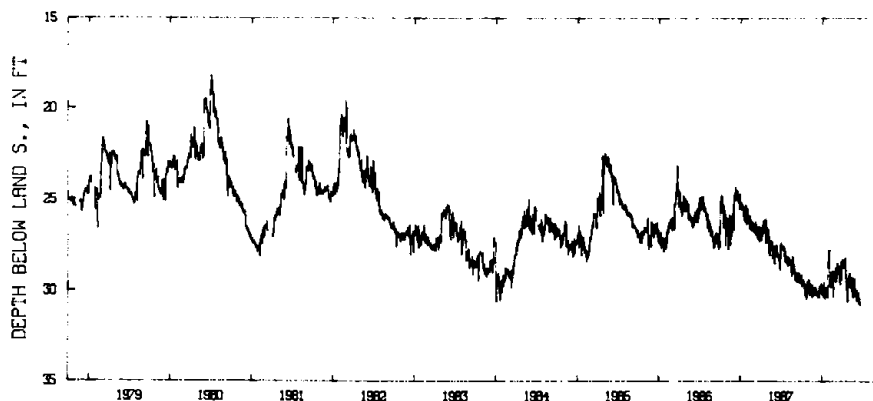
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 31.25 ft below land-surface datum, July 13, 1977; minimum daily low, 18.20 ft below land-surface datum, July 4, 1980.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------|-------|
| 1 | 29.31 | 29.96 | 30.05 | 29.99 | 28.47 | 29.10 | 28.64 | 29.40 | 30.34 | --- | --- | 30.19 |
| 2 | 29.17 | 29.68 | 30.06 | 30.00 | 28.53 | 28.91 | 28.30 | 29.59 | 30.18 | --- | --- | 30.21 |
| 3 | 29.54 | 29.90 | 30.15 | 29.82 | 27.81 | 29.57 | 28.59 | 29.20 | 29.97 | --- | --- | 30.18 |
| 4 | 29.48 | 29.61 | 29.86 | 30.03 | 27.81 | 29.49 | 28.49 | 29.49 | 30.08 | --- | --- | 29.66 |
| 5 | 29.82 | 29.42 | 29.95 | 30.30 | 29.71 | 28.82 | 28.61 | 29.10 | 30.33 | --- | --- | 30.00 |
| 6 | 29.54 | 30.24 | 29.93 | 30.05 | 29.80 | 28.77 | 28.79 | 29.05 | 30.58 | --- | --- | 30.12 |
| 7 | 29.54 | 29.91 | 30.21 | 29.90 | 29.76 | 29.47 | 28.51 | 29.78 | 30.35 | --- | --- | 30.04 |
| 8 | 29.57 | 29.73 | 30.02 | 29.94 | 29.63 | 29.18 | 28.60 | 29.86 | 30.29 | --- | --- | 29.78 |
| 9 | 29.56 | 30.21 | 30.25 | 30.17 | 29.63 | 28.54 | 28.65 | 29.61 | 30.46 | --- | --- | 29.91 |
| 10 | 29.67 | 30.11 | 30.15 | 29.90 | 29.80 | 28.89 | 28.66 | 29.40 | 30.33 | --- | --- | 29.73 |
| 11 | 29.45 | 29.90 | 30.13 | 30.35 | 28.97 | 28.87 | 28.61 | 29.41 | 30.11 | --- | --- | 29.49 |
| 12 | 29.58 | 29.64 | 30.09 | 29.57 | 29.11 | 28.67 | 28.40 | 29.37 | 30.49 | --- | --- | 29.00 |
| 13 | 29.63 | 30.03 | 30.09 | 29.98 | 29.10 | 28.50 | 28.31 | 29.63 | 30.55 | --- | --- | 28.93 |
| 14 | 29.74 | 29.84 | 30.27 | 30.13 | 29.26 | 29.05 | 28.46 | 29.29 | 30.68 | --- | --- | 28.81 |
| 15 | 29.62 | 29.86 | 30.06 | 30.17 | 29.21 | 28.76 | 28.25 | 29.61 | 30.52 | --- | --- | 29.39 |
| 16 | 29.73 | 30.25 | 30.35 | 30.45 | 29.17 | 28.76 | 28.53 | 29.86 | 30.58 | --- | --- | 28.86 |
| 17 | 29.94 | 29.85 | 30.40 | 30.35 | 29.20 | 28.69 | 28.89 | 30.07 | 30.44 | --- | --- | 29.34 |
| 18 | 29.90 | 30.36 | 30.12 | 29.92 | 28.96 | 28.65 | 29.19 | 29.91 | 30.61 | --- | --- | 29.20 |
| 19 | 29.75 | 29.81 | 30.33 | 29.85 | 29.00 | 28.93 | 29.49 | 30.00 | 30.65 | --- | --- | 28.62 |
| 20 | 29.97 | 29.72 | 30.37 | 30.22 | 29.15 | 28.82 | 29.30 | 30.19 | 30.78 | --- | --- | 28.99 |
| 21 | 30.16 | 29.81 | 30.40 | 30.26 | 30.36 | 29.18 | 29.54 | 30.41 | --- | --- | --- | 28.83 |
| 22 | 30.30 | 30.04 | 30.13 | 30.04 | 29.91 | 29.17 | 29.38 | 30.22 | --- | --- | --- | 29.10 |
| 23 | 30.18 | 30.15 | 29.88 | 29.91 | 29.03 | 29.42 | 29.91 | 29.82 | --- | --- | --- | 28.89 |
| 24 | 30.46 | 30.14 | 29.76 | 30.19 | 29.10 | 29.69 | 30.03 | 30.00 | --- | --- | --- | 29.19 |
| 25 | 30.30 | 30.29 | 29.93 | 30.22 | 29.01 | 29.21 | 30.14 | 29.33 | --- | --- | --- | 29.30 |
| 26 | 30.09 | 29.86 | 30.07 | 30.21 | 29.15 | 28.93 | 30.64 | 29.90 | --- | --- | 30.17 | 29.00 |
| 27 | 30.11 | 30.27 | 29.92 | 30.38 | 29.30 | 29.41 | 30.42 | 29.73 | --- | --- | 30.44 | 28.44 |
| 28 | 29.60 | 30.22 | 29.97 | 30.38 | 29.03 | 28.43 | 30.33 | 29.93 | --- | --- | 30.36 | 28.88 |
| 29 | 29.55 | 29.96 | 30.06 | 28.47 | 29.02 | 28.76 | 29.60 | 30.31 | --- | --- | 30.17 | 28.76 |
| 30 | 30.05 | 29.94 | 29.69 | 28.56 | --- | 28.64 | 29.72 | 30.27 | --- | --- | 30.39 | 28.87 |
| 31 | 29.59 | --- | 29.64 | 28.51 | --- | 28.71 | --- | 30.31 | --- | --- | 30.26 | --- |
| MAX | 30.46 | 30.36 | 30.40 | 30.45 | 30.36 | 29.69 | 30.64 | 30.41 | 30.78 | --- | 30.44 | 30.21 |
| CAL YR 1987 | LOW 30.46 | | | | | | | | | | | |
| WTR YR 1988 | LOW 30.78 | | | | | | | | | | | |



395639084012200 CL-9 CITY OF NEW CARLISLE AT NEW CARLISLE OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

219

CLARK COUNTY--Continued

395840083495200. Local number, CL-7.

LOCATION.--Lat 39°58'40", long 83°49'52", Hydrologic Unit 05080001. Eagle City Road northwest of Springfield.

Owner: State of Ohio.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 6 in., depth 50 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 928.02 ft. Measuring point: Floor of instrument shelter 2.00 ft above land-surface datum.

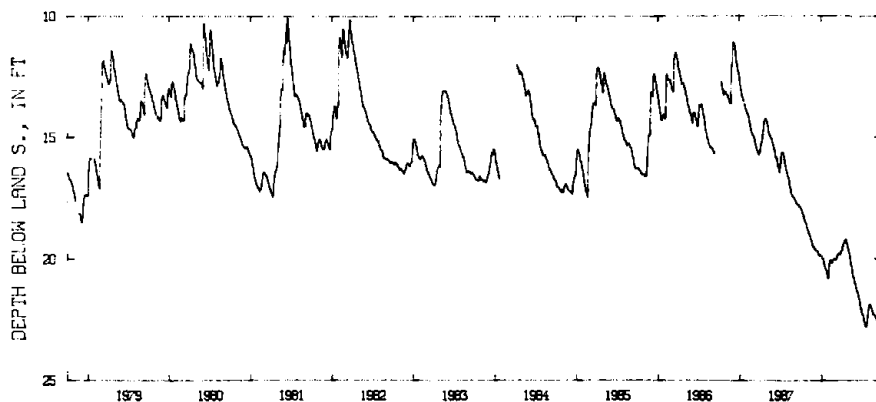
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

*EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 30.17 ft below land-surface datum, Feb. 18, 19, 1961; minimum daily low, 10.04 ft below land-surface datum, June 16, 1981.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| MAXIMUM VALUES | | | | | | | | | | | | |
|----------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
| 1 | 17.93 | 18.81 | 19.55 | 19.89 | 20.82 | 20.03 | 19.68 | 19.62 | 21.08 | 22.25 | 21.96 | 22.44 |
| 2 | 17.94 | 18.82 | 19.57 | 19.90 | 20.82 | 20.06 | 19.67 | 19.64 | 21.15 | 22.28 | 21.91 | 22.48 |
| 3 | 17.95 | 18.84 | 19.59 | 19.91 | 20.65 | 20.06 | 19.65 | 19.69 | 21.19 | 22.29 | 21.89 | 22.49 |
| 4 | 17.97 | 18.87 | 19.61 | 19.92 | 20.51 | 20.06 | 19.60 | 19.73 | 21.21 | 22.29 | 21.89 | 22.47 |
| 5 | 17.97 | 18.91 | 19.64 | 19.95 | 20.38 | 20.06 | 19.55 | 19.79 | 21.22 | 22.33 | 21.91 | 22.41 |
| 6 | 18.00 | 18.96 | 19.66 | 20.00 | 20.26 | 20.04 | 19.51 | 19.85 | 21.23 | 22.37 | 21.91 | 22.38 |
| 7 | 18.02 | 18.98 | 19.67 | 20.00 | 20.20 | 20.03 | 19.49 | 19.90 | 21.28 | 22.42 | 21.90 | 22.37 |
| 8 | 18.05 | 18.99 | 19.67 | 20.00 | 20.12 | 20.01 | 19.46 | 19.95 | 21.35 | 22.46 | 21.90 | 22.38 |
| 9 | 18.10 | 19.01 | 19.67 | 20.02 | 20.07 | 19.98 | 19.42 | 20.00 | 21.39 | 22.52 | 21.92 | 22.41 |
| 10 | 18.13 | 19.02 | 19.68 | 20.04 | 20.05 | 19.95 | 19.38 | 20.05 | 21.41 | 22.56 | 21.95 | 22.43 |
| 11 | 18.17 | 19.05 | 19.68 | 20.07 | 20.05 | 19.94 | 19.35 | 20.11 | 21.42 | 22.58 | 22.00 | 22.43 |
| 12 | 18.18 | 19.10 | 19.68 | 20.12 | 20.04 | 19.91 | 19.31 | 20.16 | 21.43 | 22.62 | 22.02 | 22.43 |
| 13 | 18.21 | 19.12 | 19.69 | 20.17 | 20.08 | 19.89 | 19.29 | 20.23 | 21.45 | 22.66 | 22.05 | 22.39 |
| 14 | 18.24 | 19.16 | 19.70 | 20.22 | 20.10 | 19.86 | 19.26 | 20.29 | 21.50 | 22.69 | 22.09 | 22.29 |
| 15 | 18.28 | 19.19 | 19.70 | 20.28 | 20.11 | 19.81 | 19.25 | 20.32 | 21.57 | 22.71 | 22.13 | 22.21 |
| 16 | 18.32 | 19.21 | 19.71 | 20.32 | 20.13 | 19.80 | 19.25 | 20.36 | 21.63 | 22.74 | 22.17 | 22.13 |
| 17 | 18.36 | 19.24 | 19.75 | 20.36 | 20.15 | 19.81 | 19.25 | 20.43 | 21.67 | 22.78 | 22.22 | 22.09 |
| 18 | 18.39 | 19.28 | 19.78 | 20.39 | 20.18 | 19.81 | 19.22 | 20.50 | 21.69 | 22.79 | 22.28 | 22.02 |
| 19 | 18.39 | 19.30 | 19.80 | 20.42 | 20.18 | 19.81 | 19.22 | 20.57 | 21.70 | 22.80 | 22.30 | 21.96 |
| 20 | 18.42 | 19.33 | 19.83 | 20.44 | 20.18 | 19.80 | 19.23 | 20.62 | 21.73 | 22.80 | 22.30 | 21.91 |
| 21 | 18.44 | 19.37 | 19.84 | 20.46 | 20.14 | 19.79 | 19.28 | 20.67 | 21.78 | 22.76 | 22.30 | 21.87 |
| 22 | 18.48 | 19.40 | 19.86 | 20.48 | 20.09 | 19.78 | 19.30 | 20.72 | 21.83 | 22.66 | 22.30 | 21.85 |
| 23 | 18.52 | 19.43 | 19.87 | 20.51 | 20.05 | 19.80 | 19.33 | 20.76 | 21.90 | 22.61 | 22.30 | 21.82 |
| 24 | 18.56 | 19.48 | 19.89 | 20.54 | 20.05 | 19.82 | 19.36 | 20.79 | 21.97 | 22.50 | 22.30 | 21.80 |
| 25 | 18.57 | 19.51 | 19.89 | 20.57 | 20.03 | 19.82 | 19.38 | 20.82 | 22.02 | 22.42 | 22.30 | 21.78 |
| 26 | 18.57 | 19.51 | 19.89 | 20.59 | 20.02 | 19.82 | 19.41 | 20.85 | 22.05 | 22.36 | 22.33 | 21.76 |
| 27 | 18.60 | 19.53 | 19.89 | 20.63 | 20.02 | 19.76 | 19.43 | 20.90 | 22.09 | 22.31 | 22.36 | 21.74 |
| 28 | 18.63 | 19.55 | 19.85 | 20.68 | 20.02 | 19.72 | 19.50 | 20.95 | 22.14 | 22.20 | 22.37 | 21.73 |
| 29 | 18.68 | 19.55 | 19.87 | 20.74 | 20.02 | 19.69 | 19.55 | 20.98 | 22.19 | 22.11 | 22.37 | 21.73 |
| 30 | 18.73 | 19.55 | 19.89 | 20.78 | --- | 19.68 | 19.59 | 21.00 | 22.21 | 22.06 | 22.39 | 21.73 |
| 31 | 18.79 | --- | 19.89 | 20.82 | --- | 19.68 | --- | 21.02 | --- | 22.02 | 22.41 | --- |
| MAX | 18.79 | 19.55 | 19.89 | 20.82 | 20.82 | 20.06 | 19.68 | 21.02 | 22.21 | 22.80 | 22.41 | 22.49 |
| CAL YR 1987 | LOW 19.89 | | | | | | | | | | | |
| WTR YR 1988 | LOW 22.80 | | | | | | | | | | | |



395840083495200 CL-7 OH DIV WTR EAGLE CITY RD NR SPRINGFIELD OH
 MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

COSHOCTON COUNTY

401256081525100. Local number, CS-3.

LOCATION.--Lat 40°12'56", long 81°52'51", Hydrologic Unit 05040004, 1.5 mi north of Conesville.

Owner: Universal Cyclops Corp.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 8 in., depth 110 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 745 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 2.80 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

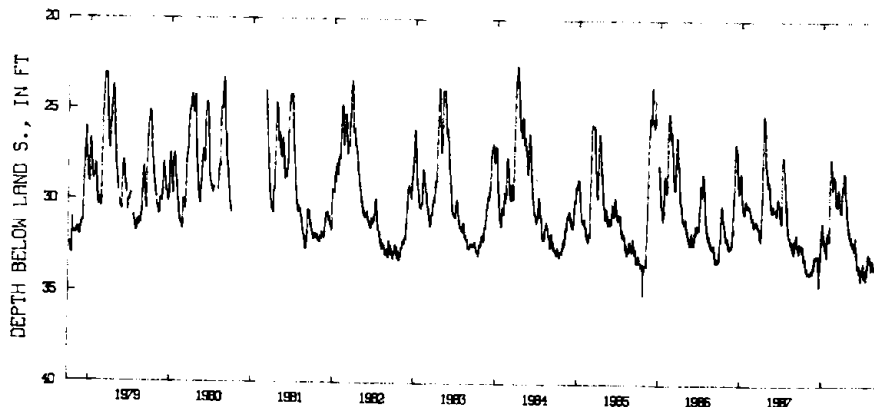
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 36.98 ft below land-surface datum, Oct. 16, 1973; minimum daily low, 21.40 ft below land-surface datum, July 10, 1969.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 32.43 | 33.75 | 33.02 | 31.23 | 32.06 | 29.55 | 29.28 | 31.48 | 32.60 | 33.85 | 32.97 | 33.56 |
| 2 | 32.65 | 33.85 | 33.04 | 31.13 | 31.85 | 29.82 | 29.04 | 31.64 | 32.76 | 33.68 | 33.05 | 33.61 |
| 3 | 32.59 | 33.89 | 33.04 | 31.12 | 31.46 | 29.99 | 29.09 | 31.75 | 32.80 | 33.38 | 33.14 | 33.56 |
| 4 | 32.44 | 33.90 | 33.00 | 31.51 | 30.23 | 30.09 | 29.26 | 31.82 | 32.93 | 33.27 | 33.21 | 33.32 |
| 5 | 32.34 | 33.91 | 32.95 | 31.69 | 29.36 | 29.97 | 29.23 | 31.89 | 32.94 | 33.68 | 33.26 | 32.93 |
| 6 | 32.55 | 33.91 | 32.90 | 31.84 | 28.75 | 29.90 | 28.92 | 31.94 | 33.53 | 34.04 | 33.17 | 32.59 |
| 7 | 32.61 | 33.82 | 32.88 | 31.92 | 28.07 | 30.15 | 28.54 | 31.94 | 33.25 | 33.90 | 33.07 | 32.46 |
| 8 | 32.77 | 33.75 | 32.91 | 32.16 | 27.58 | 30.18 | 28.36 | 31.78 | 33.36 | 33.94 | 33.15 | 32.50 |
| 9 | 32.98 | 33.86 | 32.91 | 32.21 | 27.92 | 30.15 | 28.32 | 32.03 | 33.43 | 33.87 | 33.64 | 32.53 |
| 10 | 33.09 | 33.86 | 32.92 | 31.98 | 27.83 | 30.04 | 28.41 | 32.14 | 33.50 | 33.67 | 33.19 | 32.57 |
| 11 | 32.94 | 33.87 | 32.92 | 32.14 | 28.05 | 29.76 | 28.65 | 32.15 | 33.49 | 33.78 | 33.21 | 32.63 |
| 12 | 33.03 | 33.81 | 32.89 | 32.23 | 28.28 | 29.46 | 29.04 | 32.16 | 33.34 | 33.86 | 33.23 | 32.79 |
| 13 | 33.04 | 33.81 | 32.85 | 32.31 | 28.48 | 29.25 | 29.23 | 32.21 | 33.74 | 33.75 | 33.17 | 32.93 |
| 14 | 33.11 | 33.72 | 32.85 | 32.37 | 28.59 | 29.50 | 29.43 | 32.22 | 33.50 | 33.72 | 33.08 | 32.88 |
| 15 | 33.25 | 33.64 | 32.97 | 32.42 | 28.89 | 29.64 | 29.59 | 32.05 | 33.40 | 34.18 | 33.25 | 32.89 |
| 16 | 33.28 | 33.78 | 33.66 | 32.54 | 29.25 | 29.77 | 29.71 | 32.22 | 33.52 | 33.78 | 33.40 | 32.87 |
| 17 | 33.11 | 33.83 | 33.10 | 32.58 | 29.01 | 29.88 | 29.81 | 32.30 | 33.61 | 33.52 | 33.46 | 32.90 |
| 18 | 33.04 | 33.82 | 33.59 | 32.63 | 29.05 | 29.95 | 30.01 | 32.34 | 33.61 | 33.67 | 33.50 | 32.92 |
| 19 | 33.39 | 33.71 | 34.56 | 32.64 | 29.07 | 29.95 | 30.19 | 32.34 | 33.51 | 33.90 | 33.56 | 32.98 |
| 20 | 33.59 | 33.69 | 33.08 | 32.59 | 28.97 | 30.04 | 30.36 | 32.36 | 33.65 | 33.70 | 33.59 | 33.04 |
| 21 | 33.66 | 33.57 | 33.03 | 32.91 | 28.65 | 30.18 | 30.55 | 32.26 | 34.20 | 33.55 | 33.48 | 33.16 |
| 22 | 33.47 | 33.48 | 33.68 | 32.13 | 28.50 | 30.28 | 30.71 | 32.13 | 33.82 | 33.38 | 33.40 | 33.19 |
| 23 | 33.51 | 33.54 | 33.21 | 31.81 | 28.69 | 30.37 | 30.82 | 32.18 | 33.83 | 33.13 | 33.42 | 33.25 |
| 24 | 33.62 | 33.57 | 33.06 | 31.65 | 28.65 | 30.46 | 30.90 | 32.55 | 33.81 | 32.91 | 33.48 | 33.24 |
| 25 | 33.68 | 33.58 | 32.96 | 31.62 | 28.62 | 30.53 | 31.06 | 32.35 | 33.73 | 32.81 | 33.49 | 33.25 |
| 26 | 33.78 | 33.30 | 32.65 | 32.00 | 28.70 | 30.49 | 31.19 | 32.36 | 33.59 | 32.77 | 33.43 | 33.36 |
| 27 | 33.83 | 33.08 | 32.31 | 31.85 | 28.78 | 30.15 | 31.34 | 32.40 | 33.67 | 32.78 | 33.39 | 33.43 |
| 28 | 33.83 | 32.94 | 32.05 | 31.91 | 28.93 | 29.75 | 31.47 | 32.29 | 33.84 | 33.12 | 33.39 | 33.49 |
| 29 | 33.85 | 32.94 | 31.84 | 32.01 | 29.21 | 29.51 | 31.58 | 31.90 | 33.81 | 32.87 | 33.52 | 33.50 |
| 30 | 33.88 | 33.01 | 31.65 | 32.06 | --- | 29.44 | 31.55 | 31.84 | 33.85 | 32.92 | 33.51 | 33.52 |
| 31 | 33.81 | --- | 31.39 | 32.05 | --- | 29.36 | --- | 32.49 | --- | 32.87 | 33.51 | --- |
| MAX | 33.88 | 33.91 | 34.56 | 32.91 | 32.06 | 30.53 | 31.58 | 32.55 | 34.20 | 34.18 | 33.64 | 33.61 |

CAL YR 1987 LOW 34.56

WTR YR 1988 LOW 34.56

401256081525100 CS-3
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

221

DARKE COUNTY

400514084345700. Local number, D-2.

LOCATION.--Lat 40°05'14", long 84°34'57", Hydrologic Unit 05080001, State Route 571, 3 mi east of Greenville.

Owner: Greenville Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water table well, diameter 6 in., depth 70 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 1038 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 4.00 ft above land-surface datum.

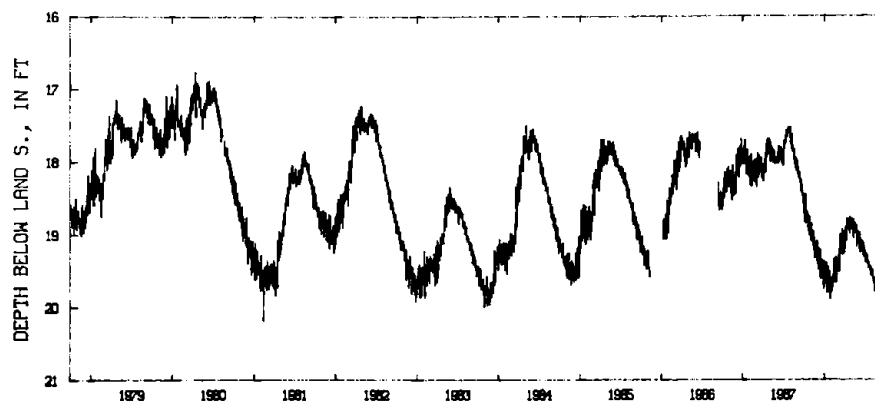
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--August 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 20.43 ft below land-surface datum, Nov. 29, 1977; minimum daily low, 16.76 ft below land-surface datum, Apr. 14, 1980.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 18.47 | 19.00 | 19.32 | 19.68 | 19.65 | 19.47 | 19.21 | 18.90 | 18.98 | 19.33 | 19.55 | 19.92 |
| 2 | 18.55 | 18.95 | 19.41 | 19.67 | 19.65 | 19.41 | 18.97 | 18.93 | 19.01 | 19.33 | 19.58 | 19.95 |
| 3 | 18.61 | 18.91 | 19.27 | 19.46 | 19.80 | 19.41 | 18.96 | 18.85 | 19.08 | 19.32 | 19.57 | 19.90 |
| 4 | 18.76 | 18.87 | 19.49 | 19.62 | 19.73 | 19.31 | 18.93 | 18.81 | 19.15 | 19.39 | 19.54 | 19.92 |
| 5 | 18.84 | 19.10 | 19.43 | 19.69 | 19.72 | 19.32 | 18.99 | 18.85 | 19.11 | 19.40 | 19.51 | 19.85 |
| 6 | 18.67 | 19.11 | 19.42 | 19.62 | 19.73 | 19.50 | 18.92 | 18.89 | 19.05 | 19.38 | 19.58 | 19.85 |
| 7 | 18.46 | 18.98 | 19.34 | 19.58 | 19.73 | 19.52 | 19.01 | 18.93 | 18.99 | 19.34 | 19.62 | 19.84 |
| 8 | 18.65 | 18.97 | 19.28 | 19.40 | 19.66 | 19.23 | 19.11 | 18.81 | 19.07 | 19.34 | 19.61 | 19.87 |
| 9 | 18.86 | 19.12 | 19.33 | 19.55 | 19.58 | 19.33 | 19.03 | 18.81 | 19.21 | 19.29 | 19.61 | 19.96 |
| 10 | 18.78 | 19.11 | 19.35 | 19.66 | 19.60 | 19.23 | 18.91 | 18.97 | 19.26 | 19.32 | 19.65 | --- |
| 11 | 18.82 | 19.06 | 19.21 | 19.56 | 19.62 | 19.05 | 18.79 | 19.06 | 19.19 | 19.37 | 19.68 | --- |
| 12 | 18.74 | 18.97 | 19.47 | 19.41 | 19.62 | 19.19 | 18.81 | 18.97 | 19.17 | 19.38 | 19.67 | --- |
| 13 | 18.69 | 19.02 | 19.61 | 19.80 | 19.35 | 19.22 | 18.86 | 18.92 | 19.21 | 19.38 | 19.67 | --- |
| 14 | 18.79 | 19.17 | 19.56 | 19.81 | 19.50 | 19.01 | 18.87 | 18.94 | 19.24 | 19.38 | 19.64 | --- |
| 15 | 18.79 | 19.23 | 19.43 | 19.55 | 19.57 | 19.18 | 18.93 | 18.86 | 19.13 | 19.43 | 19.72 | --- |
| 16 | 18.76 | 19.08 | 19.62 | 19.47 | 19.53 | 19.12 | 18.93 | 18.86 | 19.10 | 19.40 | 19.80 | --- |
| 17 | 18.72 | 19.07 | 19.62 | 19.51 | 19.61 | 19.28 | 18.81 | 18.98 | 19.12 | 19.47 | 19.79 | --- |
| 18 | 18.81 | 19.34 | 19.55 | 19.74 | 19.67 | 19.26 | 18.81 | 18.99 | 19.19 | 19.41 | 19.67 | --- |
| 19 | 18.74 | 19.31 | 19.36 | 19.72 | 19.63 | 19.23 | 18.87 | 18.88 | 19.19 | 19.44 | 19.68 | --- |
| 20 | 18.82 | 19.19 | 19.58 | 19.64 | 19.59 | 19.03 | 18.87 | 18.92 | 19.18 | 19.44 | 19.72 | --- |
| 21 | 18.93 | 19.29 | 19.58 | 19.78 | 19.33 | 18.95 | 18.86 | 18.94 | 19.15 | 19.45 | 19.80 | --- |
| 22 | 18.93 | 19.17 | 19.45 | 19.75 | 19.66 | 19.25 | 18.80 | 18.93 | 19.13 | 19.45 | 19.79 | --- |
| 23 | 18.89 | 19.25 | 19.60 | 19.52 | 19.67 | 19.29 | 18.83 | 18.89 | 19.29 | 19.46 | 19.86 | --- |
| 24 | 19.01 | 19.34 | 19.44 | 19.78 | 19.35 | 19.17 | 19.00 | 19.00 | 19.29 | 19.50 | 19.83 | --- |
| 25 | 19.01 | 19.22 | 19.53 | 19.78 | 19.57 | 18.98 | 18.94 | 19.18 | 19.18 | 19.46 | 19.82 | --- |
| 26 | 18.78 | 19.32 | 19.63 | 19.71 | 19.56 | 19.03 | 18.78 | 19.08 | 19.28 | 19.48 | 19.83 | --- |
| 27 | 18.92 | 19.21 | 19.54 | 19.89 | 19.44 | 19.01 | 18.81 | 19.03 | 19.31 | 19.54 | 19.83 | --- |
| 28 | 18.93 | 19.12 | 19.38 | 19.89 | 19.42 | 19.10 | 18.90 | 19.04 | 19.22 | 19.57 | 19.83 | --- |
| 29 | 18.94 | 19.11 | 19.77 | 19.80 | 19.51 | 19.21 | 18.89 | 19.03 | 19.25 | 19.54 | 19.79 | --- |
| 30 | 19.00 | 19.13 | 19.71 | 19.67 | --- | 19.15 | 18.94 | 19.08 | 19.25 | 19.48 | 19.68 | --- |
| 31 | 19.10 | --- | 19.51 | 19.62 | --- | 19.26 | --- | 19.06 | --- | 19.52 | 19.62 | --- |
| MAX | 19.10 | 19.34 | 19.77 | 19.89 | 19.80 | 19.52 | 19.21 | 19.18 | 19.31 | 19.57 | 19.86 | 19.96 |
| CAL YR 1987 | LOW 19.77 | | | | | | | | | | | |
| WTR YR 1988 | LOW 19.96 | | | | | | | | | | | |



----- 400514084345700 D-2
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

DELAWARE COUNTY

402126083040400. Local number, DL-3.

LOCATION.--Lat 40°21'26", long 83°04'04", Hydrologic Unit 05060001, east bank of Olentangy River at toe of Delaware dam.

Owner: U.S. Army Corps of Engineers.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in., depth 135 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 900 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 2.60 ft above land-surface datum.

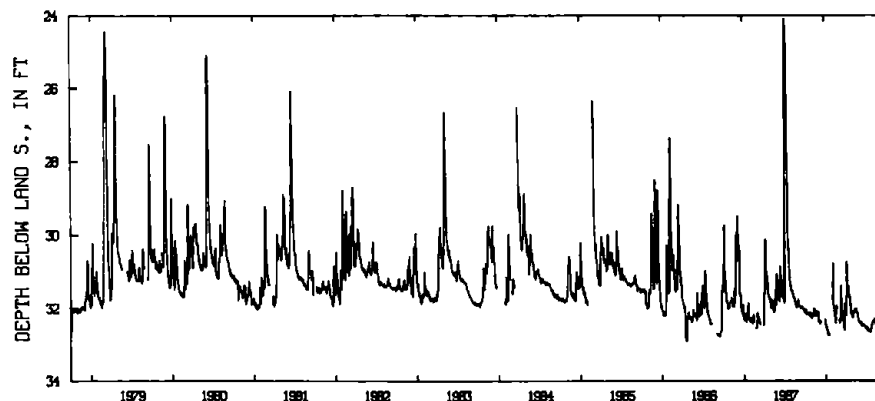
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--October 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 37.04 ft below land-surface datum, Nov. 1, 1948, Dec. 2, 3, 1948; minimum daily low, 20.43 ft below land-surface datum, Jan. 27, 1959.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 32.08 | 32.28 | 32.32 | 32.48 | --- | --- | 32.17 | 32.27 | 32.39 | 32.57 | 32.34 | 32.53 |
| 2 | 32.10 | 32.25 | 32.40 | 32.48 | 31.77 | 32.32 | 32.20 | 32.25 | 32.40 | 32.54 | 32.35 | 32.52 |
| 3 | 32.16 | 32.20 | 32.39 | 32.46 | 31.40 | 32.32 | 32.20 | 32.18 | 32.41 | 32.53 | 32.35 | 32.47 |
| 4 | 32.15 | 32.16 | 32.42 | 32.51 | 30.79 | 32.41 | 31.79 | 32.13 | 32.43 | 32.56 | 32.33 | 32.29 |
| 5 | 32.10 | 32.25 | 32.41 | 32.57 | 31.37 | 32.42 | 30.75 | 32.10 | 32.43 | 32.60 | 32.32 | 32.35 |
| 6 | 32.06 | 32.25 | 32.43 | 32.58 | 31.94 | 32.36 | 30.90 | 32.11 | 32.42 | 32.62 | 32.30 | 32.39 |
| 7 | 32.07 | 32.24 | 32.44 | 32.61 | 31.95 | 32.36 | 31.21 | 32.12 | 32.40 | 32.63 | 32.30 | 32.42 |
| 8 | 32.17 | 32.21 | 32.41 | 32.60 | 32.04 | 32.30 | 31.40 | 32.09 | 32.39 | 32.63 | 32.32 | 32.41 |
| 9 | 32.17 | 32.21 | 32.39 | 32.65 | 32.06 | 31.85 | 31.45 | 32.05 | 32.46 | 32.59 | 32.37 | 32.41 |
| 10 | 32.20 | 32.11 | 32.40 | 32.70 | 32.13 | 31.41 | 31.44 | 32.07 | 32.50 | 32.60 | 32.38 | 32.45 |
| 11 | 32.16 | 32.06 | 32.37 | 32.69 | 32.15 | 31.72 | 31.41 | 32.13 | 32.48 | 32.61 | 32.42 | 32.45 |
| 12 | 32.15 | 32.03 | --- | 32.67 | 32.29 | 31.75 | 31.43 | 32.13 | 32.47 | 32.62 | 32.45 | 32.45 |
| 13 | 32.16 | 32.05 | --- | 32.73 | 32.40 | 31.84 | 31.47 | 32.10 | 32.50 | 32.63 | 32.49 | 32.39 |
| 14 | 32.18 | 32.11 | --- | 32.76 | 32.39 | 32.23 | 31.53 | 32.11 | 32.50 | 32.61 | 32.50 | 32.40 |
| 15 | 32.17 | 32.20 | --- | 32.75 | 32.37 | 32.26 | 31.67 | 32.07 | 32.50 | 32.64 | 32.50 | 32.44 |
| 16 | 32.17 | 32.20 | --- | 32.71 | 32.42 | 32.29 | 31.73 | 32.03 | 32.47 | 32.63 | 32.55 | 32.45 |
| 17 | 32.13 | 32.10 | --- | 32.72 | 32.06 | 32.32 | 31.71 | 32.11 | 32.45 | 32.63 | 32.54 | 32.42 |
| 18 | 32.17 | 32.17 | --- | 32.73 | 32.08 | 32.29 | 31.70 | 32.12 | 32.47 | 32.64 | 32.53 | 32.36 |
| 19 | 32.16 | 32.18 | --- | 32.76 | 31.96 | 32.29 | 31.75 | 32.11 | 32.48 | 32.66 | 32.54 | 32.35 |
| 20 | 32.14 | 32.10 | --- | --- | --- | 32.40 | 31.77 | 32.11 | 32.48 | 32.61 | 32.53 | 32.33 |
| 21 | 32.18 | 32.18 | --- | --- | --- | 32.41 | 31.90 | 32.13 | 32.49 | 32.59 | 32.54 | 32.41 |
| 22 | 32.22 | 32.18 | --- | --- | --- | 32.38 | 31.99 | 32.15 | 32.48 | 32.47 | 32.57 | 32.38 |
| 23 | 32.20 | 32.16 | --- | --- | --- | 32.56 | 31.99 | 32.16 | 32.51 | 32.47 | 32.59 | 32.37 |
| 24 | 32.22 | 32.23 | --- | --- | --- | 32.61 | 32.14 | 32.19 | 32.53 | 32.47 | 32.55 | 32.41 |
| 25 | 32.25 | 32.21 | --- | --- | --- | 32.60 | 32.18 | 32.30 | 32.51 | 32.47 | 32.53 | --- |
| 26 | 32.23 | 32.19 | --- | --- | --- | 32.31 | 32.15 | 32.33 | 32.52 | 32.46 | 32.56 | --- |
| 27 | 32.15 | 32.18 | --- | --- | --- | 31.96 | 32.15 | 32.35 | 32.55 | 32.41 | 32.58 | --- |
| 28 | 32.17 | 32.16 | --- | --- | --- | 32.04 | 32.20 | 32.35 | 32.53 | 32.42 | 32.57 | --- |
| 29 | 32.20 | 32.12 | --- | --- | --- | 31.88 | 32.21 | 32.37 | 32.55 | 32.42 | 32.58 | --- |
| 30 | 32.20 | 32.14 | 32.33 | --- | --- | 31.93 | 32.19 | 32.40 | 32.56 | 32.37 | --- | 32.45 |
| 31 | 32.28 | --- | 32.40 | --- | --- | 31.93 | --- | 32.41 | --- | 32.37 | 32.53 | --- |
| MAX | 32.28 | 32.28 | 32.44 | 32.76 | 32.42 | 32.61 | 32.21 | 32.41 | 32.56 | 32.66 | 32.59 | 32.53 |
| CAL YR 1987 | LOW 32.57 | | | | | | | | | | | |
| WTR YR 1988 | LOW 32.76 | | | | | | | | | | | |



402126083040400 DL-3
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

223

FAIRFIELD COUNTY

393450082403600. Local number, F-7.

LOCATION.--Lat 39°34'50", long 82°40'36", Hydrologic Unit 05030204, southeast of Amanda.

Owner: Pine Grove Springs Water Co. Inc.

AQUIFER.--Sandstone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 5 in., depth 120 ft, cased to 31 ft.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 980 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 0.60 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

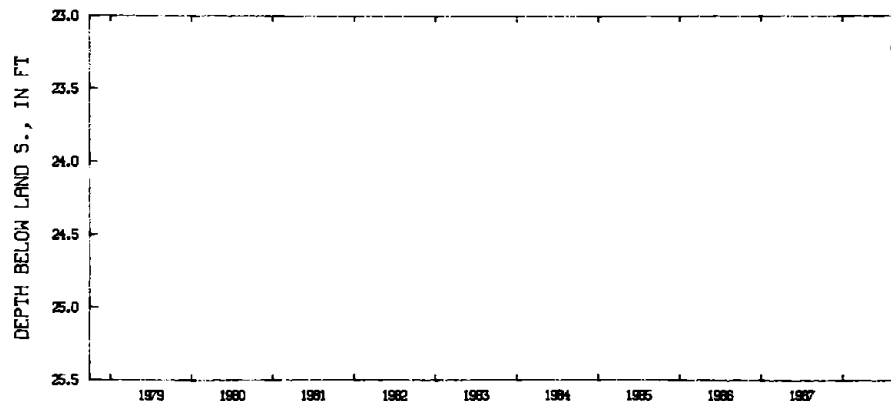
PERIOD OF RECORD.--August 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 25.36 ft below land-surface datum, Sept. 20, 1988; minimum daily low, 23.21 ft below land-surface datum, Aug. 11, 1988.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------|
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.40 |
| 2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.40 |
| 3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.40 |
| 4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.27 |
| 5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.35 |
| 6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.40 |
| 7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.43 |
| 8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.49 |
| 9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.69 |
| 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.22 | 23.78 |
| 11 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.21 | 23.64 |
| 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.23 | 23.55 |
| 13 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.23 | 23.44 |
| 14 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.23 | 23.47 |
| 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.25 | 23.53 |
| 16 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.25 | 23.53 |
| 17 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.25 | 23.51 |
| 18 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 24.09 | 23.50 |
| 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.55 | 24.00 |
| 20 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.38 | 25.36 |
| 21 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.35 | 24.60 |
| 22 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 24.17 | 23.90 |
| 23 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.94 | 24.10 |
| 24 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 24.05 | 23.70 |
| 25 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.93 | 23.64 |
| 26 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.50 | 24.48 |
| 27 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.43 | 24.70 |
| 28 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.40 | 24.32 |
| 29 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.39 | 24.17 |
| 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.37 | 24.26 |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 23.39 | --- |
| MAX | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 24.17 | 25.36 |

WTR YR 1988 LOW 25.36



393450082403600 F-7 P65 WTR CO NR AMANDA OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT), DEPTH TO WATER BL. LSD

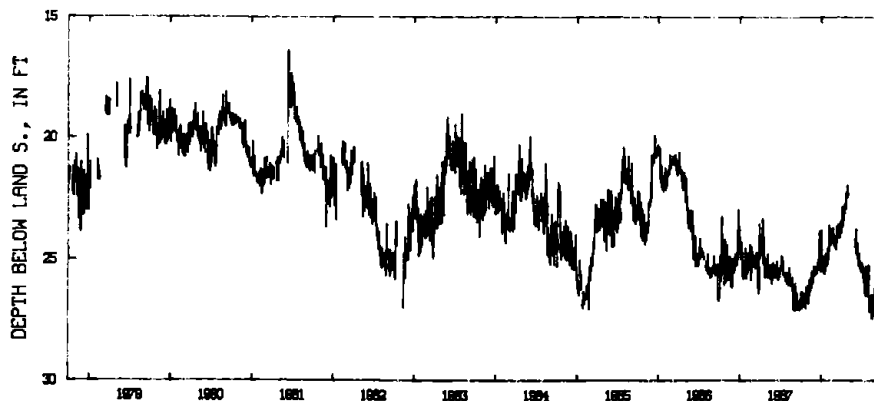
GROUND-WATER RECORDS
FAIRFIELD COUNTY--Continued

394257082362900. Local number, F-6.
LOCATION.--Lat 39°42'57", long 82°36'29", Hydrologic Unit 05030204, near Hocking River in well field at Lancaster.
Owner: Lancaster Water Department.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled unused water table well, diameter 12 in., depth 108 ft, cased.
INSTRUMENTATION.--Type F continuous recorder.
DATUM.--Elevation of land-surface datum is 820 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.
PERIOD OF RECORD.--June 1978 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 27.45 ft below land-surface datum, Aug. 17, 1988;
minimum daily low, 16.40 ft below land-surface datum, June 25, 1981.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 26.85 | 26.55 | 25.35 | 23.80 | 25.00 | 24.30 | 23.55 | --- | 24.50 | 25.30 | 25.30 | 26.30 |
| 2 | 26.70 | 26.75 | 25.55 | 24.70 | 24.90 | 24.20 | 23.30 | --- | 24.50 | 25.20 | 27.00 | 26.45 |
| 3 | 26.85 | 26.20 | 25.65 | 25.40 | 24.65 | 24.25 | 22.85 | --- | 24.25 | 25.25 | 26.60 | 26.80 |
| 4 | 26.35 | 26.85 | 25.40 | 24.75 | 24.60 | 24.25 | 23.55 | --- | 24.00 | 25.30 | 27.15 | 25.10 |
| 5 | 26.60 | 26.55 | 25.65 | --- | 24.25 | 24.25 | 23.65 | --- | 23.75 | 25.45 | 26.55 | 25.85 |
| 6 | 26.80 | 26.55 | 25.35 | 25.40 | 23.60 | 24.10 | 23.50 | --- | 24.20 | 25.65 | 26.65 | 25.70 |
| 7 | 27.00 | 26.15 | 25.55 | 25.20 | 24.25 | 24.60 | 23.50 | --- | 24.60 | 25.70 | 26.50 | 26.40 |
| 8 | 26.85 | 26.05 | 25.60 | 25.50 | 24.35 | 24.05 | 23.30 | --- | 24.80 | 25.75 | 26.60 | 26.00 |
| 9 | 26.95 | 25.85 | 25.55 | 25.15 | 24.35 | 24.30 | 23.05 | --- | 24.55 | 25.65 | 26.75 | 26.80 |
| 10 | 26.60 | 26.30 | 25.45 | 25.10 | 24.30 | 24.10 | 23.10 | --- | 24.50 | 25.50 | 26.50 | 26.50 |
| 11 | 26.40 | 26.05 | 25.50 | 25.45 | 24.40 | 24.20 | 23.10 | --- | 24.35 | 25.55 | 27.10 | 26.25 |
| 12 | 26.50 | 26.30 | 25.55 | 25.50 | 24.30 | 24.10 | 23.00 | --- | 24.50 | 25.95 | 27.10 | 26.80 |
| 13 | 26.70 | 26.30 | 25.35 | 25.55 | 24.05 | 23.60 | 22.85 | --- | 24.75 | 25.55 | 26.85 | 26.55 |
| 14 | 26.50 | 26.15 | 25.35 | 25.60 | 24.05 | 23.95 | 23.10 | --- | 25.05 | 26.40 | 26.45 | 26.45 |
| 15 | 26.55 | 25.80 | 25.20 | 25.55 | 24.15 | 24.05 | 23.05 | --- | 25.15 | 25.45 | 26.55 | 26.30 |
| 16 | 26.65 | 26.05 | 25.30 | 25.30 | 24.00 | 23.90 | 22.70 | --- | 25.25 | 25.55 | 27.25 | 25.95 |
| 17 | 26.70 | 26.15 | 25.15 | 24.85 | 24.10 | 23.95 | 22.70 | --- | 24.75 | 25.40 | 27.45 | 26.20 |
| 18 | 26.60 | 25.85 | 25.25 | 25.50 | 24.05 | 23.80 | 22.90 | --- | 25.05 | 25.45 | 27.00 | 26.25 |
| 19 | 26.70 | 25.70 | 25.15 | 25.00 | 23.75 | 23.55 | 22.90 | --- | 25.05 | 26.50 | 26.85 | 25.95 |
| 20 | 26.85 | 25.50 | 25.00 | 25.40 | 23.95 | 23.80 | 22.75 | --- | 25.20 | 25.30 | 26.55 | 26.00 |
| 21 | 27.00 | 26.00 | 25.40 | 25.15 | 23.70 | 23.65 | 22.85 | --- | 25.20 | 26.20 | 26.95 | 26.60 |
| 22 | 26.80 | 26.00 | 25.05 | 25.15 | 23.85 | 24.10 | 22.30 | --- | 25.30 | 26.35 | 26.90 | 26.15 |
| 23 | 27.00 | 25.95 | 25.20 | 24.90 | 24.00 | 24.00 | 22.25 | --- | 25.35 | 25.90 | 26.90 | 26.00 |
| 24 | 26.15 | 25.90 | 25.05 | 24.75 | 23.95 | 24.00 | 22.45 | --- | 25.10 | 25.90 | 26.90 | 26.15 |
| 25 | 26.45 | 25.80 | 23.85 | 24.90 | 24.25 | 23.80 | 22.45 | --- | 25.20 | 26.00 | 27.30 | 26.15 |
| 26 | 26.60 | 25.65 | 24.85 | --- | 24.40 | 23.70 | 22.40 | --- | 25.15 | 25.80 | 27.00 | 26.30 |
| 27 | 26.35 | 25.55 | 25.20 | 25.15 | 24.35 | 23.55 | 21.95 | --- | 25.45 | 26.50 | 26.50 | 26.10 |
| 28 | 26.35 | 25.65 | 25.30 | 25.25 | 24.30 | 23.45 | 22.35 | --- | 25.40 | 25.95 | 26.20 | 26.30 |
| 29 | 26.45 | 25.30 | 25.50 | 24.90 | 24.45 | 23.65 | 22.30 | --- | 25.50 | 25.80 | 26.60 | 25.40 |
| 30 | 26.70 | 25.55 | 25.35 | 24.90 | --- | 23.90 | 22.35 | --- | 25.15 | 25.30 | 26.90 | 26.25 |
| 31 | 26.10 | --- | 25.20 | 24.55 | --- | 23.60 | --- | 24.20 | --- | 25.25 | 26.85 | --- |
| MAX | 27.00 | 26.85 | 25.65 | 25.60 | 25.00 | 24.60 | 23.65 | 24.20 | 25.50 | 26.50 | 27.45 | 26.80 |

CAL YR 1987 LOW 27.10
WTR YR 1988 LOW 27.45



394257082362900 F-6
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

225

FAIRFIELD COUNTY--Continued

394544082271000. Local number, F-1.

LOCATION.--Lat 39°45'44", long 82°27'10", Hydrologic Unit 05030204, near the west edge of West Rushville.

Owner: State of Ohio.

AQUIFER.--Sandstone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 84 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 980 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 8.02 ft above land-surface datum.

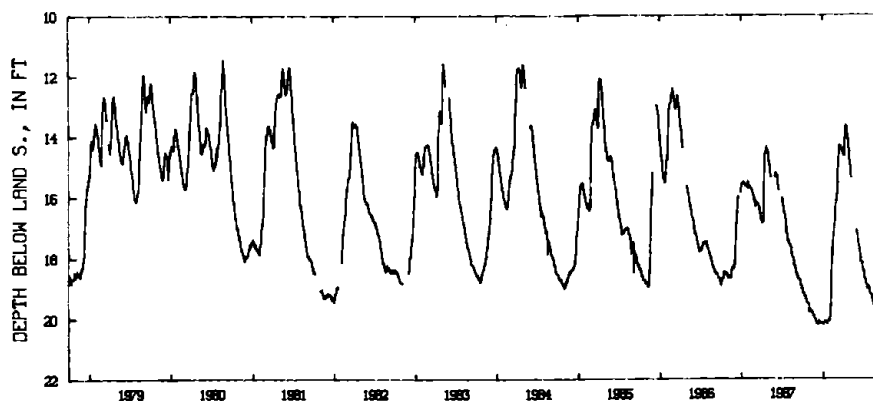
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 20.22 ft below land-surface datum, Jan. 2-3, 1988; minimum daily low, 7.27 ft below land-surface datum, May 5-6, 1962.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 19.04 | 19.79 | 20.18 | 20.20 | 20.01 | 16.10 | 14.63 | 14.91 | 17.20 | 18.43 | 19.20 | 19.88 |
| 2 | 19.12 | 19.78 | 20.20 | 20.22 | 19.96 | 16.07 | 14.64 | 14.98 | 17.23 | 18.50 | 19.21 | 19.88 |
| 3 | 19.21 | 19.73 | 20.20 | 20.22 | 19.90 | 16.04 | 14.63 | 15.02 | 17.24 | 18.50 | 19.24 | 19.88 |
| 4 | 19.21 | 19.73 | 20.17 | 20.16 | 19.61 | 15.92 | 14.65 | 15.04 | 17.33 | 18.62 | 19.24 | 19.75 |
| 5 | 19.18 | 19.73 | 20.19 | 20.16 | 19.36 | 15.82 | 14.65 | 15.16 | 17.33 | 18.69 | 19.24 | 19.76 |
| 6 | 19.18 | 19.77 | 20.20 | 20.15 | 19.13 | 15.73 | 14.42 | 15.28 | 17.47 | 18.70 | 19.24 | 19.84 |
| 7 | 19.18 | 19.77 | 20.20 | 20.15 | 18.90 | 15.53 | 14.27 | 15.37 | 17.49 | 18.70 | 19.29 | 19.87 |
| 8 | 19.20 | 19.78 | 20.20 | 20.15 | 18.56 | 15.24 | 14.14 | --- | 17.55 | 18.73 | 19.37 | 19.86 |
| 9 | 19.25 | 19.78 | 20.19 | 20.11 | 18.34 | 15.00 | 13.99 | --- | 17.58 | 18.74 | 19.38 | 19.87 |
| 10 | 19.30 | 19.84 | 20.19 | 20.11 | 18.16 | 14.75 | 13.83 | --- | 17.64 | 18.77 | 19.42 | 19.88 |
| 11 | 19.30 | 19.84 | 20.13 | 20.13 | 17.95 | 14.70 | 13.73 | --- | 17.70 | 18.77 | 19.45 | 19.88 |
| 12 | 19.30 | 19.84 | 20.10 | 20.13 | 17.73 | 14.57 | 13.67 | --- | 17.73 | 18.77 | 19.52 | 19.88 |
| 13 | 19.30 | 19.78 | 20.20 | 20.16 | 17.62 | 14.42 | 13.65 | --- | 17.76 | 18.89 | 19.56 | 19.86 |
| 14 | 19.30 | 19.84 | 20.20 | 20.16 | 17.55 | 14.42 | 13.64 | --- | 17.79 | 18.90 | 19.57 | 20.06 |
| 15 | 19.40 | 19.84 | 20.19 | 20.16 | 17.36 | 14.32 | 13.64 | --- | 17.90 | 18.91 | 19.58 | 20.05 |
| 16 | 19.40 | 19.90 | 20.15 | 20.19 | 17.32 | 14.41 | 13.69 | --- | 17.92 | 18.94 | 19.58 | 20.02 |
| 17 | 19.40 | 19.90 | 20.17 | 20.19 | 17.30 | 14.39 | 13.71 | --- | 18.01 | 18.98 | 19.60 | 20.02 |
| 18 | 19.40 | 19.95 | 20.18 | 20.19 | 17.24 | 14.39 | 13.72 | --- | 18.15 | 19.04 | 19.64 | 19.96 |
| 19 | 19.50 | 19.95 | 20.18 | 20.19 | 17.18 | 14.32 | 13.84 | --- | 18.15 | 19.04 | 19.63 | 19.96 |
| 20 | 19.50 | 19.95 | 20.18 | 20.15 | 16.98 | 14.39 | 13.96 | --- | 18.17 | 19.03 | 19.63 | 19.96 |
| 21 | 19.50 | 19.94 | 20.18 | 20.13 | 16.92 | 14.42 | 14.00 | --- | 18.17 | 18.99 | 19.75 | 20.02 |
| 22 | 19.50 | 19.94 | 20.18 | 20.13 | 16.79 | 14.42 | 14.08 | --- | 18.16 | 18.95 | 19.77 | 20.02 |
| 23 | 19.50 | 19.95 | 20.19 | 20.10 | 16.69 | 14.42 | 14.13 | --- | 18.15 | 18.96 | 19.67 | 20.00 |
| 24 | 19.53 | 20.02 | 20.19 | 20.07 | 16.63 | 14.45 | 14.24 | --- | 18.18 | 18.96 | 19.67 | 20.02 |
| 25 | 19.53 | 20.06 | 20.19 | 20.08 | 16.49 | 14.44 | 14.25 | --- | 18.19 | 19.01 | 19.73 | 20.04 |
| 26 | 19.53 | 20.07 | 20.19 | 20.07 | 16.40 | 14.43 | 14.41 | --- | 18.19 | 19.01 | 19.79 | 20.05 |
| 27 | 19.53 | 20.08 | 20.19 | 20.08 | 16.25 | 14.50 | 14.48 | --- | 18.35 | 19.12 | 19.85 | 20.06 |
| 28 | 19.53 | 20.09 | 20.19 | 20.12 | 16.24 | 14.50 | 14.55 | --- | 18.40 | 19.16 | 19.83 | 20.08 |
| 29 | 19.81 | 20.10 | 20.19 | 20.11 | 16.16 | 14.56 | 14.67 | --- | 18.44 | 19.16 | 19.80 | 20.10 |
| 30 | 19.81 | 20.17 | 20.19 | 20.08 | --- | 14.56 | 14.78 | --- | 18.44 | 19.21 | 19.79 | 20.12 |
| 31 | 19.80 | --- | 20.19 | 20.05 | --- | 14.58 | --- | 17.11 | --- | 19.21 | 19.88 | --- |
| MAX | 19.81 | 20.17 | 20.20 | 20.22 | 20.01 | 16.10 | 14.78 | 17.11 | 18.44 | 19.21 | 19.88 | 20.12 |

CAL YR 1987 LOW 20.20
WTR YR 1988 LOW 20.22— 394544082271000 F-1
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

FAIRFIELD COUNTY--Continued

395053082361900. Local number, F-5.

LOCATION.--Lat 39°50'53", long 82°36'19", Hydrologic Unit 05060001, Gaylord Paper Co., Baltimore.

Owner: Crown Zellerbach - Gaylord Paper Division.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in., depth 180 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 850 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.5 ft above land-surface datum.

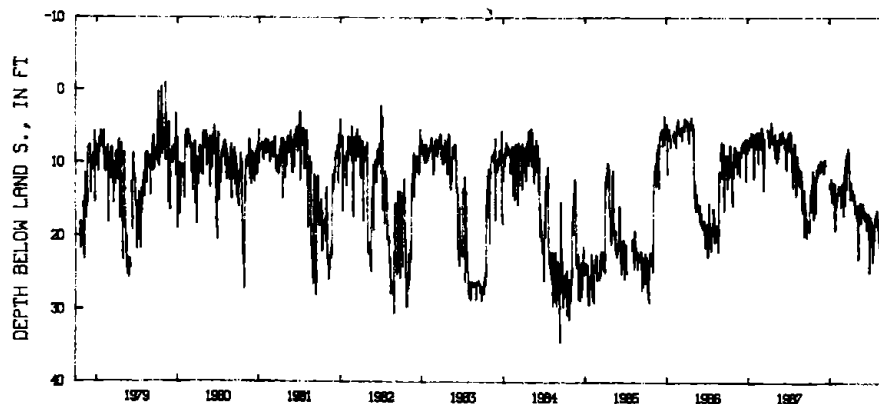
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--June 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 34.50 ft below land-surface datum, Sept. 13, 1984; minimum daily low, 0.98 ft above land-surface datum, Nov. 7, 1979.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 19.30 | 11.90 | 10.20 | 12.90 | 15.80 | 13.70 | 12.90 | 16.90 | 16.70 | 17.30 | 16.70 | 22.30 |
| 2 | 19.30 | 12.30 | 10.20 | 13.40 | 14.30 | 13.60 | 13.80 | 16.00 | 16.80 | 19.60 | 18.10 | 22.60 |
| 3 | 18.80 | 12.50 | 10.40 | 13.40 | 14.60 | 14.60 | 14.90 | 17.40 | 17.40 | 17.40 | 18.00 | 19.00 |
| 4 | 18.70 | 11.70 | 11.10 | 12.90 | 14.80 | 14.80 | 12.50 | 16.60 | 16.70 | 18.60 | 18.90 | 18.70 |
| 5 | 19.30 | 11.70 | 10.20 | 13.20 | 15.00 | 17.20 | 13.20 | 17.80 | 17.20 | 17.80 | 17.60 | 18.60 |
| 6 | 15.50 | 11.40 | 10.90 | 12.80 | 14.00 | 13.30 | 12.80 | 15.60 | 16.40 | 18.30 | 18.50 | 22.00 |
| 7 | 14.70 | 10.80 | 11.40 | 12.70 | 14.00 | 11.80 | 12.70 | 18.90 | 17.10 | 18.40 | 17.70 | 18.90 |
| 8 | 15.00 | 11.10 | 10.60 | 13.40 | 13.90 | 12.00 | 13.70 | 19.00 | 17.80 | 18.10 | 18.60 | 18.60 |
| 9 | 14.30 | 11.90 | 10.30 | 12.10 | 14.10 | 11.20 | 14.90 | 23.10 | 17.10 | 19.70 | 20.70 | 17.60 |
| 10 | 14.40 | 11.50 | 10.50 | 12.60 | 14.20 | 15.70 | 14.40 | 20.20 | 17.20 | 20.20 | 18.90 | 19.40 |
| 11 | 13.60 | 10.90 | 10.00 | 14.00 | 13.90 | 11.40 | 14.00 | 17.50 | 16.70 | 23.50 | 18.60 | 18.80 |
| 12 | 14.40 | 10.60 | 9.50 | 15.20 | 13.00 | 10.60 | 14.20 | 17.10 | 17.50 | 23.30 | 21.40 | 18.10 |
| 13 | 14.20 | 11.00 | 9.70 | 12.90 | 13.10 | 10.30 | 14.10 | 16.10 | 17.40 | 19.60 | 21.00 | 21.60 |
| 14 | 16.60 | 10.10 | 10.30 | 14.00 | 13.40 | 10.90 | 13.70 | 15.90 | 17.60 | 18.40 | 21.40 | 22.10 |
| 15 | 14.30 | 10.30 | --- | 14.30 | 14.00 | 9.40 | 14.00 | 16.00 | 18.80 | 22.40 | 22.40 | 28.30 |
| 16 | 13.00 | 11.20 | --- | 12.80 | 13.70 | 9.30 | 15.00 | 17.00 | 19.00 | 19.30 | 24.10 | 22.70 |
| 17 | 12.70 | 11.00 | --- | 14.20 | 13.40 | 13.60 | 14.10 | 16.00 | 18.20 | 19.50 | 25.00 | 19.00 |
| 18 | 12.90 | 10.40 | --- | 14.90 | 13.20 | 9.80 | 14.50 | 15.40 | 17.40 | 20.00 | 21.10 | 17.60 |
| 19 | 14.70 | 10.60 | --- | 13.30 | 13.20 | 8.80 | 14.30 | 18.10 | 17.50 | 20.50 | 18.80 | 17.80 |
| 20 | 11.10 | 10.60 | --- | 15.50 | 13.10 | 9.00 | 14.50 | 16.80 | 17.70 | 20.20 | 21.20 | 17.80 |
| 21 | 14.00 | 11.20 | --- | 14.70 | 13.10 | 9.10 | 14.90 | 18.10 | 18.20 | 18.80 | 23.20 | 17.30 |
| 22 | 17.60 | 9.90 | --- | 13.50 | 15.90 | 8.80 | 14.70 | 16.20 | 17.40 | 18.00 | 20.50 | 18.10 |
| 23 | 17.10 | 10.20 | --- | 12.70 | 15.30 | 8.60 | 15.40 | 16.40 | 16.90 | 17.40 | 19.00 | 17.70 |
| 24 | 16.60 | 9.70 | --- | 13.00 | 13.30 | 8.60 | 15.80 | 15.80 | 17.20 | 18.40 | 18.00 | 16.60 |
| 25 | 15.00 | 9.80 | --- | 19.20 | 13.10 | 8.00 | 16.70 | 16.00 | 20.00 | 17.00 | 18.70 | 17.80 |
| 26 | 14.40 | 9.80 | --- | 18.60 | 13.50 | 8.70 | 16.60 | 16.60 | 20.10 | 17.20 | 22.40 | 18.60 |
| 27 | 13.20 | 9.70 | --- | 18.90 | 12.80 | 9.20 | 16.80 | 16.20 | 24.90 | 17.00 | 23.00 | 17.05 |
| 28 | 12.10 | 11.00 | --- | 17.20 | 13.20 | 9.30 | 16.20 | 15.80 | 19.80 | 17.10 | 20.30 | 17.05 |
| 29 | 15.40 | 10.20 | --- | 15.90 | 13.50 | 11.00 | 16.60 | 15.50 | 17.70 | 16.90 | 20.60 | 17.50 |
| 30 | 16.80 | 10.70 | --- | 15.50 | --- | 10.90 | 16.00 | 15.70 | 17.60 | 17.40 | 24.90 | 17.20 |
| 31 | 12.80 | --- | 13.30 | 15.00 | --- | 13.50 | --- | 16.00 | --- | 16.40 | 21.90 | --- |
| MAX | 19.30 | 12.50 | 13.30 | 19.20 | 15.90 | 17.20 | 16.80 | 23.10 | 24.90 | 23.50 | 25.00 | 28.30 |
| CAL YR 1987 | LOW 20.10 | | | | | | | | | | | |
| WTR YR 1988 | LOW 28.30 | | | | | | | | | | | |



— 395053082361900 F-5
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

227

FAYETTE COUNTY

393153083322000. Local number, FA-1.

LOCATION.--Lat 39°31'53", long 83°32'20", Hydrologic Unit 05060003, Burnett-Perill Road about 6 mi west of Washington Court House.

Owner: Martha Slagle.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 5 in., depth 78 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 1010 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.30 ft above land-surface datum.

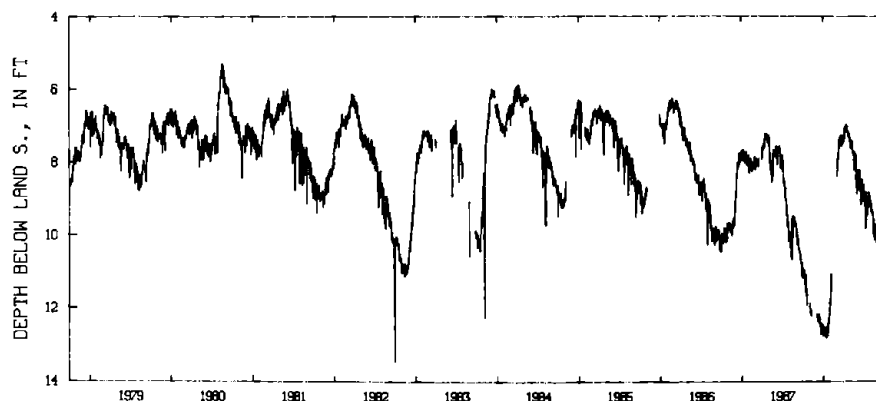
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 13.45 ft below land-surface datum, Sep. 30 1982; minimum daily low, 3.26 ft below land-surface datum, Apr. 28, 1964.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|------|------|------|------|------|-------|-------|
| 1 | 11.05 | 11.85 | --- | 12.65 | 11.75 | --- | 7.30 | 7.60 | 8.35 | 9.00 | 9.30 | 10.20 |
| 2 | 10.90 | 12.00 | 12.20 | 12.70 | 11.55 | 8.36 | 7.40 | 7.50 | 8.20 | 8.90 | 9.35 | 10.35 |
| 3 | 11.05 | 12.00 | 12.15 | 12.50 | 11.55 | 8.25 | 7.30 | 7.40 | 8.45 | 8.90 | 9.35 | 10.20 |
| 4 | 11.10 | 12.15 | 12.25 | 12.75 | 11.20 | 8.20 | 7.25 | 7.45 | 8.75 | 8.90 | 9.25 | 9.85 |
| 5 | 11.15 | 12.05 | 12.25 | 12.75 | 11.05 | 8.05 | 7.35 | 7.60 | 8.20 | 9.20 | 9.30 | 10.00 |
| 6 | 10.95 | 12.05 | 12.25 | 12.60 | 11.05 | 7.90 | 7.05 | 7.40 | 8.60 | 9.10 | 9.40 | 9.95 |
| 7 | 11.10 | 12.20 | 12.35 | 12.60 | --- | 7.90 | 7.05 | 7.40 | 8.45 | 9.80 | 9.35 | 10.00 |
| 8 | 11.10 | --- | 12.25 | 12.60 | --- | 7.75 | 7.20 | 7.50 | 8.40 | 9.20 | 9.40 | 10.15 |
| 9 | 11.30 | --- | 12.20 | 12.50 | --- | 7.70 | 7.05 | 7.40 | 8.55 | 8.80 | 9.45 | 10.25 |
| 10 | 11.35 | --- | 12.20 | 12.65 | --- | 7.65 | 7.00 | 7.50 | 8.40 | 9.35 | 9.60 | 10.20 |
| 11 | 11.20 | --- | 12.15 | 12.65 | --- | 7.60 | 7.10 | 7.60 | 8.20 | 9.55 | 9.95 | 10.25 |
| 12 | 11.05 | --- | 12.20 | 12.55 | --- | 7.50 | 7.15 | 7.65 | 8.45 | 9.20 | 9.75 | 10.00 |
| 13 | 11.25 | --- | 12.30 | 12.80 | --- | 7.40 | 6.95 | 7.75 | 8.80 | 9.00 | 9.55 | 10.15 |
| 14 | 11.60 | --- | 12.40 | 12.80 | --- | 7.35 | 7.10 | 7.75 | --- | 9.00 | 9.60 | 10.15 |
| 15 | 11.35 | --- | 12.25 | 12.65 | --- | 7.45 | 7.05 | 7.75 | 9.00 | 9.00 | 10.10 | 10.05 |
| 16 | 11.45 | --- | 12.40 | 12.70 | --- | 7.35 | 7.05 | 7.70 | 9.00 | 9.05 | 9.75 | 10.00 |
| 17 | 11.45 | --- | 12.40 | 12.70 | --- | 7.30 | 7.10 | 7.95 | 9.15 | 9.40 | 9.80 | 10.10 |
| 18 | 11.50 | --- | 12.50 | 12.70 | --- | 7.35 | 7.00 | 7.80 | 8.60 | 9.30 | 9.85 | 9.90 |
| 19 | 11.90 | --- | 12.55 | 12.75 | --- | 7.35 | 7.10 | 7.70 | 8.75 | 9.15 | 9.70 | 9.95 |
| 20 | --- | --- | 12.70 | 12.40 | --- | 7.25 | 7.15 | 8.20 | 8.50 | 9.00 | 9.70 | 10.00 |
| 21 | --- | --- | 12.70 | 12.50 | --- | 7.55 | 7.15 | 8.05 | 8.45 | 8.80 | 9.80 | 9.95 |
| 22 | --- | --- | 12.55 | 12.65 | --- | 7.55 | 7.15 | 7.95 | 8.80 | 9.00 | 9.85 | 10.05 |
| 23 | --- | --- | 12.65 | 12.35 | --- | 7.40 | 7.20 | 7.85 | 8.55 | 9.05 | 9.80 | 10.00 |
| 24 | --- | --- | 12.60 | 12.25 | --- | 7.45 | 7.30 | 7.75 | 9.00 | 9.05 | 9.90 | 9.90 |
| 25 | --- | --- | 12.40 | 12.40 | --- | 7.25 | 7.20 | 7.80 | 9.05 | 9.15 | 9.85 | 10.05 |
| 26 | --- | --- | 12.65 | 12.15 | --- | 7.25 | 7.30 | 8.10 | 8.75 | 8.90 | 10.20 | 10.05 |
| 27 | --- | --- | 12.60 | 12.20 | --- | 7.50 | 7.20 | 8.45 | 9.00 | 9.10 | 10.15 | 10.10 |
| 28 | --- | --- | 12.45 | 12.20 | --- | 7.45 | 7.35 | 8.65 | 8.80 | 9.10 | 10.10 | 10.20 |
| 29 | --- | --- | 12.60 | 12.05 | --- | 7.40 | 7.35 | 8.50 | 8.70 | 9.05 | 10.10 | 10.25 |
| 30 | 11.95 | --- | 12.75 | 11.80 | --- | 7.45 | 7.35 | 8.85 | 8.60 | 9.15 | 10.10 | 10.10 |
| 31 | 11.95 | --- | 12.55 | 11.90 | --- | 7.45 | --- | 8.35 | --- | 9.10 | 10.10 | --- |
| MAX | 11.95 | 12.20 | 12.75 | 12.80 | 11.75 | 8.36 | 7.40 | 8.85 | 9.15 | 9.80 | 10.20 | 10.35 |

CAL YR 1987 LOW 12.75
WTR YR 1988 LOW 12.80----- 393153083322000 FA-1
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

FRANKLIN COUNTY

394956083002700. Local number, FR-18.

LOCATION.--Lat 39°49'56", long 83°00'27", Hydrologic Unit 05060001, south of State Rt. 665 at Shadeville.

Owner: City of Columbus.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 6 in., depth 86.4 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 690 ft above National Geodetic Vertical Datum of 1929, from topographic

map. Measuring point: Floor of instrument shelter 3.80 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

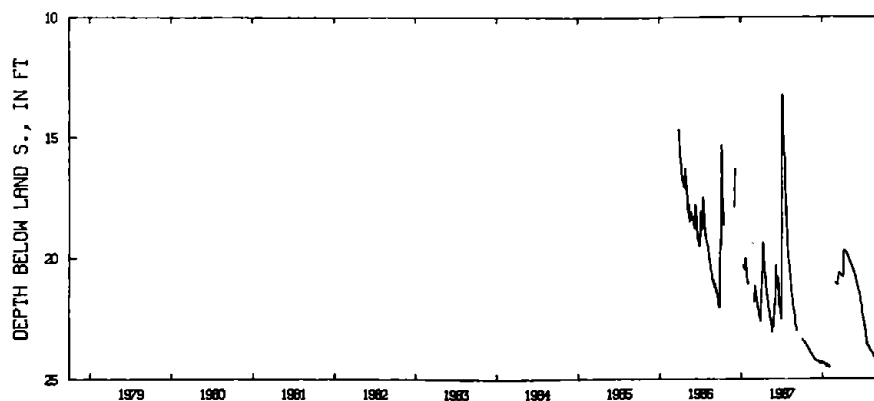
PERIOD OF RECORD.--November 22, 1985 to March 26, 1986 periodic, continuous thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 24.76 ft below land-surface datum, Sept. 30, 1988; minimum daily low, 13.23 ft below land-surface datum, July 7, 1987.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | --- | 23.77 | 24.20 | 24.30 | 24.51 | 21.02 | 20.73 | 20.04 | 20.89 | 22.43 | 23.76 | 24.30 |
| 2 | 23.36 | 23.80 | 24.21 | 24.30 | 24.47 | 21.03 | 20.74 | 20.06 | 20.92 | 22.49 | 23.78 | 24.33 |
| 3 | 23.37 | 23.81 | 24.21 | 24.30 | --- | 21.05 | 20.75 | 20.09 | 20.97 | 22.54 | 23.80 | 24.35 |
| 4 | 23.38 | 23.83 | 24.21 | 24.31 | --- | 21.04 | 20.74 | 20.12 | 21.02 | 22.58 | 23.81 | 24.37 |
| 5 | 23.40 | 23.85 | 24.22 | 24.31 | --- | 21.05 | 20.15 | 20.14 | 21.06 | 22.62 | 23.83 | 24.38 |
| 6 | 23.41 | 23.87 | 24.22 | 24.32 | --- | 21.06 | 19.71 | 20.16 | 21.11 | 22.68 | 23.84 | 24.39 |
| 7 | 23.42 | 23.89 | 24.23 | 24.33 | --- | 21.07 | 19.68 | 20.18 | 21.14 | 22.74 | 23.85 | 24.40 |
| 8 | 23.43 | 23.90 | 24.23 | 24.34 | --- | 21.08 | 19.68 | 20.20 | 21.18 | 22.77 | 23.86 | 24.41 |
| 9 | 23.44 | 23.92 | 24.24 | 24.35 | --- | 21.08 | 19.68 | 20.23 | 21.21 | 22.81 | 23.88 | 24.43 |
| 10 | 23.45 | 23.94 | 24.24 | 24.35 | --- | 21.08 | 19.68 | 20.25 | 21.25 | 22.86 | 23.90 | 24.45 |
| 11 | 23.46 | 23.95 | 24.25 | 24.36 | --- | 21.08 | 19.68 | 20.27 | 21.28 | 22.92 | 23.91 | 24.47 |
| 12 | 23.47 | 23.96 | 24.26 | 24.37 | --- | 20.77 | 19.69 | 20.29 | 21.32 | 23.00 | 23.92 | 24.49 |
| 13 | 23.48 | 23.96 | 24.27 | 24.39 | --- | 20.62 | 19.69 | 20.32 | 21.36 | 23.07 | 23.93 | 24.50 |
| 14 | 23.49 | 23.97 | 24.28 | 24.40 | --- | 20.60 | 19.70 | 20.34 | 21.40 | 23.15 | 23.94 | 24.51 |
| 15 | 23.50 | 23.99 | 24.29 | 24.41 | --- | 20.60 | 19.71 | 20.36 | 21.42 | 23.23 | 23.95 | 24.53 |
| 16 | 23.51 | 24.01 | 24.27 | 24.42 | --- | 20.60 | 19.72 | 20.39 | 21.46 | 23.29 | 23.99 | 24.55 |
| 17 | 23.53 | 24.03 | 24.28 | 24.44 | --- | 20.61 | 19.74 | 20.41 | 21.50 | 23.37 | 24.01 | 24.56 |
| 18 | 23.54 | 24.05 | 24.29 | 24.45 | --- | 20.62 | 19.75 | 20.44 | 21.56 | 23.45 | 24.03 | 24.58 |
| 19 | 23.55 | 24.07 | 24.30 | 24.47 | --- | 20.63 | 19.77 | 20.47 | 21.61 | 23.50 | 24.05 | 24.59 |
| 20 | 23.57 | 24.08 | 24.30 | 24.47 | --- | 20.64 | 19.79 | 20.50 | 21.66 | 23.55 | 24.06 | 24.60 |
| 21 | 23.58 | 24.10 | 24.31 | 24.37 | --- | 20.64 | 19.81 | 20.52 | 21.72 | 23.60 | 24.07 | 24.62 |
| 22 | 23.60 | 24.11 | 24.32 | 24.38 | --- | 20.66 | 19.83 | 20.55 | 21.78 | 23.60 | 24.09 | 24.63 |
| 23 | 23.61 | 24.13 | 24.34 | 24.40 | --- | 20.67 | 19.85 | 20.58 | 21.83 | 23.61 | 24.10 | 24.65 |
| 24 | 23.63 | 24.15 | 24.35 | 24.40 | --- | 20.68 | 19.87 | 20.60 | 21.90 | 23.62 | 24.12 | 24.66 |
| 25 | 23.65 | 24.16 | 24.35 | 24.41 | --- | 20.70 | 19.90 | 20.63 | 21.97 | 23.63 | 24.14 | 24.67 |
| 26 | 23.66 | 24.18 | 24.35 | 24.43 | --- | 20.71 | 19.92 | 20.66 | 22.05 | 23.65 | 24.16 | 24.69 |
| 27 | 23.68 | 24.19 | 24.31 | 24.45 | --- | 20.72 | 19.94 | 20.69 | 22.13 | 23.66 | 24.18 | 24.70 |
| 28 | 23.70 | 24.20 | 24.31 | 24.46 | --- | 20.72 | 19.96 | 20.72 | 22.21 | 23.69 | 24.20 | 24.72 |
| 29 | 23.71 | 24.20 | 24.30 | 24.48 | 21.01 | 20.72 | 19.99 | 20.75 | 22.29 | 23.71 | 24.22 | 24.75 |
| 30 | 23.73 | 24.22 | 24.30 | 24.49 | --- | 20.73 | 20.01 | 20.80 | 22.36 | 23.73 | 24.25 | 24.76 |
| 31 | 23.75 | --- | 24.30 | 24.50 | --- | 20.73 | --- | 20.85 | --- | 23.75 | 24.28 | --- |
| MAX | 23.75 | 24.22 | 24.35 | 24.50 | 24.51 | 21.08 | 20.75 | 20.85 | 22.36 | 23.75 | 24.28 | 24.76 |

WTR YR 1988 LOW 24.76



394956083002700 FR-18 CITY OF COLS S OF RT 665 AT SHADEVILLE OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT), DEPTH TO WATER BL. LSD

GROUND-WATER RECORDS

229

FRANKLIN COUNTY--Continued

395118082573300. Local number, FG-3.

LOCATION.--Lat 39°51'14", long 82°57'32", Hydrologic Unit 05060001, 0.7 mi southwest of Rees.

Owner: R. Hann.

AQUIFER.--Sand and gravel of Pleistocene Age.

CHARACTERISTICS.--Drilled test water table well, diameter 12 in., depth drilled 60 ft, present depth 53 ft, cased.

INSTRUMENTATION.--Monthly measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 712.94 ft above National Geodetic Vertical Datum of 1929. Measuring point: Floor of instrument shelter 3.43 ft above land-surface datum.

PERIOD OF RECORD.--April 1946 to September 1982 continuous, periodic thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 20.75 ft below land-surface datum, July 7, 1966; minimum daily low, 0.0 ft below land-surface datum, Jan. 22, 1959.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|---------------|----------------|---------------|----------------|---------------|----------------|----------------|----------------|
| Oct. 29, 1987 | 13.09 | Jan. 29, 1988 | 13.04 | Apr. 29, 1988 | 12.79 | July 29, 1988 | 12.79 |
| Nov. 30, 1987 | 12.96 | Feb. 29, 1988 | 12.17 | May 31, 1988 | 13.09 | Aug. 31, 1988 | 12.96 |
| Dec. 30, 1987 | 12.86 | Mar. 31, 1988 | 12.29 | June 30, 1988 | 13.38 | Sept. 30, 1988 | 13.29 |

GROUND-WATER RECORDS

FRANKLIN COUNTY--Continued

395157083003500. Local number, FR-109.

LOCATION.--Lat 39°51'57", long 83°00'35", Hydrologic Unit 05060001, 6.6 mi south of the State capital in Columbus.

Owner: City of Columbus.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 6 in., depth 92 ft, cased to 82 ft.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 702.24 ft above National Geodetic Vertical Datum of 1929. Measuring

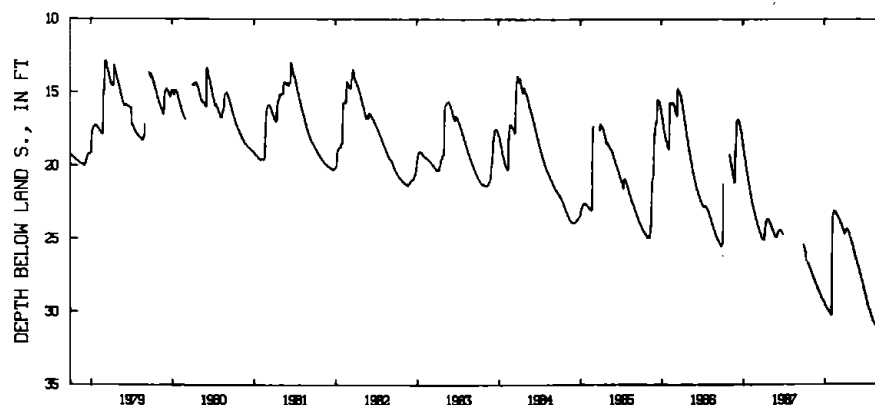
point: Floor of instrument shelter 3.00 ft above land-surface datum.

PERIOD OF RECORD.--July 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 31.43 ft below land-surface datum, Sept. 12, 1988; minimum daily low, 12.43 ft below land-surface datum, Mar. 27, 1978.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 25.48 | 27.17 | 28.40 | 29.45 | 30.25 | 23.51 | 24.70 | 25.16 | 26.90 | 28.76 | 30.44 | 31.37 |
| 2 | 25.54 | 27.20 | 28.43 | 29.47 | 30.22 | 23.54 | 24.73 | 25.22 | 26.96 | 28.80 | 30.47 | 31.41 |
| 3 | 25.58 | 27.25 | 28.46 | 29.50 | 29.48 | 23.56 | 24.74 | 25.27 | 27.03 | 28.87 | 30.53 | 31.42 |
| 4 | 25.67 | 27.29 | 28.50 | 29.55 | 27.68 | 23.58 | 24.71 | 25.32 | 27.09 | 28.94 | 30.60 | 31.42 |
| 5 | 25.68 | 27.35 | 28.54 | 29.58 | 26.28 | 23.59 | 24.61 | 25.38 | 27.14 | 28.99 | 30.65 | 31.27 |
| 6 | 25.72 | 27.38 | 28.57 | 29.61 | 25.29 | 23.58 | 24.47 | 25.45 | 27.18 | 29.06 | 30.65 | 31.27 |
| 7 | 25.82 | 27.42 | 28.61 | 29.64 | 24.60 | 23.65 | 24.48 | 25.51 | 27.24 | 29.13 | 30.67 | 31.31 |
| 8 | 25.92 | 27.46 | 28.63 | 29.68 | 24.07 | 23.66 | 24.48 | 25.55 | 27.31 | 29.20 | 30.75 | 31.34 |
| 9 | 25.96 | 27.51 | 28.68 | 29.71 | 23.73 | 23.70 | 24.47 | 25.61 | 27.38 | 29.26 | 30.76 | 31.34 |
| 10 | 25.97 | 27.55 | 28.71 | 29.74 | 23.51 | 23.75 | 24.43 | 25.67 | 27.44 | 29.33 | 30.77 | 31.38 |
| 11 | 26.05 | 27.59 | 28.74 | 29.77 | 23.35 | 23.77 | 24.39 | 25.75 | 27.49 | 29.41 | 30.81 | 31.41 |
| 12 | 26.12 | 27.63 | 28.79 | 29.79 | 23.18 | 23.77 | 24.39 | 25.80 | 27.55 | 29.46 | 30.80 | 31.43 |
| 13 | 26.57 | 27.68 | 28.82 | 29.85 | 23.16 | 23.84 | 24.40 | 25.86 | 27.62 | 29.52 | 30.81 | 31.42 |
| 14 | --- | 27.73 | 28.84 | 29.86 | 23.16 | 23.87 | 24.42 | 25.91 | 27.67 | 29.60 | 30.83 | 31.42 |
| 15 | --- | 27.76 | 28.89 | 29.89 | 23.13 | 23.94 | 24.46 | 25.95 | 27.72 | 29.66 | 30.88 | --- |
| 16 | --- | 27.79 | 28.93 | 29.92 | 23.17 | 23.99 | 24.48 | 26.01 | 27.78 | 29.72 | 30.93 | --- |
| 17 | --- | 27.84 | 28.96 | 29.94 | 23.20 | 24.02 | 24.47 | 26.09 | 27.84 | 29.78 | 30.94 | --- |
| 18 | --- | 27.89 | 28.99 | 29.97 | 23.22 | 24.02 | 24.51 | 26.13 | 27.90 | 29.83 | 30.97 | --- |
| 19 | --- | 27.91 | 29.01 | 29.97 | 23.21 | 24.06 | 24.56 | 26.19 | 27.96 | 29.89 | 30.99 | --- |
| 20 | --- | 27.97 | 29.08 | 29.95 | 23.24 | 24.15 | 24.58 | 26.26 | 28.02 | 29.89 | 31.01 | --- |
| 21 | 26.69 | 28.00 | 29.10 | 29.95 | 23.25 | 24.22 | 24.64 | 26.32 | 28.08 | 29.88 | 31.05 | --- |
| 22 | 26.75 | 28.03 | 29.14 | 29.96 | 23.22 | 24.24 | 24.67 | 26.36 | 28.14 | 29.90 | 31.06 | --- |
| 23 | 26.80 | 28.08 | 29.16 | 29.98 | 23.28 | 24.28 | 24.72 | 26.40 | 28.22 | 29.96 | 31.09 | --- |
| 24 | 26.85 | 28.11 | 29.20 | 30.03 | 23.29 | 24.32 | 24.80 | 26.47 | 28.28 | 30.04 | 31.13 | --- |
| 25 | 26.87 | 28.16 | 29.22 | 30.06 | 23.33 | 24.36 | 24.82 | 26.54 | 28.33 | 30.08 | 31.16 | --- |
| 26 | 26.91 | 28.19 | 29.24 | 30.11 | 23.33 | 24.40 | 24.86 | 26.59 | 28.41 | 30.13 | 31.20 | --- |
| 27 | 26.97 | 28.23 | 29.25 | 30.14 | 23.40 | 24.47 | 24.93 | 26.64 | 28.48 | 30.20 | 31.24 | --- |
| 28 | 27.00 | 28.26 | 29.28 | 30.16 | 23.40 | 24.50 | 25.00 | 26.69 | 28.55 | 30.26 | 31.27 | --- |
| 29 | 27.04 | 28.30 | 29.33 | 30.18 | 23.47 | 24.52 | 25.06 | 26.75 | 28.61 | 30.30 | 31.30 | --- |
| 30 | 27.09 | 28.34 | 29.35 | 30.23 | --- | 24.62 | 25.12 | 26.81 | 28.70 | 30.35 | 31.33 | --- |
| 31 | 27.13 | --- | 29.39 | 30.25 | --- | 24.65 | --- | 26.86 | --- | 30.40 | 31.34 | --- |
| MAX | 27.13 | 28.34 | 29.39 | 30.25 | 30.25 | 24.65 | 25.12 | 26.86 | 28.70 | 30.40 | 31.34 | 31.43 |
| CAL YR 1987 | LOW 29.39 | | | | | | | | | | | |
| WTR YR 1988 | LOW 31.43 | | | | | | | | | | | |



— 395157083003500 FR-109
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

231

FRANKLIN COUNTY--Continued

400101083021800. Local number, FR-10.

LOCATION.--Lat 40°01'01", long 83°02'18", Hydrologic Unit 05060001, Kenny and Ackerman Roads, Columbus.

Owner: Ohio State University.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 4 in., depth 75 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 775 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 4.00 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--March 1944 to current year.

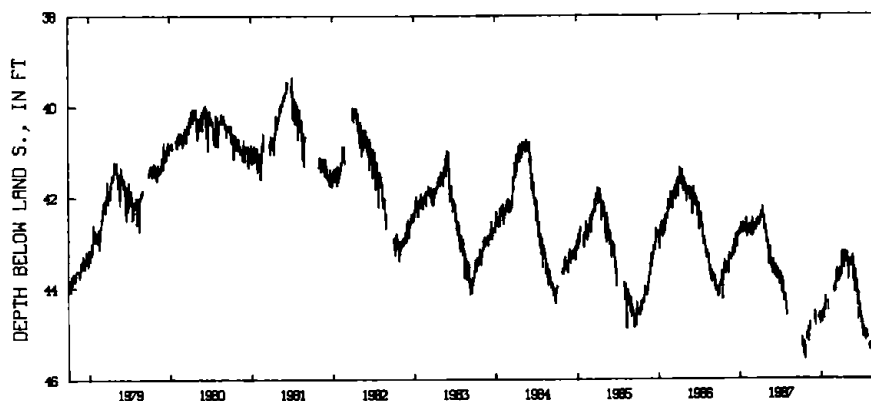
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 48.20 ft below land-surface datum, Oct. 7, 1954; minimum daily low, 37.76 ft below land-surface datum, Apr. 13, 1951.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | --- | 45.14 | --- | 44.76 | 44.32 | 44.11 | 43.73 | 43.40 | 43.74 | 44.74 | --- | 45.50 |
| 2 | 45.05 | 45.07 | 44.65 | 44.76 | 44.50 | 43.95 | 43.61 | 43.81 | 43.69 | 44.75 | 45.27 | 45.50 |
| 3 | --- | 45.02 | 44.63 | 44.65 | --- | 43.94 | 43.49 | 43.66 | 43.62 | 44.75 | 45.26 | 45.49 |
| 4 | --- | 44.88 | 44.52 | 44.64 | --- | 44.05 | 43.45 | 43.42 | 43.80 | 44.81 | 45.35 | 45.20 |
| 5 | --- | 44.89 | 44.70 | 44.70 | --- | 44.08 | 43.43 | 43.38 | 43.87 | 44.98 | 45.29 | 45.23 |
| 6 | 45.10 | 45.15 | 44.70 | 44.72 | --- | 44.00 | 43.20 | 43.53 | 44.11 | 45.08 | 45.25 | 45.36 |
| 7 | 45.23 | 45.18 | 44.82 | 44.75 | --- | 43.93 | 43.39 | 43.53 | 44.00 | 45.01 | 45.26 | 45.46 |
| 8 | 45.25 | 44.92 | --- | 44.60 | --- | 43.91 | 43.47 | 43.49 | 44.00 | 45.02 | 45.25 | 45.40 |
| 9 | 45.30 | 44.92 | --- | 44.52 | --- | 43.80 | 43.50 | 43.38 | 43.86 | 44.92 | 45.21 | 45.40 |
| 10 | 45.28 | 44.94 | --- | 44.62 | --- | 43.64 | 43.43 | 43.43 | 44.00 | 44.87 | 45.26 | 45.37 |
| 11 | 45.23 | 44.94 | --- | 44.60 | --- | 43.76 | 43.35 | 43.52 | 44.09 | 44.88 | 45.35 | 45.36 |
| 12 | 45.26 | 44.89 | --- | 44.49 | --- | 43.77 | 43.32 | 43.54 | 44.10 | 45.00 | 45.35 | 45.32 |
| 13 | 45.30 | 44.77 | --- | 44.54 | --- | 43.59 | 43.57 | --- | 44.33 | 45.08 | 45.34 | 45.13 |
| 14 | 45.46 | 44.82 | --- | 44.68 | --- | 43.66 | 43.38 | --- | 44.70 | 45.04 | 45.38 | 45.15 |
| 15 | 45.34 | --- | --- | 44.65 | --- | 43.64 | 43.46 | 43.50 | 44.56 | 45.11 | 45.42 | 45.23 |
| 16 | 45.17 | --- | --- | 44.45 | --- | 43.78 | 43.44 | 43.54 | 44.27 | 45.01 | 45.42 | 45.24 |
| 17 | 45.22 | --- | --- | 44.42 | --- | 43.88 | 43.35 | 43.48 | 44.17 | 45.06 | 45.40 | 45.10 |
| 18 | 45.50 | --- | --- | 44.39 | --- | 43.87 | 43.20 | 43.54 | 44.13 | 45.15 | 45.41 | 45.06 |
| 19 | 45.33 | --- | --- | 44.50 | --- | 43.70 | 43.29 | 43.46 | 44.34 | 44.94 | 45.45 | 44.99 |
| 20 | 45.31 | --- | --- | 44.20 | --- | 43.75 | 43.29 | 43.35 | 44.45 | 44.94 | 45.28 | 44.92 |
| 21 | 45.57 | --- | 44.64 | 44.32 | --- | 43.86 | 43.26 | 43.35 | 44.42 | 44.94 | 45.36 | 45.05 |
| 22 | 45.29 | --- | 44.64 | 44.35 | --- | 43.86 | 43.23 | 43.33 | 44.47 | 44.96 | 45.47 | 45.00 |
| 23 | --- | --- | 44.68 | 44.31 | --- | 43.80 | 43.22 | 43.30 | 44.40 | 45.08 | 45.40 | 44.98 |
| 24 | --- | --- | 44.62 | 44.31 | --- | 43.67 | 43.30 | 43.36 | 44.66 | 45.07 | 45.21 | 44.97 |
| 25 | --- | --- | 44.58 | 44.34 | --- | 43.66 | 43.38 | 43.51 | 44.55 | 45.10 | 45.20 | 44.98 |
| 26 | --- | --- | 44.70 | --- | --- | 43.58 | 43.45 | 43.57 | 44.60 | --- | 45.35 | 45.10 |
| 27 | --- | --- | 44.69 | --- | --- | 43.67 | 43.23 | 43.84 | 44.70 | --- | 45.42 | 45.18 |
| 28 | --- | --- | 44.55 | --- | --- | 43.77 | 43.26 | 43.62 | 44.66 | --- | 45.40 | 45.14 |
| 29 | --- | --- | 44.79 | --- | 44.02 | 43.73 | 43.43 | 43.89 | 44.78 | --- | 45.40 | 45.06 |
| 30 | 45.00 | --- | 44.76 | --- | --- | 43.74 | 43.51 | 44.09 | 44.67 | --- | 45.40 | 45.05 |
| 31 | 45.15 | --- | 44.58 | --- | --- | 43.76 | --- | 43.77 | --- | --- | 45.45 | --- |
| MAX | 45.57 | 45.18 | 44.82 | 44.76 | 44.50 | 44.11 | 43.73 | 44.09 | 44.78 | 45.15 | 45.47 | 45.50 |

CAL YR 1987 LOW 45.57

WTR YR 1988 LOW 45.57



— 400101083021800 FR-10
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

GALLIA COUNTY

383638082103300. Local number, G-2.

LOCATION.--Lat 38°36'38", long 82°10'33", Hydrologic Unit 05090101, 5.9 mi east of Crown City.

Owner: State of Ohio.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 12 in., depth 65 ft, cased.

INSTRUMENTATION.--Periodic measurement with chalked tape by ODNR personnel.

DATUM.--Elevation of land-surface datum is 552 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--June 1975 to September 1982 continuous, periodic thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 33.94 ft below land-surface datum, Oct. 4, 1982; minimum daily low 16.43 ft below land-surface datum, Mar. 8, 1979.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|---------------|----------------|---------------|----------------|--------------|----------------|
| Oct. 23, 1987 | 33.05 | Apr. 20, 1988 | 30.72 | Aug. 8, 1988 | 33.62 |

GREENE COUNTY

394330083531400. Local number, GR-11.

LOCATION.--Lat 39°43'30", long 83°53'14", Hydrologic Unit 05090202, near Wilberforce.

Owner: Central State University.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., depth 85 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 870 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 4.00 ft above land-surface datum.

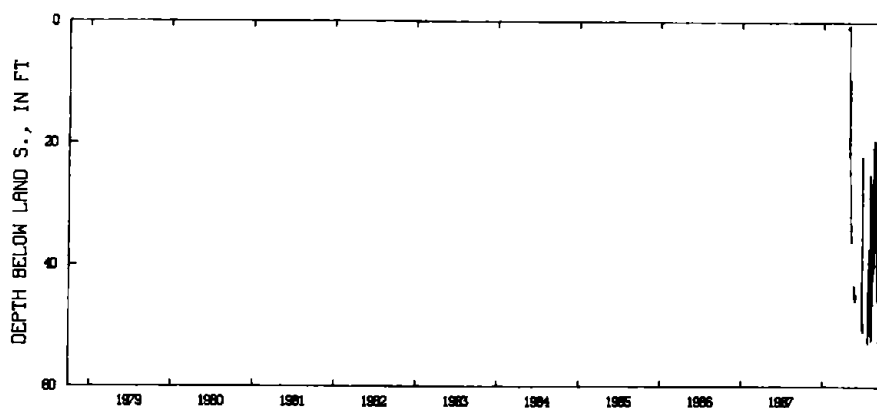
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--March 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 52.70 ft below land-surface datum, Sept. 9, 1988; minimum daily low, 0.55 ft below land-surface datum, Apr. 27, 1988.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------|-------|-------|-------|
| 1 | --- | --- | --- | --- | --- | --- | --- | 24.65 | --- | --- | 39.80 | 37.10 |
| 2 | --- | --- | --- | --- | --- | --- | --- | 26.70 | --- | --- | 46.60 | 45.80 |
| 3 | --- | --- | --- | --- | --- | --- | --- | 27.75 | --- | --- | 49.80 | 45.20 |
| 4 | --- | --- | --- | --- | --- | --- | --- | 28.95 | --- | --- | 51.10 | 22.00 |
| 5 | --- | --- | --- | --- | --- | --- | --- | 29.60 | --- | --- | 52.40 | 14.80 |
| 6 | --- | --- | --- | --- | --- | --- | --- | 33.55 | --- | --- | 51.90 | 42.40 |
| 7 | --- | --- | --- | --- | --- | --- | --- | 35.50 | --- | --- | 26.60 | 49.30 |
| 8 | --- | --- | --- | --- | --- | --- | --- | 36.15 | --- | --- | 33.40 | 52.60 |
| 9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 36.00 | 52.70 |
| 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 46.50 | 42.60 |
| 11 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 43.70 | 22.80 |
| 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 40.20 | 33.80 |
| 13 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 38.30 | 43.60 |
| 14 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 20.60 | 48.80 |
| 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 30.40 | 50.90 |
| 16 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 38.80 | 48.20 |
| 17 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 41.10 | 36.00 |
| 18 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 37.30 | 20.40 |
| 19 | --- | --- | --- | --- | --- | --- | --- | .91 | --- | --- | 37.80 | 23.50 |
| 20 | --- | --- | --- | --- | --- | --- | --- | .85 | 43.40 | --- | 37.80 | 38.90 |
| 21 | --- | --- | --- | --- | --- | --- | --- | .80 | 44.50 | --- | 51.90 | 19.40 |
| 22 | --- | --- | --- | --- | --- | --- | --- | .95 | 45.30 | --- | 52.70 | 34.80 |
| 23 | --- | --- | --- | --- | --- | --- | --- | .70 | 45.35 | --- | 47.00 | 36.00 |
| 24 | --- | --- | --- | --- | --- | --- | --- | .65 | 45.90 | 50.50 | 44.50 | 36.90 |
| 25 | --- | --- | --- | --- | --- | --- | --- | .65 | 45.75 | 50.50 | 37.40 | 37.40 |
| 26 | --- | --- | --- | --- | --- | --- | --- | .60 | 45.20 | 22.20 | 42.00 | 37.60 |
| 27 | --- | --- | --- | --- | --- | --- | --- | .55 | 44.80 | 40.20 | 46.00 | 33.00 |
| 28 | --- | --- | --- | --- | --- | --- | --- | 19.70 | --- | 47.50 | 49.60 | 19.70 |
| 29 | --- | --- | --- | --- | --- | --- | --- | 22.00 | --- | 49.90 | 50.60 | 32.50 |
| 30 | --- | --- | --- | --- | --- | --- | --- | 9.50 | --- | 50.90 | 51.20 | 35.00 |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 25.00 | 35.80 | --- |



394330083531400 GR-11 C S UNIV NR WILBERFORCE OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT), FROM GRAPHIC RECORDER

GROUND-WATER RECORDS
GREENE COUNTY--Continued

394411083561300. Local number, GR-1.

LOCATION.--Lat 39°44'11", long 83°56'13", Hydrologic Unit 05090202, along Massies Creek near U.S. 68 north of Xenia.

Owner: Xenia Water Department.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 30 in., depth 77 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 818.88 ft above National Geodetic Vertical Datum of 1929. Measuring point: Floor of instrument shelter 4.50 ft above land-surface datum.

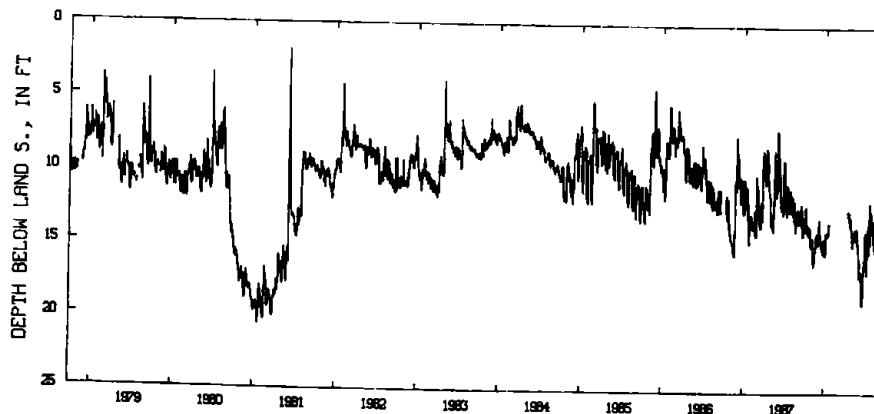
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--August 1944 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 21.60 ft below land-surface datum, July 7, 1966; minimum daily low, 0.70 ft above land-surface datum, above land surface Aug. 3, 1958.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-----|-----|-------|-------|-------|-------|-------|-------|
| 1 | 13.78 | 14.89 | 14.59 | 15.00 | --- | --- | --- | 13.92 | 15.72 | 14.89 | 13.37 | 14.21 |
| 2 | 13.73 | 14.91 | 14.66 | 15.36 | --- | --- | --- | 14.07 | 16.73 | 14.26 | 13.48 | 14.75 |
| 3 | 13.97 | 14.89 | 14.71 | 15.59 | --- | --- | --- | 14.74 | 16.87 | 14.00 | 13.57 | 14.49 |
| 4 | 13.96 | 14.83 | 14.54 | 15.33 | --- | --- | --- | 14.91 | 17.07 | 15.43 | 13.59 | 14.68 |
| 5 | 13.99 | 14.71 | 14.70 | 14.88 | --- | --- | --- | 14.84 | 15.97 | 14.51 | 13.76 | 13.84 |
| 6 | 13.74 | 14.43 | 14.85 | 14.09 | --- | --- | --- | 14.82 | 16.77 | 14.78 | 13.38 | 13.02 |
| 7 | 13.69 | 14.52 | 14.52 | 14.10 | --- | --- | --- | 14.96 | 16.66 | 14.99 | 14.56 | 12.87 |
| 8 | 13.16 | 14.61 | 13.45 | 14.13 | --- | --- | --- | 14.12 | 16.89 | 15.25 | 14.78 | 12.63 |
| 9 | 12.39 | 15.67 | 13.16 | 14.13 | --- | --- | --- | 14.19 | 17.11 | 16.88 | 13.21 | 12.99 |
| 10 | 12.34 | 15.76 | 14.37 | 14.10 | --- | --- | --- | 14.02 | 16.73 | 15.44 | 14.66 | 13.15 |
| 11 | 13.00 | 15.96 | 14.15 | 14.30 | --- | --- | --- | 14.09 | 16.65 | 15.69 | 14.89 | 13.39 |
| 12 | 13.35 | 16.28 | 14.17 | 14.31 | --- | --- | --- | 14.39 | 17.01 | 14.46 | 14.99 | 13.65 |
| 13 | 13.54 | 16.00 | 14.46 | 14.03 | --- | --- | --- | 14.11 | 17.69 | 14.06 | 15.33 | 12.87 |
| 14 | 13.59 | 16.06 | 14.62 | 14.10 | --- | --- | --- | 14.11 | 18.08 | 13.87 | 15.36 | 10.99 |
| 15 | 13.98 | 15.48 | 14.61 | 14.17 | --- | --- | 12.61 | 14.11 | 18.54 | 13.80 | 15.08 | 11.57 |
| 16 | 14.07 | 15.30 | 14.71 | 14.06 | --- | --- | 12.88 | 14.03 | 18.87 | 13.55 | 14.32 | 11.82 |
| 17 | 13.55 | 15.37 | 14.94 | 14.02 | --- | --- | 12.60 | 13.81 | 17.46 | 13.95 | 14.34 | 11.81 |
| 18 | 13.52 | 15.35 | 15.00 | 14.07 | --- | --- | 12.88 | 14.07 | 18.83 | 15.43 | 14.55 | 13.27 |
| 19 | 13.84 | 15.31 | 14.91 | 14.17 | --- | --- | 12.63 | 13.97 | 18.92 | 13.80 | 14.63 | 13.64 |
| 20 | 13.93 | 15.19 | 15.03 | 13.43 | --- | --- | 12.80 | 14.22 | 18.30 | 13.23 | 14.46 | 13.59 |
| 21 | 14.12 | 15.12 | 14.66 | --- | --- | --- | 12.72 | 14.51 | 17.41 | 12.53 | 15.06 | 13.34 |
| 22 | 14.26 | 14.36 | 15.27 | --- | --- | --- | 12.84 | 14.55 | 16.88 | 12.04 | 15.24 | 12.99 |
| 23 | 14.22 | 14.95 | 15.34 | --- | --- | --- | 12.91 | 14.23 | 16.87 | 14.82 | 14.46 | 13.49 |
| 24 | 14.18 | 14.91 | 15.48 | --- | --- | --- | 13.06 | 13.76 | 16.23 | 14.22 | 13.00 | 13.55 |
| 25 | 14.23 | 14.91 | 15.40 | --- | --- | --- | 13.54 | 13.97 | 16.46 | 13.23 | 13.49 | 13.98 |
| 26 | 13.86 | 14.82 | 15.26 | --- | --- | --- | 13.50 | 14.19 | 15.90 | 12.58 | 13.71 | 12.70 |
| 27 | 13.70 | 14.27 | 14.52 | --- | --- | --- | 13.70 | 14.43 | 16.24 | 12.79 | 13.18 | 13.77 |
| 28 | 14.21 | 14.11 | 14.50 | --- | --- | --- | 13.09 | 14.69 | 16.49 | 13.13 | 13.57 | 13.71 |
| 29 | 14.62 | 14.16 | 14.65 | --- | --- | --- | 13.65 | 14.77 | 16.03 | 13.25 | 13.52 | 12.69 |
| 30 | 14.84 | 14.55 | 14.72 | --- | --- | --- | 13.55 | 14.94 | 16.13 | 13.38 | 13.63 | 12.70 |
| 31 | 15.04 | --- | 14.65 | --- | --- | --- | --- | 15.29 | --- | 13.26 | 13.72 | --- |
| MAX | 15.04 | 16.28 | 15.48 | 15.59 | --- | --- | 13.70 | 15.29 | 18.92 | 16.88 | 15.36 | 14.75 |
| CAL YR 1987 | LOW 16.28 | | | | | | | | | | | |
| WTR YR 1988 | LOW 18.92 | | | | | | | | | | | |



394411083561300 GR-1
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

235

GREENE COUNTY--Continued

394425083551100. Local number, GR-10.

LOCATION.--Lat 39°44'25", long 83°55'11", Hydrologic Unit 05090202, in well field along Massies Creek north of Xenia.

Owner: Xenia Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in., depth 100 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 835 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter at land-surface datum.

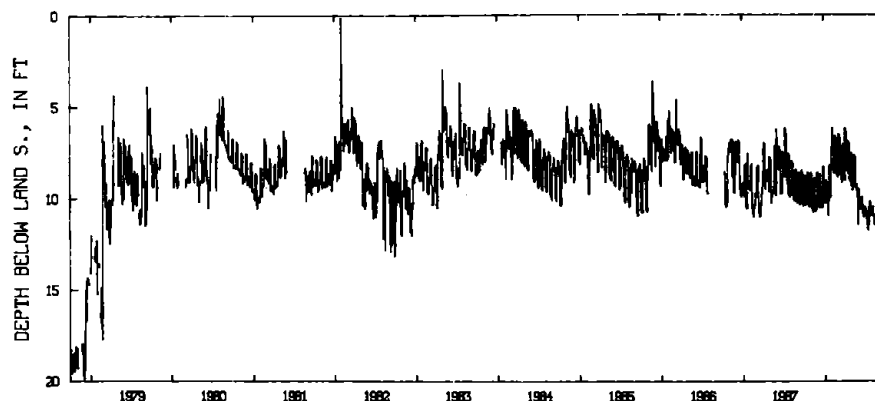
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 20.40 ft below land-surface datum, Nov. 5, 1977; minimum daily low, 0.15 ft below land-surface datum, Feb. 1, 1982.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|------|------|------|------|-------|-------|-------|-------|
| 1 | 10.47 | 10.44 | 8.66 | 9.94 | 9.75 | 8.81 | 8.82 | 9.34 | 11.45 | 10.52 | 10.51 | 10.87 |
| 2 | 10.40 | 8.73 | 8.67 | 9.98 | 9.08 | 8.85 | 8.82 | 7.55 | 9.55 | 10.53 | 10.50 | 10.85 |
| 3 | 10.39 | 8.69 | 8.63 | 10.17 | 7.48 | 8.81 | 9.06 | 7.59 | 9.51 | 10.82 | 10.52 | 10.77 |
| 4 | 10.40 | 8.67 | 8.63 | 10.05 | 7.27 | 8.46 | 6.55 | 7.66 | 9.53 | 10.61 | 10.53 | 11.03 |
| 5 | 8.76 | 8.66 | 8.64 | 10.26 | 7.46 | 8.43 | 6.24 | 7.70 | 10.04 | 10.65 | 10.53 | 11.07 |
| 6 | 8.78 | 8.69 | 10.38 | 10.26 | 7.62 | 8.25 | 6.23 | 7.76 | 10.26 | 10.71 | 10.47 | 11.22 |
| 7 | 8.79 | 8.71 | 10.47 | 10.26 | 6.25 | 6.55 | 6.28 | 9.36 | 10.45 | 10.71 | 10.85 | 11.27 |
| 8 | 8.80 | 10.34 | 10.51 | 10.26 | 6.21 | 6.54 | 6.37 | 9.58 | 10.62 | 10.74 | 10.98 | 11.28 |
| 9 | 8.79 | 10.53 | 10.51 | 10.26 | 6.48 | 6.54 | 6.45 | 9.40 | 10.58 | 10.77 | 11.04 | 11.37 |
| 10 | 8.80 | 10.58 | 10.51 | 10.26 | 6.60 | 6.66 | 8.45 | 9.38 | 10.63 | 11.29 | 11.13 | 11.41 |
| 11 | 10.32 | 10.64 | 10.53 | 9.05 | 6.76 | 6.73 | 8.24 | 9.37 | 10.64 | 11.42 | 11.22 | 11.09 |
| 12 | 10.41 | 10.74 | 10.53 | 9.09 | 6.80 | 6.77 | 8.29 | 9.39 | 10.24 | 11.55 | 11.37 | 10.96 |
| 13 | 10.32 | 10.75 | 10.53 | 9.14 | 6.97 | 8.61 | 8.39 | 9.32 | 10.21 | 11.59 | 11.47 | 10.47 |
| 14 | 10.33 | 10.75 | 10.33 | 9.16 | 8.56 | 8.56 | 8.47 | 9.32 | 10.21 | 11.68 | 11.01 | 10.04 |
| 15 | 10.31 | 10.75 | 8.78 | 9.17 | 8.60 | 8.56 | 8.40 | 7.82 | 10.20 | 11.72 | 10.95 | 10.03 |
| 16 | 10.31 | 9.07 | 8.73 | 9.23 | 8.66 | 8.63 | 8.33 | 7.68 | 10.12 | 11.75 | 10.96 | 9.87 |
| 17 | 10.30 | 8.99 | 10.25 | 10.87 | 8.67 | 8.74 | 8.65 | 7.71 | 9.96 | 11.41 | 10.96 | 9.75 |
| 18 | 10.32 | 8.98 | 10.26 | 10.96 | 8.61 | 8.74 | 6.90 | 7.76 | 9.94 | 11.32 | 10.98 | 10.18 |
| 19 | 10.30 | 8.96 | 10.26 | 10.97 | 8.49 | 8.78 | 6.95 | 7.79 | 10.26 | 11.14 | 11.00 | 10.27 |
| 20 | 8.67 | 8.95 | 10.49 | 10.83 | 8.24 | 9.17 | 6.98 | 7.79 | 10.56 | 10.98 | 11.00 | 10.35 |
| 21 | 8.66 | 8.97 | 10.52 | 10.26 | 6.79 | 7.26 | 7.07 | 7.83 | 10.58 | 10.63 | 11.46 | 10.47 |
| 22 | 8.67 | 10.64 | 10.51 | 10.14 | 6.65 | 7.27 | 7.08 | 9.46 | 10.76 | 10.37 | 11.40 | 10.42 |
| 23 | 8.67 | 10.65 | 10.52 | 10.07 | 7.66 | 7.28 | 7.14 | 9.41 | 10.94 | 10.20 | 11.47 | 10.52 |
| 24 | 8.68 | 10.73 | 10.53 | 8.42 | 6.76 | 7.34 | 9.04 | 9.39 | 11.01 | 10.41 | 11.42 | 10.53 |
| 25 | 10.26 | 10.74 | 10.53 | 8.28 | 6.79 | 7.29 | 8.86 | 9.33 | 11.05 | 10.64 | 11.50 | 10.18 |
| 26 | 10.48 | 10.67 | 10.46 | 8.27 | 6.82 | 7.09 | 8.88 | 9.28 | 11.05 | 10.64 | 11.59 | 10.08 |
| 27 | 10.47 | 10.55 | 10.25 | 8.26 | 6.97 | 8.97 | 8.96 | 9.35 | 10.64 | 10.64 | 11.73 | 10.08 |
| 28 | 10.48 | 10.51 | 8.41 | 8.28 | 8.57 | 8.70 | 8.96 | 9.51 | 10.61 | 10.85 | 11.31 | 10.08 |
| 29 | 10.38 | 10.49 | 8.33 | 8.32 | 8.75 | 8.73 | 8.97 | 9.79 | 10.61 | 10.91 | 11.00 | 10.08 |
| 30 | 10.42 | 10.26 | 8.34 | 8.32 | --- | 8.77 | 9.06 | 9.53 | 10.51 | 10.95 | 11.00 | 10.04 |
| 31 | 10.45 | --- | 8.33 | 10.00 | --- | 8.78 | --- | 9.59 | --- | 10.51 | 10.94 | --- |
| MAX | 10.48 | 10.75 | 10.53 | 10.97 | 9.75 | 9.17 | 9.06 | 9.79 | 11.45 | 11.75 | 11.73 | 11.41 |

CAL YR 1987 LOW 11.06
WTR YR 1988 LOW 11.75394425083551100 GR-10
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

HAMILTON COUNTY

391039084291500. Local number, H-11.

LOCATION.--Lat 39°10'39", long 84°29'15", Hydrologic Unit 05090203, 5.6 mi north of Riverfront Stadium in Cincinnati.

Owner: Procter and Gamble Company.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 6 in., depth 148 ft, cased.

INSTRUMENTATION.--Biyearly measurement with chalked tape by ODNR personnel.

DATUM.--Elevation of land-surface datum is 539 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 2.23 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--August 1939 to September 1982 continuous, periodic thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 129.72 ft below land-surface datum, Oct 25, 1948; minimum daily low, 69.01 ft below land-surface datum, Apr. 11, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

| DATE | WATER LEVEL | DATE | WATER LEVEL |
|---------------|----------------|---------------|----------------|
| Oct. 30, 1987 | 69.56 | Apr. 11, 1988 | 69.01 |

GROUND-WATER RECORDS
HAMILTON COUNTY--Continued

237

391101084172100. Local number, H-3.

LOCATION.--Lat 39°11'01", long 84°17'21", Hydrologic Unit 05090202, southeast of Miamiaville.

Owner: Indian Hills Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 4 in., depth 60 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 532.22 ft above National Geodetic Vertical Datum of 1929. Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--August 1952 to current year.

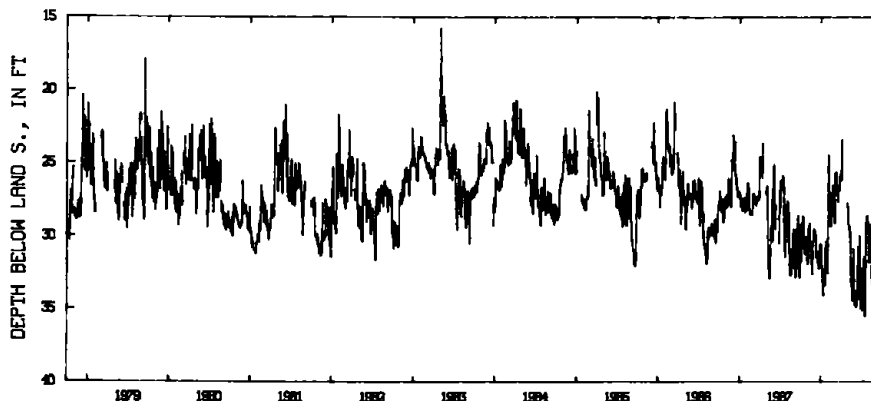
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 35.75 ft below land-surface datum, Aug. 29, 1955; minimum daily low, 15.60 ft below land-surface datum, Feb. 28, 1962.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 29.95 | 31.00 | 30.15 | 30.60 | 32.55 | 28.80 | 26.20 | 27.95 | 34.70 | 32.25 | 29.50 | 29.70 |
| 2 | 29.40 | 31.60 | 29.55 | 30.55 | 30.70 | 29.08 | 26.10 | 28.20 | 34.65 | 33.90 | 29.80 | 29.75 |
| 3 | 29.20 | 31.95 | 29.55 | 30.75 | 25.55 | 29.10 | 26.10 | 28.75 | 33.95 | 34.30 | 31.80 | 29.70 |
| 4 | 30.65 | 31.85 | 29.60 | 31.40 | 24.50 | 25.70 | 23.45 | 29.05 | 33.80 | 34.80 | 30.35 | 28.80 |
| 5 | 30.65 | 31.35 | 29.60 | 31.80 | 24.75 | 25.75 | --- | 29.30 | 34.15 | 35.10 | 31.80 | 28.00 |
| 6 | 31.75 | 30.85 | 29.70 | 32.05 | 26.10 | 26.30 | --- | 29.30 | 34.50 | 35.00 | 29.95 | 28.25 |
| 7 | 31.00 | 29.50 | 29.85 | 32.25 | 26.80 | 26.70 | --- | 29.40 | 34.75 | 34.75 | 29.30 | 28.65 |
| 8 | 30.50 | 30.15 | 29.90 | 32.60 | 27.40 | 27.20 | --- | 29.40 | 34.85 | 34.70 | 29.20 | 28.90 |
| 9 | 29.50 | 30.65 | 30.00 | 32.80 | 27.90 | 26.15 | --- | 29.55 | 34.85 | 34.70 | 29.50 | 29.10 |
| 10 | 29.30 | 30.30 | 31.00 | 33.15 | 27.50 | 25.65 | --- | 29.70 | 34.50 | 34.45 | 29.65 | 29.30 |
| 11 | 29.20 | 29.25 | 31.30 | 32.60 | 27.05 | 26.80 | --- | 29.65 | 34.55 | 32.60 | 29.75 | 29.40 |
| 12 | 28.90 | 29.15 | 31.45 | 33.80 | 28.50 | 26.90 | --- | 30.45 | 34.10 | 31.85 | 29.70 | 29.50 |
| 13 | 28.65 | 29.25 | 31.10 | 34.10 | 29.05 | --- | --- | 29.70 | 32.25 | 31.40 | 29.55 | 29.05 |
| 14 | 28.80 | 29.70 | 31.05 | --- | 29.35 | --- | --- | 30.05 | 32.25 | 31.60 | 29.55 | 28.65 |
| 15 | 28.95 | 30.60 | 31.10 | --- | 29.35 | 26.55 | --- | 31.85 | 32.10 | 34.20 | 29.80 | 28.50 |
| 16 | 28.95 | 30.60 | 31.45 | --- | 29.15 | 26.75 | --- | 32.90 | 32.10 | 34.90 | 32.40 | 28.55 |
| 17 | 30.65 | 30.55 | 31.65 | --- | 28.40 | 26.85 | --- | 33.40 | 31.20 | 35.50 | 32.85 | 28.50 |
| 18 | 30.70 | 31.55 | 31.80 | --- | 27.60 | 27.60 | --- | 33.50 | 30.70 | 35.35 | 33.30 | 27.90 |
| 19 | 30.80 | 31.40 | 31.35 | 33.40 | 28.45 | 27.65 | --- | 33.25 | 31.10 | 34.80 | 31.55 | 28.20 |
| 20 | 30.50 | 30.40 | 31.20 | 32.65 | 28.40 | --- | --- | 33.30 | 31.20 | 32.10 | 30.65 | 28.35 |
| 21 | 30.40 | 31.10 | 31.45 | 30.95 | 28.30 | --- | --- | 34.10 | 31.20 | 30.70 | 29.50 | 28.55 |
| 22 | 31.00 | 31.80 | 31.80 | 30.80 | 27.60 | 26.90 | --- | 34.45 | 29.95 | 29.10 | 29.65 | 28.85 |
| 23 | 31.25 | 32.30 | 32.10 | 30.80 | 27.05 | 26.80 | --- | 33.95 | 30.80 | 29.10 | 29.65 | --- |
| 24 | 31.25 | 32.60 | 32.25 | 31.15 | 26.70 | 26.85 | --- | 33.20 | 32.70 | 28.70 | 29.50 | --- |
| 25 | 30.80 | 32.60 | 32.25 | 30.35 | 26.50 | 26.85 | --- | 33.00 | 33.45 | 29.10 | 29.30 | --- |
| 26 | 30.10 | 31.20 | 31.40 | 30.90 | 26.55 | 26.00 | --- | 30.90 | 34.25 | 29.05 | 29.80 | --- |
| 27 | 30.05 | 30.55 | 30.85 | 31.75 | 26.65 | 25.80 | --- | 30.90 | 34.40 | 28.70 | 30.15 | --- |
| 28 | 30.10 | 30.40 | 30.60 | 31.15 | 26.75 | 25.95 | --- | 33.00 | 34.95 | 28.60 | 30.30 | --- |
| 29 | 30.10 | 30.15 | 31.00 | 31.60 | 28.20 | 26.05 | 27.75 | 32.95 | 34.95 | 29.05 | 30.30 | --- |
| 30 | 30.10 | 30.15 | 30.90 | 31.80 | --- | 26.10 | 28.05 | 34.00 | 33.40 | 29.40 | 30.10 | --- |
| 31 | 30.65 | --- | 30.75 | 32.25 | --- | 26.20 | --- | 34.60 | --- | 29.40 | 29.90 | --- |
| MAX | 31.75 | 32.60 | 32.25 | 34.10 | 32.55 | 29.10 | 28.05 | 34.60 | 34.95 | 35.50 | 33.30 | 29.75 |

CAL YR 1987 LOW 32.90

WTR YR 1988 LOW 35.50



391101084172100 H-3
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

HAMILTON COUNTY--Continued

391201084281600. Local number, H-10.

LOCATION.--Lat 39°12'01", long 84°28'16", Hydrologic Unit 05090203, Section Road, Cincinnati.

Owner: National Distillers.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., depth 170 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute.

DATUM.--Elevation of land-surface datum is 544.7 ft above National Geodetic Vertical Datum of 1929.

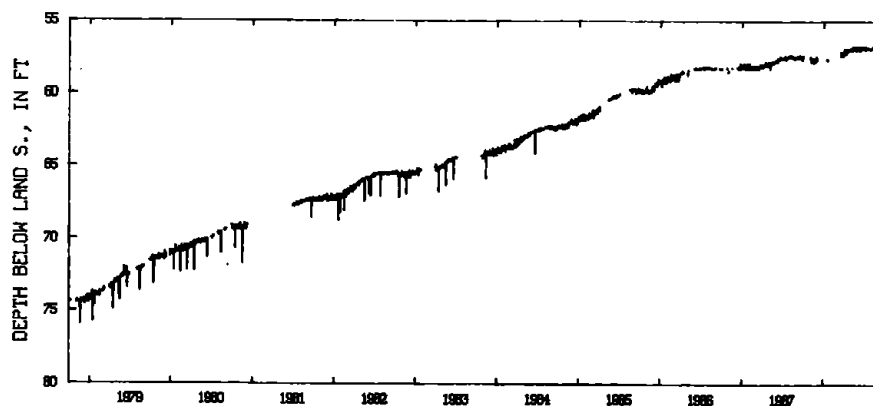
Measuring point: Floor of instrument shelter 8.13 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--January 1944 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 121.58 ft below land-surface datum, Nov. 3, 10, 1950;
minimum daily low, 56.68 ft below land-surface datum, Sept. 4, 1988.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-----|-------|-------|-------|-------|-------|-------|-------|
| 1 | 57.56 | --- | 57.56 | --- | --- | --- | 57.15 | 56.95 | 56.78 | 56.82 | 56.82 | 57.03 |
| 2 | 57.36 | --- | 57.69 | --- | --- | --- | 57.09 | 56.97 | 56.73 | 56.80 | 56.86 | 56.99 |
| 3 | --- | --- | 57.61 | --- | --- | --- | 57.01 | 56.90 | 56.82 | 56.76 | 56.85 | 56.87 |
| 4 | --- | 57.45 | --- | --- | --- | --- | 57.07 | 56.82 | 56.89 | 56.85 | 56.82 | 56.68 |
| 5 | 57.37 | 57.74 | --- | --- | --- | --- | 57.04 | 56.84 | 56.89 | 56.92 | 56.76 | 56.87 |
| 6 | --- | 57.80 | --- | --- | --- | --- | 56.91 | 56.90 | 56.82 | 56.93 | 56.77 | 56.95 |
| 7 | --- | 57.69 | --- | --- | --- | --- | 57.14 | 56.94 | 56.72 | 56.89 | 56.82 | 57.01 |
| 8 | --- | 57.63 | --- | 57.67 | --- | --- | 57.23 | 56.83 | 56.73 | 56.85 | 56.79 | 56.94 |
| 9 | --- | 57.72 | --- | --- | --- | --- | 57.25 | 56.77 | 56.92 | 56.78 | 56.78 | 56.92 |
| 10 | --- | 57.74 | --- | --- | --- | --- | 57.14 | 56.88 | 57.00 | 56.77 | 56.83 | 57.02 |
| 11 | --- | 57.74 | --- | --- | --- | --- | 56.96 | 56.99 | 56.99 | 56.78 | 56.86 | 57.04 |
| 12 | --- | 57.66 | --- | 57.62 | --- | --- | 56.96 | 56.97 | 56.94 | 56.80 | 56.90 | 56.98 |
| 13 | --- | 57.54 | --- | --- | --- | --- | 57.01 | 56.85 | 56.96 | 56.81 | 56.88 | 56.90 |
| 14 | --- | 57.71 | --- | --- | --- | --- | 57.02 | 56.86 | 56.98 | 56.80 | 56.83 | 56.99 |
| 15 | --- | 57.81 | 57.39 | --- | --- | --- | 57.09 | 56.78 | 56.90 | 56.83 | 56.82 | 57.06 |
| 16 | --- | 57.69 | --- | 57.65 | --- | --- | 57.13 | 56.73 | 56.79 | 56.83 | 56.83 | 57.05 |
| 17 | --- | 57.56 | --- | 57.61 | --- | 57.35 | 57.01 | 56.83 | 56.80 | 56.83 | 56.84 | 56.97 |
| 18 | --- | 57.86 | --- | 57.68 | --- | 57.28 | 56.90 | 56.84 | 56.86 | 56.79 | 56.77 | 56.97 |
| 19 | --- | 57.84 | --- | 57.63 | --- | 57.12 | 56.99 | 56.77 | 56.85 | 56.82 | 56.74 | 56.87 |
| 20 | --- | 57.71 | --- | --- | --- | 57.28 | 56.99 | 56.80 | 56.83 | 56.83 | 56.74 | 56.96 |
| 21 | --- | 57.84 | --- | --- | --- | 57.40 | 56.92 | 56.80 | 56.81 | 56.86 | 56.87 | 57.05 |
| 22 | --- | 57.74 | --- | --- | --- | 57.39 | 56.88 | 56.78 | 56.74 | 56.86 | 56.92 | 56.96 |
| 23 | --- | 57.73 | --- | --- | --- | 57.23 | 56.91 | 56.71 | 56.84 | 56.85 | 56.82 | 56.90 |
| 24 | --- | 57.81 | --- | --- | --- | 57.22 | 57.04 | 56.80 | 56.88 | 56.87 | 56.79 | 56.93 |
| 25 | --- | 57.68 | --- | --- | --- | 57.11 | 57.02 | 56.97 | 56.79 | 56.85 | 56.76 | 57.04 |
| 26 | --- | 57.78 | --- | --- | --- | 57.17 | 56.88 | 56.99 | 56.79 | 56.81 | 56.85 | 57.09 |
| 27 | --- | 57.72 | --- | --- | --- | 57.31 | 56.89 | 56.95 | 56.83 | 56.86 | 56.85 | 57.04 |
| 28 | --- | 57.59 | --- | --- | --- | 57.34 | 56.94 | 56.91 | 56.79 | 56.91 | 56.92 | 57.05 |
| 29 | --- | 57.49 | --- | --- | --- | 57.12 | 56.96 | 56.86 | 56.79 | 56.91 | 56.95 | 57.09 |
| 30 | --- | 57.44 | --- | --- | --- | 57.34 | 57.00 | 56.88 | 56.76 | 56.83 | 56.98 | 57.10 |
| 31 | --- | --- | 57.67 | --- | --- | 57.27 | --- | 56.88 | --- | 56.85 | 57.01 | --- |
| MAX | 57.56 | 57.86 | 57.69 | 57.68 | --- | 57.40 | 57.25 | 56.99 | 57.00 | 56.93 | 57.01 | 57.10 |
| CAL YR 1987 | LOW 58.29 | | | | | | | | | | | |
| WTR YR 1988 | LOW 57.86 | | | | | | | | | | | |



391201084281600 H-10
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

239

HAMILTON COUNTY--Continued

391214084470100. Local number, H-1.

LOCATION.--Lat 39°12'14", long 84°47'01", Hydrologic Unit 05080003, Kilby Road 4 mi southeast of Harrison.

Owner: Robert Weber.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water-table well, diameter 6 in., depth 124 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 500 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 2.70 ft above land-surface datum.

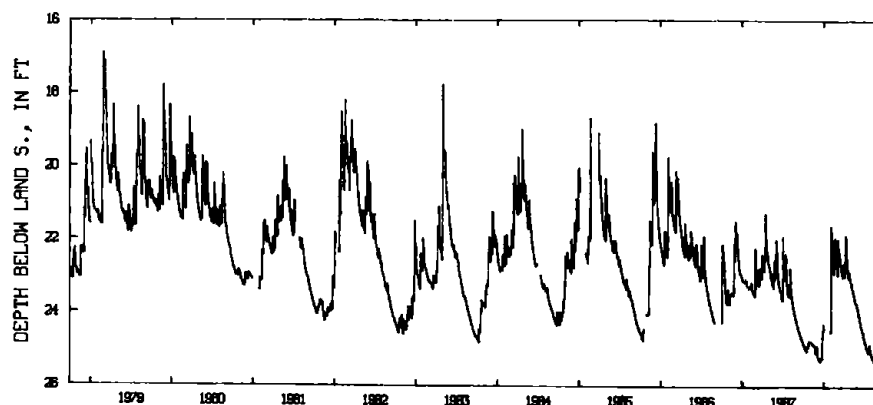
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--February 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 25.80 ft below land-surface datum, Jan. 18-20, 1964; minimum daily low, 14.00 ft below land-surface datum, Jan. 22, 1959.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 24.83 | 24.77 | 24.96 | 24.42 | 24.47 | 22.89 | 22.99 | 23.15 | 23.92 | 24.77 | 25.14 | 25.59 |
| 2 | 24.85 | 24.76 | 25.07 | --- | 22.35 | 22.95 | 22.98 | 23.17 | 23.94 | 24.79 | 25.18 | 25.60 |
| 3 | 24.85 | 24.75 | 25.10 | --- | 21.61 | 22.95 | 22.87 | 23.20 | 23.98 | 24.80 | 25.21 | 25.61 |
| 4 | 24.85 | 24.77 | 25.17 | --- | 21.61 | 21.95 | 22.62 | 23.24 | 24.02 | 24.80 | 25.18 | 25.53 |
| 5 | 24.87 | 24.78 | 25.18 | --- | 21.80 | 22.20 | 22.66 | 23.26 | 24.05 | 24.84 | 25.20 | 25.54 |
| 6 | 24.89 | 24.78 | 25.19 | --- | 21.93 | 22.25 | 22.68 | 23.31 | 24.08 | 24.88 | 25.21 | 25.56 |
| 7 | 24.93 | 24.78 | 25.20 | --- | 21.97 | 22.27 | 22.15 | 23.34 | 24.13 | 24.91 | 25.21 | 25.57 |
| 8 | 24.94 | 24.78 | 25.22 | --- | 22.00 | 22.28 | 21.86 | 23.35 | 24.17 | 24.93 | 25.22 | 25.54 |
| 9 | 24.96 | 24.79 | 25.25 | --- | 22.37 | 22.33 | 22.10 | 23.36 | 24.18 | 24.95 | 25.26 | 25.54 |
| 10 | 24.96 | 24.80 | 25.26 | --- | 22.57 | 22.43 | 22.26 | 23.36 | 24.21 | 24.96 | 25.28 | 25.55 |
| 11 | 24.95 | 24.82 | 25.27 | --- | 22.72 | 22.52 | 22.38 | 23.41 | 24.24 | 24.96 | 25.31 | 25.55 |
| 12 | 24.96 | 24.83 | 25.28 | --- | 22.85 | 22.54 | 22.50 | 23.45 | 24.26 | 24.98 | 25.32 | 25.55 |
| 13 | 24.99 | 24.83 | 25.29 | --- | 22.89 | 22.47 | 22.60 | 23.48 | 24.30 | 25.00 | 25.33 | 25.56 |
| 14 | 25.01 | 24.84 | 25.30 | --- | 22.90 | 22.59 | 22.70 | 23.50 | 24.33 | 25.04 | 25.31 | 25.58 |
| 15 | 25.01 | 24.84 | 25.30 | --- | 22.90 | 22.59 | 22.79 | 23.50 | 24.37 | 25.05 | 25.34 | 25.62 |
| 16 | 25.02 | 24.83 | 25.23 | --- | 22.53 | 22.65 | 22.84 | 23.53 | 24.40 | 25.05 | 25.37 | 25.64 |
| 17 | 24.92 | 24.85 | 25.20 | --- | 22.49 | 22.70 | 22.85 | 23.58 | 24.42 | 25.05 | 25.40 | 25.64 |
| 18 | 24.90 | 24.86 | 25.22 | --- | 22.53 | 22.74 | 22.89 | 23.61 | 24.44 | 25.06 | 25.42 | 25.64 |
| 19 | 24.87 | 24.88 | 25.23 | --- | 22.52 | 22.80 | 22.95 | 23.65 | 24.45 | 25.06 | 25.42 | 25.65 |
| 20 | 24.88 | 24.89 | 25.24 | --- | 21.99 | 22.85 | 23.01 | 23.68 | 24.46 | 25.06 | 25.42 | 25.65 |
| 21 | 24.88 | 24.89 | 25.24 | --- | 21.94 | 22.90 | 23.02 | 23.70 | 24.48 | 24.85 | 25.34 | 25.68 |
| 22 | 24.90 | 24.89 | 25.22 | --- | 22.05 | 22.93 | 23.01 | 23.70 | 24.50 | 24.84 | 25.40 | 25.69 |
| 23 | 24.90 | 24.89 | 25.21 | --- | 22.10 | 22.97 | 22.86 | 23.71 | 24.52 | 24.90 | 25.42 | 25.71 |
| 24 | 24.85 | 24.99 | 25.21 | --- | 22.11 | 23.00 | 22.87 | 23.71 | 24.55 | 24.93 | 25.44 | 25.72 |
| 25 | 24.77 | 25.07 | 25.21 | --- | 22.34 | 23.00 | 22.95 | 23.72 | 24.57 | 24.97 | 25.48 | 25.72 |
| 26 | 24.75 | 25.07 | 24.65 | --- | 22.50 | 22.64 | 23.00 | 23.75 | 24.60 | 25.02 | 25.50 | 25.71 |
| 27 | 24.74 | 25.07 | 24.48 | --- | 22.61 | 22.76 | 23.05 | 23.78 | 24.65 | 25.05 | 25.52 | 25.72 |
| 28 | 24.75 | 24.94 | 24.48 | --- | 22.70 | 22.82 | 23.07 | 23.80 | 24.69 | 25.08 | 25.52 | 25.74 |
| 29 | 24.77 | 24.87 | 24.29 | 24.49 | 22.78 | 22.90 | 23.11 | 23.82 | 24.71 | 25.11 | 25.52 | 25.75 |
| 30 | 24.77 | 24.86 | 24.36 | 24.50 | --- | 22.94 | 23.13 | 23.84 | 24.74 | 25.14 | 25.55 | 25.77 |
| 31 | 24.77 | --- | 24.36 | 24.50 | --- | 22.97 | --- | 23.89 | --- | 25.14 | 25.57 | --- |
| MAX | 25.02 | 25.07 | 25.30 | 24.50 | 24.47 | 23.00 | 23.13 | 23.89 | 24.74 | 25.14 | 25.57 | 25.77 |

CAL YR 1987 LOW 25.30
WTR YR 1988 LOW 25.77391214084470100 H-1
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

HAMILTON COUNTY--Continued

391324084272500. Local number, B-9.

LOCATION.--Lat 39°13'24", long 84°27'25", Hydrologic Unit 05090203, 9.1 mi north of Riverfront Stadium in Cincinnati.

Owner: Diamond National Corporation.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in., depth drilled 168 ft, present depth 163 ft, cased.

INSTRUMENTATION.--Biyearly measurement with chalked tape by ODNR personnel.

DATUM.--Elevation of land-surface datum is 555.30 ft above National Geodetic Vertical Datum of 1929. Measuring point: Floor of instrument shelter, 2.76 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--July 1938 to September 1982 continuous, periodic thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low 136.80 ft below land-surface datum, Nov. 9, 1947, Feb. 15, 1948; minimum water level measured, 52.93 ft below land-surface datum, Apr. 11, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

| DATE | WATER LEVEL | DATE | WATER LEVEL |
|---------------|----------------|---------------|----------------|
| Oct. 30, 1987 | 55.07 | Apr. 11, 1988 | 52.93 |

GROUND-WATER RECORDS

241

HAMILTON COUNTY--Continued

391341084275300. Local number, H-8.

LOCATION.--Lat 39°13'41", long 84°27'53", Hydrologic Unit 05090203. Vine and Water Streets, Wyoming.

Owner.--Wyoming Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., depth 194 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 576.2 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of platform 3.30 ft above land-surface datum.

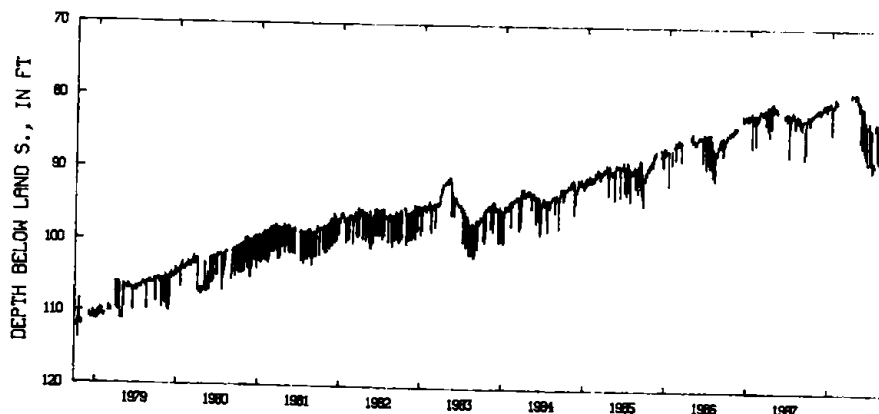
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 148.86 ft below land-surface datum, Dec. 1, 1948; minimum daily low, 78.70 ft below land-surface datum, Apr. 22, 1988.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-----|-------|-------|-------|-------|-------|-------|-------|
| 1 | 82.05 | 81.60 | --- | 80.55 | --- | --- | 79.05 | 80.05 | 82.50 | 87.50 | 83.95 | 83.40 |
| 2 | 82.10 | 81.50 | 80.70 | 80.65 | --- | --- | 78.95 | 80.05 | 82.60 | --- | 88.00 | 83.25 |
| 3 | 82.35 | 81.20 | 80.45 | 80.55 | --- | --- | 78.80 | 80.00 | 82.65 | 83.85 | 88.20 | 82.75 |
| 4 | 82.35 | 81.00 | 80.70 | 80.40 | --- | --- | --- | 79.75 | 83.00 | 88.05 | --- | 82.30 |
| 5 | 82.20 | 81.25 | 80.95 | 80.50 | --- | --- | --- | 79.70 | 87.20 | 88.70 | 84.40 | 82.55 |
| 6 | 81.80 | 81.35 | 81.00 | 84.45 | --- | --- | --- | 80.10 | 87.40 | 89.55 | 83.95 | 82.30 |
| 7 | 81.80 | 81.20 | 80.90 | 80.85 | --- | --- | --- | 81.05 | 87.55 | 89.35 | 83.95 | 82.25 |
| 8 | 82.00 | 81.30 | 80.70 | 80.70 | --- | --- | --- | 81.05 | 87.40 | 89.15 | 84.35 | 82.20 |
| 9 | 81.95 | 81.35 | 80.45 | 80.70 | --- | --- | --- | 80.20 | 87.40 | 89.35 | 88.25 | 82.20 |
| 10 | 81.95 | 81.30 | 80.40 | 80.75 | --- | --- | --- | 80.00 | 83.10 | 88.40 | 88.50 | 82.95 |
| 11 | 81.95 | 81.25 | 80.20 | 80.75 | --- | --- | 78.82 | 80.35 | 87.50 | 88.15 | 88.05 | 85.90 |
| 12 | 81.95 | 81.10 | 80.75 | 80.45 | --- | --- | 78.85 | 80.40 | 88.20 | --- | 88.00 | 82.70 |
| 13 | 81.95 | 80.90 | 81.25 | 80.70 | --- | --- | 78.80 | 80.45 | 88.30 | --- | 84.35 | 82.35 |
| 14 | 81.80 | 81.45 | 81.05 | 80.70 | --- | --- | 79.00 | 80.50 | 88.40 | --- | 84.10 | 82.85 |
| 15 | 81.70 | 81.65 | 80.75 | 80.40 | --- | --- | 79.10 | 85.40 | 88.45 | 88.55 | 84.25 | 82.80 |
| 16 | 81.60 | 81.40 | 80.60 | 80.20 | --- | --- | 79.15 | 83.00 | 88.45 | 88.65 | 84.30 | 82.60 |
| 17 | 81.55 | 81.00 | 80.45 | 80.15 | --- | --- | 79.45 | 81.80 | --- | 88.80 | 84.40 | 81.95 |
| 18 | 81.60 | 81.40 | 80.45 | 80.25 | --- | --- | 79.05 | 81.55 | 83.15 | 88.80 | 84.40 | 81.85 |
| 19 | 81.50 | 81.25 | 80.20 | 79.95 | --- | --- | 78.95 | 81.00 | 83.40 | --- | 84.05 | 81.60 |
| 20 | 81.40 | 80.95 | 80.45 | 79.40 | --- | --- | 78.90 | 80.75 | 83.45 | 83.75 | 83.45 | 81.65 |
| 21 | 81.60 | 81.15 | 80.60 | 79.65 | --- | --- | 78.80 | 83.20 | 82.95 | 83.05 | 85.35 | 81.80 |
| 22 | 81.65 | 81.00 | 80.35 | 80.05 | --- | --- | 78.70 | 86.25 | 82.70 | 82.90 | 87.50 | 81.60 |
| 23 | 81.50 | 81.10 | 80.35 | 80.15 | --- | --- | 78.90 | 82.60 | 86.75 | 82.80 | 83.45 | 81.65 |
| 24 | 81.65 | 81.10 | 80.55 | 79.75 | --- | --- | 79.05 | 80.80 | 83.55 | 82.85 | 82.75 | 81.65 |
| 25 | 81.55 | 80.95 | 80.50 | 79.70 | --- | --- | 78.90 | 80.85 | 87.65 | 83.40 | 82.75 | 81.75 |
| 26 | 81.25 | 81.00 | 80.60 | 80.15 | --- | --- | 78.80 | 80.75 | 88.25 | 83.50 | 83.50 | 81.75 |
| 27 | 81.20 | 80.80 | 80.30 | 80.20 | --- | --- | 78.90 | 80.85 | 88.40 | 87.25 | 83.60 | 81.60 |
| 28 | 81.15 | 80.45 | 80.00 | 80.10 | --- | --- | 78.95 | 81.80 | 88.10 | 87.80 | 83.00 | 81.75 |
| 29 | 81.15 | 80.45 | 80.60 | 79.89 | --- | --- | 79.45 | 84.10 | 84.10 | --- | 86.10 | 81.70 |
| 30 | 81.15 | 80.35 | 80.55 | --- | --- | --- | 79.85 | 86.70 | 83.60 | 84.00 | 83.45 | 81.60 |
| 31 | 81.55 | --- | 80.20 | --- | --- | 79.25 | --- | 82.70 | --- | 83.70 | 83.45 | --- |
| MAX | 82.35 | 81.65 | 81.25 | 84.45 | --- | 79.25 | 79.85 | 86.70 | 88.45 | 89.55 | 88.50 | 85.90 |
| CAL YR 1987 | LOW 87.80 | | | | | | | | | | | |
| WTR YR 1988 | LOW 89.55 | | | | | | | | | | | |



391341084275300 H-8
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

HAMILTON COUNTY--Continued

391442084262900. Local number, H-7.

LOCATION.--Lat 39°14'42", long 84°26'29", Hydrologic Unit 05090203, at Evendale.

Owner: General Electric Corp.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 6 in., depth 180 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 555.40 ft above National Geodetic Vertical Datum of 1929. Measuring point: Floor of instrument shelter 7.78 ft above land-surface datum.

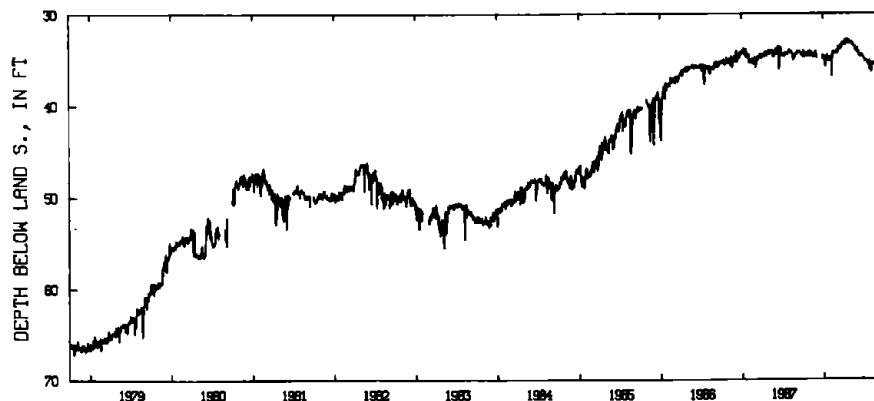
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 101.09 ft below land-surface datum, Jan. 29, 1964; minimum daily low, 32.79 ft below land-surface datum, Apr. 18, 1988.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 34.38 | 34.66 | 34.43 | 35.00 | 34.75 | 34.22 | 33.38 | 33.30 | 33.76 | 34.94 | 35.57 | 35.62 |
| 2 | 34.50 | 34.53 | 34.58 | 35.04 | 34.93 | 34.10 | 33.32 | 33.22 | 34.22 | 34.95 | 35.68 | 35.62 |
| 3 | 34.76 | 34.33 | 34.57 | 34.85 | 34.93 | 34.05 | 33.10 | 33.24 | 34.13 | 34.87 | 35.87 | 35.50 |
| 4 | 34.76 | 34.14 | 34.76 | 34.80 | 34.92 | 34.20 | 33.04 | 33.20 | 34.23 | 35.00 | 36.38 | 35.50 |
| 5 | 34.45 | 34.53 | 34.87 | 34.98 | 35.13 | 34.38 | 33.10 | 33.18 | 34.25 | 35.11 | 35.65 | 35.68 |
| 6 | 34.05 | 34.61 | --- | 35.04 | 35.13 | 34.21 | 32.95 | 33.23 | 34.15 | 35.15 | 35.45 | 35.69 |
| 7 | 34.39 | 34.48 | --- | 35.03 | 35.01 | 34.07 | 33.20 | 33.34 | 34.09 | 35.24 | 35.47 | 35.67 |
| 8 | 34.62 | 34.38 | --- | 34.73 | 34.68 | 34.04 | 33.34 | 33.24 | 34.10 | 35.24 | 35.41 | 35.45 |
| 9 | 34.66 | 34.52 | --- | 34.91 | 36.50 | 33.64 | 33.40 | 33.09 | 34.50 | 35.19 | 35.35 | 36.54 |
| 10 | 34.75 | 34.54 | --- | 35.04 | 36.83 | 33.82 | 33.30 | 33.27 | 34.63 | 35.16 | 35.39 | 35.88 |
| 11 | 34.78 | 34.54 | --- | 35.00 | 34.74 | 33.90 | 33.03 | 33.43 | 34.61 | 35.14 | 35.49 | 35.76 |
| 12 | 34.60 | 34.40 | --- | 35.77 | 34.45 | 33.60 | 32.97 | 33.46 | 34.52 | 35.21 | 35.62 | 35.67 |
| 13 | 34.54 | 34.27 | --- | 35.21 | 34.49 | 33.71 | 33.08 | 33.45 | 34.55 | 35.22 | 35.63 | 35.49 |
| 14 | 34.60 | 34.60 | --- | 35.31 | 34.46 | 33.71 | 33.06 | 33.50 | 34.68 | 35.15 | 35.54 | 35.61 |
| 15 | 34.58 | 34.66 | --- | 35.10 | 34.17 | 33.86 | 33.19 | 33.45 | 34.67 | 35.24 | 35.45 | 35.76 |
| 16 | 34.51 | 34.54 | --- | 34.85 | 34.33 | 33.95 | 33.25 | 33.42 | 34.60 | 35.25 | 35.54 | 35.75 |
| 17 | 34.47 | 34.58 | --- | 34.79 | 34.37 | 33.97 | 33.16 | 33.57 | 34.57 | 35.31 | 35.53 | 35.64 |
| 18 | 34.53 | 34.84 | --- | 34.83 | 34.40 | 33.79 | 32.79 | 33.61 | 34.59 | 35.30 | 35.47 | 35.51 |
| 19 | 34.37 | 34.80 | --- | 34.82 | 34.20 | 33.52 | 33.05 | 33.60 | 34.58 | 35.43 | 35.44 | 35.39 |
| 20 | 34.42 | 34.78 | --- | 34.56 | 34.18 | 33.53 | 33.10 | 33.66 | 34.57 | 35.43 | 35.43 | 35.25 |
| 21 | 34.65 | 34.79 | --- | 34.89 | 34.36 | 33.75 | 32.95 | 33.67 | 34.55 | 35.38 | 35.54 | 35.59 |
| 22 | 34.71 | 34.75 | --- | 34.92 | 34.19 | 33.79 | 32.98 | 33.66 | 34.46 | 35.36 | 35.56 | 35.50 |
| 23 | 34.55 | 34.82 | --- | 34.77 | 34.30 | 33.60 | 32.91 | 33.60 | 34.67 | 35.32 | 35.44 | 35.25 |
| 24 | 34.63 | 34.82 | --- | 34.92 | 34.34 | 33.48 | 33.11 | 33.98 | 34.75 | 35.27 | 35.33 | 35.35 |
| 25 | 34.71 | 34.78 | --- | 34.91 | 34.37 | 33.29 | 33.13 | 34.05 | 34.70 | 35.20 | 35.30 | 35.45 |
| 26 | 34.48 | 34.78 | --- | 35.14 | 34.37 | 33.18 | 32.98 | 34.05 | 34.65 | 35.16 | 35.44 | 35.56 |
| 27 | 34.22 | 34.64 | --- | 35.22 | 34.35 | 33.42 | 32.99 | 33.96 | 34.75 | 35.68 | 35.47 | 35.51 |
| 28 | 34.33 | 34.29 | --- | 35.24 | 34.35 | 33.48 | 33.13 | 33.89 | 34.71 | 36.06 | 35.52 | 35.47 |
| 29 | 34.40 | 34.15 | --- | 35.10 | 34.17 | 33.34 | 33.22 | 33.90 | 34.75 | 36.16 | 35.50 | 35.51 |
| 30 | 34.45 | 34.15 | --- | 34.90 | --- | 33.49 | 33.25 | 33.90 | 34.78 | 36.15 | 35.49 | 35.51 |
| 31 | 34.66 | --- | 34.65 | 34.85 | --- | 33.49 | --- | 33.88 | --- | 35.84 | 35.54 | --- |
| MAX | 34.78 | 34.84 | 34.87 | 35.77 | 36.83 | 34.38 | 33.40 | 34.05 | 34.78 | 36.16 | 36.38 | 36.54 |
| CAL YR 1987 | LOW 36.12 | | | | | | | | | | | |
| WTR YR 1988 | LOW 36.83 | | | | | | | | | | | |



391442084262900 H-7
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

243

HAMILTON COUNTY--Continued

391608084254400. Local number, H-6.

LOCATION.--Lat 39°16'08", long 84°25'44", Hydrologic Unit 05090203, Water Treatment Plant in Glendale.

Owner: Glendale Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., depth 167 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 570.65 ft above National Geodetic Vertical Datum of 1929. Measuring point: Floor of instrument shelter 4.05 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

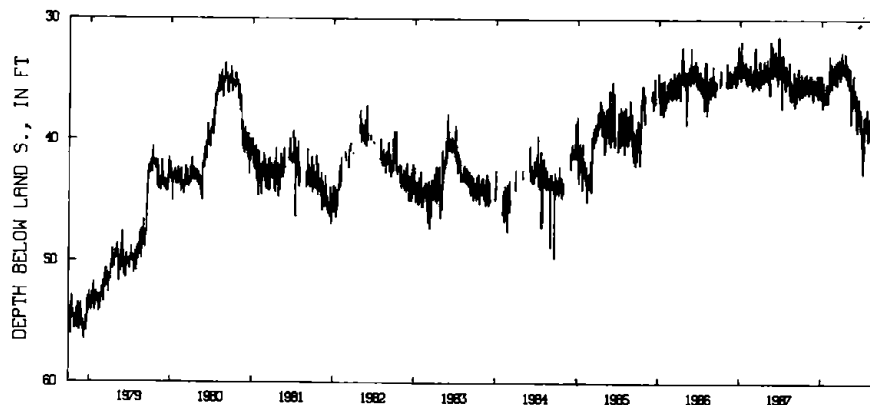
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 84.10 ft below land-surface datum, Oct. 14, 1960; minimum daily low, 23.10 ft below land-surface datum, Apr. 28, 1939.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 36.00 | 34.90 | --- | 34.60 | 35.60 | 34.20 | 33.70 | 33.90 | 37.00 | 38.90 | 39.00 | 38.90 |
| 2 | 35.70 | 35.10 | 35.80 | 34.80 | 35.90 | 34.10 | 33.00 | 34.40 | 37.10 | 40.50 | 39.50 | 39.00 |
| 3 | 36.30 | 35.40 | 35.70 | 34.80 | 36.00 | 35.00 | 32.70 | 35.10 | 37.40 | 39.10 | 39.70 | 37.90 |
| 4 | 34.50 | 36.10 | 35.80 | 35.50 | 35.70 | 35.20 | 33.20 | 35.20 | 36.90 | 38.90 | 39.70 | 36.80 |
| 5 | 34.90 | 36.20 | 35.70 | 36.40 | 35.80 | 35.30 | 33.70 | 35.30 | 36.20 | 40.70 | 39.90 | 35.50 |
| 6 | 35.30 | 36.20 | 35.00 | 37.20 | 34.70 | 33.90 | 33.80 | 35.40 | 36.90 | 41.90 | 39.60 | 37.40 |
| 7 | 35.60 | 36.10 | 35.50 | 37.30 | 33.00 | 33.50 | 34.30 | 35.70 | 37.60 | 42.60 | 38.20 | 38.20 |
| 8 | 35.70 | 34.80 | 36.10 | 37.10 | 34.40 | 35.00 | 34.40 | 34.40 | 38.00 | 42.70 | 38.10 | 38.60 |
| 9 | 36.20 | 34.60 | 36.10 | 37.10 | 35.20 | 34.80 | 34.00 | 34.00 | 38.80 | 41.80 | 38.80 | 38.70 |
| 10 | 36.30 | 35.30 | 35.90 | 35.80 | 35.50 | 35.30 | 33.60 | 35.20 | 39.30 | 41.30 | 39.10 | 38.20 |
| 11 | 34.90 | 35.70 | 36.10 | 35.20 | 35.40 | 35.40 | 33.80 | 35.70 | 37.50 | 40.80 | 39.30 | 37.10 |
| 12 | 35.00 | 36.00 | 35.40 | 35.60 | 34.60 | 34.00 | 34.40 | 35.80 | 36.60 | 38.10 | 39.30 | 37.20 |
| 13 | 35.60 | 35.80 | 35.10 | 36.60 | 34.60 | 33.40 | 34.50 | 36.40 | 36.60 | 38.10 | 38.40 | 38.00 |
| 14 | 35.50 | 35.50 | 34.60 | 36.50 | 33.60 | 33.60 | 34.40 | 38.60 | 37.80 | 38.30 | 37.40 | 38.00 |
| 15 | 35.60 | 34.70 | 35.20 | 36.90 | 34.00 | 34.30 | 34.40 | 36.30 | 38.30 | 39.00 | 37.60 | 38.10 |
| 16 | 36.10 | 34.60 | 36.30 | 36.80 | 34.90 | 34.60 | 34.50 | 36.20 | 38.30 | 39.00 | 38.40 | 38.00 |
| 17 | 35.90 | 35.10 | 36.50 | 36.50 | 35.40 | 34.70 | 32.80 | 36.90 | 37.80 | 38.30 | 39.50 | 37.60 |
| 18 | 34.60 | 35.60 | 36.10 | 36.00 | 35.70 | 34.30 | 32.95 | 37.40 | 37.30 | 38.00 | 40.00 | 36.70 |
| 19 | 35.20 | 35.60 | 35.70 | 36.00 | 34.60 | 34.20 | 33.50 | 36.90 | 36.60 | 38.60 | 39.60 | 36.70 |
| 20 | 35.70 | 36.00 | 35.10 | 36.10 | 34.30 | 33.30 | 34.00 | 36.20 | 37.30 | 38.70 | 39.20 | 37.60 |
| 21 | 36.10 | 36.10 | 34.90 | 36.80 | 33.90 | 33.50 | 34.60 | 36.80 | 37.40 | 39.00 | 37.60 | 38.60 |
| 22 | 35.50 | 35.10 | 35.60 | 36.60 | 34.50 | 33.70 | 34.80 | 35.00 | 38.00 | 39.20 | 38.10 | 38.90 |
| 23 | 35.80 | 35.30 | 36.40 | 35.70 | 34.80 | 34.30 | 34.50 | 35.30 | 38.60 | 39.20 | 38.10 | 38.70 |
| 24 | 35.40 | 36.00 | 36.40 | 35.50 | 35.10 | 34.70 | 33.60 | 35.10 | 39.10 | 39.00 | 38.20 | 38.30 |
| 25 | 34.80 | 36.50 | 34.60 | 35.30 | 35.10 | 35.00 | 33.90 | 34.60 | 38.70 | 37.40 | 38.30 | 36.90 |
| 26 | 34.50 | 36.70 | 35.30 | 35.70 | 35.20 | 34.80 | 34.70 | 34.80 | 37.50 | 38.20 | 38.00 | 36.90 |
| 27 | 36.00 | 35.60 | 34.70 | 36.50 | 34.30 | 33.60 | 34.70 | 36.80 | 38.10 | 39.30 | 37.80 | 37.90 |
| 28 | 36.00 | 35.60 | 35.10 | 36.80 | 33.70 | 33.50 | 34.60 | 36.90 | 38.70 | 39.30 | 37.30 | 38.40 |
| 29 | 36.00 | 34.90 | 36.10 | 36.90 | 34.10 | 34.30 | 35.30 | 36.10 | 38.90 | 40.00 | 37.30 | 38.10 |
| 30 | 35.80 | 35.00 | 36.50 | 36.90 | --- | 34.50 | 34.60 | 35.80 | 39.20 | 40.00 | 37.50 | 38.10 |
| 31 | 35.80 | --- | 36.50 | 35.60 | --- | 34.40 | --- | 36.20 | --- | 38.30 | 38.40 | --- |
| MAX | 36.30 | 36.70 | 36.50 | 37.30 | 36.00 | 35.40 | 35.30 | 38.60 | 39.30 | 42.70 | 40.00 | 39.00 |

CAL YR 1987 LOW 37.35

WTR YR 1988 LOW 42.70



— 391608084254400 H-6
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

HAMILTON COUNTY--Continued

391733084392400. Local number, H-2.

LOCATION.--Lat 39°17'33", long 84°39'24", Hydrologic Unit 05080002, East Miami River Road 1.5 mi south of Ross.

Owner: Lee Wilhelm.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 6 in., depth 89 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 534.21 ft above National Geodetic Vertical Datum of 1929. Measuring point: Floor of instrument shelter 8.97 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--August 1952 to current year.

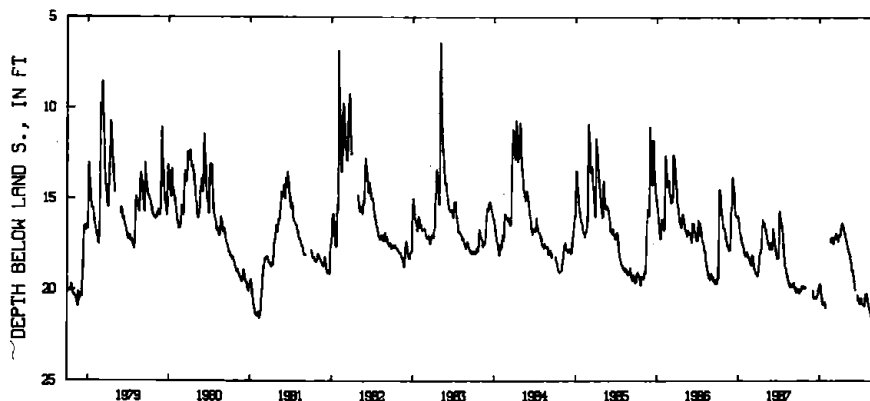
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 24.37 ft below land-surface datum, Sept. 24, 25, 1972; minimum daily low 1.60 ft below land-surface datum, June, 16, 1958. (Water level above land surface but could not be measured during January 1959 flood.)

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 20.06 | --- | 20.06 | 19.92 | --- | 17.39 | 17.04 | 17.28 | 19.08 | 20.74 | 20.20 | 21.44 |
| 2 | 20.12 | --- | 20.07 | 19.84 | --- | 17.47 | 17.04 | 17.33 | 19.23 | 20.71 | 20.26 | 21.40 |
| 3 | 20.17 | --- | 20.12 | 19.76 | --- | 17.49 | 17.00 | 17.40 | 19.40 | 20.64 | 20.32 | 21.37 |
| 4 | 20.17 | --- | 20.18 | 19.67 | --- | 17.49 | 16.95 | 17.49 | 19.49 | 20.53 | 20.47 | 21.34 |
| 5 | 20.09 | --- | 20.30 | 19.73 | --- | 17.36 | 16.83 | 17.59 | 19.51 | 20.43 | 20.63 | 21.23 |
| 6 | 19.99 | --- | 20.42 | 19.83 | --- | 17.17 | 16.66 | 17.69 | 19.57 | 20.43 | 20.71 | 21.08 |
| 7 | 19.99 | --- | 20.48 | 19.93 | --- | 17.13 | 16.63 | 17.73 | 19.66 | 20.50 | 20.74 | 20.96 |
| 8 | 20.03 | --- | 20.48 | 20.07 | --- | 17.22 | 16.59 | 17.74 | 19.83 | 20.62 | 20.78 | 20.88 |
| 9 | 20.05 | --- | 20.48 | 20.17 | --- | 17.25 | 16.50 | 17.75 | 20.01 | 20.70 | 20.82 | 20.83 |
| 10 | 20.04 | --- | 20.46 | 20.25 | --- | 17.25 | 16.39 | 17.81 | --- | 20.72 | 20.91 | 20.83 |
| 11 | 19.96 | --- | 20.43 | 20.33 | --- | 17.18 | 16.33 | 17.87 | --- | 20.75 | 20.98 | 20.80 |
| 12 | 19.87 | --- | 20.41 | 20.43 | --- | 17.07 | 16.35 | 17.95 | --- | 20.75 | 21.07 | 20.82 |
| 13 | 19.78 | --- | 20.40 | 20.54 | --- | 17.00 | 16.37 | 18.00 | --- | 20.76 | 21.11 | 20.85 |
| 14 | 19.79 | --- | 20.38 | 20.65 | --- | 16.92 | 16.42 | 18.01 | --- | 20.82 | 21.11 | 20.85 |
| 15 | 19.85 | --- | 20.37 | 20.73 | --- | 16.92 | 16.47 | 18.01 | --- | 20.84 | 21.14 | 20.77 |
| 16 | 19.90 | --- | 20.39 | 20.80 | --- | 17.00 | 16.51 | 18.03 | --- | 20.84 | 21.20 | 20.69 |
| 17 | 19.91 | --- | 20.42 | 20.82 | --- | 17.00 | 16.52 | 18.07 | --- | 20.84 | 21.29 | 20.62 |
| 18 | 19.90 | --- | 20.46 | 20.82 | --- | 17.00 | 16.59 | 18.12 | --- | 20.80 | 21.39 | 20.51 |
| 19 | 19.82 | --- | 20.46 | 20.82 | --- | 16.96 | 16.64 | 18.18 | --- | 20.87 | 21.47 | 20.39 |
| 20 | 19.78 | --- | 20.41 | 20.81 | --- | 17.02 | 16.69 | 18.30 | --- | 20.89 | 21.49 | 20.36 |
| 21 | 19.80 | --- | 20.36 | 20.74 | --- | 17.05 | 16.78 | 18.42 | 20.31 | 20.88 | 21.49 | 20.42 |
| 22 | 19.83 | --- | 20.34 | 20.67 | 17.39 | 17.07 | 16.82 | 18.49 | 20.39 | 20.69 | 21.49 | 20.43 |
| 23 | 19.86 | --- | 20.30 | 20.67 | 17.21 | 17.16 | 16.84 | 18.62 | 20.46 | 20.51 | 21.52 | 20.49 |
| 24 | 19.89 | --- | 20.28 | 20.67 | 17.16 | 17.27 | 16.89 | 18.72 | 20.55 | 20.39 | 21.55 | 20.54 |
| 25 | 19.88 | --- | 20.26 | 20.65 | 17.13 | 17.34 | 16.93 | 18.89 | 20.64 | 20.25 | 21.60 | 20.56 |
| 26 | 19.82 | --- | 20.20 | 20.70 | 17.13 | 17.32 | 16.98 | 18.98 | 20.68 | 20.22 | 21.60 | 20.57 |
| 27 | 19.80 | --- | 20.10 | 20.79 | 17.17 | 17.21 | 17.09 | 19.03 | 20.69 | 20.25 | 21.60 | 20.61 |
| 28 | 19.84 | --- | 19.96 | 20.89 | 17.21 | 17.10 | 17.16 | 19.03 | 20.73 | 20.25 | 21.56 | 20.65 |
| 29 | 19.90 | --- | 19.87 | 20.96 | 17.35 | 16.99 | 17.19 | 19.01 | 20.74 | 20.23 | 21.48 | 20.72 |
| 30 | --- | --- | 19.92 | --- | --- | 17.02 | 17.25 | 18.90 | 20.74 | 20.22 | 21.47 | 20.76 |
| 31 | --- | --- | 19.94 | --- | --- | 17.04 | --- | 18.99 | --- | 20.21 | 21.47 | --- |
| MAX | 20.17 | --- | 20.48 | 20.96 | 17.39 | 17.49 | 17.25 | 19.03 | 20.74 | 20.89 | 21.60 | 21.44 |

CAL YR 1987 LOW 20.48

WTR YR 1988 LOW 21.60



391733084392400 H-2
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

HAMILTON COUNTY--Continued

391748084393800. Local number, H-19.

LOCATION.--Lat 39°17'48", long 84°39'38", Hydrologic Unit 05080002, on left bank of Great Miami River 1.3 mi southwest of Venice.

Owner: Southwest Ohio Water Company.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Collector-type industrial supply water-table well, diameter 20 ft, depth 144 ft horizontal intakes at 95-100 ft.

PERIOD OF RECORD.--1964 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DATE | TIME | SPECIFIC CONDUCTANCE (US/CM) | PH (STANDARD UNITS) | TEMPERATURE AIR (DEG C) | TEMPERATURE WATER (DEG C) | OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNESIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | POTASSIUM, DIS-SOLVED (MG/L AS K) | BICARBONATE WATER WH FIELD (MG/L AS HCO3) |
|-----------|------|------------------------------|---------------------|-------------------------|---------------------------|---|---------------------------------|------------------------------------|---------------------------------|-----------------------------------|---|
| NOV 10... | 0945 | 830 | 7.5 | 1.0 | 18.5 | 100 | 85 | 29 | 39 | 4.3 | 290 |
| APR 15... | 1330 | 865 | 7.4 | 9.0 | 15.0 | -- | 81 | 29 | 40 | 3.2 | 300 |
| AUG 15... | 1415 | 835 | 7.5 | 37.0 | 20.0 | <10 | 82 | 30 | 42 | 3.7 | 300 |

| DATE | ALKALINITY WAT WH TOT FET FIELD (MG/L AS CaCO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLORIDE, DIS-SOLVED (MG/L AS CL) | FLUORIDE, DIS-SOLVED (MG/L AS F) | SILICA, DIS-SOLVED (MG/L AS SiO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) | NITROGEN, NITRITE TOTAL (MG/L AS N) | NITROGEN, NO2+NO3 TOTAL (MG/L AS N) | ARSENIC TOTAL (UG/L AS AS) | CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) |
|-----------|---|----------------------------------|-----------------------------------|----------------------------------|-----------------------------------|---|-------------------------------------|-------------------------------------|----------------------------|--|
| NOV 10... | 233 | 84 | 74 | 0.4 | 9.2 | 481 | <0.01 | 0.90 | <1 | <1 |
| APR 15... | 244 | 84 | 66 | 0.3 | 8.6 | 402 | 0.03 | 2.90 | -- | -- |
| AUG 15... | 244 | 87 | 80 | 0.3 | 8.1 | 552 | 0.02 | 0.90 | <1 | <1 |

| DATE | CHROMIUM, DIS-SOLVED (UG/L AS CR) | COPPER, TOTAL RECOVERABLE (UG/L AS CU) | COPPER, DIS-SOLVED (UG/L AS CU) | IRON, DIS-SOLVED (UG/L AS FE) | LEAD, TOTAL RECOVERABLE (UG/L AS PB) | LEAD, DIS-SOLVED (UG/L AS PB) | MANGANESE, DIS-SOLVED (UG/L AS MN) | ZINC, TOTAL RECOVERABLE (UG/L AS ZN) | ZINC, DIS-SOLVED (UG/L AS ZN) | CARBON, ORGANIC TOTAL (MG/L AS C) |
|-----------|-----------------------------------|--|---------------------------------|-------------------------------|--------------------------------------|-------------------------------|------------------------------------|--------------------------------------|-------------------------------|-----------------------------------|
| NOV 10... | <10 | 7 | 18 | 89 | <5 | 6 | 290 | <10 | 57 | 1.1 |
| APR 15... | -- | -- | -- | 31 | -- | -- | 240 | -- | -- | 1.1 |
| AUG 15... | <1 | 6 | 6 | 19 | <5 | <5 | 260 | 20 | 12 | 1.4 |

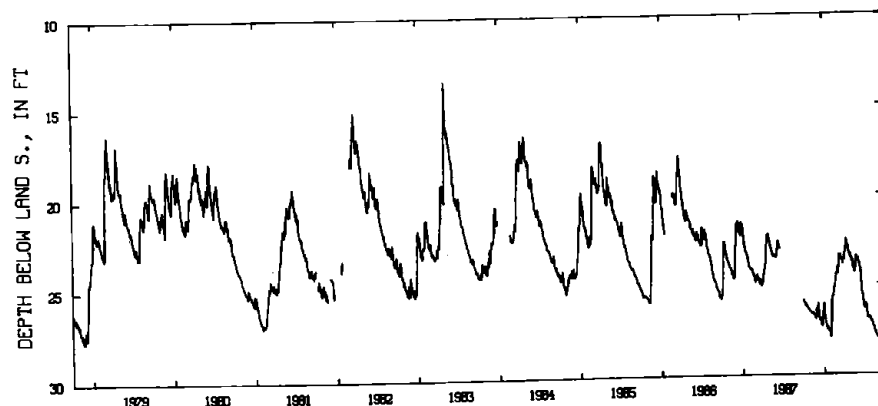
GROUND-WATER RECORDS

HAMILTON COUNTY--Continued

391817084393300. Local number, H-4.
 LOCATION.--Lat 39°18'17", long 84°39'33". Hydrologic Unit 05080002, 0.7 mi southwest of Ross.
 Owner: Southwestern Ohio Water Company.
 AQUIFER.--Sand and gravel of Pleistocene Age.
 WELL CHARACTERISTICS.--Drilled test water table well, diameter 6 in., depth 100 ft, cased.
 INSTRUMENTATION.--Digital recorder -- 60-minute punch.
 DATUM.--Elevation of land-surface datum is 541.57 ft above National Geodetic Vertical Datum of 1929. (Levels by Miami Conservancy District.) Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.
 PERIOD OF RECORD.--December 1954 to current year.
 EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 32.16 ft below land-surface datum, Nov. 20, 1971; minimum daily low, 11.60 ft below land-surface datum, June 16, 1958.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DAY | MAXIMUM VALUES | | | | | | | | | | | |
|-------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
| 1 | 25.91 | 26.58 | 26.60 | 26.10 | 27.97 | 24.21 | 23.67 | 23.38 | 23.60 | 26.34 | 27.11 | 28.08 |
| 2 | 25.96 | 26.60 | 26.69 | 26.34 | 27.92 | 24.35 | 23.48 | 23.35 | 23.61 | 26.37 | 27.13 | 28.10 |
| 3 | 26.03 | 26.60 | 26.75 | 26.54 | 27.61 | 24.46 | 23.38 | 23.48 | 23.59 | 26.20 | 27.15 | 28.12 |
| 4 | 26.03 | 26.58 | 26.77 | 26.66 | 27.06 | 24.46 | 23.27 | 23.59 | 23.69 | 26.20 | 27.10 | 28.04 |
| 5 | 26.01 | 26.61 | 26.45 | 26.76 | 26.56 | 24.40 | 23.22 | 23.68 | 23.76 | 26.27 | 27.10 | 27.85 |
| 6 | 26.04 | 26.60 | 26.10 | 26.87 | 26.20 | 24.28 | 23.15 | 23.80 | 23.80 | 26.34 | 27.18 | 27.71 |
| 7 | 26.06 | 26.63 | 26.38 | 26.95 | 25.97 | 24.00 | 23.10 | 23.80 | 23.83 | 26.40 | 27.26 | 27.78 |
| 8 | 26.08 | 26.68 | 26.61 | 27.03 | 25.82 | 23.79 | 23.03 | 23.62 | 23.89 | 26.40 | 27.29 | 27.84 |
| 9 | 26.12 | 26.69 | 26.78 | 27.13 | 25.75 | 23.43 | 23.00 | 23.78 | 23.95 | 26.11 | 27.34 | 27.89 |
| 10 | 26.20 | 26.68 | 26.91 | 27.19 | 25.70 | 23.41 | 22.72 | 23.89 | 24.02 | 26.32 | 27.39 | 27.92 |
| 11 | 26.21 | 26.68 | 26.98 | 27.27 | 25.66 | 23.45 | 22.53 | 23.98 | 24.10 | 26.44 | 27.41 | 27.77 |
| 12 | 26.13 | 26.68 | 27.03 | 27.34 | 25.67 | 23.48 | 22.64 | 24.06 | 24.15 | 26.56 | 27.45 | 27.87 |
| 13 | 26.16 | 26.71 | 26.95 | 27.39 | 25.68 | 23.46 | 22.75 | 24.13 | 24.17 | 26.64 | 27.53 | 27.96 |
| 14 | 26.20 | 26.72 | 26.92 | 27.45 | 25.50 | 23.39 | 22.85 | 24.18 | 24.18 | 26.70 | 27.60 | 27.97 |
| 15 | 26.23 | 26.61 | 26.98 | 27.52 | 25.19 | 23.45 | 22.95 | 24.09 | 24.30 | 26.79 | 27.63 | 27.98 |
| 16 | 26.26 | 26.70 | 27.04 | 27.54 | 25.19 | 23.49 | 22.96 | 24.16 | 24.67 | 26.87 | 27.63 | 28.00 |
| 17 | 26.32 | 26.72 | 27.08 | 27.38 | 25.21 | 23.57 | 22.82 | 24.24 | 24.97 | 26.92 | 27.65 | 28.01 |
| 18 | 26.34 | 26.73 | 27.12 | 27.41 | 25.21 | 23.64 | 22.94 | 24.30 | 25.20 | 26.94 | 27.68 | 27.97 |
| 19 | 26.31 | 26.75 | 27.20 | 27.51 | 25.20 | 23.67 | 23.05 | 24.37 | 25.34 | 26.94 | 27.71 | 27.75 |
| 20 | 26.34 | 26.77 | 27.24 | 27.53 | 25.15 | 23.68 | 23.12 | 24.38 | 25.42 | 26.94 | 27.78 | 27.78 |
| 21 | 26.37 | 26.83 | 27.28 | 27.53 | 24.95 | 23.65 | 23.22 | 24.08 | 25.52 | 26.89 | 27.83 | 27.83 |
| 22 | 26.39 | 26.89 | 27.31 | 27.50 | 24.76 | 23.69 | 23.25 | 23.85 | 25.59 | 26.88 | 27.87 | 27.89 |
| 23 | 26.41 | 26.91 | 27.36 | 27.57 | 24.61 | 23.74 | 23.24 | 23.75 | 25.66 | 26.88 | 27.87 | 27.94 |
| 24 | 26.45 | 26.93 | 27.36 | 27.61 | 24.55 | 23.80 | 23.25 | 23.66 | 25.70 | 26.88 | 27.89 | 27.98 |
| 25 | 26.49 | 26.93 | 27.09 | 27.64 | 24.47 | 23.88 | 23.28 | 23.60 | 25.80 | 26.86 | 27.90 | 27.99 |
| 26 | 26.49 | 26.95 | 26.84 | 27.68 | 24.43 | 23.88 | 23.33 | 23.46 | 25.91 | 26.90 | 27.94 | 27.98 |
| 27 | 26.50 | 26.80 | 26.70 | 27.72 | 24.47 | 23.79 | 23.41 | 23.50 | 26.02 | 26.94 | 28.01 | 28.01 |
| 28 | 26.52 | 26.45 | 26.62 | 27.75 | 24.41 | 23.59 | 23.48 | 23.54 | 26.09 | 26.99 | 28.04 | 28.05 |
| 29 | 26.51 | 26.39 | 26.52 | 27.80 | 24.14 | 23.58 | 23.55 | 23.55 | 26.18 | 27.03 | 28.00 | 28.09 |
| 30 | 26.49 | 26.52 | 26.33 | 27.88 | --- | 23.61 | 23.56 | 23.55 | 26.25 | 27.08 | 27.96 | 28.14 |
| 31 | 26.54 | --- | 26.18 | 27.95 | --- | 23.66 | --- | 23.57 | --- | 27.10 | 28.04 | --- |
| MAX | 26.54 | 26.95 | 27.36 | 27.95 | 27.97 | 24.46 | 23.67 | 24.38 | 26.25 | 27.10 | 28.04 | 28.14 |
| CAL YR 1987 | LOW 27.36 | | | | | | | | | | | |
| WTR YR 1988 | LOW 28.14 | | | | | | | | | | | |



391817084393300 H-4
 MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

247

HARDIN COUNTY

404218083503700. Local number, HN-1.

LOCATION.--Lat 40°42'18", long 83°50'37", Hydrologic Unit 05060001, at grain elevator in Alger.

Owner: Village of Alger.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in., depth 40 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 975 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 1.5 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

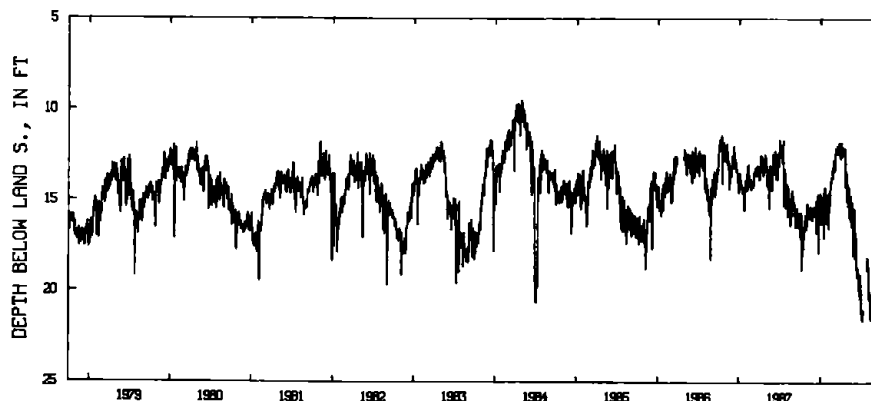
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 22.15 ft below land-surface datum, Dec. 14, 1964; minimum daily low, 5.85 ft below land-surface datum, July 1, 1946.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 15.70 | 16.60 | 15.45 | 14.80 | 14.80 | 13.25 | 12.20 | 14.10 | 18.00 | 19.50 | 18.30 | 19.80 |
| 2 | 15.70 | 16.35 | 15.50 | 15.25 | 14.70 | 12.80 | 12.70 | 15.04 | 17.90 | 20.30 | 18.45 | 19.30 |
| 3 | 16.40 | 15.70 | 15.50 | 14.70 | 14.95 | 12.80 | 12.30 | 14.15 | 15.45 | 20.10 | 18.55 | 19.05 |
| 4 | 15.95 | 15.80 | 15.35 | 15.00 | 15.35 | 13.10 | 12.40 | 14.10 | 16.70 | 20.80 | 18.65 | 19.05 |
| 5 | 17.10 | 15.20 | 15.80 | 15.85 | 15.55 | 13.40 | 12.30 | 14.60 | 17.45 | 20.95 | 18.70 | 18.90 |
| 6 | 16.20 | 15.75 | 15.85 | 16.30 | 16.10 | 13.20 | 12.05 | 15.30 | 17.90 | 21.15 | 19.50 | 18.80 |
| 7 | 15.70 | 15.75 | 15.75 | 16.20 | 16.25 | 13.30 | 11.85 | 15.20 | 18.15 | 21.45 | 20.40 | 18.55 |
| 8 | 16.00 | 16.00 | 15.60 | 16.25 | 16.55 | 12.95 | 12.60 | 15.20 | 17.50 | 21.55 | 20.35 | 18.35 |
| 9 | 15.80 | 15.40 | 15.40 | 16.20 | 15.35 | 12.50 | 12.30 | 14.65 | 16.75 | 21.45 | 19.95 | 18.35 |
| 10 | 18.85 | 15.50 | 15.55 | 15.95 | 14.60 | 12.40 | 12.30 | 14.30 | 17.10 | 21.60 | 20.25 | 19.00 |
| 11 | 18.70 | 15.65 | 15.75 | 16.00 | 14.85 | 12.15 | 12.50 | 14.75 | 17.60 | 21.25 | 20.10 | 18.60 |
| 12 | 16.60 | 15.55 | 15.60 | 15.15 | 14.65 | 12.15 | 12.50 | 14.80 | 18.25 | 21.25 | 20.45 | 18.20 |
| 13 | 16.55 | 15.60 | 15.40 | 15.70 | 15.15 | 12.35 | 12.35 | 15.75 | 18.65 | 21.05 | 21.05 | 18.10 |
| 14 | 16.70 | 16.00 | 15.60 | 15.65 | 15.25 | 12.15 | 12.35 | 15.95 | 18.95 | --- | 20.95 | 18.35 |
| 15 | 17.00 | 16.00 | 15.05 | 15.10 | 14.50 | 12.40 | 12.10 | 15.75 | 19.00 | --- | 21.15 | 18.10 |
| 16 | 17.15 | 15.70 | 16.80 | 15.00 | 14.55 | 12.15 | 12.50 | 15.45 | 18.80 | --- | 21.55 | 17.85 |
| 17 | 16.90 | 15.35 | 16.40 | 14.70 | 14.15 | 12.25 | 12.45 | 16.10 | 19.25 | --- | 21.15 | 18.40 |
| 18 | 17.30 | 15.55 | 15.35 | 17.10 | 13.95 | 12.00 | 12.25 | 15.40 | 18.70 | --- | 21.50 | 18.30 |
| 19 | 17.65 | 15.40 | 15.60 | 14.60 | 13.90 | 12.20 | 12.25 | 14.75 | 18.90 | --- | 20.75 | 17.90 |
| 20 | 16.85 | 15.50 | 15.25 | 14.60 | 14.00 | 12.30 | 12.35 | 14.90 | 19.00 | --- | 21.10 | 17.75 |
| 21 | 17.10 | 16.00 | 15.50 | 14.40 | 13.80 | 12.15 | 12.30 | 15.70 | 19.15 | --- | 21.35 | 17.90 |
| 22 | 16.50 | 15.40 | 14.70 | 14.30 | 13.75 | 12.20 | 12.15 | 16.45 | 19.40 | --- | 21.40 | 18.00 |
| 23 | 16.15 | 15.70 | 15.50 | 14.80 | 13.70 | 12.45 | 13.20 | 15.70 | 19.65 | --- | 21.25 | 17.55 |
| 24 | 16.70 | 15.90 | 16.80 | 15.00 | 13.75 | 12.35 | 12.95 | 15.10 | 19.25 | --- | 21.45 | 17.70 |
| 25 | 16.55 | 15.65 | 17.90 | 15.05 | 13.80 | 11.90 | 14.25 | 15.45 | 20.20 | --- | 21.10 | 18.10 |
| 26 | 16.25 | 16.10 | 15.10 | 15.25 | 13.35 | 11.85 | 13.95 | 15.90 | 19.95 | --- | 20.70 | 18.15 |
| 27 | 15.80 | 16.05 | 15.15 | 16.20 | 13.30 | 12.15 | 13.65 | 16.40 | 19.90 | --- | 21.15 | 17.95 |
| 28 | 16.35 | 15.85 | 14.80 | 16.25 | 13.20 | 12.10 | 13.40 | 16.40 | 20.40 | 18.35 | 20.45 | 18.25 |
| 29 | 16.05 | 15.50 | 14.70 | 15.65 | 13.25 | 12.30 | 13.60 | 16.90 | 19.95 | 18.35 | 20.20 | 18.30 |
| 30 | 15.80 | 15.45 | 14.90 | 15.10 | --- | 12.15 | 14.25 | 17.70 | 19.10 | 18.85 | 19.90 | 19.90 |
| 31 | 16.60 | --- | 14.65 | 15.30 | --- | 12.20 | --- | 18.05 | --- | 18.15 | 19.65 | --- |
| MAX | 18.85 | 16.60 | 17.90 | 17.10 | 16.55 | 13.40 | 14.25 | 18.05 | 20.40 | 21.60 | 21.55 | 19.90 |

CAL YR 1987 LOW 18.85

WTR YR 1988 LOW 21.60



404218083503700 HN-1
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

HOCKING COUNTY

393200082235300. Local number, HK-1.

LOCATION.--Lat 39°32'00", long 82°23'53", Hydrologic Unit 05060002, at railroad yards southeast edge of Logan.

Owner: Chessie System.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled unused water table well, diameter 6 in., depth 88 ft, cased.

INSTRUMENTATION.--Periodic measurement with chalked tape by ODNR personnel.

DATUM.--Elevation of land-surface datum is 710 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of gage platform 4.90 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--August 1962 to September 1982 continuous, periodic thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 21.35 ft below land-surface datum, Dec. 21, 22, 1967; minimum daily low, 9.11 ft below land-surface datum, Apr. 22, 1964.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

| DATE | WATER LEVEL | DATE | WATER LEVEL |
|---------------|----------------|---------------|----------------|
| Oct. 16, 1987 | 20.33 | Apr. 18, 1988 | 17.12 |
| Jan. 15, 1988 | 19.86 | June 22, 1988 | 19.48 |

GROUND-WATER RECORDS

249

KNOX COUNTY

402344082300700. Local number, K-1.

LOCATION.--Lat 40°23'44", long 82°30'07", Hydrologic Unit 05040003, in city park, Mt. Vernon.

Owner: Mt. Vernon Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water table well, diameter 8 in., depth 90 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 1,000 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.50 ft above land-surface datum.

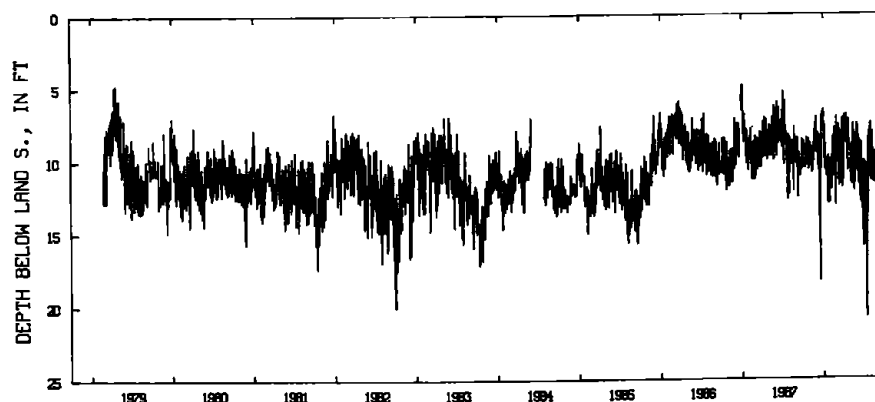
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 20.74 ft below land-surface datum, July 14, 1988; minimum daily low, 1.43 ft below land-surface datum, Apr. 29, 1950.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 10.53 | 8.89 | 8.73 | 6.54 | 10.22 | 9.56 | 7.17 | 9.24 | 10.80 | 15.38 | 10.41 | 12.03 |
| 2 | 8.71 | 9.71 | 8.14 | 7.67 | 10.13 | 10.01 | 7.16 | 9.55 | 8.69 | 10.08 | 11.16 | 12.19 |
| 3 | 8.70 | 9.87 | 8.68 | 7.61 | 11.36 | 9.51 | 6.96 | 11.23 | 7.74 | 10.35 | 11.43 | 9.68 |
| 4 | 9.04 | 10.11 | 8.94 | 7.69 | 11.85 | 9.00 | 7.75 | 11.54 | 8.25 | 10.32 | 11.46 | 8.71 |
| 5 | 8.93 | 9.92 | 8.95 | 10.00 | 11.93 | 9.02 | 8.33 | 9.10 | 8.86 | 15.17 | 9.88 | 8.32 |
| 6 | 9.19 | 10.12 | 8.22 | 8.54 | 12.00 | 7.60 | 8.44 | 11.59 | 10.66 | 14.21 | 9.79 | 9.36 |
| 7 | 9.41 | 10.08 | 10.39 | 10.67 | 9.76 | 7.98 | 7.95 | 11.66 | 11.34 | 13.24 | 8.06 | 9.51 |
| 8 | 9.45 | 9.11 | 9.97 | 9.92 | 10.76 | 8.81 | 8.25 | 8.94 | 11.65 | 14.28 | 10.56 | 9.64 |
| 9 | 9.17 | 10.71 | 10.44 | 10.07 | 10.02 | 11.03 | 8.61 | 9.52 | 9.98 | 13.01 | 9.28 | 9.78 |
| 10 | 9.24 | 10.90 | 10.69 | 8.98 | 9.95 | 11.69 | 8.83 | 9.34 | 8.68 | 10.29 | 10.88 | 9.77 |
| 11 | 9.18 | 9.40 | 9.15 | 10.19 | 9.16 | 11.75 | 6.90 | 9.51 | 9.17 | 10.94 | 11.48 | 9.72 |
| 12 | 10.58 | 10.47 | 8.48 | 10.47 | 11.13 | 7.95 | 8.53 | 9.52 | 10.24 | 19.34 | 11.35 | 9.65 |
| 13 | 10.18 | 10.78 | 8.37 | 10.11 | 9.33 | 8.70 | 8.92 | 7.56 | 11.04 | 20.45 | 11.53 | 9.65 |
| 14 | 9.48 | 9.38 | 11.12 | 11.09 | 8.42 | 10.98 | 7.58 | 8.94 | 11.67 | 20.74 | 10.08 | 9.71 |
| 15 | 9.45 | 9.42 | 10.81 | 10.38 | 9.43 | 8.73 | 8.33 | 9.08 | 12.47 | 15.93 | 10.62 | 9.76 |
| 16 | 9.53 | 9.89 | 16.74 | 9.94 | 8.38 | 8.69 | 8.77 | 11.16 | 12.84 | 13.56 | 10.73 | 9.73 |
| 17 | 9.53 | 10.08 | 18.28 | 10.36 | 9.66 | 9.19 | 8.77 | 12.00 | 9.97 | 13.09 | 11.30 | 9.61 |
| 18 | 8.50 | 10.02 | 16.77 | 10.33 | 9.69 | 9.33 | 10.60 | 12.10 | 8.80 | 13.68 | 10.98 | 9.58 |
| 19 | 10.35 | 8.87 | 10.31 | 10.63 | 9.05 | 10.78 | 10.74 | 8.97 | 9.16 | 12.25 | 10.89 | 11.03 |
| 20 | 10.01 | 9.03 | 10.24 | 10.63 | 7.82 | 8.18 | 9.07 | 11.60 | 11.04 | 12.27 | 9.46 | 11.58 |
| 21 | 10.09 | 8.38 | 10.67 | 12.82 | 8.41 | 11.07 | 8.76 | 9.81 | 12.97 | 8.47 | 10.30 | 9.40 |
| 22 | 9.59 | 8.00 | 9.20 | 12.99 | 9.14 | 11.20 | 9.01 | 9.19 | 12.50 | 11.26 | 11.63 | 10.66 |
| 23 | 9.89 | 8.02 | 7.97 | 9.75 | 9.27 | 10.79 | 7.21 | 9.69 | 11.91 | 8.70 | 11.63 | 11.36 |
| 24 | 9.86 | 7.74 | 7.82 | 10.00 | 11.12 | 11.66 | 8.71 | 9.82 | 13.39 | 8.09 | 10.60 | 9.84 |
| 25 | 8.56 | 7.73 | 6.96 | 12.12 | 13.07 | 11.87 | 9.20 | 9.50 | 10.17 | 9.14 | 10.61 | 8.85 |
| 26 | 10.68 | 7.57 | 7.17 | 12.22 | 9.72 | 7.27 | 9.24 | 8.27 | 11.69 | 9.97 | 10.72 | 9.67 |
| 27 | 9.25 | 7.46 | 7.42 | 12.53 | 9.11 | 7.18 | 9.13 | 9.52 | 12.01 | 7.82 | 9.54 | 9.84 |
| 28 | 10.50 | 7.49 | 6.75 | 12.94 | 7.07 | 9.11 | 9.41 | 9.45 | 14.40 | 9.81 | 8.84 | 11.67 |
| 29 | 9.31 | 7.08 | 7.69 | 10.47 | 9.14 | 11.18 | 9.08 | 8.23 | 15.11 | 10.08 | 10.30 | 12.04 |
| 30 | 9.28 | 9.51 | 8.06 | 10.50 | --- | 11.35 | 9.24 | 7.52 | 15.91 | 7.82 | 11.83 | 12.08 |
| 31 | 9.26 | --- | 8.06 | 10.01 | --- | 9.82 | --- | 10.54 | --- | 7.47 | 12.06 | --- |
| MAX | 10.68 | 10.90 | 18.28 | 12.99 | 13.07 | 11.87 | 10.74 | 12.10 | 15.91 | 20.74 | 12.06 | 12.19 |
| CAL YR 1987 | LOW 18.28 | | | | | | | | | | | |
| WTR YR 1988 | LOW 20.74 | | | | | | | | | | | |



402344082300700 K-1
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

MADISON COUNTY

395301083272200. Local number, M-2.

LOCATION.--Lat 39°53'01", long 83°27'22", Hydrologic Unit 05060002, U.S. 42 and Westmore Dr., London.

Owner: State of Ohio

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in., depth 350 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 1035 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 1.00 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--August 1971 to current year.

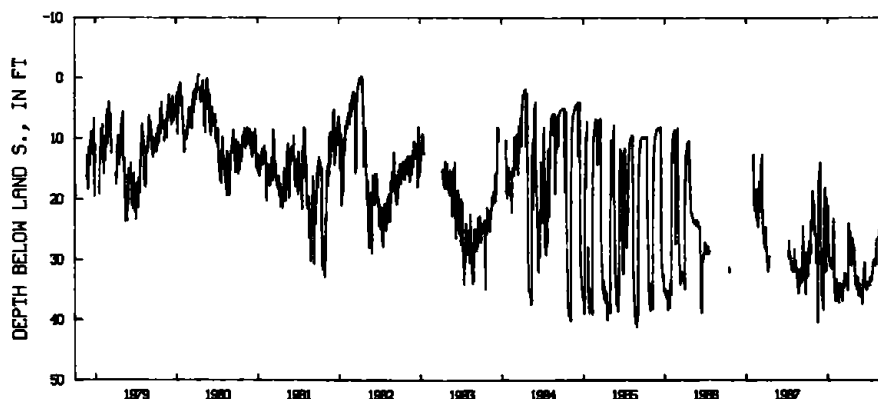
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 41.29 ft below land-surface datum, Aug. 29, 1985; minimum daily low, 0.55 ft above land-surface, Apr. 13, 1980.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 31.66 | 20.73 | 23.07 | 23.76 | 33.73 | 34.30 | 34.26 | 28.72 | 36.18 | 34.13 | 30.43 | 29.12 |
| 2 | 32.51 | 20.99 | 29.17 | 23.80 | 35.51 | 35.07 | 31.52 | 30.37 | 35.41 | 34.17 | 30.38 | 29.32 |
| 3 | 32.81 | 22.89 | 30.56 | 21.16 | 35.68 | 35.11 | 30.80 | 31.50 | 37.04 | 34.28 | 30.88 | 29.26 |
| 4 | 32.82 | 24.39 | 33.54 | 25.78 | 33.60 | 35.03 | 27.53 | 33.68 | 37.35 | 33.78 | 30.94 | 29.13 |
| 5 | 32.71 | 25.49 | 34.95 | 27.72 | 35.25 | 35.15 | 25.23 | 34.09 | 37.39 | 33.66 | 30.89 | 28.91 |
| 6 | 32.57 | 25.96 | 35.79 | 28.98 | 36.69 | 35.87 | 24.05 | 34.26 | 37.08 | 34.06 | 29.04 | 28.63 |
| 7 | 32.18 | 26.05 | 36.16 | 28.94 | 37.01 | 36.92 | 26.05 | 34.42 | 34.87 | 34.33 | 27.66 | 29.19 |
| 8 | 28.29 | 25.83 | 35.02 | 29.61 | 34.93 | 34.98 | 27.29 | 33.11 | 34.26 | 34.20 | 26.81 | 29.59 |
| 9 | 30.03 | 25.82 | 36.34 | 30.32 | 33.67 | 35.00 | 28.14 | 32.74 | 34.24 | 34.29 | 26.64 | 29.63 |
| 10 | 30.18 | 26.01 | 36.76 | 30.35 | 33.31 | 35.22 | 28.23 | 33.69 | 33.48 | 33.78 | 26.65 | 29.16 |
| 11 | 26.97 | 29.68 | 37.08 | 30.37 | 34.93 | 34.03 | 25.38 | 33.72 | 32.12 | 33.28 | 26.68 | 29.41 |
| 12 | 29.79 | 30.58 | 37.81 | 30.82 | 35.05 | 34.36 | 28.65 | 34.98 | 31.97 | 32.91 | 26.68 | 29.18 |
| 13 | 30.56 | 28.91 | 38.22 | 31.15 | 34.28 | 34.66 | 28.95 | 34.65 | 31.92 | 33.00 | 26.73 | 29.28 |
| 14 | 30.56 | 27.75 | 38.39 | 31.19 | 35.33 | 33.61 | 30.10 | 34.54 | 30.85 | 33.07 | 26.73 | 29.62 |
| 15 | 27.65 | 27.27 | 38.37 | 30.89 | 35.56 | 34.23 | 30.35 | 33.92 | 30.46 | 33.26 | 26.66 | 29.71 |
| 16 | 28.94 | 34.87 | 31.80 | 30.45 | 34.22 | 34.44 | 30.82 | 33.05 | 33.53 | 33.33 | 26.60 | 29.48 |
| 17 | 29.08 | 38.05 | 26.30 | 30.18 | 35.67 | 32.95 | 31.02 | 33.21 | 33.92 | 33.44 | 26.27 | 29.39 |
| 18 | 24.45 | 40.49 | 22.85 | 30.95 | 35.75 | 32.32 | 29.89 | 35.21 | 33.85 | 33.07 | 26.28 | 29.04 |
| 19 | 24.82 | 30.74 | 20.58 | 31.37 | 36.15 | 33.84 | 29.91 | 36.02 | 33.69 | 32.46 | 25.80 | 28.72 |
| 20 | 23.60 | 24.53 | 18.95 | 31.57 | 37.11 | 34.28 | 29.41 | 35.38 | 33.83 | 32.19 | 25.69 | 29.20 |
| 21 | 24.14 | 21.94 | 18.14 | 31.64 | 37.26 | 32.86 | 26.52 | 35.44 | 34.16 | 31.54 | 25.34 | 29.54 |
| 22 | 24.99 | 19.80 | 20.28 | 31.34 | 34.57 | 33.94 | 26.59 | 34.17 | 34.55 | 31.15 | 24.95 | 29.55 |
| 23 | 25.08 | 18.28 | 29.59 | 30.57 | 35.37 | 34.11 | 27.03 | 34.05 | 35.08 | 31.06 | 25.08 | 28.84 |
| 24 | 21.05 | 17.33 | 32.01 | 25.62 | 35.40 | 32.60 | 27.37 | 35.62 | 35.14 | 30.56 | 25.19 | 28.69 |
| 25 | 19.53 | 16.56 | 32.07 | 28.41 | 33.95 | 33.97 | 28.01 | 35.83 | 34.80 | 30.13 | 25.17 | 29.06 |
| 26 | 18.75 | 15.90 | 23.13 | 29.86 | 35.01 | 34.08 | 28.19 | 35.87 | 34.78 | 30.27 | 27.29 | 29.15 |
| 27 | 19.59 | 15.38 | 19.75 | 29.96 | 35.30 | 34.03 | 28.01 | 35.61 | 34.57 | 29.99 | 27.55 | 28.60 |
| 28 | 20.35 | 14.94 | 20.35 | 23.30 | 34.17 | 34.26 | 27.98 | 35.33 | 34.16 | 30.29 | 27.77 | 29.18 |
| 29 | 20.71 | 14.38 | 22.58 | 25.81 | 34.99 | 34.28 | 27.96 | 35.12 | 33.88 | 30.33 | 27.64 | 29.50 |
| 30 | 20.79 | 14.03 | 23.31 | 31.33 | --- | 35.12 | 28.43 | 36.34 | 34.01 | 30.23 | 27.59 | 29.64 |
| 31 | 20.87 | --- | 23.59 | 32.76 | --- | 34.20 | --- | 35.97 | --- | 30.36 | 28.18 | --- |
| MAX | 32.82 | 40.49 | 38.39 | 32.76 | 37.26 | 36.92 | 34.26 | 36.34 | 37.39 | 34.33 | 30.98 | 29.71 |

CAL YR 1987 LOW 40.49

WTR YR 1988 LOW 40.49



395301083272200 M-2
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

251

MADISON COUNTY--Continued

395352083292100. Local number, M-5.

LOCATION.--Lat 39°53'52", long 83°29'21", Hydrologic Unit 05060002, at London Correctional Institute near London Ohio.

Owner: State of Ohio.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water table well, diameter 8 in., depth 55 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 1,090 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.50 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

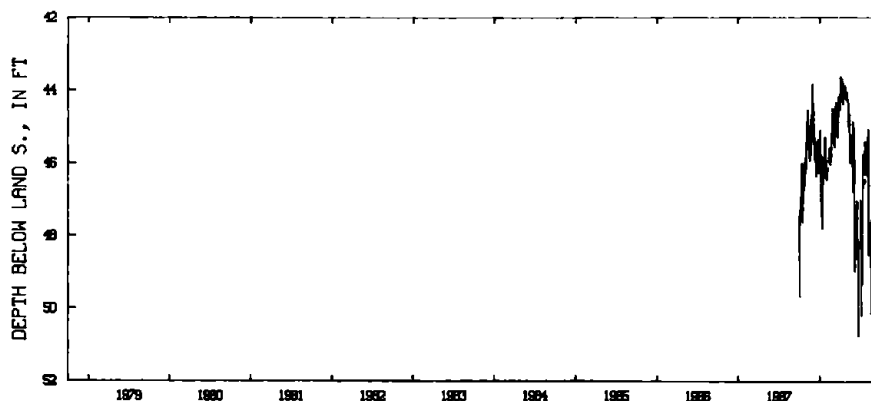
PERIOD OF RECORD.--October 1, 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 51.51 ft below land-surface datum, Aug. 21, 1987; minimum daily low, 43.64 ft below land-surface datum, Apr. 6, 1988.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 47.47 | 46.06 | 44.38 | 45.52 | --- | 45.10 | 44.52 | 44.02 | 46.64 | --- | 45.51 | 45.66 |
| 2 | 49.66 | 45.42 | 44.48 | 45.29 | 46.45 | 45.15 | 44.48 | 44.10 | 46.80 | --- | 45.82 | 45.55 |
| 3 | 47.81 | 45.57 | 44.37 | 45.11 | 46.45 | 45.06 | 44.20 | 44.12 | 46.00 | 47.02 | 46.10 | 45.20 |
| 4 | 47.29 | 45.46 | 45.17 | 45.50 | 46.25 | 44.50 | 43.71 | 44.16 | 45.55 | 47.05 | 46.37 | 43.90 |
| 5 | 47.40 | 45.13 | 45.48 | 46.23 | 46.11 | 45.39 | 43.70 | 44.24 | 45.02 | 47.52 | 46.37 | 44.55 |
| 6 | 47.32 | 45.11 | 45.30 | 45.77 | --- | 45.44 | 43.64 | 44.26 | 48.35 | 47.65 | 45.07 | 45.08 |
| 7 | 47.00 | 44.95 | 45.28 | 46.92 | --- | 45.52 | 43.74 | 44.30 | 48.87 | 50.00 | 45.08 | 45.26 |
| 8 | 47.04 | 44.55 | 45.30 | 47.07 | --- | 45.55 | 43.69 | 44.30 | 48.97 | 50.17 | 46.76 | 45.37 |
| 9 | 46.92 | 45.19 | 45.52 | 46.70 | --- | 45.37 | 43.88 | 44.53 | 48.45 | --- | 48.23 | 45.43 |
| 10 | 46.95 | 45.27 | 45.65 | 46.32 | 45.94 | 45.13 | 43.69 | 44.80 | 48.06 | 48.65 | 48.53 | 45.00 |
| 11 | 46.67 | 45.00 | 45.80 | 47.42 | 45.96 | 44.80 | 43.68 | 44.97 | 48.34 | 49.31 | 47.75 | 47.05 |
| 12 | 46.63 | 45.32 | 45.95 | 47.80 | 45.78 | 44.60 | 43.76 | 44.99 | 48.04 | 49.25 | 48.16 | 47.21 |
| 13 | 46.00 | 45.55 | 45.76 | 47.50 | 45.58 | 44.47 | 43.83 | 44.91 | 48.08 | 48.50 | 48.34 | 47.22 |
| 14 | 46.47 | 45.66 | 45.73 | 46.31 | 45.74 | 44.44 | 44.05 | 44.74 | 48.23 | 46.04 | 48.35 | 47.37 |
| 15 | 47.34 | 45.35 | 46.15 | 46.36 | 45.68 | 44.52 | 44.26 | 44.65 | 47.79 | 45.75 | 47.65 | 47.93 |
| 16 | 47.62 | 45.84 | 46.35 | 46.56 | 45.75 | 44.33 | 44.37 | 44.93 | 47.39 | 45.98 | 47.70 | 47.96 |
| 17 | 46.95 | 45.92 | 46.33 | 46.35 | 45.98 | 44.50 | 44.36 | 45.99 | 47.04 | 46.10 | 47.76 | 45.86 |
| 18 | 46.73 | 45.93 | 46.20 | 45.86 | 46.03 | 44.90 | 43.81 | 45.88 | --- | 46.09 | 48.75 | 45.69 |
| 19 | 46.70 | 45.85 | 45.50 | 45.84 | 45.78 | 44.98 | 44.08 | 45.50 | 47.05 | 46.00 | 49.90 | 45.58 |
| 20 | 46.65 | 45.72 | 45.53 | 46.00 | 45.80 | 44.86 | 44.14 | 45.35 | 48.45 | 46.35 | 50.13 | 45.53 |
| 21 | 46.68 | 45.75 | 45.51 | 46.26 | 45.82 | 45.13 | 44.16 | 45.36 | 48.63 | 46.54 | 49.90 | 45.57 |
| 22 | 46.74 | 45.35 | 45.40 | 46.28 | 45.40 | 45.29 | 44.16 | 45.34 | 48.13 | 46.50 | 47.56 | 45.53 |
| 23 | 46.72 | 44.93 | 45.94 | 45.59 | 45.41 | 44.82 | 44.14 | 45.31 | 50.75 | 46.25 | 47.56 | 45.27 |
| 24 | 46.45 | 44.89 | 46.16 | 45.36 | 45.41 | 44.79 | 43.89 | 45.30 | 50.69 | 45.40 | 47.53 | 44.95 |
| 25 | 46.10 | 44.71 | 46.26 | 45.29 | 45.19 | 44.70 | 43.90 | 45.95 | 50.68 | 45.85 | 47.53 | 44.60 |
| 26 | 45.98 | 44.92 | 45.87 | 45.41 | 45.10 | 44.64 | 43.93 | 46.07 | --- | 46.07 | 47.55 | 44.86 |
| 27 | 46.10 | 44.75 | 45.42 | 46.00 | 44.75 | 44.18 | 44.05 | 45.74 | --- | 46.19 | 45.64 | 44.92 |
| 28 | 46.25 | 44.55 | 45.36 | 46.36 | 44.50 | 44.30 | 44.17 | 45.67 | --- | 45.98 | 45.35 | 44.98 |
| 29 | 46.27 | 43.85 | 45.84 | 46.41 | 44.88 | 44.39 | 44.23 | 45.29 | --- | 45.90 | 46.69 | 44.98 |
| 30 | 45.84 | 44.05 | 45.92 | 45.90 | --- | 44.54 | 44.26 | 44.85 | --- | 45.87 | 46.84 | 44.72 |
| 31 | 46.04 | --- | 45.92 | --- | --- | 44.54 | --- | 46.30 | --- | 45.40 | 46.88 | --- |
| MAX | 49.66 | 46.06 | 46.35 | 47.80 | 46.45 | 45.55 | 44.52 | 46.30 | 50.75 | 50.17 | 50.13 | 47.96 |

WTR YR 1988 LOW 50.75



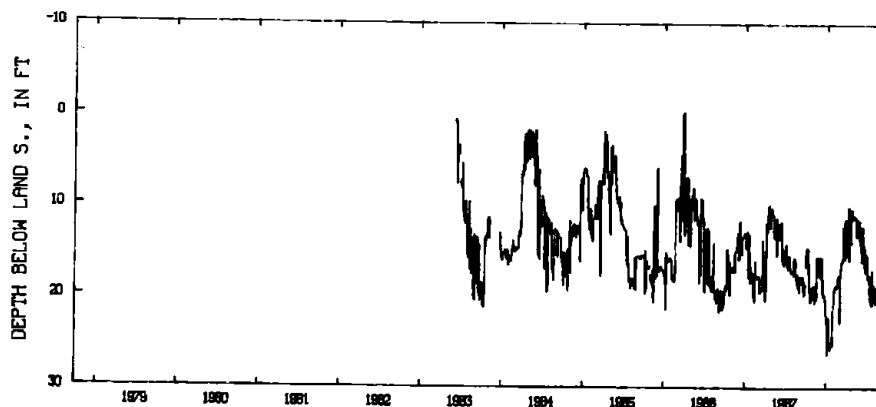
395352083292100 M-5 ST OF OH AT LONDON COR INST NR LONDON OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT), DEPTH TO WATER BL. LSD

GROUND-WATER RECORDS
MADISON COUNTY--Continued

395357083304400. Local number, M-4.
LOCATION.--Lat 39°53'57", long 83°30'44" Hydrologic Unit 05060002, 3.5 mi northwest of London, Ohio.
Owner.--State of Ohio.
AQUIFER.--Sand and gravel of Pleistocene Age.
WELL CHARACTERISTICS.--Drilled unused water table well, diameter 10 in., depth 49 ft, cased.
INSTRUMENTATION.--Type F continuous recorder.
DATUM.--Elevation of land-surface datum is 1,112 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 4.00 ft above land-surface datum.
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.
PERIOD OF RECORD.--June 1983 to current year.
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 26.30 ft below land-surface datum, Jan. 7, 1988; minimum daily low 0.20 ft below land-surface datum, Mar. 30, 1986.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 16.64 | 19.25 | 17.65 | 22.40 | --- | 17.60 | 14.15 | 11.10 | 13.95 | 15.60 | 18.80 | 19.45 |
| 2 | 15.55 | 19.00 | 15.90 | 22.50 | 21.08 | 22.80 | 12.00 | 11.15 | 14.05 | 15.50 | 18.80 | 19.45 |
| 3 | 15.15 | 19.30 | 15.65 | 22.60 | 20.60 | 22.50 | 13.70 | 11.15 | 14.20 | 15.50 | 19.60 | 19.45 |
| 4 | 14.95 | 18.80 | 15.65 | 22.80 | 19.95 | 17.50 | 13.60 | 11.10 | 14.30 | 17.65 | 20.25 | 19.40 |
| 5 | 14.95 | 19.25 | 15.60 | 22.95 | 19.55 | 17.00 | 13.00 | 11.15 | 14.35 | 17.85 | 19.05 | 19.55 |
| 6 | 14.70 | 19.80 | 15.65 | 23.15 | 19.35 | 16.65 | 13.05 | 11.20 | 14.40 | 17.90 | 19.95 | 19.60 |
| 7 | 16.20 | 20.20 | 15.80 | 26.30 | 19.20 | 16.60 | 13.10 | 11.25 | 16.00 | 18.00 | 20.40 | 19.60 |
| 8 | 14.80 | 20.50 | 17.20 | 25.35 | 19.05 | 16.45 | 13.10 | 11.25 | 16.15 | 18.05 | 20.55 | 19.65 |
| 9 | 14.75 | 20.65 | 17.85 | 23.05 | 18.90 | 16.20 | 10.20 | 11.20 | 12.75 | 17.75 | 20.70 | 19.65 |
| 10 | 14.75 | 19.45 | 17.95 | 22.50 | 18.90 | 16.25 | 10.20 | 11.20 | 12.50 | 17.65 | 19.25 | 19.75 |
| 11 | 14.70 | 18.80 | 15.75 | 22.30 | 18.80 | 16.15 | 10.15 | 11.35 | 12.40 | 17.60 | 19.10 | 19.80 |
| 12 | 17.45 | 18.85 | 17.40 | 23.80 | 18.80 | 15.95 | 14.10 | 11.35 | 12.30 | 17.70 | 19.00 | 19.95 |
| 13 | 16.35 | 20.00 | 17.80 | 24.75 | 18.85 | 15.95 | 16.00 | 11.30 | 13.70 | 19.45 | 18.95 | 20.05 |
| 14 | 16.55 | 18.90 | 17.95 | 24.90 | 18.90 | 15.95 | 10.50 | 11.35 | 14.05 | 19.80 | 18.95 | 19.35 |
| 15 | 18.45 | 18.95 | 19.50 | 25.00 | 18.95 | 15.90 | 11.05 | 11.35 | 14.40 | 20.05 | 19.00 | 19.20 |
| 16 | 19.10 | 19.70 | 18.20 | 25.10 | 19.00 | 15.85 | 10.50 | 13.35 | 14.30 | 20.20 | 19.05 | 19.15 |
| 17 | 18.95 | 20.25 | 19.85 | 25.20 | 18.95 | 15.80 | 10.40 | 13.40 | 14.65 | 20.35 | 19.10 | 19.05 |
| 18 | 19.10 | 16.50 | 19.95 | 25.50 | 18.95 | 13.15 | 10.70 | 11.60 | 14.55 | 20.40 | 19.15 | 19.00 |
| 19 | 19.15 | 15.95 | 19.60 | 25.10 | 18.75 | 12.30 | 10.45 | 11.55 | 14.50 | 18.85 | 19.15 | 19.00 |
| 20 | 20.40 | 15.70 | 19.65 | 25.70 | 18.50 | 15.15 | 10.45 | 11.55 | 14.65 | 20.35 | 19.20 | 18.95 |
| 21 | 20.55 | 15.70 | 19.65 | 24.95 | 18.30 | 15.75 | 14.15 | 11.60 | 15.30 | 20.65 | 19.30 | 18.90 |
| 22 | 20.50 | 15.65 | 19.80 | 24.95 | 18.05 | 15.85 | 11.30 | 11.55 | 16.95 | 20.80 | 19.30 | 18.85 |
| 23 | 19.15 | 15.60 | 19.90 | 24.95 | 17.95 | 13.50 | 10.50 | 11.55 | 17.05 | 20.85 | 19.15 | 18.85 |
| 24 | 19.15 | 17.05 | 19.95 | 25.00 | 17.90 | 12.05 | 10.55 | 11.60 | 17.05 | 17.75 | 18.90 | 18.85 |
| 25 | 19.15 | 17.50 | 20.10 | 25.00 | 17.70 | 11.80 | 10.55 | 11.70 | 17.20 | 17.05 | 19.20 | 18.85 |
| 26 | 19.10 | 17.40 | 20.15 | 25.05 | 17.70 | 11.80 | 10.45 | 11.70 | 17.35 | 19.75 | 19.25 | 18.95 |
| 27 | 19.00 | 17.20 | 20.25 | 25.15 | 17.70 | 11.50 | 10.45 | 11.70 | 15.40 | 18.60 | 19.25 | 18.80 |
| 28 | 20.25 | 17.45 | 20.35 | 25.20 | 17.65 | 14.00 | 11.50 | 11.65 | 15.30 | 20.15 | 19.30 | 18.85 |
| 29 | 20.05 | 17.60 | 21.40 | 25.25 | 17.60 | 15.25 | 11.25 | 13.30 | 15.45 | 19.05 | 19.35 | 18.85 |
| 30 | 20.15 | 17.75 | 21.85 | 21.60 | --- | 15.55 | 11.25 | 13.75 | 15.60 | 18.75 | 19.35 | 18.85 |
| 31 | 19.65 | --- | 22.15 | 21.45 | --- | 14.20 | --- | 13.90 | --- | 18.70 | 19.45 | --- |
| MAX | 20.55 | 20.65 | 22.15 | 26.30 | 21.08 | 22.80 | 16.00 | 13.90 | 17.35 | 20.85 | 20.70 | 20.05 |
| CAL YR 1987 | LOW 22.15 | | | | | | | | | | | |
| WTR YR 1988 | LOW 26.30 | | | | | | | | | | | |



395357083304400 M-4 LONDON ST FISH HATCHERY 3 MI NW OF LONDON OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

MADISON COUNTY--Continued

395740083255700. Local number, M-3.

LOCATION.--Lat 39°57'40", long 83°25'57", Hydrologic Unit 05060002, 5.2 mi north of London.

Owner: State of Ohio.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in., depth 290 ft, cased to 145 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape by ODNR personnel.

DATUM.--Elevation of land-surface datum is 1,020 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--November 1974 to September 1982 continuous, periodic thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum measured low, 10.35 ft below land-surface datum, Dec. 30, 1987; minimum daily low, 3.93 ft below land-surface datum, Feb. 25, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|--------------|----------------|---------------|----------------|---------------|----------------|----------------|----------------|
| Oct. 1, 1987 | 8.73 | Dec. 30, 1987 | 10.35 | May 20, 1988 | 5.89 | Aug. 19, 1988 | 8.82 |
| Nov. 2, 1987 | 9.60 | Feb. 2, 1988 | 9.88 | June 20, 1988 | 7.04 | Sept. 19, 1988 | 8.75 |
| Dec. 1, 1987 | 9.78 | Apr. 1, 1988 | 6.00 | July 21, 1988 | 8.22 | | |

GROUND-WATER RECORDS

MAHONING COUNTY

410042080453800. Local number, MA-1.

LOCATION.--Lat 41°00'42", long 80°45'38", Hydrologic Unit, 05030103, in county fairgrounds at south edge of Canfield.

Owner: Canfield Water Department.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., depth 170 ft, cased to 99.5 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by ODNR personnel.

DATUM.--Elevation of land-surface datum is 1,160 ft above National Geodetic Vertical Datum of 1929, from

topographic map. Measuring point: Floor of instrument shelter at land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water. Influenced by seasonal water demand at county fairgrounds.

PERIOD OF RECORD.--May 1946 to September 1982 continuous, periodic thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 110.75 ft below land-surface datum, Sept. 18, 1946; minimum daily low, 30.35 ft below land-surface datum, Apr. 23, 1951.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|---------------|----------------|---------------|----------------|--------------|----------------|
| Oct. 29, 1987 | 34.27 | Apr. 29, 1988 | 36.30 | Aug. 1, 1988 | 35.15 |

MARION COUNTY

403413083170500. Local number, MN-4.

LOCATION.--Lat 40°34'13", long 83°17'05", Hydrologic Unit 05060001, 1.9 mi southeast of New Bloomington.

Owner: State of Ohio.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in., depth drilled 290 ft, present depth 286 ft, cased to 33 ft.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 915.96 ft above National Geodetic Vertical Datum of 1929. Measuring point: Floor of shelter 3.00 ft above land-surface datum.

REMARKS.--Influenced by seasonal water demand for nearby wildlife refuge.

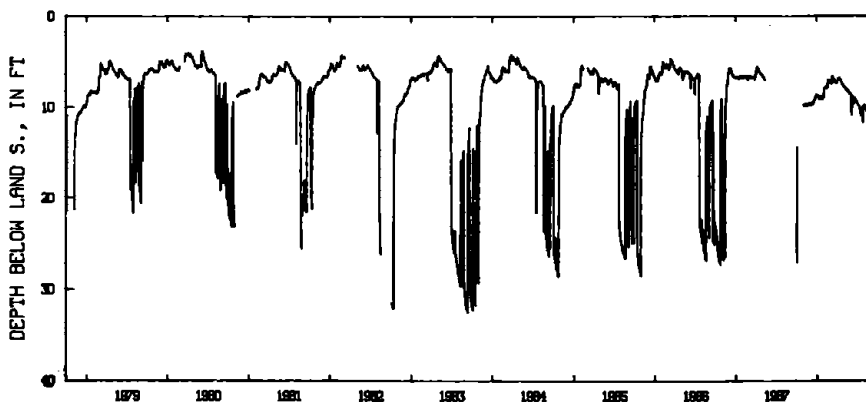
PERIOD OF RECORD.--January 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 32.57 ft below land-surface datum, Aug. 14, 1983; minimum daily low, 0.61 ft below land-surface datum, Mar. 18, 1974.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----------------------|-------|------|------|------|------|------|------|------|-------|-------|-------|-------|
| 1 | 22.90 | --- | 9.63 | 8.83 | 8.92 | 7.31 | 7.34 | 7.73 | 8.59 | 9.56 | 9.78 | 10.80 |
| 2 | 25.84 | --- | 9.73 | 8.82 | 8.73 | 7.30 | 7.32 | 7.77 | 8.63 | 9.59 | 9.82 | 10.79 |
| 3 | 26.81 | --- | 9.70 | 8.76 | 8.51 | 7.31 | 7.25 | 7.78 | 8.63 | 9.64 | 9.86 | 10.72 |
| 4 | 27.04 | 9.75 | 9.76 | 8.77 | 7.98 | 7.41 | 7.13 | 7.77 | 8.67 | 9.74 | 9.84 | 10.56 |
| 5 | 18.85 | 9.92 | 9.79 | 8.83 | 7.95 | 7.46 | 7.14 | 7.82 | 8.64 | 9.81 | 9.83 | 10.73 |
| 6 | 14.47 | 9.92 | 9.81 | 8.88 | 7.95 | 7.38 | 6.88 | 7.87 | 8.67 | 9.84 | 9.80 | 10.81 |
| 7 | --- | 9.89 | 9.81 | 8.91 | 7.90 | 7.44 | 6.91 | 7.92 | 10.87 | 9.85 | 9.88 | 10.86 |
| 8 | --- | 9.82 | 9.70 | 8.81 | 7.83 | 7.41 | 6.92 | 7.89 | 8.78 | 9.85 | 9.93 | 10.84 |
| 9 | 24.51 | 9.88 | 9.58 | 8.94 | 7.81 | 7.12 | 6.89 | 7.86 | 8.81 | 9.84 | 9.95 | 10.83 |
| 10 | --- | 9.88 | 9.60 | 8.99 | 7.89 | 6.82 | 6.85 | 7.92 | 8.89 | 9.90 | 10.09 | 10.92 |
| 11 | --- | 9.85 | 9.50 | 8.96 | 7.86 | 6.69 | 6.81 | 8.02 | 8.87 | 9.96 | 10.14 | 10.96 |
| 12 | --- | 9.76 | 9.55 | 8.88 | 7.81 | 6.62 | 6.82 | 8.03 | 8.85 | 10.03 | 10.41 | 10.94 |
| 13 | --- | 9.68 | 9.73 | 9.14 | 7.94 | 6.75 | 6.86 | 8.07 | 8.90 | 10.08 | 10.22 | 10.87 |
| 14 | --- | 9.82 | 9.73 | 9.20 | 7.92 | 6.78 | 6.94 | 8.12 | 8.96 | 10.14 | 10.21 | 10.92 |
| 15 | --- | 9.89 | 9.49 | 9.09 | 7.91 | 6.94 | 7.04 | 8.07 | 8.98 | 10.25 | 10.26 | 10.99 |
| 16 | --- | 9.89 | 9.61 | 9.04 | 7.97 | 7.05 | 7.10 | 8.08 | 9.65 | 10.28 | 10.32 | 11.00 |
| 17 | --- | 9.67 | 9.65 | 9.04 | 7.96 | 7.10 | 7.06 | 8.21 | 9.00 | 10.34 | 10.29 | 10.93 |
| 18 | --- | 9.90 | 9.63 | 9.14 | 7.93 | 7.05 | 7.06 | 8.26 | 9.02 | 10.94 | 10.33 | 10.94 |
| 19 | --- | 9.88 | 9.45 | 9.14 | 7.75 | 6.98 | 7.17 | 8.20 | 9.47 | 10.36 | 10.35 | 12.61 |
| 20 | --- | 9.79 | 9.29 | 8.90 | 7.40 | 7.16 | 7.18 | 8.21 | 9.03 | 10.36 | 10.36 | 11.01 |
| 21 | --- | 9.86 | 9.30 | 9.01 | 7.39 | 7.29 | 7.25 | 8.21 | 9.06 | 10.21 | 10.50 | 11.07 |
| 22 | --- | 9.85 | 9.24 | 9.01 | 7.02 | 7.29 | 7.29 | 8.20 | 9.10 | 10.18 | 10.57 | 11.01 |
| 23 | --- | 9.83 | 9.22 | 8.88 | 7.06 | 7.21 | 7.28 | 8.20 | 9.24 | 10.15 | 10.49 | 10.99 |
| 24 | --- | 9.87 | 9.19 | 8.93 | 7.05 | 7.25 | 7.46 | 8.28 | 9.28 | 10.15 | 10.49 | 11.04 |
| 25 | --- | 9.81 | 9.10 | 8.93 | 7.10 | 7.23 | 7.48 | 8.48 | 9.23 | 10.13 | 10.58 | 11.14 |
| 26 | --- | 9.87 | 9.15 | 9.03 | 7.09 | 7.21 | 7.46 | 8.40 | 9.27 | 10.00 | 10.71 | 11.17 |
| 27 | --- | 9.84 | 9.05 | 9.13 | 7.20 | 7.33 | 7.47 | 8.42 | 9.34 | 9.98 | 10.72 | 12.41 |
| 28 | --- | 9.74 | 8.85 | 9.14 | 7.18 | 7.36 | 7.58 | 8.40 | 9.35 | 11.68 | 10.73 | 11.26 |
| 29 | --- | 9.60 | 8.87 | 9.10 | 7.27 | 7.24 | 7.62 | 8.42 | 9.43 | 10.03 | 10.73 | 11.28 |
| 30 | --- | 9.56 | 8.82 | 9.00 | --- | 7.40 | 7.68 | 8.52 | 9.49 | 9.88 | 10.75 | 11.28 |
| 31 | --- | --- | 8.66 | 8.99 | --- | 7.39 | --- | 8.60 | --- | 9.81 | 10.77 | --- |
| MAX | 27.04 | 9.92 | 9.81 | 9.20 | 8.92 | 7.46 | 7.68 | 8.60 | 10.87 | 11.68 | 10.77 | 12.61 |
| CAL YR 1987 LOW 27.04 | | | | | | | | | | | | |
| WTR YR 1988 LOW 27.04 | | | | | | | | | | | | |



403413083170500 MN-4
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

MARION COUNTY--Continued

403443083230400. Local number, MN-1.

LOCATION.--Lat 40°34'43", long 83°23'04", Hydrologic Unit 05060001, SR 37 at Baptist Church in LaRue.

Owner: Village of LaRue.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 4 in., depth 100 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 930 ft above National Geodetic Vertical Datum of 1929, from topographic

map. Measuring point: Floor of instrument shelter 3.30 ft above land-surface datum.

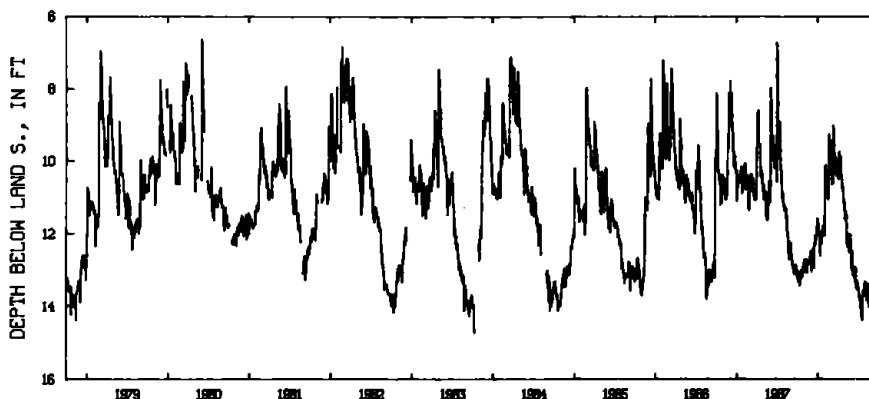
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 14.72 ft below land-surface datum, Oct. 8, 1983; minimum daily low, 5.67 ft below land-surface datum, Jan. 23, 1959.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 13.13 | 12.90 | 12.65 | 11.62 | 11.88 | 10.33 | 10.48 | 11.58 | 12.93 | 13.53 | 13.34 | 13.72 |
| 2 | 13.04 | 12.85 | 12.66 | 11.70 | 10.75 | 10.33 | 10.44 | 11.43 | 12.99 | 13.58 | 13.57 | 14.21 |
| 3 | 13.21 | 12.70 | 12.68 | 11.70 | 10.17 | 10.27 | 10.49 | 11.48 | 12.87 | 13.63 | 13.35 | 14.18 |
| 4 | 13.27 | 12.83 | 13.03 | 11.77 | 10.94 | 10.45 | 10.11 | 11.36 | 12.47 | 13.75 | 13.59 | 13.97 |
| 5 | 13.32 | 13.05 | 12.87 | 11.98 | 10.10 | 10.63 | 9.78 | 11.43 | 12.95 | 13.75 | 13.50 | 13.89 |
| 6 | 13.28 | 13.05 | 12.65 | 11.96 | 10.48 | 10.52 | 10.08 | 11.39 | 12.93 | 13.71 | 13.82 | 13.82 |
| 7 | 13.13 | 12.95 | 12.60 | 11.96 | 10.28 | 10.58 | 10.12 | 11.45 | 13.13 | 13.82 | 13.83 | 14.07 |
| 8 | 13.21 | 12.87 | 12.71 | 11.96 | 10.44 | 10.61 | 9.73 | 11.52 | 13.14 | 13.83 | 13.38 | 13.93 |
| 9 | 13.32 | 13.00 | 12.50 | 12.00 | 10.52 | 9.92 | 9.96 | 11.48 | 12.97 | 13.93 | 13.70 | 13.84 |
| 10 | 13.13 | 12.84 | 12.40 | 12.43 | 10.65 | 9.18 | 9.85 | 12.10 | 12.89 | 14.00 | 13.47 | 14.00 |
| 11 | 13.11 | 12.81 | 12.42 | 12.50 | 10.64 | 9.01 | 9.90 | 12.23 | 13.05 | 14.05 | 13.36 | 14.10 |
| 12 | 13.08 | 12.77 | 12.54 | 12.60 | 10.81 | 9.11 | 10.07 | 12.34 | 13.14 | 14.04 | 13.59 | 14.14 |
| 13 | 13.43 | 12.71 | 12.85 | 12.37 | 10.89 | 9.33 | 10.20 | 11.98 | 13.08 | 13.74 | 13.84 | 13.76 |
| 14 | 13.25 | 12.96 | 12.94 | 12.22 | 10.98 | 9.53 | 10.29 | 12.13 | 13.22 | 13.83 | 13.88 | 14.07 |
| 15 | 13.06 | 13.07 | 12.70 | 12.18 | 11.00 | 9.71 | 10.34 | 12.26 | 13.30 | 14.10 | 13.88 | 14.08 |
| 16 | 13.02 | 12.83 | 12.36 | 12.01 | 11.04 | 9.78 | 10.41 | 12.00 | 13.31 | 14.20 | 13.80 | 13.89 |
| 17 | 13.02 | 12.81 | 12.32 | 12.02 | 10.94 | 9.88 | 10.48 | 12.37 | 13.09 | 14.34 | 14.00 | 14.08 |
| 18 | 13.00 | 12.81 | 12.30 | 12.26 | 10.70 | 9.94 | 10.56 | 12.38 | 12.92 | 14.37 | 13.94 | 14.17 |
| 19 | 13.11 | 12.76 | 12.19 | 11.95 | 10.35 | 9.88 | 10.63 | 12.36 | 12.96 | 14.13 | 13.55 | 14.15 |
| 20 | 13.01 | 12.77 | 12.27 | 12.05 | 9.93 | 10.10 | 10.62 | 12.14 | 13.40 | 14.09 | 14.03 | 14.14 |
| 21 | 13.10 | 12.79 | 12.11 | 12.07 | 9.24 | 10.34 | 10.75 | 12.49 | 13.38 | 13.80 | 13.93 | 14.22 |
| 22 | 13.13 | 12.75 | 12.03 | 11.93 | 9.32 | 10.29 | 10.72 | 12.29 | 13.40 | 13.56 | 13.95 | 13.90 |
| 23 | 13.03 | 12.74 | 12.17 | 11.77 | 9.41 | 10.35 | 10.71 | 12.22 | 13.51 | 13.64 | 14.08 | 13.81 |
| 24 | 13.06 | 12.80 | 12.10 | 11.78 | 9.43 | 10.39 | 10.77 | 12.33 | 13.28 | 13.72 | 13.90 | 14.31 |
| 25 | 13.18 | 12.74 | 12.01 | 11.99 | 9.60 | 10.35 | 10.98 | 12.27 | 13.27 | 13.70 | 13.82 | 14.23 |
| 26 | 13.09 | 12.83 | 12.02 | 11.91 | 9.72 | 10.12 | 11.12 | 12.00 | 13.37 | 13.53 | 13.93 | 14.15 |
| 27 | 12.90 | 12.69 | 12.01 | 11.99 | 9.93 | 10.10 | 11.04 | 12.45 | 13.43 | 13.66 | 14.13 | 14.08 |
| 28 | 12.94 | 12.70 | 11.92 | 12.01 | 10.03 | 10.32 | 11.14 | 12.43 | 13.35 | 13.63 | 13.95 | 14.00 |
| 29 | 12.80 | 12.62 | 11.80 | 11.97 | 10.16 | 10.38 | 11.14 | 12.55 | 13.42 | 13.40 | 13.82 | 14.09 |
| 30 | 12.84 | 12.46 | 11.57 | 12.01 | --- | 10.40 | 11.19 | 12.72 | 13.49 | 13.31 | --- | 14.42 |
| 31 | 12.97 | --- | 11.58 | 12.04 | --- | 10.43 | --- | 12.83 | --- | 13.47 | 13.83 | --- |
| MAX | 13.43 | 13.07 | 13.03 | 12.60 | 11.88 | 10.63 | 11.19 | 12.83 | 13.51 | 14.37 | 14.13 | 14.42 |
| CAL YR 1987 | LOW 13.43 | | | | | | | | | | | |
| WTR YR 1988 | LOW 14.42 | | | | | | | | | | | |



403443083230400 MN-1
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

MARION COUNTY--Continued

403601083110400. Local number, MN-2.

LOCATION.--Lat 40°36'01, long 83°11'04", Hydrologic Unit 05060001, water treatment plant 2 mi west of Marion.

Owner: Marion Water Department.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in., depth 67 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 910 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 2.00 ft above land-surface datum.

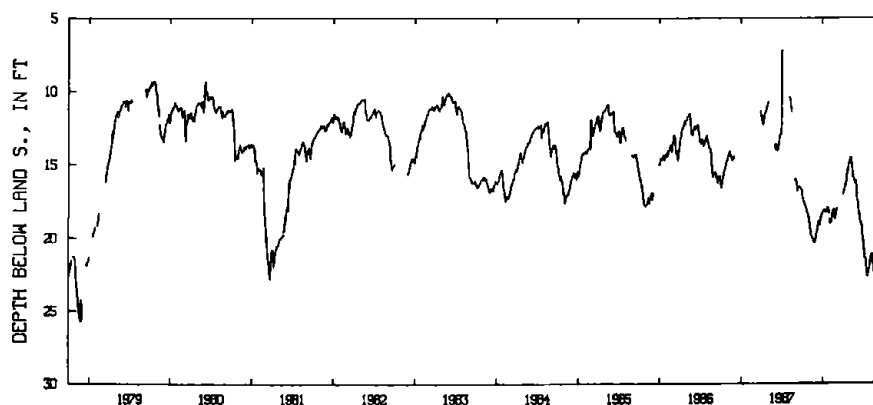
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--May 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 49.50 ft below land-surface datum, Feb. 11, 1956; minimum daily low, 7.00 ft below land-surface datum, July 12, 1987.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 17.07 | 18.77 | 20.16 | 18.31 | --- | 18.41 | 17.08 | 14.85 | 16.53 | 20.31 | 21.63 | 22.63 |
| 2 | 17.15 | 19.00 | 19.88 | 18.30 | 18.79 | 18.34 | 17.07 | 14.78 | 16.85 | 20.40 | 21.54 | 22.56 |
| 3 | 17.26 | 19.10 | 19.84 | 18.28 | 18.91 | 18.22 | 16.90 | 14.66 | 17.06 | 20.49 | 21.46 | 22.47 |
| 4 | 17.33 | 19.08 | 19.72 | 18.24 | 19.04 | 18.12 | 16.95 | 14.59 | 17.30 | 20.77 | 21.35 | 22.34 |
| 5 | 17.35 | 19.18 | 19.70 | 18.18 | 19.06 | 18.04 | 16.99 | 14.57 | 17.52 | 21.15 | 21.25 | 22.20 |
| 6 | 17.36 | 19.45 | 19.64 | 18.19 | --- | --- | 16.80 | 14.56 | 17.61 | 21.09 | 21.21 | 22.14 |
| 7 | 17.44 | 19.50 | 19.59 | 18.16 | --- | --- | 16.71 | 14.57 | 17.65 | 21.18 | 21.16 | 22.05 |
| 8 | 17.56 | 19.57 | 19.49 | 18.14 | 18.98 | --- | 16.71 | 14.57 | 17.85 | 21.28 | 21.12 | 21.95 |
| 9 | 17.69 | 19.69 | 19.41 | 18.11 | 18.94 | --- | 16.69 | 14.74 | 18.00 | 21.46 | 21.20 | 21.87 |
| 10 | 17.77 | 19.80 | 19.30 | 18.17 | 18.79 | --- | 16.62 | 14.97 | 18.11 | 21.42 | 21.33 | 21.78 |
| 11 | 17.77 | 19.90 | 19.22 | 18.26 | 18.69 | --- | 16.53 | 15.13 | 18.21 | 21.50 | 21.47 | 21.70 |
| 12 | 17.77 | 19.95 | 19.10 | 18.28 | 18.54 | --- | 16.45 | 15.22 | 18.30 | 21.68 | 21.65 | 21.64 |
| 13 | 17.77 | 20.01 | 19.05 | 18.28 | 18.45 | --- | 16.37 | 15.37 | 18.44 | 21.84 | 21.79 | 21.58 |
| 14 | 17.83 | 20.03 | 19.04 | 18.27 | 18.37 | --- | 16.28 | 15.50 | 18.53 | 22.00 | 21.90 | 21.55 |
| 15 | 17.87 | 20.01 | 18.99 | 18.33 | 18.29 | --- | 16.20 | 15.58 | 18.64 | 22.17 | 21.89 | 21.61 |
| 16 | 17.93 | 20.01 | 18.86 | 18.34 | 18.17 | --- | 16.19 | 15.72 | 18.75 | 22.32 | 22.02 | 21.62 |
| 17 | 17.99 | 20.07 | 19.07 | 18.33 | 18.15 | --- | 16.05 | 15.84 | 18.91 | 22.38 | 22.16 | 21.63 |
| 18 | 18.03 | 20.12 | 19.18 | 18.23 | 18.15 | --- | 15.87 | 15.92 | 18.95 | 22.46 | 22.27 | 21.59 |
| 19 | 18.05 | 20.23 | 19.19 | 18.17 | 18.15 | --- | 15.82 | 15.97 | 18.94 | 22.61 | 22.41 | 21.52 |
| 20 | 18.12 | 20.26 | 19.09 | 18.12 | 18.10 | --- | 15.72 | 16.02 | 19.02 | 22.66 | 22.53 | 21.55 |
| 21 | 18.15 | 20.32 | 18.94 | 18.07 | 18.48 | --- | 15.60 | 16.07 | 19.05 | 22.65 | 22.65 | 21.74 |
| 22 | 18.20 | 20.34 | 18.91 | 18.07 | 18.70 | --- | 15.55 | 16.10 | 19.07 | 22.52 | 22.77 | 21.85 |
| 23 | 18.25 | 20.26 | 18.79 | 17.95 | 18.74 | --- | 15.46 | 16.14 | 19.18 | 22.42 | 22.90 | 22.14 |
| 24 | 18.31 | 20.16 | 18.72 | 17.96 | 18.71 | --- | 15.32 | 16.22 | 19.25 | 22.30 | 22.98 | 22.14 |
| 25 | 18.39 | 20.29 | 18.63 | 18.04 | 18.71 | --- | 15.32 | 16.27 | 19.30 | 22.23 | 23.00 | 22.20 |
| 26 | 18.43 | 20.36 | 18.55 | 18.13 | 18.73 | --- | 15.23 | 16.31 | 19.35 | 22.17 | 23.07 | 22.43 |
| 27 | 18.52 | 20.39 | 18.53 | 18.21 | 18.65 | --- | 15.13 | 16.34 | 19.54 | 22.15 | 23.07 | 22.52 |
| 28 | 18.60 | 20.30 | 18.52 | 18.30 | 18.52 | --- | 15.03 | 16.33 | 19.79 | 22.09 | 22.98 | 22.62 |
| 29 | 18.65 | 20.18 | 18.43 | 18.29 | 18.48 | --- | 14.98 | 16.25 | 19.94 | 21.90 | 22.89 | 22.77 |
| 30 | 18.67 | 20.18 | 18.44 | 18.35 | --- | --- | 14.92 | 16.19 | 20.13 | 21.85 | --- | 22.92 |
| 31 | 18.72 | --- | 18.35 | --- | --- | --- | --- | 16.15 | --- | 21.75 | 22.66 | --- |
| MAX | 18.72 | 20.39 | 20.16 | 18.35 | 19.06 | 18.41 | 17.08 | 16.34 | 20.13 | 22.66 | 23.07 | 22.92 |

CAL YR 1987 LOW 20.39
WTR YR 1988 LOW 23.07403601083110400 MN-2
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

MEDINA COUNTY

410120081431800. Local number, MD-3.

LOCATION.--Lat 41 01'20", long 81 43'18", Hydrologic Unit 05040001, Auble Street at water treatment plant in Wadsworth.

Owner: Wadsworth Water Department.

AQUIFER.--Sandstone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in., depth 275 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 1180 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 1.00 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--December 1973 to current year.

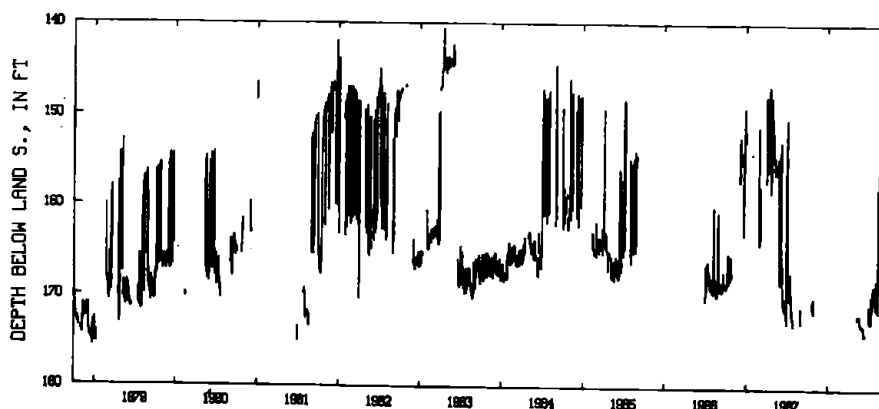
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 186.74 ft below land-surface datum, Jan. 21, 1975; minimum daily low, 140.60 ft below land-surface datum, Apr. 16, 1983

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|--------|-----|--------|-----|--------|-----|-----|--------|--------|--------|--------|--------|
| 1 | --- | --- | --- | --- | 170.30 | --- | --- | --- | --- | 170.80 | 169.30 | 169.30 |
| 2 | 170.10 | --- | --- | --- | --- | --- | --- | --- | 172.90 | 171.30 | 171.12 | 169.60 |
| 3 | --- | --- | --- | --- | --- | --- | --- | --- | 173.10 | 171.60 | 168.80 | 169.70 |
| 4 | --- | --- | --- | --- | --- | --- | --- | --- | 173.20 | 172.40 | 169.90 | 169.70 |
| 5 | --- | --- | --- | --- | --- | --- | --- | --- | 173.20 | 172.60 | 168.00 | 170.20 |
| 6 | --- | --- | --- | --- | --- | --- | --- | --- | 173.20 | 171.90 | 169.80 | 170.90 |
| 7 | --- | --- | --- | --- | --- | --- | --- | --- | 173.10 | 172.10 | 168.50 | 171.20 |
| 8 | --- | --- | --- | --- | --- | --- | --- | --- | 174.00 | 172.20 | 169.60 | 171.20 |
| 9 | --- | --- | --- | --- | --- | --- | --- | --- | 174.00 | 172.20 | 170.30 | 171.20 |
| 10 | --- | --- | --- | --- | --- | --- | --- | --- | 173.90 | 172.70 | 170.50 | 171.20 |
| 11 | --- | --- | --- | --- | --- | --- | --- | 171.90 | 173.90 | 171.60 | 171.20 | 171.50 |
| 12 | --- | --- | --- | --- | --- | --- | --- | 172.20 | 173.80 | 172.10 | 171.50 | 172.10 |
| 13 | --- | --- | --- | --- | --- | --- | --- | 171.80 | 173.90 | 169.80 | 160.20 | 172.10 |
| 14 | --- | --- | --- | --- | --- | --- | --- | 172.10 | 174.00 | 169.70 | 157.90 | 171.80 |
| 15 | --- | --- | --- | --- | --- | --- | --- | 171.80 | 174.00 | 171.20 | 168.80 | 172.00 |
| 16 | --- | --- | --- | --- | --- | --- | --- | 172.10 | --- | 171.30 | 169.20 | 172.40 |
| 17 | --- | --- | --- | --- | --- | --- | --- | 172.20 | --- | 170.70 | 169.30 | 164.00 |
| 18 | --- | --- | --- | --- | --- | --- | --- | 171.90 | --- | 169.90 | 159.00 | 168.60 |
| 19 | --- | --- | --- | --- | --- | --- | --- | 171.80 | --- | 170.30 | 169.10 | 168.90 |
| 20 | --- | --- | --- | --- | --- | --- | --- | 171.80 | --- | 170.70 | 156.70 | 168.00 |
| 21 | 170.50 | --- | --- | --- | --- | --- | --- | 172.00 | --- | 169.00 | 155.60 | 168.30 |
| 22 | 170.60 | --- | --- | --- | --- | --- | --- | 172.20 | --- | 168.90 | 167.20 | 168.30 |
| 23 | 170.50 | --- | --- | --- | --- | --- | --- | 172.40 | --- | 168.70 | 155.20 | 167.50 |
| 24 | 170.50 | --- | --- | --- | --- | --- | --- | 172.70 | --- | 168.80 | 167.00 | 167.70 |
| 25 | 171.10 | --- | --- | --- | --- | --- | --- | 172.70 | --- | 168.90 | 156.50 | 167.90 |
| 26 | 171.40 | --- | --- | --- | --- | --- | --- | 173.00 | --- | 168.60 | 168.10 | 167.80 |
| 27 | 170.10 | --- | --- | --- | --- | --- | --- | 172.90 | --- | 168.90 | 168.50 | 168.70 |
| 28 | 171.60 | --- | --- | --- | --- | --- | --- | 172.90 | --- | 168.60 | 169.00 | 168.70 |
| 29 | 171.60 | --- | --- | --- | --- | --- | --- | 172.90 | --- | 169.90 | 169.60 | 167.60 |
| 30 | 170.10 | --- | --- | --- | --- | --- | --- | --- | --- | 168.90 | 169.90 | 167.50 |
| 31 | --- | --- | 171.20 | --- | --- | --- | --- | --- | --- | 168.90 | 169.30 | --- |
| MAX | 171.60 | --- | 171.20 | --- | 170.30 | --- | --- | 173.00 | 174.00 | 172.70 | 171.50 | 172.40 |

CAL YR 1987 LOW 173.00

WTR YR 1988 LOW 174.00

410120081431800 MD-3
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

259

MERCER COUNTY

402833084375200. Local number, MR-2.

LOCATION.--Lat 40°28'33", long 84°37'52", Hydrologic Unit 05120101, at AVCO Mfg. Co. building in Coldwater.

Owner: New Idea Farm Equipment Co.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in., depth 253 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 915 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of platform 1.2 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

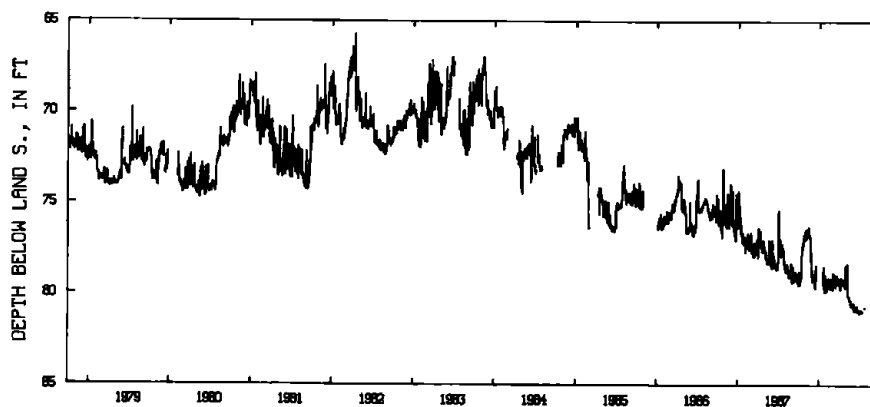
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 81.60 ft below land-surface datum, Sept. 15, 1988; minimum daily low, 60.13 ft below land-surface datum, Feb. 14, 1967.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 79.16 | 76.86 | 78.75 | --- | 79.57 | 79.42 | 79.33 | 78.75 | 80.51 | 81.04 | --- | --- |
| 2 | 79.44 | 76.56 | 78.99 | --- | 79.66 | 79.45 | 79.34 | 78.43 | 80.57 | 81.00 | --- | --- |
| 3 | 79.51 | 76.56 | 78.86 | --- | 79.66 | 79.26 | 79.34 | 78.96 | 80.65 | 80.91 | --- | --- |
| 4 | 78.76 | 76.45 | 79.31 | --- | 79.66 | 79.68 | 79.44 | 78.96 | 80.74 | 80.93 | --- | --- |
| 5 | 78.97 | 76.83 | 79.11 | --- | 79.84 | 79.74 | 79.44 | 78.52 | 80.71 | 80.91 | --- | --- |
| 6 | 79.21 | 76.94 | 79.05 | --- | 79.84 | 78.82 | 79.45 | 78.55 | 80.49 | 80.97 | --- | --- |
| 7 | 79.37 | 76.66 | 79.26 | --- | 79.47 | 79.29 | 79.76 | 78.56 | 80.59 | 80.99 | --- | --- |
| 8 | 79.51 | 76.45 | 79.22 | --- | 79.28 | 79.34 | 79.76 | 78.44 | 80.73 | 81.00 | --- | --- |
| 9 | 79.42 | 76.70 | 79.24 | --- | 79.48 | 79.20 | 79.52 | 78.35 | 80.91 | 80.99 | --- | --- |
| 10 | 79.29 | 76.71 | 79.15 | --- | 79.43 | 79.43 | 79.16 | 79.74 | 80.92 | 80.97 | --- | --- |
| 11 | 79.17 | 76.69 | 78.89 | --- | 79.41 | 79.49 | 79.09 | 80.01 | 80.74 | 80.89 | --- | --- |
| 12 | 79.01 | 76.67 | 79.27 | --- | 79.42 | 78.91 | 79.23 | 80.08 | 80.78 | 80.98 | --- | --- |
| 13 | 79.15 | 76.60 | 79.20 | --- | 79.44 | 79.06 | 79.25 | 80.14 | 80.77 | 80.94 | --- | --- |
| 14 | 79.22 | 76.71 | 79.10 | --- | 79.11 | 79.11 | 79.43 | 80.18 | 80.89 | 81.01 | --- | --- |
| 15 | 78.90 | 76.68 | 79.17 | --- | 79.30 | 79.35 | 79.48 | 80.11 | 80.87 | --- | --- | 81.60 |
| 16 | 77.96 | 76.45 | 79.48 | --- | 79.51 | 79.54 | 79.44 | 80.15 | 80.85 | --- | --- | --- |
| 17 | 77.86 | 76.32 | 79.67 | --- | 79.66 | 79.60 | 79.22 | 80.31 | 80.87 | --- | --- | --- |
| 18 | 77.86 | 76.85 | 79.25 | --- | 79.67 | 79.46 | 79.19 | 80.33 | 80.88 | --- | --- | --- |
| 19 | 77.73 | 76.82 | 79.20 | --- | 79.47 | 79.31 | 79.49 | 80.31 | 80.64 | --- | --- | --- |
| 20 | 77.30 | 76.69 | 78.40 | --- | 79.56 | 79.13 | 79.50 | 80.34 | 80.72 | --- | --- | --- |
| 21 | 77.52 | 76.85 | --- | --- | 79.50 | 79.26 | 79.42 | 80.35 | 80.73 | --- | --- | --- |
| 22 | 77.39 | 76.78 | --- | 79.45 | 79.11 | 78.95 | 79.42 | 80.34 | 80.76 | --- | --- | --- |
| 23 | 77.37 | 76.80 | --- | 79.28 | 79.52 | 79.16 | 79.32 | 80.33 | 80.96 | --- | --- | --- |
| 24 | 77.17 | 76.99 | --- | 78.49 | 79.57 | 79.20 | 79.52 | 80.49 | 80.96 | --- | --- | --- |
| 25 | 77.04 | 77.94 | --- | 79.47 | 79.72 | 79.18 | 79.20 | 80.64 | 80.93 | 80.73 | 81.35 | --- |
| 26 | 76.72 | 78.13 | --- | 79.83 | 79.72 | 79.33 | 79.32 | 80.63 | 80.83 | 80.77 | 81.40 | --- |
| 27 | 76.85 | 77.84 | --- | 79.87 | 79.55 | 79.22 | 79.47 | 80.61 | 80.86 | 80.77 | --- | 81.09 |
| 28 | 76.84 | 77.97 | --- | 79.89 | 79.34 | 79.11 | 79.61 | 80.56 | 80.92 | --- | --- | 81.26 |
| 29 | 76.85 | 77.70 | --- | 79.59 | 79.36 | 79.10 | 79.63 | 80.54 | 80.93 | --- | --- | 81.26 |
| 30 | 76.96 | 78.25 | --- | 79.49 | --- | 79.49 | 79.04 | 80.65 | 80.95 | --- | --- | 80.98 |
| 31 | 77.02 | --- | --- | 78.92 | --- | 79.49 | --- | 80.67 | --- | --- | --- | --- |
| MAX | 79.51 | 78.25 | 79.67 | 79.89 | 79.84 | 79.74 | 79.76 | 80.67 | 80.96 | 81.04 | 81.40 | 81.60 |

CAL YR 1987 LOW 79.67

WTR YR 1988 LOW 81.60

402833084375200 MR-2
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

MIAMI COUNTY

395848084085500. Local number, MI-3.

LOCATION.--Lat 39°58'48", long 84°08'55", Hydrologic Unit 05080001, 2.0 mi northeast of Tipp City.

Owner: Fulton Fruit Farms.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water table well, diameter 5 in., depth 48 ft, cased.

INSTRUMENTATION.--Periodic measurement with chalked tape by ODNR personnel.

DATUM.--Elevation of land-surface datum is 804.78 ft above National Geodetic Vertical Datum of 1929. (Levels by Miami Conservancy District.) Measuring point: Floor of shelter 3.50 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--October 1966 to September 1982 continuous, periodic thereafter.

EXTREMES FOR PERIOD OF RECORD---Maximum daily low, 15.61 ft below land-surface datum, Feb. 4, 1971; minimum daily low, 7.53 ft below land-surface datum, Feb. 25, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|---------------|----------------|---------------|----------------|---------------|----------------|
| Oct. 22, 1987 | 12.32 | Apr. 12, 1988 | 10.80 | July 21, 1988 | 13.63 |
| Jan. 19, 1988 | 12.22 | June 25, 1988 | 13.05 | July 25, 1988 | 13.45 |

GROUND-WATER RECORDS

261

MIAMI COUNTY--Continued

400208084112900. Local number, MI-44.

LOCATION.--Lat 40°02'08", long 84°11'29", Hydrologic Unit 05080001, on left bank of Great Miami River 0.7 mi east of city hall in Troy.

Owner: City of Troy.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled public supply water-table well, diameter 26 in, depth 105 ft, screened below 89 ft.

PERIOD OF RECORD.--August 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DATE | TIME | SPECIFIC CONDUCTANCE (US/CM) | PH (STANDARD UNITS) | TEMPERATURE AIR (DEG C) | TEMPERATURE WATER (DEG C) | OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNESIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | POTASSIUM, DIS-SOLVED (MG/L AS K) | BICARBONATE WATER WH FET FIELD (MG/L AS HCO3) |
|-----------|------|------------------------------|---------------------|-------------------------|---------------------------|---|---------------------------------|------------------------------------|---------------------------------|-----------------------------------|---|
| NOV 05... | 1450 | 740 | 7.5 | 10.0 | 13.0 | -- | 85 | 33 | 18 | 2.1 | 370 |
| APR 15... | 0915 | 790 | 7.6 | 4.0 | 12.5 | 23 | 84 | 33 | 14 | 1.6 | 370 |
| AUG 15... | 1000 | 730 | 7.4 | 32.0 | 15.5 | <10 | 82 | 33 | 18 | 1.9 | 360 |

| DATE | ALKALINITY TOT FET FIELD (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLORIDE, DIS-SOLVED (MG/L AS CL) | FLUORIDE, DIS-SOLVED (MG/L AS F) | SILICA, DIS-SOLVED (MG/L AS SiO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) | NITROGEN, NITRITE TOTAL (MG/L AS N) | NITROGEN, NO2+NO3 TOTAL (MG/L AS N) | ARSENIC TOTAL (UG/L AS AS) | ARSENIC DIS-SOLVED (UG/L AS AS) | CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) |
|-----------|--|----------------------------------|-----------------------------------|----------------------------------|-----------------------------------|---|-------------------------------------|-------------------------------------|----------------------------|---------------------------------|--|
| NOV 05... | 301 | 63 | 26 | 0.9 | 14 | 426 | <0.01 | <0.10 | 1 | 1 | <1 |
| APR 15... | 305 | 65 | 9.9 | 0.9 | 14 | 426 | -- | -- | -- | -- | -- |
| AUG 15... | 290 | 66 | 26 | 0.7 | 13 | 437 | <0.01 | <0.10 | <1 | 1 | <1 |

| DATE | CHROMIUM, DIS-SOLVED (UG/L AS CR) | COPPER, TOTAL RECOVERABLE (UG/L AS CU) | COPPER, DIS-SOLVED (UG/L AS CU) | IRON, DIS-SOLVED (UG/L AS FE) | LEAD, TOTAL RECOVERABLE (UG/L AS PB) | LEAD, DIS-SOLVED (UG/L AS PB) | MANGANESE, DIS-SOLVED (UG/L AS MN) | ZINC, TOTAL RECOVERABLE (UG/L AS ZN) | ZINC, DIS-SOLVED (UG/L AS ZN) | CARBON, ORGANIC TOTAL (MG/L AS C) |
|-----------|-----------------------------------|--|---------------------------------|-------------------------------|--------------------------------------|-------------------------------|------------------------------------|--------------------------------------|-------------------------------|-----------------------------------|
| NOV 05... | <10 | 5 | 7 | 1400 | <5 | <5 | 47 | 40 | 34 | 0.7 |
| APR 15... | -- | -- | -- | 700 | -- | -- | 47 | -- | -- | -- |
| AUG 15... | <1 | 2 | 2 | 1500 | <5 | <5 | 58 | 40 | 30 | 0.8 |

GROUND-WATER RECORDS

MONTGOMERY COUNTY

393757084173600. Local number MT-928.

LOCATION.--Lat 39°37'57", long 84°17'36", Hydrologic Unit 05080002, on right bank of Great Miami River 0.2 mi south of Linden Ave. bridge, Miamisburg.

Owner: City of Miamisburg.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled municipal supply water-table well, 20 in, depth 95 ft, screened below 70 ft.

PERIOD OF RECORD.--September 1983 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

| DATE | TIME | SPE- CIFIC CON- DUCT- ANCE (US/CM) | PH (STAND- ARD UNITS) | TEMPER- ATURE AIR (DEG C) | TEMPER- ATURE WATER (DEG C) | OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) | CALCIUM DIS- SOLVED (MG/L AS CA) | MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) | SODIUM, DIS- SOLVED (MG/L AS NA) | POTAS- SIUM, DIS- SOLVED (MG/L AS K) | BICAR- BONATE WATER WH FET FIELD MG/L AS HCO3 |
|--------------|------|---|--------------------------------|------------------------------------|--------------------------------------|---|--|--|--|---|---|
| NOV 05... | 1150 | 865 | 7.4 | 7.0 | 15.5 | 34 | 96 | 32 | 37 | 3.9 | 350 |
| APR 15... | 1030 | 930 | 7.4 | 4.0 | 14.0 | <10 | 90 | 30 | 42 | 3.0 | 340 |
| AUG 15... | 1115 | 920 | 7.6 | 32.0 | 16.5 | <10 | 93 | 33 | 48 | 3.4 | 360 |

| DATE | ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3 | SULFATE DIS- SOLVED (MG/L AS SO4) | CHLO- RIDE, DIS- SOLVED (MG/L AS CL) | FLUO- RIDE, DIS- SOLVED (MG/L AS F) | SILICA, DIS- SOLVED (MG/L AS SiO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) | NITRO- GEN, NITRITE TOTAL (MG/L AS N) | NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) | ARSENIC TOTAL (UG/L AS AS) | ARSENIC DIS- SOLVED (UG/L AS AS) | CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) |
|--------------|---|---|---|--|---|--|--|--|-------------------------------------|--|--|
| NOV 05... | 286 | 63 | 67 | 0.3 | 9.9 | 481 | <0.01 | 1.3 | 1 | 1 | 15 |
| APR 15... | 279 | 71 | 71 | 0.4 | 9.1 | 500 | 0.02 | 2.1 | -- | -- | -- |
| AUG 15... | 290 | 73 | 88 | 0.2 | 8.8 | 528 | 0.02 | 1.0 | 1 | 1 | 1 |

| DATE | CHRO- MIUM, DIS- SOLVED (UG/L AS CR) | COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) | COPPER, DIS- SOLVED (UG/L AS CU) | IRON, DIS- SOLVED (UG/L AS FE) | LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) | LEAD, DIS- SOLVED (UG/L AS PB) | MANGA- NESE, DIS- SOLVED (UG/L AS MN) | ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) | ZINC, DIS- SOLVED (UG/L AS ZN) | CARBON, ORGANIC TOTAL (MG/L AS C) |
|--------------|---|---|--|--|---|--|--|---|--|---|
| NOV 05... | 20 | 11 | 10 | 10 | <5 | <5 | 190 | <10 | 23 | 1.0 |
| APR 15... | -- | -- | -- | 13 | -- | -- | 190 | -- | -- | 1.1 |
| AUG 15... | <1 | 6 | 10 | 23 | <5 | <5 | 190 | <10 | 15 | 1.2 |

MONTGOMERY COUNTY--Continued

394012084151700. Local number, MT-55.

LOCATION.--Lat 39°40'12", long 84°15'17", Hydrologic Unit 05080002, Elm Street in West Carrollton.

Owner: Oxford Paper Company.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water table well, diameter 12 in., depth 84 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 717.6 ft above National Geodetic Vertical Datum of 1929. Measuring point: Floor of instrument shelter 0.30 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--April 1970 to current year.

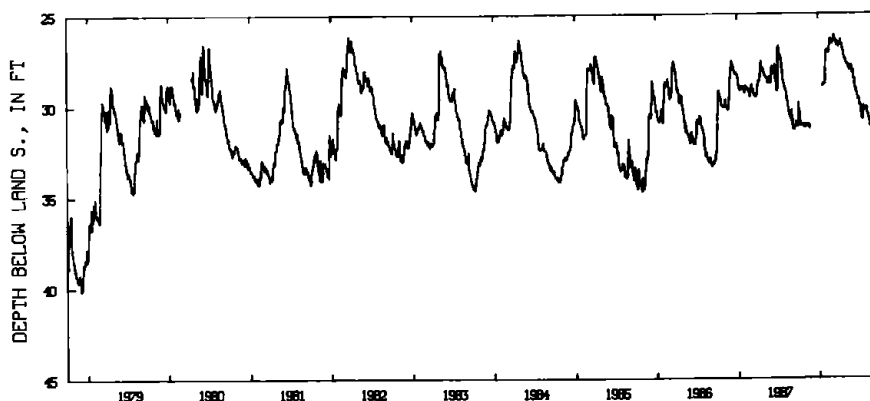
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 58.57 ft below land-surface datum, Nov. 24, 1974; minimum daily low, 26.16 ft below land-surface datum, Mar. 22, 23, 1982.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 31.06 | 31.26 | --- | --- | 28.78 | 26.60 | 26.81 | 27.42 | 28.06 | 29.62 | 30.15 | 31.37 |
| 2 | 31.06 | 31.27 | --- | --- | 28.68 | 26.65 | 26.81 | 27.56 | 28.25 | 29.66 | 30.22 | 31.36 |
| 3 | 31.07 | 31.26 | --- | --- | 28.12 | 26.67 | 26.65 | 27.58 | 28.20 | 29.73 | 30.30 | 31.33 |
| 4 | 31.19 | 31.26 | --- | --- | 27.52 | 26.62 | 26.70 | 27.61 | 28.06 | 29.83 | 30.32 | 31.19 |
| 5 | 31.09 | 31.09 | --- | --- | 27.18 | 26.65 | 26.70 | 27.63 | 28.10 | 29.86 | 30.32 | 31.01 |
| 6 | 29.87 | 31.07 | --- | --- | 27.03 | 26.57 | 26.63 | 27.73 | 28.23 | 29.97 | 30.22 | 31.08 |
| 7 | 30.57 | 31.06 | --- | --- | 27.02 | 26.48 | 26.64 | 27.73 | 28.39 | 30.03 | 30.15 | 31.15 |
| 8 | 30.67 | 31.11 | --- | --- | 27.00 | 26.52 | 26.63 | 27.73 | 28.48 | 30.03 | 30.33 | 31.21 |
| 9 | 30.81 | 31.22 | --- | --- | 27.02 | 26.41 | 26.58 | 27.77 | 28.58 | 29.99 | 30.43 | 31.23 |
| 10 | 30.33 | 31.19 | --- | --- | 27.03 | 26.28 | 26.44 | 27.79 | 28.56 | 30.13 | 30.52 | 31.16 |
| 11 | 30.82 | 31.18 | --- | --- | 26.98 | 26.23 | 26.47 | 27.84 | 28.56 | 30.26 | 30.58 | 31.09 |
| 12 | 30.92 | 31.05 | --- | --- | 27.05 | 26.20 | 26.53 | 27.82 | 28.66 | 30.47 | 30.64 | 31.19 |
| 13 | 31.10 | 31.11 | --- | --- | 27.09 | 26.18 | 26.64 | 27.87 | 28.91 | 30.62 | 30.58 | 31.23 |
| 14 | 31.10 | 31.05 | --- | --- | 27.11 | 26.23 | 26.73 | 27.88 | 29.00 | 30.71 | 30.56 | 31.19 |
| 15 | 31.03 | 31.12 | --- | --- | 27.14 | 26.30 | 26.77 | 27.78 | 29.10 | 30.77 | 30.73 | 31.22 |
| 16 | 31.03 | 31.17 | --- | --- | 27.18 | 26.43 | 26.78 | 27.89 | 29.21 | 30.78 | 30.81 | 31.23 |
| 17 | 31.02 | 31.12 | --- | --- | 27.17 | 26.48 | 26.70 | 27.95 | 29.17 | 30.74 | 30.83 | 31.13 |
| 18 | 31.06 | 31.16 | --- | --- | 27.11 | 26.49 | 26.79 | 27.97 | 29.07 | 30.81 | 30.97 | 30.92 |
| 19 | 31.06 | 31.09 | --- | --- | 26.98 | 26.47 | 26.88 | 28.05 | 29.17 | 30.82 | 31.13 | 30.93 |
| 20 | 31.07 | 31.07 | --- | 28.99 | 26.91 | 26.51 | 26.97 | 28.08 | 29.30 | 30.64 | 31.08 | 31.03 |
| 21 | 31.17 | 31.18 | --- | 28.96 | 26.76 | 26.60 | 27.05 | 28.08 | 29.33 | 30.50 | 31.08 | 31.07 |
| 22 | 31.18 | 31.24 | --- | 28.92 | 26.44 | 26.64 | 27.08 | 27.89 | 29.39 | 30.26 | 31.16 | 31.05 |
| 23 | 31.15 | 31.29 | --- | 28.87 | 26.46 | 26.72 | 27.05 | 28.02 | 29.45 | 30.07 | 31.19 | 31.05 |
| 24 | 31.15 | 31.31 | --- | 28.87 | 26.47 | 26.77 | 27.06 | 28.03 | 29.45 | 30.08 | 31.19 | 31.04 |
| 25 | 31.08 | 31.24 | --- | 28.84 | 26.39 | 26.76 | 27.17 | 28.06 | 29.46 | 30.22 | 31.23 | 31.03 |
| 26 | 31.12 | 31.12 | --- | 28.87 | 26.43 | 26.71 | 27.31 | 28.05 | 29.50 | 30.23 | 31.24 | 31.13 |
| 27 | 31.09 | --- | --- | 28.85 | 26.48 | 26.53 | 27.41 | 27.99 | 29.65 | 30.18 | 31.15 | 31.19 |
| 28 | 31.12 | --- | --- | 28.84 | 26.44 | 26.59 | 27.47 | 27.85 | 29.71 | 30.20 | 31.16 | 31.23 |
| 29 | 31.14 | --- | --- | 28.83 | 26.56 | 26.64 | 27.46 | 27.82 | 29.72 | 30.14 | 31.26 | 31.23 |
| 30 | 31.16 | --- | --- | 28.88 | --- | 26.77 | 27.46 | 27.89 | 29.71 | 30.11 | 31.26 | 31.19 |
| 31 | 31.22 | --- | --- | 28.89 | --- | 26.79 | --- | 28.07 | --- | 30.11 | 31.35 | --- |
| MAX | 31.22 | 31.31 | --- | 28.99 | 28.78 | 26.79 | 27.47 | 28.08 | 29.72 | 30.82 | 31.35 | 31.37 |

CAL YR 1987 LOW 31.40

WTR YR 1988 LOW 31.37



— 394012084151700 MT-55
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

MONTGOMERY COUNTY--Continued

394025084162800. Local number, MT-49.

LOCATION.--Lat 39°40'25", long 84°16'28", Hydrologic Unit 05080002, 1.2 mi west of city hall in West Carrollton.

Owner: Metal Shredders, Inc.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 6 in., depth 220 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

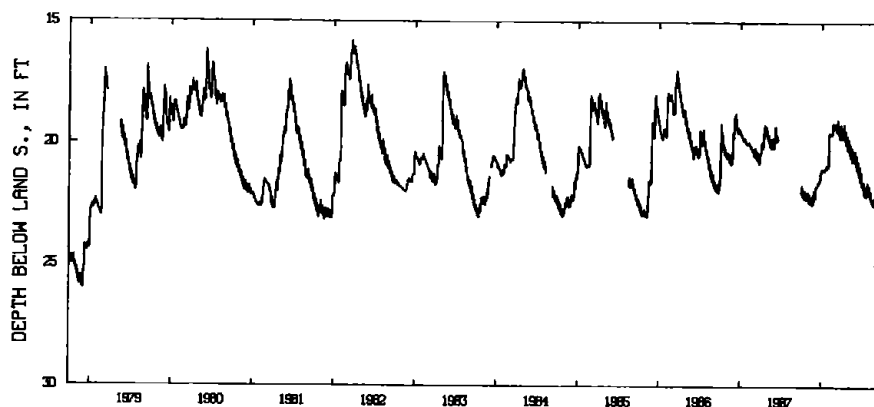
DATUM.--Elevation of land-surface datum is 714.61 ft above National Geodetic Vertical Datum of 1929. (Levels by Miami Conservancy District.) Measuring point: Floor of shelter 2.50 ft above land-surface datum.

PERIOD OF RECORD.--November 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 36.30 ft below land-surface datum, Dec. 8, 1974; minimum daily low, 10.58 ft below land-surface datum, Jan. 23, 1959.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 21.98 | 22.02 | 22.20 | 21.08 | 20.89 | 19.36 | 19.79 | 19.80 | 20.71 | 21.76 | 21.86 | 22.62 |
| 2 | 22.03 | 22.25 | 22.26 | 21.08 | 20.65 | 19.37 | 19.52 | 20.22 | 20.76 | 21.56 | 21.99 | 22.30 |
| 3 | 22.02 | 22.29 | 22.19 | 21.04 | 19.95 | 19.37 | 19.42 | 20.29 | 20.86 | 21.70 | 22.01 | 22.09 |
| 4 | 21.73 | 22.31 | 22.17 | 21.08 | 19.65 | 19.28 | 19.62 | 20.30 | 20.60 | 21.59 | 22.11 | 22.02 |
| 5 | 21.98 | 22.39 | 21.90 | 21.10 | 19.56 | 19.26 | 19.57 | 20.36 | 20.48 | 21.68 | 22.15 | 22.41 |
| 6 | 22.07 | 22.42 | 21.81 | 21.10 | 19.56 | 19.17 | 19.54 | 20.41 | 20.82 | 21.81 | 22.21 | 22.45 |
| 7 | 22.11 | 22.38 | 21.77 | 21.09 | 19.55 | 19.44 | 19.64 | 20.16 | 20.92 | 21.84 | 21.94 | 22.47 |
| 8 | 22.17 | 22.08 | 21.75 | 21.07 | 19.58 | 19.50 | 19.67 | 20.01 | 20.99 | 21.95 | 22.13 | 22.49 |
| 9 | 22.13 | 22.36 | 21.77 | 21.08 | 19.59 | 19.45 | 19.34 | 20.37 | 21.11 | 21.61 | 22.21 | 22.26 |
| 10 | 22.16 | 22.37 | 21.75 | 21.09 | 19.61 | 19.40 | 19.20 | 20.46 | 21.10 | 21.77 | 22.30 | 22.14 |
| 11 | 21.90 | 22.42 | 21.71 | 21.06 | 19.59 | 19.39 | 19.55 | 20.50 | 20.83 | 21.99 | 22.35 | 22.09 |
| 12 | 22.09 | 22.43 | 21.71 | 21.04 | 19.61 | 19.08 | 19.63 | 20.54 | 20.72 | 22.09 | 22.33 | 22.15 |
| 13 | 22.16 | 22.46 | 21.72 | 21.12 | 19.63 | 19.02 | 19.71 | 20.58 | 21.09 | 22.13 | 22.29 | 22.00 |
| 14 | 22.24 | 22.47 | 21.72 | 21.12 | 19.62 | 19.12 | 19.79 | 20.33 | 21.16 | 22.15 | 22.28 | 22.26 |
| 15 | 22.25 | 22.19 | 21.66 | 21.06 | 19.61 | 19.12 | 19.87 | 20.14 | 21.23 | 22.11 | 22.38 | 22.39 |
| 16 | 22.26 | 22.39 | 21.65 | 21.05 | 19.62 | 19.28 | 19.58 | 20.51 | 21.22 | 21.93 | 22.45 | 22.44 |
| 17 | 22.19 | 22.40 | 21.66 | 21.04 | 19.58 | 19.54 | 19.46 | 20.64 | 21.31 | 21.82 | 22.49 | 22.06 |
| 18 | 21.95 | 22.51 | 21.60 | 21.07 | 19.54 | 19.59 | 19.79 | 20.70 | 21.07 | 22.16 | 22.50 | 21.91 |
| 19 | 22.18 | 22.47 | 21.55 | 21.05 | 19.46 | 19.31 | 19.93 | 20.75 | 20.93 | 22.19 | 22.53 | 21.98 |
| 20 | 22.25 | 22.50 | 21.54 | 20.93 | 19.38 | 19.27 | 19.93 | 20.65 | 21.29 | 22.16 | 22.39 | 22.28 |
| 21 | 22.28 | 22.23 | 21.53 | 20.96 | 19.23 | 19.66 | 20.02 | 20.35 | 21.37 | 21.99 | 22.44 | 22.36 |
| 22 | 22.29 | 22.12 | 21.56 | 20.94 | 19.16 | 19.68 | 20.03 | 20.27 | 21.46 | 22.01 | 22.45 | 22.44 |
| 23 | 22.30 | 22.36 | 21.57 | 20.89 | 19.19 | 19.74 | 19.71 | 20.58 | 21.52 | 21.68 | 22.47 | 22.49 |
| 24 | 22.28 | 22.41 | 21.48 | 20.91 | 19.17 | 19.79 | 19.65 | 20.65 | 21.55 | 21.60 | 22.51 | 22.17 |
| 25 | 22.02 | 22.44 | 21.41 | 20.92 | 19.19 | 19.48 | 19.97 | 20.73 | 21.40 | 21.93 | 22.55 | 22.28 |
| 26 | 22.13 | 22.15 | 21.35 | 20.98 | 19.18 | 19.33 | 20.06 | 20.41 | 21.17 | 21.98 | 22.21 | 22.40 |
| 27 | 22.23 | 22.26 | 21.29 | 21.00 | 19.26 | 19.22 | 20.18 | 20.36 | 21.49 | 21.98 | 22.43 | 22.48 |
| 28 | 22.22 | 22.22 | 21.19 | 20.99 | 19.25 | 19.56 | 20.25 | 20.31 | 21.61 | 22.04 | 22.47 | 22.55 |
| 29 | 22.26 | 21.94 | 21.22 | 20.94 | 19.32 | 19.63 | 20.13 | 20.29 | 21.66 | 22.08 | 22.51 | 22.59 |
| 30 | 22.28 | 22.15 | 21.18 | 20.92 | --- | 19.76 | 19.93 | 20.28 | 21.72 | 22.09 | 22.55 | 22.62 |
| 31 | 22.29 | --- | 21.09 | 20.91 | --- | 19.78 | --- | 20.60 | --- | 21.73 | 22.59 | --- |
| MAX | 22.30 | 22.51 | 22.26 | 21.12 | 20.89 | 19.79 | 20.25 | 20.75 | 21.72 | 22.19 | 22.59 | 22.62 |
| CAL YR 1987 | LOW 22.51 | | | | | | | | | | | |
| WTR YR 1988 | LOW 22.62 | | | | | | | | | | | |



394025084162800 MT-49
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

MONTGOMERY COUNTY--Continued

394425084113200. Local number, MT-3.

LOCATION.--Lat 39°44'25", long 84°11'32", Hydrologic Unit 05080002, Patterson Blvd. at Stewart St., in Dayton.

Owner: State of Ohio.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 6 in., depth 80 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 744 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 1.20 ft above land-surface datum.

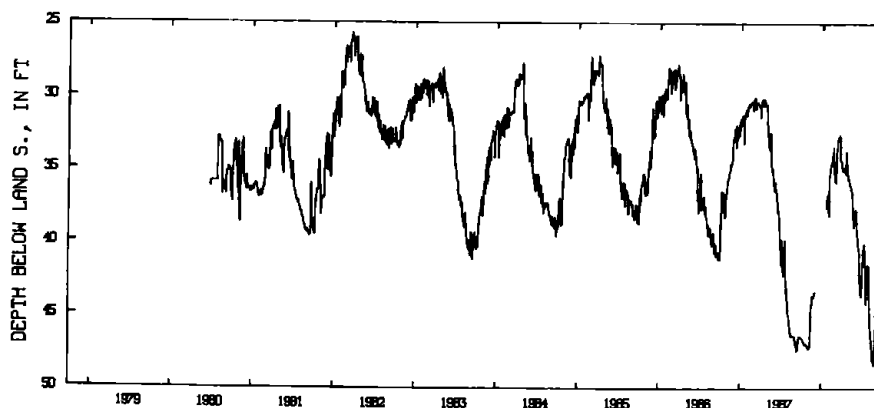
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--May 1945 to June 1974. Reactivated June 1980.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low 79.45 ft below land-surface datum, Apr. 6, 1971; minimum daily low, 25.72 ft below land-surface datum, Mar. 21, 1982.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 46.48 | 47.09 | 43.44 | --- | 38.20 | 35.82 | 35.00 | 35.66 | 37.82 | 42.91 | 42.51 | 45.96 |
| 2 | 46.49 | 47.17 | 43.41 | --- | 38.17 | 35.85 | 35.07 | 35.84 | 37.85 | 41.62 | 43.53 | 45.70 |
| 3 | 46.50 | 47.22 | --- | --- | 36.54 | 35.86 | 35.09 | 35.93 | 37.85 | 41.19 | 44.16 | 45.52 |
| 4 | 46.52 | 47.27 | --- | --- | 35.47 | 35.15 | 35.09 | 35.97 | 37.87 | 40.85 | 44.64 | 45.30 |
| 5 | 46.54 | 47.30 | --- | --- | 35.20 | 34.39 | 34.91 | 36.06 | 37.88 | 40.57 | 45.06 | 45.02 |
| 6 | 46.56 | 47.29 | --- | --- | 35.15 | 33.96 | 34.88 | 36.12 | 38.68 | 40.48 | 45.32 | 44.88 |
| 7 | 46.59 | 47.21 | --- | --- | 34.99 | 33.74 | 34.99 | 36.14 | 39.12 | 40.38 | 45.51 | 44.73 |
| 8 | 46.60 | 47.17 | --- | --- | 34.82 | 33.57 | 34.99 | 36.13 | 39.45 | 40.30 | 45.75 | 44.58 |
| 9 | 46.62 | 47.21 | --- | --- | 34.72 | 33.28 | 34.93 | 36.20 | 39.72 | 40.26 | 45.97 | 44.49 |
| 10 | 46.64 | 47.20 | --- | --- | 34.71 | 33.03 | 34.88 | 36.34 | 39.83 | 40.15 | 46.24 | 44.46 |
| 11 | 46.68 | 47.16 | --- | --- | 34.62 | 32.93 | 34.91 | 36.39 | 39.97 | 40.29 | 46.47 | 44.43 |
| 12 | 46.70 | 47.12 | --- | --- | 34.53 | 32.85 | 35.03 | 36.39 | 40.12 | 40.38 | 46.67 | 44.33 |
| 13 | 46.74 | 46.42 | --- | --- | 34.52 | 32.86 | 35.08 | 36.50 | 40.30 | 40.99 | 46.83 | 44.31 |
| 14 | 46.77 | 45.48 | --- | --- | 34.47 | 32.79 | 35.18 | 36.57 | 40.42 | 41.45 | 46.96 | 44.15 |
| 15 | 46.85 | 44.83 | --- | --- | 34.36 | 32.82 | 35.28 | 36.59 | 40.54 | 41.74 | 47.16 | 44.01 |
| 16 | 46.88 | 44.25 | --- | --- | 34.34 | 32.82 | 35.28 | 36.74 | 40.72 | 42.35 | 47.37 | 43.95 |
| 17 | 46.92 | 44.40 | --- | --- | 34.24 | 32.82 | 34.32 | 36.85 | 41.44 | 42.98 | 47.57 | 43.91 |
| 18 | 46.92 | 44.13 | --- | --- | 34.20 | 32.81 | 33.76 | 37.39 | 41.89 | 43.59 | 47.77 | 43.86 |
| 19 | 46.95 | 43.70 | --- | --- | 34.00 | 32.68 | 34.35 | 38.03 | 42.21 | 43.84 | 47.92 | 43.88 |
| 20 | 47.00 | 43.65 | --- | 37.66 | 33.78 | 32.79 | 34.60 | 38.37 | 42.47 | 44.21 | 47.98 | 43.92 |
| 21 | 47.00 | 43.77 | --- | 37.59 | 33.49 | 32.78 | 34.88 | 38.62 | 42.73 | 44.04 | 48.07 | 43.92 |
| 22 | 46.98 | 43.77 | --- | 37.39 | 34.51 | 32.75 | 35.01 | 38.83 | 42.98 | 43.05 | 48.12 | 43.88 |
| 23 | 47.02 | 43.80 | --- | 37.12 | 34.89 | 33.87 | 35.22 | 38.94 | 43.19 | 42.47 | 48.20 | 43.85 |
| 24 | 47.04 | 43.81 | --- | 36.91 | 34.94 | 34.24 | 35.30 | 38.98 | 43.17 | 42.02 | 48.25 | 43.85 |
| 25 | 47.04 | 43.79 | --- | 36.90 | 35.12 | 34.41 | 35.33 | 38.64 | 43.31 | 41.75 | 48.32 | 43.79 |
| 26 | 46.95 | 43.79 | --- | 36.78 | 35.23 | 34.42 | 35.43 | 38.20 | 43.49 | 41.58 | 48.39 | 43.78 |
| 27 | 47.02 | 43.68 | --- | 36.78 | 35.56 | 34.42 | 35.50 | 38.54 | 43.59 | 41.60 | 48.40 | 43.55 |
| 28 | 47.02 | 43.62 | --- | 36.69 | 35.56 | 34.52 | 35.64 | 38.17 | 43.70 | 41.58 | 47.96 | 42.97 |
| 29 | 47.02 | 43.59 | --- | 37.08 | 35.77 | 34.67 | 35.73 | 37.87 | 43.54 | 41.61 | 47.31 | 43.64 |
| 30 | 47.06 | 43.52 | --- | 37.74 | --- | 34.84 | 35.74 | 37.78 | 42.89 | 41.65 | 46.74 | 43.67 |
| 31 | 47.08 | --- | --- | 38.08 | --- | 34.83 | --- | 37.79 | --- | 41.66 | 46.30 | --- |
| MAX | 47.08 | 47.30 | 43.44 | 38.08 | 38.20 | 35.86 | 35.74 | 38.98 | 43.70 | 44.21 | 48.40 | 45.96 |

CAL YR 1987 LOW 47.43
WTR YR 1988 LOW 48.40394425084113200 MT-3
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

MONTGOMERY COUNTY--Continued

394533084113800. Local number, MT-6.

LOCATION.--Lat 39°45'33", long 84°11'38", Hydrologic Unit 05080002, 3rd and Ludlow Sts., Dayton.

Owner: City of Dayton

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., depth 60 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 740 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 13.00 ft below land-surface datum.

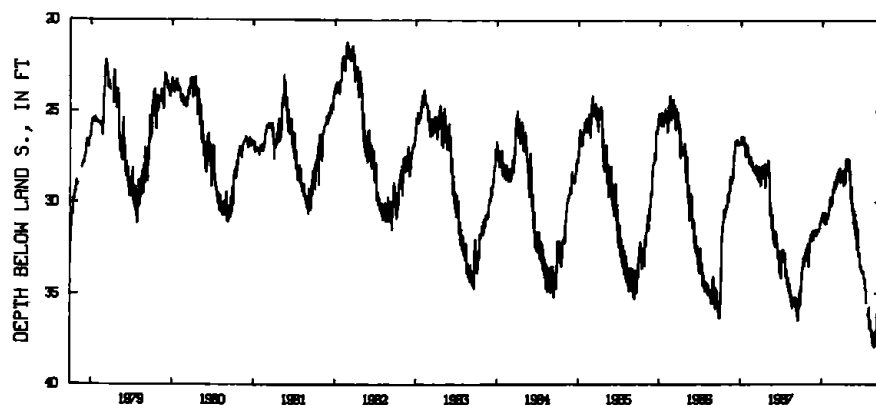
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 60.20 ft below land-surface datum, Oct. 2, 1970; minimum daily low, 21.23 ft below land-surface datum, Feb. 26, 1982.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 34.92 | 32.29 | 31.61 | 30.92 | 30.63 | 29.27 | 28.39 | 27.64 | 31.73 | 33.85 | 35.80 | 37.62 |
| 2 | 34.78 | 33.06 | 31.61 | 30.83 | 30.61 | 28.92 | 28.55 | 28.25 | 31.98 | 33.87 | 36.42 | 37.68 |
| 3 | 34.44 | 33.39 | 31.55 | 30.73 | 30.68 | 28.83 | 28.27 | 28.25 | 31.51 | 33.86 | 36.42 | 37.37 |
| 4 | 33.98 | 33.53 | 31.61 | 30.61 | 30.41 | 29.14 | 28.33 | 28.62 | 31.22 | 33.76 | 36.93 | 36.79 |
| 5 | 33.76 | 33.01 | 31.59 | 30.61 | 30.45 | 28.90 | 28.74 | 28.23 | 31.02 | 33.77 | 36.85 | 36.34 |
| 6 | 33.76 | 32.78 | 31.54 | 30.58 | 30.18 | 28.60 | 28.54 | 28.71 | 31.92 | 33.84 | 36.86 | 36.23 |
| 7 | 33.66 | 32.60 | 31.57 | 30.58 | 29.92 | 28.68 | 28.29 | 28.81 | 32.10 | 33.94 | 36.49 | 36.12 |
| 8 | 33.57 | 32.67 | 31.70 | 30.62 | 29.73 | 29.08 | 29.10 | 28.44 | 32.61 | 34.07 | 36.51 | 36.21 |
| 9 | 33.58 | 32.25 | 31.86 | 30.91 | 30.02 | 28.84 | 28.48 | 29.39 | 32.36 | 34.12 | 36.93 | 36.35 |
| 10 | 33.47 | 32.14 | 31.77 | 30.81 | 30.01 | 28.68 | 28.23 | 29.32 | 31.87 | 34.12 | 36.99 | 36.09 |
| 11 | 33.24 | 32.01 | 31.73 | 30.86 | 29.91 | 28.87 | 28.56 | 29.38 | 31.66 | 34.16 | 37.03 | 35.75 |
| 12 | 33.04 | 31.91 | 31.72 | 30.68 | 30.02 | 28.60 | 28.62 | 29.82 | 31.46 | 34.28 | 37.22 | 36.53 |
| 13 | 33.12 | 31.98 | 31.64 | 31.07 | 30.21 | 28.42 | 28.71 | 30.08 | 32.57 | 34.44 | 37.32 | 36.73 |
| 14 | 33.33 | 31.90 | 31.58 | 31.17 | 29.89 | 28.29 | 28.97 | 29.41 | 32.50 | 34.52 | 37.04 | 37.04 |
| 15 | 33.27 | 31.77 | 31.64 | 31.02 | 29.78 | 28.27 | 28.91 | 29.18 | 32.95 | 34.67 | 37.23 | 36.58 |
| 16 | 33.47 | 32.00 | 31.65 | 31.01 | 30.03 | 28.58 | 28.51 | 30.45 | 32.86 | 34.77 | 37.45 | 36.95 |
| 17 | 33.19 | 32.14 | 31.61 | 30.77 | 30.07 | 28.66 | 27.95 | 30.05 | 32.99 | 34.78 | 37.45 | 36.44 |
| 18 | 32.95 | 32.01 | 31.56 | 30.57 | 29.74 | 28.50 | 27.63 | 30.04 | 32.92 | 34.83 | 37.83 | 36.00 |
| 19 | 33.24 | 31.88 | 31.52 | 30.88 | 29.76 | 28.30 | 27.79 | 30.16 | 32.82 | 34.88 | 37.78 | 36.56 |
| 20 | 33.03 | 31.81 | 31.53 | 31.21 | 29.50 | 28.15 | 27.66 | 30.65 | 33.18 | 35.53 | 37.73 | 36.58 |
| 21 | 32.83 | 31.70 | 31.50 | 31.13 | 29.29 | 28.17 | 27.79 | 30.37 | 33.32 | --- | 37.27 | 36.62 |
| 22 | 32.63 | 31.59 | 31.50 | 30.89 | 29.49 | 28.41 | 28.10 | 30.54 | 33.52 | --- | 37.32 | 36.57 |
| 23 | 32.77 | 31.75 | 31.47 | 30.92 | 29.50 | 28.61 | 27.82 | 31.14 | 33.55 | --- | 37.45 | 36.86 |
| 24 | 32.74 | 31.84 | 31.40 | 30.68 | 29.19 | 28.81 | 27.60 | 31.07 | 33.62 | --- | 37.83 | 36.24 |
| 25 | 32.62 | 32.08 | 31.30 | 30.69 | 29.35 | 28.92 | 27.96 | 30.57 | 33.67 | --- | 37.80 | 35.84 |
| 26 | 32.66 | 31.94 | 31.21 | 30.88 | 29.09 | 28.62 | 28.04 | 30.47 | 33.63 | --- | 37.96 | 35.89 |
| 27 | 32.59 | 31.75 | 31.13 | 30.88 | 29.08 | 28.31 | 28.21 | 31.34 | 33.52 | 36.15 | 37.67 | 36.03 |
| 28 | 32.51 | 31.74 | 31.05 | 30.93 | 28.88 | 28.39 | 27.92 | 31.44 | 33.64 | 36.23 | 37.45 | 36.28 |
| 29 | 32.46 | 31.67 | 31.10 | 30.92 | 28.91 | 28.47 | 27.76 | 31.15 | 33.72 | 36.21 | 37.09 | 36.58 |
| 30 | 32.82 | 31.62 | 31.00 | 30.87 | --- | 28.54 | 27.76 | 30.68 | 33.81 | 36.19 | 37.46 | 36.48 |
| 31 | 32.42 | --- | 30.99 | 30.62 | --- | 28.61 | --- | 31.34 | --- | 35.92 | 37.87 | --- |
| MAX | 34.92 | 33.53 | 31.86 | 31.21 | 30.68 | 29.27 | 29.10 | 31.44 | 33.81 | 36.23 | 37.96 | 37.68 |

CAL YR 1987 LOW 36.52
WTR YR 1988 LOW 37.96394533084113800 MT-6
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

267

MUSKINGUM COUNTY

395804081593200. Local number, MU-1A.

LOCATION.--Lat 39°58'04", long 81°59'32", Hydrologic Unit 05040004, 2.2 mi northeast of the "Y" bridge in Zanesville.

Owner: Zanesville Water Department.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled unused water table well, diameter 6 in., depth 109 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 700 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 4.48 ft above land-surface datum.

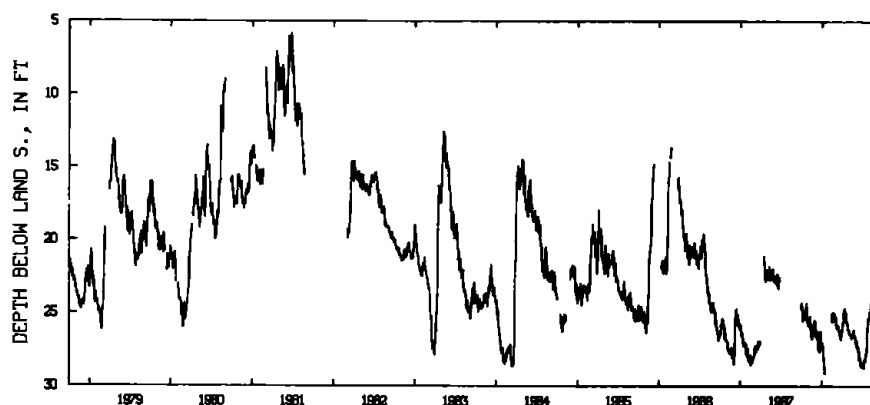
REMARKS.--Water level affected by nearby municipal wells and by stage of the Muskingum River. Prior to water year 1978, well depth reported as 132 ft.

PERIOD OF RECORD.--May 1942 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 37.25 ft below land-surface datum, Aug. 1-2, 1954; minimum daily low, 8.50 ft below land-surface datum, May 25, 1967.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 24.56 | 25.51 | 25.55 | 27.11 | --- | 25.22 | 26.11 | 26.15 | 26.83 | 28.65 | 24.91 | 25.94 |
| 2 | 24.73 | 25.44 | 26.01 | 27.05 | --- | 25.29 | 26.00 | 26.15 | 27.09 | 28.70 | 24.89 | 26.13 |
| 3 | 24.31 | 25.68 | 26.50 | 27.05 | --- | 25.35 | 25.76 | 26.28 | 27.09 | 28.71 | 24.89 | 26.12 |
| 4 | 24.64 | 25.90 | 26.25 | 27.23 | --- | 25.48 | 25.85 | 26.40 | 26.98 | 28.54 | 25.12 | 26.12 |
| 5 | 24.58 | 25.88 | 25.84 | 27.31 | --- | 25.59 | 25.81 | 26.45 | 26.87 | 28.45 | 25.04 | 26.05 |
| 6 | 24.89 | 25.86 | 26.40 | 27.49 | --- | 25.62 | 25.72 | 26.42 | 26.96 | 28.66 | 25.18 | 25.89 |
| 7 | 25.00 | 25.80 | 26.51 | 27.28 | --- | 25.83 | 25.53 | 26.47 | 27.10 | 28.76 | 24.73 | 26.24 |
| 8 | 25.52 | 25.76 | 26.66 | 27.44 | --- | 25.99 | 25.48 | 26.40 | 27.36 | 28.65 | 24.58 | 26.26 |
| 9 | 25.48 | 25.76 | 26.71 | 27.51 | --- | 25.95 | 25.02 | 26.43 | 27.42 | 28.45 | 24.34 | 25.89 |
| 10 | 25.34 | 25.76 | 26.60 | 28.04 | --- | 26.01 | 24.76 | 26.51 | 27.41 | 28.21 | 24.21 | 26.02 |
| 11 | 25.22 | 25.22 | 26.61 | 28.12 | --- | 26.05 | 24.72 | 26.55 | 27.33 | --- | 24.21 | 26.09 |
| 12 | 25.34 | 25.61 | 26.31 | 28.76 | --- | 25.87 | 24.87 | 26.60 | 27.31 | --- | 24.32 | 26.16 |
| 13 | 25.14 | 25.93 | 26.45 | 28.75 | --- | 25.83 | 24.71 | 26.71 | 27.32 | --- | 24.28 | 26.17 |
| 14 | 25.25 | 26.08 | 26.34 | 29.15 | --- | 25.85 | 24.91 | 26.72 | 27.64 | --- | 24.07 | 26.31 |
| 15 | 25.27 | 26.63 | 27.09 | --- | --- | 25.99 | 25.01 | 26.55 | 27.95 | 28.23 | 23.98 | 26.38 |
| 16 | 25.10 | 26.30 | 27.05 | --- | --- | 26.15 | 24.99 | 26.52 | 28.14 | 28.27 | 24.56 | 26.47 |
| 17 | 25.45 | 26.28 | 27.09 | --- | 24.98 | 26.17 | 24.93 | 26.54 | 28.25 | 27.90 | 24.65 | 26.48 |
| 18 | 25.34 | 26.72 | 27.51 | --- | 25.60 | 26.15 | 25.16 | 26.58 | 28.11 | 27.87 | 25.02 | 26.21 |
| 19 | 25.09 | 26.76 | 27.48 | --- | 25.62 | 26.26 | 25.26 | 26.57 | 28.06 | 27.69 | 25.07 | 26.12 |
| 20 | 24.95 | 25.96 | --- | --- | 25.00 | 26.16 | 25.37 | 26.45 | 28.06 | 27.65 | 25.00 | 26.12 |
| 21 | 24.86 | 25.91 | 26.88 | --- | 25.38 | 26.42 | 25.52 | 26.48 | 28.08 | 27.37 | 24.99 | 25.84 |
| 22 | 24.63 | 25.83 | 27.52 | --- | 25.40 | 26.40 | 25.66 | 26.47 | 28.25 | 26.38 | 25.11 | 26.00 |
| 23 | 24.63 | 26.10 | 27.63 | --- | 25.24 | 26.49 | 25.71 | 26.15 | 28.30 | 26.16 | 25.21 | 26.14 |
| 24 | 24.81 | 26.24 | 27.64 | --- | 24.95 | 26.68 | 25.69 | 26.35 | 28.50 | 25.80 | 25.37 | 26.12 |
| 25 | 24.34 | 26.51 | 27.17 | --- | 25.04 | 26.72 | 25.76 | 26.43 | 28.66 | 25.67 | 25.56 | 25.93 |
| 26 | 24.75 | 26.44 | 26.25 | --- | 25.39 | 26.81 | 26.00 | 26.52 | 28.66 | 25.67 | 25.84 | 26.05 |
| 27 | 25.12 | 26.28 | 26.69 | --- | 25.01 | 26.69 | 26.15 | 26.60 | 28.44 | 25.37 | 25.63 | 26.05 |
| 28 | 25.42 | 26.25 | 26.83 | --- | 25.15 | 26.59 | 26.15 | 26.64 | 28.45 | 25.39 | 25.66 | 26.12 |
| 29 | 25.50 | 25.88 | 27.32 | --- | 25.26 | 26.55 | 26.16 | 26.62 | 28.47 | 25.48 | 25.32 | 26.16 |
| 30 | 25.76 | 25.49 | 27.24 | --- | --- | 26.39 | 26.16 | 26.63 | 28.56 | 25.45 | 25.57 | 26.27 |
| 31 | 25.55 | --- | 27.20 | --- | --- | 26.16 | --- | 26.81 | --- | 25.14 | 25.84 | --- |
| MAX | 25.76 | 26.76 | 27.64 | 29.15 | 25.62 | 26.81 | 26.16 | 26.81 | 28.66 | 28.76 | 25.84 | 26.48 |

CAL YR 1987 LOW 28.56
WTR YR 1988 LOW 29.15395804081593200 MU-1A ZANESV WTR 1 MI N OF ZANESVILLE OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

PICKAWAY COUNTY

393327082571600. Local number, PK-7.

LOCATION.--Lat 39°33'27", long 82°57'16", Hydrologic Unit 05060002, 3.1 mi south of Circleville.

Owner: State of Ohio.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 6 in., depth drilled 172 ft, present depth 169 ft, cased to 164 ft.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 705 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter, 3.00 ft above land-surface datum.

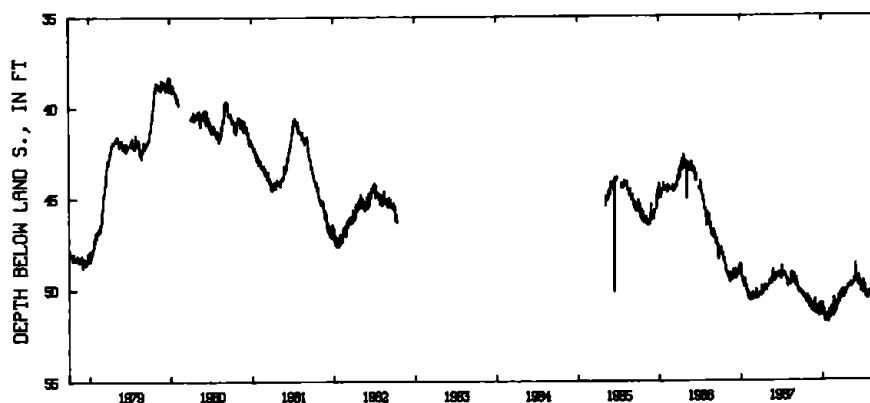
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--July 1972 to September 1982 continuous, October 1982 to April 1985 periodic, continuous thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 54.80 ft below land-surface datum, Sept. 15, 1977; minimum daily low, 38.32 ft below land-surface datum, Dec. 25, 1979.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 50.28 | 50.45 | 51.10 | 51.02 | 51.16 | 51.17 | 50.42 | 49.80 | 49.33 | 50.26 | 50.18 | 51.02 |
| 2 | 50.27 | 50.55 | 51.24 | 50.88 | 51.48 | 51.23 | 50.30 | 49.74 | 49.46 | 50.27 | 50.34 | 51.10 |
| 3 | 50.36 | 50.73 | 51.20 | 50.80 | 51.50 | 51.23 | 50.02 | 49.78 | 49.60 | 49.75 | 50.35 | 51.10 |
| 4 | 50.36 | 50.87 | 51.35 | 51.12 | 51.58 | 51.20 | 50.08 | 49.79 | 49.60 | 49.53 | 50.34 | 50.92 |
| 5 | 50.16 | 51.00 | 51.34 | 51.44 | 51.58 | 51.17 | 50.29 | 49.79 | 49.42 | 49.87 | 50.30 | 50.55 |
| 6 | 50.23 | 51.00 | 50.93 | 51.48 | 51.59 | 50.73 | 50.36 | 49.78 | 49.39 | 50.14 | 50.27 | 50.62 |
| 7 | 50.37 | 51.00 | 51.06 | 51.50 | 51.22 | 50.67 | 50.45 | 49.80 | 49.53 | 50.22 | 50.09 | 50.75 |
| 8 | 50.44 | 50.60 | 51.26 | 51.48 | 51.06 | 50.76 | 50.50 | 49.67 | 49.65 | 50.27 | 50.15 | 50.78 |
| 9 | 50.44 | 50.83 | 51.35 | 51.48 | 51.28 | 50.82 | 50.49 | 49.66 | 49.74 | 50.26 | 50.39 | 50.84 |
| 10 | 50.44 | 51.05 | 51.38 | 51.16 | 51.38 | 50.90 | 50.12 | 49.80 | 49.79 | 49.90 | 50.48 | 50.93 |
| 11 | 50.30 | 51.09 | 51.38 | 51.25 | 51.38 | 50.89 | 50.04 | 49.88 | 49.78 | 49.80 | 50.49 | 50.93 |
| 12 | 50.30 | 51.10 | 51.34 | 51.51 | 51.37 | 50.80 | 50.14 | 49.88 | 49.26 | 50.10 | 50.57 | 50.83 |
| 13 | 50.49 | 51.16 | 51.01 | 51.75 | 51.37 | 50.38 | 50.27 | 49.86 | 49.35 | 50.28 | 50.59 | 50.94 |
| 14 | 50.53 | 51.17 | 50.97 | 51.75 | 50.96 | 50.49 | 50.31 | 49.83 | 49.66 | 50.41 | 50.40 | 50.98 |
| 15 | 50.53 | 50.75 | 51.25 | 51.72 | 51.07 | 50.72 | 50.31 | 49.72 | 49.79 | 50.49 | 50.32 | 51.03 |
| 16 | 50.53 | 50.80 | 51.43 | 51.66 | 51.38 | 50.76 | 50.31 | 49.66 | 49.84 | 50.48 | 50.57 | 51.03 |
| 17 | 50.53 | 51.09 | 51.47 | 51.39 | 51.51 | 50.76 | 50.10 | 49.80 | 49.84 | 50.22 | 50.70 | 51.03 |
| 18 | 50.44 | 51.23 | 51.42 | 51.58 | 51.51 | 50.75 | 50.00 | 49.80 | 49.88 | 50.37 | 50.75 | 51.00 |
| 19 | 50.42 | 51.22 | 51.37 | 51.62 | 51.51 | 50.73 | 50.09 | 49.79 | 49.56 | 50.52 | 50.84 | 50.96 |
| 20 | 50.62 | 51.23 | 50.79 | 51.75 | 51.42 | 50.22 | 50.09 | 49.74 | 49.55 | 50.54 | 50.84 | 51.07 |
| 21 | 50.72 | 51.24 | 51.11 | 51.76 | 51.10 | 50.36 | 50.08 | 49.69 | 49.84 | 50.54 | 50.60 | 51.11 |
| 22 | 50.72 | 50.87 | 51.35 | 51.76 | 50.49 | 50.48 | 50.07 | 49.51 | 50.02 | 50.54 | 50.60 | 51.11 |
| 23 | 50.72 | 51.10 | 51.43 | 51.75 | 51.38 | 50.55 | 50.05 | 49.42 | 50.17 | 50.48 | 50.71 | 51.07 |
| 24 | 50.72 | 51.23 | 51.42 | 51.39 | 51.43 | 50.57 | 49.89 | 49.64 | 50.17 | 50.21 | 50.72 | 51.07 |
| 25 | 50.39 | 51.28 | 50.97 | 51.53 | 51.42 | 50.57 | 49.82 | 49.65 | 50.16 | 50.14 | 50.80 | 51.00 |
| 26 | 50.36 | 51.28 | 50.84 | 51.75 | 51.41 | 50.49 | 49.92 | 49.65 | 49.74 | 50.24 | 50.89 | 51.03 |
| 27 | 50.61 | 50.83 | 50.83 | 51.80 | 51.29 | 50.10 | 49.96 | 49.62 | 49.83 | 50.33 | 50.89 | 51.11 |
| 28 | 50.67 | 50.65 | 51.07 | 51.80 | 50.96 | 50.15 | 49.96 | 49.41 | 50.02 | 50.40 | 50.87 | 51.20 |
| 29 | 50.70 | 50.55 | 51.39 | 51.80 | 50.99 | 50.31 | 49.95 | 48.95 | 50.16 | 50.40 | 50.78 | 51.27 |
| 30 | 50.81 | 50.82 | 51.41 | 51.75 | --- | 50.45 | 49.92 | 48.64 | 50.19 | 50.40 | 50.93 | 51.27 |
| 31 | 50.81 | --- | 51.30 | 51.20 | --- | 50.45 | --- | 49.05 | --- | 50.15 | 50.96 | --- |
| MAX | 50.81 | 51.28 | 51.47 | 51.80 | 51.59 | 51.23 | 50.50 | 49.88 | 50.19 | 50.54 | 50.96 | 51.27 |

CAL YR 1987 LOW 51.47
WTR YR 1988 LOW 51.80393327082571600 PK-7 ST OF OH DUPONT RD S OF CIRCLEVILLE OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

269

PICKAWAY COUNTY--Continued

393402082572500. Local number, PK-4.

LOCATION.--Lat 39°34'02", long 82°57'25", Hydrologic Unit 05060002, 2 mi south of Circleville.

Owner: E.I. DuPont DeNemours.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 6 in., depth 136 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 707 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.50 ft above land-surface datum.

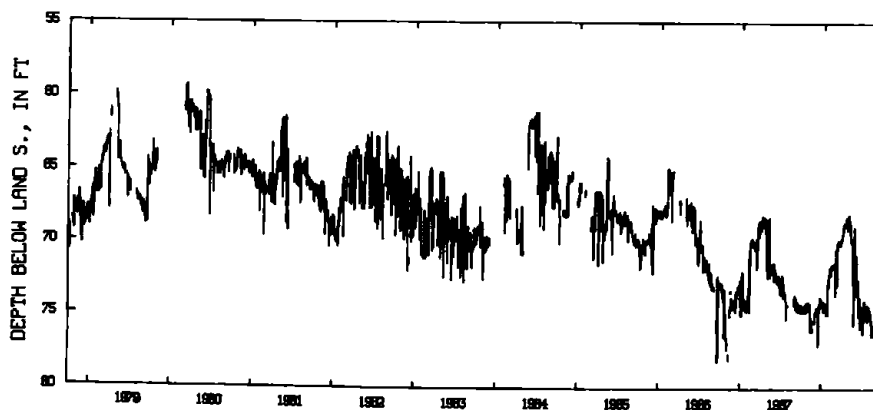
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 80.15 ft below land-surface datum, Nov. 3, 1972; minimum daily low, 47.40 ft below land-surface datum, Feb. 25, 1960.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 74.20 | 74.05 | 75.00 | 74.25 | 72.75 | 72.60 | 69.55 | 68.40 | 70.90 | 74.90 | 74.90 | 76.30 |
| 2 | 74.45 | 74.37 | 74.80 | 74.35 | 72.40 | 73.60 | 69.35 | 68.50 | 70.85 | 74.65 | 75.00 | 76.25 |
| 3 | 74.60 | 74.10 | 74.70 | 74.10 | 72.30 | 71.55 | 69.45 | 68.60 | 71.30 | 74.80 | 75.05 | 76.05 |
| 4 | 74.50 | 74.55 | 74.70 | 74.25 | 71.95 | 70.45 | 69.20 | 68.60 | 71.55 | 74.85 | 75.10 | 75.75 |
| 5 | 74.40 | 74.55 | 74.70 | 74.30 | 71.70 | 70.60 | 68.95 | 68.50 | 71.70 | 75.80 | 75.05 | 76.00 |
| 6 | 74.40 | 74.50 | 74.75 | 74.10 | 71.75 | 70.40 | 68.75 | 68.70 | 72.95 | 76.20 | 74.60 | 76.10 |
| 7 | 74.75 | 74.40 | 74.60 | 74.00 | 71.75 | 72.80 | 68.75 | 69.05 | 73.25 | 75.05 | 74.80 | 75.25 |
| 8 | 74.35 | 74.50 | 74.45 | 74.10 | 72.20 | 72.80 | 68.75 | 69.70 | 73.60 | 74.90 | 75.00 | 75.45 |
| 9 | 74.60 | 74.50 | 74.50 | 74.55 | 72.20 | 72.65 | 68.80 | 69.75 | 73.30 | 75.25 | 75.15 | 75.40 |
| 10 | 74.75 | 74.15 | 74.65 | 74.70 | 71.85 | 72.90 | 68.65 | 69.90 | 73.25 | 74.45 | 75.30 | 75.30 |
| 11 | 74.70 | 75.65 | 74.55 | --- | 71.65 | 70.05 | 68.65 | 69.90 | 72.55 | 73.95 | 75.30 | 75.30 |
| 12 | 74.35 | 76.05 | 74.85 | --- | 71.55 | 69.95 | 68.80 | 69.95 | 72.70 | 74.55 | 75.90 | 75.35 |
| 13 | 74.55 | 75.40 | 74.75 | 74.30 | 71.80 | 70.20 | 68.80 | 69.90 | 75.00 | 74.10 | 76.10 | 75.80 |
| 14 | 74.50 | 75.45 | 74.65 | 74.25 | 71.50 | 70.15 | 68.85 | 69.70 | 73.70 | 74.35 | 76.05 | 75.55 |
| 15 | 74.60 | 75.15 | 74.80 | 74.10 | 71.70 | 69.90 | 68.70 | 69.75 | 74.10 | 74.50 | 76.35 | 75.30 |
| 16 | 74.25 | 75.25 | 74.90 | 74.35 | 71.70 | 69.85 | 68.60 | 70.10 | 74.15 | 74.55 | 76.20 | 75.60 |
| 17 | 74.60 | 75.30 | 77.05 | 74.55 | 71.65 | 69.95 | 68.40 | 70.00 | 74.30 | 74.65 | 76.35 | 75.30 |
| 18 | 74.55 | 75.80 | 76.85 | 74.45 | 71.65 | 69.85 | 68.70 | 69.70 | 73.75 | 75.15 | 76.15 | 75.35 |
| 19 | 74.30 | 75.80 | 74.90 | 74.25 | 71.50 | 70.05 | 68.60 | 72.75 | 74.05 | 75.00 | 76.05 | 75.50 |
| 20 | 74.75 | 76.05 | 74.30 | 74.65 | 71.60 | 69.95 | 68.30 | 69.65 | 74.85 | 75.00 | 75.95 | 75.50 |
| 21 | 74.55 | 76.05 | 74.55 | 74.60 | 71.50 | 69.95 | 68.60 | 69.60 | 75.10 | 75.25 | 75.85 | 75.80 |
| 22 | 74.45 | --- | 74.15 | 74.90 | 71.55 | 69.80 | 68.50 | 69.60 | 75.85 | 75.25 | 75.80 | 75.35 |
| 23 | 74.10 | --- | 74.30 | 74.50 | 71.65 | 70.10 | 68.45 | 72.00 | 75.40 | 74.90 | 76.00 | 75.55 |
| 24 | 74.25 | --- | 73.95 | 74.75 | 71.50 | 70.15 | 68.25 | 75.65 | 74.75 | 74.25 | 75.65 | 75.40 |
| 25 | 74.65 | --- | 73.70 | 74.70 | 71.50 | 69.95 | 69.10 | 68.95 | 74.70 | 75.00 | 76.20 | 75.35 |
| 26 | 74.25 | --- | 74.10 | 74.55 | 71.40 | 69.85 | 68.50 | 70.95 | 74.95 | 75.35 | 75.95 | 75.40 |
| 27 | 74.20 | --- | 73.85 | 74.90 | 71.65 | 69.90 | 68.75 | 70.95 | 74.40 | 75.00 | 76.05 | 72.80 |
| 28 | 74.55 | --- | 73.80 | 72.85 | 71.40 | 69.80 | 68.40 | 70.95 | 74.35 | 75.05 | 75.95 | 72.85 |
| 29 | 74.55 | --- | 74.20 | 72.80 | 71.65 | 69.80 | 68.50 | 70.85 | 74.75 | 74.80 | 76.00 | 72.95 |
| 30 | 74.50 | 75.45 | 74.15 | 72.70 | --- | 69.60 | 68.10 | 71.15 | 74.45 | 74.55 | 76.15 | 74.20 |
| 31 | 74.05 | --- | 74.05 | 73.00 | --- | 69.65 | --- | 70.95 | --- | 74.35 | 76.50 | --- |
| MAX | 74.75 | 76.05 | 77.05 | 74.90 | 72.75 | 73.60 | 69.55 | 75.65 | 75.85 | 76.20 | 76.50 | 76.30 |
| CAL YR 1987 | LOW 77.05 | | | | | | | | | | | |
| WTR YR 1988 | LOW 77.05 | | | | | | | | | | | |



393402082572500 PK-4
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

PICKAWAY COUNTY--Continued

393638082572300. Local number, PK-6.

LOCATION.--Lat 39°36'38", long 82°57'23", Hydrologic Unit 05060002, Water Works Plant 1 mi northwest of Circleville.

Owner: Circleville Water Dept.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water table well, diameter 6 in., depth 120 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 672 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

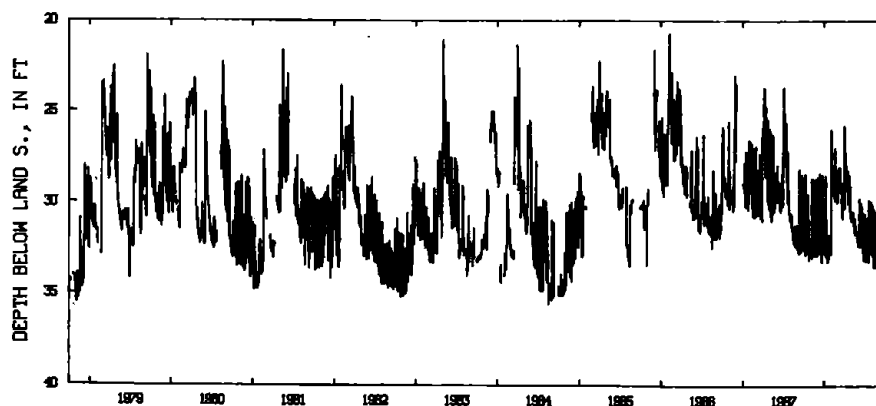
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--July 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 37.32 ft below land-surface datum, Feb. 24, 1977; minimum daily low, 14.50 ft below land-surface datum, Feb. 2, 1969.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 32.40 | 32.05 | 32.80 | 32.60 | 32.35 | 29.30 | 30.30 | 30.70 | 32.25 | 31.75 | 30.10 | 33.15 |
| 2 | 30.90 | 31.98 | 32.85 | 32.60 | 31.35 | 29.50 | 25.80 | 30.90 | 32.35 | 33.10 | 30.25 | 30.55 |
| 3 | 32.45 | 32.05 | 32.50 | 32.00 | 28.75 | 29.70 | 30.30 | 31.00 | 31.75 | 32.20 | 30.65 | 30.40 |
| 4 | 29.00 | 32.90 | 32.30 | 32.35 | 26.00 | 28.90 | 27.20 | 30.95 | 32.20 | 33.10 | 32.90 | 32.65 |
| 5 | 32.65 | 32.95 | 30.30 | 32.75 | 26.60 | 28.60 | 27.95 | 30.95 | 32.15 | 32.60 | 30.55 | 31.95 |
| 6 | 32.55 | 33.00 | 28.60 | 32.80 | 27.10 | 28.70 | 28.30 | 30.95 | 32.30 | 33.20 | 30.30 | 32.90 |
| 7 | 28.70 | 30.40 | 32.75 | 32.85 | 28.05 | 28.70 | 27.70 | 31.00 | 29.80 | 33.10 | 31.60 | 29.95 |
| 8 | 32.85 | 28.70 | 31.95 | 32.75 | 28.35 | 29.20 | 27.90 | 30.70 | 30.05 | 31.05 | 30.30 | 29.90 |
| 9 | 32.55 | 32.80 | 31.90 | 28.55 | 28.45 | 29.25 | 28.00 | 30.85 | 30.90 | 31.10 | 33.45 | 33.00 |
| 10 | 28.45 | 32.80 | 31.90 | 32.95 | 28.95 | 28.55 | 28.20 | 30.50 | 32.40 | 32.80 | 33.50 | 33.05 |
| 11 | 32.45 | 32.90 | 32.75 | 32.95 | 28.60 | 28.05 | 28.30 | 30.50 | 32.35 | 30.90 | 30.40 | 32.90 |
| 12 | 28.60 | 32.10 | 32.10 | 32.90 | 28.30 | 28.50 | 28.40 | 30.90 | 30.00 | 30.95 | 31.30 | 33.10 |
| 13 | 32.30 | 28.70 | 28.40 | 33.00 | 28.25 | 28.80 | 28.65 | 31.20 | 30.00 | 30.80 | 33.50 | 32.60 |
| 14 | 31.30 | 32.90 | 32.75 | 32.85 | 28.30 | 28.90 | 29.30 | 31.35 | 31.80 | 32.45 | 30.60 | 32.50 |
| 15 | 31.75 | 29.60 | 31.95 | 32.30 | 28.70 | 29.20 | 28.90 | 31.40 | 30.35 | 30.95 | 30.70 | 32.35 |
| 16 | 31.55 | 32.00 | 32.75 | 33.25 | 28.70 | 29.35 | 28.25 | 31.55 | 30.40 | 32.35 | 33.50 | 29.70 |
| 17 | 32.65 | 32.60 | 31.95 | 33.10 | 29.60 | 29.45 | 29.15 | 30.85 | 30.20 | 33.20 | 33.45 | 33.05 |
| 18 | 30.60 | 32.35 | 31.65 | 33.05 | 28.95 | 29.40 | 29.15 | 31.70 | 30.35 | 33.20 | 30.85 | 33.20 |
| 19 | 32.70 | 32.25 | 32.80 | 33.00 | 29.90 | 28.90 | 29.30 | 31.60 | 30.65 | 30.85 | 30.80 | 33.20 |
| 20 | 31.90 | 32.85 | 32.85 | 32.25 | 27.50 | 29.35 | 30.05 | 31.20 | 30.55 | 30.45 | 30.70 | 33.20 |
| 21 | 32.70 | 32.20 | 33.25 | 32.20 | 27.00 | 29.90 | 29.65 | 31.45 | 30.55 | 29.85 | 30.50 | 32.70 |
| 22 | 32.75 | 32.20 | 32.65 | 32.40 | 29.05 | 30.70 | 29.60 | 31.50 | 32.70 | 31.15 | 30.85 | 32.25 |
| 23 | 29.55 | 32.90 | 32.60 | 31.75 | 29.15 | 30.85 | 29.75 | 31.70 | 31.25 | 32.75 | 32.30 | 32.60 |
| 24 | 33.15 | 32.20 | 31.50 | 32.50 | 28.20 | 30.25 | 28.50 | 31.70 | 30.95 | 32.40 | 30.50 | 29.75 |
| 25 | 32.95 | 32.50 | 28.50 | 31.85 | 28.25 | 29.80 | 30.10 | 31.70 | 31.20 | 31.60 | 30.50 | 31.45 |
| 26 | 32.00 | 32.05 | 32.20 | 32.50 | 28.85 | 29.15 | 29.90 | 31.70 | 33.15 | 30.05 | 30.55 | 29.90 |
| 27 | 32.35 | 32.05 | 31.80 | 32.65 | 28.85 | 29.75 | 30.55 | 31.80 | 31.55 | 30.05 | 30.60 | 32.95 |
| 28 | 32.40 | 28.70 | 30.20 | 31.85 | 28.60 | 29.85 | 30.40 | 31.85 | 33.00 | 29.95 | 32.10 | 30.50 |
| 29 | 32.05 | 32.75 | 31.80 | 32.75 | 30.00 | 30.05 | 29.10 | 31.90 | 32.00 | 30.55 | 33.25 | 30.10 |
| 30 | 32.75 | 32.80 | 32.55 | 32.80 | --- | 30.20 | 30.80 | 32.05 | 30.60 | 30.25 | 33.50 | 30.20 |
| 31 | 32.25 | --- | 31.20 | 32.75 | --- | 29.90 | --- | 32.20 | --- | 30.15 | 33.55 | --- |
| MAX | 33.15 | 33.00 | 33.25 | 33.25 | 32.35 | 30.85 | 30.80 | 32.20 | 33.15 | 33.20 | 33.55 | 33.20 |

CAL YR 1987 LOW 33.25
WTR YR 1988 LOW 33.55393638082572300 PK-6
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

271

PICKAWAY COUNTY--Continued

393438083072200. Local number, PK-8.

LOCATION.--Lat 39°34'38", long 83°07'22", Hydrologic Unit 05060002, 0.5 mi south of Williamsport.

Owner: Village of Williamsport.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 10 in., depth 18 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 723 ft above National Geodetic Vertical Datum of 1929, from topographic

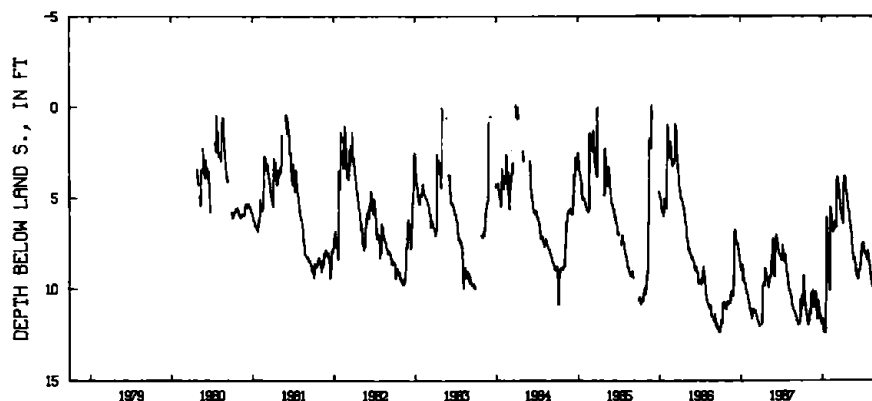
map. Measuring point: Floor of instrument shelter 0.9 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--April 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low 12.38 ft below land-surface datum, Jan. 9, 13-14, 1988;
minimum recorded daily low, 0.08 ft above land-surface datum, Mar. 29, 1984 and Nov. 29, 1985.DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|------|------|------|------|------|-------|-------|
| 1 | 10.40 | 11.60 | 10.12 | 11.60 | 9.98 | 6.46 | 6.25 | 5.87 | 9.20 | 7.43 | 8.76 | 10.17 |
| 2 | 10.37 | 11.74 | 10.40 | 11.58 | 10.03 | 6.50 | 6.30 | 6.05 | 9.22 | 7.42 | 8.90 | 10.14 |
| 3 | 10.27 | 11.67 | 10.67 | 11.82 | 8.78 | 6.58 | 6.38 | 6.18 | 9.27 | 7.50 | 9.03 | 10.08 |
| 4 | 10.71 | 11.55 | 10.88 | 12.03 | 7.20 | 6.54 | 6.15 | 6.25 | 9.17 | 7.62 | 9.20 | 9.45 |
| 5 | 10.88 | 11.23 | 11.00 | 12.17 | 6.30 | 5.75 | 4.90 | 6.39 | 9.18 | 7.74 | 9.30 | 9.30 |
| 6 | 10.49 | 11.20 | 11.18 | 12.28 | 5.57 | 4.55 | 4.33 | 6.45 | 9.22 | 7.86 | 9.35 | --- |
| 7 | 10.00 | 11.15 | 11.38 | 12.32 | 5.47 | 4.08 | 4.19 | 6.52 | 9.35 | 7.93 | 9.39 | --- |
| 8 | 9.50 | 11.27 | 11.51 | 12.35 | 5.58 | 3.87 | 4.02 | 6.65 | 9.41 | 7.97 | 9.48 | --- |
| 9 | 9.22 | 11.34 | 11.62 | 12.38 | 5.76 | 3.82 | 3.94 | 6.76 | 9.28 | 7.99 | 9.57 | --- |
| 10 | 9.41 | 10.95 | 11.40 | 12.35 | 5.86 | 3.87 | 3.85 | 6.84 | 9.16 | 8.02 | 9.71 | --- |
| 11 | 10.04 | 10.35 | 11.03 | 12.13 | 6.00 | 3.95 | 3.78 | 6.96 | 9.03 | 8.05 | 9.80 | --- |
| 12 | 10.15 | 10.20 | 10.55 | 12.31 | 6.21 | 4.00 | 3.77 | 7.15 | 8.91 | 8.01 | 9.83 | --- |
| 13 | 10.17 | 10.35 | 10.75 | 12.38 | 6.41 | 4.14 | 3.90 | 7.35 | 8.94 | 7.96 | 9.45 | --- |
| 14 | 10.42 | 10.15 | 10.98 | 12.38 | 6.58 | 4.28 | 4.05 | 7.58 | 8.94 | 8.01 | 9.18 | --- |
| 15 | 10.67 | 10.56 | 10.92 | 12.19 | 6.68 | 4.42 | 4.20 | 7.74 | 8.95 | 8.01 | 9.15 | --- |
| 16 | 10.72 | 10.76 | 10.90 | 10.29 | 6.82 | 4.54 | 4.35 | 7.97 | 8.91 | 8.11 | 9.38 | --- |
| 17 | 10.87 | 10.50 | 11.07 | 8.85 | 6.83 | 4.67 | 4.48 | 8.20 | 8.85 | 8.23 | 9.58 | --- |
| 18 | 11.04 | 10.04 | 11.28 | 7.90 | 6.84 | 4.80 | 4.60 | 8.30 | 8.57 | 8.34 | 9.75 | --- |
| 19 | 11.15 | 10.05 | 11.40 | 7.38 | 6.70 | 4.93 | 4.69 | 8.35 | 8.63 | 8.35 | 9.88 | --- |
| 20 | 11.22 | 10.40 | 11.56 | 7.16 | 6.70 | 5.12 | 4.78 | 8.22 | 8.65 | 8.34 | 9.96 | --- |
| 21 | 11.30 | 10.65 | 11.63 | 6.04 | 6.74 | 5.30 | 4.88 | 8.17 | 8.46 | 8.15 | 10.03 | --- |
| 22 | 11.38 | 10.82 | 11.63 | 6.65 | 6.70 | 5.46 | 4.98 | 8.24 | 8.25 | 7.86 | 10.11 | --- |
| 23 | 11.35 | 10.98 | 11.45 | 7.37 | 6.61 | 5.57 | 5.06 | 8.38 | 8.15 | 8.01 | 10.14 | --- |
| 24 | 11.50 | 10.70 | 11.43 | 7.90 | 6.48 | 5.67 | 5.18 | 8.27 | 7.95 | 8.08 | 10.16 | --- |
| 25 | 11.64 | 10.84 | 11.62 | 8.33 | 6.40 | 5.75 | 5.29 | 8.33 | 7.75 | 8.19 | 10.17 | --- |
| 26 | 11.76 | 10.71 | 11.67 | 8.72 | 6.33 | 5.82 | 5.41 | 8.48 | 7.62 | 8.30 | 10.19 | --- |
| 27 | 11.84 | 10.80 | 11.75 | 8.97 | 6.23 | 5.90 | 5.51 | 8.57 | 7.54 | 8.36 | 10.22 | --- |
| 28 | 11.90 | 10.09 | 11.88 | 9.22 | 6.32 | 6.03 | 5.60 | 8.66 | 7.53 | 8.43 | 10.25 | --- |
| 29 | 11.92 | 10.40 | 11.89 | 9.45 | 6.39 | 6.12 | 5.67 | 8.74 | 7.46 | 8.56 | --- | --- |
| 30 | 11.76 | 10.54 | 11.89 | 9.69 | --- | 6.10 | 5.75 | 8.87 | 7.45 | 8.67 | 10.27 | --- |
| 31 | 11.47 | --- | 11.88 | --- | --- | 6.21 | --- | 9.09 | --- | 8.72 | 10.26 | --- |
| MAX | 11.92 | 11.74 | 11.89 | 12.38 | 10.03 | 6.58 | 6.38 | 9.09 | 9.41 | 8.72 | 10.27 | 10.17 |

CAL YR 1987 LOW 12.00
WTR YR 1988 LOW 12.38393438083072200 PK-8 AT WELL FIELD NR WILLIAMSPORT OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

PICKAWAY COUNTY--Continued

394742083094800. Local number, PK-9.

LOCATION.--Lat 39°47'42", long 83°09'48", Hydrologic Unit 05060002, at Pickaway Correctional Institute near Orient.

Owner: State of Ohio.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water table well, diameter 8 in., depth 45 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 770 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 4.00 ft above land-surface datum.

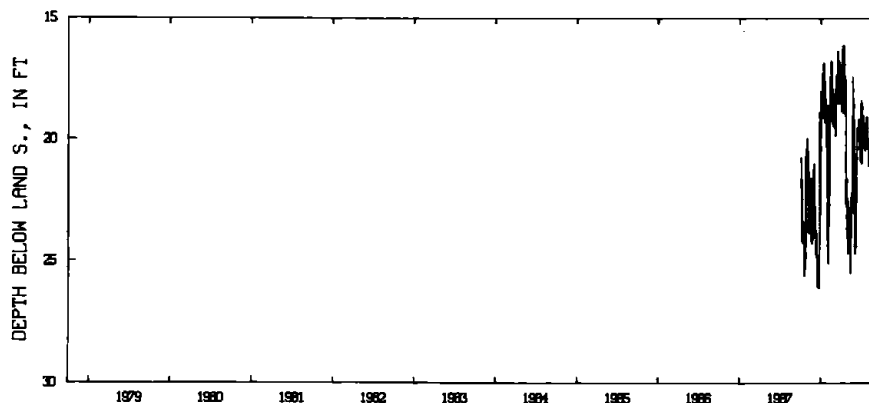
PERIOD OF RECORD.--October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 26.10 ft below land-surface datum, Dec. 23, 1987; minimum daily low, 12.95 ft above land-surface datum, Oct. 6, 1986.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 20.75 | 20.50 | 23.30 | 18.00 | 24.80 | 19.05 | 18.35 | 24.35 | 24.45 | 18.50 | 20.80 | 21.35 |
| 2 | 22.05 | 21.60 | 22.75 | 18.45 | 25.10 | 19.75 | 18.25 | 24.10 | 24.70 | 19.10 | --- | 20.90 |
| 3 | 21.65 | 21.90 | 23.10 | 18.70 | 23.35 | 19.85 | 17.80 | 23.70 | 24.20 | 19.30 | --- | 20.90 |
| 4 | 22.10 | 21.30 | 23.05 | 19.10 | 23.00 | 18.75 | 16.30 | 24.00 | 24.20 | 19.75 | --- | 20.45 |
| 5 | 23.20 | 23.40 | 23.70 | 19.05 | 22.70 | 18.60 | 16.35 | 24.00 | 24.35 | 19.65 | --- | 19.35 |
| 6 | 22.45 | 23.85 | 23.70 | 17.25 | 22.70 | 17.90 | 16.15 | 24.00 | 24.40 | 19.75 | --- | 20.15 |
| 7 | 24.10 | 22.50 | 23.95 | 17.65 | 22.20 | 18.00 | 16.25 | 24.00 | 23.10 | 19.00 | --- | 19.50 |
| 8 | 24.25 | 21.85 | 23.85 | 17.40 | 17.40 | 17.40 | 18.90 | 23.05 | 20.80 | 19.35 | --- | 19.50 |
| 9 | 23.65 | 22.30 | 24.70 | 18.50 | 18.40 | 17.35 | 16.55 | 23.20 | 19.80 | 19.90 | --- | 18.30 |
| 10 | 23.65 | 23.15 | 24.75 | 17.65 | 18.45 | 17.75 | 16.10 | 23.50 | 19.65 | 19.65 | 19.75 | 18.45 |
| 11 | 23.70 | 23.25 | 24.65 | 16.85 | 18.55 | 18.45 | 17.20 | 23.80 | 19.70 | 20.15 | 19.85 | 18.80 |
| 12 | 23.70 | 23.20 | 24.75 | 18.65 | 19.25 | 18.50 | 16.85 | 25.50 | 19.50 | 20.25 | 20.00 | 19.00 |
| 13 | 23.65 | 22.55 | 25.30 | 19.10 | 17.65 | 17.30 | 17.30 | 22.80 | 19.65 | 20.35 | 20.05 | 18.55 |
| 14 | 23.40 | 22.50 | 25.30 | 17.40 | 16.75 | 17.45 | 18.40 | 23.35 | 19.65 | 20.40 | 19.80 | 18.90 |
| 15 | 23.65 | 21.60 | 25.45 | 18.00 | 17.45 | 16.35 | 18.15 | 22.80 | 19.80 | 20.45 | 20.60 | 19.00 |
| 16 | 25.50 | 23.95 | 25.20 | 18.25 | 17.75 | 18.50 | 17.40 | 22.30 | 19.70 | 19.95 | 20.30 | 18.85 |
| 17 | 25.60 | 24.20 | 26.05 | 19.15 | 17.90 | 18.45 | 17.95 | 22.30 | 19.90 | 20.20 | 20.05 | 18.90 |
| 18 | 25.30 | 23.80 | 25.95 | 19.30 | 17.95 | 17.05 | 19.00 | 22.25 | 19.15 | 20.40 | 20.85 | 19.00 |
| 19 | 25.00 | 24.30 | 26.05 | 18.85 | 18.50 | 16.75 | 17.85 | 23.00 | 19.50 | 20.25 | 20.50 | 19.00 |
| 20 | 25.05 | 23.60 | 24.85 | 18.30 | 18.55 | 16.80 | 17.55 | 22.30 | 19.55 | 19.75 | 19.90 | 19.80 |
| 21 | 24.95 | 23.30 | 25.15 | 19.30 | 18.70 | 17.50 | 22.35 | 17.40 | 20.30 | 19.15 | 19.90 | 20.20 |
| 22 | 24.85 | 23.65 | 24.90 | 20.30 | 19.30 | 17.75 | 22.65 | 19.00 | 20.30 | 19.35 | 19.50 | 19.95 |
| 23 | 22.20 | 23.50 | 26.10 | 18.75 | 19.45 | 17.85 | 22.75 | 19.60 | 20.20 | 19.05 | 19.30 | 19.95 |
| 24 | 20.80 | 23.20 | 25.90 | 18.70 | 18.50 | 18.50 | 21.60 | 19.30 | 20.40 | 19.70 | 18.35 | 19.65 |
| 25 | 20.40 | 24.10 | 21.80 | 19.55 | 18.40 | 18.10 | 23.70 | 18.70 | 20.90 | 19.60 | 19.95 | 19.40 |
| 26 | 21.65 | 23.10 | 18.85 | 19.75 | 18.10 | 16.90 | 22.60 | 18.30 | 20.20 | 19.50 | 20.10 | 20.00 |
| 27 | 22.35 | 23.15 | 22.40 | 18.85 | 18.55 | 17.00 | 22.50 | 21.00 | 19.40 | 20.05 | 20.05 | 19.75 |
| 28 | 20.35 | 21.40 | 23.10 | 18.60 | 18.40 | 17.25 | 24.05 | 23.00 | 19.20 | 20.25 | 19.95 | 20.05 |
| 29 | 19.95 | 21.00 | 19.40 | 22.00 | 18.40 | 17.40 | 22.50 | 22.50 | 18.40 | 20.15 | 20.35 | 19.70 |
| 30 | 19.99 | 23.25 | 18.65 | 23.75 | --- | 18.60 | 24.70 | 22.45 | 21.00 | 20.00 | 20.50 | 19.00 |
| 31 | 21.05 | --- | 18.60 | 24.35 | --- | 18.85 | --- | 23.00 | --- | 21.10 | 21.00 | --- |
| MAX | 25.60 | 24.30 | 26.10 | 24.35 | 25.10 | 19.85 | 24.70 | 25.50 | 24.70 | 21.10 | 21.00 | 21.35 |

WTR YR 1988 LOW 26.10



— 394742083094800 PK-9 ST OF OH AT PICKAWAY COR INST NR ORIENT OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT), DEPTH TO WATER BL. LSD

GROUND-WATER RECORDS

273

PIKE COUNTY

390359083015100. Local number, PI-2.

LOCATION.--Lat 39°03'59", long 83°01'51", Hydrologic Unit 05060002, 1 mi west of Piketon.

Owner: Goodyear Atomic Corporation.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 6 in., depth 60 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 550 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1969 to current year.

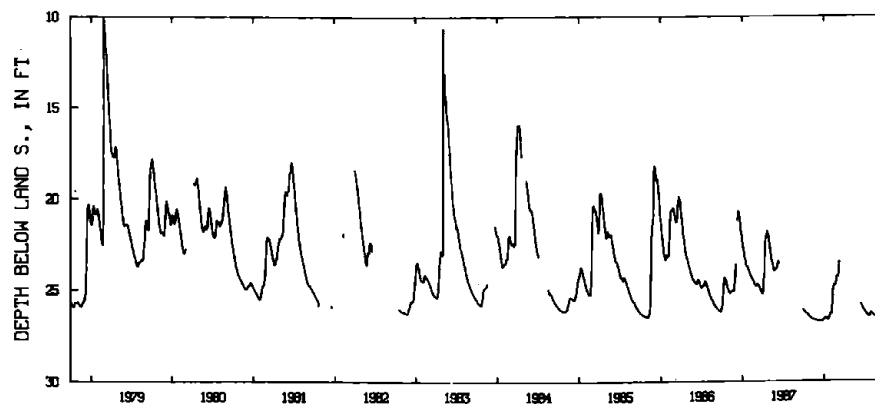
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 27.46 ft below land-surface datum, Feb. 15, 1977; minimum daily low, 10.06 ft below land-surface datum, Mar. 1, 1979.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-----|-----|-------|-------|-------|-------|
| 1 | 26.08 | 26.50 | 26.67 | 26.62 | 26.30 | 24.25 | --- | --- | --- | 26.16 | 26.26 | 26.56 |
| 2 | 26.11 | 26.51 | 26.67 | 26.61 | 26.30 | 24.25 | --- | --- | --- | 26.18 | 26.27 | 26.56 |
| 3 | 26.13 | 26.52 | 26.67 | 26.59 | 26.29 | 24.27 | --- | --- | --- | 26.19 | 26.29 | 26.57 |
| 4 | 26.14 | 26.53 | 26.67 | 26.56 | 26.25 | 24.28 | --- | --- | --- | 26.21 | 26.30 | 26.57 |
| 5 | 26.15 | 26.55 | 26.67 | 26.55 | 26.17 | 24.19 | --- | --- | --- | 26.23 | 26.32 | 26.59 |
| 6 | 26.17 | 26.55 | 26.67 | 26.54 | 26.04 | 24.16 | --- | --- | --- | 26.24 | 26.33 | 26.59 |
| 7 | 26.18 | 26.56 | 26.67 | 26.54 | 25.83 | 24.00 | --- | --- | --- | 26.26 | 26.35 | 26.58 |
| 8 | 26.20 | 26.57 | 26.67 | 26.53 | 25.59 | 23.73 | --- | --- | --- | 26.28 | 26.36 | 26.55 |
| 9 | 26.21 | 26.57 | 26.68 | 26.53 | 25.34 | 23.46 | --- | --- | --- | 26.30 | 26.38 | 26.52 |
| 10 | 26.22 | 26.58 | 26.68 | 26.53 | 25.14 | --- | --- | --- | --- | 26.32 | 26.40 | 26.50 |
| 11 | 26.23 | 26.59 | 26.68 | 26.53 | 25.00 | --- | --- | --- | --- | 26.34 | 26.41 | 26.50 |
| 12 | 26.24 | 26.60 | 26.69 | 26.54 | 24.87 | --- | --- | --- | --- | 26.35 | 26.42 | 26.50 |
| 13 | 26.26 | 26.60 | 26.69 | 26.55 | 24.80 | --- | --- | --- | --- | 26.37 | 26.43 | 26.51 |
| 14 | 26.27 | 26.60 | 26.70 | 26.56 | 24.76 | --- | --- | --- | --- | 26.39 | 26.45 | 26.52 |
| 15 | 26.27 | 26.61 | 26.71 | 26.57 | 24.72 | --- | --- | --- | 25.78 | 26.41 | 26.46 | 26.52 |
| 16 | 26.28 | 26.62 | 26.71 | 26.59 | 24.72 | --- | --- | --- | 25.80 | 26.42 | 26.47 | 26.51 |
| 17 | 26.29 | 26.62 | 26.71 | 26.60 | 24.73 | --- | --- | --- | 25.83 | 26.43 | 26.48 | 26.49 |
| 18 | 26.30 | 26.62 | 26.71 | 26.62 | 24.73 | --- | --- | --- | 25.85 | 26.45 | 26.49 | 26.46 |
| 19 | 26.31 | 26.62 | 26.71 | 26.62 | 24.73 | --- | --- | --- | 25.87 | 26.46 | 26.50 | 26.45 |
| 20 | 26.33 | 26.62 | 26.71 | 26.62 | 24.72 | --- | --- | --- | 25.90 | 26.47 | 26.50 | 26.44 |
| 21 | 26.34 | 26.63 | 26.71 | 26.61 | 24.73 | --- | --- | --- | 25.92 | 26.48 | 26.47 | 26.43 |
| 22 | 26.35 | 26.63 | 26.71 | 26.59 | 24.71 | --- | --- | --- | 25.95 | 26.48 | 26.50 | 26.44 |
| 23 | 26.37 | 26.64 | 26.71 | 26.54 | 24.64 | --- | --- | --- | 25.97 | 26.48 | 26.50 | 26.45 |
| 24 | 26.39 | 26.64 | 26.71 | 26.50 | 24.59 | --- | --- | --- | 25.99 | 26.45 | 26.51 | 26.47 |
| 25 | 26.39 | 26.66 | 26.70 | 26.45 | 24.51 | --- | --- | --- | 26.02 | 26.40 | 26.52 | 26.49 |
| 26 | 26.41 | 26.66 | 26.69 | 26.41 | 24.45 | --- | --- | --- | 26.04 | 26.36 | 26.52 | 26.51 |
| 27 | 26.43 | 26.66 | 26.68 | 26.37 | 24.35 | --- | --- | --- | 26.06 | 26.33 | 26.52 | 26.53 |
| 28 | 26.44 | 26.67 | 26.68 | 26.34 | 24.31 | --- | --- | --- | 26.09 | 26.30 | 26.53 | 26.55 |
| 29 | 26.46 | 26.67 | 26.66 | 26.32 | 24.26 | --- | --- | --- | 26.11 | 26.28 | 26.53 | 26.56 |
| 30 | 26.48 | 26.67 | 26.65 | 26.31 | --- | --- | --- | --- | 26.14 | 26.26 | 26.53 | 26.58 |
| 31 | 26.49 | --- | 26.64 | 26.30 | --- | --- | --- | --- | --- | 26.25 | 26.54 | --- |
| MAX | 26.49 | 26.67 | 26.71 | 26.62 | 26.30 | 24.28 | --- | --- | 26.14 | 26.48 | 26.54 | 26.59 |

CAL YR 1987 LOW 26.71

WTR YR 1988 LOW 26.71



— 390359083015100 PI-2
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

PORTAGE COUNTY

411401081025000. Local number, PQ-1.

LOCATION.--Lat 41°14'01", long 81°02'50" Hydrologic Unit 05030103. Bauer Street in Windham.

Owner: Edward Liddle.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in., depth 55 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 980 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 0.60 ft above land-surface datum.

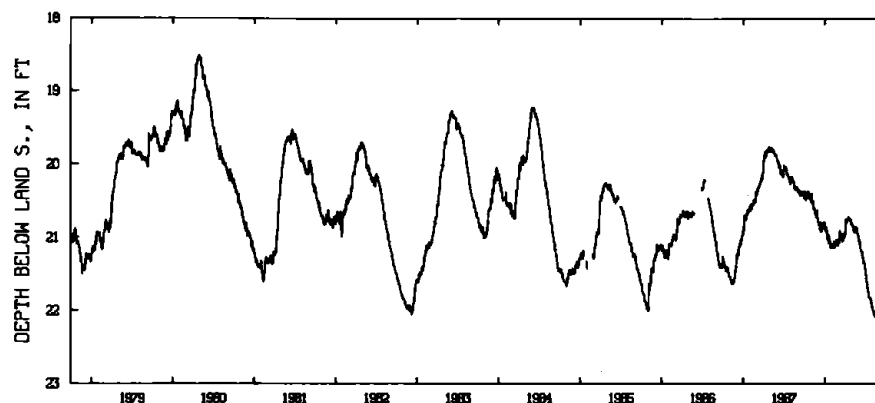
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 23.08 ft below land-surface datum, Feb. 22, 1954; minimum daily low, 14.59 ft below land-surface datum, June 24, 1947.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 20.41 | 20.50 | 20.72 | 20.87 | 21.14 | 21.11 | 20.94 | 20.82 | 20.99 | 21.43 | 21.96 | 22.07 |
| 2 | 20.42 | 20.48 | 20.78 | 20.87 | 21.11 | 21.07 | 20.93 | 20.82 | 21.01 | 21.45 | 21.98 | 22.07 |
| 3 | 20.47 | 20.45 | 20.78 | 20.84 | 21.11 | 21.06 | 20.91 | 20.82 | 21.03 | 21.49 | 21.97 | 22.06 |
| 4 | 20.45 | 20.40 | 20.79 | 20.85 | 21.09 | 21.06 | 20.79 | 20.81 | 21.06 | 21.52 | 21.97 | 22.00 |
| 5 | 20.40 | 20.50 | 20.81 | 20.87 | 21.12 | 21.07 | 20.78 | 20.82 | 21.05 | 21.54 | 21.98 | 21.92 |
| 6 | 20.37 | 20.52 | 20.83 | 20.91 | 21.13 | 21.03 | 20.75 | 20.84 | 21.06 | 21.55 | 22.00 | 21.93 |
| 7 | 20.40 | 20.51 | 20.83 | 20.91 | 21.13 | 21.01 | 20.79 | 20.86 | 21.05 | 21.60 | 22.01 | 21.94 |
| 8 | 20.46 | 20.51 | 20.81 | 20.86 | 21.12 | 21.01 | 20.80 | 20.85 | 21.07 | 21.60 | 22.01 | 21.92 |
| 9 | 20.46 | 20.55 | 20.79 | 20.90 | 21.11 | 20.91 | 20.80 | 20.84 | 21.14 | 21.61 | 22.02 | 21.92 |
| 10 | 20.49 | 20.55 | 20.80 | 20.93 | 21.14 | 20.96 | 20.78 | 20.88 | 21.17 | 21.64 | 22.05 | 21.95 |
| 11 | 20.45 | 20.52 | 20.79 | 20.92 | 21.13 | 20.99 | 20.75 | 20.91 | 21.17 | 21.66 | 22.06 | 21.95 |
| 12 | 20.41 | 20.51 | 20.86 | 20.90 | 21.05 | 20.95 | 20.74 | 20.91 | 21.17 | 21.67 | 22.06 | 21.94 |
| 13 | 20.43 | 20.55 | 20.91 | 21.00 | 21.13 | 20.96 | 20.75 | 20.92 | 21.18 | 21.70 | 22.07 | 21.89 |
| 14 | 20.43 | 20.61 | 20.91 | 21.02 | 21.13 | 20.96 | 20.75 | 20.93 | 21.20 | 21.71 | 22.07 | 21.91 |
| 15 | 20.41 | 20.62 | 20.85 | 20.98 | 21.07 | 21.00 | 20.76 | 20.89 | 21.18 | 21.76 | 22.08 | 21.93 |
| 16 | 20.40 | 20.60 | 20.89 | 20.98 | 21.11 | 21.01 | 20.76 | 20.86 | 21.20 | 21.75 | 22.09 | 21.92 |
| 17 | 20.39 | 20.62 | 20.92 | 21.00 | 21.10 | 21.03 | 20.75 | 20.87 | 21.21 | 21.79 | 22.09 | 21.88 |
| 18 | 20.41 | 20.65 | 20.92 | 21.06 | 21.12 | 21.00 | 20.72 | 20.87 | 21.25 | 21.79 | 22.10 | 21.89 |
| 19 | 20.38 | 20.64 | 20.88 | 21.07 | 21.09 | 20.95 | 20.75 | 20.86 | 21.26 | 21.81 | 22.10 | 21.89 |
| 20 | 20.37 | 20.67 | 20.82 | 20.97 | 21.07 | 21.03 | 20.75 | 20.86 | 21.26 | 21.83 | 22.10 | 21.90 |
| 21 | 20.43 | 20.68 | 20.80 | 21.05 | 21.09 | 21.05 | 20.75 | 20.87 | 21.29 | 21.83 | 22.11 | 21.91 |
| 22 | 20.46 | 20.68 | 20.81 | 21.05 | 21.03 | 21.05 | 20.75 | 20.87 | 21.30 | 21.82 | 22.12 | 21.90 |
| 23 | 20.45 | 20.71 | 20.86 | 21.03 | 21.05 | 21.00 | 20.75 | 20.86 | 21.34 | 21.83 | 22.10 | 21.92 |
| 24 | 20.46 | 20.71 | 20.85 | 21.07 | 21.05 | 21.00 | 20.76 | 20.92 | 21.35 | 21.83 | 22.07 | 21.92 |
| 25 | 20.47 | 20.73 | 20.82 | 21.08 | 21.05 | 20.98 | 20.77 | 20.93 | 21.32 | 21.85 | 22.08 | 21.93 |
| 26 | 20.43 | 20.73 | 20.84 | 21.12 | 21.05 | 20.95 | 20.75 | 20.94 | 21.34 | 21.84 | 22.10 | 21.93 |
| 27 | 20.40 | 20.73 | 20.83 | 21.13 | 21.07 | 20.98 | 20.76 | 20.94 | 21.35 | 21.86 | 22.10 | 21.92 |
| 28 | 20.41 | 20.70 | 20.81 | 21.13 | 21.07 | 21.00 | 20.77 | 20.94 | 21.35 | 21.88 | 22.10 | 21.94 |
| 29 | 20.43 | 20.62 | 20.88 | 21.14 | 21.05 | 20.95 | 20.79 | 20.97 | 21.37 | 21.90 | 22.04 | 21.94 |
| 30 | 20.45 | 20.63 | 20.87 | 21.10 | --- | 20.99 | 20.82 | 20.97 | 21.39 | 21.90 | 22.03 | 21.93 |
| 31 | 20.52 | --- | 20.79 | 21.13 | --- | 20.99 | --- | 20.98 | --- | 21.93 | 22.06 | --- |
| MAX | 20.52 | 20.73 | 20.92 | 21.14 | 21.14 | 21.11 | 20.94 | 20.98 | 21.39 | 21.93 | 22.12 | 22.07 |
| CAL YR 1987 | LOW 20.96 | | | | | | | | | | | |
| WTR YR 1988 | LOW 22.12 | | | | | | | | | | | |



411401081025000 PQ-1
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

PREBLE COUNTY

394438084335900. Local number, PR-2.

LOCATION.--Lat 39°44'38", long 84°33'59", Hydrologic Unit 05080002, Stover Rd 4 mi east of Eaton.

Owner: Eaton Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in., depth 78.5 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 900 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 1.50 ft above land-surface datum.

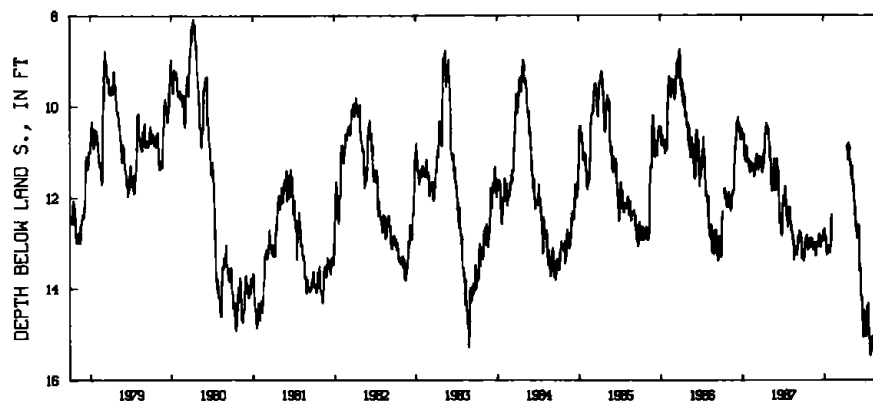
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--May 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 15.86 ft below land-surface datum, Aug. 19, 1988; minimum daily low, 7.94 ft below land-surface datum, May 4, 1975.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-----|-------|-------|-------|-------|-------|-------|
| 1 | 13.35 | 13.00 | 13.08 | 12.71 | 13.04 | --- | --- | 11.30 | 12.65 | 14.75 | 15.07 | 15.22 |
| 2 | 13.27 | 12.92 | 13.08 | 12.76 | 12.89 | --- | --- | 11.24 | 12.71 | 14.80 | 15.13 | 15.20 |
| 3 | 13.38 | 12.99 | 12.99 | 12.71 | 12.81 | --- | --- | 11.48 | 12.81 | 14.81 | 15.26 | 15.00 |
| 4 | 13.38 | 12.88 | 13.02 | 12.72 | 12.58 | --- | --- | 11.51 | 12.60 | 14.81 | 15.22 | 14.98 |
| 5 | 13.25 | 13.07 | 13.04 | 12.69 | 12.46 | --- | --- | 11.42 | 12.63 | 14.70 | 15.10 | 14.88 |
| 6 | 13.16 | 12.96 | 12.98 | 12.88 | 12.37 | --- | --- | 11.60 | 12.61 | 14.62 | 15.08 | 15.03 |
| 7 | 13.16 | 13.06 | 13.05 | 12.82 | --- | --- | --- | 11.50 | 12.81 | 14.68 | 15.05 | 14.95 |
| 8 | 12.98 | 12.89 | 12.90 | 12.93 | --- | --- | --- | 11.58 | 13.59 | 14.84 | 15.11 | 14.96 |
| 9 | 13.05 | 13.00 | 12.88 | 12.85 | --- | --- | --- | 11.30 | 13.51 | 15.04 | 15.13 | 14.72 |
| 10 | 13.04 | 12.91 | 12.81 | 12.99 | --- | --- | --- | 11.72 | 13.60 | 14.90 | 15.19 | 15.00 |
| 11 | 12.91 | 13.06 | 12.90 | 12.90 | --- | --- | --- | 11.61 | 13.45 | 14.88 | 15.25 | 14.86 |
| 12 | 12.93 | 13.04 | 12.80 | 12.98 | --- | --- | --- | 11.80 | 13.59 | 14.77 | 15.28 | 14.79 |
| 13 | 12.92 | 13.07 | 13.05 | 13.16 | --- | --- | --- | 11.86 | 13.64 | 14.54 | 15.31 | 14.86 |
| 14 | 13.10 | 13.09 | 12.94 | 13.25 | --- | --- | --- | 11.62 | 13.71 | 14.43 | 15.22 | 14.89 |
| 15 | 12.83 | 13.14 | 12.88 | 13.24 | --- | --- | 10.88 | 11.72 | 13.93 | 14.40 | 15.45 | 14.70 |
| 16 | 13.09 | 13.08 | 12.98 | 13.23 | --- | --- | 10.94 | 12.08 | 14.12 | 14.55 | 15.38 | 15.06 |
| 17 | 12.86 | 13.04 | 13.08 | 13.20 | --- | --- | 10.96 | 12.07 | 14.24 | 14.35 | 15.69 | 14.69 |
| 18 | 12.92 | 13.02 | 13.06 | 13.14 | --- | --- | 10.86 | 12.37 | 14.26 | 14.48 | 15.82 | 15.00 |
| 19 | 12.83 | 13.12 | 13.04 | 13.14 | --- | --- | 11.13 | 12.31 | 14.27 | 14.32 | 15.86 | 14.86 |
| 20 | 13.00 | 12.98 | 12.85 | 13.05 | --- | --- | 11.18 | 12.38 | 14.19 | 14.71 | 15.77 | 14.98 |
| 21 | 12.98 | 13.16 | 12.95 | 13.07 | --- | --- | 10.89 | 12.18 | 14.45 | 14.83 | 15.75 | 15.05 |
| 22 | 13.15 | 13.07 | 12.90 | 13.08 | --- | --- | 11.03 | 12.59 | 14.61 | 14.89 | 15.74 | 15.05 |
| 23 | 13.13 | 13.01 | 12.96 | 13.05 | --- | --- | 10.81 | 12.61 | 14.79 | 15.07 | 15.74 | 14.81 |
| 24 | 13.10 | 13.01 | 12.93 | 13.11 | --- | --- | 10.82 | 12.52 | 14.79 | 15.18 | 15.67 | 14.78 |
| 25 | 13.05 | 13.28 | 12.93 | 13.10 | --- | --- | 10.86 | 12.69 | 14.87 | 15.21 | 15.41 | 14.78 |
| 26 | 13.11 | 13.25 | 12.89 | 13.14 | --- | --- | 11.04 | 12.58 | 15.07 | 15.28 | 15.37 | 14.71 |
| 27 | 12.92 | 13.13 | 12.95 | 13.20 | --- | --- | 11.19 | 12.87 | 14.81 | 15.46 | 15.48 | 14.68 |
| 28 | 13.11 | 13.13 | 12.83 | 13.21 | --- | --- | 10.87 | 12.88 | 14.66 | 15.39 | 15.25 | 14.68 |
| 29 | 12.94 | 13.07 | 12.88 | 13.07 | --- | --- | 11.25 | 12.89 | 14.66 | 15.41 | 15.25 | 14.70 |
| 30 | 13.04 | 13.07 | 12.88 | 13.17 | --- | --- | 11.24 | 12.81 | 14.47 | 15.37 | 15.28 | 14.79 |
| 31 | 12.91 | --- | 12.75 | 13.06 | --- | --- | --- | 12.71 | --- | 15.39 | 15.30 | --- |
| MAX | 13.38 | 13.28 | 13.08 | 13.25 | 13.04 | --- | 11.25 | 12.89 | 15.07 | 15.46 | 15.86 | 15.22 |
| CAL YR 1987 | LOW 13.38 | | | | | | | | | | | |
| WTR YR 1988 | LOW 15.86 | | | | | | | | | | | |



394438084335900 PR-2
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

RICHLAND COUNTY

404625082305100. Local number, R-4.

LOCATION.--Lat 40°46'25", long 82°30'51", Hydrologic Unit 05040002, at Ohio Brass Plant in Mansfield.

Owner: Ohio Brass Company

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 14 in., depth 127 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 1150 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Top of platform 5.00 ft above land-surface datum.

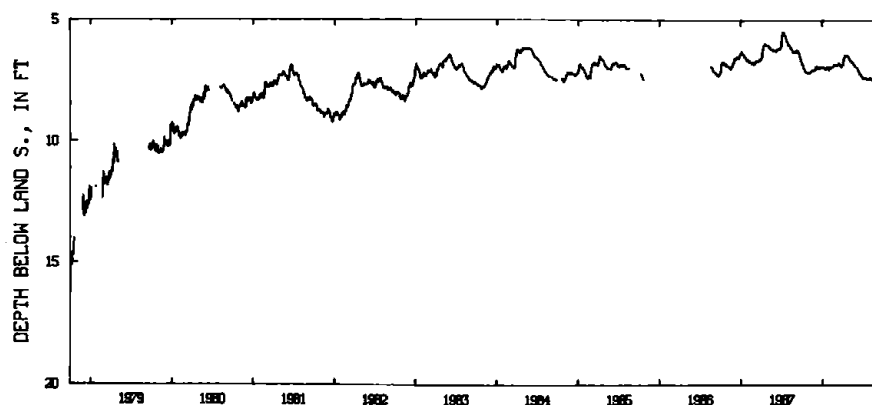
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--May 1942 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 60.10 ft below land-surface datum, Oct. 12, 13, 19, 20, 1962; minimum daily low, 5.48 ft below land-surface datum, July 9-10, 1987.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 6.75 | 7.19 | 6.93 | 6.91 | 7.03 | 6.82 | 6.83 | 6.56 | 6.92 | 7.38 | 7.36 | 7.35 |
| 2 | 6.77 | 7.19 | 6.91 | 6.92 | 7.02 | 6.82 | 6.83 | 6.57 | 6.93 | 7.39 | 7.35 | 7.35 |
| 3 | 6.82 | 7.19 | 6.90 | 6.92 | 7.00 | 6.82 | 6.81 | 6.59 | 6.93 | 7.39 | 7.35 | 7.35 |
| 4 | 6.83 | 7.18 | 6.89 | 6.92 | 6.97 | 6.83 | 6.73 | 6.61 | 6.95 | 7.38 | 7.37 | 7.34 |
| 5 | 6.83 | 7.16 | 6.90 | 6.92 | 6.94 | 6.86 | 6.68 | 6.62 | 6.95 | 7.37 | 7.39 | 7.29 |
| 6 | 6.83 | 7.14 | 6.93 | 6.94 | 6.94 | 6.86 | 6.63 | 6.64 | 6.96 | 7.37 | 7.40 | 7.22 |
| 7 | 6.84 | 7.15 | 6.96 | 6.97 | 6.94 | 6.86 | 6.56 | 6.66 | 6.97 | 7.37 | 7.40 | 7.20 |
| 8 | 6.89 | 7.15 | 6.98 | 6.97 | 6.94 | 6.86 | 6.53 | 6.67 | 6.97 | 7.37 | 7.40 | 7.19 |
| 9 | 6.94 | 7.13 | 6.98 | 6.97 | 6.94 | 6.86 | 6.53 | 6.67 | 7.01 | 7.37 | 7.41 | 7.19 |
| 10 | 6.98 | 7.11 | 6.99 | 6.97 | 6.94 | 6.83 | 6.52 | 6.66 | 7.05 | 7.37 | 7.42 | 7.19 |
| 11 | 7.01 | 7.11 | 6.99 | 6.97 | 6.94 | 6.82 | 6.49 | 6.68 | 7.07 | 7.36 | 7.45 | 7.19 |
| 12 | 7.01 | 7.11 | 6.98 | 6.97 | 6.94 | 6.82 | 6.44 | 6.70 | 7.09 | 7.36 | 7.47 | 7.19 |
| 13 | 7.03 | 7.09 | 6.95 | 6.98 | 6.92 | 6.80 | 6.42 | 6.71 | 7.11 | 7.36 | 7.47 | 7.17 |
| 14 | 7.06 | 7.07 | 6.97 | 7.02 | 6.92 | 6.77 | 6.42 | 6.72 | 7.14 | 7.36 | 7.47 | 7.16 |
| 15 | 7.10 | 7.06 | 6.97 | 7.02 | 6.92 | 6.75 | 6.42 | 6.73 | 7.16 | 7.37 | 7.46 | 7.17 |
| 16 | 7.13 | 7.06 | 6.95 | 7.02 | 6.90 | 6.77 | 6.44 | 6.72 | 7.18 | 7.38 | 7.44 | 7.18 |
| 17 | 7.14 | 7.06 | 6.96 | 7.02 | 6.91 | 6.81 | 6.44 | 6.72 | 7.19 | 7.39 | 7.43 | 7.18 |
| 18 | 7.14 | 7.05 | 6.99 | 7.00 | 6.92 | 6.82 | 6.44 | 6.74 | 7.21 | 7.42 | 7.42 | 7.18 |
| 19 | 7.14 | 7.07 | 7.00 | 6.98 | 6.92 | 6.82 | 6.42 | 6.75 | 7.22 | 7.42 | 7.42 | 7.16 |
| 20 | 7.14 | 7.07 | 7.00 | 6.98 | 6.90 | 6.82 | 6.43 | 6.77 | 7.22 | 7.43 | 7.42 | 7.14 |
| 21 | 7.14 | 7.08 | 6.97 | 6.94 | 6.85 | 6.84 | 6.43 | 6.79 | 7.22 | 7.43 | 7.42 | 7.13 |
| 22 | 7.15 | 7.08 | 6.97 | 6.93 | 6.83 | 6.87 | 6.45 | 6.79 | 7.23 | 7.43 | 7.42 | 7.13 |
| 23 | 7.16 | 7.08 | 6.96 | 6.94 | 6.80 | 6.89 | 6.45 | 6.79 | 7.25 | 7.43 | 7.41 | 7.13 |
| 24 | 7.17 | 7.07 | 6.96 | 6.93 | 6.80 | 6.91 | 6.45 | 6.79 | 7.28 | 7.43 | 7.41 | 7.13 |
| 25 | 7.18 | 7.07 | 6.95 | 6.92 | 6.81 | 6.91 | 6.45 | 6.82 | 7.29 | 7.42 | 7.39 | 7.13 |
| 26 | 7.18 | 7.07 | 6.94 | 6.91 | 6.82 | 6.91 | 6.46 | 6.86 | 7.29 | 7.41 | 7.38 | 7.14 |
| 27 | 7.17 | 7.07 | 6.93 | 6.95 | 6.82 | 6.89 | 6.47 | 6.89 | 7.31 | 7.40 | 7.37 | 7.15 |
| 28 | 7.15 | 7.06 | 6.93 | 7.01 | 6.82 | 6.86 | 6.50 | 6.90 | 7.32 | 7.39 | 7.37 | 7.17 |
| 29 | 7.14 | 7.03 | 6.92 | 7.03 | 6.82 | 6.85 | 6.53 | 6.91 | 7.34 | 7.39 | 7.36 | 7.18 |
| 30 | 7.16 | 6.97 | 6.92 | 7.04 | --- | 6.83 | 6.54 | 6.91 | 7.36 | 7.39 | 7.35 | 7.20 |
| 31 | 7.18 | --- | 6.92 | 7.04 | --- | 6.83 | --- | 6.91 | --- | 7.39 | 7.35 | --- |
| MAX | 7.18 | 7.19 | 7.00 | 7.04 | 7.03 | 6.91 | 6.83 | 6.91 | 7.36 | 7.43 | 7.47 | 7.35 |

CAL YR 1987 LOW 7.19
WTR YR 1988 LOW 7.47404625082305100 R-4
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

277

ROSS COUNTY

391341083172200. Local number, RQ-7.

LOCATION.--Lat 39°13'41", long 83°17'22", Hydrologic Unit 05060003, Highland County well field, 1 mi west of Bainbridge.

Owner: Highland County Water Company.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 6 in., depth 67 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 740 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

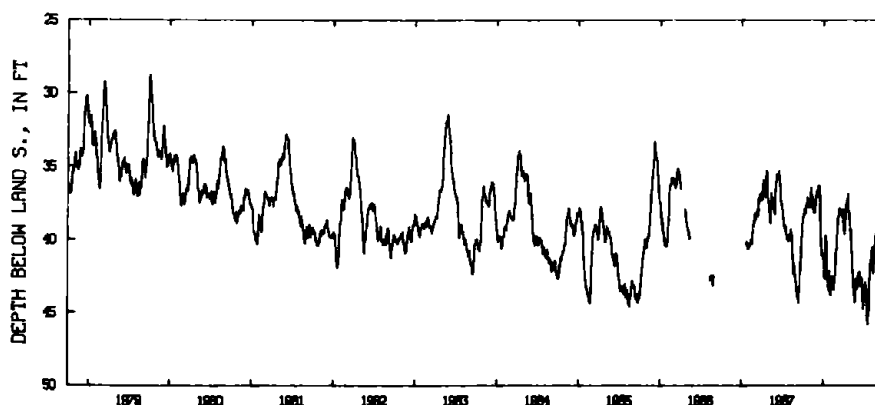
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--February 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 45.81 ft below land-surface datum, July 20, 1988; minimum daily low, 20.93 ft below land-surface datum, Feb. 28, 1971.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 38.88 | 37.60 | 37.00 | 41.25 | 43.49 | 40.64 | 38.73 | 38.54 | 43.44 | 43.81 | 41.61 | 38.87 |
| 2 | 38.79 | 37.48 | 36.96 | 41.40 | 43.75 | 40.20 | 39.13 | 39.60 | 43.36 | 43.22 | 41.64 | 38.92 |
| 3 | 38.50 | 37.47 | 36.96 | 41.45 | 43.81 | 39.84 | 39.31 | 39.60 | 43.25 | 43.31 | 41.57 | 38.91 |
| 4 | 38.48 | 37.55 | 36.70 | 41.71 | 43.56 | 39.57 | 39.53 | 39.75 | 42.77 | 43.41 | 41.53 | 38.97 |
| 5 | 38.50 | 37.82 | 36.86 | 42.06 | 43.21 | 38.58 | 39.62 | 39.61 | 42.54 | 43.41 | 41.10 | 38.91 |
| 6 | 38.27 | 37.22 | 36.72 | 42.33 | 43.11 | 38.54 | 39.59 | 39.32 | 42.58 | 43.44 | 41.09 | 38.56 |
| 7 | 38.40 | 36.83 | 36.85 | 42.57 | 42.96 | 38.76 | 39.30 | 40.01 | 42.60 | 43.57 | 40.97 | 38.54 |
| 8 | 38.36 | 36.49 | 37.10 | 42.71 | 42.97 | 39.00 | 39.35 | 40.61 | 42.64 | 43.57 | 40.73 | 38.26 |
| 9 | 38.29 | 36.52 | 36.72 | 42.26 | 42.93 | 38.77 | 38.73 | 40.85 | 42.57 | 43.17 | 40.55 | 38.58 |
| 10 | 38.01 | 36.84 | 36.36 | 41.44 | 42.89 | 38.44 | 38.29 | 40.98 | 42.33 | 42.99 | 41.04 | 38.97 |
| 11 | 38.08 | 37.00 | 36.74 | 40.74 | 42.75 | 38.30 | 38.13 | 40.98 | 42.23 | 43.19 | 41.53 | 39.22 |
| 12 | 37.91 | 37.00 | 36.67 | 40.39 | 42.56 | 38.00 | 37.90 | 41.36 | 42.30 | 43.23 | 41.93 | 38.89 |
| 13 | 38.11 | 37.03 | 36.49 | 39.75 | 42.75 | 38.03 | 37.83 | 41.92 | 42.29 | 43.81 | 42.21 | 38.74 |
| 14 | 38.21 | 37.23 | 36.48 | 40.02 | 42.99 | 37.94 | 37.57 | 42.23 | 42.29 | 44.24 | 42.32 | 38.03 |
| 15 | 37.86 | 37.43 | 36.34 | 40.23 | 43.23 | 37.87 | 37.49 | 42.65 | 42.98 | 44.63 | 42.11 | 37.92 |
| 16 | 37.82 | 37.34 | 36.82 | 40.98 | 43.44 | 37.86 | 37.50 | 43.08 | 43.21 | 45.10 | 41.63 | 37.60 |
| 17 | 37.73 | 37.86 | 36.93 | 41.32 | 43.47 | 37.86 | 37.41 | 43.52 | 43.03 | 45.36 | 41.63 | 37.61 |
| 18 | 37.78 | 38.03 | 37.35 | 41.93 | 43.14 | 38.28 | 37.36 | 43.61 | 42.76 | 45.55 | 41.24 | 37.50 |
| 19 | 37.76 | 37.91 | 37.98 | 42.56 | 42.99 | 38.18 | 37.19 | 43.74 | 42.64 | 45.71 | 41.08 | 37.22 |
| 20 | 37.55 | 38.15 | 38.64 | 42.90 | 42.94 | 38.37 | 37.22 | 43.81 | 42.69 | 45.81 | 40.42 | 37.48 |
| 21 | 37.50 | 38.02 | 39.39 | 42.81 | 42.92 | 38.37 | 37.22 | 43.83 | 42.66 | 45.60 | 40.59 | 37.74 |
| 22 | 37.51 | 37.83 | 40.03 | 42.91 | 42.84 | 38.34 | 37.20 | 44.18 | 42.77 | 45.20 | 40.39 | 37.76 |
| 23 | 37.14 | 38.12 | 40.48 | 43.07 | 42.75 | 38.21 | 36.91 | 44.29 | 42.67 | 45.02 | 39.83 | 37.92 |
| 24 | 37.24 | 38.18 | 40.70 | 43.28 | 42.42 | 38.28 | 37.46 | 43.81 | 42.76 | 44.81 | 39.80 | 38.37 |
| 25 | 37.59 | 37.49 | 40.86 | 43.49 | 41.77 | 38.33 | 38.02 | 43.23 | 43.51 | 44.42 | 39.66 | 38.99 |
| 26 | 37.56 | 37.58 | 40.75 | 43.41 | 41.37 | 38.41 | 38.42 | 42.84 | 44.06 | 43.88 | 39.72 | 39.50 |
| 27 | 37.57 | 37.77 | 41.13 | 42.66 | 40.90 | 38.49 | 38.60 | 42.76 | 44.49 | 43.10 | 39.70 | 39.83 |
| 28 | 37.82 | 37.51 | 41.00 | 42.64 | 40.81 | 38.52 | 38.39 | 42.82 | 44.57 | 42.73 | 39.67 | 40.22 |
| 29 | 37.56 | 37.31 | 41.06 | 42.19 | 40.77 | 38.44 | 38.22 | 42.88 | 44.74 | 42.14 | 39.29 | 40.15 |
| 30 | 37.49 | 37.02 | 41.17 | 42.68 | --- | 37.93 | 38.19 | 42.91 | 44.48 | 41.89 | 39.22 | 40.22 |
| 31 | 37.59 | --- | 41.21 | 43.14 | --- | 38.17 | --- | 43.14 | --- | 41.57 | 39.08 | --- |
| MAX | 38.88 | 38.18 | 41.21 | 43.49 | 43.81 | 40.64 | 39.62 | 44.29 | 44.74 | 45.81 | 42.32 | 40.22 |

CAL YR 1987 LOW 44.33
WTR YR 1988 LOW 45.81391341083172200 RQ-7
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

ROSS COUNTY--Continued

391913082580500. Local number, RQ-8.

LOCATION.--Lat 39°19'13", long 82°58'05", Hydrologic Unit 05060003, Mead Paper wood yard in Chillicothe.

Owner: Mead Paper Corp.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 6 in., depth 95 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 631.30 ft above National Geodetic Vertical Datum of 1929. Measuring point: Floor of instrument shelter 3.30 ft above land-surface datum.

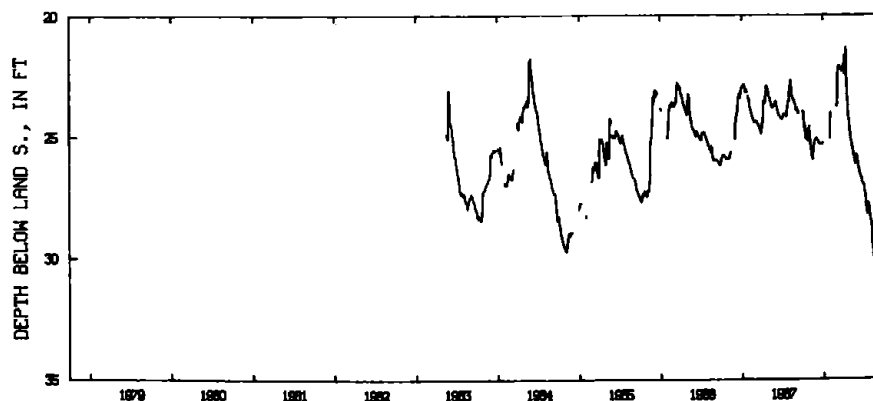
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--May 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 31.39 ft below land-surface datum, Sept. 3-4, 1988; minimum daily low, 21.35 ft below land-surface datum, April 12, 1988.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | --- | 24.62 | 25.09 | 25.31 | 25.08 | 23.72 | 22.18 | 24.75 | 25.80 | 27.00 | 28.43 | 31.30 |
| 2 | 23.98 | 24.60 | 25.10 | --- | 25.00 | 23.74 | 22.18 | 24.84 | 25.79 | 27.01 | 28.46 | 31.34 |
| 3 | 24.00 | 24.82 | 25.10 | --- | 24.56 | 23.76 | 22.16 | 24.92 | 25.88 | 27.05 | 28.50 | 31.39 |
| 4 | 24.00 | 25.01 | 25.12 | --- | 24.15 | 23.67 | 21.99 | 24.98 | 25.99 | 27.09 | 28.55 | 31.39 |
| 5 | 23.98 | 25.18 | 25.14 | --- | 24.02 | 22.66 | 21.66 | 25.05 | 26.05 | 27.17 | 28.62 | 31.38 |
| 6 | 23.99 | 25.30 | 25.16 | --- | --- | 22.41 | 22.12 | 25.12 | 26.10 | 27.24 | 28.84 | --- |
| 7 | 24.25 | 25.39 | 25.17 | --- | --- | 22.34 | 22.45 | 25.19 | 26.16 | 27.28 | 29.04 | --- |
| 8 | 24.48 | 25.47 | 25.17 | --- | --- | 22.31 | 22.44 | 25.25 | 26.21 | 27.32 | 29.21 | --- |
| 9 | 24.65 | 25.55 | 25.20 | --- | --- | 22.22 | 21.97 | 25.28 | 26.26 | 27.38 | 29.36 | --- |
| 10 | 24.66 | 25.60 | 25.20 | --- | --- | 22.14 | 21.58 | 25.34 | 26.31 | 27.52 | 29.52 | --- |
| 11 | 24.66 | 25.60 | 25.21 | --- | --- | 22.11 | 21.40 | 25.39 | 26.36 | 27.67 | 29.64 | --- |
| 12 | 24.56 | 25.63 | 25.26 | --- | --- | 22.09 | 21.35 | 25.44 | 26.41 | 27.79 | 29.73 | --- |
| 13 | 24.75 | 25.72 | 25.28 | --- | --- | 22.08 | 21.71 | 25.51 | 26.45 | 27.88 | 29.85 | --- |
| 14 | 24.89 | 25.81 | 25.28 | --- | --- | 22.11 | 22.30 | 25.54 | 26.49 | 27.95 | 29.95 | --- |
| 15 | 24.99 | 25.88 | 25.26 | --- | --- | 22.16 | 22.68 | 25.58 | 26.56 | 28.01 | --- | --- |
| 16 | 25.07 | 25.88 | 25.30 | --- | --- | 22.20 | 22.95 | 25.61 | 26.59 | 28.07 | --- | --- |
| 17 | 25.10 | 25.94 | 25.32 | --- | --- | 22.21 | 23.12 | 25.68 | 26.61 | 28.12 | --- | --- |
| 18 | 25.04 | 25.95 | 25.32 | --- | --- | 22.21 | 23.26 | 25.80 | 26.65 | 28.19 | --- | --- |
| 19 | 24.85 | 25.79 | 25.32 | --- | --- | 22.20 | 23.42 | 25.82 | 26.67 | 28.19 | --- | --- |
| 20 | 24.75 | 25.55 | 25.34 | --- | --- | 22.20 | 23.57 | 25.74 | 26.69 | 28.00 | --- | --- |
| 21 | 24.99 | 25.43 | --- | --- | --- | 22.19 | 23.74 | 25.80 | 26.70 | 27.72 | --- | --- |
| 22 | 25.10 | 25.34 | --- | --- | --- | 22.19 | 23.88 | 25.82 | 26.74 | 27.87 | --- | --- |
| 23 | 25.14 | 25.28 | --- | --- | --- | 22.16 | 24.01 | 26.00 | 26.76 | 27.87 | --- | --- |
| 24 | 25.17 | 25.26 | --- | --- | --- | 22.30 | 24.14 | 26.14 | 26.88 | 27.79 | --- | --- |
| 25 | 25.19 | 25.23 | --- | --- | --- | 22.32 | 24.24 | 26.14 | 26.89 | 27.91 | --- | --- |
| 26 | 25.20 | 25.20 | --- | --- | --- | 22.30 | 24.26 | 26.02 | 26.90 | 28.03 | --- | --- |
| 27 | 25.17 | 25.20 | --- | --- | --- | 22.19 | 24.34 | 25.91 | 26.91 | 28.12 | --- | --- |
| 28 | 25.17 | 25.17 | --- | --- | --- | 22.15 | 24.47 | 25.83 | 26.93 | 28.21 | --- | --- |
| 29 | 24.99 | 25.14 | --- | --- | 23.72 | 22.12 | 24.55 | 25.77 | 26.95 | 28.27 | --- | 29.90 |
| 30 | 24.80 | 25.12 | --- | --- | --- | 22.13 | 24.66 | 25.75 | 26.98 | 28.33 | 31.25 | 30.05 |
| 31 | 24.70 | --- | 25.29 | --- | --- | 22.16 | --- | 25.80 | --- | 28.39 | 31.26 | --- |
| MAX | 25.20 | 25.95 | 25.34 | 25.31 | 25.08 | 23.76 | 24.66 | 26.14 | 26.98 | 28.39 | 31.26 | 31.39 |
| CAL YR 1987 | LOW 25.95 | | | | | | | | | | | |
| WTR YR 1988 | LOW 31.39 | | | | | | | | | | | |



391913082580500 RO-8 MEAD PAPER CORP AT CHILLICOTHE OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

SHELBY COUNTY

401712084103500. Local number, SH-4.

LOCATION.--Lat 40°17'12", long 84°10'35", Hydrologic Unit 05080001, State Route 47 in Sidney.

Owner: Stolle Corporation.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., depth 280 ft, cased to 136 ft.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 1,033.72 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of platform 4.50 ft above land-surface datum.

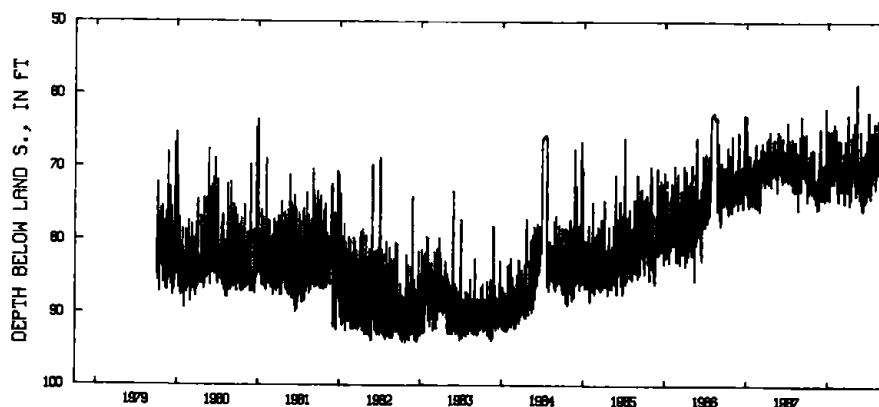
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--September 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 94.19 ft below land-surface datum, Oct. 26, 1982; minimum daily low, 58.56 ft below land-surface datum, May 13, 1988.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 74.57 | 72.20 | 74.28 | 72.99 | 66.81 | 73.21 | 64.49 | 63.84 | 74.90 | 70.43 | 70.04 | 70.50 |
| 2 | 71.13 | 74.04 | 71.11 | 68.31 | 69.32 | 73.06 | 62.75 | 71.80 | 72.97 | 64.88 | 71.17 | 69.78 |
| 3 | 71.30 | 73.60 | 70.55 | 64.89 | 67.22 | 71.58 | 65.88 | 72.26 | 75.76 | 62.30 | 72.87 | 65.51 |
| 4 | 70.00 | 71.65 | 71.11 | 70.76 | 67.97 | 70.87 | 73.14 | 71.53 | 75.00 | 65.44 | 71.19 | 59.87 |
| 5 | 71.19 | 72.66 | 74.41 | 71.15 | 67.98 | 70.80 | 73.36 | 72.66 | 71.54 | 71.01 | 68.80 | 62.67 |
| 6 | 71.27 | 72.30 | 69.51 | 70.52 | 69.17 | 71.37 | 72.56 | 73.79 | 74.81 | 72.35 | 66.63 | 70.53 |
| 7 | 71.88 | 73.69 | 72.85 | 72.52 | 64.64 | 72.12 | 73.12 | 72.02 | 75.82 | 73.68 | 65.14 | 69.30 |
| 8 | 73.59 | 71.82 | 71.87 | 71.02 | 69.29 | 70.92 | 75.12 | 65.29 | 75.63 | 70.90 | 68.63 | 69.61 |
| 9 | 72.29 | 72.42 | 72.54 | 74.50 | 70.94 | 70.96 | 73.73 | 71.51 | 72.77 | 67.40 | 69.54 | 68.59 |
| 10 | 72.62 | 74.91 | 71.05 | 66.58 | 71.33 | 72.59 | 68.38 | 59.82 | 74.12 | 68.02 | 68.53 | 66.96 |
| 11 | 68.34 | 74.32 | 74.18 | 70.22 | 71.28 | 73.13 | 74.40 | 58.78 | 73.56 | 71.23 | 70.68 | 65.03 |
| 12 | 72.71 | 73.21 | 74.23 | 72.22 | 71.30 | 71.78 | 72.33 | 58.76 | 68.25 | 74.19 | 69.34 | 70.96 |
| 13 | 73.18 | 74.34 | 70.13 | 71.36 | 73.36 | 67.97 | 70.47 | 58.56 | 74.60 | 71.59 | 66.84 | 71.10 |
| 14 | 72.88 | 74.57 | 72.74 | 71.02 | 67.99 | 72.78 | 71.29 | 71.73 | 73.25 | 73.40 | 63.61 | 71.91 |
| 15 | 72.41 | 75.69 | 70.72 | 71.03 | 72.72 | 72.13 | 71.81 | 67.19 | 74.08 | 69.56 | 70.03 | 71.06 |
| 16 | 72.80 | 72.27 | 71.63 | 72.09 | 71.59 | 72.61 | 72.38 | 70.40 | 74.76 | 70.46 | 69.68 | 69.24 |
| 17 | 71.66 | 71.57 | 74.40 | 64.92 | 74.54 | 74.87 | 65.72 | 72.66 | 73.68 | 65.05 | 70.88 | 67.45 |
| 18 | 67.67 | 72.14 | 72.87 | 72.16 | 74.61 | 72.33 | 70.25 | 71.77 | 73.15 | 71.97 | 70.75 | 64.84 |
| 19 | 69.60 | 72.10 | 74.53 | 71.14 | 72.00 | 71.45 | 70.96 | 71.82 | 67.72 | 71.98 | 69.82 | 70.10 |
| 20 | 71.02 | 70.12 | 69.53 | 70.99 | 72.31 | 66.27 | 70.64 | 73.27 | 74.08 | 70.70 | 64.97 | 69.98 |
| 21 | 72.97 | 75.61 | 71.74 | 70.31 | 66.13 | 71.33 | 70.35 | 71.97 | 74.42 | 70.75 | 62.33 | 71.32 |
| 22 | 71.68 | 72.11 | 71.56 | 71.25 | 71.89 | 71.62 | 70.39 | 69.30 | 73.89 | 69.97 | 70.76 | 71.84 |
| 23 | 73.61 | 73.10 | 71.98 | 71.76 | 72.21 | 72.13 | 70.45 | 71.50 | 73.43 | 68.48 | 69.44 | 72.95 |
| 24 | 72.07 | 73.09 | 67.72 | 66.15 | 71.72 | 72.77 | 65.16 | 72.16 | 72.72 | 66.55 | 71.04 | 67.76 |
| 25 | 67.48 | 70.71 | 61.79 | 70.49 | 72.25 | 71.88 | 70.93 | 71.84 | 70.81 | 70.81 | 70.21 | 63.15 |
| 26 | 72.35 | 67.78 | 66.06 | 72.09 | 71.36 | 73.16 | 70.30 | 74.24 | 66.15 | 71.25 | 70.69 | 73.56 |
| 27 | 73.08 | 69.70 | 68.83 | 71.64 | 71.93 | 68.65 | 70.56 | 71.70 | 72.79 | 70.41 | 69.68 | 74.98 |
| 28 | 73.22 | 65.17 | 73.25 | 72.12 | 66.31 | 72.12 | 71.23 | 71.78 | 73.63 | 68.91 | 65.99 | 74.16 |
| 29 | 72.35 | 64.75 | 73.82 | 71.54 | 71.36 | 73.26 | 69.66 | 65.01 | 73.14 | 65.87 | 69.50 | 73.23 |
| 30 | 72.90 | 69.39 | 74.18 | 68.69 | --- | 71.78 | 70.87 | 68.35 | 72.53 | 70.52 | 68.01 | 68.99 |
| 31 | 67.65 | --- | 69.85 | 64.05 | --- | 69.43 | --- | 73.39 | --- | 63.83 | 71.47 | --- |
| MAX | 74.57 | 75.69 | 74.53 | 74.50 | 74.61 | 74.87 | 75.12 | 74.24 | 75.82 | 74.19 | 72.87 | 74.98 |
| CAL YR 1987 | LOW 75.95 | | | | | | | | | | | |
| WTR YR 1988 | LOW 75.82 | | | | | | | | | | | |



401712084103500 SH-4 STOLLE CORP SIDNEY OH
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

STARK COUNTY

404939081203800. Local number, ST-5A.

LOCATION.--Lat 40°49'39", long 81°20'38", Hydrologic Unit 05040001, Northeast well field off Harrisburg Rd, Canton.

Owner: Canton Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water table well, diameter 12 in., depth 132 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 1060 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 1.00 ft above land-surface datum.

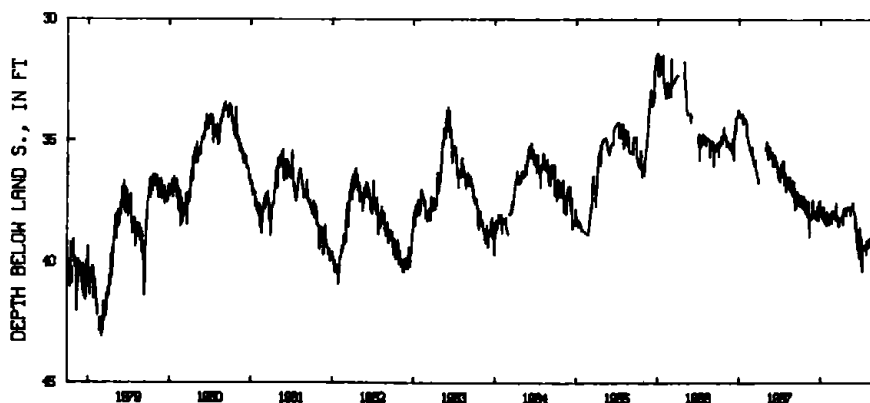
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--June 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 54.00 ft below land-surface datum, Feb. 10, 1956; minimum daily low, 26.13 ft below land-surface datum, May 18, 1964.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 37.60 | 37.98 | 38.12 | 37.46 | 37.93 | 37.90 | 38.25 | 37.79 | 37.90 | 38.97 | 39.10 | 39.09 |
| 2 | 37.49 | 38.01 | 38.15 | 37.67 | 38.44 | 37.90 | 38.23 | 37.76 | 37.95 | 38.95 | 39.5 | 39.04 |
| 3 | 37.38 | 38.07 | 37.94 | 37.67 | 38.16 | 37.91 | 38.19 | 37.75 | 38.00 | 38.98 | 39.19 | 39.18 |
| 4 | 37.44 | 38.06 | 38.10 | 37.72 | 38.18 | 38.16 | 38.19 | 37.74 | 38.02 | 39.02 | 39.17 | 39.47 |
| 5 | 37.45 | 37.98 | 38.02 | 37.81 | 38.41 | 38.17 | 38.19 | 37.74 | 38.01 | 39.69 | 39.40 | 39.25 |
| 6 | 37.63 | 37.87 | 38.07 | 38.02 | 38.39 | 37.95 | 38.11 | 37.81 | 38.01 | 40.00 | 39.23 | 39.00 |
| 7 | 37.69 | 37.88 | 38.07 | 37.84 | 38.17 | 38.00 | 38.12 | 37.80 | 38.60 | 40.32 | 39.11 | 39.40 |
| 8 | 37.52 | 37.47 | 37.90 | 38.05 | 38.42 | 38.15 | 38.11 | 37.77 | 38.60 | 40.37 | 39.07 | 39.00 |
| 9 | 37.25 | 38.03 | 37.88 | 38.09 | 38.37 | 38.20 | 38.07 | 37.75 | 38.23 | 39.85 | 39.03 | 39.20 |
| 10 | 37.68 | 38.14 | 37.96 | 38.16 | 38.44 | 38.00 | 38.26 | 37.76 | 38.18 | 39.55 | 39.03 | 38.90 |
| 11 | 37.73 | 38.15 | 38.03 | 38.03 | 38.17 | 38.25 | 38.44 | 37.81 | 38.70 | 39.47 | 39.03 | 39.25 |
| 12 | 37.66 | 38.11 | 38.13 | 38.10 | 38.21 | 37.92 | 38.03 | 37.78 | 38.70 | 39.42 | 39.03 | 39.21 |
| 13 | 37.72 | 38.15 | 38.17 | 37.98 | 38.22 | 37.56 | 37.93 | 37.74 | 38.86 | 39.32 | 39.03 | 39.12 |
| 14 | 37.35 | 38.94 | 38.16 | 38.13 | 38.17 | 38.00 | 37.92 | 37.74 | 39.15 | 39.35 | 39.03 | 39.15 |
| 15 | 37.65 | 38.01 | 38.10 | 38.21 | 37.98 | 38.10 | 37.89 | 37.73 | 39.42 | 39.35 | 39.06 | 39.17 |
| 16 | 37.56 | 38.17 | 38.24 | 38.25 | 38.00 | 38.05 | 37.81 | 38.04 | 38.85 | 39.35 | 39.08 | 38.76 |
| 17 | 37.76 | 38.01 | 38.25 | 37.71 | 38.01 | 38.27 | 37.80 | 37.74 | 38.69 | 39.36 | 39.00 | 39.06 |
| 18 | 37.54 | 38.00 | 38.13 | 38.04 | 38.00 | 38.27 | 37.79 | 37.73 | 38.65 | 39.36 | 39.37 | 39.10 |
| 19 | 37.33 | 38.18 | 38.14 | 38.04 | 37.97 | 38.13 | 37.78 | 37.73 | 39.05 | 39.38 | 39.05 | 38.99 |
| 20 | 37.27 | 38.12 | 38.17 | 38.22 | 38.16 | 38.14 | 37.82 | 37.75 | 39.42 | 39.36 | 39.04 | 39.13 |
| 21 | 37.55 | 38.21 | 37.69 | 38.34 | 38.38 | 38.12 | 37.78 | 37.75 | 39.47 | 39.36 | 38.85 | 39.02 |
| 22 | 37.54 | 38.22 | 38.16 | 38.32 | 38.07 | 38.48 | 37.75 | 37.72 | 39.51 | 39.47 | 38.68 | 38.72 |
| 23 | 37.87 | 38.09 | 38.27 | 38.36 | 37.89 | 38.29 | 37.74 | 37.78 | 39.62 | 39.35 | 38.64 | 39.03 |
| 24 | 37.80 | 38.05 | 38.27 | 38.17 | 37.94 | 38.44 | 38.05 | 37.75 | 39.70 | 39.30 | 39.65 | 38.74 |
| 25 | 37.38 | 38.03 | 37.52 | 38.18 | 37.97 | 38.51 | 37.81 | 37.78 | 39.82 | 39.27 | 39.21 | 39.01 |
| 26 | 37.43 | 38.02 | 37.53 | 38.25 | 38.05 | 38.30 | 37.79 | 37.78 | 39.15 | 39.67 | 39.11 | 39.04 |
| 27 | 37.54 | 37.61 | 37.63 | 38.41 | 38.13 | 38.30 | 38.05 | 37.54 | 39.42 | 39.32 | 39.49 | 39.06 |
| 28 | 37.96 | 37.43 | 37.75 | 38.46 | 38.06 | 38.27 | 37.75 | 37.82 | 38.57 | 39.13 | 39.10 | 38.65 |
| 29 | 37.90 | 37.47 | 37.73 | 38.46 | 37.90 | 38.30 | 37.82 | 37.84 | 38.84 | 39.29 | 39.12 | 38.65 |
| 30 | 37.97 | 37.97 | 37.80 | 38.24 | --- | 38.31 | 37.82 | --- | 38.93 | 39.12 | 39.06 | 39.03 |
| 31 | 37.96 | --- | 37.78 | 37.91 | --- | 38.23 | --- | --- | --- | 39.11 | 39.49 | --- |
| MAX | 37.97 | 38.94 | 38.27 | 38.46 | 38.44 | 38.51 | 38.44 | 38.04 | 39.82 | 40.37 | 39.65 | 39.47 |
| CAL YR 1987 | LOW 38.94 | | | | | | | | | | | |
| WTR YR 1988 | LOW 40.37 | | | | | | | | | | | |



— 404939081203800 ST-5A
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

281

STARK COUNTY--Continued

405211081253500. Local number, ST-27.

LOCATION.--Lat 40°52'11", long 81°25'35", Hydrologic Unit 05040001, Dresler Rd near North Canton.

Owner: North Canton Water Department

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., depth 55 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 1060 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 2.50 ft above land-surface datum.

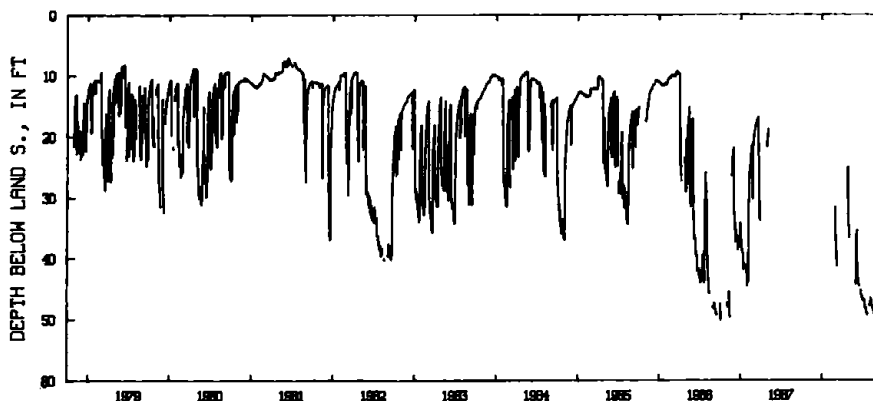
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--April 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 50.10 ft below land-surface datum, Oct. 4, 1986; minimum daily low, 7.10 ft below land-surface datum, June 15, 1981.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-----|-----|-----|-----|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | --- | --- | --- | --- | --- | 34.65 | --- | 35.65 | 44.28 | 46.70 | 47.65 | 28.95 |
| 2 | --- | --- | --- | --- | --- | 36.40 | --- | 36.60 | 44.30 | 46.85 | 47.80 | 30.00 |
| 3 | --- | --- | --- | --- | --- | 37.55 | --- | --- | 38.40 | 46.75 | 47.80 | 35.00 |
| 4 | --- | --- | --- | --- | --- | 38.55 | --- | --- | 36.00 | 47.00 | 47.20 | 38.85 |
| 5 | --- | --- | --- | --- | --- | 39.15 | --- | --- | 37.85 | 47.00 | --- | 40.65 |
| 6 | --- | --- | --- | --- | --- | 39.65 | --- | --- | 35.45 | 47.00 | 46.60 | 41.65 |
| 7 | --- | --- | --- | --- | --- | 40.20 | --- | --- | 39.55 | 47.00 | 47.20 | 42.40 |
| 8 | --- | --- | --- | --- | --- | 40.80 | --- | --- | 41.35 | 46.85 | 47.20 | 42.95 |
| 9 | --- | --- | --- | --- | --- | 41.30 | --- | --- | 42.40 | 47.25 | 46.85 | 43.10 |
| 10 | --- | --- | --- | --- | --- | --- | --- | --- | 43.20 | 47.70 | 47.25 | 43.30 |
| 11 | --- | --- | --- | --- | --- | --- | --- | --- | 43.60 | 48.05 | 47.65 | 43.30 |
| 12 | --- | --- | --- | --- | --- | --- | --- | --- | 43.85 | 48.10 | 47.85 | 43.25 |
| 13 | --- | --- | --- | --- | --- | --- | --- | --- | 44.05 | 48.30 | 48.00 | 43.20 |
| 14 | --- | --- | --- | --- | --- | --- | --- | --- | 44.35 | 48.30 | 48.10 | 43.25 |
| 15 | --- | --- | --- | --- | --- | --- | --- | --- | 44.55 | 48.30 | 48.25 | 43.25 |
| 16 | --- | --- | --- | --- | --- | --- | --- | --- | 44.65 | 48.25 | 48.25 | 39.70 |
| 17 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 48.50 | 48.05 | 40.85 |
| 18 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 48.65 | 48.25 | 41.50 |
| 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 48.95 | 48.65 | 41.90 |
| 20 | --- | --- | --- | --- | --- | --- | --- | --- | 45.00 | 49.05 | 49.20 | 42.20 |
| 21 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 49.15 | 49.20 | 42.60 |
| 22 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 49.35 | --- | 42.70 |
| 23 | --- | --- | --- | --- | --- | --- | --- | --- | 45.30 | --- | --- | 42.80 |
| 24 | --- | --- | --- | --- | --- | --- | --- | --- | 45.85 | --- | --- | 43.00 |
| 25 | --- | --- | --- | --- | --- | --- | --- | --- | 46.10 | --- | 44.40 | 43.00 |
| 26 | --- | --- | --- | --- | --- | --- | 25.10 | --- | 46.10 | --- | 39.00 | 43.00 |
| 27 | --- | --- | --- | --- | --- | --- | 29.45 | --- | 46.35 | --- | 36.00 | 42.85 |
| 28 | --- | --- | --- | --- | --- | --- | 31.60 | --- | 46.40 | --- | 34.00 | 42.00 |
| 29 | --- | --- | --- | --- | 31.60 | --- | 33.10 | --- | 46.40 | --- | 32.45 | 42.70 |
| 30 | --- | --- | --- | --- | --- | --- | 34.60 | --- | 46.75 | --- | 31.25 | 43.40 |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 30.10 | --- |
| MAX | --- | --- | --- | --- | 31.60 | 41.30 | 34.60 | 36.60 | 46.75 | 49.35 | 49.20 | 43.40 |

CAL YR 1987 LOW 44.60
WTR YR 1988 LOW 49.35

— 405211081253500 ST-27
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

SUMMIT COUNTY

410141081315200. Local number, SU-4A.

LOCATION.--Lat 41°01'41", long 81°31'52", Hydrologic Unit 05040001, Firestone well field, Akron.

Owner: Firestone Tire and Rubber Co.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 6 in., depth 60 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 970 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

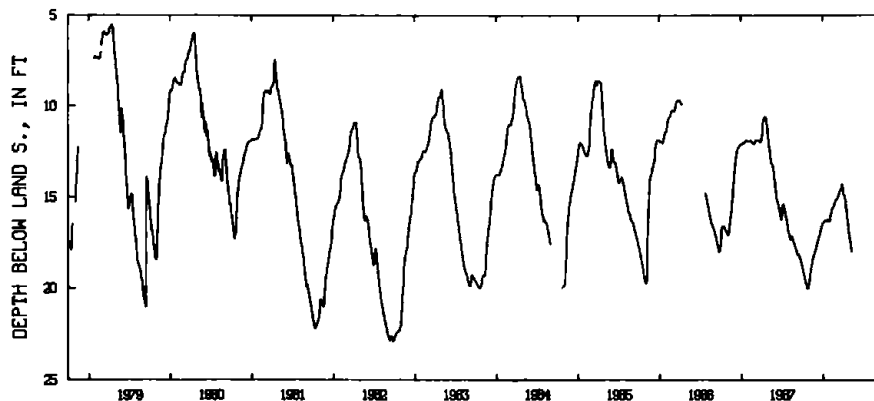
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--July 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 42.60 ft below land-surface datum, Oct. 21, 1966; minimum daily low, 3.45 ft below land-surface datum, Jan. 23, 1959.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-----|-----|-----|-----|
| 1 | 18.77 | 19.72 | 17.86 | 16.47 | 16.32 | 15.16 | 14.59 | 17.19 | --- | --- | --- | --- |
| 2 | 18.82 | 19.64 | 17.81 | 16.45 | 16.31 | 15.15 | 14.71 | 17.27 | --- | --- | --- | --- |
| 3 | 18.88 | 19.55 | 17.77 | 16.43 | 16.27 | 15.14 | 14.82 | 17.35 | --- | --- | --- | --- |
| 4 | 18.94 | 19.46 | 17.72 | 16.41 | 16.19 | 15.12 | 14.86 | 17.44 | --- | --- | --- | --- |
| 5 | 18.99 | 19.36 | 17.68 | 16.39 | 16.11 | 15.11 | 14.87 | 17.53 | --- | --- | --- | --- |
| 6 | 19.05 | 19.28 | 17.63 | 16.38 | 16.03 | 15.09 | 14.87 | 17.62 | --- | --- | --- | --- |
| 7 | 19.11 | 19.19 | 17.59 | 16.37 | 15.95 | 15.07 | 14.89 | 17.70 | --- | --- | --- | --- |
| 8 | 19.17 | 19.11 | 17.54 | 16.35 | 15.88 | 15.04 | 14.91 | 17.78 | --- | --- | --- | --- |
| 9 | 19.24 | 19.03 | 17.50 | 16.34 | 15.82 | 15.01 | 14.95 | 17.86 | --- | --- | --- | --- |
| 10 | 19.30 | 18.95 | 17.44 | 16.32 | 15.77 | 14.98 | 15.01 | 17.95 | --- | --- | --- | --- |
| 11 | 19.36 | 18.87 | 17.40 | 16.31 | 15.73 | 14.94 | 15.09 | 17.98 | --- | --- | --- | --- |
| 12 | 19.41 | 18.79 | 17.35 | 16.29 | 15.69 | 14.91 | 15.16 | --- | --- | --- | --- | --- |
| 13 | 19.46 | 18.72 | 17.30 | 16.28 | 15.66 | 14.87 | 15.25 | --- | --- | --- | --- | --- |
| 14 | 19.51 | 18.65 | 17.26 | 16.27 | 15.63 | 14.83 | 15.35 | --- | --- | --- | --- | --- |
| 15 | 19.56 | 18.58 | 17.22 | 16.27 | 15.61 | 14.79 | 15.46 | --- | --- | --- | --- | --- |
| 16 | 19.62 | 18.52 | 17.18 | 16.27 | 15.59 | 14.76 | 15.57 | --- | --- | --- | --- | --- |
| 17 | 19.67 | 18.46 | 17.13 | 16.28 | 15.57 | 14.72 | 15.68 | --- | --- | --- | --- | --- |
| 18 | 19.72 | 18.41 | 17.09 | 16.28 | 15.55 | 14.69 | 15.79 | --- | --- | --- | --- | --- |
| 19 | 19.77 | 18.35 | 17.05 | 16.29 | 15.53 | 14.66 | 15.91 | --- | --- | --- | --- | --- |
| 20 | 19.82 | 18.31 | 17.01 | 16.29 | 15.50 | 14.62 | 16.02 | --- | --- | --- | --- | --- |
| 21 | 19.84 | 18.27 | 16.96 | 16.29 | 15.47 | 14.60 | 16.14 | --- | --- | --- | --- | --- |
| 22 | 19.89 | 18.22 | 16.91 | 16.29 | 15.44 | 14.58 | 16.24 | --- | --- | --- | --- | --- |
| 23 | 19.95 | 18.18 | 16.85 | 16.28 | 15.40 | 14.55 | 16.35 | --- | --- | --- | --- | --- |
| 24 | 20.00 | 18.14 | 16.79 | 16.26 | 15.36 | 14.53 | 16.47 | --- | --- | --- | --- | --- |
| 25 | 20.03 | 18.11 | 16.74 | 16.25 | 15.31 | 14.50 | 16.57 | --- | --- | --- | --- | --- |
| 26 | 20.03 | 18.07 | 16.69 | 16.24 | 15.27 | 14.46 | 16.69 | --- | --- | --- | --- | --- |
| 27 | 20.02 | 18.03 | 16.64 | 16.24 | 15.24 | 14.39 | 16.81 | --- | --- | --- | --- | --- |
| 28 | 19.98 | 17.99 | 16.60 | 16.32 | 15.21 | 14.31 | 16.92 | --- | --- | --- | --- | --- |
| 29 | 19.93 | 17.95 | 16.56 | 16.32 | 15.18 | 14.30 | 17.01 | --- | --- | --- | --- | --- |
| 30 | 19.87 | 17.90 | 16.53 | 16.32 | --- | 14.36 | 17.10 | --- | --- | --- | --- | --- |
| 31 | 19.80 | --- | 16.49 | 16.32 | --- | 14.46 | --- | --- | --- | --- | --- | --- |
| MAX | 20.03 | 19.72 | 17.86 | 16.47 | 16.32 | 15.16 | 17.10 | 17.98 | --- | --- | --- | --- |
| CAL YR 1987 | LOW 20.03 | | | | | | | | | | | |
| WTR YR 1988 | LOW 20.03 | | | | | | | | | | | |



410141081315200 SU-4A
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

TRUMBULL COUNTY

411604080505600. Local number, T-3

LOCATION.--Lat 41°16'04", long 80°50'56", Hydrologic Unit 05030103, N. River Rd near Warren.

Owner: Copperweld Steel Corp.

AQUIFER.--Sandstone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in., depth 125 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 890 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--September 1969 to current year.

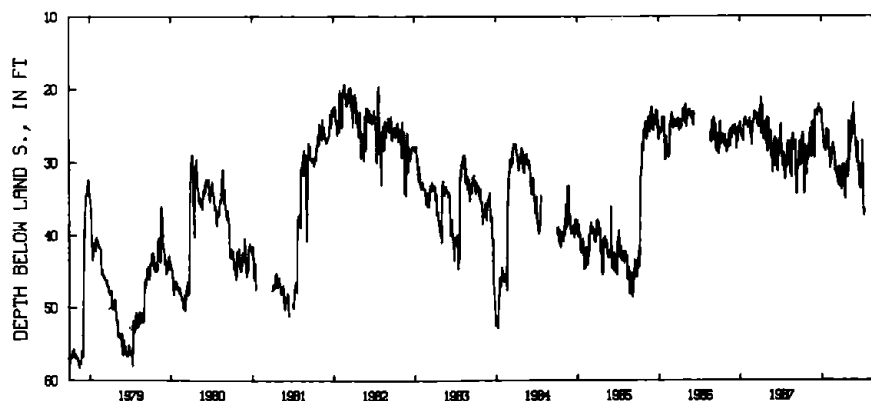
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 60.30 ft below land-surface datum, July 2, 1975; minimum daily low, 19.35 ft below land-surface datum, Feb. 21, 1982.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|
| 1 | 27.70 | 28.73 | 29.45 | 22.84 | 26.06 | 28.81 | 32.45 | 31.09 | 25.47 | 32.22 | --- | --- |
| 2 | 27.64 | 28.35 | 27.72 | 22.95 | 25.78 | 29.92 | 32.44 | 30.19 | 26.96 | 32.21 | --- | --- |
| 3 | 27.57 | 27.98 | 25.51 | 23.04 | 26.41 | 31.36 | 31.67 | 26.06 | 27.57 | 29.10 | --- | --- |
| 4 | 27.11 | 29.34 | 23.85 | 24.01 | 26.31 | 30.99 | 30.53 | 24.49 | 27.97 | 27.16 | --- | --- |
| 5 | 26.64 | 29.50 | 23.43 | 24.48 | 27.31 | 31.10 | 31.30 | 25.90 | 26.89 | 29.30 | --- | --- |
| 6 | 27.58 | 28.54 | 23.04 | 25.31 | 28.32 | 30.68 | 32.06 | 29.66 | 27.16 | 33.53 | --- | --- |
| 7 | 27.42 | 27.69 | 23.10 | 25.11 | 28.67 | 31.27 | 31.17 | 29.80 | 29.50 | 35.45 | --- | --- |
| 8 | 26.90 | 27.54 | 23.37 | 25.82 | 29.70 | 31.48 | 30.83 | 28.72 | 29.65 | 37.10 | --- | --- |
| 9 | 26.45 | 28.29 | 23.43 | 25.69 | 30.60 | 31.63 | 30.59 | 25.84 | 30.10 | 37.29 | --- | --- |
| 10 | 26.11 | 27.99 | 23.30 | 25.74 | 30.87 | 31.27 | 30.36 | 24.72 | 29.65 | 36.41 | --- | --- |
| 11 | 26.01 | 26.72 | 23.18 | 26.70 | 29.91 | 32.14 | 30.90 | 24.64 | 29.65 | 36.55 | --- | --- |
| 12 | 26.75 | 26.08 | 23.04 | 26.75 | 30.21 | 32.33 | 31.07 | 26.38 | 27.44 | --- | --- | --- |
| 13 | 28.84 | 25.88 | 22.86 | 26.96 | 29.77 | 31.37 | 32.80 | 27.42 | 28.74 | --- | --- | --- |
| 14 | 33.25 | 25.97 | 23.69 | 27.75 | 29.17 | 31.74 | 33.20 | 25.70 | 30.05 | --- | --- | --- |
| 15 | 34.37 | 25.45 | 23.32 | 28.26 | 29.22 | 31.80 | 35.04 | 26.42 | 30.39 | --- | --- | --- |
| 16 | 33.63 | 27.39 | 22.99 | 27.68 | 28.90 | 32.16 | 34.84 | 26.92 | 31.27 | --- | --- | --- |
| 17 | 28.41 | 28.09 | 23.07 | 27.79 | 28.25 | 33.13 | 33.27 | 26.23 | 30.69 | --- | --- | --- |
| 18 | 27.81 | 29.34 | 23.14 | 27.42 | 28.39 | 32.59 | 30.83 | 26.30 | 30.34 | --- | --- | --- |
| 19 | 27.94 | 29.04 | 22.93 | 27.70 | 29.11 | 31.38 | 31.46 | 25.56 | 31.44 | --- | --- | --- |
| 20 | 28.78 | 25.55 | 22.66 | 28.52 | 28.20 | 30.78 | 31.24 | 23.97 | 32.95 | --- | --- | --- |
| 21 | 27.72 | 25.20 | 22.13 | 28.25 | 27.94 | 30.68 | 31.51 | 23.56 | 33.01 | --- | --- | --- |
| 22 | 28.46 | 24.58 | 22.56 | 27.63 | 27.68 | 32.28 | 31.55 | 25.78 | 33.45 | --- | --- | --- |
| 23 | 28.94 | 24.55 | 23.07 | 26.73 | 27.74 | 33.33 | 32.06 | 26.09 | 33.65 | --- | --- | --- |
| 24 | 30.73 | 24.62 | 22.99 | 25.90 | 27.46 | 33.21 | 31.82 | 23.40 | 33.44 | --- | --- | --- |
| 25 | 30.88 | 26.26 | 22.76 | 25.59 | 28.31 | 32.61 | 30.49 | 23.03 | 32.99 | --- | --- | --- |
| 26 | 31.76 | 26.81 | 22.69 | 26.12 | 28.60 | 32.33 | 30.01 | 22.03 | 32.61 | --- | --- | --- |
| 27 | 31.75 | 26.80 | 22.84 | 26.21 | 28.60 | 31.11 | 30.70 | 24.22 | 30.46 | --- | --- | --- |
| 28 | 29.48 | 25.11 | 23.00 | 26.29 | 28.22 | 31.94 | 32.05 | 25.64 | 31.79 | --- | --- | --- |
| 29 | 28.83 | 24.44 | 23.35 | 26.18 | 28.70 | 33.22 | 31.91 | 25.52 | 31.23 | --- | --- | --- |
| 30 | 29.62 | 27.30 | 23.14 | 26.26 | --- | 33.81 | 31.59 | 25.17 | 31.75 | --- | --- | --- |
| 31 | 30.11 | --- | 23.05 | 26.16 | --- | 32.93 | --- | 25.76 | --- | --- | --- | --- |
| MAX | 34.37 | 29.50 | 29.45 | 28.52 | 30.87 | 33.81 | 35.04 | 31.09 | 33.65 | 37.29 | --- | --- |

CAL YR 1987 LOW 34.39

WTR YR 1988 LOW 37.29



411604080505600 T-3
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

TUSCARAWAS COUNTY

403207081293800. Local number, TY-3.

LOCATION.--Lat 40°32'07", long 81°29'38", Hydrologic Unit 05040001, in the northwest part of Dover.

Owner: Dover City Water Department.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water table well, diameter 6 in., depth 62 ft, cased.

INSTRUMENTATION.--Monthly measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 880 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

PERIOD OF RECORD.--May 1960 to September 1982 continuous, periodic thereafter.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 19.35 ft below land-surface datum, Nov. 29-30, Dec. 6-8, 1962; minimum daily low, 3.20 ft below land-surface datum, July 15, 1969.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM
INSTANTANEOUS OBSERVATIONS

| DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL | DATE | WATER LEVEL |
|---------------|----------------|---------------|----------------|---------------|----------------|----------------|----------------|
| Oct. 30, 1987 | 11.80 | Jan. 29, 1988 | 12.25 | Apr. 29, 1988 | 9.95 | July 29, 1988 | 12.80 |
| Nov. 30, 1987 | 12.15 | Feb. 29, 1988 | 9.77 | May 31, 1988 | 11.35 | Aug. 31, 1988 | 13.11 |
| Dec. 30, 1987 | 12.03 | Mar. 31, 1988 | 9.85 | June 30, 1988 | 12.45 | Sept. 30, 1988 | 12.88 |

GROUND-WATER RECORDS

285

TUSCARAWAS COUNTY--Continued.

403557081313600. Local number, TU-4.

LOCATION.--Lat 40°35'57", long 81°31'36", Hydrologic Unit 05040001, near Fire Dept. building in Strasburg.

Owner: Strasburg Water Dept.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water table well, diameter 6 in., depth 42.5 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 920 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.50 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

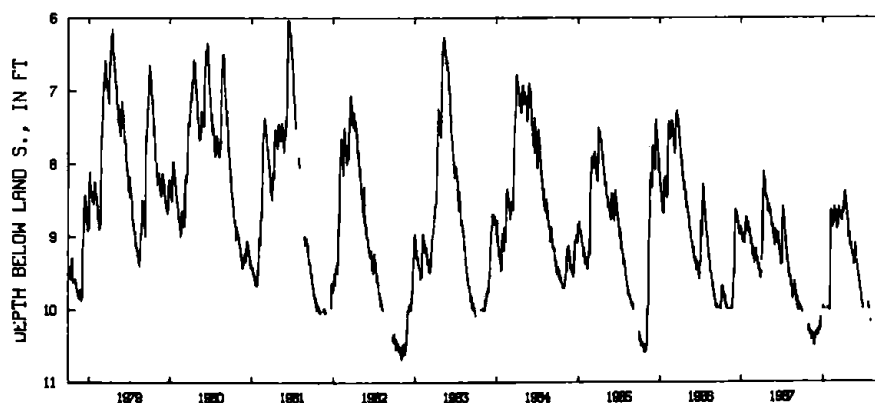
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 10.68 ft below land-surface datum, Nov. 3, 1982; minimum daily low, 4.05 ft below land-surface datum, July 13, 1969.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|------|------|------|------|-------|-------|-------|
| 1 | 10.04 | 10.24 | 10.37 | 9.97 | 10.01 | 8.80 | 8.62 | 8.96 | 9.34 | --- | 10.16 | 10.44 |
| 2 | --- | 10.28 | 10.36 | 9.97 | 9.90 | 8.78 | 8.68 | 9.05 | 9.37 | --- | 10.17 | 10.47 |
| 3 | --- | 10.34 | 10.36 | 9.96 | 9.17 | 8.81 | 8.66 | 9.13 | 9.40 | --- | --- | 10.45 |
| 4 | --- | 10.30 | 10.35 | 10.00 | 9.02 | 8.83 | 8.60 | 9.10 | 9.43 | --- | --- | 10.29 |
| 5 | --- | 10.30 | 10.30 | 10.00 | 8.84 | 8.90 | 8.50 | 9.11 | 9.41 | --- | --- | 10.18 |
| 6 | --- | 10.31 | 10.36 | 10.00 | 8.68 | 8.82 | 8.42 | 9.12 | 9.46 | --- | --- | 10.18 |
| 7 | --- | 10.31 | 10.30 | 10.00 | 8.64 | 8.87 | 8.45 | 9.12 | 9.50 | --- | --- | 10.15 |
| 8 | --- | 10.32 | 10.30 | 10.00 | 8.66 | 8.84 | 8.43 | 9.10 | 9.52 | --- | --- | 10.10 |
| 9 | --- | 10.34 | 10.30 | 10.00 | 8.69 | 8.76 | 8.41 | 9.17 | 9.56 | --- | --- | --- |
| 10 | --- | 10.41 | 10.32 | --- | 8.73 | 8.70 | 8.38 | 9.20 | 9.56 | --- | --- | --- |
| 11 | --- | 10.34 | 10.29 | --- | 8.76 | 8.74 | 8.46 | 9.20 | 9.57 | --- | --- | --- |
| 12 | --- | 10.35 | 10.35 | --- | 8.75 | 8.68 | 8.48 | 9.23 | 9.56 | --- | --- | --- |
| 13 | --- | 10.36 | 10.25 | --- | 8.88 | 8.60 | 8.52 | 9.25 | 9.65 | --- | --- | --- |
| 14 | --- | 10.36 | 10.29 | --- | 8.80 | 8.66 | 8.53 | 9.24 | 9.69 | --- | --- | --- |
| 15 | --- | 10.32 | 10.30 | --- | 8.77 | 8.67 | 8.56 | 9.23 | 9.70 | --- | --- | --- |
| 16 | --- | 10.39 | 10.27 | --- | 8.83 | 8.68 | 8.64 | 9.29 | 9.72 | --- | --- | --- |
| 17 | --- | 10.40 | 10.25 | --- | 8.79 | 8.70 | 8.56 | 9.32 | 9.73 | --- | --- | --- |
| 18 | --- | 10.35 | 10.25 | --- | 8.83 | 8.70 | 8.65 | 9.33 | 9.74 | --- | --- | --- |
| 19 | --- | 10.40 | 10.29 | --- | 8.77 | 8.69 | 8.70 | 9.39 | 9.74 | --- | --- | --- |
| 20 | --- | 10.41 | 10.20 | --- | 8.70 | 8.67 | 8.71 | 9.27 | 9.80 | --- | --- | --- |
| 21 | --- | 10.49 | 10.17 | 10.00 | 8.59 | 8.76 | 8.79 | 9.30 | 9.82 | --- | --- | --- |
| 22 | --- | 10.41 | 10.16 | 9.98 | 8.63 | 8.77 | 8.77 | 9.28 | 9.85 | --- | --- | --- |
| 23 | --- | 10.44 | 10.12 | 9.98 | 8.68 | 8.77 | 8.77 | 9.35 | 9.90 | 9.92 | --- | --- |
| 24 | --- | 10.50 | --- | 9.98 | 8.63 | 8.78 | 8.77 | 9.36 | 9.90 | 9.99 | --- | --- |
| 25 | --- | 10.45 | --- | 10.00 | 8.63 | 8.79 | 8.86 | 9.10 | 9.90 | 10.00 | --- | --- |
| 26 | --- | 10.37 | --- | 10.00 | 8.65 | 8.71 | 9.02 | 9.15 | 9.93 | 9.99 | --- | --- |
| 27 | --- | --- | --- | 10.00 | 8.66 | 8.70 | 9.00 | 9.15 | 9.96 | 9.99 | --- | --- |
| 28 | --- | --- | --- | 10.00 | 8.65 | 8.70 | 8.96 | 9.21 | 9.99 | --- | --- | --- |
| 29 | 10.23 | --- | --- | 10.00 | 8.73 | 8.67 | 8.97 | 9.18 | 9.99 | --- | --- | --- |
| 30 | 10.31 | 10.32 | 9.99 | 10.01 | --- | 8.69 | 8.98 | 9.28 | 9.99 | --- | --- | 10.48 |
| 31 | 10.31 | --- | 10.00 | 10.01 | --- | 8.66 | --- | --- | --- | --- | 10.40 | --- |
| MAX | 10.31 | 10.50 | 10.37 | 10.01 | 10.01 | 8.90 | 9.02 | 9.39 | 9.99 | 10.00 | 10.40 | 10.48 |

CAL YR 1987 LOW 10.50

WTR YR 1988 LOW 10.50



— 403557081313600 TU-4
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS
TUSCARAWAS COUNTY--Continued

403653081321800. Local number, TU-1.

LOCATION.--Lat 40°36'53", long 81°32'18", Hydrologic Unit 05040001, 1.3 mi north of Strasburg.

Owner: Ray Libert.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water table well, diameter 4 in., depth 23 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 928.24 ft above National Geodetic Vertical Datum of 1929. Measuring point: Floor of instrument shelter 0.90 ft above land-surface datum.

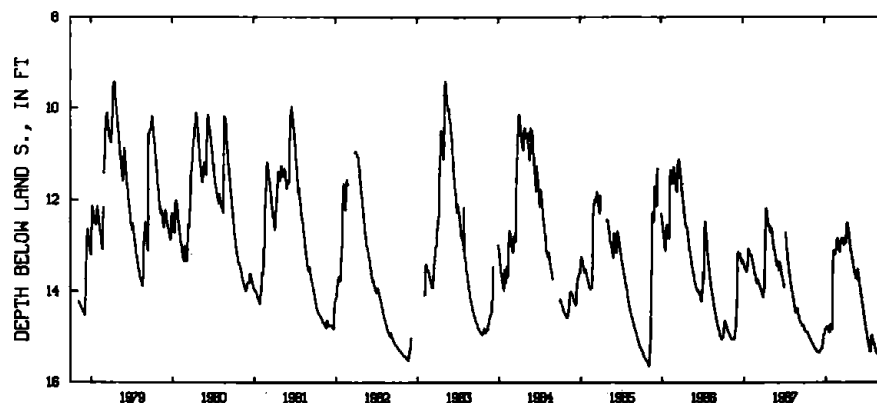
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 15.64 ft below land-surface datum, Nov. 3, 1985; minimum daily low, 6.64 ft below land-surface datum, July 14, 1969.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 14.87 | 15.12 | 15.34 | 14.83 | 14.84 | 13.01 | 12.91 | 13.27 | 13.79 | 14.82 | 15.10 | 15.45 |
| 2 | 14.86 | 15.13 | 15.34 | 14.83 | 14.77 | 13.04 | 12.94 | 13.30 | 13.82 | 14.85 | 15.13 | 15.45 |
| 3 | 14.86 | 15.14 | 15.34 | 14.82 | 14.25 | 13.06 | 12.95 | 13.34 | 13.85 | 14.88 | 15.12 | 15.47 |
| 4 | 14.88 | 15.15 | 15.34 | 14.82 | 13.90 | 13.12 | 12.89 | 13.37 | 13.88 | 14.92 | 15.13 | 15.45 |
| 5 | 14.89 | 15.16 | 15.33 | 14.82 | 13.62 | 13.13 | 12.76 | 13.41 | 13.91 | 14.95 | 15.15 | 15.33 |
| 6 | 14.89 | 15.16 | 15.32 | 14.80 | 13.41 | 13.13 | 12.61 | 13.43 | 13.95 | 14.98 | 15.16 | 15.25 |
| 7 | 14.89 | 15.17 | 15.31 | 14.78 | 13.22 | 13.15 | 12.55 | 13.45 | 13.99 | 15.01 | 15.18 | 15.21 |
| 8 | 14.89 | 15.19 | 15.30 | 14.77 | 13.12 | 13.15 | 12.54 | 13.48 | 14.02 | 15.05 | 15.19 | 15.19 |
| 9 | 14.89 | 15.19 | 15.30 | 14.77 | 13.12 | 13.04 | 12.52 | 13.50 | 14.05 | 15.07 | 15.21 | 15.19 |
| 10 | 14.89 | 15.20 | 15.29 | 14.77 | 13.14 | 12.98 | 12.50 | 13.52 | 14.10 | 15.11 | 15.23 | 15.19 |
| 11 | 14.89 | 15.21 | 15.29 | 14.78 | 13.14 | 12.95 | 12.50 | 13.55 | 14.12 | 15.13 | 15.25 | 15.20 |
| 12 | 14.89 | 15.22 | 15.27 | 14.79 | 13.16 | 12.89 | 12.54 | 13.56 | 14.17 | 15.17 | 15.27 | 15.20 |
| 13 | 14.92 | 15.23 | 15.26 | 14.80 | 13.20 | 12.86 | 12.57 | 13.60 | 14.22 | 15.19 | 15.29 | 15.20 |
| 14 | 14.93 | 15.25 | 15.26 | 14.82 | 13.20 | 12.85 | 12.63 | 13.62 | 14.25 | 15.22 | 15.31 | 15.20 |
| 15 | 14.94 | 15.25 | 15.26 | 14.84 | 13.20 | 12.85 | 12.68 | 13.64 | 14.28 | 15.25 | 15.33 | 15.20 |
| 16 | 14.95 | 15.26 | 15.23 | 14.85 | 13.18 | 12.85 | 12.73 | 13.67 | 14.30 | 15.27 | 15.35 | 15.20 |
| 17 | 14.96 | 15.26 | 15.21 | 14.88 | 13.13 | 12.87 | 12.74 | 13.70 | 14.34 | 15.30 | 15.36 | 15.20 |
| 18 | 14.97 | 15.27 | 15.19 | 14.90 | 13.11 | 12.85 | 12.81 | 13.72 | 14.37 | 15.32 | 15.37 | 15.21 |
| 19 | 14.98 | 15.27 | 15.16 | 14.90 | 13.09 | 12.84 | 12.86 | 13.72 | 14.41 | 15.32 | 15.37 | 15.25 |
| 20 | 15.00 | 15.28 | 15.14 | 14.90 | 13.05 | 12.90 | 12.88 | 13.72 | 14.44 | 15.32 | 15.38 | 15.26 |
| 21 | 15.00 | 15.29 | 15.12 | 14.84 | 13.00 | 12.93 | 12.94 | 13.72 | 14.48 | 15.32 | 15.38 | 15.28 |
| 22 | 15.01 | 15.30 | 15.05 | 14.77 | 12.92 | 12.95 | 12.97 | 13.73 | 14.50 | 15.26 | 15.38 | 15.29 |
| 23 | 15.03 | 15.31 | 14.99 | 14.74 | 12.88 | 12.95 | 13.01 | 13.74 | 14.55 | 15.24 | 15.39 | 15.30 |
| 24 | 15.04 | 15.32 | 14.97 | 14.74 | 12.88 | 12.97 | 13.05 | 13.74 | 14.57 | 14.99 | 15.40 | 15.31 |
| 25 | 15.05 | 15.32 | 14.95 | 14.75 | 12.85 | 12.99 | 13.08 | 13.55 | 14.61 | 14.97 | 15.40 | 15.32 |
| 26 | 15.05 | 15.32 | 14.94 | 14.77 | 12.86 | 12.99 | 13.11 | 13.53 | 14.65 | 14.97 | 15.41 | 15.33 |
| 27 | 15.05 | 15.32 | 14.93 | 14.80 | 12.92 | 12.94 | 13.16 | 13.53 | 14.69 | 14.96 | 15.42 | 15.35 |
| 28 | 15.07 | 15.32 | 14.92 | 14.81 | 12.92 | 12.88 | 13.18 | 13.57 | 14.72 | 14.99 | 15.43 | 15.36 |
| 29 | 15.10 | 15.32 | 14.90 | 14.82 | 12.99 | 12.83 | 13.21 | 13.63 | 14.76 | 15.01 | 15.43 | 15.38 |
| 30 | 15.10 | 15.34 | 14.88 | 14.83 | --- | 12.86 | 13.24 | 13.67 | 14.79 | 15.04 | 15.43 | 15.42 |
| 31 | 15.12 | --- | 14.84 | 14.84 | --- | 12.87 | --- | 13.71 | --- | 15.06 | 15.45 | --- |
| MAX | 15.12 | 15.34 | 15.34 | 14.90 | 14.84 | 13.15 | 13.24 | 13.74 | 14.79 | 15.32 | 15.45 | 15.47 |
| CAL YR 1987 | LOW 15.34 | | | | | | | | | | | |
| WTR YR 1988 | LOW 15.47 | | | | | | | | | | | |



403653081321800 TU-1
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

287

TUSCARAWAS COUNTY--Continued

403823081324200. Local number, TU-5.

LOCATION.--Lat 40°38'23", long 81°32'42", Hydrologic Unit 05040001, Sugar Creek well field near Strasburg.

Owner: Canton Water Dept.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused water table well, diameter 6 in., depth 100 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 937.93 ft above National Geodetic Vertical Datum of 1929. Measuring point: Floor of instrument shelter 4.00 ft above land-surface datum.

REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

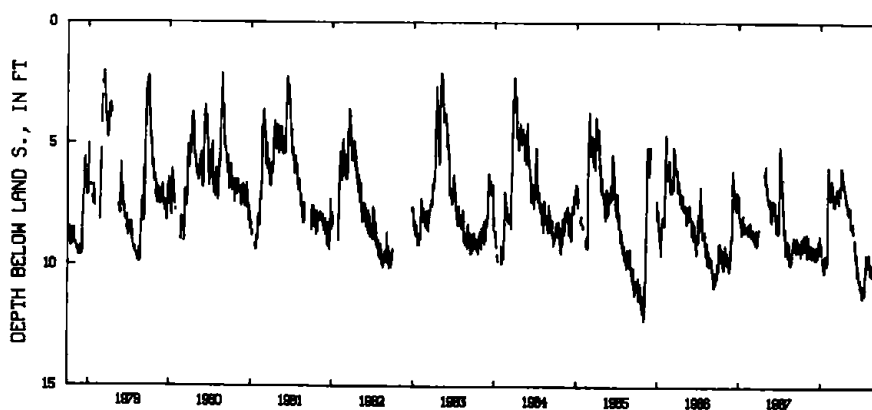
EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 12.68 ft below land-surface datum, Feb. 14, 24, 1977; minimum daily low, 1.05 ft below land-surface datum, July 9, 1969.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|------|------|------|-------|------|------|------|------|-------|-------|-------|-------|
| 1 | 9.43 | 8.73 | 9.30 | 9.00 | 9.76 | 7.38 | 7.11 | 7.35 | 9.21 | 10.90 | 9.94 | 10.25 |
| 2 | 9.22 | 8.71 | 9.46 | 9.00 | 9.87 | 7.49 | 6.66 | 7.55 | 9.26 | 10.90 | 9.94 | 10.40 |
| 3 | 9.22 | 9.30 | 9.39 | 9.23 | 9.07 | 7.53 | 6.46 | 7.52 | 9.07 | 11.00 | 9.79 | 10.30 |
| 4 | 9.31 | 9.50 | 9.59 | 9.07 | 8.05 | 7.34 | 6.46 | 7.71 | 9.03 | 10.96 | 9.93 | 9.77 |
| 5 | 9.37 | 9.65 | 9.50 | 9.29 | 6.82 | 7.10 | 6.27 | 7.82 | 8.90 | 10.87 | 10.03 | 9.38 |
| 6 | 9.61 | 9.45 | 9.30 | 9.55 | 6.38 | 7.12 | 5.95 | 7.83 | 9.29 | 11.15 | 10.03 | 9.32 |
| 7 | 9.53 | 8.97 | 9.39 | --- | 5.93 | 7.40 | 5.95 | 7.81 | 9.59 | 11.28 | 9.51 | 9.30 |
| 8 | 9.44 | 8.88 | 9.25 | --- | 6.11 | 7.53 | 6.16 | 7.59 | 9.67 | 11.30 | 9.72 | 9.42 |
| 9 | 9.15 | 8.79 | 9.75 | --- | 6.40 | 7.20 | 6.05 | 7.55 | 9.58 | 11.26 | 9.93 | 9.26 |
| 10 | 9.15 | 8.83 | 9.63 | --- | 6.72 | 7.20 | 6.24 | 7.89 | 9.64 | 11.00 | 10.08 | 9.44 |
| 11 | 8.91 | 9.60 | 9.70 | --- | 6.87 | 7.20 | 6.33 | 7.79 | 9.49 | 10.80 | 10.17 | 9.44 |
| 12 | 8.93 | 9.10 | 9.23 | 9.67 | 6.72 | 7.06 | 6.45 | 7.88 | 9.81 | 10.97 | 10.25 | 9.62 |
| 13 | 9.09 | 9.52 | 9.30 | 9.86 | 7.01 | --- | 6.68 | 7.88 | 9.88 | 10.99 | 10.25 | 9.61 |
| 14 | 9.09 | 9.52 | 9.35 | 9.92 | 7.07 | --- | 6.73 | 7.83 | 10.15 | 11.08 | 10.27 | 9.35 |
| 15 | 9.41 | 9.52 | 9.29 | 9.87 | 7.20 | --- | 6.83 | 7.60 | 10.40 | 11.02 | 10.36 | 9.65 |
| 16 | 9.42 | 9.45 | 9.40 | 10.13 | 7.29 | 6.83 | 6.62 | 8.25 | 10.31 | 11.19 | 10.18 | 9.67 |
| 17 | 9.31 | 9.50 | 9.57 | 9.94 | 7.09 | 7.20 | 6.63 | 8.41 | 9.95 | 11.16 | 10.33 | 9.61 |
| 18 | 8.94 | 9.62 | 9.72 | 10.28 | 7.09 | 7.26 | 6.64 | 8.32 | 10.07 | 11.13 | 10.10 | 9.60 |
| 19 | 8.86 | 9.37 | 9.29 | 10.28 | 7.18 | 6.83 | 6.77 | 8.38 | 10.27 | 11.05 | 10.40 | 9.81 |
| 20 | 8.90 | 9.40 | 9.26 | 10.28 | 7.07 | 7.12 | 6.85 | 8.42 | 10.22 | 10.62 | 10.40 | 10.02 |
| 21 | 8.76 | 9.33 | 9.38 | 10.09 | 6.68 | 7.18 | 6.95 | 8.27 | 10.50 | 10.40 | 10.17 | 10.07 |
| 22 | 9.15 | 9.36 | 9.20 | 9.68 | 6.49 | 7.25 | 6.95 | 8.28 | 10.57 | 10.40 | 10.16 | 10.07 |
| 23 | 9.37 | 9.16 | 9.57 | 9.57 | 6.56 | 7.42 | 7.12 | 8.27 | 10.57 | 10.21 | 9.97 | 10.16 |
| 24 | 9.24 | 9.32 | 9.33 | 9.57 | 6.81 | 7.29 | 6.98 | 8.45 | 10.66 | 9.57 | 10.16 | 10.14 |
| 25 | 8.96 | 9.59 | 9.23 | 9.72 | 7.02 | 7.25 | 6.99 | 8.51 | 10.66 | 9.54 | 9.90 | 10.09 |
| 26 | 9.09 | 9.68 | 9.15 | 9.86 | 7.14 | 7.24 | 7.18 | 8.26 | 10.53 | 9.60 | 10.00 | 10.14 |
| 27 | 8.88 | 9.53 | 9.00 | 9.89 | 7.13 | --- | 7.46 | 8.58 | 10.75 | 9.68 | 10.06 | 10.10 |
| 28 | 8.96 | 9.27 | 9.04 | 9.88 | 6.98 | 6.76 | 7.39 | 8.50 | 10.88 | 9.68 | 10.14 | 10.25 |
| 29 | 8.99 | 9.33 | 9.04 | 9.89 | 7.38 | 6.83 | 7.40 | 8.64 | 10.70 | 9.73 | 9.88 | 10.33 |
| 30 | 8.88 | 9.21 | 8.77 | 9.89 | --- | 6.98 | 7.43 | --- | 10.86 | 9.73 | 10.14 | 10.50 |
| 31 | 8.72 | --- | 8.77 | 9.99 | --- | 7.11 | --- | --- | --- | 9.57 | 10.29 | --- |
| MAX | 9.61 | 9.68 | 9.75 | 10.28 | 9.87 | 7.53 | 7.46 | 8.64 | 10.88 | 11.30 | 10.40 | 10.50 |

CAL YR 1987 LOW 9.97

WTR YR 1988 LOW 11.30



403823081324200 TU-5
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

UNION COUNTY

401826083255200. Local number, U-4.

LOCATION.--Lat 40°18'26", long 83°25'52", Hydrologic Unit 05060001, 2.6 mi southeast of Raymond.

Owner: State of Ohio.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled test artesian well, diameter 12 in., depth 350 ft, cased to 37 ft.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

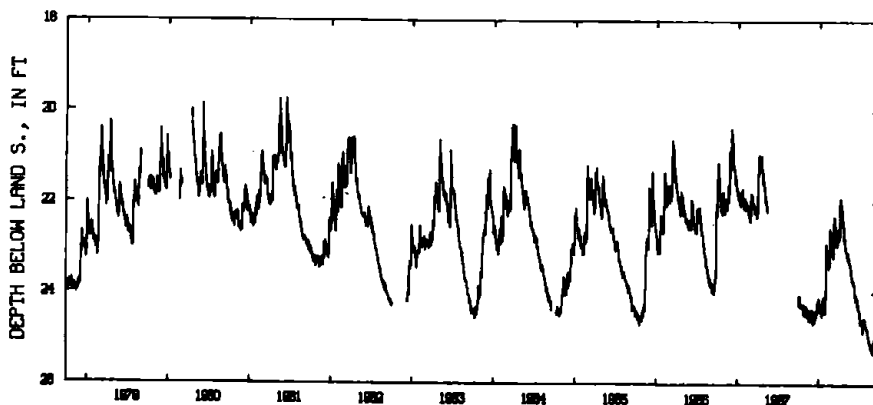
DATUM.--Elevation of land-surface datum is 1,040 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

PERIOD OF RECORD.--January 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 25.37 ft below land-surface datum, Sept. 29, 1988; minimum daily low, 19.32 ft below land-surface datum, Feb. 24, 1975.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 24.09 | 24.45 | 24.39 | 24.28 | 24.02 | 23.10 | 22.79 | 23.10 | 23.70 | 24.40 | 24.74 | 25.31 |
| 2 | 24.12 | 24.43 | 24.49 | 24.29 | 23.25 | 23.07 | 22.80 | 23.10 | 23.75 | 24.53 | 24.75 | 25.30 |
| 3 | 24.27 | 24.34 | 24.48 | 24.21 | 22.92 | 23.11 | 22.71 | 23.07 | 23.74 | 24.48 | 24.78 | 25.18 |
| 4 | 24.27 | 24.27 | 24.54 | 24.26 | 22.99 | 23.16 | 22.14 | 23.09 | 23.81 | 24.58 | 24.77 | 25.02 |
| 5 | 24.12 | 24.47 | 24.58 | 24.33 | 23.09 | 23.22 | 22.12 | 23.10 | 23.79 | 24.63 | 24.78 | 25.14 |
| 6 | 24.06 | 24.48 | 24.64 | 24.36 | 23.15 | 23.15 | 22.02 | 23.13 | 23.79 | 24.66 | 24.78 | 25.21 |
| 7 | 24.17 | 24.44 | 24.66 | 24.40 | 23.14 | 23.10 | 21.91 | 23.21 | 23.79 | 24.63 | 24.84 | 25.24 |
| 8 | 24.24 | 24.40 | 24.56 | 24.25 | 23.21 | 22.83 | 21.95 | 23.18 | 23.82 | 24.61 | 24.87 | 25.21 |
| 9 | 24.27 | 24.46 | 24.44 | 24.32 | 23.26 | 22.31 | 22.03 | 23.10 | 23.94 | 24.61 | 24.90 | 25.22 |
| 10 | 24.30 | 24.49 | 24.49 | 24.38 | 23.35 | 22.36 | 22.03 | 23.17 | 24.04 | 24.61 | 24.92 | 25.33 |
| 11 | 24.28 | 24.46 | 24.40 | 24.35 | 23.31 | 22.42 | 22.05 | 23.27 | 24.03 | 24.60 | 24.98 | 25.32 |
| 12 | 24.24 | 24.40 | 24.42 | 24.26 | 23.34 | 22.33 | 22.11 | 23.28 | 24.06 | 24.64 | 24.97 | 25.30 |
| 13 | 24.27 | 24.34 | 24.63 | 24.44 | 23.45 | 22.46 | 22.17 | 23.21 | 24.14 | 24.68 | 25.00 | 25.19 |
| 14 | 24.30 | 24.49 | 24.62 | 24.49 | 23.44 | 22.51 | 22.28 | 23.29 | 24.15 | 24.67 | 25.00 | 25.23 |
| 15 | 24.30 | 24.55 | 24.42 | 24.40 | 23.38 | 22.68 | 22.37 | 23.24 | 24.16 | 24.71 | 25.03 | 25.31 |
| 16 | 24.28 | 24.52 | 24.45 | 24.34 | 23.39 | 22.79 | 22.44 | 23.24 | 24.10 | 24.79 | 25.07 | 25.28 |
| 17 | 24.25 | 24.40 | 24.54 | 24.34 | 23.41 | 22.82 | 22.42 | 23.33 | 24.04 | 24.86 | 25.10 | 25.21 |
| 18 | 24.30 | 24.59 | 24.52 | 24.44 | 23.36 | 22.76 | 22.39 | 23.35 | 24.14 | 24.80 | 25.11 | 25.20 |
| 19 | 24.25 | 24.59 | 24.42 | 24.44 | 23.12 | 22.70 | 22.49 | 23.34 | 24.11 | 24.72 | 25.12 | 25.15 |
| 20 | 24.29 | 24.49 | 24.41 | 24.11 | 22.58 | 22.83 | 22.54 | 23.36 | 24.12 | 24.72 | 25.10 | 25.20 |
| 21 | 24.37 | 24.56 | 24.42 | 24.17 | 22.75 | 22.94 | 22.64 | 23.44 | 24.11 | 24.54 | 25.15 | 25.27 |
| 22 | 24.38 | 24.56 | 24.37 | 24.20 | 22.66 | 22.96 | 22.63 | 23.49 | 24.12 | 24.56 | 25.21 | 25.23 |
| 23 | 24.36 | 24.52 | 24.44 | 24.09 | 22.64 | 22.86 | 22.61 | 23.44 | 24.27 | 24.55 | 25.12 | 25.22 |
| 24 | 24.44 | 24.60 | 24.42 | 24.20 | 22.73 | 22.91 | 22.79 | 23.46 | 24.31 | 24.60 | 25.12 | 25.27 |
| 25 | 24.47 | 24.53 | 24.35 | 24.20 | 22.82 | 22.82 | 22.89 | 23.54 | 24.24 | 24.57 | 25.12 | 25.34 |
| 26 | 24.38 | 24.59 | 24.30 | 24.33 | 22.81 | 22.59 | 22.81 | 23.65 | 24.30 | 24.58 | 25.22 | 25.36 |
| 27 | 24.27 | 24.54 | 24.28 | 24.43 | 22.96 | 22.71 | 22.80 | 23.64 | 24.35 | 24.65 | 25.22 | 25.36 |
| 28 | 24.32 | 24.46 | 24.18 | 24.44 | 22.95 | 22.76 | 22.90 | 23.72 | 24.34 | 24.70 | 25.27 | 25.34 |
| 29 | 24.35 | 24.35 | 24.29 | 24.38 | 23.07 | 22.66 | 22.92 | 23.68 | 24.36 | 24.72 | 25.27 | 25.37 |
| 30 | 24.34 | 24.35 | 24.23 | 24.28 | --- | 22.83 | 23.02 | 23.72 | 24.35 | 24.70 | 25.27 | 25.36 |
| 31 | 24.49 | --- | 24.12 | 24.26 | --- | 22.83 | --- | 23.75 | --- | 24.70 | 25.31 | --- |
| MAX | 24.49 | 24.60 | 24.66 | 24.49 | 24.02 | 23.22 | 23.02 | 23.75 | 24.36 | 24.86 | 25.31 | 25.37 |

CAL YR 1987 LOW 24.66
WTR YR 1988 LOW 25.37

— 401826083255200 U-4
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

VINTON COUNTY

391452082282900. Local number, V-1.

LOCATION.--Lat 39°14'52", long 82°28'29", Hydrologic Unit 05090101, State Highway garage in McArthur.

Owner: Vinton County School Board.

AQUIFER.--Sandstone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in., depth 218 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 730 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring Point: Top of platform 2.50 ft below land-surface datum.

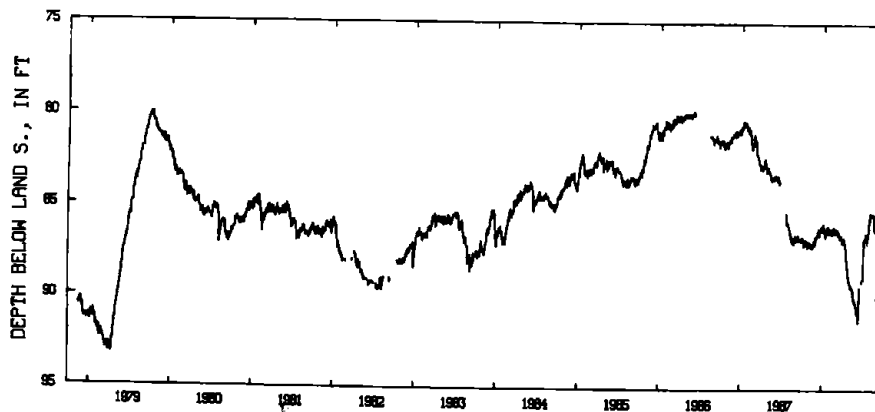
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--September 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 93.23 ft below land-surface datum, Apr. 12, 1979; minimum daily low, 49.55 ft below land-surface datum, Mar. 20, 1963.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 86.73 | 87.11 | 86.57 | 86.10 | 86.35 | 86.43 | 86.94 | 89.07 | 90.48 | 88.88 | 85.28 | 86.48 |
| 2 | 86.66 | 87.05 | 86.71 | 86.15 | 86.33 | 86.38 | 86.90 | 89.15 | 90.60 | 88.27 | 85.33 | 86.49 |
| 3 | 86.87 | 87.00 | 86.69 | 86.11 | 86.41 | 86.33 | 86.88 | 89.22 | 90.72 | 87.25 | 85.42 | 86.40 |
| 4 | 86.86 | 86.91 | 86.54 | 85.88 | 86.17 | 86.16 | 86.85 | 89.29 | 90.73 | 86.91 | 85.43 | 86.17 |
| 5 | 86.80 | 87.04 | 86.62 | 86.03 | 86.26 | 86.17 | 86.76 | 89.20 | 90.74 | 86.74 | 85.36 | 86.09 |
| 6 | 86.66 | 87.14 | 86.65 | 86.23 | 86.39 | 86.19 | 86.69 | 89.38 | 90.87 | 86.85 | 85.34 | 86.27 |
| 7 | 86.75 | 87.14 | 86.57 | 86.36 | 86.45 | 86.27 | 86.75 | 89.30 | 90.75 | 86.79 | 85.36 | 86.42 |
| 8 | 87.12 | 87.12 | 86.53 | 86.26 | 86.40 | 86.42 | 86.93 | 89.27 | 90.86 | 86.72 | 85.36 | 86.45 |
| 9 | 87.09 | 87.03 | 86.42 | 86.22 | 86.35 | 86.40 | 86.93 | 89.31 | 90.95 | 86.72 | 85.34 | 86.40 |
| 10 | 87.06 | 87.11 | 86.47 | 86.27 | 86.39 | 86.43 | 86.94 | 89.33 | 91.21 | 86.78 | 85.34 | 86.46 |
| 11 | 87.03 | 87.08 | 86.33 | 86.28 | 86.47 | 86.50 | 86.97 | 89.43 | 91.29 | 86.62 | 85.35 | 86.50 |
| 12 | 86.94 | 87.09 | 86.27 | 86.26 | 86.21 | 86.29 | 87.12 | 89.46 | 91.03 | 86.44 | 85.43 | 86.48 |
| 13 | 86.96 | 87.01 | 86.38 | 86.44 | 86.25 | 86.39 | 87.22 | 89.39 | 90.20 | 86.44 | 85.45 | 86.33 |
| 14 | 86.93 | 87.18 | 86.41 | 86.63 | 86.29 | 86.39 | 87.31 | 89.48 | 89.62 | 86.45 | 85.46 | 86.39 |
| 15 | 87.05 | 87.22 | 86.15 | 86.53 | 86.16 | 86.52 | 87.53 | 89.44 | 89.39 | 86.56 | 85.39 | 86.44 |
| 16 | 86.92 | 87.12 | 86.28 | 86.41 | 86.29 | 86.55 | 87.74 | 89.63 | --- | 86.74 | 85.37 | 86.44 |
| 17 | 86.81 | 87.04 | 86.49 | 86.44 | 86.41 | 86.70 | 87.80 | 89.81 | --- | 86.84 | 85.46 | 86.40 |
| 18 | 86.78 | 87.09 | 86.55 | 86.37 | 86.44 | 86.67 | 87.89 | 89.75 | --- | 86.87 | 85.68 | 86.38 |
| 19 | 86.79 | 87.14 | 86.51 | 86.45 | 86.32 | 86.54 | 88.15 | 89.80 | --- | 86.84 | 85.98 | 86.29 |
| 20 | 86.80 | 86.91 | 86.33 | 86.10 | 86.08 | 86.54 | 88.12 | 89.91 | --- | 86.83 | 86.06 | 86.33 |
| 21 | 87.01 | 86.90 | 86.30 | 86.20 | 86.22 | 86.69 | 88.40 | 90.09 | --- | 86.61 | 86.19 | 86.44 |
| 22 | 87.09 | 86.95 | 86.24 | 86.21 | 86.12 | 86.73 | 88.38 | 90.06 | --- | 86.53 | 86.28 | 86.45 |
| 23 | 87.10 | 86.82 | 86.21 | 86.13 | 86.20 | 86.64 | 88.44 | 90.09 | 89.05 | 86.52 | 86.27 | 86.44 |
| 24 | 87.12 | 86.98 | 86.20 | 86.02 | 86.30 | 86.53 | 88.77 | 90.12 | 89.07 | 86.40 | 86.21 | 86.52 |
| 25 | 87.18 | 86.99 | 86.15 | 86.03 | 86.31 | 86.68 | 88.80 | 90.09 | 89.10 | 86.21 | 86.21 | 86.63 |
| 26 | 87.00 | 87.04 | 86.10 | 86.19 | 86.33 | 86.66 | 88.75 | 90.25 | --- | 85.97 | 86.27 | 86.67 |
| 27 | 86.86 | 87.00 | 86.13 | 86.29 | 86.28 | 86.73 | 88.86 | 90.19 | --- | 85.86 | 86.33 | 86.66 |
| 28 | 86.99 | 86.94 | 86.04 | 86.40 | 86.34 | 86.80 | 88.97 | 90.25 | 88.96 | 85.80 | 86.45 | 86.60 |
| 29 | 87.02 | 86.73 | 86.27 | 86.33 | 86.35 | 86.80 | 89.03 | 90.31 | 88.89 | 85.71 | 86.44 | 86.60 |
| 30 | 86.98 | 86.63 | 86.28 | 86.29 | --- | 86.92 | 89.07 | 90.42 | 88.95 | 85.53 | 86.45 | 86.63 |
| 31 | 87.13 | --- | 85.99 | 86.37 | --- | 86.97 | --- | 90.38 | --- | 85.38 | 86.43 | --- |
| MAX | 87.18 | 87.22 | 86.71 | 86.63 | 86.47 | 86.97 | 89.07 | 90.42 | 91.29 | 88.88 | 86.45 | 86.67 |

CAL YR 1987 LOW 87.22
WTR YR 1988 LOW 91.29391452082282900 V-1
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

WARREN COUNTY

392712084191700. Local number, W-5.

LOCATION.--Lat 39°27'12", long 84°19'17", Hydrologic Unit 05080002, Union Rd., 2 mi east of Monroe.

Owner: Bob Proeschel.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in., depth 121 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 660 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.50 ft above land-surface datum.

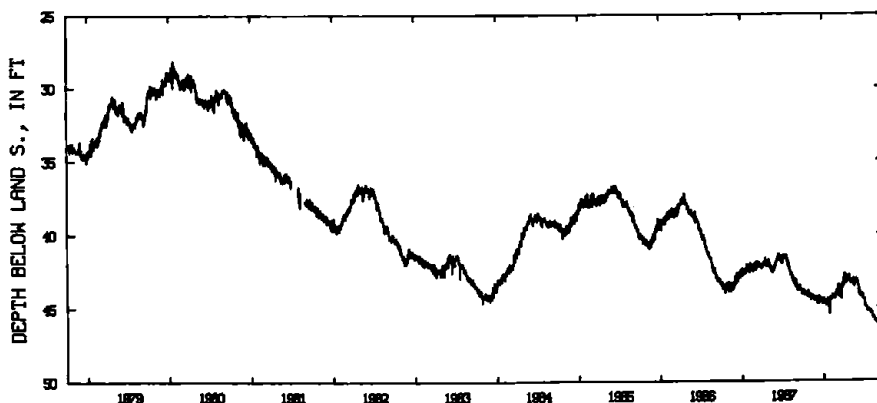
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--March 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 47.00 ft below land-surface datum, Sept. 10, 1988; minimum daily low, 17.70 ft below land-surface datum, Apr. 30, 1975.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 44.00 | 44.30 | 44.50 | 44.80 | 44.35 | 44.20 | 43.20 | 43.35 | 43.25 | 44.50 | 45.40 | 46.20 |
| 2 | 44.10 | 44.30 | 44.60 | 44.65 | 44.45 | 43.95 | 43.00 | 43.40 | 43.30 | 44.45 | 45.45 | 46.15 |
| 3 | 44.15 | 44.25 | 44.40 | 44.40 | 44.35 | 43.85 | 42.95 | 43.30 | 43.45 | 44.50 | 45.45 | 46.00 |
| 4 | 44.05 | 44.15 | 44.75 | 44.65 | 44.40 | 44.00 | 43.25 | 43.20 | 43.50 | 44.75 | 45.40 | 46.00 |
| 5 | 43.85 | 44.50 | 44.70 | 44.70 | 44.50 | 44.00 | 43.15 | 43.20 | 43.55 | 44.80 | 45.40 | 46.30 |
| 6 | 43.85 | 44.40 | 44.70 | 44.70 | 44.50 | 43.80 | 42.75 | 43.30 | 43.55 | 44.95 | 45.45 | 46.35 |
| 7 | 44.10 | 44.35 | 44.65 | 44.55 | 44.30 | 44.15 | 43.10 | 43.35 | 43.65 | 45.00 | 45.50 | 46.35 |
| 8 | 44.20 | 44.25 | 44.55 | 44.55 | 44.40 | 43.90 | 43.35 | 43.35 | 43.80 | 44.95 | 45.50 | 46.35 |
| 9 | 44.15 | 44.35 | 44.45 | 44.65 | 44.35 | 43.50 | 43.35 | 43.35 | 44.00 | 45.00 | 45.55 | 46.50 |
| 10 | 44.05 | 44.40 | 44.45 | 44.75 | 44.35 | 43.90 | 43.10 | 43.25 | 44.20 | 45.00 | 45.75 | 47.00 |
| 11 | 44.10 | 44.35 | 44.25 | 44.60 | 44.15 | 44.30 | 43.10 | 43.40 | 43.95 | 45.00 | 45.75 | 46.65 |
| 12 | 44.05 | 44.25 | 44.55 | 44.55 | 44.25 | 43.80 | 43.40 | 43.40 | 44.05 | 45.00 | 45.80 | 46.55 |
| 13 | 44.15 | 44.20 | 44.75 | 44.90 | 44.35 | 44.00 | 43.15 | 43.35 | 44.15 | 45.05 | 45.75 | 46.45 |
| 14 | 44.15 | 44.40 | 44.60 | 44.85 | 44.25 | 43.95 | 43.10 | 43.25 | 44.20 | 45.15 | 45.70 | 46.55 |
| 15 | 44.05 | 44.40 | 44.35 | 44.55 | 44.30 | 44.05 | 43.25 | 43.10 | 44.20 | 45.25 | 45.75 | 46.65 |
| 16 | 44.00 | 44.25 | 44.60 | 44.50 | 44.40 | 44.05 | 43.30 | 43.30 | 44.30 | 45.25 | 45.80 | 46.60 |
| 17 | 44.15 | 44.25 | 44.65 | 44.50 | 44.45 | 44.05 | 42.95 | 43.50 | 44.15 | 45.30 | 45.80 | 46.60 |
| 18 | 44.05 | 44.55 | 44.55 | 44.55 | 44.40 | 43.80 | 42.90 | 43.60 | 44.20 | 45.25 | 45.85 | 46.55 |
| 19 | 44.10 | 44.45 | 44.40 | 44.55 | 44.25 | 43.60 | 43.10 | 43.30 | 44.20 | 45.25 | 45.85 | 46.50 |
| 20 | 44.15 | 44.45 | 44.55 | 44.40 | 44.40 | 43.90 | 42.90 | 43.30 | 44.20 | 45.20 | 45.90 | 46.65 |
| 21 | 44.30 | 44.55 | 44.55 | 44.50 | 44.35 | 44.45 | 43.00 | 43.30 | 44.20 | 45.20 | 46.00 | 46.70 |
| 22 | 44.15 | 44.45 | 44.55 | 44.55 | 44.40 | 44.35 | 43.10 | 43.20 | 44.25 | 45.20 | 46.00 | 46.65 |
| 23 | 44.25 | 44.50 | 44.60 | 44.45 | 44.30 | 43.90 | 42.95 | 43.25 | 44.35 | 45.15 | 45.95 | 46.60 |
| 24 | 44.30 | 44.50 | 44.50 | 44.75 | 44.25 | 43.65 | 43.20 | 43.25 | 44.35 | 45.25 | 45.85 | 46.65 |
| 25 | 44.30 | 44.45 | 44.50 | 44.75 | 44.30 | 43.45 | 43.20 | 43.20 | 44.15 | 45.20 | 46.05 | 46.80 |
| 26 | 43.90 | 44.55 | 44.70 | 44.95 | 44.10 | 43.50 | 42.85 | 43.15 | 44.40 | 45.20 | 46.05 | 46.80 |
| 27 | 44.05 | 44.45 | 44.60 | 44.95 | 44.10 | 43.65 | 43.10 | 43.10 | 44.45 | 45.30 | 46.05 | 46.75 |
| 28 | 44.15 | 44.35 | 44.50 | 45.45 | 43.95 | 43.65 | 43.10 | 43.10 | 44.40 | 45.35 | 46.10 | 46.70 |
| 29 | 44.20 | 44.35 | 44.80 | 44.75 | 44.05 | 43.35 | 43.15 | 43.15 | 44.45 | 45.35 | 46.10 | 46.75 |
| 30 | 44.25 | 44.40 | 44.65 | 44.50 | --- | 43.55 | 43.20 | 43.30 | 44.40 | 45.30 | 46.05 | 46.75 |
| 31 | 44.35 | --- | 44.60 | 44.45 | --- | 43.40 | --- | 43.35 | --- | 45.25 | 46.10 | --- |
| MAX | 44.35 | 44.55 | 44.80 | 45.45 | 44.50 | 44.45 | 43.40 | 43.60 | 44.45 | 45.35 | 46.10 | 47.00 |
| CAL YR 1987 | LOW 44.80 | | | | | | | | | | | |
| WTR YR 1988 | LOW 47.00 | | | | | | | | | | | |



392712084191700 W-5
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

WASHINGTON COUNTY

392553081281600. Local number, WA-2.

LOCATION.--Lat 39°25'53", long 81°28'16", Hydrologic Unit 05040004 near county fairgrounds north of Marietta.

Owner: Marietta Water Dept.

AQUIFER.--Sand and gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled unused water table well, diameter 8 in., depth, 50 ft, cased.

INSTRUMENTATION.--Type F continuous recorder.

DATUM.--Elevation of land-surface datum is 605 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 3.00 ft above land-surface datum.

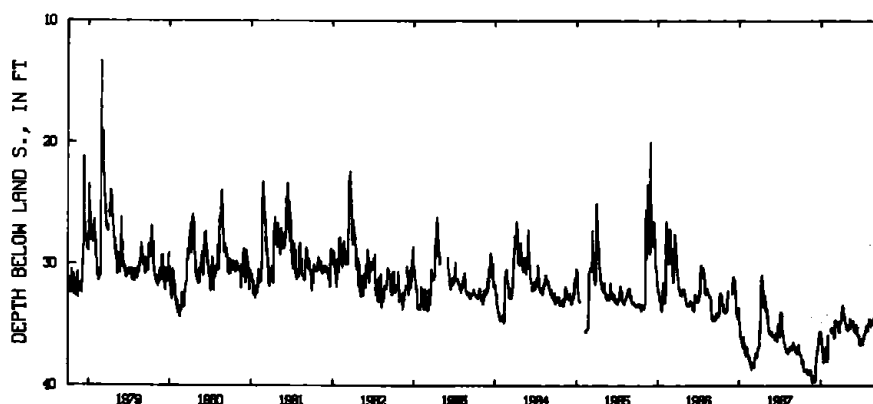
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--August 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 39.75 ft below land-surface datum, Nov. 26, 1987; minimum daily low, 18.72 ft below land-surface datum, June 28, 1972.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 37.40 | 38.65 | 39.45 | 35.75 | 38.05 | 36.00 | 34.85 | 35.30 | 35.40 | 36.55 | 35.00 | 35.10 |
| 2 | 37.40 | 38.65 | 39.25 | 35.65 | 38.00 | 36.00 | 34.65 | 35.20 | 35.55 | 36.25 | 35.05 | 35.10 |
| 3 | 37.45 | 38.90 | 39.25 | 35.60 | 37.65 | 36.05 | 34.70 | 35.45 | 35.60 | 36.25 | 34.95 | 34.60 |
| 4 | 37.45 | 38.95 | 39.25 | 35.90 | 35.90 | 36.10 | 34.65 | 35.45 | 35.60 | 36.15 | 34.90 | 34.05 |
| 5 | 37.45 | 39.00 | 39.35 | 36.10 | --- | 35.90 | 34.60 | 35.45 | 35.55 | 36.30 | 35.00 | 34.05 |
| 6 | 37.60 | 39.05 | 39.25 | 36.35 | --- | 35.05 | 34.20 | 35.30 | 35.55 | 36.30 | 35.00 | 34.40 |
| 7 | 37.70 | 38.95 | 39.65 | 36.50 | --- | 34.65 | 33.80 | 35.25 | 35.60 | 36.65 | 34.95 | 34.85 |
| 8 | 37.70 | 38.80 | 39.65 | 36.65 | --- | 34.85 | 33.85 | 35.10 | 35.65 | 36.65 | 34.50 | 35.00 |
| 9 | 37.80 | 38.85 | 39.50 | 36.80 | --- | 34.85 | 33.55 | 35.10 | 35.65 | 36.65 | 34.75 | 35.10 |
| 10 | 38.10 | 39.00 | 39.40 | 36.95 | --- | 34.80 | 33.40 | 35.05 | 35.70 | 36.60 | 34.80 | 35.20 |
| 11 | 38.20 | 39.00 | 38.85 | 36.95 | --- | 35.00 | 33.55 | 35.10 | 35.60 | 36.45 | 34.80 | 35.00 |
| 12 | 38.20 | 38.90 | 38.45 | 37.10 | --- | 35.05 | 33.55 | 35.20 | 35.00 | 36.40 | 35.05 | 34.95 |
| 13 | 38.00 | 38.85 | 37.80 | 37.55 | --- | 34.80 | 33.65 | 34.50 | 35.35 | 36.20 | 35.10 | 34.70 |
| 14 | 37.90 | 38.85 | 37.65 | 37.65 | --- | 34.70 | 33.80 | 34.65 | 35.55 | 36.15 | 35.15 | 34.90 |
| 15 | 37.90 | 38.80 | 37.70 | 38.10 | --- | 34.75 | 34.05 | 34.70 | 35.60 | 36.10 | 35.00 | 34.95 |
| 16 | 38.05 | 39.00 | 37.35 | 37.90 | --- | 34.80 | 34.10 | 34.85 | 35.75 | 35.85 | 35.00 | 34.90 |
| 17 | 38.55 | 39.00 | 37.30 | 37.85 | --- | 34.90 | 34.15 | 35.25 | 35.85 | 35.95 | 34.95 | 34.40 |
| 18 | 38.55 | 38.70 | 37.35 | 37.75 | 35.35 | 35.15 | 34.50 | 35.25 | 35.90 | 35.90 | 35.00 | 34.60 |
| 19 | 38.75 | 38.85 | 37.10 | 37.90 | 35.55 | 35.15 | 34.50 | 35.20 | 36.00 | 35.70 | 35.00 | 34.60 |
| 20 | 38.80 | 38.95 | 37.00 | 38.00 | 35.65 | 35.05 | 34.60 | 35.10 | 35.95 | 35.70 | 34.85 | 34.30 |
| 21 | 38.75 | 39.10 | 36.90 | 38.05 | 35.35 | 35.05 | 34.65 | 35.05 | 35.85 | 35.55 | 34.70 | 33.95 |
| 22 | 38.80 | 39.50 | 36.60 | 37.45 | 35.25 | 35.40 | 34.85 | 34.90 | 35.85 | 35.45 | 34.60 | 33.90 |
| 23 | 38.85 | 39.50 | 36.60 | 37.25 | 35.25 | 35.60 | 34.85 | 34.75 | 36.10 | 35.40 | 34.90 | 33.95 |
| 24 | 38.80 | 39.10 | 36.45 | 36.85 | 35.25 | 35.55 | 34.85 | 34.80 | 36.40 | 35.30 | 34.90 | 34.10 |
| 25 | 38.70 | 39.70 | 36.15 | 36.95 | 35.30 | 35.60 | 35.05 | 34.75 | 36.45 | 35.10 | 34.85 | 33.80 |
| 26 | 38.70 | 39.75 | 36.00 | 37.10 | 35.50 | 35.65 | 35.10 | 34.70 | 36.60 | 35.20 | 34.85 | 33.95 |
| 27 | 38.75 | 39.45 | 35.65 | 37.25 | 35.60 | 35.65 | 35.15 | 34.70 | 36.60 | 35.20 | 34.95 | 33.85 |
| 28 | 38.85 | 39.40 | 35.60 | 37.40 | 35.55 | 35.20 | 35.40 | 34.75 | 36.65 | 35.30 | 34.85 | 34.45 |
| 29 | 38.85 | 39.30 | 35.65 | 37.70 | 35.70 | 34.80 | 35.15 | 34.75 | 36.70 | 35.45 | 34.70 | 34.50 |
| 30 | 38.80 | 39.45 | 35.65 | 37.90 | --- | 34.70 | 35.25 | 34.95 | 36.60 | 35.55 | 34.60 | 35.05 |
| 31 | 38.90 | --- | 35.75 | 37.75 | --- | 34.80 | --- | 35.10 | --- | 35.55 | 34.35 | --- |
| MAX | 38.90 | 39.75 | 39.65 | 38.10 | 38.05 | 36.10 | 35.40 | 35.45 | 36.70 | 36.65 | 35.15 | 35.20 |

CAL YR 1987 LOW 39.75
WTR YR 1988 LOW 39.75392553081281600 WA-2
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

WAYNE COUNTY

404655081553200. Local number, WN-3.

LOCATION.--Lat 40°46'55", long 81°55'32", Hydrologic Unit 05040003, OARDC-OSU Experiment Station near Wooster.

Owner: OARDC-OSU.

AQUIFER.--Shale of Mississippian Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 8 in., depth 20 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 1040 ft above National Geodetic Vertical Datum of 1929, from topographic

map. Measuring point: Floor of instrument shelter 3.50 ft above land-surface datum.

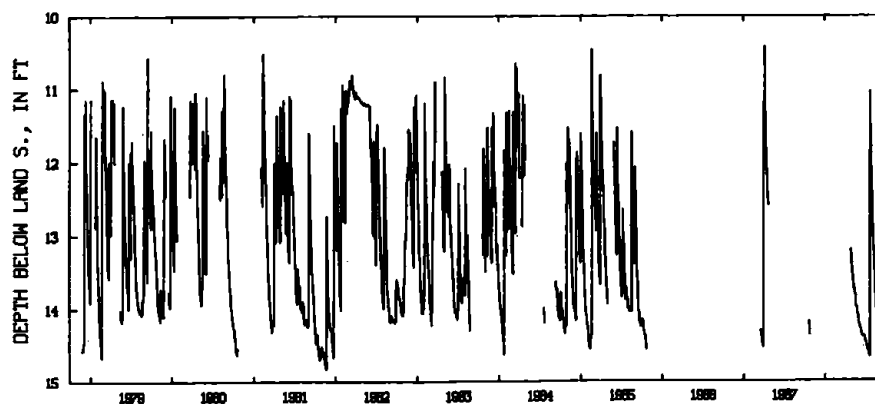
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 16.17 ft below land-surface datum, Jan. 27, 29, 1956; minimum daily low, 10.43 ft below land-surface datum, Apr. 6, 1987.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-----|-----|-----|-----|-----|-------|-------|-------|-------|-------|-------|
| 1 | --- | --- | --- | --- | --- | --- | --- | 13.46 | 14.22 | 14.47 | 12.75 | 13.53 |
| 2 | --- | --- | --- | --- | --- | --- | --- | 13.51 | 14.24 | 14.48 | 12.86 | 13.58 |
| 3 | --- | --- | --- | --- | --- | --- | --- | 13.55 | 14.25 | 14.49 | 12.99 | 13.61 |
| 4 | --- | --- | --- | --- | --- | --- | --- | 13.61 | 14.25 | 14.50 | 13.11 | 11.18 |
| 5 | --- | --- | --- | --- | --- | --- | --- | 13.65 | 14.26 | 14.52 | 13.21 | 11.59 |
| 6 | --- | --- | --- | --- | --- | --- | --- | 13.67 | 14.27 | 14.53 | 13.23 | 11.84 |
| 7 | --- | --- | --- | --- | --- | --- | --- | 13.69 | 14.28 | 14.54 | 13.23 | 12.03 |
| 8 | --- | --- | --- | --- | --- | --- | --- | 13.71 | 14.29 | 14.55 | 13.27 | 12.20 |
| 9 | --- | --- | --- | --- | --- | --- | --- | 13.74 | 14.30 | 14.56 | 13.36 | 12.38 |
| 10 | --- | --- | --- | --- | --- | --- | --- | 13.75 | 14.32 | 14.57 | 13.45 | 12.55 |
| 11 | --- | --- | --- | --- | --- | --- | --- | 13.76 | 14.33 | 14.58 | 13.55 | 12.72 |
| 12 | --- | --- | --- | --- | --- | --- | --- | 13.78 | 14.35 | 14.59 | 13.64 | 12.88 |
| 13 | --- | --- | --- | --- | --- | --- | --- | 13.79 | 14.36 | 14.60 | 13.73 | 12.93 |
| 14 | --- | --- | --- | --- | --- | --- | --- | 13.81 | 14.38 | 14.62 | 13.79 | 12.97 |
| 15 | --- | --- | --- | --- | --- | --- | --- | 13.83 | 14.39 | 14.63 | 13.90 | 13.07 |
| 16 | --- | --- | --- | --- | --- | --- | --- | 13.84 | 14.39 | 14.64 | 13.98 | 13.18 |
| 17 | --- | --- | --- | --- | --- | --- | --- | 13.84 | 14.39 | 14.66 | 14.03 | 13.29 |
| 18 | --- | --- | --- | --- | --- | --- | --- | 13.96 | 14.39 | 14.67 | 14.07 | 13.41 |
| 19 | --- | --- | --- | --- | --- | --- | --- | 13.98 | 14.39 | 14.67 | 14.09 | 13.51 |
| 20 | --- | --- | --- | --- | --- | --- | --- | 13.99 | 14.39 | 11.90 | 14.09 | 13.61 |
| 21 | 14.19 | --- | --- | --- | --- | --- | --- | 14.00 | 14.40 | 11.92 | 14.07 | 13.70 |
| 22 | 14.27 | --- | --- | --- | --- | --- | --- | 14.01 | 14.40 | 11.66 | 14.08 | 13.78 |
| 23 | 14.31 | --- | --- | --- | --- | --- | --- | 14.03 | 14.39 | 11.05 | 14.10 | 13.82 |
| 24 | 14.34 | --- | --- | --- | --- | --- | --- | 14.05 | 14.40 | 11.51 | 14.10 | 13.95 |
| 25 | 14.37 | --- | --- | --- | --- | --- | --- | 14.07 | 14.40 | 11.79 | 14.05 | 14.01 |
| 26 | --- | --- | --- | --- | --- | --- | 13.22 | 14.09 | 14.41 | 11.96 | 14.02 | 14.06 |
| 27 | --- | --- | --- | --- | --- | --- | 13.28 | 14.11 | 14.42 | 12.09 | 13.99 | 14.10 |
| 28 | --- | --- | --- | --- | --- | --- | 13.35 | 14.13 | 14.43 | 12.24 | 13.97 | 14.14 |
| 29 | --- | --- | --- | --- | --- | --- | 13.39 | 14.15 | 14.44 | 12.42 | 13.92 | 14.17 |
| 30 | --- | --- | --- | --- | --- | --- | 13.43 | 14.17 | 14.45 | 12.59 | 13.67 | 14.21 |
| 31 | --- | --- | --- | --- | --- | --- | --- | 14.19 | --- | 12.68 | 13.52 | --- |
| MAX | 14.37 | --- | --- | --- | --- | --- | 13.43 | 14.19 | 14.45 | 14.67 | 14.10 | 14.21 |
| CAL YR 1987 | LOW 14.54 | | | | | | | | | | | |
| WTR YR 1988 | LOW 14.67 | | | | | | | | | | | |



404655081553200 WN-3
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

293

WAYNE COUNTY--Continued.

404802081583100. Local number, WN-2A.

LOCATION.--Lat 40°48'02", long 81°58'31", Hydrologic Unit 05040003, in well field by Killbuck Creek near Wooster.

Owner: Wooster Water Dept.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled test water table well, diameter 6 in., depth 65 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 855 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 6.00 ft above land-surface datum.

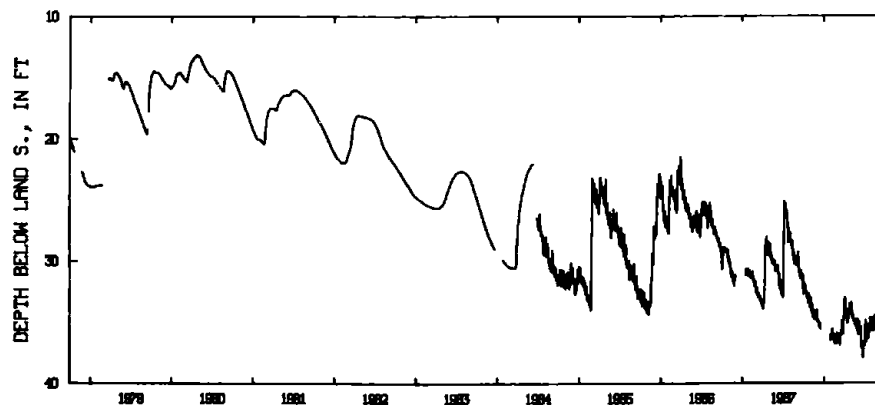
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--July 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 37.95 ft below land-surface datum, June 23, 1988; minimum daily low, 2.35 ft below land-surface datum, Jan. 28, 1952.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 32.68 | 33.05 | 34.54 | --- | 36.20 | 36.21 | 34.05 | 33.48 | 35.74 | 36.77 | 34.81 | 35.24 |
| 2 | 32.37 | 33.51 | 34.87 | --- | 36.34 | 36.51 | 33.61 | 33.58 | 36.04 | 36.54 | 34.98 | 35.28 |
| 3 | 32.22 | 33.75 | 35.02 | --- | 36.43 | 36.44 | 33.05 | 33.98 | 36.08 | 35.79 | 35.55 | 35.33 |
| 4 | 31.87 | 33.79 | 35.03 | --- | 36.48 | 36.52 | 33.18 | 34.10 | 35.61 | 34.90 | 35.59 | 34.42 |
| 5 | 32.01 | 34.18 | 35.03 | --- | 36.49 | 36.50 | 33.84 | 34.13 | 35.18 | 35.12 | 35.80 | 34.00 |
| 6 | 32.32 | 34.20 | 34.95 | --- | 36.37 | 36.05 | 34.32 | 34.63 | 35.03 | 35.71 | 35.70 | 34.32 |
| 7 | 32.37 | 34.12 | 35.02 | --- | 35.61 | 36.22 | 34.49 | 34.72 | 35.36 | 36.28 | 34.95 | 34.70 |
| 8 | 32.45 | 33.54 | 35.16 | --- | 35.93 | 36.58 | 34.41 | 34.38 | 35.60 | 36.70 | 34.71 | 34.57 |
| 9 | 32.47 | 33.95 | 35.28 | --- | 35.99 | 36.54 | 34.21 | 34.56 | 35.70 | 36.59 | 35.31 | 34.78 |
| 10 | 32.38 | 34.16 | 35.35 | --- | 36.41 | 36.77 | 34.02 | 34.58 | 35.79 | 35.73 | 35.35 | 34.98 |
| 11 | 32.13 | 34.50 | 35.49 | --- | 36.56 | 36.92 | 34.32 | 34.97 | 35.70 | 35.22 | 35.69 | 34.26 |
| 12 | 32.60 | 34.47 | 35.49 | --- | 36.57 | 36.70 | 34.88 | 34.94 | 35.56 | 35.29 | 35.73 | 34.64 |
| 13 | 32.78 | 34.69 | 35.20 | --- | 36.58 | 36.13 | 34.83 | 34.95 | 35.44 | 35.57 | 35.41 | 34.71 |
| 14 | 32.83 | 34.50 | 35.16 | --- | 36.03 | 36.10 | 35.16 | 34.94 | 35.89 | 35.74 | 34.82 | 34.69 |
| 15 | 32.93 | 34.12 | 35.41 | --- | 36.11 | 36.05 | 35.18 | 34.86 | 36.72 | 36.15 | 34.56 | 34.77 |
| 16 | 33.08 | 34.11 | 35.60 | --- | 36.37 | 36.08 | 34.87 | 34.93 | 37.16 | 36.34 | 35.15 | 34.77 |
| 17 | 32.93 | 34.38 | --- | --- | 36.56 | 36.07 | 34.33 | 34.91 | 37.02 | 36.42 | 35.44 | 34.56 |
| 18 | 32.69 | 34.54 | --- | --- | 36.73 | 36.13 | 34.39 | 35.11 | 37.03 | 36.12 | 35.49 | 33.99 |
| 19 | 32.93 | 34.87 | --- | --- | 36.83 | 35.79 | 34.81 | 35.32 | 36.63 | 36.09 | 35.47 | 34.14 |
| 20 | 33.07 | 34.87 | --- | --- | 36.76 | 34.95 | 34.83 | 35.28 | 36.95 | 35.96 | 35.22 | 34.50 |
| 21 | 33.46 | 34.79 | --- | --- | 36.46 | 35.51 | 34.59 | 35.00 | 37.65 | 35.93 | 34.33 | 34.59 |
| 22 | 33.48 | 34.18 | --- | --- | 36.15 | 35.76 | 34.42 | 34.86 | 37.87 | 35.84 | 34.53 | 34.64 |
| 23 | 33.42 | 34.53 | --- | --- | 36.63 | 35.90 | 34.10 | 35.14 | 37.95 | 35.81 | 34.71 | 34.47 |
| 24 | 33.40 | 34.72 | --- | --- | 36.59 | 36.06 | 33.57 | 35.15 | 37.68 | 34.75 | 34.69 | 34.47 |
| 25 | 32.77 | 34.76 | --- | --- | 36.84 | 35.81 | 33.71 | 35.30 | 37.36 | 35.11 | 35.10 | 34.08 |
| 26 | 33.25 | 34.76 | --- | --- | 36.76 | 35.82 | 33.72 | 35.55 | 37.11 | 35.33 | 35.12 | 34.67 |
| 27 | 33.48 | 34.28 | --- | --- | 36.29 | 35.22 | 33.94 | 35.76 | 36.91 | 35.43 | 35.16 | 35.02 |
| 28 | 33.77 | 34.20 | --- | 36.54 | 35.97 | 34.62 | 34.03 | 35.52 | 36.90 | 35.70 | 34.51 | 35.22 |
| 29 | 33.85 | 34.06 | --- | 36.57 | 36.17 | 34.80 | 34.02 | 35.12 | 36.72 | 35.52 | 34.35 | 35.32 |
| 30 | 33.86 | 34.32 | --- | 36.05 | --- | 34.60 | 33.66 | 34.83 | 37.00 | 35.54 | 34.58 | 35.26 |
| 31 | 33.70 | --- | --- | 36.06 | --- | 34.34 | --- | 35.26 | --- | 34.86 | 35.08 | --- |
| MAX | 33.86 | 34.87 | 35.60 | 36.57 | 36.84 | 36.92 | 35.18 | 35.76 | 37.95 | 36.77 | 35.80 | 35.33 |
| CAL YR 1987 LOW 35.60 | | | | | | | | | | | | |
| WTR YR 1988 LOW 37.95 | | | | | | | | | | | | |



— 404802081583100 WN-2A
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

GROUND-WATER RECORDS

WAYNE COUNTY--Continued

405745081510200. Local number, WN-7.

LOCATION.--Lat 40°57'45", long 81°51'02", Hydrologic Unit 05040001, in well field along Steele Ditch near Sterling.

Owner: Rittman Water Department

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., depth 123 ft, cased.

INSTRUMENTATION.--Type P continuous recorder.

DATUM.--Elevation of land-surface datum is 965 ft above National Geodetic Vertical Datum of 1929, from topographic

map. Measuring point: Floor of instrument shelter 5.00 ft above land-surface datum.

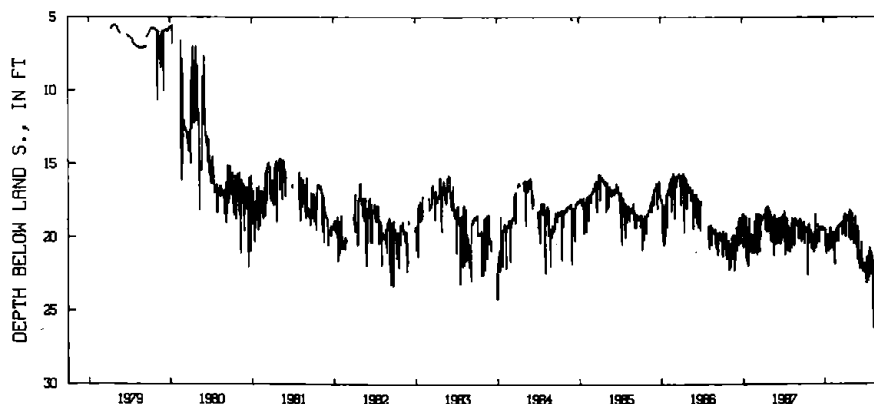
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--April 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 26.85 ft below land-surface datum, Sept. 14, 1988; minimum daily low, 5.38 ft below land-surface datum, Jan. 17, 1980.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 19.00 | 19.60 | --- | 19.40 | 20.35 | 19.55 | 18.50 | 20.10 | 21.55 | 21.75 | 21.85 | 21.10 |
| 2 | 19.00 | 19.60 | 19.15 | 19.50 | 19.75 | 19.45 | 19.30 | 20.15 | 19.60 | 21.90 | 22.45 | 21.00 |
| 3 | 19.05 | 19.55 | 19.15 | 19.40 | 19.80 | 19.40 | 18.40 | 19.40 | 19.60 | 21.80 | 22.45 | 20.80 |
| 4 | 19.00 | 19.95 | 19.20 | 19.50 | 19.80 | 19.25 | 19.55 | 19.45 | 20.90 | 22.05 | 21.30 | 20.55 |
| 5 | 20.45 | 19.95 | 19.30 | 19.50 | 19.70 | 20.30 | 18.50 | 18.35 | 21.05 | 22.30 | 21.90 | 22.00 |
| 6 | 19.90 | 20.75 | 19.35 | 19.55 | 20.75 | 19.35 | 18.65 | 19.55 | 21.35 | 22.65 | 22.10 | 20.85 |
| 7 | 19.35 | 20.70 | 19.40 | 19.60 | 20.55 | 19.35 | 20.00 | 19.60 | 21.70 | 22.85 | 22.00 | 21.00 |
| 8 | 19.40 | 19.80 | 19.35 | 19.55 | 19.75 | 19.30 | 19.00 | 19.90 | 21.90 | 23.00 | 26.20 | 20.95 |
| 9 | 19.45 | 20.80 | 19.40 | 20.65 | 19.65 | 19.20 | 18.90 | 19.80 | 22.15 | 23.15 | 25.80 | 21.90 |
| 10 | 19.35 | 19.80 | 20.35 | 20.90 | 19.80 | 19.15 | 18.80 | 19.50 | 21.25 | 22.90 | 22.10 | 21.05 |
| 11 | 19.35 | 20.70 | 19.45 | 21.10 | 19.80 | 19.20 | 18.75 | 19.70 | 21.25 | 22.60 | 21.90 | 22.10 |
| 12 | 19.35 | 20.50 | 19.35 | 20.00 | 19.70 | 19.25 | 18.75 | 19.70 | 21.35 | 21.35 | 23.65 | 25.20 |
| 13 | 19.40 | 20.65 | 19.40 | 19.90 | 20.70 | 19.20 | 18.70 | 20.35 | 21.50 | 22.45 | 23.10 | 26.15 |
| 14 | 19.40 | 20.60 | 19.50 | 19.95 | 20.40 | 19.15 | 18.70 | 20.45 | 21.85 | 22.25 | 21.70 | 26.85 |
| 15 | 19.50 | 20.45 | 19.35 | 19.95 | 21.00 | 19.15 | 18.70 | 20.35 | 22.00 | 22.75 | 21.65 | 25.50 |
| 16 | 19.50 | 21.00 | 19.35 | 19.90 | 21.50 | 19.20 | 18.60 | 20.00 | 22.00 | 23.00 | 23.15 | 23.00 |
| 17 | 19.50 | 20.85 | 19.40 | 20.00 | 20.05 | 19.10 | 18.60 | 19.90 | 20.40 | 22.75 | 23.30 | 23.00 |
| 18 | 19.35 | 20.60 | 19.35 | 19.85 | 21.75 | 19.10 | 18.50 | 18.70 | 20.35 | 21.50 | 21.50 | 22.75 |
| 19 | 19.40 | 19.90 | 19.40 | 20.70 | 21.85 | 19.00 | 18.55 | 18.65 | 21.50 | 22.75 | 21.35 | 22.60 |
| 20 | 22.60 | 19.80 | 19.35 | 20.60 | 19.80 | 19.00 | 18.55 | 18.60 | 21.80 | 22.25 | 22.45 | 21.40 |
| 21 | 20.00 | 19.65 | 19.40 | 20.95 | 19.75 | 19.00 | 18.55 | 18.65 | 22.20 | 21.15 | 21.20 | 22.45 |
| 22 | 19.55 | 18.45 | 19.45 | 20.90 | 19.70 | 19.85 | 18.55 | 19.95 | 22.25 | 21.00 | 22.20 | 22.10 |
| 23 | 19.20 | 19.85 | 19.45 | 20.70 | 19.70 | 19.00 | 20.05 | 20.30 | 22.25 | 21.90 | 21.10 | 21.05 |
| 24 | 19.15 | 20.40 | 19.55 | 20.60 | 19.65 | 19.10 | 18.15 | 20.00 | 22.35 | 20.75 | 21.05 | 21.90 |
| 25 | 19.10 | 20.45 | 19.30 | 20.70 | 19.60 | 19.15 | 19.70 | 20.25 | 22.35 | 20.85 | 22.30 | 21.95 |
| 26 | 20.40 | 20.75 | 19.50 | 20.65 | 19.40 | 19.15 | 18.25 | 20.50 | 22.05 | 22.30 | 22.25 | 23.05 |
| 27 | 19.55 | 20.45 | 19.40 | 20.70 | 20.30 | 19.30 | 18.25 | 20.70 | 22.20 | 22.55 | 22.40 | 25.50 |
| 28 | 19.50 | 20.45 | 19.40 | 19.50 | 19.50 | 19.15 | 18.20 | 20.45 | 21.95 | 22.05 | 20.95 | 26.55 |
| 29 | 19.55 | 19.55 | 19.45 | 19.35 | --- | 18.60 | 18.20 | 20.80 | 22.40 | 21.10 | 21.05 | 23.65 |
| 30 | 19.55 | 19.50 | 19.40 | 20.80 | --- | 19.65 | 20.25 | 19.25 | 21.90 | 21.05 | 21.05 | 21.80 |
| 31 | 19.65 | --- | 19.40 | 20.65 | --- | 19.75 | --- | 20.60 | --- | 21.05 | 21.10 | --- |
| MAX | 22.60 | 21.00 | 20.35 | 21.10 | 21.85 | 20.30 | 20.25 | 20.80 | 22.40 | 23.15 | 26.20 | 26.85 |
| CAL YR 1987 | LOW 22.60 | | | | | | | | | | | |
| WTR YR 1988 | LOW 26.85 | | | | | | | | | | | |



405745081510200 WN-7
MAXIMUM DAILY DEPTH BELOW LAND S. (FT)

WAYNE COUNTY--Continued

405805081462300. Local number, WN-6.

LOCATION.--Lat 40°58'05", long 81°46'23", Hydrologic Unit 05040001, Salt Street, Rittman.

Owner: Tenneco, Inc.

AQUIFER.--Sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled unlined artesian well, diameter 8 in., depth 180 ft, cased.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 960 ft above National Geodetic Vertical Datum of 1929, from topographic map. Measuring point: Floor of instrument shelter 2.30 ft above land-surface datum.

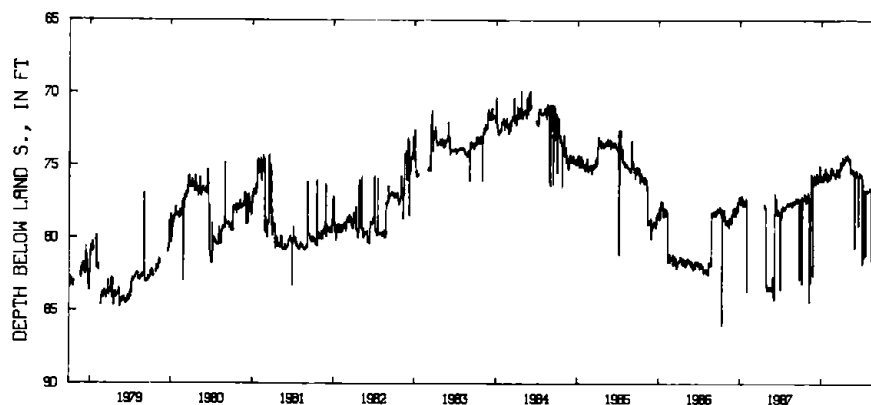
REMARKS.--Station operated by Ohio Department of Natural Resources, Division of Water.

PERIOD OF RECORD.--May 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily low, 92.80 ft below land-surface datum, July 21, 1971; minimum daily low, 69.87 ft below land-surface datum, Apr. 22, 1984.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 77.44 | 77.40 | 75.69 | 75.95 | 75.56 | 75.68 | 74.97 | 74.50 | 75.47 | 75.72 | 76.72 | 76.94 |
| 2 | 77.44 | 77.31 | 75.95 | 76.04 | 75.84 | 75.53 | 74.96 | 74.49 | 75.38 | 75.82 | 76.77 | 76.84 |
| 3 | 77.69 | 77.12 | 75.95 | 75.88 | 75.82 | 75.63 | 74.71 | 74.47 | 75.51 | 75.88 | 76.76 | 76.63 |
| 4 | 77.69 | 76.89 | 75.95 | 75.71 | 75.74 | 75.74 | 74.67 | 74.61 | 75.59 | 75.99 | 76.76 | 76.25 |
| 5 | 77.43 | 77.17 | 76.10 | 75.90 | 75.88 | 75.87 | 74.68 | 74.64 | 75.56 | 81.83 | 76.64 | 76.39 |
| 6 | 77.13 | 77.29 | 76.28 | 76.06 | 75.96 | 75.68 | 74.42 | 74.76 | 75.46 | 81.35 | 76.56 | 76.54 |
| 7 | 83.17 | 77.27 | 76.29 | 76.08 | 75.95 | 75.69 | 74.65 | 74.83 | 75.35 | 76.23 | 76.58 | 81.19 |
| 8 | 77.67 | 77.27 | 76.11 | 75.68 | 75.81 | 75.68 | 74.86 | 74.76 | 75.33 | 76.32 | 76.57 | 81.27 |
| 9 | 77.67 | 83.75 | 75.82 | 75.71 | 75.66 | 75.21 | 74.92 | 74.52 | 75.58 | 80.80 | 76.53 | 81.13 |
| 10 | 77.49 | 84.38 | 75.75 | 75.91 | 75.83 | 75.44 | 74.85 | 74.60 | 75.73 | 81.36 | 76.57 | 81.24 |
| 11 | 77.37 | 79.77 | 75.60 | 75.75 | 75.71 | 75.54 | 74.71 | 74.88 | 75.73 | 81.38 | 76.60 | 81.31 |
| 12 | 77.27 | 82.70 | 75.54 | 75.55 | 75.21 | 75.24 | 74.60 | 75.36 | 75.68 | 80.83 | 76.60 | 76.62 |
| 13 | 77.27 | 83.08 | 76.04 | 75.81 | 75.47 | 75.23 | 74.62 | 75.49 | 75.75 | 80.89 | 76.58 | 76.33 |
| 14 | 77.32 | 79.39 | 76.07 | 76.00 | 75.47 | 75.23 | 74.55 | 75.52 | 75.80 | 80.80 | 81.21 | 76.37 |
| 15 | 77.24 | 79.46 | 75.78 | 75.82 | 75.09 | 75.46 | 74.70 | 75.40 | 75.69 | 76.71 | 81.38 | 76.58 |
| 16 | 77.17 | 77.85 | 75.66 | 75.55 | 75.36 | 75.61 | 74.74 | 75.22 | 79.13 | 80.97 | 76.62 | 76.55 |
| 17 | 77.05 | 75.58 | 76.01 | 75.47 | 75.47 | 75.70 | 74.63 | 75.39 | 75.76 | 81.17 | 81.43 | 76.33 |
| 18 | 77.11 | 76.36 | 76.14 | 75.61 | 75.59 | 75.52 | 74.33 | 75.41 | 75.76 | 81.19 | 81.62 | 76.23 |
| 19 | 77.00 | 76.36 | 75.81 | 75.61 | 75.35 | 75.21 | 74.47 | 75.32 | 75.74 | 80.48 | 76.70 | 76.11 |
| 20 | 76.93 | 76.03 | 75.69 | 75.15 | 75.19 | 75.44 | 74.50 | 75.34 | 75.63 | 76.89 | 76.56 | 76.06 |
| 21 | 77.18 | 76.59 | 75.82 | 75.55 | 75.43 | 75.71 | 74.42 | 75.38 | 75.57 | 76.76 | 76.72 | 76.18 |
| 22 | 77.27 | 76.64 | 75.70 | 75.56 | 75.27 | 75.77 | 74.48 | 75.38 | 75.48 | 76.80 | 76.76 | 76.15 |
| 23 | 77.37 | 76.22 | 75.87 | 75.38 | 75.40 | 75.48 | 74.36 | 75.27 | 75.72 | 76.80 | 76.66 | 75.96 |
| 24 | 77.45 | 76.41 | 75.30 | 75.44 | 75.46 | 75.41 | 74.46 | 75.38 | 75.74 | 76.77 | 76.50 | 76.04 |
| 25 | 77.56 | 82.60 | 75.01 | 75.47 | 75.53 | 75.22 | 74.51 | 75.62 | 75.61 | 76.75 | 76.42 | 76.12 |
| 26 | 77.38 | 76.32 | 75.19 | 75.69 | 75.53 | 74.74 | 74.36 | 75.68 | 75.59 | 76.66 | 76.62 | 76.20 |
| 27 | 77.03 | 76.29 | 75.17 | 75.99 | 75.54 | 75.11 | 74.25 | 75.67 | 75.68 | 76.72 | 76.68 | 76.11 |
| 28 | 77.08 | 76.11 | 75.36 | 76.07 | 75.54 | 75.22 | 74.31 | 75.58 | 75.63 | 76.77 | 76.76 | 76.19 |
| 29 | 77.13 | 75.77 | 75.98 | 75.97 | 75.50 | 74.94 | 74.36 | 75.52 | 75.60 | 76.80 | 76.76 | 76.27 |
| 30 | 77.17 | 75.67 | 76.04 | 75.61 | --- | 75.22 | 74.49 | 75.57 | 75.58 | 76.70 | 76.77 | 76.27 |
| 31 | 77.46 | --- | 75.70 | 75.62 | --- | 75.15 | --- | 80.68 | --- | 76.71 | 76.83 | --- |
| MAX | 83.17 | 84.38 | 76.29 | 76.08 | 75.96 | 75.87 | 74.97 | 80.68 | 79.13 | 81.83 | 81.62 | 81.31 |
| CAL YR 1987 | LOW 85.44 | | | | | | | | | | | |
| WTR YR 1988 | LOW 84.38 | | | | | | | | | | | |



— 405805081462300 WN-6
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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI).

| Multiply inch-pound units | By | To obtain SI units |
|--|------------------------|--|
| <i>Length</i> | | |
| inches (in) | 2.54×10^1 | millimeters (mm) |
| | 2.54×10^{-2} | meters (m) |
| feet (ft) | 3.048×10^{-1} | meters (m) |
| miles (mi) | 1.609×10^0 | kilometers (km) |
| <i>Area</i> | | |
| acres | 4.047×10^3 | square meters (m ²) |
| | 4.047×10^{-1} | square hectometers (hm ²) |
| | 4.047×10^{-3} | square kilometers (km ²) |
| square miles (mi ²) | 2.590×10^0 | square kilometers (km ²) |
| <i>Volume</i> | | |
| gallons (gal) | 3.785×10^0 | liters (L) |
| | 3.785×10^0 | cubic decimeters (dm ³) |
| | 3.785×10^{-3} | cubic meters (m ³) |
| million gallons | 3.785×10^3 | cubic meters (m ³) |
| | 3.785×10^{-3} | cubic hectometers (hm ³) |
| cubic feet (ft ³) | 2.832×10^1 | cubic decimeters (dm ³) |
| | 2.832×10^{-2} | cubic meters (m ³) |
| cfs-days | 2.447×10^3 | cubic meters (m ³) |
| | 2.447×10^{-3} | cubic hectometers (hm ³) |
| acre-feet (acre-ft) | 1.233×10^3 | cubic meters (m ³) |
| | 1.233×10^{-3} | cubic hectometers (hm ³) |
| | 1.233×10^{-6} | cubic kilometers (km ³) |
| <i>Flow</i> | | |
| cubic feet per second (ft ³ /s) | 2.832×10^1 | liters per second (L/s) |
| | 2.832×10^1 | cubic decimeters per second (dm ³ /s) |
| | 2.832×10^{-2} | cubic meters per second (m ³ /s) |
| gallons per minute (gal/min) | 6.309×10^{-2} | liters per second (L/s) |
| | 6.309×10^{-2} | cubic decimeters per second (dm ³ /s) |
| | 6.309×10^{-5} | cubic meters per second (m ³ /s) |
| million gallons per day | 4.381×10^1 | cubic decimeters per second (dm ³ /s) |
| | 4.381×10^{-2} | cubic meters per second (m ³ /s) |
| <i>Mass</i> | | |
| tons (short) | 9.072×10^{-1} | megagrams (Mg) or metric tons |

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